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Space, Missile, Command, and Control

***TERMINAL ATTACK CONTROLLER
TRAINING PROGRAM***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This volume implements Air Force Policy Directive (AFPD) 13-1, *Theater Air Control System*. It establishes the minimum Air Force standards for training and qualifying Air Force personnel to control close air support (CAS) missions as a Terminal Attack Controller (TAC). It supplements Air Force Specialty Code (AFSC)-based continuation and upgrade training programs. This volume applies to all Air Force military and civilian personnel (including Air National Guard [ANG] and Air Force Reserve Command [AFRC]) engaged in TAC training. See **paragraph 1.5** for procedures to follow to further supplement this volume. Follow **paragraph 1.6** for procedures for submitting changes and recommendations to improve this volume.

This instruction requires the collection and maintenance of information protected by the Privacy Act (PA) of 1974. The authority to collect and or maintain the records prescribed in this instruction is 37 USC 301a. Privacy Act system notice F036 AF PC C, Military Personnel Records System, applies .

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This volume establishes TAC training and qualification as a separate AFI from Tactical Air Control Party (TACP) and Air Support Operations Center (ASOC) training. It incorporates all Air Force TAC training under one instruction and complies with Ready Aircrew Training program requirements. Incorporated is the TAC letter of qualifications, terminal attack control mission log, and terminal attack control mission grade sheet. Units must have a dedicated Operating Instruction (OI) governing its TAC training .

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Chapter 1

POLICIES AND RESPONSIBILITIES

1.1. Introduction. A Terminal Attack Controller (TAC) is specially trained, qualified, and authorized to provide terminal control of close air support (CAS) aircraft conducting operations in support of ground forces. Standardized training for TACs is essential to providing effective air control of all CAS missions. The complexity of coordinating CAS with ground fire support and maneuver units requires a detailed understanding of aerospace combat capabilities and other fire support means. This instruction provides the minimum training baseline needed for personnel to maintain TAC Combat Mission Ready (CMR) status.

1.2. Policies. The training and performance standards outlined in this instruction facilitate the employment of TACs to effectively and efficiently accomplish their peacetime and contingency duties and responsibilities. It also provides commanders with quantitative mission performance indicators for assessing TACs and to determine individual combat readiness. This instruction provides guidance for conducting a TAC training program that will complement AFI 36-2201 Volume 3, *Air Force Career Training Program On The Job Training Administration*. The unit's individual TAC training program is governed by this AFI and will be included in a unit's OI. The unit's TAC training program may be included in the OI developed in accordance with AFI 13-113, Volume 1, or in an OI developed separately to govern the unit's TAC training program. The unit's training program must be tailored to meet the unit's Designed Operational Capability (DOC) statement requirements and conducted in conjunction with joint training exercises to the maximum extent possible. Requirements of this AFI remain in effect during contingency operations .

1.2.1. TAC Training Program. Units will design its TAC training program to achieve the highest degree of individual combat readiness to support the unit's DOC statement. Training objectives must balance the need for realism against the expected threat when executing TAC mission essential tasks. Additionally, applying the Air Force standards that govern safety of flight (as well as the safety of ground forces) is paramount during the conduct of the overall training program.

1.2.2. TAC Training Missions. Units will design TAC training missions to: (a) achieve combat capability in mission tasks; (b) enhance mission accomplishment; and (c) comply with safety standards. Terminal attack control training mission scenarios should be based upon the unit's DOC statement and theater-specific operations plans and orders (OPLANs/OPORDs).

1.2.2.1. During training, TACs will use tactics, techniques, and procedures applicable to develop combat scenarios (e.g., appropriate use of code words, authentication procedures, combat tactics, tactical deception and concealment, threat reactions, intelligence briefings/debriefings, and Battle Damage Assessment (BDA) reports).

1.2.2.2. To the maximum extent practical, all training will include the use of inert or live ordnance, artillery and mortar fire support, threat simulators, countermeasures, and target marking techniques.

1.2.3. Only TAC qualified Air Liaison Officers (ALOs), Terminal Attack Controller-Instructors (TAC-Is), or TAC qualified personnel are permitted to provide terminal attack control *academic* training. If TAC trainees are controlling aircraft, **a TAC-I must be physically located with the trainee** and capable of assuming direct control of the aircraft if necessary .

1.2.4. CAS Mission Utilization Policy. In support of training requirements, squadron commanders are responsible for allocating CAS missions within their unit to ensure battalion level TACs and TAC-Is maintain experience, proficiency, and CMR status. Squadrons should prioritize CAS training missions during periods of reduced availability based on the unit's DOC and Unit Type Code (UTC) taskings.

1.2.4.1. Experienced TAC. An experienced TAC has three or more years of uninterrupted CMR-TAC experience. The three years begins with completion of a CMR-TAC evaluation and certification by the commander. A TAC placed in Non-CMR TAC status for more than 15 months will restart their timing for uninterrupted experience. Forward Air Controller (Airborne) qualified ALOs and Battalion Air Liaison Officers (BALO), certified as TACs, are considered experienced after completing CMR-TAC evaluation and being certified by their commander.

1.2.4.2. Experienced TACs will perform 12 terminal attack controls annually with three controls every 90 days.

1.2.4.3. Inexperienced TAC. A TAC with less than three years of uninterrupted CMR-TAC certification are considered inexperienced.

1.2.4.4. Inexperienced TACs will perform at least 12 terminal attack controls annually with three controls every 90 days; MAJCOMs will determine inexperienced requirements.

1.2.5. Personnel Authorized to Perform TAC Duties. The following Air Force personnel are authorized to perform TAC duties and must meet the requirements established in this instruction:

1.2.5.1. AFSC 1C4X1, Tactical Air Command and Control Specialist (TACCS), assigned to a Brigade, Regiment, Battalion, Ranger, or Special Operations Forces UTC, supporting ground maneuver forces.

1.2.5.2. Air Liaison Officers (ALO), assigned to a Brigade, Regiment, Battalion, Ranger, or Special Operations Forces UTC supporting ground maneuver forces .

1.2.5.3. AFSC 1C2X1, Combat Control Operators filling UTC positions that require TAC certification executing TAC duties in conjunction with joint/coalition SOF units and other governmental agencies missions.

1.2.5.4. AFSC 13D3B, Special Tactics Officer, with a minimum of one year operational experience, requiring supporting ground maneuver forces.

1.2.5.5. Personnel designated as Chief, Terminal Attack Controller-Instructor (Chief, TAC-I) and Terminal Attack Controller-Instructors (TAC-I) as described in this AFI.

1.2.5.6. Personnel designated as Chief, Stan/Eval and Stan/Eval Examiners as described in AFI 13-112V2.

1.2.5.7. Personnel designated as a Battalion Air Liaison Officer (BALO) assigned to U.S. Army Ranger Battalions must maintain TAC qualification. All other personnel designated as BALOs (officer and enlisted) may maintain TAC qualification if required by the Air Support Operations Squadron commander.

1.2.5.8. AFSC 1C4X1, TACCS, personnel performing tactical range control, test and evaluation duties, or assigned instructor duties at the Air Ground Operations School (AGOS) .

1.2.6. Personnel Authorized to Perform TAC Duties as a Forward Air Controller (Airborne) FAC(A). Air Force personnel performing TAC duties as a FAC(A) must meet the FAC(A) training requirements

specified in their AFI 11-MDS, Volume 1. In order to complete FAC(A) qualification they must attend an approved Air Ground Operations School (AGOS) course. The primary course is the FAC(A) Joint Firepower Course. The Joint Firepower Course, Air Liaison Officer Qualification Course, or the previous Joint Firepower Control Course is acceptable .

1.2.7. Personnel Unauthorized to Perform TAC Duties. The following personnel will not be entered into or continued in training as prescribed by this AFI:

- 1.2.7.1. Individuals not listed under **paragraph 1.2.5.** or **1.2.6.** above.
- 1.2.7.2. Individuals permanently deferred from worldwide mobility.
- 1.2.7.3. Individuals permanently deferred from carrying weapons.
- 1.2.7.4. Individuals unable to perform duties due to Uniform Code of Military Justice (UCMJ) action.
- 1.2.7.5. Individuals identified as drug or alcohol dependant.
- 1.2.7.6. Individuals who proclaim and are granted conscientious objector status.
- 1.2.7.7. Individuals who do not possess a current security clearance.

1.2.8. Use of AC-130 gunships and attack helicopters. AC-130 gunships and attack helicopters will not count toward currency requirements as outlined in this AFI. These assets do not require a person controlling them to be TAC certified. This does not preclude a TAC or unit from training with and controlling AC-130 gunships and attack helicopters to gain proficiency with these assets.

1.2.9. Automated Products. The use of automated products (e.g., spreadsheets, databases, word processing), to support the requirements of this AFI, is authorized when approved by the parent Group. Automated products will be included in an individual's training record upon PCA, PCS, or TDY deployments in support of exercises and contingencies (may be current copies of the products).

1.3. Responsibilities:

1.3.1. HQ USAF/XOOY will:

- 1.3.1.1. Establish policy and provide guidance for the execution of the TAC training program.
- 1.3.1.2. Resolve training issues that arise between using Major Commands (MAJCOMs).
- 1.3.1.3. Review and process all change requests to this instruction.

1.3.2. MAJCOMs will:

- 1.3.2.1. Resolve major training issues that arise between units within their purview.
- 1.3.2.2. Forward all requested MAJCOM supplements to HQ USAF/XOOY for coordination. Inform all MAJCOMs Offices of Primary Responsibility (OPRs) of approved supplements to this AFI .
- 1.3.2.3. Assist subordinate units in obtaining formal school quotas and training resources to support TAC training.
- 1.3.2.4. For those individuals attending the Terminal Attack Controller course, forward the Type 5 information to HQ ACC/DOYC no earlier than 60 days and no later than 45 days prior to class start date.

1.3.2.5. Execute group-level responsibilities over squadrons that lack group oversight or assign group-level responsibility directly to the squadron. The NGB may request oversight of its ANG units from the Numbered Air Forces (NAFs) or Group as required.

1.3.2.6. Approve all automated training tracking products.

1.3.3. Group Commanders (Squadron Commanders in the Air National Guard) will:

1.3.3.1. Ensure compliance with this instruction by their subordinate units. Provide staff support and assist those units in implementing and managing the training program to meet DOC readiness requirements.

1.3.3.2. If required, forward recommended supplements to this instruction and any supporting documents to the parent MAJCOM for review. The Group and MAJCOM will review approved supplements annually.

1.3.3.3. Identify training shortfalls that adversely impact a unit's combat capability through appropriate channels using the USAF *Status of Resources and Training System* (SORTS).

1.3.3.4. Certify and designate in writing, a group-level Chief, TAC-I responsible for the oversight of each subordinate (active duty) unit's TAC training programs. The certification will be documented in the individual's training records.

1.3.3.5. Award TAC Special Experience Identifier (SEI) 914 to group level personnel upon completion of TAC Mission Qualification Training (MQT) and initial TAC CMR certification .

1.3.3.6. Ensure the Group assists in the implementation of the TAC Training Program, in accordance with this AFI and applicable MAJCOM supplements. Provide assistance to the ANG units (when requested and funded by the NGB) as follows:

1.3.3.6.1. The 1st ASOG is available to provide assistance to 111 ASOC and 116 ASOS (Camp Murray WA), and 124 ASOS (Boise ID).

1.3.3.6.2. The 3rd ASOG is available to provide assistance to 122 ASOS (Alexandria LA), 169 ASOS and 182 ASOC (Peoria IL), and 238 ASOS (Meridian MS).

1.3.3.6.3. The 18th ASOG is available to provide assistance to the 118 ASOS (Stanly County NC), 165 ASOS (Brunswick GA), and 274 ASOS (Syracuse NY).

1.3.3.6.4. The 720th STG is available to provide assistance to the 123rd STS (Stadiford Field, KY).

1.3.3.7. Approve the group's OI governing its training program.

1.3.4. Group-level Chief, TAC-I will:

1.3.4.1. In concert with the Group Training Manager's (TM) responsibilities, ensure the TAC training requirements established in this AFI are implemented and followed by scheduling and conducting assistance visits to subordinate and/or ANG units once a year or upon unit request.

1.3.4.2. Maintain and utilize core TAC lesson plans to support this AFI and develop additional lesson plans to support any unique Group and squadron training requirements.

1.3.4.3. Properly document all TAC training, listed in both **Table 2.1.**, **Table 2.2.** and any unit-MQT or MAJCOM/NGB required training for group level TACs, on AF Form 797, **Job Qualification Standard Continuation/Command (JQS)** (or approved automated products). The

AF Form 797 will be placed in the individual's AF Form 623, **On-the-Job Training (OJT) Record**, or kept in the individual's training folder.

1.3.4.4. Maintain a copy of all TAC training records for six months on all group-level TACs who PCS, Separate, or retire. After the six-month period, the records will be destroyed.

1.3.4.5. Maintain TAC qualification and meet continuation-training (CT) requirements for the tasks they are instructing.

1.3.4.6. Ensure a current Terminal Attack Controller Letter of Qualifications is maintained for group-level TACs. The letter will be formatted using AF Form 3130, **General Purpose** (see **Attachment 2**), or a MAJCOM approved automated product.

1.3.4.7. Review all training records of newly assigned group-level TAC personnel. Personnel who were previously qualified TACs, and will require TAC certification in their new duty position, will complete one supervised terminal attack control mission within 60 days of station arrival in the unit's normal training area and then be evaluated for local area certification regardless of previous experience .

1.3.4.8. Develop and include any specific TAC training requirements and procedures in the group's training OI.

1.3.4.9. In coordination with unit TMs, consolidate and forward written requests for TAC course quotas to parent MAJCOM, in accordance with MAJCOM directives, for sub-allocation actions. Exception: ANG and PACAF squadrons forward written requests for TAC course quotas to their respective MAJCOM Functional Manager.

1.3.4.10. Coordinate with the group's TM and ensure that provisions for selecting, training, and evaluating the TAC-Is instructional techniques (reference **Chapter 3**) are incorporated into the group's overall training program OI.

1.3.4.11. Evaluate all unit Chief, TAC-Is on instructional techniques (reference **paragraph 3.1.1.5** and **Table 3.1**.) annually to ensure standardization and accuracy. The evaluation will focus on the effectiveness of teaching the trainee(s) using group-approved checklists. Use AF Form 803, **Report of Task Evaluation** (or approved automated products) for the Chief, TAC-I's evaluation and certification.

1.3.4.12. Conduct a review at the end of each month to identify group-level TACs who have not controlled a terminal attack control mission within the last 90 days or identify individuals whose 90 days will expire within the upcoming month.

1.3.4.13. Conduct a review, not later than 1 December, to ensure all group-level TACs have satisfactorily completed annual academic/task training and annual control requirements. Failure for an individual to meet annual training requirements will be annotated in the individual's training record. Commanders will determine additional training and number of supervised controls required.

1.3.5. Unit Commanders (Flight Commanders in the ANG) will:

1.3.5.1. Establish and maintain the unit's TAC training program IAW AFI 36-2201 Volume 3, to ensure that the unit is capable of meeting its DOC taskings.

- 1.3.5.2. Coordinate, direct, and control the unit's training events and processes to include commander/staff reviews of automated data products and operational reports that assess unit and individual TAC training status.
 - 1.3.5.3. Ensure adequate continuity and supervision of individual training needs and experience levels for assigned/attached TACs.
 - 1.3.5.4. Identify unit TAC training deficiencies to the Group or NGB and implement corrective actions.
 - 1.3.5.5. Approve individuals for entry into TAC qualification training.
 - 1.3.5.6. Award TAC SEI 914 to personnel upon completion of TAC MQT and initial TAC CMR certification.
 - 1.3.5.7. Certify and designate in writing, a squadron-level Chief, TAC-I responsible for the oversight of the unit's TAC training programs. The certification will be documented in the individual's training records.
 - 1.3.5.8. Approve the unit's OI governing its training program.
- 1.3.6. Squadron-level Chief, TAC-I (to include ANG units) will:
- 1.3.6.1. Ensure the intent and guidance of this AFI is implemented. Develop and incorporate unit-specific TAC training requirements and program management procedures into the unit's operations training program OI governed by this AFI and AFI 13-113, Volume 1, or by a separate OI dedicated to TAC training.
 - 1.3.6.2. Maintain and utilize TAC lesson plans and develop additional lesson plans as needed.
 - 1.3.6.3. Maintain a copy of all TAC training records for six months on all TACs who PCS, Separate, or retire. After the six-month period, the records will be destroyed .
 - 1.3.6.4. Properly document all TAC training, listed in both **Table 2.1.**, **Table 2.2.** and any unit-MQT or MAJCOM/NGB required training for unit-level TACs, on AF Form 797 or approved automated products). The AF Form 797 will be placed in the individual's AF Form 623 or kept in the individual's training folder.
 - 1.3.6.5. Maintain TAC qualification and meet CT requirements for the tasks they are instructing.
 - 1.3.6.6. Ensure a current Terminal Attack Controller Letter of Qualifications is maintained. The letter will be formatted using AF Form 3130 (see **Attachment 2**), or a MAJCOM/NGB-approved automated product.
 - 1.3.6.7. Review all training records of newly assigned TAC personnel. Personnel who were previously qualified TACs, and will require TAC certification in their new duty position, will complete a minimum of one, supervised terminal attack control mission within 60 days of station arrival in the unit's normal training area and then be evaluated for local area certification regardless of previous experience .
 - 1.3.6.8. Evaluate all unit TAC-Is on instructional techniques (reference **paragraph 3.1.1.5.** and **Table 3.1.**) annually to ensure standardization and accuracy. The evaluation will focus on the effectiveness of teaching the trainee(s) using group-approved checklists. Use AF Form 803, (or approved automated products) for the unit TAC-Is' evaluation and certification.

1.3.6.9. Conduct a review at the end of each month to identify TACs who have not controlled a terminal attack control mission within the last 90 days or identify individuals whose 90 days will expire within the upcoming month. Conduct a review, not later than 1 December, to ensure all TACs have satisfactorily completed academic/task training and annual mission requirements. Failure for an individual to meet annual training requirements will be annotated in the individual's training record. Commanders will determine additional training and number of supervised terminal attack control missions required.

1.3.7. Individual TACs will:

1.3.7.1. Hand carry their individual TAC training records during PCS moves to assist the gaining unit in assessing qualifications and training requirements.

1.3.7.2. When tasked to perform controller duties at temporary duty locations over a period greater than 30 days, to include contingencies, hand carry TAC training records or a copy for the gaining command/unit/supervisor to maintain.

1.3.7.3. Maintain CMR status IAW this AFI and participate only in controlling activities for which they are qualified.

1.3.8. AGOS, located at Nellis AFB, and 6th Combat Training Squadron (6th CTS), combined, will:

1.3.8.1. Perform group responsibilities as outlined in paragraphs **1.3.3.** and **1.3.4.** above.

1.3.8.2. Provide group oversight to Detachment 1, 548 CTS, Joint Readiness Training Center (JRTC) Fort Polk, LA and Detachment 2, AGOS, National Training Center (NTC) Fort Irwin, CA.

1.3.9. Detachment 1, 548 CTS and Detachment 2, AGOS will perform the squadron responsibilities as outlined in paragraphs **1.3.5.** and **1.3.6.** above .

1.4. Waivers. Unless noted, waiver authorities for this instruction are AF/XOO through, ACC/DO, USAFE/DO, PACAF/DO, ANG/C4B, or AFSOC/DO. Waivers to this instruction are valid until 31 December. Individuals deployed to operational commands, will request waivers through the operational command to the Commander Air Force Forces (COMAFFOR). COMAFFOR can approve, disapprove, or forward to Air Staff for adjudication.

1.5. Supplements. MAJCOMs and/or subordinate groups may supplement this document in order to provide specific guidance to their aligned units. The parent MAJCOM OPR must approve all group-level supplements. AF/XOOY will coordinate prior to publication on all MAJCOM supplements. MAJCOM OPRs will forward all approved supplements to the other MAJCOMs within 30 days of publication. The NGB will provide a copy of any approved supplements to their gaining MAJCOM.

1.6. Changes. Forward recommendations for changes to this AFI to the parent MAJCOM on AF Form 847, **Recommendation for Change of Publication.** MAJCOMs will forward their approved recommendations to HQ USAF/XOOY for final review and approval.

1.7. Maintaining Training Records. Units will maintain records for individual training and evaluation in accordance with (IAW) AFI 36-2201 Volume 3, and any applicable MAJCOM directives. All TAC training related documentation will be maintained in the individual's AF Form 623 or in individual training folders for officers and senior enlisted personnel. Each TAC-I will coordinate inputs to an individual's

training record with supervisors and the unit's TM as appropriate to ensure TAC training documentation is completed as required.

Chapter 2

TRAINING AND QUALIFICATION STANDARDS

2.1. TAC Training Requirements. TAC training requirements established in this chapter ensure unit TACs meet all qualification standards and are mission-specific qualified before controlling aircraft. Unit TAC training requirements incorporated in the unit's OI will be forwarded to the group TM and Chief, TAC-I for review. Group Chief, TAC-Is will assist subordinate units to ensure all required areas of training and qualifications are addressed. The unit's training OI will, as a minimum, address the following items:

- 2.1.1. Unit TM's, supervisor's, Chief, TAC-I, and TAC-I(s) duties and responsibilities.
- 2.1.2. TAC-I selection criteria.
- 2.1.3. Individual TAC's training responsibilities.
- 2.1.4. Training documentation and evaluation responsibilities and procedures.
- 2.1.5. Additional TAC MQT requirements unique to each unit as appropriate.
- 2.1.6. Continuation training task requirements and frequency.
- 2.1.7. Work center/duty position Master Task Listings applicable to TAC operations.
- 2.1.8. Terminal Attack Control mission log management.

2.2. TAC Training Process. Training requirements of this AFI are designed to progress TACs from Initial Qualification Training (IQT) through MQT to CMR and finally to CT.

- 2.2.1. TAC IQT is a two-phase training process (see **paragraph 2.4.**) necessary to initially qualify a TAC in basic controller duties without regard to the unit's mission. Upon completing IQT, the TAC starts MQT.
- 2.2.2. TAC MQT provides the training necessary to initially qualify or re-qualify TACs in specific duty position(s) and controller duties required to perform missions assigned to a specific unit. Completion of TAC MQT is a prerequisite for TAC CMR status.
- 2.2.3. TAC CMR status is attained when an individual is fully qualified on all tasks listed in **Table 2.1.**, completes all MQT requirements, passes a formal TAC evaluation as outlined in AFI 13-112, Volume 2, *Terminal Attack Controller Standardization/Evaluation Program*, and has the unit commander's certification.
- 2.2.4. TACs that regress to Non-Combat Mission Ready (N-CMR) status will accomplish a tailored program to regain CMR status as approved by unit commander (see **paragraph 2.12.**).
- 2.2.5. TAC CT includes terminal attack controller training and unit-specific training that is required to accomplish the unit's assigned missions (see **Table 2.2.**).
- 2.2.6. The TAC academic training cycle is 12 months: 1 January through 31 December. TACs will complete training requirements during the appropriate training cycle unless an extension is approved. Units will maintain the previous year's training cycle documentation until all outstanding training events are closed out.

2.2.7. Terminal attack control missions will include a tactical mission scenario IAW Aircrew and Terminal Attack Controller Coordination Guide found in Attachment 8 of AFI 11-214, *Air Operations Rules and Procedures*.

2.2.7.1. A terminal attack control is action taken by a TAC applying the procedures and techniques described in Joint Publication 3-09.3, *Joint Tactics, Techniques, and Procedures for Close Air Support*.

2.2.7.2. For the purpose of this instruction, a TAC is credited with a control when all aircraft flying an attack mission have completed their weapons release (actual or simulated). Example: A two-ship of F-16s would count as one control after the TAC has issued a “clear hot/continue dry” call to each of the two aircraft. Subsequent attacks by the same mission will require a new target, scenario, and “cleared hot/continue dry” call to count as a second control. Only Type 1 and Type 2 controls may be used for TAC mission credit.

2.2.7.3. An effective terminal attack control mission requires accomplishing a tactical mission scenario in accordance with terminal attack control standards specified for IQT, MQT, and CT (see [Table 2.1.](#) and [Table 2.2.](#)).

2.2.7.4. Aircraft flying in support of the terminal attack control mission must be flying an attack mission profile as defined in Joint Publication 3-09.3 *Joint Tactics, Techniques, and Procedures for Close Air Support (CAS)* to satisfy currency and upgrade requirements. **Helicopters and AC-130s may be used for proficiency training only .**

2.3. Training Program and Schedule Adjustments.

2.3.1. Commanders may adjust the training time or remove personnel from training due to medical disqualification, emergency leave, administrative action, or failure to progress in the TAC training program. The supervisor or TM will document adjustments in the individual’s training records.

2.3.2. Unit commanders may grant an individual one 30-day extension in each phase of training. Group commanders can grant a second 30-day extension. If necessary, MAJCOM OPRs are authorized to grant a third 30-day extension or provide a waiver.

2.3.3. The unit TM in coordination with the supervisor and Chief, TAC-I can adjust training dates or prorate training requirements based on an individual’s TDY or emergency leave for 30 cumulative days, three (3) Unit Training Assemblies (UTAs) for ANG, or more. Personnel who are TDY for 30 consecutive days or 3 UTAs or more will continue to accomplish training at temporary locations where MQT or CT training is available.

2.4. Initial Qualification Training and Formal Training Requirements. Phase I is TAC familiarization focusing on unit-level academics and supervised CAS control provided by a TAC-I. Phase I is mandatory for all TAC candidates. Phase II consists of formal TAC training and is mandatory for TAC qualification. Unit commander’s certify IQT completion .

2.4.1. Phase I - Terminal Attack Control Familiarization. Unit commanders approve individuals for entry into Phase I IQT. Phase I must be completed within 180 days (1 year for ANG) of entry. Any extensions must be requested through the Group or NGB. Minimum requirements for entry into Phase I are :

2.4.1.1. Have 12 months operational experience within the individual's duty AFSC. See **paragraph 1.2.4.** and **1.2.5.** for individuals authorized to perform TAC duties .

2.4.1.2. Achieve and maintain all measurement standards listed in **Table 2.1.** under the IQT Phase I column and complete all unit-level academics. Training will be documented on AF Form 797 (or approved automated products) and maintained in the individual's AF Form 623 or training folder (see **paragraph 1.7.**).

2.4.1.3. Successfully control a minimum of four graded terminal attack control missions under the supervision of a TAC-I using fighter/attack-designated aircraft, not AC-130, bomber aircraft, or rotary wing aircraft .

2.4.1.4. Document terminal attack control missions conducted by trainees on a terminal attack control mission grade sheet, AF Form 4144, **Positional Evaluation Checklist (Attachment 4).** The grade sheets will be filed in the individual's training record, to include grade sheets completed during the formal training course(s).

2.4.2. Phase II - Formal School Training. The satisfactory completion of ACC's AGOS TAC Course or USMC TACP Course (Special Tactics only) is a pre-requisite for qualification as a TAC. Personnel who satisfactorily completed the United States Marine Corps TACP course before the publication of this AFI will have fulfilled the formal training requirement of phase II training. Unit commanders must approve personnel for entry into Phase II IQT. Minimum requirements for personnel to attend the TAC course are:

2.4.2.1. For enlisted personnel, possess a 5-skill level in AFSC 1C2X1 or 1C4X1 and meet minimum grade requirement of Senior Airman .

2.4.2.2. Satisfactorily complete all Phase I training.

2.4.3. Phase II Control Requirements. The TAC trainee must successfully control a minimum of four air-to-ground missions under the supervision of an instructor. If the trainee is unable to control four missions due to unavailability of aircraft or weather, a training deficiency letter will be forwarded from the school to the unit. The unit will ensure completion of required training before the student progresses to the next level. Upon graduation from the formal course, review of all training records, and recommendations by the Chief, TAC-I and individual's supervisor, the unit commander may enter the TAC trainee in MQT.

2.4.4. A TAC-I will be a safety observer any time a trainee is controlling CAS aircraft. The TAC-I will physically locate with the trainee and be able to assume direct control if required. The TAC-I must conduct a thorough risk assessment, in writing, if attack aircraft are going to deliver live ordnance, using Air Force Pamphlet 90-902, *Operational Risk Management Guidelines and Tools* as a guide.

Table 2.1. Initial Unit Level Terminal Attack Controller Training Program

TRAINING ITEM	IQT Phase I	MQT
1. CAS Mission Preparation TR: Joint Pub 3-09.3; AFTTP 3-1 Vol 26; Appropriate Airspace and Range AFI and local procedures; AFI 11-214; Applicable T.O.s;		
a. Mission Planning (Map Datum, Timing)	B	3c
b. ATO Information	B	3c
c. Weather	B	3c
d. Range Procedures	B	3c
e. Equipment Preparation (radios, GPS, LRF, etc.)	B	3c
f. Airspace Requirements, Constraints, and Restrictions	B	3c
2. Target Analysis TR: Joint Pub 3-09.3; AFTTP 3-1 Vol 2, 26;		
a. Target Suitability	B	3c
b. Identification	B	3c
c. Description	B	3c
3. Aircraft Weapons and Tactics TR: AFTTP Vol 1, 3, 26;		
a. Air-to-Ground Weapons and Effects	B	C
b. CAS Aircraft Capabilities and Tactics	B	C
4. Ground-to-Air Threats TR: AFTTP 3-1 Vol 2,	B	C
5. Mission Coordination		
a. S-2	B	3c
b. S-3	B	3c
c. FSE/NGF LNO	B	3c
d. Aviation LNO	B	3c
e. ADA LNO	B	3c
f. Ground Commander	B	3c
g. Other Agencies	B	3c
6. CAS Integration TR: Joint Pub 3-09, 3-09.3; AFTTP (I) 3-2.6; AFTTP 3-1 Vol 26; FM 1-112, 6-20, 6-20-10, 6-20-40, 6-20-50, 6-71, 6-121, 7-20		
a. Ground Maneuver	1b	3c
b. Surface Fire Support	1b	3c
c. Localized SEAD	1b	3c
d. Attack Helicopters	A	B
e. JSTARS	1b	3c
f. Joint/combined C2 integration	A	B

TRAINING ITEM	IQT Phase I	MQT
g. ISR Integration (UAV and Rivet Joint)	A	B
h. SOF Operations	A	B
i. ADA and Integrated Air Defense System	1b	3c
7. Develop CAS Briefing TR: Joint Pub 3-09.3; AFTTP (I) 3-2.6; AFTTP 3-1 Vol 26		
a. 5/6/9/15 Line Requirements (Theater specific)	1b	3c
b. Additional Remarks	1b	3c
8. Initial Contact TR: Joint Pub 3-09.3		
a. FAC(A)/TAC Interface	A	b
b. Mission Check-In	1a	3c
9. Marking TR: FM 6-20, 6-20-10, 6-20-40, 6-20-50, 6-71		
a. Target with Indirect Fire	A	B
b. Target with LASER	A	B
c. Target with IR Systems	A	2b
d. Friendly locations	B	3c
10. Final Attack Control		
a. Day	1a	3c
b. Night – Visual		3c
c. Night - System-aided		3c
d. Night – NVD		3c
e. Ordnance Selection and Adjustment	1a (live mission)	3c
f. Clearance (Dry or Live)	1a	3c
g. Abort Procedures	1a	3c
h. Min Safe Distances	A	C
i. Attack Headings/Angles	A	C
11. Post Attack Procedures	1a	3c
12. Terminal Attack Control		
a. Terminal Attack Control Mission #1	1a	2b
b. Terminal Attack Control Mission #2	1a	2b
c. Terminal Attack Control Mission #3	1a	2b
d. Terminal Attack Control Mission #4	2b	3c

NOTE: Refer to [Attachment 5](#), Task Measurement Standards for required knowledge level.

2.5. Mission Qualification Training. MQT is a unit-developed training program that upgrades TACs and prepares them for CMR status. MQT builds upon the training received in formal training and consists

of unit-level academics coupled with supervised and graded terminal attack control missions. MQT begins after IQT and formal training requirements are complete. Unit MQT programs require group approval .

2.5.1. Units are allowed to tailor their programs for TACs, based on current qualification, experience, currency, documented performance, and formal training. Applicable portions of MQT may be used to create a re-qualification program for TACs who have regressed from CMR to specifically address the deficiencies, which caused the regression.

2.5.2. MQT training will be completed within the time frame specified below. Timing starts with the newly assigned, currently qualified, TACs first duty day at the gaining operational unit or upon completion of Phase II IQT for trainees.

2.5.2.1. Newly assigned TAC qualified personnel must complete unit MQT training within 90 days.

2.5.2.2. Individuals completing Phase II IQT must complete MQT within 180 days for active duty and one year for ANG.

2.5.2.3. Individuals failing to satisfactorily complete MQT in the allotted time must have group commander approval to continue in training.

2.5.3. MQT requirements are listed in [Table 2.1](#) under the MQT column. For MQT, the unit's training program must be based upon the unit's DOC statement. Training will be documented on AF Form 797 (or approved automated products) and maintained in the individual's AF Form 623 or individual training record.

2.5.4. Units will also develop blocks of instruction covering areas pertinent to the unit's mission as determined by the unit commander. This training will be identified in the unit's applicable OI that governs its individual TAC training program .

2.5.5. Training tasks identified with a subject knowledge level code will have a written test developed for that training task.

2.5.6. Training tasks identified with a task performance level code will have a task evaluation with a "Go or No-Go" standard developed for that training task. Training items that are both academic and task will have both a written test and a "Go or No-Go" standard developed.

2.5.7. Newly assigned TAC-qualified personnel, still current from their previous assignment must complete at least one graded missions under a TAC-I for continuation of TAC status before the individual can control aircraft unsupervised at the new location.

2.5.8. If more than 30 calendar days lapse between terminal attack control missions during MQT, a CAS mission scenario "practical exercise" (PE) event will be conducted before continuing in the program .

2.5.8.1. A CAS mission scenario PE is a comprehensive training event that includes all areas of mission planning, coordination, and execution but does not involve control of actual aircraft. CAS mission PEs are rehearsals/simulations that allow trainees to demonstrate the skills associated with correct use of Tactics, Techniques and Procedures during various types of CAS control.

2.5.8.2. A complete CAS mission PE is a tactical scenario that occurs on any given range, or within a defined area of responsibility. Each mission scenario PE could have several different out-

comes/training objectives based on the instructor inputs. CAS mission scenario PE will be conducted prior to any mission being controlled by non-TAC qualified personnel. This will provide instant feedback to the instructor and trainee in those areas needing improvement. Instructors will use actual mission profiles and mission-related information to familiarize the trainee with what to expect during all phases of mission execution. Instructors will:

2.5.8.2.1. Conduct CAS PEs prior to controlling missions that will include procedures and/or tactics that individuals are not qualified for, e.g., laser, night.

2.5.8.2.2. Use CAS PEs to familiarize individuals with local ranges, aligned OPLANs, or other training areas as designated by the Chief, TAC-I and unit commander.

2.5.8.2.3. As a minimum, the CAS PE training will consist of mission planning, coordination, execution, briefing, controlling, and debriefing using a unit commander approved scenario.

2.5.9. Upon completion of MQT, the Chief, TAC-I will request a formal performance evaluation from the unit's Standardization and Evaluation section.

2.5.9.1. Until the individual receives the initial TAC qualification, a TAC-I will be a safety observer any time a trainee is controlling CAS aircraft. The TAC-I will physically locate with the trainee and be able to assume direct control if required. The TAC-I must conduct a thorough risk assessment, in writing, if attack aircraft are going to deliver live ordnance using Air Force Pamphlet 90-902, *Operational Risk Management Guidelines and Tools* as a guide. All terminal attack control missions will be documented on the terminal attack control grade sheet and maintained in the individual's records.

2.5.9.2. Individual is placed on CMR status and considered basic TAC-qualified after passing the formal performance evaluation and receiving unit commander's certification .

2.6. CMR TAC Qualification. CMR TACs are authorized to perform unsupervised CAS control. Terminal attack control missions must be documented on AF Form 3132, **General Purpose** (see **Attachment 3**) and maintained in an individual's AF Form 623 or training record.

2.6.1. CMR TACs must perform a minimum of three terminal attack control missions every 90 days for a total of twelve missions per calendar year, 1 January through 31 December, to maintain CMR TAC qualification. Aircraft must be classified as fixed wing and excludes the use of the AC-130. **Note: Of the twelve missions per calendar year, at least 75% (i.e., nine) must be fighter/attack-designated aircraft; the other 25% (i.e., three) may be bomber aircraft.**

2.6.1.1. CMR TACs must control at least one laser terminal attack control mission per calendar year, and one live and one night terminal attack control mission every six months. Night missions may be used to satisfy up to two thirds of the annual requirements.

2.6.1.2. CMR TACs who do not maintain the live, laser, or night mission requirements are considered N-CMR **for that task** until requalified.

2.6.2. Terminal attack control missions must include a complete scenario following the Aircrew and Terminal Attack Controller Coordination Guide IAW AFI 11-214.

2.6.3. No more than one terminal attack control mission per individual scenario may count for a TACs training requirement as described in **paragraph 2.6.1**. For additional controls to qualify, using the same mission, the control(s) must consist of a different target, threats, and learning objective.

2.7. Continuation Training For CMR TACs. **Table 2.2.** identifies the minimum CT tasks deemed critical and required for recurring training. TACs failing to meet CT requirements listed in **Table 2.2.** and not controlling three missions within 90 days, are placed in N-CMR status until training requirements are met.

2.7.1. CMR TAC continuation training will be documented on AF Form 1098, **Special Task Certification and Recurring Training** (or approved automated products) .

2.7.2. Academic training tasks will have a written test developed for that task.

2.7.3. Performance training tasks will have a task evaluation with a “Go or No-Go” standard developed for that task .

2.7.4. If a CMR TAC has not completed recurring training for a specific task, or cannot attain the minimum task measurement standard, the individual is decertified in that task, they may not perform that task unsupervised until re-certified in that task. The unit commander must make an entry into the individual’s training record stating reason for the decertification.

2.7.5. Units must identify local and/or mission specific additional training requirements in an OI that governs their TAC training program.

2.8. Night Terminal Attack Control. Night terminal attack control is control of CAS aircraft at a point beyond End of Evening Nautical Twilight (EENT) and prior to Begin Morning Nautical Twilight (BMNT), with or without the use of night observation devices or IR designators .

2.8.1. Night terminal attack control missions may be used to update CMR TAC qualification if aircraft are classified as fixed wing with the exception of the AC-130.

2.8.2. Helicopters and AC-130s may be used for proficiency training, but they may not be used to update CMR TAC qualification or currency.

2.8.3. TACs must control one night terminal attack control mission every six months based on the annual training calendar to maintain certification. An individual non-current in night terminal attack control may not perform unsupervised night terminal attack control .

2.8.4. TACs must maintain night terminal attack control qualification to perform unsupervised night CAS. CMR qualification is not affected for TACs non-current in night terminal attack control.

2.8.5. For a TAC’s first night terminal attack control mission or for re-qualification, a night-qualified TAC-I must be a safety observer. The TAC-I will physically locate with the controller and be able to assume direct control if necessary.

2.9. Laser Terminal Attack Control. Laser terminal attack control is control of CAS aircraft using laser designation as a marking device or terminal guidance for air-to-ground munitions .

2.9.1. Laser terminal attack control missions may be used to update CMR TAC qualification if aircraft are classified as fixed wing with the exception of the AC-130.

2.9.2. Helicopters and AC-130s may be used for proficiency training, but may not be used to update CMR TAC qualification or currency.

2.9.3. TACs must control one terminal attack control mission using laser designation every 12 months based on the annual training calendar to maintain certification. An individual non-current in laser terminal attack control may not perform unsupervised terminal attack control using laser designation .

2.9.4. TACs must maintain laser terminal attack control qualification to perform unsupervised CAS control using laser target designating and marking devices. CMR qualification is not affected for TACs non-current in laser terminal attack control.

2.9.5. For a TAC's first control involving laser designation or to re-qualification, a laser-qualified TAC-I will act as a safety observer. The TAC-I will physically locate with the controller and be able to assume direct control if necessary.

2.9.6. All personnel when conducting laser operations will wear approved laser-safe goggles.

2.10. Live Terminal Attack Control. Live terminal attack control is control of CAS aircraft where air-to-ground munitions, either live or inert, are released from the aircraft.

2.10.1. Live terminal attack control missions may be used to update CMR TAC qualification if aircraft are classified as fixed wing with the exception of the AC-130.

2.10.2. Helicopters and AC-130s may be used for proficiency training, but may not be used to update CMR TAC qualification or currency.

2.10.3. TACs must control one terminal attack control mission where munitions are released from the aircraft every six months based on an annual training calendar to maintain certification. An individual non-current in live terminal attack control may not perform unsupervised terminal attack control where ordnance is released from aircraft .

2.10.4. TACs must maintain live terminal attack control qualification to perform unsupervised CAS control where munitions are released from the aircraft. TAC qualification is not affected for TACs non-current in live terminal attack control.

2.10.5. For a TAC's first control involving actual munitions release from a CAS aircraft or for re-qualification, a live-qualified TAC-I will act as a safety observer. The TAC-I will physically locate with the controller and be able to assume direct control if necessary .

2.10.6. Ballistic Nylon Vest (Flak Jacket) or body armor and Kevlar Helmet will be worn by all personnel when conducting live terminal attack control duties.

2.11. Terminal Attack Control Mission Logs. All terminal attack control missions controlled by a TAC will be documented using AF Form 3132 (see [Attachment 3](#)) or approved automated products .

2.11.1. Terminal attack control mission logs will be annotated following mission completion and placed in the individual's AF Form 623 training record or folder.

2.11.2. Terminal attack control mission logs will be started during IQT and be maintained throughout a TAC's career.

2.12. Non-Combat Mission Ready (N-CMR) Status. When N-CMR TACs or other non-TAC certified personnel are providing terminal control of CAS aircraft, **a TAC-I is required to be present.**

2.12.1. TACs placed in N-CMR status require one supervised and graded mission from a TAC-I to regain currency level. The unit commander will make an entry in the individual's AF Form 623 training record stating individual has regained his currency level. TACs in N-CMR status for more than 180 days must reaccomplish MQT as outlined in [paragraph 2.5.](#)

2.12.2. Commanders will remove TAC certified personnel, in writing, when it is determined that the individual lacks the appropriate skill or abilities required to continue controlling aircraft. This letter becomes a permanent part of the individual's TAC training record.

2.12.2.1. Disqualified individuals are immediately removed from the terminal attack control program .

2.12.2.2. Commanders must approve, in writing, a disqualified individual's re-entry into the terminal attack control program. This letter becomes a permanent part of the individuals training record. Unit commanders will closely monitor training of previously disqualified individuals.

Table 2.2. Terminal Attack Controller Continuation Training Program

TRAINING ITEM	TYPE	FREQUENCY
1. CAS Mission Preparation	Academics	12 Months
2. Target Analysis	Academics	12 Months
3. Weapons and Tactics	Academics	12 Months
4. Ground-to-Air Threats	Academics	12 Months
5. Mission Coordination	Academics	12 Months
6. CAS Integration	Academics	12 Months
7. Airborne C2 integration	Academics	12 Months
8. Joint STARS integration	Academics	12 Months
9. ISR integration	Academics	12 Months
10. CAS Mission Briefing	Academic/Task	12 Months
11. Initial Contact	Academic/Task	12 Months
12. Position Marking	Academic/Task	12 Months
13. Final Attack Control	Academic/Task	12 Months
14. Post Attack Procedures	Academic/Task	12 Months
15. Terminal Attack Control	Task	*
16. Night Terminal Attack Control Missions	Task	6 Months
17. Laser Terminal Attack Control Missions	Task	12 Months
18. Live Terminal Attack Control Missions	Task	6 Months

NOTE: * Three TAC Missions every 90 days, Minimum 12 TAC Missions per calendar year (1 January through 31 December) .

Chapter 3

TERMINAL ATTACK CONTROLLER - INSTRUCTOR REQUIREMENTS

3.1. Chief, Terminal Attack Controller-Instructor (Chief, TAC-I). Due to the critical nature of terminal attack control, unit commanders will select only their best-qualified individual, based on the criteria below and the individual's knowledge and expertise, to run the unit's TAC training program.

3.1.1. Criteria:

3.1.1.1. All individuals considered for Chief TAC-I must have two years experience as a TAC-I. Additionally, enlisted personnel must be a 7-level in their Primary AFSC.

3.1.1.2. Individual must meet trainer and certifier status IAW AFI 36-2201, Volume 3.

3.1.1.3. Individual must be certified CMR and appointed in writing by commander.

3.1.1.4. Individual must have completed a formal instructor-training course either military or civilian. Examples are, but not limited to, Basic Instructor Course (BIC) E3AIR3S200-087, Classroom Instructor Course (CIC) Y120022 or civilian teacher certification.

3.1.1.5. Pass an annual instructor evaluation as defined in **Table 3.1**. Chief, TAC-Is who receive a "U" in any area will receive an overall rating of unqualified and must be pulled from instructor duty. The Chief, TAC-I must be re-evaluated after completing training in the area(s) marked "U". Upon successful reevaluation, reinstate Chief, TAC-I duties. If the reevaluation results in a second failure, individual must be pulled from Chief, TAC-I duties.

3.1.2. Chief TAC-I Certification. The unit commander will certify the Chief, TAC-I and the certification will be documented in the individual's training records.

3.2. Terminal Attack Controller-Instructor (TAC-I). Commanders, with recommendations from the Chief, TAC-I, will select only the best-qualified individuals, based on the criteria listed below, to conduct TAC training.

3.2.1. Criteria:

3.2.1.1. Individual must be at least a 5-level with three years experience as a TAC. Officers (ALOs/BALOs) may be selected as a TAC-I with less than 2 years experience at the discretion of the unit commander .

3.2.1.2. Individual must meet trainer and certifier status IAW AFI 36-2201V3.

3.2.1.3. Individual must be certified CMR and appointed in writing by commander.

3.2.1.4. Completing a formal instructor course is highly desirable for TAC-Is. Some examples are, but not limited to, BIC E3AIR3S200-087, CIC Y120022, or civilian teacher certification .

3.2.1.5. Pass an annual instructor evaluation using the criteria in **Table 3.1**. TAC-Is who receive two "U" ratings will receive an overall rating of unqualified and must be pulled from instructor duty. The TAC-I must be re-evaluated after completing training in the area(s) marked "U". A "U" in area 11 "Integrated safety principles" will automatically result in an overall rating of unqualified. Upon successful reevaluation, reinstate instructor duty. If the reevaluation results in a failure, individual must be pulled from TAC-I duties.

3.2.2. The TAC-I may only provide instruction on those tasks he is currently certified on.

Table 3.1. TAC-I Instructional Evaluation Criteria.

1. Equipment required is ready for use.
Q: Required equipment was immediately available and set up for use.
Q-: Required equipment was available for use.
U: Required equipment was not available or not in working condition.
2. Stated lesson overview and included a clear statement of objectives.
Q: Clear step-by-step overview of lesson objectives clearly understood by student.
Q-: Stated lesson overview and included a statement of the objectives.
U: Objectives of the lesson not stated and no overview given.
3. Used appropriate techniques (examples, scenarios) to assist and motivate student.
Q: Assured student understood material and related material to actual job performance.
Q-: Used appropriate techniques to assist and motivate student.
U: Did not use appropriate techniques to assist and motivate student.
4. Used training aids effectively.
Q: Training aids and devices used in a manner that enhances the training outcome.
Q-: Used training aids effectively.
U: Training aids did not enhance training or not used effectively.
5. Verbalized clearly, easily heard, used correct grammar.
Q: All technical terms clearly pronounced and vocal quality conveyed enthusiasm.
Q-: Verbally clear, easily heard and used correct grammar.
U: Mispronounced technical terms which distracted from the lesson.
6. Administered student measurement appropriately.
Q: All procedures for administering measurement devices were followed exactly.
Q-: Administered student measurement devices properly.
U: Measurement device administered improperly.
7. Demonstrated knowledge of subject matter/procedures.
Q: Demonstrated thorough knowledge of the subject matter and used examples to clarify problem areas.
Q-: Demonstrated adequate knowledge of the subject matter and procedures.
U: Instructor did not fully understand the subject matter.
8. Managed time effectively/completed all phases of lesson and reviewed main points.
Q: All objectives covered in detail with no time wasted.
Q-: All objectives covered with little time wasted.

U: All objectives not covered and time wasted.
9. Clearly identified procedure vs. technique.
Q: Thoroughly explained instructions as procedures and technical methods as techniques.
Q-: Clearly identified procedure vs. technique.
U: Did not clearly identify procedures vs. techniques.
10. Ensured equipment was properly configured and addressed problems appropriately.
Q: Ensured equipment available for use had all safety devices in proper working order.
Q-: Ensured equipment was properly configured and addressed problems appropriately.
U: Did not ensure proper equipment configuration, did not address problems.
11. Integrated safety principles into lesson and applied safety precautions at all times.
Q: Ensured students complied with personnel and equipment safety procedures.
Q-: Integrated general safety procedures into lesson.
U: Did not integrate general safety procedures into lesson.

3.3. Forms Adopted. AF Form 623, **On-the-Job (OJT) Record**; AF Form 797, **Job Qualification Standard/Command (JQS)**; AF Form 803, **Report of Task Evaluation**; AF Form 847, **Recommendation for Change of Publication**; AF Form 1098, **Special Task Certification and Recurring Training**; AF Form 3130, **General Purpose (11 X 8 1/2")**; AF Form 3132, **General Purpose (11 X 8 1/2")**.

3.4. Forms Prescribed. AF Form 4144, **Positional Evaluation Checklist**.

RONALD E. KEYS, Lt General, USAF
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Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****Abbreviations and Acronyms***

ACC—Air Combat Command
ADA—Air Defense Artillery
AFI—Air Force Instruction
AFPD—Air Force Policy Directive
AFRC—Air Force Reserve Command
AFSC—Air Force Specialty Code
AFTP—Air Force Tactics, Techniques, and Procedures
AGOS—Air Ground Operations School
ALO—Air Liaison Officer
ANG—Air National Guard
ASOC—Air Support Operations Center
ATO—Air Tasking Order
BALO—Battalion Air Liaison Officer
BIC—Basic Instructor Course
BDA—Battle Damage Assessment
BMNT—Begin Morning Nautical Twilight
C2—Command and Control
CAS—Close Air Support
CCO—Combat Control Operator
CIC—Classroom Instructor Course
CMR—Combat Mission Ready
COMAFFOR—Commander Air Force Forces
CT—Continuation Training
CTS—Combat Training Squadron
DOC—Designed Operational Capability
ECAS—Emergency Close Air Support
EENT—End of Evening Nautical Twilight
FAC(A)—Forward Air Controller (Airborne)
FM—Field Manual

FSE—Fire Support Element
IAW—In Accordance With
IP—Initial Point
IR—Infrared
ISR—Intelligence Surveillance Reconnaissance
IQT—Initial Qualification Training
JRTC—Joint Readiness Training Center
JSTARS—Joint Surveillance Target Attack Radar System
JQS—Job Qualification Standard
LNO—Liaison Officer
MAJCOM—Major Command
MQT—Mission Qualification Training
NAF—Numbered Air Forces
N-CMR—Non-Combat Mission Ready
NGB—National Guard Bureau
NGF—Naval Gun Fire
NTC—National Training Center
NVD—Night Vision Device
NVG—Night Vision Goggles
OI—Operating Instruction
OJT—On the Job Training
OPLAN—Operations Plan
OPORD—Operations Order
OPR—Office of Primary Responsibility
PA—Privacy Act
PCA—Permanent Change of Assignment
PCS—Permanent Change of Station
PE—Practical Exercise
SEAD—Suppression of Enemy Air Defense
SEI—Special Experience Identifier
SOF—Special Operations Force
SORTS—Status of Resources and Training System

TAC—Terminal Attack Controller
TACCS—Tactical Air Command and Control Specialist
TAC-I—Terminal Attack Controller - Instructor
TACP—Tactical Air Control Party
TM—Training Manager
UAV—Unmanned Aerial Vehicle
UCMJ—Uniformed Code of Military Justice
UTA—Unit Training Assemblies
UTC—Unit Type Code

Terms

Air Liaison Officer (ALO)—An officer (aviator/pilot) attached to a ground unit who functions as the primary advisor to the ground commander on air operation matters. (JP 1-02). The following AFSCs may be assigned the suffix “U” for ALO; 11AXX, 11BXX, 11EXX, 11FXX, 11HXX, 11KXX, 11RXX, 11SXX, 11TXX, 12AXX, 12BXX, 12EXX, 12FXX, 12RXX, 12SXX, 12TSS, and 13BXX. (AFMAN 36-2105)

Air Support Operations Center (ASOC)—An agency of a tactical air control system collocated with a corps headquarters or an appropriate land force headquarters, which coordinates and directs close air support and other tactical air support. (JP-1-02)

Battalion Air Liaison Officer (BALO)—

Officer—An 11FXN (OA-10) fighter pilot who performs liaison duties at the battalion level. With the exception of PCS-assigned Ranger Battalion BALOs, A/OA-10 pilots perform ALO duties on a TDY basis while permanently assigned to a fighter squadron.

Enlisted—A Technical or Master Sergeant with an AFSC of 1C471 who performs liaison duties at the battalion level. Enlisted personnel who perform BALO duties are permanently aligned with Army battalions and perform full-time BALO duties.

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. (JP 1-02)

Chief, Terminal Attack Controller-Instructor (Chief, TAC-I)—A highly qualified individual appointed by the unit commander who is responsible for the unit’s TAC training program. Ensures the requirements of AFI 13-112, Volume 1, are implemented and oversees the training and utilization of unit’s Terminal Attack Controller-Instructor(s) .

Close Air Support (CAS)—Air action by fixed-wing and rotary-wing aircraft against hostile targets in close proximity to friendly forces which require detailed integration of each air mission with the fire and movement of those forces. (JP 1-02)

Combat Control Operators (CCO)—Directs and controls the delivery and battlefield application of lethal and non-lethal airpower. Uses visual and electronic aids to control airhead in the area of

responsibility. Establishes long-range command and control communications and intelligence nets (AFMAN 36-2108)

Combat Mission Ready (CMR)—A status of a TAC who is fully qualified to perform the unit's operational mission, maintains qualification and proficiency in the mission, has been evaluated IAW AFI 13-112, Volume 2, and has commander certification.

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

Emergency Close Air Support (ECAS)—Close Air Support missions conducted under emergency wartime conditions when a qualified TAC is unable to provide terminal attack control. Emergency CAS is not permitted during peacetime operations.

End of 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. (JP1-02)

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

Initial Qualification Training (IQT)—A two-phase formal training process designed to initially qualify a TAC in basic controller duties without regards to the unit's operational mission.

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

Non-Combat Mission Ready (N-CMR)—Individuals are placed an N-CMR status after failing to complete academic/proficiency training or currency requirements within the allotted training cycle. Individuals must complete required training and require one supervised and graded mission from a TAC-I to regain CMR status. TACs in an N-CMR status for more than 60 days must re-accomplish MQT.

Practical Exercise—A practical exercise (PE) uses a CAS mission scenario that is a comprehensive training event and includes all areas of mission planning, coordination, and execution. The CAS mission scenario PE events are intended to make the most effective use of available training sorties by allowing TACs to become familiar with techniques and procedures prior to the actual mission. A complete CAS mission scenario PE occurs on any given range, or within a defined area of responsibility. Each mission scenario 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.

Special Tactics Officer—Provides reconnaissance/assessments, terminal control, and rescue and recovery. Manages day-to-day operations of personnel recovery (PR) activities and Special Tactics (ST) teams to conduct rescue and recovery operations; run survival, evasion, resistance, and escape (SERE) programs; and survey, establish, and control the aerospace surface interface in objective areas. Deploys as a PR or ST team leader/mission commander as a direct combatant or to command and battle staffs to provide expertise and command/control for special reconnaissance, terminal control, and PR operations. (Draft AFMAN 36-2105)

Tactical Air Command and Control Specialist (TACCS)—Performs and manages TACP operations. Provides Air Force assistance and expertise in planning and controlling combat air resources. Operates

and supervises communications nets to support army ground maneuver units. (AFMAN 36-2108)

Tactical Air Control Party (TACP)—A subordinate operational component of a tactical air control system designed to provide air liaison to land forces and for control of aircraft. (JP 3-09.3) TACP is the principal Air Force liaison element aligned with Army maneuver units from battalion through corps and consist of air liaison officers and enlisted terminal attack controllers. TACPs advise ground commanders on the capabilities and limitations of aerospace power and provide the primary Air Force terminal attack control of CAS in support of ground forces. (AFDD 2-1.7)

Terminal Attack Control Currency—An individual must perform at least one terminal attack control mission every 90 days (rolling) and a minimum of twelve missions per calendar year. The calendar year runs from 1 January through 31 December. Units will conduct monthly and annual look-backs. No more than one terminal attack control mission per individual scenario may count for Basic Terminal Attack Control qualification.

Terminal Attack Control Mission—A terminal attack control mission must include a scenario and performance of each item listed in the Aircrew and Terminal Attack Controller Coordination Guide, AFI 11-214, Attachment 8. Items may be simulated, but every item must be included in the mission. A single CAS mission may be used for multiple terminal attack control missions, provided each terminal attack control mission consists of a complete profile. **Note: Of the twelve missions per calendar year, at least 75% must be fighter-designated aircraft. The other 25% may be bomber aircraft. Helicopters and AC-130s will not be counted for terminal attack control missions, but may be used for proficiency training.**

Terminal Attack Controller (TAC)—A TAC is specially trained, qualified, and authorized to provide terminal control of close air support CAS aircraft conducting operations in support of ground forces. Standardized training for TACs is essential to providing effective command and control of all CAS missions. The complexity of coordinating CAS with fire support and maneuver units of ground forces requires a detailed understanding of aerospace power capabilities and other fire support means.

Terminal Attack Controller-Instructor (TAC-I)—A highly qualified individual recommended by the unit Chief, TAC-I and appointed by the unit commander who provides training to unit TACs. Responsible for implementing the training as required by this AFI and developed by the unit's Chief, TAC-I.

Attachment 4

SAMPLE TERMINAL ATTACK CONTROL MISSION GRADE SHEET

POSITIONAL EVALUATION CHECKLIST											
EXAMINEE NAME		TYPE OF EVALUATION		DATE		OVERALL GRADE					
SrA Smith, Johnston A.		IQT - Mission #1		20010823							
DUTY POSITION		EXAMINER		EXCEPTIONALLY QUALIFIED		QUALIFIED		UNQUALIFIED			
TAC Trainee		TSgt John Doe Chief, TAC-I		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>			
EVALUATION AREAS			GRADE			EVALUATION AREAS			GRADE		
			Q	Q	U				Q	Q	U
1. CAS MSN Prep						5. MSN Coordinatio					
a. Mission Planning			X			a. S-2			X		
b. ATO Information			X			b. S-3			X		
c. Weather				X		c. FSE/NGF LNO			X		
d. Range Procedures			X			d. Aviation LNO			X		
e. Equipment Prep			X			e. ADA LNO			X		
f. Airspace Use			X			f. Ground CC			X		
2. Target Analysis						g. Other Agencies			X		
a. TGT Suitability			X			6. CAS Integration					
b. Identification			X			a. Ground Maneuver			X		
c. Description			X			b. Surface Fire			X		
3. A/C Weap/Tactic						c. Localized SEAD				X	
a. A/G Weapons			X			d. Attack Helio			X		
b. CAS A/C Tactics			X			e. J-STARS			X		
4. Grnd-Air Threat						f. Airborne C2			X		
grade				X		g. ISR Integration			X		
BLANK						h. ADA			X		

EVALUATION AREAS	GRADE			EVALUATION AREAS	GRADE		
	Q	Q	U		Q	Q	U
7. CAS Briefing				10. Final Attack Control			
a. 5/9/15 Line Brief	X			a. Day	X		
b. Additional Remarks	X			b. Night-Visual			
8. Initial Contact				c. Night-System Aided			
a. FAC (A)/TAC (A)	X			d. Night-NVD			
b. Fighter Check-In	X			e. Ord Selection/Adj	X		
9. TGT Marking				f. Clearance	X		
a. Indirect Fire	X			g. Abort Procedures	X		
b. LASER	X			h. Min Safe Dist	X		
c. IR Systems	X			i. Attack Heading	X		
d. Friendly Location	X			11. Post Attack Control			
BLANK				grade	X		
REMARKS							
<p>Evaluation took place on the Fort XX live fire range @ 1120 Hrs. Mission involved 2 A-10s, call sign Wolf 11 and 12. Ordnance was 2X MK-82s and 30MM. Target objective was a group of tanks protected by SAMs.</p> <p>SrA Smith did a good job with mission preparation, though he failed to utilize the collocated WX folks for current update. TGT analysis was on the mark and very thorough. Well versed on A-10 weapons & tactics. SrA Smith was uncertain of the SA-10 capabilities. Outstanding job on mission coordination. Failed to use existing artillery assets for SEAD mission and did not fully integrate the available airborne C2 elements. Once A/C arrived on station, Smith did an excellent job of briefing pilots on mission, threats and TGT area. Maintained positive control at all times.</p> <p>All Q- areas were debriefed and additional training will be provided by a TAC-I. SUSPENSE: 20010810.</p> <p>Instructor Signature: Commander Signature:</p>							

Attachment 5

TASK MEASUREMENT STANDARDS

LEVELS	SCALE VALUE	DEFINITIONS: The Individual:
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (LIMITED)
	2	Can do most parts of the task. Needs only help on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
* TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step-by-step procedures for doing task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCE THEORY)
** SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationships of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)

* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.