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Operations

**JOINT TERMINAL
ATTACK CONTROLLER
(JTAC) TRAINING PROGRAM**

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This manual implements Department of the Air Force Policy Directive (DAFPD) 10-35, *Air Force Special Warfare*. This publication establishes the minimum Air Force standards for training, certifying, and qualifying Air Force personnel as a Joint Terminal Attack Controller (JTAC) to control Close Air Support (CAS) and other offensive air operations, and aligns with the Joint Fire Support Executive Steering Committee Action Plan Memorandum of Agreement (JFS ESC AP MOA) 2004-01 (JTAC) (Ground), referred to as the JTAC MOA. This publication applies to all DAF civilian employees and uniformed members of Regular Air Force, the Air Force Reserve, the Air National Guard, and those who are contractually obligated to comply with the terms of DAF issuances and who are engaged in JTAC Training. This publication does not apply to the United States Space Force. This publication requires the collection and/or maintenance of information protected by the Privacy Act of 1974 authorized by Title 10, United States Code (U.S.C.) Section 9013, Secretary of the Air Force. The applicable System of Records Notice(s) F036 AF PC C, Military Personnel Records System is available at: <http://dpclo.defense.gov/Privacy/SORNs.aspx>. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with (IAW) the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. This publication may be supplemented at any level, but all supplements must be routed

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SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include (but are not limited to): changes the OPR from Headquarters Air Force (HAF), Aircrew Training (AF/A3TC) to HAF, Air Force Special Warfare (AF/A3S); removes the term Initial Qualification Training and replaces it with Initial Certification Training (ICT); incorporates new certification and qualification standards IAW the JTAC MOA; removes the term standardization and evaluations examiner (SEE) and replaces it with Joint Terminal Attack Controller-Evaluator (JTAC-E); establishes criteria for contract CAS aircraft to meet JTAC training; and introduces additional criteria for night terminal attack controls (TAC). Units will implement the new publication in its entirety within 90 days of the publication date.

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Chapter 1

PROGRAM OVERVIEW

1.1. Overview. As part of the Air Force Special Warfare mission to provide precision strike across the spectrum of conflict, the Air Force trains JTACs to support combatant command requirements. Per joint doctrine for CAS; a JTAC is a certified and qualified service member who, from a forward position, directs the action of combat aircraft engaged in CAS and other offensive air operations. A qualified JTAC is recognized across the Department of Defense (DoD) as capable and authorized to perform TAC (reference Joint Publication (JP) 3-09.3, *Close Air Support*).

1.2. Purpose. The purpose of this manual is to ensure standardized JTAC training across the Air Force. Additionally, this document defines the individuals in the Air Force authorized for JTAC duties and establishes the Tactical Air Control Party (TACP) 1Z3X1 and TACP Officer 19ZXB Air Force Specialty Codes (AFSCs) as JTAC-inherent. Adherence to this AFMAN ensures that Air Force JTACs meet all the requirements outlined in the JTAC MOA and JP 3-09, *Joint Fire Support*. Air Force JTACs are recognized across the DoD and by JTAC MOA partner nations as capable and authorized to perform TAC.

1.2.1. This manual provides baseline guidance for conducting a JTAC ICT program. Air Force unit JTAC training programs are governed by this AFMAN. Each unit with a JTAC program will have a Master Training Plan. **(T-1)**

1.2.2. Training programs should be tailored to meet the unit's Mission Essential Tasks Lists (METLs). In addition, units should style training programs towards preparation for upcoming taskings or requirements IAW the unit's Designed Operational Capability (DOC) or Mission Essential Tasks.

1.2.3. This manual provides guidance on the use of Ready Tasking Messages (RTMs). The RTM is a major command (MAJCOM)-developed continuation training (CT) program to improve proficiency of Air Force JTACs and to develop metrics that match resources with required JTAC training requirements.

1.3. Key Terms and Definitions.

1.3.1. **Certified JTAC:** A JTAC who has graduated a formal JTAC schoolhouse and completed ICT with no deficiencies.

1.3.2. **Qualified JTAC:** An ICT complete JTAC who has completed mission qualification training (MQT) and passed a JTAC evaluation.

1.3.3. **Current JTAC:** A qualified JTAC who has no CT deficiencies.

1.3.4. **Non-Current JTAC:** A qualified JTAC who has one or more CT deficiencies.

1.3.5. **Group:** Throughout this document, when referring to a "group", the standard group is an Air Support Operations Group (ASOG) or a Special Tactics Group. ANG units may not always fall under a standard group.

1.3.6. **Wing:** Throughout this document when referring to a "wing", the standard wing is an Air Ground Operations Wing or Special Operations Wing. ANG units may not always fall under a standard wing.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. The Deputy Chief of Staff for Operations (AF/A3). AF/A3 is responsible for matters concerning JTAC training and operations. AF/A3, through the Director of Air Force Special Warfare (AF/A3S) and the Air Force JTAC-Program Manager (JTAC-PM) establishes JTAC training and operations policy, programming, and requirements.

2.1.1. Establish policy and guidance for the execution of all Air Force JTAC programs.

2.1.2. Serve as the Air Force lead agency for JTAC issues. Provide Air Force coordination and position to Joint Force and partner nation JTAC program issues, primarily through the Joint Fire Support Executive Steering Committee (JFS ESC).

2.1.3. Review all requests for MAJCOMs that do not have an established JTAC training program and wish to establish one.

2.1.4. Approve all automated training tracking products.

2.1.5. Establish JTAC position requirements.

2.1.5.1. Ensure MAJCOM-validated JTAC positions meet the established requirements.

2.1.5.2. Review and provide AF JTAC requirements and inventory for Joint Staff inquiries.

2.1.6. Resolve training issues that arise between MAJCOMs.

2.1.7. Review and process all changes to this manual and coordinate all changes with appropriate MAJCOMs and the ANG.

2.1.8. Review and process all waivers and supplements to this manual.

2.1.9. Publish an Air Force Guidance Memorandum to address time sensitive changes.

2.1.10. Develop the Management Internal Control Toolset (MICT) checklist.

2.2. MAJCOM JTAC-Program Managers and the NGB TACP Functional Manager.

2.2.1. Ensure units work with their supported customer, if applicable, on the desired learning objectives and frequency of joint training events and exercises.

2.2.2. Submit MAJCOM JTAC position requirements to AF/A3S to be reviewed and approved every three years.

2.2.3. Track financial resources used to support JTAC training.

2.2.4. Assign oversight for units that lack a group-level oversight capability.

2.2.5. Review approved supplements to this AFMAN annually and forward all requested MAJCOM supplements to AF/A3S for coordination.

2.2.6. Resolve JTAC training issues within the appropriate MAJCOM or the NGB.

2.2.7. Publish a command-authored RTM each fiscal year that covers the minimum number of Full Mission Profiles (FMPs) required to meet mission proficiency requirements. **Note:** Air Force Special Operations Command (AFSOC) is designated as the lead component within United States Special Operations Command (USSOCOM) for the JTAC program. The AFSOC JTAC program will ensure compliance with this manual and USSOCOM M350-5, *Special Operations Forces Baseline Interoperable Training Standards, Joint Terminal Attack Controller*, to maintain fluidity across its JTAC requirements.

2.3. Group Commanders with a JTAC Program.

2.3.1. Review approved supplements to this AFMAN annually.

2.3.2. Ensure subordinate units comply with this manual. Provide staff support and assist units in implementing and managing JTAC training to meet readiness requirements. If required, forward recommended supplements to this manual and any supporting documents to the parent MAJCOM for review.

2.3.3. Designate in writing, a group JTAC-PM responsible for the oversight of group JTAC programs and administration of unit JTAC records. Designation will be documented in the individual's JTAC training and evaluation folder.

2.3.4. Designate in writing, a Group Chief of Weapons and Tactics (W&T) responsible for the oversight of group-level W&T. Designation will be documented in the individual's JTAC training and evaluation folder. The Group Chief of W&T will be a graduate of the USAF JTAC Weapons Instructor Course (WIC) with an awarded W-prefix or 262 Special Experience Identifier (SEI). When no WIC graduate with a W-prefix or 262 SEI is available, the commander will designate the most qualified JTAC for the position.

2.3.5. Approve the group's JTAC training program guidance.

2.4. Group JTAC-Program Manager.

2.4.1. Schedule and conduct assistance visits to subordinate units at the request of the squadron commander or TACP-PM to ensure JTAC requirements of this AFMAN are implemented and followed.

2.4.2. In conjunction with Group W&T, review group-level and subordinate unit training program guidance annually.

2.4.3. Maintain a copy of JTAC training and evaluation folders for the group staff in an analog or HAF-approved digital format. **Note:** AFSOC Automated JTAC Academic Currency Tracking System is approved.

2.4.4. Track JTAC training status for group staff and subordinate units.

2.4.5. Prioritize and coordinate formal JTAC schoolhouse slots for all subordinate squadrons.

2.4.6. Maintain a copy of Group assigned JTAC records for a period of 90 days.

2.5. Group Weapons and Tactics.

2.5.1. Designate a Chief of W&T IAW [paragraph 2.3.4](#) of this publication.

2.5.2. Develop and maintain JTAC and JTAC-Instructor (JTAC-I) lesson plans to support training requirements and standardize training across the group.

2.5.3. Assist the group JTAC-PM with reviewing group-level and subordinate unit training plans and Operating Instruction (OI) annually.

2.5.4. Establish and maintain liaison with higher headquarters acquisitions to identify fielding timelines and develop academics and training for newly acquired equipment and technology.

2.5.5. Conduct assistance visits of subordinate units W&T programs annually or as requested by subordinate units.

2.5.6. Collect, review, and submit subordinate units input for any requirements, working groups, training boards, and tactics review boards.

2.5.7. Work with assigned group intelligence personnel to ensure subordinate unit W&T and intelligence personnel are collaborating to ensure all assigned personnel receive current information on unit mission, enemy threats (current and projected), and expected combat and/or theater conditions affecting mission execution.

2.6. Unit Commanders with a JTAC Program.

2.6.1. Designate, in writing, a JTAC-PM responsible for the administrative oversight of the unit's JTAC program and administration of unit JTAC records. Document the designation in the individual's JTAC training and evaluation folder to reflect the 280 SEI.

2.6.2. Designate, in writing, a Chief of W&T responsible for the oversight of the unit's JTAC W&T program. Designation will be documented in the individual's JTAC training and evaluation folder. The Squadron Chief of W&T will be a graduate of the JTAC WIC with an awarded W-prefix or 262 SEI. When no WIC graduate with a W-prefix or 262 SEI is available, the commander will designate the most qualified JTAC for the position.

2.6.3. Define the local training area. When multiple units are assigned to the same location, consensus among unit commanders will define the local area parameters to ensure standardization and continuity.

2.6.4. Approve the unit's JTAC training program guidance.

2.6.5. Approve individuals for entry into JTAC mission qualification training (MQT).

2.6.6. Award SEI O9C, O9D, O9E, 914, 262, 279, and 281 as applicable IAW AFMAN 36-2100, *Military Utilization and Classification*, the Air Force Officer Classification Directory, and the Air Force Enlisted Classification Directory. **Note:** SEIs O9D, O9E 279 and 281 are additive to the members list of SEIs and do not replace SEI O9C or 914.

2.6.7. Ensure unit simulator training managers and simulator operators are trained and certified.

2.6.8. Appoint an Information Systems Security Officer (ISSO) to provide oversight of cybersecurity programs or functions involving management decisions for the administration of assigned simulation systems.

2.7. Unit JTAC-Program Manager.

2.7.1. In conjunction with the unit W&T, develop the unit JTAC training program. The unit training program will cover, at a minimum, JTAC MQT. If applicable, it will include a Ready Tasking Message.

2.7.2. Document the training program IAW unit program guidance. Unit program guidance will include a local area orientation for newly assigned personnel documented on AF Form 797, *Job Qualification Standard Continuation/Command JQS*, AF Form 623A, *On-the-Job Training Record Continuation Sheet*, or MAJCOM-approved digital format.

2.7.3. Ensure JTACs are registered and use the current Air Force or approved USSOCOM digital training system of record.

2.7.4. Maintain JTAC training and evaluation records in a HAF-approved, digital tracking system. AFSOC units shall use a USSOCOM-approved and funded digital tracking system, provided it meets HAF guidelines.

2.7.5. Document training in analog records if digital formats are unavailable.

2.7.6. Certify all properly documented JTAC training on MAJCOM approved CAS log format.

2.7.7. Maintain a copy of JTAC training records for 90 days on all JTACs who Permanent Change of Station/Permanent Change of Assignment, separate, or retire.

2.7.8. Ensure a qualified JTAC tracking system is maintained on the Commander's Designation Letter(s) IAW this publication, [Attachment 4](#).

2.7.9. In conjunction with the JTAC-Evaluator-Program Manager (JTAC-E-PM), review all JTAC training and evaluation folders, ensuring the period between review does not exceed 18 months. Review JTAC training and evaluation folders of newly assigned JTACs arriving on-station within 30 days (training days for ANG), and prior to any individual JTAC, JTAC-Instructor (JTAC-I), or JTAC-E evaluation.

2.7.10. Track individuals in JTAC ICT and JTAC MQT for training timeline compliance; report reasons for deficiencies to group semi-annually.

2.7.11. Document any changes to qualification status in Part IV of the JTAC training and evaluation folder.

2.7.12. Ensure adherence to risk assessment process for TAC training missions.

2.7.13. Maintain JTAC-I qualification.

2.8. Unit Weapons and Tactics.

2.8.1. Have a designated Chief of W&T. The designated Chief of W&T will be a graduate of the JTAC WIC with an awarded W-prefix or 262 SEI. When no WIC graduate with a W-prefix or 262 SEI is available, the commander will designate the most qualified JTAC for the position.

2.8.2. Develop and maintain JTAC and JTAC-I lesson plans to support training requirements and aligned unit METLs.

2.8.3. Develop and maintain unit scenarios for live, virtual, and constructive TAC missions.

2.8.4. In conjunction with the unit JTAC-PM, develop the unit training program. The unit training program will cover, at a minimum, JTAC MQT. If applicable, it will include a Ready Tasking Message.

2.8.5. Assist the JTAC-PM with reviewing unit JTAC program guidance annually.

2.8.6. Review unit scenarios annually.

2.8.7. Maintain JTAC-I qualification.

2.9. Individual JTAC.

2.9.1. Maintain a minimum of JTAC qualification IAW [paragraph 4.6](#) of this manual.

2.9.2. Properly document all JTAC live, virtual, and constructive training in HAF-approved CAS log format.

2.9.3. Maintain certification documentation in JTAC training and evaluation folder.

2.9.4. Review JTAC training and evaluation folder not to exceed every 18 months.

Chapter 3

GUIDANCE AND PROCEDURES

3.1. Individuals Assigned to Perform JTAC Duty. Only authorized personnel will perform JTAC duties or conduct JTAC training. (T-1) **Table 3.1** lists Air Force personnel authorized to perform JTAC duties. **Note:** The OPR for this AFMAN is the waiver authority for personnel to perform JTAC duties that are not listed in **Table 3.1**.

Table 3.1. Personnel Authorized to Perform JTAC Duties.

1. JTAC Inherent	YES	NO
1.1. 1Z3X1, Tactical Air Control Party (TACP). ¹	X	
1.2. 19ZXB, Special Warfare Officer-TACP Officer.	X	
2. Individual Authorizations	YES	NO
2.1. 1Z2X1, Combat Control designated as JTAC by the commander and occupying a 914-coded billet.	X	
2.2. 19ZXA, Special Tactics Officer designated as JTAC by the commander and occupying an O9C-coded billet.	X	
2.3. JTAC-Instructor (JTAC-I) and JTAC-Program Manager (JTAC-PM).	X	
2.4. JTAC-Evaluator (JTAC-E) & JTAC-Evaluator-Program Manager (JTAC-E-PM).	X	
2.5. Rated Air Liaison Officers (ALO) assigned to an Air Force Special Warfare (AFSPEWAR) unit and filling O9C-coded billets may perform JTAC duties when authorized by the Wing or (NGB/A3J), <i>Personnel Recovery/Special Missions Division</i> .	X	
2.6. Air Force Civilians and Contractors whose statement of work requires performing JTAC, JTAC-I, and/or JTAC-E duties. ^{2, 3}	X	
3. Personnel Actions	YES	NO
3.1. Individuals denied from bearing arms (not allowed access to weapons).		X
3.2. Individuals unable to perform duties due to Uniform Code of Military Justice action or other adverse action (e.g., administrative or civil).		X
3.3. Individuals identified as drug or alcohol dependent.		X
3.4. Individuals authorized in this table who were classified as drug or alcohol dependent but who have been subsequently cleared as NOT drug or alcohol dependent by medical authority and approved by group commander.	X	
3.5. Individuals enrolled in a substance abuse/dependency program.		X
3.6. Individuals who proclaim and are granted conscientious objector status IAW DAFI 36-3211, <i>Military Separations</i> .		X
3.7. Individuals who do not possess a security clearance. ¹		X
3.8. Individuals who do not meet the Special Warfare Airmen (SWA) Medical requirements IAW Department of the Air Force Manual (DAFMAN) 48-123, <i>Medical Examinations and Standards</i> . ⁴		X

Notes:

- ¹. All JTACs or authorized personnel considered for JTAC upgrade must be eligible for Top Secret/Secret Compartmented Information. **(T-2)**
- ². Contractor support limitations. The engagement of contractors as a JTAC, JTAC-I, and/or JTAC-E is subject to the limitation that contractors cannot perform inherently governmental functions. **(T-0)** This in general restricts contractors from operational/combat roles outside of the training environment.
- ³. Air Force civilians and contractors are not required to meet medical requirements unless specified in their position description or contract.
- ⁴. Waivers or exceptions to policy for individuals who fail to meet the SWA medical standards IAW DAFMAN 48-123 will be approved at MAJCOM level. **(T-1)**

3.1.1. **JTAC Inherency.** 19ZXB and 1Z3X1 personnel must gain and maintain JTAC certification and qualification as identified in the applicable classification directory. **(T-1)** 19ZXB or 1Z3X1 personnel who fail to obtain an initial JTAC certification or are decertified IAW this AFMAN must be entered into retraining or be administratively removed from the Air Force IAW [paragraph 4.4.4](#) of this manual. **(T-1)**

3.1.2. **Exceptions.** Once 19ZXB or 1Z3X1 personnel acquire the 914 or O9C SEI, they may conduct duties in positions that do not require them to remain qualified JTACs (e.g., non-914 billet, staff tour, technical instructor). Once they return to a duty position that requires them to perform JTAC duties, they must regain qualification, be moved into a non-JTAC position, be retrained, or be separated from the Air Force. **(T-1)**

3.1.3. JTAC inherent AFSCs and 19ZXA/1Z2s assigned to 914 billets have priority for placement in formal JTAC training courses (e.g., TACP Initial Certification Course, JTAC WIC, Air Force students to United States Marine Corps Weapons and Tactics Instructor). **Note:** Priority for JTAC qualification courses does not include the Special Operations Terminal Attack Controller Course.

3.2. Performance of JTAC duties. The following individuals must be or have previously been JTAC certified:

- 3.2.1. All personnel performing JTAC-PM and JTAC-I duty. **(T-1)**
- 3.2.2. All personnel performing JTAC-E-PM and JTAC-E duty. **(T-1)**
- 3.2.3. All AFSCs 19ZXA, 1Z2X1 occupying a SEI 914 or O9C-coded position. **(T-1)**
- 3.2.4. All AFSCs 19ZXB and 1Z3X1 are JTAC-inherent AFSCs. **(T-1)**

3.3. JTAC Safety. Applying Air Force flight and ground safety standards is paramount during the conduct of JTAC training.

3.3.1. A qualified JTAC or JTAC-I will be physically located with any individual being supervised/trained and be able to take control, if necessary. **(T-1)**

3.3.1.1. Supervision by a qualified JTAC is required:

- 3.3.1.1.1. When non-current on a specific control item. **(T-1)** For example: if a JTAC is non-current for night missions, they can still control day missions unsupervised. However, if they need to control a night mission, they need to be supervised by a JTAC who is “green” for night missions. **(T-1)**
- 3.3.1.1.2. When non-current in any category for greater than six months, but less than 24 months, all controls must be supervised by a qualified JTAC. **(T-1)**
- 3.3.1.2. Supervision by a JTAC-I is required:
 - 3.3.1.2.1. When a JTAC does not hold a 914/O9C SEI, has failed to meet evaluation standards, or is unqualified in any event for more than 24 months. **(T-1)**
 - 3.3.1.2.2. During live terminal attack control (TAC) for initial JTAC certification or requalification, when instructing JTAC trainees, or when overseeing unqualified (24 months or greater) JTACs in live TAC. **(T-1)**
- 3.3.2. A JTAC-I shall only instruct certification or qualification controls for which they are current and qualified (e.g., if qualified on day controls, but unqualified on night controls, the JTAC-I shall only instruct day controls). **(T-1)**
- 3.3.3. JTACs and collocated personnel will adhere to local published range safety procedures when conducting live TACs at air-to-ground range facilities. **(T-1)** In the event no local procedures are published, JTACs will utilize, at a minimum, personal protective equipment consisting of a helmet, body armor with plates inserted, and any additional items determined by the range safety officer or senior ranking member. **(T-1)** All personnel will wear laser eye protection IAW AFMAN 11-214, *Air Operations Rules and Procedures*, during laser operations. **(T-1)**

3.4. Controller Limitations.

- 3.4.1. JTACs, JTAC-Is and JTAC-Es will not control, instruct, or evaluate live fly or simulated aircraft if:
 - 3.4.1.1. Any alcohol, other intoxicating substance, or prescribed narcotic medication is consumed within 12 hours prior to controlling duties; or, if still impaired by any of these (or their aftereffects) even though they were consumed more than 12 hours prior to controlling duties. **(T-1)**
 - 3.4.1.2. Anytime a physical or psychological condition is suspected or known to be detrimental to the safe performance of controller duties. **(T-1)** **Note:** Consult with a flight surgeon IAW Special Warfare Airmen medical standards at the earliest opportunity.
 - 3.4.1.3. While self-medicating, except IAW the “Official Air Force Aerospace Medicine Approved Medications” in DAFMAN 48-123.
- 3.4.2. When a flight surgeon completes a DD Form 2992, *Medical Recommendation for Flying or Special Operational Duty*, and recommends duties not including controlling (DNIC) status, unit commanders will use their discretion on what duties (e.g., simulators, academic instruction) the individuals can perform that do not include control of live aircraft and/or munitions. **(T-1)** Unit commanders accept any risk taken by disregarding medical recommendations.

3.4.2.1. After consultation with the flight surgeon and the unit JTAC-PM, unit commanders may authorize JTACs to continue performing specified JTAC training after assessing the risk. **Note:** Risk assessment decisions should consider the quality of training or instruction to be provided or received by the DNIC member for the duties being authorized.

3.4.2.2. The unit JTAC-PM will document the acceptance of risk and any exceptions to DNIC status on an AF Form 623A or a memorandum for record (MFR) (placed in Part IV Section 5) signed by the commander and placed in the JTAC's training folder. **(T-1)**

3.5. General Training Guidance.

3.5.1. Fixed-Wing (FW) and Rotary-Wing (RW) assets must meet the following requirements to be counted towards JTAC ICT, JTAC MQT, and JTAC CT:

3.5.1.1. Flying unit must formally train to CAS procedures and have an operational CAS mission requirement. **(T-1)**

3.5.1.2. Aircraft must fly CAS missions employing CAS procedures outlined in Joint Publication 3-09.3 or Allied Tactical Publication 3.3.2.1, *Tactics, Techniques, and Procedures (TTP) for Close Air Support and Air Interdiction*.

3.5.2. Use of RW assets. RW aircraft controls may be counted towards CAS training and proficiency requirements during any phase of training.

3.5.3. Contract aircraft may be used to fulfill all JTAC training requirements provided they meet the appropriate criteria. The intent for contract CAS is to match the capability of combat aircraft as closely as possible. Contract CAS aircraft are broken down into high performance aircraft and non-high-performance aircraft IAW US Federal Aviation Administration guidelines. To meet all qualification requirements, contract CAS aircraft must meet the performance standards listed in **Table 3.2**. **(T-1)** Aircraft that do not meet the performance standards listed in **Table 3.2** do not meet the intent for Type 1 controls.

Table 3.2. Requirements for High Performance Contract CAS Aircraft.

Altitude	SFC – 10K MSL
Speed	175 KTAS
TOS	90 Mins
Dive Angle	30 Deg. (Max)
Rate of Climb	1.5K ft/min (Min)
Type of Delivery	Level/Diving/Pop Attacks (Visual or System Delivery)

3.5.4. Non-USAF JTAC-Is and non-USAF JTACs assigned as formal JTAC schoolhouse instructors will meet the requirements in this publication as well as successfully pass a JTAC and JTAC-I evaluation IAW AFMAN 10-3505V2, *Joint Terminal Attack Controller Standards and Evaluations Program*, before performing instructor duties for schoolhouse trainees. **(T-1)**

3.5.5. JTAC-Is directly supervising JTAC trainees and JTAC requalification may count up to two supervised controls every six months (to include night, live, and laser controls) toward the JTAC-I qualification requirement IAW **Table 4.2**.

3.6. Formal Schoolhouse Guidance.

3.6.1. The 6th Combat Training Squadron (CTS) is the lead Combat Air Forces (CAF) schoolhouse for the JTAC certification process, and will maintain syllabi, lesson plans, and course documents for JTAC ICT. 6 CTS will develop the JTAC ICT syllabus so that it meets the Joint Mission Task List (JMTL) requirements for JTAC certification IAW the JTAC MOA.

3.6.2. 6 CTS is the OPR for all changes to the syllabus.

3.7. Deployment Process. JTACs will deploy qualified and current IAW [paragraph 4.6](#), without exception. Deployed JTACs are considered current for the duration of the deployment and the 18-month evaluation requirement is waived. All deployed JTACs who fail to maintain currency requirements are considered non-current upon completion of the deployment and must regain currency IAW this manual. **Note:** MAJCOM functional area managers may designate short notice response taskings as “deployed in place”. Personnel in these MAJCOM designated taskings can be placed in deployed status.

3.7.1. Units will ensure JTAC training and evaluation folders are up to date prior to deployment. **(T-1)** JTACs that deploy to locations that are not capable of or permitted to use a digital training tracking system will adhere to the area of operation reporting instruction requirements. **(T-1)**

3.7.2. JTACs will document all combat and non-combat missions conducted while deployed via analog means or in a HAF-approved digital system of record. **(T-1)**

3.7.2.1. AFSOC units may use a USSOCOM approved and funded digital format, provided it meets the same reporting standards as the system used by CAF and ANG personnel.

3.7.2.2. Group JTAC-PMs, or equivalent, will create a controller read file detailing what information is required or not authorized in a CAS log to ensure that Operations Security violations do not occur. **(T-1)**

3.8. Individual JTAC Transfers.

3.8.1. In the case of transferring to an assignment not requiring JTAC duties, the individual’s JTAC digital training tracking system may be deactivated if not used, but may be retained by the digital training tracking system for future reactivation.

3.8.1.1. Deactivation and reactivation of a JTAC’s digital training tracking record is conducted by the unit JTAC-PM.

3.8.1.2. JTACs will retain a copy of their individual training folder as a back-up. **(T-1)** An offline digital copy is preferred with an analog copy as optional back-up.

3.8.2. In the case of transferring to an assignment requiring JTAC duties, but the unit does not maintain a JTAC program, the individual JTAC’s training folder will be managed/coordinated by the parent MAJCOM. **(T-1)** ANG will be coordinated through the parent group JTAC-PM. **(T-1)** Personnel assigned to a unit that does not maintain a JTAC program will remain designated by their unit commander. **(T-2)**

Chapter 4

JTAC CERTIFICATION AND QUALIFICATION

4.1. Purpose. This section provides minimum requirements for personnel responsible for training JTACs and the minimum requirements for initial (certification) and recurring (qualification) training to meet combatant commander needs. **NOTE:** Refer to **Attachment 2** for mission and event definitions.

4.2. JTAC Instructors and Evaluators.

4.2.1. JTAC-I. Qualified JTAC-I instruct JTAC trainees conducting simulated, dry, or live TAC. Non-JTAC-I subject matter experts may instruct JTAC trainees on course topics which support CAS operations but are not directly associated with the control of aircraft (e.g., fire support coordination measures, airspace management, and the theater air-ground system). JTAC-Is are also responsible for conducting any additional training assigned after a JTAC evaluation and the instruction of TTPs for the unit to which they are assigned. To be designated as a JTAC-I, an individual must:

4.2.1.1. Must possess a minimum of one year of experience as a qualified JTAC.

4.2.1.2. Maintain JTAC qualification IAW this AFMAN. **(T-1)**

4.2.1.3. Complete a squadron commander-approved training program that demonstrates how to effectively teach, coach, and mentor all duty areas listed in **Table 5.1.**, **Table 5.2.**, and **Table 5.3** of this publication. The program will, at a minimum, include:

4.2.1.3.1. An academic phase covering JTAC-I roles and responsibilities, academic lesson development, academic instruction fundamentals, training scenario development and instruction, and briefing and debriefing techniques. **(T-1)**

4.2.1.3.2. Presentation of one planned academic lesson. **(T-1)**

4.2.1.3.3. One instructor-led demonstration of a CAS FMP. **(T-1)**

4.2.1.3.4. Student-led development and instruction of four CAS missions. **(T-1)** At least one mission will use live-fly aircraft. **(T-1)** At least one mission will be permissive. **(T-1)** At least one mission will be non-permissive. **(T-1)**

4.2.1.4. Be designated a JTAC-I in writing by the unit commander. **(T-3)**

4.2.1.5. Be RegAF, ANG, ARC, DoD civilian, civilian contractor, or partner nation equivalent. **(T-1)**

4.2.1.6. JTAC-I Waiver Authority. JTAC-I waiver authority resides with the group commander. If the individual is assigned to a unit without a group, then waiver authority resides with the commander at the next higher echelon of command, equal to group commander authority or higher. **(T-2)**

4.2.1.7. Contractor JTAC-I. Contractors may serve as JTAC-Is with the following criteria:

- 4.2.1.7.1. Previously qualified as a JTAC-I or certified and qualified as a JTAC (IAW the JTAC MOA or North Atlantic Treaty Organization (NATO) Allied Tactical Publication 3.3.2.2., *Joint Terminal Attack Controller Program*) while serving as a member of the Armed Forces. Previously qualified JTACs require upgrade training IAW this AFMAN under the supervision of a RegAF, ANG, ARC, or DoD Civilian JTAC-I.
- 4.2.1.7.2. Meet certification and maintain qualification requirements IAW this AFMAN.
- 4.2.1.7.3. Restricted to operations in a training environment only.
- 4.2.1.7.4. Prohibited from performing JTAC duties in support of combat operations.
- 4.2.1.7.5. Recurring evaluations will be administrated by a RegAF, ANG, AFR, or DoD JTAC-E. **(T-1)**
- 4.2.1.8. Formal Schoolhouse JTAC-I.
- 4.2.1.8.1. The 6 CTS is the lead Air Force organization responsible for maintaining formal JTAC schoolhouse JTAC-I training requirements for schools conducting JTAC ICT courses.
- 4.2.1.8.2. Schoolhouses will train and certify new instructors using the training requirements identified in **Table A3.2. (T-1)**
- 4.2.1.8.2.1. When teaching actual students, instructors must be under qualified unit supervision until certified, to include live-fly controls. Instructors must maintain JTAC qualification. **(T-1)**
- 4.2.1.8.2.2. Instructor assessments will be documented on a separate Air Education and Training Command (AETC) Form 281, *Instructor Evaluation*, for each lesson the instructor is certified in. **(T-1)**
- 4.2.1.8.2.3. Schoolhouses will document instructor certification in section IV of AETC Form 10, *Instructor Training/Proficiency Record*, and place in the instructor's training record. **(T-1) Note:** "Letters of Certifications" should be updated quarterly to reflect all lesson certifications and instructor certifications.
- 4.2.1.8.3. The course managers will designate primary and alternate instructors who are responsible for lesson plan accuracy and conformity to approved syllabi or plan of instruction. **(T-1)**
- 4.2.1.8.4. Periodic Assessments. Each schoolhouse will establish an academic standardization program IAW Air Combat Command Instruction (ACCI) 11-251, *ACC Operations Training Development Program. (T-1)*
- 4.2.1.8.4.1. Each certified instructor must be assessed in at least one instructional class/event every 12 months, or more frequently, as directed by the commander. **(T-2)**
- 4.2.1.8.4.2. Assessments will be documented in the individual's training folder using an AETC Form 281. **(T-1)**

4.2.1.8.4.3. Assessments and informal feedback should be conducted outside the formal assessment process.

4.2.1.8.4.4. Instructor qualification. Formal schoolhouse instructors will maintain currency by instructing a non-administrative lesson at least every 180 calendar days IAW AETCI 36-2604, *Flying Training Instructor Programs*. **(T-1)**

4.2.1.8.5. Instructor Training Records (ITRs). Each schoolhouse will maintain an ITR for each instructor. **(T-1)**

4.2.1.8.5.1. Organize the folder into a 4-part documentation system consisting of:

4.2.1.8.5.1.1. Part I: Instructor Training Record. Schoolhouses will use an AETC Form 10, to document instructor training and proficiency. **(T-1)**

4.2.1.8.5.1.2. Part II: Instructor Assessments. Schoolhouses will use an AETC Form 281, to document all instructor assessments. **(T-1)**

4.2.1.8.5.1.3. Part III: Formal Instructor Training Certificate.

4.2.1.8.5.1.4. Part IV: Other Training Course Certificates. Schoolhouses will place any other formal training course certificates that add to an instructor's capability as an instructor or subject matter expert in this section. **(T-1)** Examples are Analysis, Design, Development, Implementation, Evaluation, and Technical Writer.

4.2.1.8.5.2. Non-USAF Forward Air Controllers (FAC) and JTACs assigned to a USAF formal schoolhouse:

4.2.1.8.5.2.1. Individuals must maintain and document JTAC training requirements identified in this manual and evaluation requirements identified in AFMAN 10-3505V2 guidance on JTAC evaluations while assigned to the schoolhouse. **(T-1)**

4.2.1.8.5.2.2. Upon change of assignment, non-USAF FACs and JTACs are no longer considered qualified USAF formal schoolhouse JTAC-Is and revert to their service or national qualification status.

4.2.1.8.5.2.3. Schoolhouses must provide ITR and any training or evaluation records (e.g., AF Form 1035, *AFSPECWAR Evaluation Form*, ACC Form 134, *Training Summary*) to the individual. **(T-1)**

4.2.1.8.5.2.4. For individuals qualified as a JTAC under North American Treaty Organization (NATO) Allied Tactical Publication (ATP) 3.3.2.2, any previous task and evaluation accomplishments will count towards JTAC experience requirements. **(T-1)**

4.2.1.8.5.3. CTS, 4 CTS, and 137 CTF must maintain a roster of certified instructors, updated monthly. **(T-1)**

4.2.2. JTAC-E. A qualified JTAC-E is a JTAC that has been designated to conduct JTAC evaluations. Reference AFMAN 10-3505V2 for JTAC-E requirements and upgrade process.

4.3. JTAC Initial Certification Training.

4.3.1. Eligibility to Enter JTAC ICT.

4.3.1.1. Officers must possess a minimum 2-skill level in their Air Force Specialty Code (AFSC) 19ZXB/19ZXA or be an aircrew member ALO filling a 09C-coded billet and with a Tier-1 waiver. **(T-1)**

4.3.1.2. Enlisted personnel must possess a minimum 3-skill level in AFSC 1Z3X1 or be a 1Z2X1 assigned to a 914 billet. **(T-1)**

4.3.2. JTAC certification process. JTAC inherent career fields will be provided priority placement for scheduling and attendance of all formal JTAC courses with the exception of the Special Operations Terminal Attack Control Course. **(T-1)** To be certified as a JTAC, the individual must successfully:

4.3.2.1. Complete the academic curriculum of an accredited JTAC schoolhouse **(T-1)** Accredited schoolhouses are those that have been found by the JFS ESC to meet requirements IAW the JTAC MOA, paragraph 5.1.1.

4.3.2.2. Demonstrate proficiency conducting the execution tasks under the supervision of a qualified JTAC-I. **(T-1)**

4.3.2.3. Complete initial JTAC certification during the Initial Certification Course culminating event proctored by a formal schoolhouse JTAC-I and documented on an AF Form 1036, *JTAC Initial Certification Training*. This evaluation will occur as a part of a formal training course or conducted at the unit level. **(T-1)** **Note:** JTAC ICT Individuals may graduate with deficiencies, however they must be documented on their Form 1036.

4.3.2.4. Prior to completion of MQT, JTAC trainees will complete the following JMTL tasks identified in [Table 4.1](#). **(T-1)**.

Table 4.1. Minimum JTAC Certification Controls.

Terminal Attack Control	Minimum Required	Condition
Type 1	2	Live or Dry
Type 2	2	Live, Dry, or Simulated
Type 3	1	Live, Dry, or Simulated
Bomb on Target (BOT)	2	Live or Dry
Bomb on Coordinate (BOC)	2	Live, Dry, or Simulated
FW CAS Aircraft	2	Live or Dry
RW CAS Aircraft	1	Live, Dry, or Simulated
Laser control ¹	1	Live or Dry
InfraRed (IR) Pointer ^{2,3}	1	Live or Dry
Remote Observer	1	Live, Dry, or Simulated

Video Downlink (VDL)	1	Live, Dry, or Simulated
Live	2	Live
9-line attack brief ³	2	Live or Dry (1 may be Simulated)
Suppression of Enemy Air Defenses (SEAD)	1	Live, Dry, or Simulated
Urban	1	Live, Dry, or Simulated
With Forward Air Controller Airborne (FAC(A))	1	Live, Dry, or Simulated
Day	2	Live or Dry
Night ^{4,5}	2	Live or Dry (1 may be Simulated)

Notes:

¹ Ground laser shall be utilized to mark/designate a target for an aircraft (laser spot tracker recommended). Intent is to utilize laser equipment and laser terminology.

² A ground IR pointer shall be utilized to mark a target for a Night Vision Device (NVD) equipped aircrew. Intent is to utilize IR equipment and IR terminology.

³ Night TAC – A control in which each of the players in the CAS Team are in the same environment of darkness, which is a point in time after End Evening Nautical Twilight (EENT) and prior to Begin Morning Nautical Twilight (BMNT). The intent is to train in hours of darkness where low visibility affects visual acquisition of the target. **Note:** A Tactical Operations Center (TOC) environment does not meet this intent.

⁴ Must use a complete 9-line attack brief – Initial point (IP) to target attack (Lines 1-3) will not be abbreviated, not applicable (N/A) or from the overhead. (T-1)

⁵ Units deployed to or stationed at extreme latitudes (>49 deg) may waive the night and/or IR pointer control(s) for certification until night sorties can be executed. Waived units will control night sorties in a simulator approved by the JFS ESC IAW JTAC MOA for night controls if available. (T-1)

4.4. Formal JTAC Course Documentation.

4.4.1. Formal courses will provide course completion documentation once all training is accomplished. (T-1) If all required training was not accomplished, the JTAC schoolhouse will provide a deficiency letter listing the specific training that was not accomplished to include the reason why the training was not accomplished (e.g., no live or dry controls were completed due to weather). (T-1)

4.4.2. Formal courses will also provide any classroom products, requirements, and grading criteria to the unit JTAC-PM that address the deficient area(s). **(T-1)** Once all deficiencies are completed, the JTAC-PM will contact the course manager for release of the certification course completion certificate. **(T-3)** The formal JTAC schoolhouse will complete this documentation when the JTAC graduates and will send training documentation to the gaining unit's JTAC-PM within 5 duty days of course completion. **(T-1)**

4.4.3. Each control at a formal JTAC course will be graded and documented on ACC Form 206, *Individual Mission Gradesheet*, or an approved service/nation equivalent, and placed into Part IV: Documentation of Training, Section 4, of the trainee's JTAC training and evaluation Folder IAW **Attachment 4**. **(T-1)**

4.4.4. JTAC ICT Failure to Progress. Commanders will consider Airmen for disqualification from the 1Z3X1 and 19ZXB AFSCs after removal from an accredited JTAC schoolhouse for academic failure or non-progression. **(T-3)** Once commanders determine AFSC disqualification is appropriate, commanders should take one of the following actions:

4.4.4.1. Recommend Airman for retraining if eligible IAW AFMAN 36-2100.

4.4.4.2. Return Airman to prior AFSC IAW HAF Accessions and Training Division (AF/A1PT), Memorandum: *Clarification of Crossflow/Retraining Policy for Air Force Special Warfare (AFSPECWAR) and Special Warfare Mission Support Candidates*.

4.4.4.3. Separate Airman IAW DAFI 36-3211, *Military Separations*. **NOTE:** Commanders should consult with the local Staff Judge Advocate before proceeding with any action to separate an individual.

4.5. JTAC Mission Qualification Training (MQT). MQT is the required to achieve a basic level of competence in JTAC requirements and in a unit's primary tasked missions. It should be focused and tailored to the unit METL. MQT training requirements are documented on AF Form 797. An example JTAC MQT program is provided in **Attachment 5**. Individuals must be ICT complete to begin MQT.

4.5.1. Unit JTAC-PMs will ensure that ICT complete individuals (marked "Certified" on their AF Form 1036) are entered into MQT no later than 30 days (training days for ANG) after arrival at their first duty station. **(T-3)**

4.5.1.1. For individuals who are not ICT complete (not marked "Certified" on their AF Form 1036), unit JTAC-PMs will ensure that all deficiencies are completed no later than 60 days (training days for ANG) after arrival at their duty station. **(T-3)**

4.5.1.2. Once all deficiencies are completed, the JTAC-PM will contact the course manager for release of the JTAC Qualification Course certificate, mark the individuals AF Form 1036 as "Certified", and the individual can begin MQT. **(T-3)**

4.5.1.3. The JTAC-PM will document individuals who fail to successfully complete ICT training deficiencies within 60 days (training days for ANG) and will annotate them as an ICT failure on a MFR signed by the unit commander and placed in their JTAC training and evaluation Folder. **(T-3)** A single extension of up to 30 days (training days for ANG) may be requested from the JTAC schoolhouse the individual attended. Individuals who fail to successfully complete their ICT training deficiencies will be treated IAW **paragraph 4.4.4** of this publication for non-progression. **(T-3)**

4.5.2. The individual must be entered into MQT no later than 10 days (training days for ANG) after ICT completion. **(T-3)**

4.5.3. Upon completion of MQT a JTAC evaluation must be conducted within 30 days (training days for ANG) after completion of MQT. **(T-3)**

4.5.4. JTAC MQT Timeline. JTAC trainees must complete JTAC MQT within 180 calendar days (training days for ANG) unless a break in training occurs and the JTAC MQT timeline is adjusted IAW this publication. **(T-1)** Authorized breaks in training include, but are not limited to, contingency deployments, medical restrictions, extenuating personal circumstances (e.g., a death in the family), insufficient training day resources for ANG, or national emergencies. JTAC MQT completion will be documented on AF Form 797 and/or in the HAF-approved digital tracking system. **(T-3)**

4.5.4.1. If necessary, squadron commanders will extend the MQT timeline by no more than 30 days (training days for ANG). **(T-1)**

4.5.4.2. If necessary, group commanders will extend the MQT timeline an additional 30 days beyond the squadron commander's 30-day (training days for ANG) extension. **(T-1)**

4.5.4.3. MAJCOM commanders may extend the MQT timeline an additional 30 days (training days for ANG). MAJCOM commanders may delegate this authority to Numbered Air Force or wing commanders.

4.5.4.4. JTAC timeline adjustments and extensions will be documented on AF Form 623A. **(T-1)**

4.5.4.5. When JTAC trainees do not complete MQT within the extension timelines, commanders will consider Airmen for disqualification from the 1Z3X1 or 19ZXB AFSC. **(T-3)**

4.5.4.6. JTAC MQT is complete upon accomplishing all training requirements outlined in this publication and any unit-specified requirements.

4.5.5. JTAC MQT Training Requirements. Units that require a JTAC MQT program will develop a program that consists of part task and FMP training. **(T-2)**

4.5.5.1. MQT will be broken down into three separate phases: Static Phase, Dynamic Phase, and Mission Phase. **(T-1)** These phases will be accomplished in sequence and consist of multiple part-task training events and have a culminating FMP that must be successfully accomplished to move on to the next phase. **(T-1)**

4.5.5.2. A minimum of four FMPs are required to complete MQT. **(T-1)**

4.5.6. JTAC MQT Documentation.

4.5.6.1. Unit commanders must approve, in writing or on a comprehensive AF Form 797, an individual's entry into, completion, or removal from JTAC MQT in the individual's JTAC training and evaluation folder. **(T-1)**

4.5.6.2. Unit commanders must approve breaks in JTAC MQT training in writing on an AF Form 623A and place it within the individual's JTAC training and evaluation folder. **(T-1)**

4.5.6.3. JTAC MQT progression will be documented using AF Form 797. **(T-1)**

4.5.6.4. Commanders will award SEI 914 or O9C to individuals upon successful completion of an evaluation documented on AF Form 1035. **(T-1)**

4.5.7. JTAC MQT Failure to Progress. Commanders should consider an Airman for disqualification from the 1Z3X1 or 19ZXB AFSCs after exhausting all extensions outlined in **paragraph 4.4.4** of this manual for non-progression. Once commanders determine AFSC disqualification is appropriate, commanders will take one of the following actions:

4.5.7.1. Recommend Airman for retraining (if eligible IAW AFMAN 36-2100) **(T-2)**

4.5.7.2. Return Airman to prior awarded AFSC IAW HAF AF/A1PT Memorandum: *Clarification of Crossflow/Retraining Policy for Air Force Special Warfare (AFSPEWAR) and Special Warfare Mission Support Candidates.* **(T-2)**

4.5.7.3. Separate Airman IAW DAFI 36-3211, *Military Separations.* **(T-2)** **Note:** Commanders should consult with the local Staff Judge Advocate before proceeding with any action to separate an individual.

4.6. JTAC Continuation Training (CT). CT is required after successfully completing MQT and successfully passing a JTAC evaluation to maintain JTAC currency.

4.6.1. JTAC CT process. Once certified, a JTAC will remain qualified provided:

4.6.1.1. JMTL knowledge and task proficiency is maintained IAW this manual. **(T-1)**

4.6.1.2. Evaluation requirements are satisfactorily accomplished.

4.6.1.3. Tasks identified in **Table 4.2** are successfully completed during the conduct of a TAC and during an established six-month period unless noted.

4.6.2. Minimum JTAC Qualification Controls. **Table 4.2** provides the minimum terminal attack tasks and conditions that must be accomplished every 6 months to maintain JTAC qualification. **(T-1)**

Table 4.2. Minimum JTAC Continuation Training (CT) Controls.

Terminal Attack Control	Minimum Required	Condition
Type 1	1	Live, Dry, or Simulated (No more than 12 months between Live or Dry)
Type 2	1	Live, Dry, or Simulated
Type 3	1	Live, Dry, or Simulated
BOT	1	Live or Dry
BOC	1	Live, Dry or Simulated
FW CAS Aircraft	2	Live or Dry (1 may be Simulated)
RW CAS Aircraft	1	Live, Dry, or Simulated
Laser control ¹	1	Live, Dry, or Simulated (No more than 12 months between Live or Dry)
IR Pointer ^{2,3,4}	1	Live, Dry, or Simulated (No more than 12 months between Live or Dry)
Remote Observer	1	Live, Dry, or Simulated
Video Downlink (VDL)	1	Live, Dry, or Simulated
Live	1	Live (actual munitions release)
9-line attack brief ⁵	1	Live or Dry
Day	1	Live or Dry
Night ^{4,5}	1	Live, Dry, or Simulated (No more than 12 months between Live or Dry)

¹ Ground laser shall be utilized to mark/designate a target for an aircraft (laser spot tracker recommended). Intent is to utilize laser equipment and laser terminology.

² A ground IR pointer shall be utilized to mark a target for a NVD equipped aircrew. Intent is to utilize IR equipment and IR terminology.

³ Units deployed to or stationed at extreme latitudes (>49 deg) may waive the night and/or IR pointer control(s) for certification until night sorties can be executed. Waived units will control night sorties in a simulator approved by the JFS ESC IAW JTAC MOA for night controls if available. **(T-1)**

⁴ Night TAC – A control in which each of the players in the CAS Team are in the same environment of darkness, which is a point in time after EENT and prior to BMNT. The intent is to train in hours of darkness where low visibility affects visually acquiring the target. **Note:** A TOC environment does not meet this intent.

⁵ Must use a complete 9-line attack brief – IP to target attack (Lines 1-3 will not be abbreviated, N/A, or from the overhead).

4.6.3. JTACs should accomplish qualification requirements with ground maneuver units, Type-2 enablers, integrating Joint Fires Observers (JFO) and FAC(A) whenever possible. Commanders will establish guidance and set goals aimed at achieving joint interoperability. **(T-2)**

4.6.4. JTAC Qualification Failure to Progress. Commanders will consider Airmen for disqualification from the 1Z3X1 or 19ZXB AFSCs after two consecutive recurring evaluation failures. **(T-3)** Once commanders determine AFSC disqualification is appropriate, commanders will take one of the following actions:

4.6.4.1. Recommend Airman for retraining (if eligible IAW AFMAN 36-2100). **(T-1)**

4.6.4.2. Return Airman to prior awarded AFSC (if eligible per AFSC specialty description). **(T-1)**

4.6.4.3. Separate Airman IAW. DAFI 36-3211, *Military Separations* **(T-1)** **Note:** Commanders should consult with the local Staff Judge Advocate before proceeding with any action to separate an individual.

4.7. Ready Tasking Message (RTM). The RTM is a MAJCOM-developed CT program, designed to develop JTAC training and focused on capabilities needed to accomplish a unit's mission essential tasks. The RTM is a mechanism for connecting resources to training requirements and building proficiency. ACC is responsible for the publication of the RTM for CAF JTACs and AFSOC is responsible for the publication of the RTM for Air Force Special Operations Forces (SOF) JTACs.

4.7.1. The RTM is a 12-month training cycle based on the fiscal year that defines the MAJCOM CT program and should be updated annually, or as required.

4.7.2. The RTM should include the following:

4.7.2.1. Requirements for the completion of an FMP and events to receive RTM credit.

4.7.2.2. CT requirements that match JTAC proficiency requirements.

4.7.2.3. CT requirements that match JTAC experience levels.

4.7.3. Reporting Procedures.

4.7.3.1. ACC/A3J, should determine reporting procedures and formats for CAF units and AFSOC, Operations Division (AFSOC/A3O), should determine reporting procedures and formats for AFSOC units.

4.7.3.2. The RTM should determine the frequency of reporting at the unit level. The RTM should also establish due dates for unit reporting to the MAJCOM.

4.8. Loss of Currency.

4.8.1. Loss of Currency. JTACs who fail to comply with CT IAW [paragraph 4.6](#) (e.g., JMTL tasks and qualification, or evaluation) will be considered non-current. JTACs who fail to successfully complete JMTL Tasks in [Table 4.2](#) requirements must, under the supervision of a qualified JTAC, complete the number and category (e.g., appropriate night, FW, ordnance)

of controls they failed to accomplish to regain currency. Supervision is required only for those events which were not accomplished (e.g., if night was not accomplished; only night control requires supervision). A JTAC who is non-current (JMTL tasks) for more than six months, but less than 24 months, will complete the JMTL requirements IAW [paragraph 4.6](#) (JTAC CT Process), under the supervision of a qualified JTAC.

4.8.2. Evaluation Failure. A JTAC who fails to satisfactorily complete an evaluation, will only control while under the supervision of a qualified JTAC-I. This restriction will remain in place until the unqualified JTAC satisfactorily completes a subsequent re-evaluation conducted by a JTAC-E. See AFMAN 10-3505V2 for guidance after a JTAC evaluation failure.

4.8.3. Non-current for 24 Months or Longer. A JTAC who is non-current on any JMTL task for 24 consecutive months must regain qualification by completing all JMTL tasks and [Table 4.2](#) (Minimum JTAC Qualification Controls) under the supervision of a qualified JTAC-I. (T-1)

4.9. JTAC Training and Evaluation Folder. To document compliance with JTAC certification and qualification standards, each JTAC will have a training and evaluation folder created and maintained by the assigned unit in either an analog or a digital format. (T-1) The JTAC training and evaluation folder will be used to record and maintain appropriate JTAC training and evaluation records during each duty assignment and deployment. (T-1) The JTAC training and evaluation folder or an up-to-date copy will accompany the individual JTAC to each duty assignment and deployment location to provide commanders a historical record of the individual's JTAC certification and qualification training and their qualification status. (T-1) A JTAC training and evaluation folder is mandatory for all JTACs and will contain the six-part format as depicted in [Table 4.3](#). (T-1)

Table 4.3. JTAC Training and Evaluation Folder Table of Contents.

PART I: TABLE OF CONTENTS	
PART II: COMMANDER'S DESIGNATION LETTERS	This section contains a copy of the JTAC's current designation letter.
PART III: CAS LOG	This section contains a record of all controls in legible format. This section should contain records of all controls performed since initial certification.
PART IV: DOCUMENTATION OF TRAINING	All continuation training (CT) and refresher training should be documented in Part IV to include academics and testing. Changes to certification and qualification/certification status will be documented by the appropriate authority.
PART V: DOCUMENTATION OF EVALUATIONS	This section contains documentation of all evaluations conducted since initial certification.
PART VI: JTAC FORMAL SCHOOL DOCUMENTATION	This section contains copies of course completion documentation received from attending a formal course of instruction pertaining to CAS or TAC.
Note: Copies of waivers will be placed into the section of the folder that they apply to.	

4.9.1. Analog Records. **(T-1)** When maintaining analog records, use a six-part sectional, letter size folder with standard 2 ¾-inch metal fasteners at the top to hold documents. A label bearing the individual's name and rank will be affixed to the inside back cover so that the folder can be identified when filed. **(T-1)** A Privacy Act Statement label will be affixed to the cover of each physical folder. Place a MFR in the physical folder for documentation that is maintained on a HAF-approved digital JTAC training and evaluation folder. **(T-1)** See [Attachment 4](#) for additional details and examples.

4.9.2. Electronic Records. Units must maintain JTAC training and evaluation records using an electronic database with a HAF-approved digital tracking system. **(T-1)** The systems must be capable of producing a hard copy of individual JTAC records and contain the information in Parts II – VI as listed above. **(T-1)**

4.9.2.1. Units must provide access to digital records or a hard copy of individual JTAC training and evaluation records when verification of individual JTAC qualification is required. **(T-1)**

4.9.2.2. Units will use a MAJCOM-directed naming convention for all digital JTAC training and evaluation records. **(T-2)**

Chapter 5

JTAC JOINT MISSION TASK LIST

5.1. Purpose. The following three tables comprise the JTAC JMTL, which is comprised of the Joint Mission Tasks that have been identified as the minimum tasks required for a JTAC to successfully perform TAC. The JMTL is the basis for developing schoolhouse academic training syllabus for JTAC certification and qualification training programs. The JMTL will also be used during assessments of JTAC training programs and schoolhouses by the JTAC standardization team. The Joint Mission Tasks are divided into duty areas for academic application and are listed by task and associated sub-tasks.

5.2. Duty Area 01 – CAS Planning. This Duty Area focuses on the minimum classroom academics to be instructed. Each Task and Sub-Task will be covered in the schoolhouse/unit lesson plan. Lesson plan learning objectives will be based on the Task and Sub-task and be a source for test questions. To re-enforce the learning objectives and to assess student comprehension, practical exercises (PEs), quizzes, and examinations will be conducted.

Table 5.1. Duty Area 01 – Close Air Support (CAS) Planning Joint Mission Task List (JMTL).

Task	Defined Task	Condition	Standard
01.1 Advise ground commander on Close Air Support assets in support of ground scheme of maneuver.	Collective Task		
01.1.1 Advise ground commander on Fixed- Wing (FW)/Rotary-Wing (RW) platform capabilities/limitations/employment.	Demonstrate knowledge of the capabilities, limitations, and employment of fixed wing/rotary wing platforms. (e.g., tactical air, bomber, Unmanned Aircraft System (UAS)). JTAC will be able to successfully answer questions on capabilities, limitations, and employment of FW/RW CAS platforms.	Classroom	Score 80% or greater on a written test.
01.1.2 Advise ground commander on FAC(A) capabilities/limitations/employment.	Demonstrate knowledge of the capabilities, limitations, and employment of fixed wing/rotary wing FAC(A) platforms. Clearly define the roles and responsibilities of supporting and supported forces when integrating FAC(A). JTAC will be able to successfully answer questions on the capabilities, limitations, and employment of FW/RW FAC(A).	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.1.3 Advise ground commander on remote observer capabilities/limitations/employment.	Demonstrate knowledge of the capabilities, limitations, and employment of a remote observer (e.g., scout, Fire Support Team (FIST), JFO, SOF). Clearly define the roles and responsibilities of supporting and supported forces when integrating a remote observer/JFO. JTAC will be able to successfully answer questions on remote observer/JFO capabilities, limitations, and employment.	Classroom	Score 80% or greater on a written test.
01.1.4 Advise ground commander on Group 1 through 5 Unmanned Aerial Systems (UAS) capabilities/limitations/employment.	Demonstrate knowledge of the capabilities, limitations, and employment of Group 1, 2, 3 UAS platforms. JTAC will be able to successfully answer questions on the capabilities, limitations, video downlink (VDL) and employment of Group 1 through 5 UAS.	Classroom	Score 80% or greater on a written test.
01.1.5 Advise ground commander on aviation weapon capabilities/limitations/employment.	Demonstrate knowledge of air delivered weapon capabilities, limitations, and employment methods (general purpose bombs, laser guided munitions, inertially-aided munitions, aircraft guns, rockets, flares, air to ground missiles). JTAC will be able to successfully answer questions on weapon capabilities, limitations, and employment.	Classroom	Score 80% or greater on a written test.
01.1.6 Advise ground commander on effects of weather, terrain, and threats on CAS capabilities.	Demonstrate knowledge of weather, terrain and threats when employing CAS assets. JTAC will be able to successfully answer questions on mission impacts of weather, terrain and threats when employing CAS assets.	Classroom	Score 80% or greater on a written test.
01.1.7 Advise ground commander on effects of electronic warfare (EW) on CAS capabilities.	Demonstrate knowledge of airborne and ground base Electronic Warfare (EW) effects. JTAC will be able to successfully answer questions on EW effects, location of electronic warfare planners, the request process and how to submit an EW request (Joint Tactical Air Strike Requests (JTAR) when employing CAS assets.)	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.1.8 Advise ground commander on the use and timely submission of joint tactical air strike requests (JTAR).	Demonstrate knowledge of the Air Tasking Order (ATO) planning cycle and its effects on JTAR submission. Address what an ATO is, the information listed and how to access the document. The JTAC should also understand the process to get a preplanned mission on the ATO. JTAC trainee will be able to successfully answer questions on the ATO planning cycle and its effects on JTAR submission.	Classroom	Score 80% or greater on a written test.
01.1.9 Advise ground commander on battle damage assessment (BDA) and mission report (MISREP) procedures.	Demonstrate knowledge of the information required to successfully complete a BDA (e.g., observed damage (enemy/civilian), re-attack recommendation, BDA log, and MISREP procedures). JTAC will be able to successfully answer questions on the information required to successfully complete BDA report to CAS aircraft that includes: size, activity, and location. Time, remarks — munitions expended, observed damage (number of tanks destroyed, number still active, and recommendation), mission number, and mission accomplishment (SUCCESSFUL, UNSUCCESSFUL or UNKNOWN).	Classroom	Score 80% or greater on a written test.
01.2 Advise ground commander on the minimum components of a game plan (types of Terminal Attack Control and Method of Attack).	Demonstrate knowledge of how tactical situation, aircrew, aircraft, and weapons capabilities/limitations determine appropriate type of terminal attack control and method of attack contained in the game plan. JTAC will be able to successfully answer questions on the types of CAS control and the factors that determine the type of control and method of attack to be used in a given situation.	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.3 Advise ground commander on integration of CAS with indirect fires.	Demonstrate knowledge of the integration of indirect fires (surface to surface) with CAS during a written evaluation. Address deconfliction methods which facilitate simultaneous multi-ship/platform CAS and indirect fire operations. Must be well versed in Airspace Coordination Area (ACA) terminology and have knowledge of all applicable ACAs in use. JTAC will be able to successfully answer questions on separation techniques that deconflict airspace to provide a reasonably safe operating space for aircraft to maneuver and attack targets.	Classroom	Score 80% or greater on a written test.
01.4 Advise ground commander on the impact of fire support coordination measures (FSCMs) on CAS mission planning.	Given a tactical scenario (e.g., operations order) assess the impact of FSCMs on CAS operations in support of the ground commander's concept of operations during a written evaluation. Address, at a minimum, the definition and proper employment of permissive and restrictive FSCMs to expedite the attack of targets. JTAC will be able to successfully answer questions on FSCMs used during CAS operations. Note: Students should be briefed on Kill box terminology, but a kill box will not be established for close air support (CAS) missions. If a CAS mission is required within an established kill box, the portion of the kill box requiring detailed integration should be closed.	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.5 Advise ground commander on airspace command and control (Joint and Component) procedures and their impact on CAS mission planning (supporting documents – Airspace Control Order (ACO), Airspace Control Measures (ACMs), Air Tasking Order (ATO), and Special Instructions (SPINS)).	Demonstrate knowledge of airspace command and control components, the definition and application of ACO, ACM, ATO, and SPINS and their impact on CAS mission planning (e.g., Theater Air Ground System (TAGS), Theater Air Control System (TACS)/Army Air-Ground System (AAGS), Marine Corps Air Command and Control System (MACCS), Navy Tactical Air Control System (NTACS), and Special Operations Air-Ground System (SOAGS)). JTAC will be able to successfully answer questions on the primary command and control agencies and their roles and responsibilities within the associated Command and Control System and the functions of the ACO, ACM, ATO, and SPINS.	Classroom	Score 80% or greater on a written test.
01.6 Apply intelligence products to CAS mission planning.	Given a tactical scenario/operations order, apply intelligence products to support CAS mission planning in support of the ground commander's concept of operations. Describe how intelligence supports air operations, available intelligence products (e.g., order of battle, maps, Intelligence, Surveillance, and Reconnaissance (ISR) imagery) and the importance of including Intel early in the planning process. JTAC will be able to successfully answer questions on the intelligence products used to support CAS mission planning.	Classroom	Score 80% or greater on a written test.
01.7 Apply the products of the targeting process to CAS mission planning.	Demonstrate knowledge of the targeting process. Address the process which the supported commander selects and prioritize targets and match appropriate effects. Lesson should focus on the products the JTAC will use when planning the employment of CAS (tactical level). JTAC trainee will be able to successfully answer questions on the targeting process products.	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.8 Plan CAS missions with precision and non-precision weapons, in support of the ground scheme of maneuver.	Collective Task		
01.8.1 Plan a laser guided weapon employment and use of both a ground and airborne Laser Target Designator (LTD).	Demonstrate knowledge of laser guided weapons employment and use of both a ground and airborne LTD (aircraft targeting pod and UAS). Address the standard laser brevity terms and procedures for ground and airborne designating, marking, and proper employment of laser guided weapons. JTAC will be able to successfully answer questions on laser guided weapons employment, safety zone, optimal attack zones, hellfire designator exclusion zone and proper laser terminology.	Classroom	Score 80% or greater on a written test.
01.8.2 Plan inertial aided munitions deliveries.	Demonstrate knowledge of inertial aided munitions employment. Address the unique characteristics and limitations of inertially aided/ Global Positioning System (GPS) guided weapons. Lesson will also cover target location error (TLE), Bomb on Coordinate (BOC), and Bomb on Target (BOT). JTAC will be able to successfully answer questions on inertial aided munitions employment.	Classroom	Score 80% or greater on a written test.
01.8.3 Plan non-precision weapons deliveries.	Demonstrate knowledge of non-precision weapons employment. Address the capabilities, limitations, and employment of general-purpose weapons. Consideration must be given to host aircraft navigation/ weapons system accuracy. JTAC will be able to successfully answer questions on non-precision weapons employment.	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.9 Plan engagement with appropriate weapon in order to achieve desired effects, proportional response, and minimize collateral damage.	Demonstrate knowledge of aviation ordnance capabilities and effects. Lesson will present scenarios where ordnance is appropriately matched to targets to achieve ground commanders desired results and comply with Rules of Engagement (ROE) and restrictions. Theatre specific ROE, restrictions, and lessons learned should be briefed. Reinforcement through practical application is required during simulated, dry, or live controls. JTAC will be able to successfully answer questions on aviation ordnance capabilities and effects.	Classroom	Score 80% or greater on a written test.
01.10 Plan day CAS missions, in support of the ground scheme of maneuver.	Collective Task		
01.10.1 Plan day FW CAS missions.	Demonstrate knowledge of day, FW CAS planning factors. JTAC will be able to successfully answer questions on day, FW CAS planning factors.	Classroom	Score 80% or greater on a written test.
01.10.2 Plan day RW CAS missions.	Demonstrate knowledge of day, RW CAS planning factors. JTAC will be able to successfully answer questions on RW CAS planning factors.	Classroom	Score 80% or greater on a written test.
01.11 Plan night CAS missions, in support of the ground scheme of maneuver.	Collective Task		
01.11.1 Plan night FW CAS missions.	Demonstrate knowledge of night, FW CAS planning factors. JTAC will be able to successfully answer questions on night, FW CAS planning factors.	Classroom	Score 80% or greater on a written test.
01.11.2 Plan night RW CAS missions.	Demonstrate knowledge of night, RW CAS planning factors. JTAC will be able to successfully answer questions on night, RW CAS planning factors.	Classroom	Score 80% or greater on a written test.
01.11.3 Plan illumination in support of night CAS missions.	Collective Task		

Task	Defined Task	Condition	Standard
01.11.3.1 Plan ground-delivered illumination.	Demonstrate knowledge of ground-delivered illumination, in support of CAS. Address techniques and procedures on how to employ illumination via surface-based fire support systems in support of CAS missions (artillery, mortars, and naval surface fire support). JTAC will be able to successfully answer questions on surface-delivered illumination, in support of CAS.	Classroom	Score 80% or greater on a written test.
01.11.3.2 Plan aviation-delivered illumination.	Demonstrate knowledge of aviation-delivered illumination, in support of CAS. Address techniques and procedures on how to employ illumination via aviation assets in support of CAS missions (e.g., Airborne delivered flares, illumination rockets). JTAC will be able to successfully answer questions on aviation-delivered illumination, in support of CAS.	Classroom	Score 80% or greater on a written test.
01.12 Incorporate CAS mission planning factors for operations in limited visibility/adverse weather.	Demonstrate knowledge of limited visibility and adverse weather and its effects on CAS. Address techniques and procedures on how to execute a CAS mission during limited visibility and adverse weather conditions. JTAC will be able to successfully answer questions on limited visibility/adverse weather effects on CAS.	Classroom	Score 80% or greater on a written test.
01.13 Incorporate CAS mission planning factors for operations in an urban environment.	Demonstrate knowledge of CAS mission planning factors for operations in an urban environment. Address planning factors, techniques, and procedures on how to execute a CAS mission in the urban environment. JTAC will be able to successfully answer questions on urban CAS planning factors.	Classroom	Score 80% or greater on a written test.
01.14 Plan AC-130 fire missions in support of the ground scheme of maneuver.	Demonstrate knowledge of AC-130 fire missions. Address planning factors, techniques and procedures on how to employ the AC-130. JTAC will be able to successfully answer questions on AC-130	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
	capabilities, call for fire (CFF) procedures and proper employment.		
01.15 Plan integrated attack by multiple fire support assets to support CAS.	Collective Task		
01.15.1 Plan target marking for CAS assets.	Sub-Task	Classroom	
01.15.1.1 Plan target marking for CAS with indirect fire assets.	Demonstrate knowledge to effectively plan visual target marking for CAS with indirect fire. Address techniques and procedures on how to use indirect fire (e.g., artillery, mortars) to provide visual marks (e.g., smoke, illumination) to execute a CAS mission. JTAC will be able to successfully answer questions on target mark timing, airspace management (deconflicting fires from CAS platforms) and use of smoke, high explosive, illumination, or other visual means.	Classroom	Score 80% or greater on a written test.
01.15.1.2 Plan target marking with ground IR pointer for CAS assets.	Demonstrate the ability to effectively plan ground IR pointer target marking for CAS. Address the standard IR pointer brevity terms, procedures for ground IR pointer marking, and the proper employment of IR pointer. JTAC will be able to successfully answer questions on IR brevity and IR pointer safety.	Classroom	Score 80% or greater on a written test.
01.15.2 Plan surface to surface Suppression Enemy Air Defenses (SEAD) for CAS attack.	Demonstrate the ability to effectively plan SEAD for CAS. Address techniques and procedures on how to use indirect fire (e.g., artillery, mortars) to provide SEAD in support of a CAS mission. JTAC will be able to successfully answer questions on definition of SEAD, timing, and airspace management (deconflicting fires from CAS platforms).	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.15.3 Plan coordinated attacks by multiple flights of aircraft to support CAS.	Demonstrate knowledge to effectively coordinate attacks by multiple flights of aircraft and deconflict them from each other during simultaneous, sequential, or random attacks to support CAS. Address type of attack (combined/sectored), timing and procedures on how to deconflict flights. JTAC will be able to successfully answer questions on methods of deconflicting CAS platforms from each other during simultaneous, sequential, or random attacks.	Classroom	Score 80% or greater on a written test.
01.16 Plan terminal attack control in support of CAS attack.	Demonstrate knowledge of terminal attack control procedures in support of CAS planning. Address planning factors, techniques, and procedures on how to conduct terminal attack control of a CAS mission. JTAC will be able to successfully answer questions on established terminal attack control procedures, situation update, game plan and CAS attack brief.	Classroom	Score 80% or greater on a written test.
01.17 Plan target location procedures with the understanding of target location errors (TLE) in support of attack.	Demonstrate knowledge of target location procedures and target location errors (TLEs) in support of CAS planning. Address planning factors, techniques, and procedures on how to most efficiently and effectively locate targets; stress the importance of a targets associated TLE. JTAC will be able to successfully answer questions on procedures, equipment used to determine target location, and TLE categories.	Classroom	Score 80% or greater on a written test.
01.18 Request CAS via JTAR.	Demonstrate knowledge of the JTAR. Address the proper routing and processing of pre-planned and immediate request through the command and control system. JTAC will be able to successfully answer questions on the procedures to fill out and route a JTAR.	Classroom	Score 80% or greater on a written test.

Task	Defined Task	Condition	Standard
01.19 Plan the use of digitally aided CAS (DACAS) systems in support of weapons deliveries.	Demonstrate knowledge of Digitally Aided Close Air Support (DACAS)/Fires systems to facilitate weapons employment. Address the capabilities, limitations, and proper use of Service, USSOCOM, or Partner Nation-fielded DACAS systems (e.g., Android Tactical Assault Kit [ATAK], Special Warfare Assault Kit [SWAK], etc.) JTAC will be able to successfully answer questions on the use of DACAS systems to request, CAS brief and BDA.	Classroom	See Duty Area 2, CAS Preparation Task 02.1.5.
01.20 Plan CAS employment in a contested environment.	Demonstrate knowledge of CAS employment in a contested environment. Address planning factors for threats and tactical situation that dictate attacking aircraft use counter-tactics, countermeasures, and/or vertical and/or lateral standoff during target attack. Include planning for surface-based indirect fire and/or EW assets (lethal and/or non-lethal) to provide SEAD, degraded/denied GPS/communications, and enemy direction-finding capabilities, as applicable.	Classroom	Score 80% or greater on written test.

5.3. Duty Area 02 – CAS Preparation. This Duty Area focuses on the minimum practical, dry, or live TAC to be conducted. Trainees should use the same JTAC equipment in training as they are required to operate during combat operations. Appropriate material will be supplied to the trainees to facilitate CAS mission planning. Each Task and Sub-Task will be covered in the exercise. For the purpose of [Table 5.2](#) “Proficient” is defined as: trainee can do all parts of the task, identify why and when the task must be done, and why each step is needed. This term will be utilized to define the standard to which a task should be accomplished for all, regardless of certification type within this manual.

Table 5.2. Duty Area 02 – CAS Preparation Joint Mission Task List.

Task	Defined Task	Condition	Standard
02.1 Operate organic JTAC equipment.	Collective Task		
02.1.1 Operate organic JTAC communications equipment.	Performance level of proficient.	Classroom, practical exercise, dry, or live.	Performance level of proficient.
02.1.2 Operate organic JTAC target marking equipment.	Demonstrate the ability to operate target-marking equipment in support of CAS. JTAC will demonstrate the ability to operate laser target designators (LTD), IR pointers, radar beacons and other designated target marking equipment. Reference Service equipment checklist, manuals, and documentation.	Classroom, practical exercise, dry, or live.	Performance level of proficient.
02.1.3 Operate organic JTAC target location equipment.	Demonstrate the ability to operate target location equipment and knowledge of its accuracy in support of CAS. JTAC will demonstrate the ability to operate laser range finders (LRF), GPS systems, Target Mensuration Only (TMO) Targeting Software (e.g., PSS-SOF) and other target location equipment. Reference Service equipment checklist, manuals, and documentation.	Classroom, practical exercise, dry, or live.	Performance level of proficient.
02.1.4 Operate organic JTAC video downlink equipment.	Demonstrate the ability to operate video downlink equipment (e.g., ROVER) in support of CAS. JTAC will demonstrate the ability to operate video downlink equipment. Reference Service equipment checklist, manuals, and documentation.	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.
02.1.5 Operate organic DACAS/Fires systems.	Demonstrate the ability to operate digitally aided systems in support of CAS and call for fire (CFF) missions using appropriate reference material when required. JTAC will demonstrate the ability to operate digitally aided systems in support of CAS and CFF missions during simulation, dry and/or live training events. Reference Service equipment checklist, manuals, and documentation.	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.

Task	Defined Task	Condition	Standard
02.2 Apply the products of Operational planning in support of CAS execution.	Collective Task		
02.2.1 Apply intelligence products in support of CAS execution.	Demonstrate the ability to apply intelligence products (e.g., ISR support, ground order of battle, air order of battle, missile order of battle, maps, charts (1:50, GRG)). JTAC will understand which products of the intelligence/deliberate planning cycle are available to devise a plan to ensure CAS resources are used against appropriate targets based on the commander's intent. (e.g., target list).	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.
02.2.2 Apply the products of the fire support plan in support of CAS execution.	Demonstrate the ability to apply the products of the fire support plan (e.g., FSCMs). JTAC will understand what role they play in developing a fire support plan, ensuring CAS is fully integrated, and be able to use the products that result from fire support planning (e.g., target lists, FSCMs).	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.
02.2.3 Apply the products of the Airspace Control Order in support of CAS execution.	Demonstrate the ability to apply the products of the ACO (e.g., ACMs). JTAC will be able to extract and apply the applicable information contained in the ACO required to safely and effectively conduct a CAS mission.	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.
02.2.4 Apply the products of communications planning in support of CAS execution.	Demonstrate the ability to apply a communications plan (e.g., Tactical Air Direction (TAD), Air Request Net (ARN), Tactical Air Request (TAR)/Helicopter Request (HR), TACP Local (L), Tactical Chat, IP and URN addressing, OPTASKLINK). JTAC will establish and maintain all applicable communications nets required to plan, coordinate, and execute a CAS mission. JTAC will understand communications plans and be able to extract communications network data from applicable sources.	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.
02.2.5 Apply the products of the ATO in support of CAS execution.	Demonstrate the ability to apply the ATO (e.g., aircraft, time on station, SPINS). JTAC will read an ATO and be able to identify and extract the information needed to execute a CAS mission.	Classroom, practical exercise, simulation, dry, or live.	Performance level of proficient.

5.4. Duty Area 03 – CAS Execution. This Duty Area focuses on the minimum practical, dry, or live TACs to be conducted. Trainees should use the same JTAC equipment in training as they are required to operate during combat operations. Appropriate material will be supplied to the trainees to facilitate CAS mission planning and execution. Each task and sub-task will be covered in the exercise. For the purpose of **Table 5.3** “Proficient” is defined as: trainee that can do all parts of the task, identify why and when the task must be done, and why each step is needed. This term will be utilized to define the standard to which a task should be accomplished for all, regardless of certification type within this manual.

Table 5.3. Duty Area 03 – CAS Execution Joint Mission Task List.

Task	Defined Task	Condition	Standard
03.1 Targeting	Collective Task		
03.1.1 Target Acquisition	Sub-Task		
03.1.1.1 Execute target acquisition via aided and unaided during daytime conditions.	Demonstrate the ability to acquire targets based on ground commander’s CAS target nominations aided (e.g., binoculars, laser range finder (LRF), LTD, electro-optical (EO), IR) and unaided visual acquisition. JTAC will visually identify CAS targets based on ground commander’s CAS target nominations under day conditions.	Practical exercise, simulation, dry, or live.	Performance level of proficient.
03.1.1.2 Execute target acquisition via aided and unaided during nighttime conditions.	Demonstrate the ability to acquire targets aided (e.g., binoculars, NVDs, IR, thermal) and unaided eyes during night. JTAC will visually identify CAS targets based on ground commander’s CAS target nominations under night conditions. Unaided may involve the use of artificial illumination.	Practical exercise, simulation, dry, or live.	Performance level of proficient.
03.1.1.3 Execute target acquisition via remote observer.	Demonstrate the ability to target via remote observer (e.g., scout, FIST, JFO, SOF). JTAC will demonstrate the ability to work successfully with a remote observer to acquire targeting information (e.g., target location, threats, friendlies) and other critical information needed to build situational awareness to successfully conduct a CAS mission.	Practical exercise, simulation, dry, or live.	Performance level of proficient.

03.1.1.4 Execute target acquisition via remote real-time sensor video downlink information.	Demonstrate the ability to acquire targets via remote real-time sensor video downlink (e.g., ROVER, Video Scout, and targeting pod). JTAC will demonstrate the ability to successfully use video downlink to receive full motion video, still photos, imagery or other media to acquire targeting information (e.g., target coordinates, threats, friendlies, etc.) needed to build situational awareness to successfully conduct a CAS mission.	Practical exercise, simulation, dry, or live.	Performance level of proficient.
03.1.2 Target Location	Collective Task		
03.1.2.1 Determine target location via map plot.	Demonstrate the ability to determine target location via map plot. JTAC will demonstrate the ability to successfully determine target coordinates within 100 m accuracy in open terrain with identifiable terrain features out to 3500 m using only binoculars map and compass.	Practical exercise, simulation, dry, or live.	Performance level of proficient.
03.1.2.2 Determine target location via coupled GPS/LRF system.	Demonstrate the ability to determine target location via coupled GPS and LRF. JTAC will demonstrate the ability to successfully determine target coordinates using a coupled GPS and LRF with at least the following accuracy: 50-80 m at 1 km.	Practical exercise, simulation, dry, or live.	Performance level of proficient.
03.1.2.3 Determine target location via tactical targeting system (e.g., Precision Strike Suite – Special Operations Forces (PSS-SOF)).	Demonstrate the ability to determine target location via tactical targeting system. JTAC will demonstrate the ability to successfully determine target location coordinates within 10 m accuracy using a tactical targeting system (e.g., PSS-SOF).	Practical exercise, simulation, dry, or live.	Performance level of proficient.

03.2 Match target location accuracy / format to desired weapon system.	Demonstrate the ability to determine accuracy of target location (e.g., TLE) and proper coordinate format to desired weapons system. JTAC will determine target location error (TLE) associated with the procedure or equipment used to determine target location coordinates. Match coordinates format and best weapon to target based on accuracy and capability.	Practical exercise, simulation, dry, or live.	Performance level of proficient.
03.3 Coordinate CAS missions	Collective Task		
03.3.1 Integrate CAS missions with ground scheme of maneuver.	Demonstrate the ability to integrate CAS missions with ground scheme of maneuver. JTAC will demonstrate the ability to effectively integrate CAS into the ground scheme of maneuver by meeting the commander's intent for CAS, without limiting the employment of maneuver, aviation, or fire support assets.	Simulation, dry, or live.	Performance level of proficient.
03.3.2 Integrate CAS missions with surface-based fires.	Demonstrate the ability to integrate CAS missions with surface-based fires. JTAC will demonstrate the ability to effectively integrate CAS with supporting or complementary surface fires into the ground scheme of maneuver by meeting the commander's intent for Fire Support.	Simulation, dry, or live.	Performance level of proficient.
03.3.3 Integrate CAS missions with fire support and airspace coordination measures.	Demonstrate the ability to integrate CAS missions with fire support coordination and airspace coordinating measures. JTAC will demonstrate the ability to effectively use fire support coordination and airspace coordinating measures to deconflict CAS with all fire support and aviation assets, to meet the commander's intent for maneuver and fire support.	Simulation, dry, or live.	Performance level of proficient.

03.4 Execute deconfliction of aviation assets	Collective Task		
03.4.1 Execute procedural control of aircraft to provide safe separation.	Demonstrate the ability to effectively deconflict aircraft. JTAC will demonstrate the ability to use appropriate airspace management procedures to ensure safe operation of aircraft in the battlespace during CAS operations.	Simulation, dry, or live.	Performance level of proficient.
03.4.2 Execute procedural control of aircraft to provide safe separation from fires.	Demonstrate the ability to effectively deconflict aircraft from fires. JTAC trainee will demonstrate the ability to combine appropriate airspace management procedures with active fire support coordination measures to ensure safe operation of aircraft in the battlespace during CAS operations.	Simulation, dry, or live.	Performance level of proficient.
03.5 Coordinate CAS Target engagement.	Collective Task		
03.5.1 Receive aircraft check-in and provide situation update to CAS aircraft.	Demonstrate the ability to receive aircraft check-in and provide situation update. JTAC will demonstrate the ability to receive CAS aircraft check-in and provide situation update and apply information to the CAS mission as required.	Simulation, dry, or live.	Performance level of proficient.
03.5.2 Provide game plan and CAS attack brief.	Demonstrate the ability to provide Game plan and CAS attack brief. JTAC will demonstrate the ability to pass a game plan and CAS attack brief to CAS aircraft to attack a surface target.	Simulation, dry, or live.	Performance level of proficient.
03.5.3 Provide weapon recommendation to achieve desired effects.	Demonstrate the ability to provide a weapon recommendation, based on ground commander's intent, to achieve desired effects. JTAC will demonstrate the ability to make appropriate weapons recommendations to CAS aircraft to ensure effects achieve the ground commander's desired intent and comply with ROE and restrictions.	Simulation, dry, or live.	Performance level of proficient.

03.6 Execute target marking for CAS assets.	Collective Task		
03.6.1 Execute visual target marking for CAS with indirect fire assets.	Demonstrate the ability to effectively target mark via visual means with indirect fire. JTAC will demonstrate the ability to mark a target using a visual indicator (e.g., smoke (WP, RP), high explosive (HE), illumination) to allow a CAS aircraft to visually acquire the target area.	Simulation, dry, or live.	Performance level of proficient.
03.6.2 Execute target mark or designation for CAS with a ground laser target designator (LTD).	Demonstrate the ability to effectively target mark or designate with a ground based LTD. JTAC will demonstrate the ability to successfully mark or designate a target using a LTD to allow a CAS aircraft to acquire the target or deliver a laser guided weapon. Laser is to be utilized to designate for a weapon delivery or to mark a target for an aircraft (laser spot tracker recommended). Intent is to utilize laser equipment and proper terminology.	Simulation, dry, or live.	Performance level of proficient.
03.6.3 Execute target mark for CAS with a ground IR pointer.	Demonstrate the ability to effectively target mark with a ground based IR pointer. JTAC demonstrates the ability to successfully mark a target using an IR pointer to allow a CAS aircraft to acquire the target. IR pointer is to be utilized to mark a target for aircrew with NVD. Intent is to utilize IR pointer equipment and proper terminology.	Simulation, dry, or live.	Performance level of proficient.
03.7 Integrate SEAD during the execution of CAS missions in a medium to high threat environment.	Demonstrate the ability to effectively integrate SEAD with CAS in a medium to high threat environment. JTAC will demonstrate the ability to successfully integrate SEAD during a CAS mission.	Simulation, dry, or live.	Performance level of proficient.

03.8 Execute appropriate terminal attack control procedures and method of attack.	Collective Task		
03.8.1 Execute Type 1 terminal attack control procedures.	Perform Type 1 terminal attack control of CAS aircraft. JTAC will demonstrate the ability to successfully perform a Type 1 CAS control.	Simulation, dry, or live.	Performance level of proficient.
03.8.2 Execute Type 2 terminal attack control procedures.	Perform Type 2 terminal attack control of CAS aircraft. JTAC will demonstrate the ability to successfully perform a Type 2 CAS control.	Simulation, dry, or live.	Performance level of proficient.
03.8.3 Execute Type 3 terminal attack control procedures.	Perform Type 3 terminal attack control of CAS aircraft. JTAC will demonstrate the ability to successfully perform a Type 3 CAS control.	Simulation, dry, or live.	Performance level of proficient.
03.8.4 Execute BOT method of attack during a terminal attack control.	Perform BOT method of attack during terminal attack control of CAS aircraft. JTAC will demonstrate the ability to successfully perform a BOT method of attack.	Simulation, dry, or live.	Performance level of proficient.
03.8.5 Execute BOC method of attack during a terminal attack control.	Perform BOC method of attack during terminal attack control of CAS aircraft. JTAC will demonstrate the ability to successfully perform a BOC method of attack.	Simulation, dry, or live.	Performance level of proficient.
03.9 Control day and night CAS missions, in support of the ground scheme of maneuver.	Collective Task		
03.9.1 Control day FW CAS missions.	Perform a day fixed-wing control. JTAC will demonstrate the ability to successfully perform a day fixed-wing control.	Simulation, dry, or live.	Performance level of proficient.
03.9.2 Control night FW CAS missions.	Perform a night fixed-wing control. JTAC will demonstrate the ability to successfully perform a night fixed-wing control.	Simulation, dry, or live.	Performance level of proficient.
03.9.3 Control RW CAS missions.	Perform a rotary-wing control. JTAC will demonstrate the ability to successfully perform a day or	Simulation, dry, or live.	Performance level of proficient.

	night rotary-wing control IAW JP 3-09.3 and appropriate service references.		
03.9.4 Control CAS missions with the support of a remote observer.	Perform a Type 2 or 3 control with the support of a remote observer (e.g., scout, FIST, JFO, SOF). JTAC will demonstrate the ability to successfully perform a day or night Type 2 or 3 control with the support of a remote observer.	Simulation, dry, or live.	Performance level of proficient.
03.9.5 Control CAS missions with the support of a FAC(A).	Perform a control with the support of a FAC(A). JTAC will demonstrate the ability to successfully perform a day or night control with the support of a FAC(A).	Simulation, dry, or live.	Performance level of proficient.
03.10 Control a CAS mission in an urban environment in support of the ground scheme of maneuver.	Perform a CAS control in an urban environment. JTAC will demonstrate the ability to successfully perform a CAS control in an urban environment.	Simulation, dry, or live.	Performance level of proficient.
03.11 Employ service DACAS/Fires systems.	Demonstrate the ability to control CAS missions (e.g., Friendly deconfliction, A/C check in, ON STATION REPORT, CAS 9-Line brief, and BDA) using DACAS systems. JTAC will demonstrate the ability to successfully perform a digital aided CAS control.	Simulation, dry, or live.	Performance level of proficient.
03.12 Conduct Battle Damage Assessment (BDA).	Demonstrate the ability to provide accurate BDA (e.g., observed damage (enemy/civilian)), re-attack recommendation and maintain a log of all BDA collected, using appropriate reference material when required. JTAC will demonstrate the ability to provide BDA report to CAS aircraft that includes: size, activity, location, time, and remarks — munitions expended, observed damage (number of tanks destroyed, number still active, and recommendation),	Simulation, dry, or live.	Performance level of proficient.

	mission number, and mission accomplishment (SUCCESSFUL, UNSUCCESSFUL or UNKNOWN).		
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Chapter 6

SIMULATIONS

6.1. JTAC Training Simulations. TAC simulation system(s) will be used to conduct procedural training, mission rehearsal, and training of certification and qualification Joint Mission Tasks that either cannot be executed, or are very difficult to execute, using existing equipment, weapon systems or aircraft. **(T-1)** Units will make every effort to integrate Distributed Mission Operations (DMON) into their simulator training plan. **(T-1)** Refer to **Attachment 3** for Simulator Operator Training Requirements. A list of all currently accredited simulator systems is maintained by Joint Staff J6 Deputy Directorate for Cyber and Command, Control, Communications, and Computers Integration, (JS J6 DD C5I JFID), Joint Close Air Support (JCAS) Simulation Lead. **NOTE:** Personnel trained using JTAC simulation systems which were granted interim accreditation from self-assessment, but do not meet JFS ESC accreditation criteria during the program triennial review, will lose JTAC qualification status until retraining on those specific tasks is accomplished either on an approved simulation system or in live training.

6.1.1. Simulator Operations.

6.1.1.1. Information Systems Security Officer (ISSO).

6.1.1.1.1. Each unit with a JTAC simulator will appoint an ISSO to provide oversight of cybersecurity programs or functions involving management decisions for the administration of assigned simulation systems IAW AFMAN 17-1303, *Air Force Cyber Security Workforce Improvement Program*. **(T-2)** The squadron commander will identify the ISSO as part of the cybersecurity workforce, per AFMAN 17-1303. **(T-2)** Detachments or echelons below squadron level should request ISSO support from the base or post assigned if resources are not available internally. If local resources are not available, the parent squadron must provide the ISSO capability. **(T-2)**

6.1.1.1.2. The unit commander is responsible for the cybersecurity of the Joint Terminal Control Training and Rehearsal System (JTC TRS) simulator and may designate a DoD civilian or contracted simulator operator as the ISSO.

6.1.1.1.3. The ISSO will attain and maintain Information Assurance Technician (IAT) level II IAW AFMAN 17-1303, paragraph 3.2.9. and DoD 8140.03-M, *Cyberspace Workforce & Qualification Management Program*. **(T-0)** DoD approved cyber security baseline training and certifications can be found at the following website: https://dl.cyber.mil/cyber-workforce/pdf/unclass-dod-manual-8140_03.pdf.

6.1.1.1.4. The ISSO must comply with AFMAN 17-1303 to complete and maintain baseline qualifications, sign a formal statement of assigned cybersecurity responsibilities, sign a Privileged Access Agreement, and report Continuing Education Units (CEUs). The CEUs must be accomplished every three years from initial certification award. **(T-2)**

6.1.1.1.5. The squadron ISSO will provide oversight and cyber security management of JTAC simulators assigned to detachments and/or operating locations. **(T-2)**

6.1.1.1.6. The ISSO will report cyber security readiness discrepancies to the JTC TRS Program Office Information System Security Manager. **(T-2)**

6.1.1.2. Simulator Operator/Maintainer (SIM O/M).

6.1.1.2.1. The SIM O/Ms are the primary operators of the unit simulation systems. SIM O/Ms are responsible for operating the simulation systems during training, adding/editing accounts, creating scenarios as required, patching simulator systems, and running scans as required, troubleshooting, updating software as required, and performing maintenance diagnostics. The simulator operators must attain and maintain IAT level 1 or higher. **(T-2)** As part of the baseline certification, the simulator operators must complete and maintain A+ CE, Cisco® Certified Network Associate-Security (CCNA®-Security), Network+ CE, or System Security Certified Practitioner (SSCP). **(T-2)** The Defense Information System Agency (DISA) website for approved training can be found at the Information Assurance Support Environment's website: <https://www.disa.mil/NewsandEvents/Training>, and <https://cyber.mil/cyber-training/training-catalog/>.

6.1.1.2.2. The simulator operators must comply with AFMAN 17-1303, to complete and maintain baseline qualifications, sign a formal statement of assigned cybersecurity responsibilities, sign a privileged access agreement, and report CEUs to maintain certification. **(T-2)** The CEUs must be accomplished every three years from initial certification award. **(T-2)**

6.1.1.2.3. Full-time simulator operators require training records that document, at a minimum, the completion of Organization and/or System Integrator-provided simulator training, and cybersecurity training/course certificates IAW AFMAN 17-1303. **(T-2)**

6.1.1.3. Basic Simulator Operator (BSO).

6.1.1.3.1. The BSO, typically as an additional duty, will operate simulator systems and conduct training related operations during system use as directed by the SIM O/M (if one is assigned). **(T-2)** Duties of the BSO include turning the system on, scenario generation, loading missions and performing training related operations during system use. **(T-2)**

6.1.1.3.2. To perform the function of BSO, units will identify specific tasks to be trained and performance standards to meet the unit's needs. This training will be documented on an AF Form 1098, *Special Task Certification and Recurring Training*. **(T-2)**

6.1.1.4. A BSO is not required to be IAT certified, however, a BSO is also not authorized to perform system maintenance or have access to system files. **(T-2)**

JAMES C. SLIFE, Lt Gen, USAF
Deputy Chief of Staff, Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

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- AFI 11-214, *Air Operations Rules and Procedures*, 8 July 2020
- AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020
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ATP 3-04.1, *Aviation Tactical Employment*, 7 May 2020

ATP 3-09.30, *Observed Fires*, 28 September 2017

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DoD Dictionary, *DoD Dictionary of Military and Associated Terms*, Nov 2021

JP 3-09, *Joint Fire Support*, April 2019

JP 3-09.3, *Close Air Support (CAS)*, 10 June 2019

NATO Allied Tactical Publication 3.3.2.2., *Joint Terminal Attack Controller Program*, Edition B Version 1, January 2018

USSOCOM Manual 350-5, *Special Operations Forces Baseline Interoperable Standards, Joint Terminal Attack Controller Training*, 13 November 2018

Prescribed Forms

None

Adopted Forms

DD Form 2992, *Medical Recommendation for Flying or Special Operational Duty*

DAF Form 847, *Recommendation for Change of Publication*

AF Form 8, *Certificate of Aircrew Qualification*

AF Form 623A, *On-the-Job Training Record Continuation Sheet*

AF Form 797, *Job Qualification Standard Continuation/Command JQS*

AF Form 942, *Record of Evaluation*

AF Form 1098, *Special Task Certification and Recurring Training*

AF Form 2096, *Classification/On-the-Job Training Action*

AF Form 1035, *AFSPECWAR Evaluation Form*

AF Form 1036, *JTAC Initial Certification Training*

ACC Form 134, *Training Summary*

ACC Form 206, *Individual Mission Gradesheet*, AETC Form 10, *Instructor Training/Proficiency Record*

AETC Form 281, *Instructor Evaluation*

Abbreviations and Acronyms

AAGS—Army Air Ground System

ACA—Airspace Coordination Area

ACC—Air Combat Command

ACM—Airspace Control Measure

ACO—Airspace Control Order
AFDP—Air Force Doctrine Publication
AETC—Air Education and Training Command
AFI—Air Force Instruction
AFMAN—Air Force Manual
AFPD—Air Force Policy Directive
AFSC—Air Force Specialty Code
AFSOC—Air Force Special Operations Command
AFSPECWAR—Air Force Special Warfare
AFTTP—Air Force Tactics, Techniques, and Procedures
AFTTP(I)—Air Force Tactics, Techniques, and Procedures (Inter-service)
ALO—Air Liaison Officer
ANG—Air National Guard
ARCNET—Air Reserve Component Network
ASOG—Air Support Operations Group
ASOS—Air Support Operations Squadron
ATAK—Android Tactical Assault Kit
ATO—Air Tasking Order
ATP—Allied Tactical Publication
BDA—Battle Damage Assessment
BMNT—Begin Morning Nautical Twilight
BOC—Bomb on Coordinate
BOT—Bomb on Target
BSO—Basic Simulator Operator
CAF—Combat Air Forces
CAS—Close Air Support
CCNA—Cisco® Certified Network Associate
CEU—Continuing Education Units
CFF—Call for Fire
CT—Continuation Training
CTF—Combat Training Flight
CTS—Combat Training Squadron

DACAS—Digitally Aided Close Air Support
DAFPD—Department of the Air Force Policy Memorandum
DAFMAN—Department of the Air Force Manual
DAFI—Department of the Air Force Instruction
DISA—Defense Information System Agency
DMON—Distributed Mission Operations Network
DNIC—Duties Not Including Controlling
DOC—Designed Operational Capability
DoD—Department of Defense
DRRS—Defense Readiness Reporting System
DTOC—Distributed Training Operations Center
EENT—End Evening Nautical Twilight
EW—Electronic Warfare
FAC—Forward Air Controller
FAC(A)—Forward Air Controller (Airborne)
FIST—Fire Support Team
FMP—Full Mission Profile
FSCM—Fire Support Coordination Measure
FW—Fixed-wing
GFC—Ground Force Commander
GPS—Global Positioning System
HAF—Headquarters Air Force
IA—Information Assurance
IAT—Information Assurance Technician
IAW—In Accordance With
IP—Initial Point
IR—Infrared
ISR—Intelligence, Surveillance, and Reconnaissance
ISSO—Information Systems Security Officer
ITR—Instructor Training Records
JCAS—Joint Close Air Support
JFO—Joint Fires Observer

JFS ESC—Joint Fire Support Executive Steering Committee
JMTL—Joint Mission Task List
JP—Joint Publication
JTAC—Joint Terminal Attack Controller
JTAC ICT—Joint Terminal Attack Controller Initial Certification Training
JTAC MQT—Joint Terminal Attack Controller Mission Qualification Training
JTAC-E—Joint Terminal Attack Controller Evaluator
JTAC-E-PM—Joint Terminal Attack Controller Evaluator Program Manager
JTAC-I—Joint Terminal Attack Controller Instructor
JTAC-PM—Joint Terminal Attack Controller Program Manager
JTAR—Joint Tactical Airstrike Request
JTC TRS—Joint Terminal Control Training and Rehearsal System
LRF—Laser Range Finder
LTD—Laser Target Designator
MACCS—Marine Corps Air Command and Control System
MAJCOM—Major Command (USAF)
METL—Mission Essential Tasks List
MFR—Memorandum for Record
MICT—Management Internal Control Toolset
MISREP—Mission Report
MOA—Memorandum of Agreement
NATO—North Atlantic Treaty Organization
NGB—National Guard Bureau
NTACS—Navy Tactical Air Control System
NVD—Night Vision Device
OI—Operating Instruction
OPR—Office of Primary Responsibility
PE—Practical Exercise
PM—Program Manager
PSS-SOF—Precision Strike Suite-Special Operations Forces
REGAF—Regular Air Force
ROE—Rules of Engagement

RTM—Ready Tasking Message
RW—Rotary-wing
SEAD—Suppression of Enemy Air Defenses
SEE—Standardization and Evaluations Examiner
SEI—Special Experience Identifier
SIM O/M—Simulator Operator and Maintainer
SOAGS—Special Operations Air-Ground System
SOF—Special Operations Forces
SPINS—Special Instructions
SSCP—System Security Certified Practitioner
SWA—Special Warfare Airmen
SWAK—Special Warfare Assault Kit
TAC—Terminal Attack Control
TACS—Theater Air Control System
TACP—Tactical Air Control Party
TAGS—Theater Air-Ground System
TLE—Target Location Error
TOC—Tactical Operations Center
UAS—Unmanned Aircraft System
UCAV—Unmanned Combat Aerial Vehicle
UQ—Unqualified
USSOCOM—United States Special Operations Command
VDL—Video Downlink
W&T—Weapons and Tactics
WIC—Weapons Instructor Course

Office Symbols

AF/A1PT—Air Force Accessions and Training
AF/A3—Air Force Operations
AF/A3S—Air Force Special Warfare
AF/A3TC—Air Force Combat Air Forces
ACC/A3J—Air Combat Command Personnel Recovery
AFSOC/A3O—Air Force Special Operations Command/Operations

NGB A3J—Personnel Recovery and Joint Integration Division

JS J6 DD C5I JFID—Joint Staff J6 Deputy Directorate for Cyber and Command, Control, Communications, and Computers Integration

Terms

Accredited JTAC Schoolhouse—Recognition by the Joint Close Air Support (JCAS) ESC that a schoolhouse instructs trainees in the academic, practical, and live control training requirements IAW JTAC MOA.

Airman—Throughout this document, the term Airman refers to uniformed members of the U.S. Air Force.

Approval Authority—Senior leader responsible for contributing to and implementing policies and guidance/procedures pertaining to that individual’s functional area(s) (e.g., heads of functional two-letter offices).

Authentication—Required element to verify approval of the publication; the approval official applies their signature block to authenticate the publication. The signature block includes the official’s name, rank, and title (not signature).

Begin Morning Nautical Twilight (BMNT)—The start of that period where, in good conditions and in the absence of other illumination, enough light is available to identify the general outlines of ground objects and conduct limited military operations. Light intensification devices are still effective and may have enhanced capabilities. At this time, the sun is 12 degrees below the eastern horizon (*DoD Dictionary of Military and Associated Terms*).

Certified (JTAC)—An individual who satisfactorily completes the appropriate Service, United States Special Operation Command, or Partner Nation JTAC academic course, and evaluation IAW AFMAN 10-3505V1 and AFMAN 10-3505V2 may be granted JTAC certification. Once certified and awarded the applicable SEI, a JTAC remains certified permanently unless the certification is lost for cause. **Note:** Combat Control Team and TACP operators are awarded SEI 914. Air Force Special Warfare Officers and ALOs are awarded SEI O9C upon initial JTAC certification.

Chief, W&T—Graduate of the USAF WIC, who serves as the unit’s instructor of instructors and is responsible for the grooming and upgrade of JTAC-Is and oversees the training and utilization of the unit’s JTAC instructor(s) (JTAC-I). In addition, assists the unit commander in identifying weapons and/or tactics deficiencies and advises on necessary actions and programs to remedy problem areas.

Close Air Support (CAS)—Air action by fixed-wing and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and requires detailed integration of each air mission with the fire and movement of those forces (JP 3-09.3).

Combat Aircraft—Fixed-wing or variable geometry wing aircraft designed, equipped, or modified to engage targets by employing guided missiles, unguided rockets, bombs, guns, cannons, or other weapons of destruction, including versions of these aircraft which perform specialized electronic warfare, suppression of air defense or reconnaissance missions.

Note—The term “combat aircraft” does not include primary trainer aircraft unless designed, equipped, or modified as described above.

Combat Mission Ready (CMR)—CMR establishes the minimum training required for qualified JTACs to remain proficient in all of the primary missions for their unit and aligned unit. CMR is designed for JTACs assigned to squadron-level and below.

Constructive Training—Constructive simulation training is the use of computer models and game-type simulations. These tools permit multiple echelons of command and staff to execute their normal warfighting tasks in an unconstrained exercise environment (e.g., battle command training plan exercises).

Continuation Training (CT)—Training required to maintain duty position qualification and proficiency.

Control—Consists of at least one simulated, dry, or live aircraft (fixed/rotary-wing) attacking a surface target. The control should follow the CAS execution template IAW JP 3-09.3/ATP 3.3.2.2. An actual weapons release is not required. No more than two controls (lead aircraft and wingman) can be counted per CAS briefing per target.

Day Terminal Attack Control—Day terminal attack control is a control of CAS aircraft at a point after BMNT and prior to EENT.

Dry Terminal Attack Control—Dry terminal attack control is control of aircraft where no air-to-ground munitions (live, inert, or training ordnance) are released from the aircraft.

Dynamic Phase—Dynamic Phase will involve moving friendly elements. This may consist of a foot patrol, vehicle convoy, or quick reaction force situations. If limited to an observation post due to range restrictions, JTAC-I will create a scenario with notional friendly elements moving about the target area.

End Evening Nautical Twilight (EENT)—Occurs when the sun has dropped 12 degrees below the western horizon and is the instant of last available daylight for the visual control of limited ground operations. At the EENT there is no further sunlight available (*DoD Dictionary of Military and Associated Terms*).

Forward Air Controller (Airborne) (FAC(A))—A specifically trained and qualified aviation officer who exercises control from the air of aircraft engaged in close air support of ground troops. The FAC(A) is normally an airborne extension of the tactical air control party (JP 3-09.3).

Joint Terminal Attack Controller (JTAC)—A qualified (certified) Service member who, from a forward position, directs the action of combat aircraft engaged in close air support and other offensive air operations. (JP 309.3).

Joint Terminal Attack Controller- Evaluator (JTAC-E)—A qualified JTAC who has completed an initial JTAC-E evaluation successfully and is designated to perform evaluation duties as specified by AFMAN 10-3505V2. JTAC-Es must be qualified in the position they are evaluating. JTAC-Es are trained and certified to administer JTAC evaluations at the direction of the JTAC-E-PM.

Joint Terminal Attack Controller-Instructor (JTAC-I)—A qualified individual recommended by the unit Chief, W&T and designated by the unit commander who provides training to unit JTACs. Responsible for implementing JTAC training per this AFMAN and developed by the unit's Chief, W&T.

Joint Terminal Attack Controller Trainee—A JTAC trainee is an individual that is currently going through the process to become a JTAC. An individual is considered a JTAC trainee until they successfully complete an initial certification evaluation and are awarded either SEI O9C or 914.

JTAC Initial Certification Training (JTAC ICT)—A formal training process consisting of an accredited JTAC schoolhouse course designed to initially qualify a JTAC in terminal control duties without regards to the unit's operational mission.

JTAC Mission Qualification Training (JTAC MQT)—Training required to achieve a basic level of competence in JTAC requirements and in a unit's primary tasked missions. This training is a prerequisite for CMR status.

JTAC-Program Manager (JTAC-PM)—A highly qualified individual designated by the unit commander who is responsible for managing the unit's JTAC upgrade and CT training programs. Ensures the requirements of AFMAN 10-3505V2, are implemented.

Laser Terminal Attack Control—Laser terminal attack control is control of CAS aircraft using a laser target designation device or terminal guidance for air-to-ground munitions. A laser terminal attack control is defined as control of CAS aircraft using ground-based laser designation equipment where the JTAC has direct or indirect control over activation and deactivation.

Live Terminal Attack Control—Live terminal attack control is control of aircraft where air-to-ground munitions (live, inert, or training ordnance) are released from the aircraft.

Live Training—Live training is that which is conducted in a physical environment. It normally occurs on ranges/maneuver areas or in a military operating area.

Mission Essential Tasks List (METL)—A collective task on which an organization trains to be proficient in its designed capabilities or assigned mission (*DoD Dictionary of Military and Associated Terms*). Each Air Force unit and aligned or associated Army unit have a unit METL. The ASOS specific METL can be found in Defense Readiness Reporting System (DRRS).

Mission Phase—Mission Phase is the culminating phase of MQT and is meant to prepare the student for deployment as a JTAC across the full spectrum of mission sets and tasks that a JTAC may encounter.

Night Terminal Attack Control—Night terminal attack control is control of CAS aircraft at a point after EENT and prior to BMNT, with or without the use of night observation devices or Infrared (IR) designators.

Practical Exercise (PE)—A CAS mission PE is a comprehensive training event that includes all areas of mission planning, coordination, and execution, but does not involve control of actual aircraft. The CAS mission PE is intended to make the most effective use of available training sorties by allowing personnel to become familiar with tactics, techniques, and procedures prior to an actual mission. Each CAS mission PE could have several different outcomes/training objectives based on the instructor's inputs. The PE provides instant feedback to an instructor and trainee in those areas needing improvement. Instructors use actual mission profiles and mission-related information to familiarize the trainee with what to expect during all phases of mission execution. Additionally, PEs can be used to complete identified CT requirements when live-fly aircraft, equipment or ranges are not available to complete live training and the training objectives can be met by a combination of discussion, demonstration, and/or performance of the tasks.

Precision Strike—The full kinetic and non-kinetic potential of ground, air, space, and cyber power to successfully find, fix, and bring effects against an objective or capability.

Proficiency—Accomplishing a JMTL or METL task correctly and efficiently without assistance.

Qualified (JTAC)—A certified JTAC who holds a 914/O9C SEI and completes the established minimum recurring training IAW [Table 4.2](#) and evaluation requirements.

Simulated Terminal Attack Control—Simulated terminal attack control is control of virtual aircraft in an electronically generated environment.

Static Phase—Static phase is intended to accomplish JTAC MOA certification [Table 4.1](#) items, build the students CAS cadence proficiency, and establish effectiveness in the targeting process without the added stress of moving and tracking multiple friendly and enemy positions in a dynamic environment.

Task Evaluation—A task evaluation is the completion of a task under the supervision of a trainer to certify the member is capable of performing the task to a Go/No-Go standard.

Terminal Attack Control—A control consists of at least one aircraft attacking a surface target. The control begins with a CAS briefing from a JTAC and ends with either an actual/simulated weapons release or an abort on a final attack run. No more than two controls may be counted per CAS briefing per target.

Unqualified (UQ) (JTAC)—Individuals are placed in “unqualified” status after failing to complete training or qualification requirements within the allotted training cycle or has failed to meet evaluation requirements outlined in AFMAN 10-3505V2. “Unqualified” is a status for when a JTAC is not permitted to control aircraft unsupervised.

Note—Even when an individual is placed in “UQ” status, the JTAC remains a “certified.”

Virtual Training—Virtual training provides crews, leaders, and units with realistic training experiences using a variety of means ranging from sophisticated simulators to practical exercises. Simulators operating on virtual terrain take the place of weapon systems and can be linked to expand the scope of the training event (e.g., JFS ESC accredited simulator).

Attachment 2

GLOSSARY OF MISSION AND EVENT DEFINITIONS

A2.1. Full Mission Profile (FMP). An FMP includes all of the following: receipt of mission; planning and staff coordination to include a mission briefing; complete CAS Execution Template tasks IAW JP 3-09.3, and mission debriefing.

A2.2. Terminal Attack Control Events.

A2.2.1. A terminal attack control, or just a control, consists of at least one aircraft attacking a surface target. The control begins with a CAS briefing from a JTAC and ends with either an actual or simulated weapons release or an abort on a final attack run. No more than two controls may be counted per CAS briefing per target. The following events are tasks that may be part of a terminal attack control:

A2.2.1.1. **Type 1 Control.** Type 1 control is used when the JTAC/FAC(A) requires control of individual attacks, and the situation requires the JTAC/FAC(A) to visually acquire the attacking aircraft and the target for each attack. Reference JP 3-09.3 for complete Type 1 control requirements.

A2.2.1.2. **Type 2 Control.** Type 2 control is used when the JTAC requires control of individual attacks and any or all of the following conditions exist: JTAC is unable to visually acquire the attacking aircraft at weapons release; JTAC is unable to visually acquire the target; or the attacking aircraft is unable to acquire the mark and/or target prior to weapons release. See JP 3-09.3 for complete Type 2 control requirements.

A2.2.1.3. **Type 3 Control.** Type 3 control is used when the JTAC requires the ability to provide clearance for multiple attacks within a single engagement, subject to specific attack restrictions, and any or all of the following conditions exist: JTAC is unable to visually acquire the attacking aircraft at weapons release; JTAC is unable to visually acquire the target or the attacking aircraft is unable to acquire the mark and/or target prior to weapons release. See JP 3-09.3 for complete Type 3 control requirements.

A2.2.1.4. **Day.** Day terminal attack control is control of CAS aircraft at a point after BMNT and prior to EENT.

A2.2.1.5. **Night.** Night terminal attack control is control of CAS aircraft at a point after EENT and prior to BMNT.

A2.2.1.6. **Bomb on Target (BOT).** A BOT attack requires that the JTAC/FAC(A)'s intended target or mark is tally/contact/captured by the aircrew. See JP 3-09.3 for complete BOT control requirements.

A2.2.1.7. **Bomb on Coordinate (BOC).** A BOC attack is used when the JTAC/FAC(A) determines that the desired effects can be created against the target with CAS aircraft employing ordnance on a specified set of coordinates. See JP 3-09.3 for complete BOC control requirements.

A2.2.1.8. **Digitally Aided (DA).** Employ DA CAS/Fires system. JTAC will demonstrate the ability to successfully perform a DA CAS control.

A2.2.1.9. **Fixed-Wing (FW).** CAS conducted with CAS capable fixed-wing aircraft.

A2.2.1.10. **Rotary-Wing (RW).** CAS conducted with CAS capable rotary-wing or helicopter aircraft.

A2.2.1.11. **Laser Designation.** Ability to effectively target mark or designate with a ground based LTD for CAS aircraft. Such equipment may be, but not limited to, the Type 63, GLTD II or AN/PEQ-1. The intent is to utilize laser, equipment, terminology, brevity, and safety procedures.

A2.2.1.12. **Infrared (IR) Designation.** Ability to effectively target mark with a ground-based IR pointer for aircraft capable of seeing and/or detecting IR energy during the employment of real or simulated weapons. IR designation includes using IR brevity terminology and ground-based IR pointing equipment where the JTAC has direct or indirect control over activation, movement, mode, and deactivation.

A2.2.1.13. **Remote Observer.** Defined as demonstrating the ability to target via remote observer (e.g., Scout, FIST, JFO, SOF). JTAC will demonstrate the ability to work successfully with a remote observer to acquire targeting information (e.g., target location, threats, friendlies) and other critical information needed to build situational awareness to successfully conduct a CAS mission.

A2.2.1.14. **Video Downlink (VDL).** Defined as the JTAC demonstrating the ability to successfully use video downlink to receive full motion video, still photos, imagery, or other media to acquire targeting information (e.g., target coordinates, threats, friendlies, etc.) needed to build situational awareness to successfully conduct a CAS mission.

A2.2.1.15. **Live Control.** Control of live aircraft where air-to-ground munitions (live, inert or training ordnance) are present, and release is intended. Actual munition release must take place to count towards live control requirements.

A2.2.1.16. **9-line Attack Brief Terminal Attack Control.** A 9-line attack brief terminal attack control is defined as control of CAS aircraft during the employment of real or simulated weapons in a permissive or non-permissive environment where threats, airspace deconfliction, or terrain require the use of a complete 9-line to include calculating and communicating initial IP, heading, and distance.

A2.2.1.17. **Battle Damage Assessment (BDA).** JTAC demonstrating the ability to provide a BDA report to CAS aircraft that includes: Size, Activity, Location, Time, Remarks — Munitions expended, observed damage (e.g., number of tanks destroyed, number still active, and recommendation), mission number, and mission accomplishment (SUCCESSFUL, UNSUCCESSFUL or UNKNOWN).

Attachment 3

SPECIALIZED POSITION TRAINING TABLES

Table A3.1. Simulator Operator Training Requirements.

TRAINING ITEM	FREQUENCY	PROFICIENCY CODES
1. Attain and maintain information assurance requirements. TR: DoDM 8140.03-; AFMAN 17-1303, <i>Cybersecurity Workforce Improvement Program</i>		
1.1. A+CE, CCNA-Security, Network+ CE, or SSCP	Initial	N/A
1.2. Certified Network Defender (CND)	Initial	N/A
1.3. Continuing Education Units (CEU).	Triennial	N/A
1.4. Sign formal statement of assigned cybersecurity responsibilities.	Initial	N/A
1.5. Sign Privileged Access Agreement.	Initial	N/A
1.6. Sign authorized release of cybersecurity baseline certification data to DoD via DMDC.	Initial	N/A
1.7. Understand IA controls and how the controls apply to simulation systems to enable coordination with unit Information Systems Security Officer to identify applicable IA controls and develop local policy and procedures to ensure compliance and retain Authority to Operate certification.	Annual	B
1.8. Perform cybersecurity responsibilities, as directed by the authorizing official, information systems security manager/officer.	Annual	3c
1.9. Understand requirements to perform distributed operations with units operating on the Distributed Mission Operations Network (DMON) and Air Reserve Component Network (ARCNET) networks (as applicable). TR: DMON and ARCNET guidelines	Annual	B
2. Operate unit assigned JTAC simulation systems TR: JTAC Simulation Systems Operators Manuals.	Annual	4c
3. Perform operator-level and preventative maintenance on assigned simulation systems. TR: Simulation Systems' Help Desk Procedures, Simulation Systems' Operators Manuals	Biennial	3b
4. Maintain proficiency in the use of Image Generation and Simulation and Threat Environment software (e.g., Virtual Reality Scene Generation and Modern Air Combat Environment) on JTAC Simulation Systems. TR: Software User's Guide.	Biennial	3c

5. Operate ARCNet Gateway rack and portal equipment. TR: Distributed Training Operations Center (DTOC) provided guidance.	Biennial	4c
6. Understand air and ground combat systems capabilities and limitations that perform component fires and joint fires (e.g., CAS aircraft, rotary-wing attack aircraft, artillery systems, etc.). TR: Air Force Tactics, Techniques, and Procedures (Inter-service (AFTTP) 3-1, AFTTP 3-2.5, AFTTP(I) 3-2.6, AFTTP 3-2.17, AFTTP 3-3. JTAC, ATP 3-09.30, JP 3-0, JP 3-09, JP 3-09.3, AFDP 3-03, AFI 11-214, ATP 3-04.1, ATP 3-09.30, and applicable weapons systems TTPs/Combat Fundamentals.	Biennial	C
7. Understand air-and ground-based threat systems. TR: AFTTP 3-1 Volume 2.	Annual	C
8. Build and execute full-mission scenarios based on Air Support Operations Squadron (ASOS) and aligned-Army unit Mission Essential Tasks.	Annual	3c
9. Understand simulation requirements for JTACs and JFOs. TR: AFMAN 10-3505V2 and RTPTM.	Annual	C
10. Understand unit procedures for coordinating with unit training, intelligence, and W&T personnel to create and maintain scenarios to support all levels of training and pre-deployment preparation for assigned JTAC personnel. TR: Unit Preparation Message, area of operation specific documentation, and Unit Line Number specific training requirements.	Biennial	B
Note: Refer to TACP CFETP for item 1.6 through item 10 proficiency code requirements.		

Table A3.2. Formal Schoolhouse Instructor Certification Requirements.

1. Phase 1, Lesson Observation.	
1.1. Review the lesson, any lesson materials, and any insights to the lesson for which the individual is to be certified to instruct.	Practical
1.2. Demonstrate understanding of the lesson objectives, samples of behavior, student workbook, presentation, exam questions, and reference materials/documents/publications for the class/simulator profile.	Practical
1.3. Observe the lesson being presented to students. Individual takes the lesson academic test.	Achieve minimum score of 90%
2. Phase 2. Lesson Instruction.	
2.1. Prepare the lesson using all available visual aids and present the lesson to an instructor supervisor (or primary/alternate instructor), ensuring coverage of the samples of behavior and demonstrating good time management.	Practical
2.2. Presenting the lesson to actual students or instructors role-playing as students.	Supervising Instructor Assessment

Table A3.3. Minimum Requirements JTAC-I Upgrade Training Plan.

1. Classroom Training.	
1.1. Complete an instructor academic course that provides: instructor fundamentals, learning theories, teaching methods, questioning techniques, lesson plan development, JTAC-I roles, training program management, mission planning, briefing, grade sheet fundamentals, and debriefing fundamentals.	N/A
1.2. Understand JTAC references per AFMAN 10-3505V2.	
1.3. Observe minimum of two JTAC-I led classes.	N/A
1.4. Instruct three classes using a minimum of one visual aid.	W&T or JTAC-PM Assessment
2. Task Training.	
2.1. Simulator training.	
2.1.1. Simulator Event #1. Observe a certified JTAC-I providing instruction to a JTAC trainee during a permissive FMP.	Practical
2.1.2. Simulator Event #2. Observe a certified JTAC-I providing instruction to a JTAC trainee during a non-permissive FMP.	Practical
2.1.3. Simulator Event #3. Provide instruction to a JTAC trainee during a permissive FMP.	CW&T, JTAC-PM, Course Manager, Instructor Supervisor, or Commander-designated representative Assessment
2.1.4. Simulator Event #4. Provide instruction to a JTAC trainee during a non-permissive FMP.	CW&T, JTAC-PM, Course Manager, Instructor Supervisor, or Commander-designated representative Assessment
2.2. Live-fly Training.	
2.2.1. Live-fly Event #1. Observe a certified JTAC-I providing instruction to a JTAC trainee during a permissive FMP.	Practical
2.2.2. Live-fly Event #2. Observe a certified JTAC-I providing instruction to a JTAC trainee during a non-permissive FMP.	Practical

<p>2.2.3. Live-fly Event #3. Provide instruction to a JTAC trainee during a permissive CAS Mission Profile.</p>	<p>CW&T, JTAC-PM, Course Manager, Instructor Supervisor, or Commander-designated representative Assessment</p>
<p>2.2.4. Live-fly Event #4. Provide instruction to a JTAC trainee during a non-permissive FMP.</p>	<p>CW&T, JTAC-PM, Course Manager, Instructor Supervisor, or Commander-designated representative Assessment</p>

Table A3.4. Minimum Requirements JTAC-E Upgrade Training Plan.

1. Classroom Training.	
1.1. Complete an evaluator academic course that provides: Stan/Eval Upgrade Procedures, Stan/Eval Organization, Stan/Eval Duties and Responsibilities, Stan/Eval Governing Publications, JTAC Evaluations Scenario Development, Go/No Procedures Publications Test, Conduct of Ground Phase Evaluation, Conduct of Control Phase JTAC Evaluation, Conduct of Control Phase No-Notice/Spot Evaluation, Conduct of Control Phase JTAC-I Evaluation, Conduct of Control Phase JTAC-E Spot Evaluation, Failure and Additional Training Procedures, Evaluation Documentation, and JTAC Training & Evaluation Record Review.	N/A
1.2. Understand JTAC references per flight/ground safety standards and governing supplements/instructions.	N/A
2. Task Training.	
2.1. Develop two complete JTAC evaluation scenarios (one permissive and one non-permissive) or differing mission types (e.g., armor, Airborne, Air Assault, major combat operations, counter-insurgency) to include a mock ATO and OPORD/CONOP.	JTAC-E-PM or Commander Designated JTAC-E assessment
2.2. Live-Fly or Simulator Event: Observe a certified JTAC-E providing evaluation to a JTAC trainee during both a permissive and non-permissive event, from notification of evaluation through evaluation form debrief.	Practical
2.2.1. As Required, Practical Exercise: If Simulator Event, an additional observation of all Required Evaluation Areas not previously covered must be accomplished.	Practical
2.3. Recommend. Live-fly, Simulator, or Practical Exercise: Conduct a mock JTAC evaluation, from tactical scenario development through evaluation debrief and evaluation form completion.	JTAC-E-PM or Commander Designated JTAC-E Assessment

Attachment 4**JTAC TRAINING & EVALUATION FOLDER.**

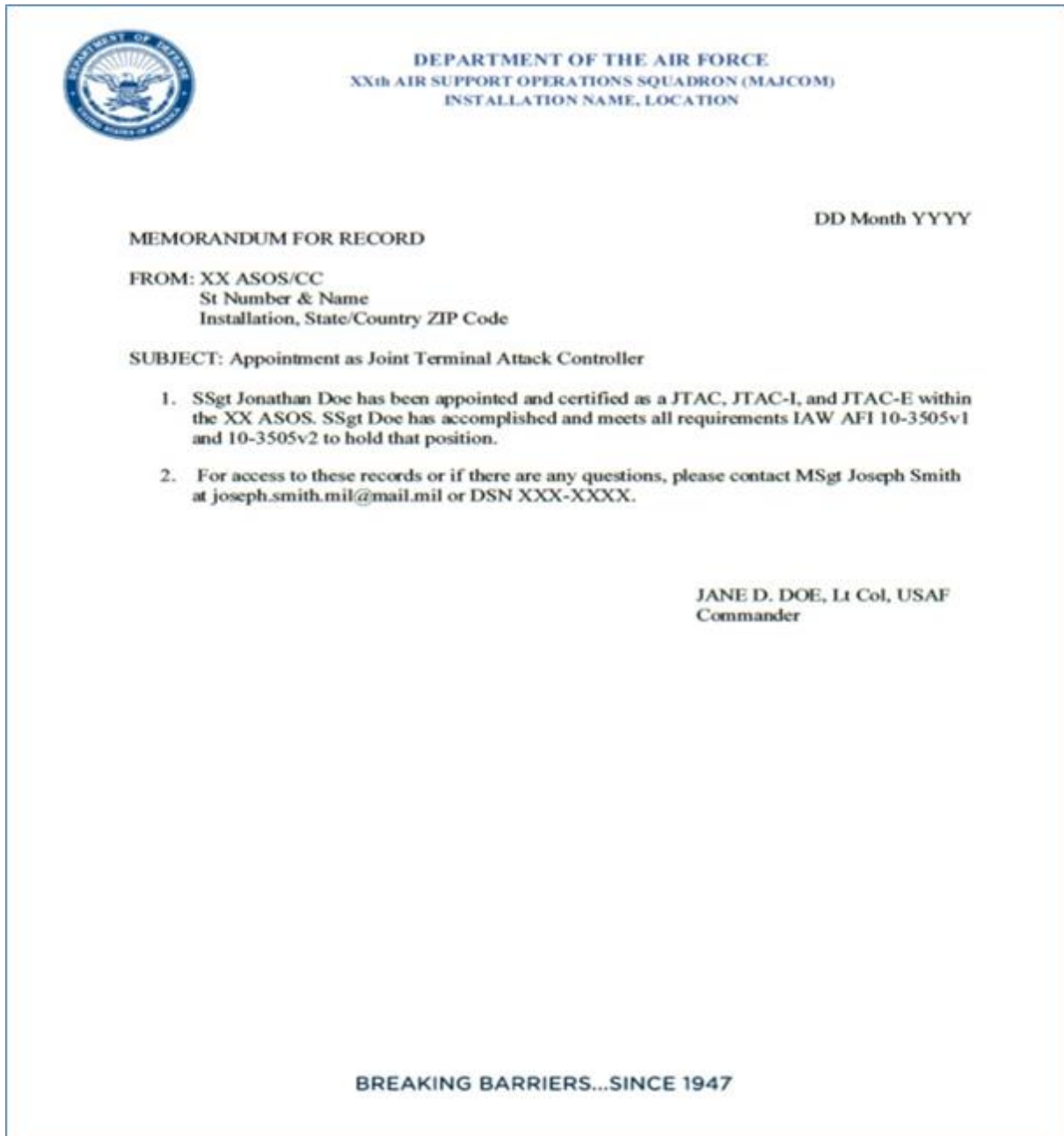
A4.1. Part I -left side Table of Contents. The table of contents will list each section of the folder. (T-1)

Figure A4.1. Sample Table of Contents.


Table of Contents
PART II: COMMANDER'S DESIGNATION LETTER(S)
PART III: CAS LOG
PART IV: DOCUMENTATION OF TRAINING
PART V: DOCUMENTATION OF EVALUATIONS
PART VI: JTAC FORMAL SCHOOL DOCUMENTATION

A4.2. Part II. Inside right side Commander's Designation Letters (CDLs). This section contains, at a minimum, a copy of the current JTAC designation letter as well as any documentation of the JTAC being removed from the JTAC program for any reason. If the JTAC is re-entered into the JTAC program, that designation letter will also be present. Copies of previous designation letters (optional), if applicable, may be kept here. A Letter of Qualifications is acceptable in this portion of the folder in lieu of the Commander's Designation Letter.

Figure A4.2. Sample Commander's Designation Letter.



The image shows a sample Commander's Designation Letter (CDL) from the Department of the Air Force. It is a memorandum for record. The header includes the Department of the Air Force logo and the text: "DEPARTMENT OF THE AIR FORCE", "XXth AIR SUPPORT OPERATIONS SQUADRON (MAJCOM)", and "INSTALLATION NAME, LOCATION". The date is "DD Month YYYY". The subject is "Appointment as Joint Terminal Attack Controller". The body contains two numbered items: 1. "SSgt Jonathan Doe has been appointed and certified as a JTAC, JTAC-I, and JTAC-E within the XX ASOS. SSgt Doe has accomplished and meets all requirements IAW AFI 10-3505v1 and 10-3505v2 to hold that position." 2. "For access to these records or if there are any questions, please contact MSgt Joseph Smith at joseph.smith.mil@mail.mil or DSN XXX-XXXX." The signature is "JANE D. DOE, Lt Col, USAF Commander". The footer is "BREAKING BARRIERS...SINCE 1947".

 DEPARTMENT OF THE AIR FORCE
XXth AIR SUPPORT OPERATIONS SQUADRON (MAJCOM)
INSTALLATION NAME, LOCATION

DD Month YYYY

MEMORANDUM FOR RECORD

FROM: XX ASOS/CC
St Number & Name
Installation, State/Country ZIP Code

SUBJECT: Appointment as Joint Terminal Attack Controller

1. SSgt Jonathan Doe has been appointed and certified as a JTAC, JTAC-I, and JTAC-E within the XX ASOS. SSgt Doe has accomplished and meets all requirements IAW AFI 10-3505v1 and 10-3505v2 to hold that position.
2. For access to these records or if there are any questions, please contact MSgt Joseph Smith at joseph.smith.mil@mail.mil or DSN XXX-XXXX.

JANE D. DOE, Lt Col, USAF
Commander

BREAKING BARRIERS...SINCE 1947

Figure A4.4. Sample CAS Log Cover Page.

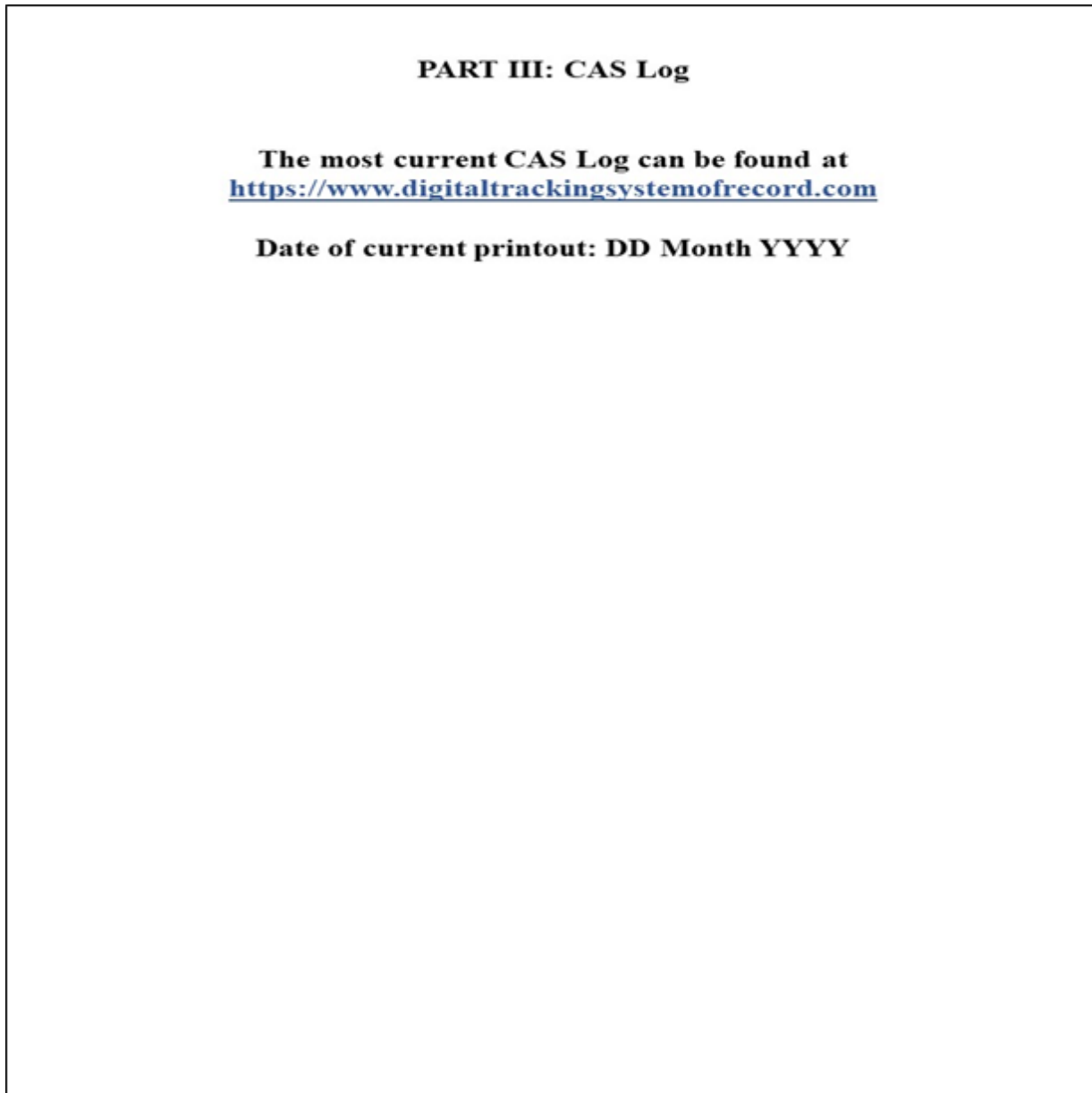


Figure A4.5. Sample CAS Log.

Mission		Live Py Controls						Sim Controls										Control		Supervised By	Approved By (Date)	Remarks		
Date	Number	Qual	Range/Location	# Type Aircraft	Type	Ordnance	Type			Smb-Op	JFS-ESC	MAJCOM	JTCOSS	AAJTS	JTCRS	JTAG	MP	PE (Hrs)	DMD	Debits	Env.	By	By (Date)	Remarks
							1	2	3															
2/1/2019	1095	CURRENT	Grafenwoerther Range, Germany	2x F-16	0	2	0	2		0(0)	0(0)	0(0)	2(1)	0(0)	0	0	0(0)		C, PBL, LD, P, TO, UB, VDL, DAY	Garrison	UNISUPERV/ SED		Litochoro Range, Greece. Live helicopter controls with AH-64s, T1, T2, T3. Dry controls TZ.	
1/25/2019	1094	CURRENT	Other	2x AH-64 - CAS	2	2	1	5		0(0)	0(0)	0(0)	0(0)	0(0)	2	0(0)		AdWV, C, FBL, F, R, SD, T, TO, NIGHT	Garrison	UNISUPERV/ SED				
12/7/2018	81	CURRENT	Hohenfels Range, (OITC), Germany	2x A-10	0	4	0	4		0(0)	0(0)	0(0)	0(0)	0(0)	4	0(0)		AdWV, C, FBL, F, MA, RO, T, TO, UB, VDL, NIGHT	Garrison	UNISUPERV/ SED				
8/8/2018	550	CURRENT	MOA, Los/Zia/Sa ra MOAs Italy	2x F-16	0	2	0	2		0(0)	0(0)	0(0)	0(0)	0(0)	2	0(0)		FBL, FAC, A, F, R, RO, T, TO, UB, VDL, NIGHT	Garrison	SSgt Doe				
8/2/2018	555	CURRENT	MOA, Los/Zia/Sa ra MOAs Italy	2x F-16	0	1	1	2		0(0)	0(0)	0(0)	0(0)	0(0)	0	0(0)		FBL, F, R, RO, SQ, T, TO, UB, VDL, NIGHT	Garrison	SSgt Smith				
7/24/2018	555	CURRENT	MOA, Los/Zia/Sa ra MOAs Italy	2x F-16	2	0	0	2		0(0)	0(0)	0(0)	0(0)	0(0)	2	0(0)		DF, FBL, FAC, A, F, MA, RO, SQ, TO, UB, VDL, DAY	Garrison	UNISUPERV/ SED				
4/4/2018	A44	CURRENT	R. Hood Range, TX	6x AH-64 - CAS	2	2	2	6		0(0)	0(0)	0(0)	0(0)	0(0)	0	0(0)		C, FBL, MA, P, T, TO, NIGHT	Garrison	UNISUPERV/ SED				
4/3/2018	UNK	CURRENT	R. Hood Range, TX	2x AH-64 - CAS	2	0	0	2		0(0)	0(0)	0(0)	0(0)	0(0)	0	0(0)		FBL, F, R, SD, T, TO, NIGHT	Garrison	UNISUPERV/ SED				
#####	1182	CURRENT	R. Hood Range, CA	2x F-16, 1x F-35	3	0	0	3		0(0)	0(0)	0(0)	0(0)	0(0)	3	0(0)		C, FBL, F, MA, RO, SQ, T, TO, UB, VDL, DAY	Garrison	UNISUPERV/ SED				

A4.4. PART IV. Inside center right side. Documentation of Training. Document all initial, mission qualification, continuation qualification, and refresher training, including academics and testing. This section will include all AF Form 623A, AF Form 797, and AF Form 1098. **(T-1)**

A4.4.1. The order of documentation will be:

A4.4.1.1. AF Form 623A – In addition to the CDL, the AF Form 623A will document: removal from JTAC Qualification Status, return to JTAC Qualification status, all additional, remedial, requalification, and refresher training. **(T-1)** If there are any corrections to, or changes made to the training record, then they will be recorded on the AF Form 623A. **(T-1)**

A4.4.1.1.1. A change log from the digital tracking system will be included with the AF Form 623A to annotate any corrections or adjustments to the individual's training documentation. **(T-1)**

A4.4.1.1.2. If the change log also documents all of the data that is required on the AF Form 623A, then it may be used in lieu of the AF Form 623A.

A4.4.1.2. AF Form 1098 – The AF Form 1098 will document all Special Task and Recurring Training such as JTAC qualification requirements IAW **Table 4.2** of this publication. **(T-1)** The Go/No-Go Table of an approved digital tracking system is an acceptable substitute for tracking recurring qualification requirements. **(T-1)**

A4.4.1.3. JTAC Certification AF Form 1036 – The AF Form 1036 will document the JTAC's entry into Initial Certification Training, completion of ICT, completion of initial JTAC evaluation, entry into Mission Qualification Training, and completion of MQT. **(T-1)**

A4.4.1.3.1. JTAC Upgrade AF Form 797– If not included in the JTAC Certification AF Form 797, a separate AF Form 797 will include entry into, and completion of JTAC-I and JTAC-E qualification. **(T-1)**

A4.4.1.3.2. All JTAC Upgrade AF Form 797 will remain a permanent part of the JTAC training and evaluation folder. **(T-1)** Missing JTAC upgrade AF Form(s) 797 will be documented in an MFR and endorsed by the group commander or equivalent O-6. **(T-1)**

A4.4.1.4. ACC Form 206, *Individual Mission Gradesheet* or Approved Equivalent – All documentation of graded controls will be retained and stored in this section in order from newest grade sheet to oldest. Reference ACCI 11-464, *Training Records and Performance Evaluation in Formal Flying Training Programs* for instructions on how to complete ACC Form 206. **(T-1)**

A4.4.1.5. MFR Related to Training – Any MFR that is related to the individual's training will be retained here. **(T-1)**

Figure A4.6. Sample Documentation of Training Cover Page.

PART IV: Documentation of Training

**The most current 1098 Log can be found at
<https://www.digitaltrackingsystemofrecord.com>**

Date of current printout: DD Month YYYY

Date of Change Log Printout: DD Month YYYY

Section 1. AF Form 623A

Section 2. AF IMT 1098

**Section 3. JTAC Certification, JTAC-I Upgrade
Certification, and JTAC-E Upgrade Certification 797s**

**Section 4. Grade Sheets – ACC Form 206 or
HAF-approved Equivalent**

Section 5. MFR Related to Training

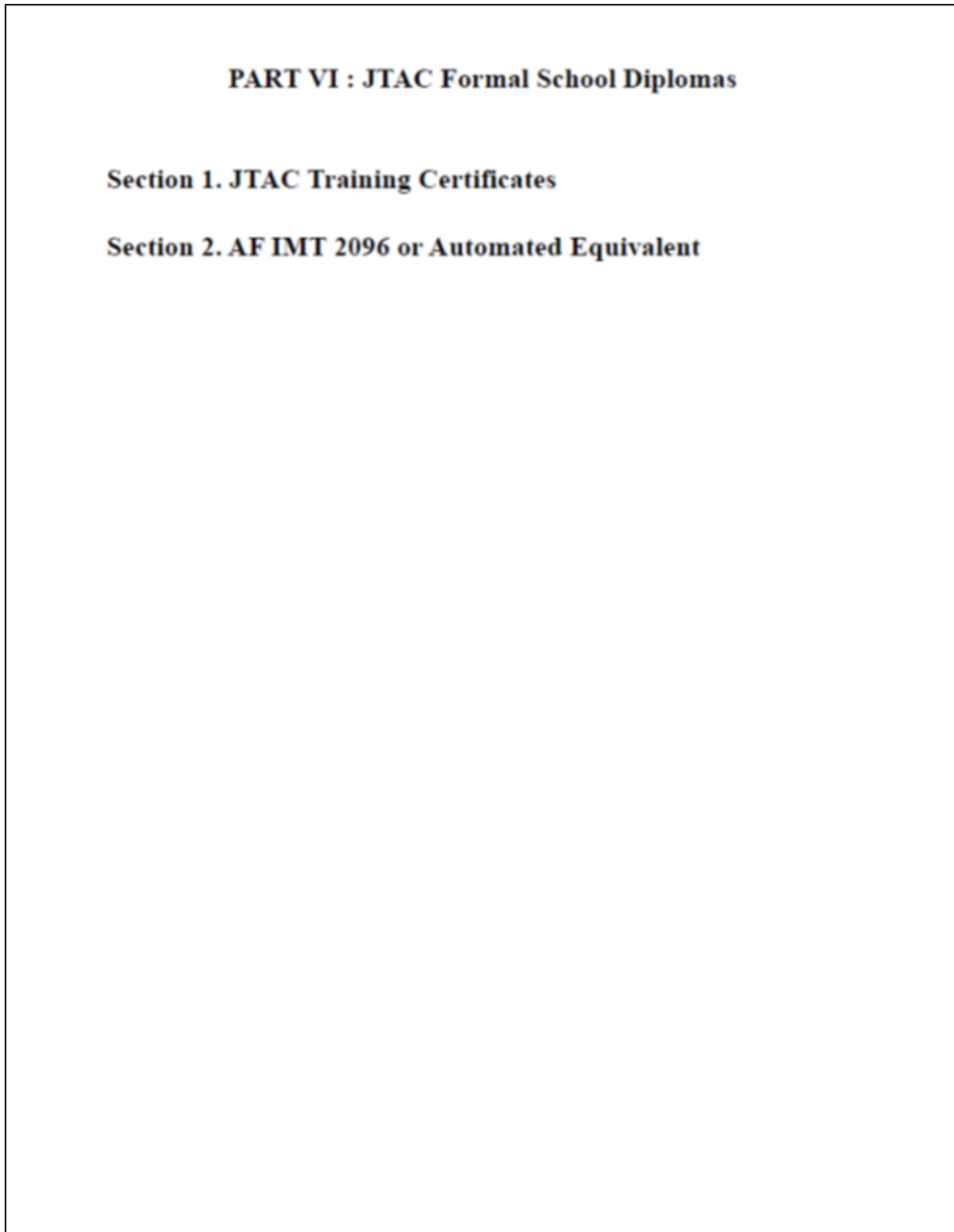
A4.5. PART V. Inside back left side Documentation of Evaluations. This section contains all evaluations conducted since initial certification. It also includes all documentation of waivers, extensions, and discrepancies as appropriate to clarify any inputs on the evaluation form(s) contained within this part of the folder. This portion of the training and evaluation folder is governed by AFMAN 10-3505V2, *Joint Terminal Attack Controller (JTAC) Standardization & Evaluation Program*.

A4.6. PART VI. Inside back, right side JTAC Formal School Diplomas and SEI Documentation. In this section, all formal JTAC courses attended by the individual will be listed with the most recent on top. Additionally, any administrative documentation of SEI designation such as the AF Form 2096 will be located in this section. **(T-1)**

A4.6.1. JTAC Training Certificates

A4.6.2. AF Form 2096 or Automated Equivalent

Figure A4.7. Sample JTAC Formal School Diplomas & SEI Documentation Cover Sheet.



Attachment 5

EXAMPLE JTAC MQT PROGRAM

A5.1. JTAC MQT PROGRAM Syllabus. An example syllabus is outlined below that demonstrates part task training events culminating in a FMP as a check on learning to progress to the next phase of training and prepare trainees for a formal JTAC evaluation. Items covered during formal training courses that conduct a comprehensive JTAC final assessment that covers all of the JMTLs, such as the Tactical Air Control Party Initial Certification Course, are not required to be completed during a JTAC MQT upgrade program, but may be, subject to the unit commander's discretion.

A5.1.1. **Static Phase** – these scenarios are intended to build the students CAS cadence and effectiveness in creating and passing 9-lines without the added stress of moving or tracking other moving friendly elements.

A5.1.1.1. Event 1-Single friendly, single target.

A5.1.1.2. Event 2-Single friendly, multiple targets.

A5.1.1.3. Event 3-Multiple friendlies, single target.

A5.1.1.4. Event 4-Multiple friendly, multiple targets.

A5.1.1.5. Event 5-Troops in Contact (TIC) Situation.

A5.1.1.6. FMP-1 (Day or Night) FMP and assessment of static phase focus items.

A5.1.1.6.1. Static Phase Focus Items:

A5.1.1.6.2. Demonstrate routing/safety of flight IAW JP 3-09.3.

A5.1.1.6.3. Demonstrate CAS check-in brief IAW JP 3-09.3.

A5.1.1.6.4. Establish and maintain effective two-way radio communication with aircraft.

A5.1.1.6.5. Demonstrate proper CAS brief IAW JP 3-09.3.

A5.1.1.6.6. Utilize coordinates to facilitate target acquisition and location(s) of friendly elements.

A5.1.1.6.7. Personal kit set up to execute JTAC mission and allow for easy access to mission equipment.

A5.1.1.6.8. Demonstrate understanding/employment of TAC equipment (GPS, marking devices, etc.).

A5.1.1.6.9. Demonstrates basic understanding of aircraft and artillery weaponry.

A5.1.1.6.10. Execute simple artillery CFF, Army Attack Aviation CFF, and AC-130 Gunship CFF, and de-confliction IAW JP 3-09.3.

A5.1.1.6.11. Demonstrate understanding of Risk Estimate Distances and Minimum Safe Distances IAW AFI 11-214 and AFTTP 3-2.6 JFIRE.

A5.1.1.6.12. CAS mission briefing/debriefing procedures.

A5.1.1.6.13. Electronic Counter-counter Measures (frequency hopping procedures).

A5.1.1.6.14. Laser procedures (marking and terminal guidance operations).

A5.1.2. **Dynamic Phase.** Dynamic scenarios should involve mobile elements. This may consist of a foot patrol, vehicle convoy, or response to a TIC situation. If limited to an OP due to range restrictions, JTAC-I can create a scenario with notional friendly elements moving throughout the target area.

A5.1.2.1. Event 1-Single moving friendly element, single target.

A5.1.2.2. Event 2-Single moving friendly element, multiple targets.

A5.1.2.3. Event 3-Multiple moving friendly elements, single target.

A5.1.2.4. Event 4-Multiple moving friendly elements, multiple targets.

A5.1.2.5. FMP-2 (Day or Night) FMP and assessment of dynamic focus items – Scenario should involve an FMP with a friendly moving element (patrol or convoy) which demonstrates a sound grasp of dynamic phase focus items. Dynamic Phase-Focus Items:

A5.1.2.5.1. Utilize multiple air assets within given airspace in conjunction with CAS (Bomber, ISR, RW, AC-130, etc.)

A5.1.2.5.2. Demonstrate correct and timely sensor postures while utilizing all available sensors to meet ground force commander intent.

A5.1.2.5.3. Prioritizing FW or RW effects based upon ground situation and using all available assets to produce synergistic effects.

A5.1.2.5.4. Safely integrates surface-based fires to meet ground force commander intent.

A5.1.2.5.5. Formal and Informal ACAs.

A5.1.2.5.6. Digitally Aided, day, night, mounted and dismounted CAS TTP.

A5.1.2.5.7. Insertion/Extraction and Infiltration/Exfiltration TTP.

A5.1.2.5.8. Create and utilize Concept of Fires plan.

A5.1.2.5.9. Conduct Staff Coordination with appropriate level.

A5.1.3. **Mission Phase.** This is the culminating phase of MQT and is meant to prepare the student for deployment as a JTAC across the full spectrum of mission sets and tasks that a JTAC can encounter.

A5.1.3.1. FMP-3. Day offensive operations.

A5.1.3.2. FMP-4. Night offensive operations.

A5.1.3.2.1. Mission Phase-Focus Items:

A5.1.3.2.2. Effectively battle track friendlies, know friendly positions and de-conflict from aircraft.

A5.1.3.2.3. Prioritize CAS or artillery based on precedence – effectively and efficiently identified threat and how and/or when to engage.

A5.1.3.2.4. Utilize multiple assets to meet ground force commander intent.

A5.1.3.2.5. Conduct SEAD utilizing ground/air weapons.

A5.1.3.2.6. Utilize EW.