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SECRETARY OF THE AIR FORCE**



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***Flying Operations***

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This publication implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations*, AFPD 11-4, *Aviation Service*, and Air Force Instruction (AFI) 11-202, Volume 1 (V1), *Aircrew Training*. This publication establishes training and proficiency requirements and weapons delivery certification for A-10C aircrew. This Air Force Manual (AFMAN) applies to all civilian employees and uniformed members in the Regular Air Force (RegAF), Air National Guard (ANG), and Air Force Reserve (AFR) who participate in A-10C aircrew training. This instruction requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by Executive Order 9397, *Numbering System for Federal Accounts Relating to Individual Persons*. The applicable Systems of Records Notice – F011 AF XO A, *Aviation Resource Management Systems (ARMS)* is available at: <http://dpcl.d.defense.gov/Privacy/SORNS>. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule 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 Air Force (AF) Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Air Combat Command (ACC)/A3 will coordinate all changes to the basic volume with all major command (MAJCOM)/A3s. This publication may be supplemented at any level, but route all direct supplements to Air Force Flight Standards Agency (AF/A3OF) and ACC Flight Operations and Training Branch (ACC/A3TO) for coordination prior to certification and approval.

Field units below MAJCOM/direct reporting unit (DRU)/field operating agency (FOA) level forward copies of their supplements of this publication to their parent MAJCOM/ DRU/FOA OPR for post-publication review. Copies of MAJCOM/DRU/FOA-level supplements, after approval and publishing, will be made available on the e-Publishing website at <https://www.e-publishing.af.mil>. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor’s commander for non-tiered compliance items. Additional waiver authority to this publication is described in [paragraph 1.2](#)

## ***SUMMARY OF CHANGES***

This document has been substantially revised and should be completely reviewed. Major changes include: established training minimums, experience criteria, standardized terminology, mission recording operations, numerous safety related inputs, multiple updated/streamlined waiver changes and deletions per Headquarters Air Force review, and significant administrative changes to baseline procedures across all fighters. Waiver authorities (tier numbers) have been added per AFI 33-360. Where the word “days” is used, it denotes calendar days unless otherwise specified. The 22 August 2019 Corrective Action revises Table 4.1. A-10 Currencies page 19. The referenced notes within Table 4.1 need updated to the correct numbering. During the rewrite draft process, notes were deleted from the notes section and the associated reference note number was not updated to reflect the appropriate number. Three note numbers need to be adjusted to reflect the appropriate number. All three changes lie in the last three rows.

<b>Chapter 1— GENERAL GUIDANCE</b>	<b>6</b>
1.1. Roles and Responsibilities. ....	6
1.2. Waivers. ....	7
1.3. Training Programs, Concepts, and Policies. ....	7
1.4. Mission Recording. ....	8
1.5. In-flight Supervision. ....	8
1.6. Experienced (Exp) Pilot Criteria. ....	8
1.7. RAP Guidance and Management. ....	9
1.8. Training Records and Reports. ....	10
1.9. Pilot Utilization Guidance. ....	10
1.10. Unit Manpower. ....	11
<b>Chapter 2— INITIAL QUALIFICATION TRAINING</b>	<b>12</b>
2.1. General. ....	12

2.2.	Approval and Waiver for Local IQT. ....	12
2.3.	Prerequisites. ....	12
2.4.	Ground Training. ....	12
2.5.	Flying Training. ....	12
2.6.	Senior Officer Course. ....	13
<b>Chapter 3—</b>	<b>MISSION QUALIFICATION TRAINING</b>	<b>14</b>
3.1.	General. ....	14
3.2.	Combat-coded Unit MQT. ....	14
3.3.	Test- and Training-coded Unit MQT. ....	17
3.4.	Flight Surgeon and US Army Ground Liaison Officer Ground Training. ....	17
<b>Chapter 4—</b>	<b>CONTINUATION TRAINING (CT)</b>	<b>18</b>
4.1.	General. ....	18
4.2.	CT. ....	18
4.3.	Currencies, Recurrency and Recurrency/Requalification Programs. ....	18
Table 4.1.	A-10 Currencies. ....	20
4.4.	Combat-Coded Units. ....	21
Figure 4.1.	Regression Flow Chart. ....	26
Table 4.2.	Proration Allowance. ....	28
4.5.	Test- and Training-coded Units. ....	28
4.6.	Special Categories. ....	29
4.7.	Multiple Qualification/Currency. ....	29
4.8.	Instruments. ....	30
4.9.	Gravitational load factor (G)-Awareness CT. ....	30
4.10.	CDO. ....	31
<b>Chapter 5—</b>	<b>WEAPONS DELIVERY/EMPLOYMENT CERTIFICATION</b>	<b>32</b>
5.1.	General. ....	32
5.2.	Mission Evaluation Versus Employment Certification. ....	32
5.3.	Initial Weapon Certification. ....	32
5.4.	CT Proficiency. ....	32

5.5.	Weapons Delivery Parameters. ....	33
5.6.	Full Scale/Live Ordnance. ....	35
<b>Chapter 6— SPECIALIZED TRAINING</b>		<b>36</b>
6.1.	General. ....	36
6.2.	Flight Lead Upgrade (FLUG) - Certification.....	36
6.3.	Instructor Pilot Upgrade (IPUG) – Qualification and Certification. ....	37
6.4.	Mission Commander (MC) Upgrade – Certification. ....	39
6.5.	LASDT – Certification. ....	39
Table 6.1.	LOWAT Categories.....	40
6.6.	NVG – Certification.....	42
6.7.	Functional Check Flight (FCF) – Certification. ....	42
6.8.	FAC(A) – Certification. ....	42
6.9.	Combat Search and Rescue (CSAR) Upgrade – Certification. ....	44
6.10.	FMT Operator Upgrade – Certification. ....	45
6.11.	Night Vision Goggle (NVG) Takeoff and Landing (T/L) Upgrade – Certification. ....	46
6.12.	Not Used. ....	46
6.13.	Targeting Pod (TGP) LASDT (TLASDT) Upgrade – Certification. ....	46
6.14.	Anti-Helicopter/Low/Slow Upgrade – Certification.....	47
6.15.	Unimproved Surface/Austere Field Training and/or Forward Area/Arming Refueling Point – Certification. ....	48
<b>Attachment 1— GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>		<b>49</b>
<b>Attachment 2— GLOSSARY OF MISSION AND EVENT DEFINITIONS</b>		<b>56</b>
<b>Attachment 3— VERIFICATION GUIDE FOR A/G</b>		<b>63</b>
<b>Attachment 4— EXAMPLE FAC(A) CERTIFICATION MEMORANDUM</b>		<b>65</b>
<b>Attachment 5— EXAMPLE FAC(A) REQUALIFICATION DOCUMENT</b>		<b>66</b>
<b>Attachment 6— EXAMPLE FAC(A) REQUALIFICATION DOCUMENT (6-24 MONTHS UNQUALIFIED)</b>		<b>67</b>
<b>Attachment 7— EXAMPLE FAC(A) REQUALIFICATION DOCUMENT (GREATER THAN 24 MONTHS UNQUALIFIED)</b>		<b>68</b>



## Chapter 1

### GENERAL GUIDANCE

**1.1. Roles and Responsibilities.** This manual establishes the minimum Air Force standards for training, qualifying, and certifying personnel performing aircrew duties in the A-10C. **Note:** For the purposes of this manual, certification denotes a commander's action, whereas qualification denotes a formal evaluation. Reference AFI 11-202V2, *Aircrew Standardization / Evaluation Program*, for an explanation of qualifications versus certifications. ACC/A3 is designated the responsible agency for this volume in accordance with AFPD 11-2.

1.1.1. Director of Operations, Headquarters Air Combat Command (ACC/A3) will:

1.1.1.1. Chair annual Combat Air Forces Realistic Training Review Board to review ground and flying training requirements and programs. Focused at the group commander and MAJCOM/A3T (or equivalent) level, board participation includes active and reserve component units and organizations. MAJCOM/A3s with major weapons systems for which ACC is lead command, will be invited to send representatives and/or inputs.

1.1.1.2. Process all publication change requests.

1.1.1.3. Coordinate, publish and distribute the *Ready Aircrew Program (RAP) Tasking Memorandum (RTM)*, which describes annual training requirements for designated combat-coded units.

1.1.2. MAJCOM/A3s may elect to develop their own training requirements to fulfill designed operational capability (DOC) statement missions and documentation of aircrew certification via supplement or in their own MAJCOM RTM.

1.1.3. DRUs will:

1.1.3.1. Provide standard instructional texts to support operational weapons and tactics training. Forward electronic copies to appropriate MAJCOM/A3 and Numbered Air Force/A3. **(T-2)**.

1.1.3.2. Review, update, and distribute changes to instructional texts. **(T-2)**.

1.1.3.3. Review subordinate unit training programs. **(T-2)**.

1.1.4. Wings and groups will:

1.1.4.1. Develop, approve, and implement programs to ensure training objectives are met and assist subordinate units in management of training programs. **(T-2)**.

1.1.4.2. Attach aircrew position indicator (API)-5/6/8 pilots to a flying squadron and designate the continuation training status for each, except when otherwise mandated. All API 5/6/8 Air Reserve Component (ARC) pilots will have continuation training status designated. **(T-2)**.

1.1.4.3. Review manning programs and position designations annually. **(T-2)**.

1.1.4.4. Review training programs and syllabi annually. **(T-2)**. Forward unit supplements to this publication to MAJCOM/A3T (or equivalent), for coordination prior to certification and approval (ANG to National Guard Bureau (NGB)/A2/3/6/100, AFR to Air Force Reserve Command (AFRC)/A3D).

#### 1.1.5. Squadrons/units will:

1.1.5.1. Combat-coded units will publish a letter of pilot qualifications and certifications monthly (example: Letter of X's). (T-2). The letter provides a list of pilots that have special capabilities or qualifications for that month. The letter also provides utilization of basic mission capable (BMC) pilots (annotate missions and events that maintain qualification/certification).

1.1.5.2. Ensure adequate continuity and supervision of individual training needs, experience, and proficiencies of assigned/attached pilots. (T-3).

1.1.5.3. Monitor assigned and attached pilot currencies and requirements. (T-3).

1.1.5.4. Review training and evaluation records of newly assigned pilots and those completing formal training to determine the training required for them to achieve the appropriate qualification, certifications, and training status. (T-3). After review and evaluation, archive the previous flying assignment training folder.

1.1.5.5. Develop unit training programs using RTM guidance and this volume. (T-2). Consider attrition and collateral sorties (including associated training requirements) when developing unit training and flying hour programs.

1.1.5.6. Review qualifications and training requirements of non-pilots (flight surgeon, ground liaison officer, etc.) and determine appropriate flight restrictions. (T-3).

1.1.5.7. Ensure pilots only participate in missions, events, and tasks for which they are being trained or trained, current, and prepared for that purpose. (T-3).

1.1.5.8. Submit training reports as outlined in MAJCOM RTM guidance. See [paragraph 1.8.5](#)

#### 1.1.6. Individual pilots will:

1.1.6.1. Monitor currencies and requirements established in this instruction. (T-3).

1.1.6.2. Only participate in ground and flying activities for which they are being trained or trained, current, and prepared for that purpose. (T-3).

**1.2. Waivers.** Forward waiver requests through appropriate channels to the applicable MAJCOM/A3 or equivalent, or Commander Air Force Forces (COMAFFOR) for those aircrew and assets under the COMAFFOR's oversight, for approval. The COMAFFOR, MAJCOM/A3 (or equivalent) will notify ACC/A3 of waivers within 72 hours of issuance. Wing commanders (WG/CCs) will notify the publication OPR within 72 hours of waiver approval. (T-2). In accordance with AFI 33-360, a copy of the approved waiver must follow within 30 days of issuance. (T-2). An email to the waived publication OPR that includes a completed AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval* or equivalent will suffice. The waiver authority for supplemental guidance will be as specified in the supplement and approved through a higher level coordination authority.

#### 1.3. Training Programs, Concepts, and Policies.

1.3.1. Units will design training programs to achieve the highest degree of mission readiness consistent with flight safety and resource availability. (T-2). Training programs are designed to progress pilots from initial qualification training (IQT) (basic (B)-course or

transition/requalification training (TX)), then to mission qualification training (MQT), continuation training (CT), and specialized training as required. The guidelines in this instruction should be balanced with operational procedures and Combatant Commander priorities.

1.3.2. ACC Training Support Squadron assists operations group (OG)/CCs in developing training programs when tasked by the ACC/A3. Other MAJCOMs may submit requests for training program support to the ACC/A3. If validated, these requests are prioritized and tasked to the ACC Training Support Squadron. Test-coded units may develop syllabi to upgrade operational test pilots in support of specific test plans. These syllabi will be approved by the Test Group Commander. **(T-2).**

#### **1.4. Mission Recording.**

1.4.1. Squadron commanders (SQ/CCs) will determine program(s) for supervisory review of mission recording(s). **(T-2).**

1.4.2. Pilots will record from takeoff to landing to the maximum extent possible in order to maximize training value. **(T-3).**

**1.5. In-flight Supervision.** Unless specifically directed, the SQ/CC determines the level of supervision necessary to accomplish the required training (unaccomplished tasks, new tasks, corrections to previous discrepancies, etc.).

1.5.1. **Flight Lead (FL).** Instructor Pilots (IP) and FL-certified squadron supervisors may allow any pilot to lead portions of a mission if appropriately briefed. The IP or FL-certified squadron supervisor always retains responsibility for the flight.

1.5.2. **Tactical Lead.** FLs may pass the tactical lead to their wingman for specific tasks. As the tactical lead, the wingman may make tactical decisions for the flight, but the FL retains overall authority and responsibility for the flight.

**1.6. Experienced (Exp) Pilot Criteria.** An experienced pilot consistently demonstrates the skills (airmanship, situational awareness, and tactical leadership) required to effectively employ fighter aircraft in combat. Designation as an experienced pilot requires SQ/CC approval and one of the following:

1.6.1. Formal training unit (FTU) B-course Graduate and both of the following:

1.6.1.1. 2-ship FL certification

1.6.1.2. 200 A-10C flying sorties

1.6.2. FTU TX-course graduate (including senior officer course) and one of the following:

1.6.2.1. Previous A-10C Pilot

1.6.2.1.1. If previously Exp, no additional criteria

1.6.2.1.2. If not previously Exp, follow B-course criteria

1.6.2.2. Different fighter mission design series (MDS) background (F-16/F-15E/F-15C, etc.)

1.6.2.2.1. Previously fighter Exp requires both of the following:

1.6.2.2.1.1. 2-Ship FL certification



1.6.2.2.1.2. 50 A-10C flying sorties

1.6.2.2.2. Previously fighter inexperienced (Inexp) requires both of the following:

1.6.2.2.2.1. 2-Ship FL certification

1.6.2.2.2.2. 100 A-10C flying sorties

## 1.7. RAP Guidance and Management.

1.7.1. RAP defines the minimum training required to maintain the assigned training status.

1.7.2. The RAP training cycle is 12 months, aligned with the fiscal year and executed as outlined the RTM (**Exception:** Air Education and Training Command training cycle is 12 months, determined by the MAJCOM). RAP training is designed to focus on skills needed to accomplish DOC-tasked missions following completion of IQT and MQT.

1.7.3. All combat-coded unit regular Air Force API-1 positions, flying SQ/CC and operations officer (DO) positions are designated combat mission ready (CMR). OG or fighter group (FG)/CCs may designate other API-6 positions not assigned to the flying squadron as CMR. **Exception:** If a unit is over-manned, the SQ/CC will train the unit manning document API-1s to CMR and designate the overage no lower than BMC. **(T-2)**. In this case, priority should be given to inexperienced pilots. **Exception:** In the ANG/AFR at the operations group or fighter group commander (OG/FG/CC) discretion, any pilot may be designated CMR/BMC.

1.7.4. RegAF API-6 positions above squadron level are normally designated BMC. These BMC pilots are typically assigned to pilot positions whose primary job lies within wing supervision or a staff function that directly supports the flying operation.

1.7.5. All test- and training-coded unit regular Air Force pilot positions are designated mission ready (MR) (and fly at a BMC rate as a minimum).

1.7.6. An effective RAP training sortie includes a complete primary, secondary, or basic skills mission. Effective sorties include a sufficient number of events applicable to that mission type, as determined by the SQ/CC. Pilots are not required to log effective RAP sorties when minimal training occurs. Only one RAP sortie may be logged per sortie (day or night) unless separated by air-to-air refueling (AAR) or hot pit refueling. **(T-2)**.

1.7.6.1. Each mission on either side of the AAR/hot pit refueling must stand alone as an effective RAP training sortie. **(T-3)**.

1.7.6.2. A maximum of three RAP training sorties will be logged per 24-hour period under these rules. **(T-3)**. **Exception:** This limit does not apply to combat operations. Apply mission complexity guidance contained in AFI 11-2A-10CV3, *A-10C -- Operations Procedures* (e.g., prioritize flying upgrade missions and the most complex/demanding events to the first sortie).

1.7.7. Units converting from another MDS may fly pilots in CMR positions at the BMC rate if CMR sortie rates cannot be supported (e.g., due to lack of trained maintenance personnel or available aircraft). In this case, CMR pilots maintain CMR status while flying the BMC rate. SQ/CCs will determine when pilots become non-combat mission ready (N-CMR) due to lack of resources or training, and ensure CMR designated pilots fly at the CMR sortie rate no later than one month prior to the scheduled operationally ready date. **(T-3)**.

## 1.8. Training Records and Reports.

1.8.1. SQ/CC maintain pilot records for individual training and flight evaluations as applicable, in accordance with:

1.8.1.1. AFI 11-202V1.

1.8.1.2. AFI 11-202V2.

1.8.1.3. AFI 11-401, *Aviation Management*.

1.8.2. SQ/CC track the following information for all pilots, as appropriate:

1.8.2.1. **Ground training.**

1.8.2.2. Requirements and accomplishment of individual mission types and events cumulatively for the training cycle.

1.8.2.3. One and three-month RAP lookback as outlined in the RTM.

1.8.2.4. Training requirements and accomplishment of individual currencies.

1.8.2.5. Weapons employment records in sufficient detail to document all employment attempts and hit percentages.

1.8.3. Units update aviation resource management system (ARMS) "No Date" with either the date of the last FTU or United States Air Force Weapons School (USAFWS)-equivalent training accomplished, or the unit mission certification date.

1.8.4. Units will maintain a training folder (electronic folder is acceptable) for each assigned and attached pilot. **(T-1)**. Training folders include information on pilot qualifications/certifications and current assignment training documentation (upgrades, regression, waivers, special qualifications, etc.).

1.8.5. **Periodic and End of Cycle (EOC) Training Reports (Operational Units and FTUs).**

1.8.5.1. **Operational Unit Reporting.** Operational squadrons (including those deployed) will submit periodic and EOC RAP training reports as outlined in the RTM. **(T-2)**. Squadrons may submit an out of cycle report at any time if higher headquarters assistance is required to prepare for DOC or deployment tasking. Reference current RTM for detailed instructions and report templates.

1.8.5.2. **FTU Reporting.** FTUs will report training health as directed via the combat air force formal training review process. **(T-2)**.

## 1.9. Pilot Utilization Guidance.

1.9.1. In general, inexperienced API-1 should receive sortie allocation priority over experienced pilots. Priorities for sortie allocation are as follows:

1.9.1.1. **Combat-coded Units.** CMR API-1, MQT API-1, CMR API-6, MQT API-6, BMC (API- All), API-5 pilot-physicians.

1.9.1.2. **Training-coded Units.** Formal syllabus training, MQT, instructor CT, authorized staff personnel not performing instructor or flight examiner duties (to include API-5 pilot-physicians not on instructor orders).

1.9.1.3. **Test-coded Units.** Requirements directed by MAJCOM, training required to prepare for assigned projects or tasking, BMC training requirements that cannot be accomplished on primary missions, API-5 pilot-physicians.

1.9.2. While API-1 pilots may perform additional duties outside of their flying squadron on a temporary basis, their primary responsibility is with the squadron to fill unit-assigned missions. Commanders will not prioritize workload outside of the squadron over squadron mission requirements for the employment of squadron API-1 pilots. **(T-3).**

1.9.3. Commanders will ensure inexperienced pilots in the first year of their initial operational assignment are given scheduling priority and only perform non-flying duties related to operational/combat activities. **(T-3).**

1.9.4. Units should provide assigned/attached API-6/-8 pilots adequate resources to maintain minimum training requirements; however, support for API-6/-8 pilots will not come at the expense of the flying squadron's primary mission.

#### **1.10. Unit Manpower.**

1.10.1. Commanders will ensure that pilots only fill authorized API-1/-5/-6 positions in accordance with unit manning document. **(T-2).**

1.10.2. Wings with a formal training mission should strive to maximize instructor qualification (T-prefix) for API-6 pilots. At least one of the following pilots will maintain formal IP status: WG/CC or vice, operations group commander (OG/CC) or deputy. **(T-3).**

1.10.3. API-8 pilot authorizations and test-coded authorizations are in accordance with AFI 11-401 and MAJCOM guidance. If units cannot meet attached flyer requirements, request relief in accordance with AFI 11-401, as supplemented. Units requiring flight hour adjustments for attached API-8 and applicable API-6 pilots request program changes in accordance with MAJCOM directives.

## Chapter 2

### INITIAL QUALIFICATION TRAINING

**2.1. General.** This chapter outlines IQT requirements for all pilots. IQT provides the training necessary to qualify pilots in a basic position and flying duties without regard to a unit's mission. Upon completion of IQT, the pilots attain basic aircraft qualification (BAQ) status. BAQ is a prerequisite for MQT. Except for general officers above wing level, BAQ is not a long term qualification status. Waiver authority for pilots, other than general officers above the wing level, to remain BAQ is MAJCOM/A3 (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D).

**2.1.1. Formal Training.** IQT includes B-course, TX, and senior officer course training normally conducted during formal syllabus courses at FTU squadrons. Formal course graduates are proficient in mission tasks as indicated by the course training standards and required proficiency levels of the FTU syllabi.

**2.1.2. Local Training.** In exceptional circumstances when FTU training is not available within a reasonable time period, local training may be conducted in accordance with the provisions in this chapter. When local training is approved, the gaining MAJCOM assumes responsibility for the burden of providing this training. Local training is developed and conducted using the appropriate formal course syllabi.

### **2.2. Approval and Waiver for Local IQT.**

**2.2.1.** Gaining MAJCOM/A3 (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D) is the approval authority to conduct local IQT and is the waiver authority to change the requirements of the formal course syllabus. Inform ACC/A3T of approved waivers prior to commencing local IQT.

**2.2.2.** Gaining MAJCOM/CC (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D) is the approval authority for local IQT for colonel-selects and above to be conducted at the unit to which the officer is assigned. Inform ACC/A3T of approved waivers prior to commencing local IQT.

**2.2.3.** Requests to conduct local IQT includes the following:

- 2.2.3.1. Justification for the local training in lieu of FTU training.
- 2.2.3.2. Summary of individual's flying experience to include last centrifuge date.
- 2.2.3.3. Date training will begin and expected completion date.
- 2.2.3.4. Requested exceptions to formal course syllabus, with rationale.

**2.3. Prerequisites.** Course prerequisites are in accordance with the appropriate formal course syllabus and USAF Education and Training Course Announcements.

**2.4. Ground Training.** OG/FG/CCs may tailor ground training to the individual's background and experience, or local conditions.

### **2.5. Flying Training.**

**2.5.1.** If training is not completed within the time specified in the syllabus (or by an expected completion date for local IQT), notify the gaining MAJCOM/A3 (ANG to NGB/A2/3/6/100;

AFR to AFRC/A3D) with pilot's name, rank, reason for delay, planned actions, and estimated completion date. (T-2).

2.5.2. Successful completion of IQT includes the upgrading pilot (UP) completing (at a minimum) an aircraft instrument (INSTM) qualification (QUAL) evaluation in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2, *A-10C -- Aircrew Evaluation Criteria*.

2.5.3. UPs fly under IP supervision until completing the INSTM/QUAL evaluation.

2.5.4. Formal course syllabus mission objectives and tasks are minimum requirements. The SQ/CC may authorize additional training events based on UP proficiency and background. Additional training due to UP non-progression is incorporated within the constraints of the formal course syllabus.

## **2.6. Senior Officer Course.**

2.6.1. All formal training courses for senior officers (colonel-selects and above) will be conducted at FTUs unless waived in accordance with [paragraph 2.2.2](#).

2.6.2. Senior officers must meet course entry prerequisites outlined in the ACC A-10C syllabus and complete all requirements unless waived in accordance with syllabus directives or [paragraph 2.2.1](#)

2.6.3. If a senior officer must be trained at the base to which assigned, the officer will be in formal training status. (T-2). Unit duties will be turned over to appropriate deputies or vice commanders until training is completed. (T-2). Exceptions to this regulation must be approved by the gaining MAJCOM/CC (ANG: ACC/CG) submitted through MAJCOM/A3.

## Chapter 3

### MISSION QUALIFICATION TRAINING

**3.1. General.** MQT is an OG/CC approved unit-developed, training program that upgrades IQT-complete (BAQ) pilots to accomplish the unit specific missions. The SQ/CC develops and maintains responsibility for the local MQT programs. (T-3). This chapter outlines the minimum guidance to assist SQ/CCs in developing their MQT program. Units are expected to further tailor programs based on an individual's current qualifications, experience, currency, documented performance, and formal training. Applicable portions of MQT may be used to create a requalification program for pilots who have regressed from BMC/CMR to specifically address the deficiencies which caused the regression. For test- and training-coded units, see [paragraph 3.3](#)

**3.2. Combat-coded Unit MQT.** The SQ/CC will ensure a pilot completes MQT within 90 days (ARC: 120 days). (T-3). Timing starts at the pilot's first duty day at the gaining operational unit. If a pilot elects to take leave prior to entering MQT, the timing begins after the termination of the pilot's leave. MQT is considered complete with the SQ/CC certifying the pilot as CMR/BMC. Notify MAJCOM/A3T (or equivalent) (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D) if there is a delay beginning MQT that exceeds 30 days or training exceeds the 90-day time period (ARC: 120 days).

3.2.1. MQT Syllabus Minimum Requirements. At a minimum, SQ/CCs will include the following events within the individualized MQT program (T-2):

3.2.1.1. Ground training (see [paragraph 3.2.3](#)).

3.2.1.2. Local area orientation (LAO) simulator (SIM) (if not previously accomplished within 24 months).

3.2.1.3. LAO sortie (if not previously accomplished within 24 months).

3.2.1.4. Tactical sortie (may be combined with LAO sortie).

3.2.1.5. Air combat training (ACBT) (see [paragraph 3.2.6](#)).

3.2.1.6. Initial weapons employment certification in accordance with [Chapter 5](#) and as outlined in the RTM.

3.2.1.7. Current INSTM/QUAL and mission (MSN) evaluations in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2.

#### 3.2.2. Restrictions.

3.2.2.1. SQ/CCs will not fly MQT pilots in FLAG exercises or weapon system evaluation program. (T-3).

3.2.2.2. There is a 90-day grace period (ARC: 180 days) granted for completion of the following training items after the SQ/CC certification to CMR/BMC: AAR, night training, aircrew chemical, biological, radiological, nuclear (ACBRN) flight (see [paragraph 3.2.7](#)), and initial verification (not required for BMC). SQ/CCs will regress pilots who fail to accomplish these tasks within the grace period to N-CMR/N-BMC. (T-3).

3.2.2.3. Proficiency and currency in day events will be demonstrated prior to training in similar events at night. (T-2).

**3.2.3. Ground Training.** Units develop blocks of instruction covering areas pertinent to the unit's mission as determined by the SQ/CC. Training accomplished during IQT may be credited towards this requirement.

3.2.3.1. Newly assigned pilots receive theater indoctrination academics in accordance with AFI 11-202V1 prior to their first flight. Theater indoctrination academics may be accomplished during MQT academics or as part of the MQT LAO briefing.

3.2.3.2. **Initial Verification.** Verification is a formal process where pilots demonstrate to a formal board satisfactory knowledge of the squadron's assigned mission(s) (see [attachment 3](#)). The SQ/CC establishes the board composition. Desired composition is SQ/CC or SQ/DO, weapons, electronic combat, intelligence, and plans representatives. Initial verification will be completed within 90 days (ARC: 180 days) after completing MQT. (T-3). As part of the verification process, a simulator mission may be included at the SQ/CC discretion. Experienced pilots who accomplished initial verification in a previous assignment may, at SQ/CC discretion, complete either an initial or a continuation verification to meet the requirements of this section.

**3.2.4. SIM Training.** In addition to the LAO SIM (in accordance with [paragraph 3.2.1](#)), MQT may include: day/night tactical SIMs. SQ/CCs will include the following events in simulator training (T-2):

3.2.4.1. Selected emergency procedures (EPs).

3.2.4.2. Unusual attitude recovery.

3.2.4.3. Inadvertent weather entry procedures.

3.2.4.4. Lost wingman.

3.2.4.5. Emergency divert.

3.2.4.6. Local procedures and approaches.

**3.2.5. Flying Training.** MQT progression and performance are documented within unit developed gradebooks. The MQT program culminates with an AF Form 8, *Certificate of Aircrew Qualification*, checkride if required. MQT programs designed to regain CMR/BMC status do not require an AF Form 8 unless dictated by other regulations or the SQ/CC. Maximum use of mission recording and captive missiles is encouraged on all MQT missions.

3.2.5.1. **Supervision.** FTU graduates in MQT require an IP. All other MQT pilots require an IP or FL-certified squadron supervisor.

3.2.5.2. **Breaks-in-training.** If more than 14 days elapse between sorties, the UP flies an additional review sortie before continuing in the program. The SQ/CC may substitute a full mission trainer (FMT) mission (with an IP) for a required review sortie.

3.2.5.3. **Practice EPs.** Accomplish practice airborne EP training during at least one MQT sortie. As a minimum, the training consists of briefing, flying, and debriefing a simulated EP scenario.

**3.2.6. ACBT Program.** The following sorties (in sequence) are used for initial ACBT certification or to regain ACBT certification. Units may expand this program to achieve desired proficiency or capability.

3.2.6.1. **Aircraft Handling Characteristics (AHC).** Demonstrate proficiency with aircraft maneuvering capabilities and limitations, by practicing advanced handling maneuvers (in accordance with Air Force Tactics Techniques and Procedures (AFTTP) 3-3.A-10, *Combat Aircraft Fundamentals—A-10*). This mission can be combined with basic fighter maneuvers (BFM) sortie.

3.2.6.2. **BFM (1v1).** Demonstrate proficiency in defensive, offensive or high aspect BFM skills.

3.2.6.3. **Air Combat Maneuvering (ACM).** Demonstrate proficiency in element air-to-air (A/A) maneuvering and employment.

3.2.6.4. **Air Combat Tactics.** Demonstrate proficiency in element A/A employment primarily in the beyond visual range arena. This mission can be combined with ACM sortie.

3.2.7. **Initial ACBRN Training.** ACBRN training integrates pilot training with other functional areas (maintenance, intelligence, security, etc.) required to conduct combat operations in a chemical environment and applies to all CMR/BMC pilots. Pilots demonstrate a basic proficiency of flight and mission tasks while wearing the ACBRN equipment. Accomplish ACBRN training in accordance with AFI 11-301V1, *Aircrew Flight Equipment (AFE) Program*, AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*, and the RTM. Pilots who accomplished initial ACBRN training in previous fighter MDS are not required to reaccomplish the ACBRN flight.

3.2.7.1. **ACBRN Ground Training.** Ground training is accomplished in accordance with AFIs 11-301V1 and 16-1301.

3.2.7.2. **ACBRN FMT.** Introduce operations in full ACBRN gear (anti-exposure suit not required), harness, and gravitational load factor (G)-suit. An ACBRN FMT may use existing mission profiles and count toward FMT training cycle requirements. Units use FMT (primary) or actual aircraft cockpit (secondary) for ACBRN FMT training. The ACBRN FMT is accomplished once in a career (per MDS), and should be conducted as close as possible (but not more than 30 days prior) to the ACBRN flight.

3.2.7.3. **ACBRN Flight Training.** Flight training highlights the limitations of operating while wearing ACBRN equipment. Practice full ACBRN equipment donning and doffing procedures/sequence in conjunction with the ACBRN flight. Adhere to the following ACBRN flight restrictions:

3.2.7.3.1. Wear only Aircrew Eye and Respiratory Protection (AERP) (or mask with filter pack) and gloves. **(T-2).**

3.2.7.3.2. Only one pilot in the element wears ACBRN equipment, supervised by an ACBRN-certified FL. **(T-2).** Formations larger than a 2-ship require SQ/CC approval.

3.2.7.3.3. Accomplish events in which the pilot is current and certified. **(T-2).**

3.2.7.3.4. Only conduct preflight operations in Fighter Index of Thermal Stress “Normal” (refer to AFI 48-151, *Thermal Injury Prevention Program*) conditions, as adjusted for the partial ACBRN gear. **(T-2).** Include full walk around, AERP ingress, cockpit interior check and AERP egress. If other than condition “Normal,” another qualified pilot may conduct the walk around.



3.2.7.3.5. Minimum planned formation spacing is “Route”. “Close” formation is allowed only if required for safe mission accomplishment. Refer to AFTTP 3-3.A-10 for descriptions of formation spacing.

3.2.7.3.6. Minimum altitude is 500 feet above ground level (AGL) except takeoffs, approaches and landings. **(T-2)**.

3.2.7.3.7. Minimum weather is 1,500 feet ceiling and 3 miles visibility. **(T-2)**.

3.2.7.3.8. No night sorties. **(T-2)**.

3.2.7.3.9. AAR requires an IP. **(T-2)**.

### **3.3. Test- and Training-coded Unit MQT.**

3.3.1. MQT is a unit-developed training program that upgrades pilots to MR status in order to accomplish the unit’s specific missions. The FTU instructor course is equivalent to a unit MQT program. If applicable, training accomplished during IQT may be credited towards this requirement. MQT is complete once the SQ/CC certifies the pilot as MR.

3.3.2. MQT Syllabus Minimum Requirements. At a minimum, SQ/CCs will include the following events within the individualized MQT program **(T-2)**:

3.3.2.1. LAO Sortie (if not previously accomplished within 24 months).

3.3.2.2. Unit mission sortie (may be combined with LAO sortie).

**3.4. Flight Surgeon and US Army Ground Liaison Officer Ground Training.** Units train and document assigned flight surgeons and ground liaison officers. For flying activities, refer to host unit-equipped procedures for ground and flight training.

## Chapter 4

### CONTINUATION TRAINING (CT)

**4.1. General.** This chapter and the current A-10C RTM outlines ground and flying training requirements for BAQ, BMC/CMR, and MR pilots in test- and training-coded units. Pilots must be qualified in accordance with AFIs 11-401 and 11-202V1/2, and AFMAN 11-2A-10CV2. SQ/CCs will ensure assigned pilots complete an IQT to fly in a BAQ status and a MQT or FTU IP upgrade to fly in a BMC/CMR or MR status. (T-2). For test- and training-coded units, see [paragraph 4.5](#).

**4.2. CT.** CT consists of two aspects. The first involves training in the basic flight skills necessary to ensure the safe operation of the aircraft. The second consists of specific mission-related training required to accomplish the unit's assigned missions.

#### **4.3. Currencies, Recurrency and Recurrency/Requalification Programs.**

4.3.1. **Currencies.** [Table 4.1](#), as supplemented by the most current RTM, defines currency requirements for all pilots. If a pilot loses a particular currency, that sortie/event may not be performed except for the purpose of regaining currency as noted.

4.3.2. **Recurrency.** Pilots accomplish overdue training requirements as specified by the SQ/CC before they are considered recertified to perform the task. Pilots overdue on training annotated in [table 4.1](#) as affecting CMR/BMC status requires regression to N-CMR/N-BMC. Unless otherwise specified, supervisory requirements pertaining to recurrency may be satisfied in the cockpit or flight position that offers the best control of the mission, as determined by the SQ/CC.

#### **4.3.3. Noncurrent Versus Unqualified.**

4.3.3.1. **Noncurrent.** A pilot becomes noncurrent in a particular currency if they exceed the specified timeframe listed in [table 4.1](#) (e.g., an inexperienced pilot becomes noncurrent for landing after 30 days from last landing).

4.3.3.2. **Unqualified.** For criteria specified in [paragraph 4.3.4.](#), a pilot can become "unqualified" for landing and instructor currencies.

#### **4.3.4. Currencies Requiring Recurrency/Requalification Program.**

4.3.4.1. **Landing Recurrency/Requalification.** Pilots become unqualified after loss of landing currency plus 180 days (e.g., an inexperienced pilot who has not landed for 211 days). Loss of landing currency requires the following action (timing starts from date of last landing):

4.3.4.1.1. 31/46 (Inexp/Exp) to 90 days (e.g., an inexperienced pilot who has not landed for 31 to 90 days). Regain landing currency in accordance with [table 4.1](#)

4.3.4.1.2. 91 to 135 days. Requirements in [paragraph 4.3.4.1.1](#), plus IP-supervised EP SIM.

4.3.4.1.3. 136 to 210/225 days (Inexp/Exp) (e.g., an inexperienced pilot who has not landed for 136 to 210 days). Requirements in [paragraph 4.3.4.1.2](#), plus open and closed book instrument examinations.

4.3.4.1.4. 211/226 days (Inexp/Exp) to 12 months. (e.g., an inexperienced pilot who has not landed for 211 to 365 days). Requalification program in accordance with AFI 11-202V1. OG/FG/CC is the approval authority to conduct this training locally.

4.3.4.1.5. Greater than 12 months. Accomplish applicable formal TX course. Reference [paragraph 2.2](#) for local IQT waivers.

4.3.4.2. **Instructor Recurrency/Requalification.** Pilots become unqualified after loss of instructor currency plus 180 days (e.g., an IP who has not instructed for 271 days).

4.3.4.2.1. Timing for loss of instructor currency starts from the last instructor event and requires the following action:

4.3.4.2.1.1. 91 to 180 days. Regain instructor currency with an IP. **(T-3).**

4.3.4.2.1.2. 181 to 270 days. Regain IP currency in accordance with SQ/CC directed program that may result in a flight evaluation. **(T-3).**

4.3.4.2.1.3. Greater than 270 days. Accomplish an AF Form 8 requalification checkride in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2. **(T-3).**

4.3.4.2.2. IPs instruct airborne events in which they are current and qualified. With SQ/CC approval, IPs who become N-CMR/N-BMC may still instruct events in which they are current and qualified.

4.3.4.3. **ACBT Recurrency.** Loss of ACBT currency requires the following action (timing starts from date of last event):

4.3.4.3.1. 61/91 (Inexp/Exp) to 180 days. Dedicated sortie(s) including AHC and BFM. **(T-3).**

4.3.4.3.2. Greater than 180 days. SQ/CC tailored ACBT program in accordance with [Chapter 3](#) and documented in gradebook. **(T-3).**

4.3.4.4. **Night Sortie Recurrency.** Pilots losing night sortie currency accomplish the following events (under night vision devices (NVD)) prior to unrestricted night operations:

4.3.4.4.1. Pilots who have had more than 120/180 (Inexp/Exp) days elapse since logging last night sortie require a NVD academic review prior to the recurrency sortie (see [paragraph 4.4.4.6](#)). Include the following items in the flight briefing: mission planning considerations, airfield and runway approach lighting configurations, non-standard ground operations taxi procedures, moon illumination, sky glow impacts, cultural lighting, alternate recovery plan, and immediate reaction to malfunctions. Recommend emphasizing visual scan techniques, instrument crosscheck, transition to visual references, altitude alerts, and flare anomalies.

4.3.4.4.2. 2-ship basic formation work/light drills and unit specific mission elements.

4.3.4.4.3. Tactical turns and maneuvers.

4.3.4.4.4. Minimum of the following: 2-ship Basic Surface Attack (BSA) (OG/CC waivable up to 4-ship) above 2,000 feet AGL or minimum safe altitude whichever is higher. At a minimum, the first half of the night recurrency sortie will consist of BSA. The second half of the sortie will be at the discretion of the IP or FL-certified squadron supervisor.

4.3.5. ACC Air Operations Squadron Currency Requirements. Units will comply with AFI 11-207, *Combat Aircraft Delivery*, for additional currencies required for the flight delivery of aircraft coordinated through the ACC Air Operations Squadron. (T-2).

**Table 4.1. A-10 Currencies.**

Event	To update fly:	INEXP	EXP	Affects CMR/BMC	To regain currency:	Notes
Demanding Mission	Any mission	21	30	No	Non-demanding day mission	1
Night Sortie	Any night sortie	120	180	No	Night sortie/profile	2, 3
Landing	Day or night landing	30	45	No	Day landing	2, 4
Night Vision Goggle (NVG) Landing	Event	90	120	No	Event	2, 5
Precision Approach	Event or SIM event	30	45	No	Event or SIM event	6
Form Approach	Event	120	180	No	Event	2, 7
Instructor	Event or SIM event	N/A	90	No	Event or SIM event	8
AAR	Event	180	180	Yes	Event	2
ACBT	Event	60	90	No	Event	2, 9, 10
Terminal Attack Control	Event or SIM event	60	90	No	Event	2
Functional Check Flight (FCF)	FCF sortie or SIM	N/A	180	No	FCF Sortie or SIM	11
Weapons Delivery	Event (actual or simulated)	60	90	Yes	Event (actual or simulated)	2
Night Weapons Delivery	Event (actual or simulated)	90	120	No	Night event (actual or simulated)	10, 12
LOW A/A	LOW A/A event	60	90	No	LOW A/A event	2, 10, 13
LOW air-to-ground (A/G)	LOW A/G event	60	90	No	LOW A/G event	2, 10, 13

Notes:

1 – Recurrency for pilots is a dedicated non-demanding sortie as defined in Attachment 2. In addition, BAQ pilots fly in a supervised status (FL-certified squadron supervisor or IP) any time a non-demanding mission is required.

2 – Recurrency supervision is an IP or FL-certified squadron supervisor, current in the event.

3 – Recurrency in accordance with **paragraph 4.3.4.4.**

4 – Loss of landing currency and recurrency/requalification in accordance with **paragraph 4.3.4.1.**

- 5 – NVG landing recurrency requires a minimum of one NVG approach to a low approach, followed by an NVG landing in accordance with **paragraph 6.12**.
- 6 – Pilots require currency in order to fly an approach through actual weather down to pilot weather category minimums. **(T-3)**. Loss of currency results in regression to the next higher category. Recurrency supervision during day visual flight rules conditions may be any pilot in chase or from the wingman position, current in the event (or SIM IP if accomplishing recurrency in the SIM). All other times regain currency in accordance with AFI 11-202V3, *General Flight Rules*, as supplemented.
- 7 – FLs may update currency from either lead or wing position. Wingmen may only update currency from the wing position.
- 8 – Loss of Instructor currency and recurrency/requalification in accordance with **paragraph 4.3.4.2**. USAFWS upgrade missions count as instructor missions for currency. Updating or regaining currency in the SIM requires IPs to instruct while flying the SIM.
- 9 – Recurrency in accordance with **paragraph 4.3.4.3**.
- 10 – For formal course IPs (Weapons Instructor Course and FTU), CT and exercise participation require above currencies; formal syllabus training missions require 180 days currency.
- 11 – Supervision for flight or simulator is a current FCF pilot.
- 12 – Regain currency by accomplishing 2-ship BSA sortie above 2,000 feet AGL or minimum safe altitude whichever is higher
- 13 – Currency is required to perform the event at or below 1,000 feet AGL in the pilot's Low Altitude Training (LOWAT) category (Category I, II, III). See **Chapter 6** for Low Altitude Step Down Training (LASDT) and LOWAT categories. Loss of currency requires regression to the next higher category that the event is current. Operations in a lower block category will update the higher block categories. Recurrency requires satisfactory performance in the following events: vertical awareness training, hard turns, tactical formation, and offensive/defensive maneuvering.

#### 4.4. Combat-Coded Units.

4.4.1. **BAQ.** Pilots achieve BAQ status after successfully completing IQT and remain in BAQ status until the completion of MQT in accordance with **Chapter 3**. BAQ is not a permanent status except for general officers above the wing level (reference AFI 11-202V1 for restrictions), and any other pilots specifically authorized by MAJCOM/A3 (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D). SQ/CCs will ground pilots who are in BAQ status for more than six months unless the pilots are enrolled in a program to achieve CMR/BMC. **(T-2)**. BAQ Requirements:

4.4.1.1. INSTM/QUAL evaluation in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2.

4.4.1.2. Currencies (as applicable) in accordance with **paragraph 4.3**

4.4.1.3. Fly a supervised sortie with an IP or FL-certified squadron supervisor at least once every 60 days. If a BAQ pilot does not fly for 21 days (inexperienced) or 30 days

(experienced), the next sortie must be flown with an IP or FL-certified squadron supervisor. **(T-3)**.

**4.4.2. BMC.** BMC establishes the minimum training required for pilots to be familiar with all (and may be certified, current, and proficient in some) of the primary DOC statement mission requirements of their assigned or attached unit and weapon system. Designate and maintain BMC pilots in accordance with [paragraph 1.7.3](#)

4.4.2.1. BMC pilots at a minimum maintain familiarization with all unit primary missions. BMC pilots accomplish all mission-related ground training designated by their attached SQ/CC, and may deploy and participate in any mission as determined by the SQ/CC. Failure to complete required training in accordance with this volume and as outlined in the RTM (both flying and ground) results in regression to N-BMC status. While N-BMC, the SQ/CC determines which missions the pilots may perform and the supervision required.

**4.4.2.2. BMC Requirements.**

4.4.2.2.1. INSTM/QUAL and MSN evaluations in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2.

4.4.2.2.2. RAP sorties, sortie rate (lookback), mission types, and events (including weapons certifications), and applicable mission/event ground training requirements in accordance with the procedures set forth in this volume and as outlined in the RTM. API-8 (e.g., Numbered Air Force/MAJCOM inspector general) pilots should fly the BMC mission rate; however, they are not required to complete BMC-specific missions/events or meet RTM lookback requirements. API-8 pilots (see [paragraph 4.6.2](#)) should strive to accomplish Basic Skills requirements with allotted BMC sorties.

4.4.2.2.3. Currencies (as applicable) in accordance with [table 4.1](#)

4.4.2.2.4. LOWAT CAT I certification.

**4.4.3. CMR.** CMR establishes the minimum training required to remain proficient in all of the primary DOC statement missions tasked to their assigned or attached unit and weapon system. Designate and maintain CMR pilots in accordance with [paragraph 1.7.3](#)

4.4.3.1. CMR pilots maintain proficiency in all primary missions of the flying unit to which they are assigned or attached. SQ/CCs will regress pilots who fail to complete required training to N-CMR status. **(T-3)**. While N-CMR, pilots may participate in missions, including exercises and contingency operations, in which they are proficient at the discretion of the SQ/CC.

**4.4.3.2. CMR Requirements.**

4.4.3.2.1. INSTM/QUAL and MSN evaluations in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2.

4.4.3.2.2. RAP sorties, sortie rate (lookback), mission types, and events (including weapons certifications), and ground training in accordance with the procedures set forth in this volume and as outlined in the RTM.

4.4.3.2.3. Currencies (as applicable) in accordance with [paragraph 4.3](#).

4.4.3.2.4. LOWAT CAT I certification.

4.4.3.2.5. Verification in accordance with **Chapter 3**.

**4.4.4. Ground Training.** Accomplish ground training in accordance with the parent directives and as outlined in the RTM tables. Units may credit ground training accomplished during IQT/MQT toward CT requirements for the training cycle in which it was accomplished. Ensure ground training is tracked in ARMS to the maximum extent possible.

**4.4.4.1. Weapons and Tactics Academic Training.** Establish a weapons and tactics academic training program to satisfy MQT and CT requirements. FL upgrade (FLUG) and IP upgrade (IPUG) flows include weapons and tactics academic training commensurate with the level of upgrade being accomplished. SQ/CCs will provide guidance to the unit weapons shops on an annual CT weapons and tactics academics program that ensures pilots are informed/reminded of new/current A-10C weapons, systems, and mission-specific tactics techniques and procedures. **(T-3)**. Academic instructors should be USAFWS graduates to the maximum extent practical.

**4.4.4.2. Intelligence Training.** SQ/CCs will develop the unit external intelligence training for pilots in accordance with AFI 14-1020, *Intelligence Mission Qualification and Readiness*, MAJCOM and local unit instructions. **(T-3)**.

**4.4.4.3. Aircraft Servicing.** SQ/CCs will ensure pilots are trained and prepared to accomplish all aircraft servicing actions necessary to beddown and turn aircraft when off-station without maintenance support. **(T-3)**.

**4.4.4.4. CT Verification.** CMR pilots participate in a verification as a briefer, board member, or seminar participant at the frequency referenced in the RTM. BMC pilots should participate in a verification to facilitate future upgrade to CMR status; at the discretion of the SQ/CC. Pilots who participate in a unit deployment to a tasked area of responsibility may receive credit for CT verification.

**4.4.4.5. Cockpit/Crew Resource Management (CRM).** Pilots participate in CT CRM training at the frequency referenced in the RTM (reference AFI 11-290, *Cockpit/Crew Resource Management Training Program*). Briefs and debriefs include the core curriculum of CRM training in accordance with AFI 11-290 and the appropriate MAJCOM supplements. The instructor CRM course may be used to satisfy the periodic requirement.

**4.4.4.6. Night Vision Device Refresher Academics.** Conduct refresher training in accordance with AFI 11-202V1 and as outlined in the RTM.

**4.4.5. Simulator Training.** Conduct RTM SIM in the best available SIM. SQ/CCs determine the required supervision for CT FMT missions based on SIM capabilities and mission training objectives. Units develop scenarios that cover RAP-event FMT missions based on unit tasking and emergency procedure/general systems knowledge requirements. Emphasis should be placed on skill-set training not attainable during live fly. SQ/CCs will review scenarios each training cycle. **(T-3)**. Pilots may receive credit for training accomplished in other SIMs (e.g., industry SIMs) if approved by the SQ/CC.

**4.4.5.1.** Tactical SIM RAP training should emphasize the following areas: DOC-relevant simulated combat employment, threat recognition, threat reactions and counter tactics, weapons malfunctions, contested degraded and operationally limited operations (CDO),

battle damage and wounded bird procedures, controllability and structural damage checklists.

4.4.5.2. EP SIM RAP training in the following areas will be accomplished at least once each training cycle **(T-3)**: unusual attitude recoveries, spatial disorientation, inadvertent weather entry, controlled flight departure recognition and recovery procedures, controlled and uncontrolled ejection parameters, aircraft subsystem failure checklist procedures, relevant boldface procedures, precision instrument procedures, pitot-static system anomalies (partial blockage), lost wingman procedures, post-gun employment engine anomalies, aircraft stall warning and slat system (normal and abnormal operations), minimum/emergency fuel, landing gear malfunctions, emergency divert situations. Incorporate environmental/mission/system scenarios to include NVG use that can lead to Type I spatial disorientation. Intent is to highlight the role that instrument crosscheck discipline plays in prevention of unrecognized unusual attitudes and recognition/recovery from recognized unusual attitudes/spatial disorientation.

4.4.5.3. **Situational Emergency Procedure Trainer (SEPT)**. This training is not an evaluation, but a review of EPs and aircraft systems operations/limitations during realistic scenarios. Units produce monthly SEPT scenarios, topics, and higher Headquarters special interest items using actual mishaps and incidents as baseline cases. Pilots take actions necessary to cope with the malfunction and carry it to a logical conclusion.

4.4.5.3.1. Units will incorporate the following elements into SEPT programs:

4.4.5.3.1.1. Emphasize boldface and special interest items to include any MAJCOM, OG, and squadron special interest items related to aircraft employment. **(T-3)**.

4.4.5.3.1.2. Include two EPs per phase of flight and/or major aircraft subsystem (hydraulic, electrical, fuel, oxygen, engine, flight control, and auxiliary power, as applicable) during each session. **(T-3)**.

4.4.5.3.2. Pilots accomplish a SEPT in each calendar month. Currency expires at the end of the calendar month following the month in which the SEPT was credited, regardless of which date the SEPT was completed (e.g., if a SEPT is accomplished on 1 May, the currency is good through 30 June). SQ/CCs will ground pilots for failure to maintain currency until subsequently completed. **(T-3)**. SQ/CCs may waive unaccomplished SEPTs from previous months due to non-flying temporary duty (TDY) or special circumstances.

4.4.5.3.3. Pilots may satisfy their monthly SEPT requirement by accomplishing or administering an EP SIM, an EP evaluation, or formal course EP training.

4.4.5.3.4. Accomplish two SEPTs each training cycle with an IP or FL-certified squadron supervisor.

4.4.5.3.5. Accomplish SEPTs in the best available device. If no device is available, SEPTs may be accomplished in a table-top one-on-one or in small flight-sized groups, as long as all members participate fully and share equal time responding to emergency situations.

4.4.6. **Flight Training**. Flying requirements are outlined in the current RTM.



4.4.7. **Regression.** See the RTM for live fly and SIM lookback requirements. Reference [figure 4.1](#) for necessary decisions/actions to maintain/regain CMR/BMC status. If a pilot does not meet lookback requirements throughout the training cycle, the SQ/CC can either regress the pilot to N-CMR/N-BMC, remove the pilot from a CMR/BMC manning position, or initiate action to remove the pilot from active flying status.

4.4.7.1. **MQT Completion.** Lookback computation begins following completion of MQT. 1-month lookback starts the first full month of CMR/BMC status. Post-MQT sorties flown during the month of MQT completion may be used at the SQ/CC discretion for 3-month lookback.

4.4.7.2. Pilots regressed to N-CMR/N-BMC accomplish the following events (documented in gradebook) in order to regain CMR/BMC status:

4.4.7.2.1. Up to 3 Months. The pilot completes a SQ/CC approved recertification program. Additionally, regain all expired currencies affecting CMR/BMC, and meet RTM lookback requirements.

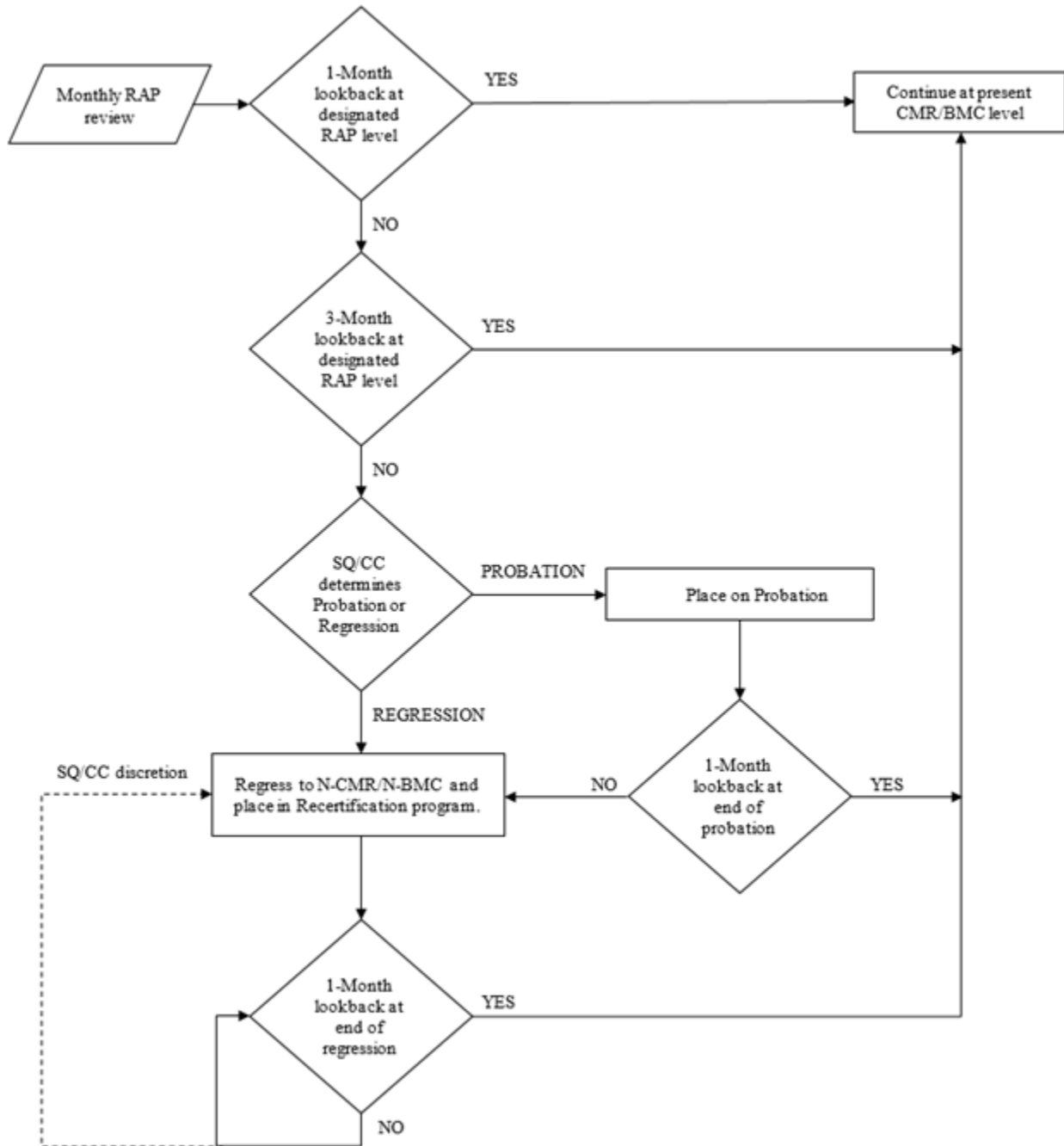
4.4.7.2.2. 3 to 6 Months. Requirements in [paragraph 4.4.7.2.1](#), plus standardization and evaluation office generated open and closed book written examinations.

4.4.7.2.3. Over 6 Months. Re-accomplish MQT program in accordance with [Chapter 3](#).

4.4.7.3. Failure to Maintain Weapons Proficiency. Pilots who fail to maintain weapons RAP requirements at the end of the training cycle regain proficiency in the deficient weapons event in accordance with [Chapter 5](#). Events accomplished for regaining proficiency may count toward the cumulative CT event proficiency required at the end of the training cycle.

4.4.7.4. Flight Evaluation Failure. Pilots who fail a flight evaluation are handled in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2 and regress to N-CMR/N-BMC as applicable, until requalification is complete and recertified by the SQ/CC.

Figure 4.1. Regression Flow Chart.



**4.4.8. EOC Requirements.** Pilots who fail to complete RAP mission or event requirements by the end of training cycle may require additional training depending on the type and magnitude of the deficiency. Refer to [paragraph 4.4.9](#) for probation guidance. In all cases, report training shortfalls as outlined in the RTM instructions.

4.4.8.1. Pilots who fail to meet EOC mission and/or event requirements may continue CT as CMR/BMC as determined by lookback. The SQ/CC determines if additional training is required.

4.4.8.2. Failure to accomplish missions/events required for Special Capabilities or Certifications/Qualifications in accordance with [Chapter 6](#) and as outlined in the RTM may result in the loss of that certification or qualification as determined by the SQ/CC. The SQ/CC determines if any additional training is required to address shortfalls.

#### 4.4.9. Proration of EOC Requirements.

4.4.9.1. The SQ/CC may prorate training requirements when duty not including flight, emergency/consecutive overseas tour leave, non-flying TDYs/exercises, or non-flying combat/contingency deployments preclude training for a portion of the training cycle. Loss of training due to ordinary annual leave will not result in proration. SQ/CCs may consider proration due to poor weather that precludes the unit from flying for more than one-half of the monthly scheduled flying days. For ARC units, proration is allowed for mandatory training required by civilian employment. EOC proration is permitted for documented attrition, such as higher headquarters or weather cancels, maintenance non-delivery, ground aborts, in monthly increments when the total number of occurrences ranges from one-half to one times the pilot's normal monthly rate of flying.

4.4.9.2. SQ/CCs only prorate requirements to adjust for genuine circumstances of training non-availability – not to mask training or planning deficiencies.

4.4.9.3. Proration is based on cumulative days of non-availability for flying during the training cycle. Use [table 4.2](#) to determine the number of months to prorate based on cumulative calendar days of non-availability.

4.4.9.4. Training requirements for newly assigned pilots achieving CMR/BMC after the 15th of the month start on the first day of the following month.

4.4.9.5. If MQT is re-accomplished, a pilot's training cycle starts over at a prorated share following completion of that training in accordance with [paragraph 4.4.9.4](#)

4.4.9.6. Do not prorate any requirement below one. Prorated numbers resulting in fractions of less than 0.5 will be rounded to the next lower whole number (one or greater).

4.4.9.7. Night and AAR requirements accomplished during MQT may be credited toward prorated CT requirements if accomplished during the cycle in which the pilot was declared CMR/BMC.

4.4.9.8. A pilot's last month on station prior to departure for permanent change of station may be prorated provided 1-month's proration is not exceeded. Individuals scheduled to depart may be considered CMR for reporting purposes during a period of 60 days from date of last flight, or until loss of CMR currency, port call date, or sign in at new duty station, whichever occurs first.

4.4.9.9. CMR pilots who attend USAFWS in TDY-and-return status may be reported throughout the TDY as CMR. Upon return, those pilots accomplish a prorated share of mission and event requirements.

4.4.9.10. **Contingency Operations.** Commanders follow proration guidance as outlined in the RTM. For ARC units, individuals deployed for more than a seven-day period may be prorated a 1-month portion of RAP missions and events.

4.4.9.11. SQ/CCs may prorate unit training requirements when a pilot is assigned to the unit following completion of a formal course (IQ, TX, or senior officer course) in accordance with [paragraph 4.4.9.4.](#) and halfway or more through the training cycle. The intent is to provide a realistic assessment of unit training requirements for the remainder of the training cycle and a prediction of potential RAP training shortfalls. SQ/CCs also prorate unit training requirements at the end of the training cycle to accurately report EOC training shortfalls and assign additional training if required.

4.4.9.12. **Proration Example.** A pilot was granted 17 days of emergency leave in January and attended professional military education in residence from March through April for 56 consecutive days. The SQ/CC authorized a total of two months proration from his training cycle (17 days of emergency leave plus 56 days for non-flying TDY equals 73 cumulative days of non-availability for flying).

**Table 4.2. Proration Allowance.**

Cumulative Days of Non-flying	Months of Proration Allowed
0 - 15	0
16 - 45	1
46 - 75	2
76 - 105	3
106 - 135	4
136 - 165	5
166 - 195	6
196 - 225	7
226 - 255	8
266 - 285	9
286 - 315	10
316 - 345	11
346 - 365	12

#### **4.5. Test- and Training-coded Units.**

4.5.1. Pilots assigned or attached to test- or training-coded units will fly at the BMC rate (see RTM table), and meet monthly flying-lookback. **(T-3)**. Sorties should be in accordance with the unit's mission as determined by the SQ/CC, but also fulfill RTM AHC/instruments requirements, which is applied toward lookback. Any RAP mission listed in the RTM also counts towards lookback. SQ/CCs will ensure IPs are current and qualified in all events they instruct. **(T-3)**. Failure to maintain an individual currency does not affect IP status, but requires additional training as determined by the SQ/CC prior to instructing that event. For test-coded units, SQ/CCs may designate IPs as initial cadre to instruct new events under an approved test plan.

4.5.2. **Ground Training.** SQ/CCs may reference the RTM Ground Training table to develop their ground training plan.

4.5.3. **SIM Training.** FMT RAP requirements do not apply, with the following exception: each pilot must accomplish one graded or evaluated (in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2) EP simulator per year. (T-2). Part task training devices and cockpit mock-ups are not acceptable. All pilots accomplish SEPTs in accordance with [paragraph 4.4.5.3](#)

4.5.4. **Flight Training.** SQ/CC directed.

4.5.5. **Weapons Events.** Maintain appropriate weapons delivery certifications as outlined in the RTM Flight Training - Weapons Certifications Requirements table.

4.5.6. MSN and INSTM/QUAL (initial and requalification) evaluations are conducted as applicable, in accordance with AFI 11-202V2 and AFMAN 11-2A-10CV2.

4.5.7. 83d Fighter Weapon Squadron pilots will maintain ACBT currency. (T-2).

4.5.8. **Visits/Deployments.** Only qualified USAFWS instructors are sent on weapons school visits/deployments. During visits, USAFWS instructors may perform FL and instructor duties during tactical missions.

#### 4.6. Special Categories.

4.6.1. **Flight Surgeon.** Flight surgeon flight rates and requirements are in accordance with AFIs 11-202V1/2.

4.6.2. **API-8 Pilots.** API-8 pilots designated as BMC strive to fly at the BMC rate; however, they are exempt from non-grounding academic ground training, night AAR, combat survival training, and ACBRN training. Additionally, API-8 pilots designated as BMC are not required to complete BMC-specific missions/events or meet RTM lookback requirements. Submit qualification and/or authorization documentation to the supporting SQ/CC or authorized representative prior to flying with that squadron. IPs may perform instructor duties with the concurrence of the OG/FG/CC, if current and qualified in the applicable mission and events.

#### 4.7. Multiple Qualification/Currency.

4.7.1. See AFIs 11-202V1/2 for guidance on authorization to obtain multiple qualification. This does not apply to variants of the A-10C which are considered the same MDS. Submit multiple qualification requests through command channels to MAJCOM/A3 (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D). All requests must contain full justification. (T-2). Approval for multiple qualification requests must be provided to the appropriate host aviation resource management office; flights are not authorized until aircraft assignment is updated in ARMS. (T-2). Individually authorized multiple qualifications are valid as long as the individual is assigned to the specific position and aircraft requested, or rescinded by MAJCOM/A3 (ANG to NGB/A2/3/6/100; AFR to AFRC/A3D).

4.7.2. Multiple qualifications are not appropriate for senior wing supervisors of units with different types of aircraft. WG/CCs will qualify in only one of their wing's aircraft. (T-2). Either the WG/vice-commander or OG/CC should qualify in another of the wing's aircraft (not the same aircraft selected by the WG/CC).

4.7.3. **Multiple Requirements.** Pilots will satisfy at least 50 percent of the sortie requirements in their primary aircraft. (T-2). If CMR, they will meet all RAP mission and event requirements of the primary aircraft. (T-3). In addition, pilots will fly an equitable distribution

of emergency patterns, instrument sorties, penetrations, non-precision approaches, and precision approaches in each MDS to fulfill their basic skills requirements. (T-2).

4.7.4. **Multiple Currencies.** Pilots will comply with currency requirements for each MDS. (T-2).

**4.8. Instruments.** Instrument proficiency training includes but is not limited to: lost wingman training, briefings on how to recognize and deal with spatial disorientation, heads up display-off unusual attitude recoveries, and transition from visual to instrument conditions. It will also stress the use of primary flight reference and standby flight instruments during instrument recovery from unusual attitudes or spatial disorientation. (T-3).

4.8.1. Units which seldom encounter bad weather and/or night recoveries should exercise pilots and approach facilities by periodically simulating "weather day" recovery operations, as determined by the SQ/CC.

4.8.2. Pilots transferring from another MAJCOM require the theater-specific portions of the instrument refresher course before flying without a theater-experienced pilot in the formation. MQT academics and the LAO mission may satisfy this requirement.

4.8.3. RAP events may be accomplished on an instrument mission provided accomplishment does not interfere with the primary goal of instrument training. The transition from instruments to visual references should be practiced on all instrument approaches. An instrument sortie is a basic skills requirement and may be credited toward monthly RAP lookback as outlined in the RTM.

**4.9. Gravitational load factor (G)-Awareness CT.** Units will develop a CT program that provides feedback to pilots and ingrains a proper anti-G straining maneuver (AGSM) so that it becomes an integral part of pulling Gs. (T-2). This program's intent is to make assessment of the AGSM a normal debrief item after every flight. The assessment should be done as a normal part of mission recording review while debriefing other tactical portions of the mission.

4.9.1. Use the following minimum guidance to implement the unit's program:

4.9.1.1. Develop a program to ensure at least one tactical mission recording for each pilot is reviewed and documented each training cycle by a aeromedical specialist (i.e., flight surgeon), aerospace operational physiologist, and/or pilot-physician for AGSM and human factors required in accordance with AFI 11-403, *Aerospace Physiological Training Program*, and AFPAM 11-419, *G Awareness for Aircrew*. (T-3). Only as a last resort, SQ/CC or SQ/DO may accomplish the review.

4.9.1.2. Focus ground training/academics on technique and assessment, including a discussion of the limitations imposed on aircraft/pilot performance as a result of an ineffective AGSM. Emphasize briefing, debriefing, G-suit/aircrew flight equipment differences, and assessment of the proper AGSM during flight debriefs.

4.9.1.3. Include "AGSM effectiveness" on MQT and "AGSM assessment" on FLUG and IPUG grade sheets. (T-3). IPs should evaluate these areas on upgrade missions that involve tactical maneuvering.

4.9.1.4. FLs emphasize G-awareness during appropriate portions of the flight brief. FLs will also assess the AGSM effectiveness of flight members during mission debriefings. (T-3). This assessment should not be limited to the G-awareness exercise. Evaluate the AGSM

after the pilot has had the time to fatigue to get an accurate assessment of a pilot's AGSM during a tactically and G-demanding portion of flight. AGSM will also be evaluated under relatively low intensity G such as A/G sorties. **(T-3)**.

4.9.2. During the mission recording review, FLs assess and debrief the pilot's AGSM. Identify pilots having poor AGSM technique or low G-tolerance to the flight commander or appropriate operations supervisor. The SQ/DO or appropriate supervisor determines what action is required to improve the pilot's G-tolerance. **(T-3)**. The SQ/CC determines if commander-directed acceleration training is required in accordance with AFI 11-404, *Fighter Aircrew Acceleration Training Program*. **(T-3)**.

**4.10. CDO.** CDO scenario development will be included in daily training (aircraft, academics and FMT), and will also be incorporated into MSN evaluations and EP evaluations. **(T-3)**. Daily CT flights and FMT missions should discuss the following CDO areas in relationship to the mission's profile:

- 4.10.1. Contested: Electromagnetic spectrum degradation caused by enemy action (jamming).
- 4.10.2. Degraded: Electromagnetic spectrum and battlespace degradation caused by failed systems (global positioning system (GPS) degradation/denial, datalink, simple failure).
- 4.10.3. Operationally limited: Reduced mission effectiveness caused by the physical or operational environment (system, force structure, rules of engagement/special instructions, etc.).

## Chapter 5

### WEAPONS DELIVERY/EMPLOYMENT CERTIFICATION

**5.1. General.** This chapter outlines guidance for attaining initial weapons certification, and maintaining CT proficiency in “Weapons Certification Requirements” listed in the RTM. Refer to [Attachment 2](#) for further guidance on weapons events.

**5.2. Mission Evaluation Versus Employment Certification.** A successful AF Form 8 mission evaluation qualifies a pilot to employ the member’s assigned weapon system in accomplishing the unit’s operational or DOC statement mission. SQ/CCs will certify pilots in employing weapons before employing without instructor supervision. **(T-3).**

**5.3. Initial Weapon Certification.** Initial weapon certification can be achieved in IQT, MQT, or a combination of each. Weapons certification carries over for consecutive tours in the MDS. In order to be designated CMR, accomplish initial certification in RTM directed “proficient” munitions.

5.3.1. Initial certification in a weapon is satisfied when a pilot has achieved a minimum of three hits out of six consecutive record deliveries (see [Attachment 2](#)). To count as a hit, the delivery is assessed as Valid and Assessable in accordance with AFTTP 3-1.Shot Kill, with the following addition: Inert/Live Unguided Munitions (impact within hit criteria listed for each event under [paragraph 5.5](#)).

5.3.2. **Gun.** Certification is achieved by meeting the “qualified” criteria for A/A and/or A/G employment in accordance with AFMAN 11-2A-10CV2 and may be verified through mission recording assessment of an engagement/strafe pass or via live fire.

5.3.3. **Conventional Munitions.** Certification is achieved by meeting the qualification criteria for A/G weapons employment in accordance with AFMAN 11-2A-10CV2. There is no limit to the number of hot passes utilized to achieve initial certification.

5.3.4. **A/A Missile.** Certification is achieved by meeting the qualification criteria for missile employment in accordance with AFMAN 11-2A-10CV2.

5.3.5. **A/G Missile.** Employment is accomplished utilizing a tactically representative time on final.

### 5.4. CT Proficiency.

5.4.1. Each pilot's weapons employment is assessed for validity in accordance with AFTTP 3-1.IPE, *Integrated Planning and Employment* criteria. The results in each category (i.e., air intercept missile (AIM)-9) are recorded for the current training period (RAP required tasks) per the squadron weapons and tactics program (refer to AFI 11-415, *Weapons and Tactics Programs*).

5.4.2. Proficiency in A/A weapons employment is maintained by achieving a 75 percent valid at weapons release rate for AIM-9 and 75 percent valid attempt at trigger squeeze for gun. Proficiency in A/G weapons employment is maintained by achieving a 50 percent dry pass hit criteria in accordance with AFTTP 3-1.IPE and AFTTP 3-1.Shot Kill (where applicable), or in accordance with hot pass hit criteria.



5.4.3. Failure to meet annual RTM weapon proficiency requirements results in the individual losing certification in that weapon. The SQ/CC may consider regressing pilots to N-CMR/N-BMC until proficiency/familiarization is regained (see [paragraph 4.4.7.](#)).

**5.5. Weapons Delivery Parameters.** All deliveries conform to the limits established for each specific event. Pattern descriptions, procedures, training rules, and foul criteria are contained in AFIs 11-2A-10CV3 and 11-214, *Air Operations Rules and Procedures*. Events performed at night may require higher minimum recovery altitudes based on AFI 11-214 minimum altitude restrictions. Hit criteria is in accordance with AFTTP 3-1.A-10, *Tactical Employment – A-10C*, AFTTP 3-1.Shot Kill and/or this volume as applicable.

**5.5.1. Strafe Events.** Pilots set the aircraft rounds limiter to the total number of rounds for all events planned but no less than 100 rounds. Set and expend minimum rounds per strafe event to satisfy RAP strafe requirements.

**5.5.1.1. Tactical Strafe.** Tactical strafe is a combined event. Any combination of low angle strafe and/or high angle strafe hits satisfies this training requirement. Each pass is a standalone event for weapons employment qualification with no maximum number of passes. Hit criteria (regardless of aircraft rounds limiter setting): acoustically scored or independently observed impacts on a point target, or bullet dispersion within 36 feet of any target.

**5.5.1.2. Low Angle Strafe.** Planned dive angle of 15 degrees or less. Cease fire range is 2,000 feet. Minimum recovery altitude is 75 feet AGL. Minimum number of rounds per event is 50. Hit Criteria: five acoustically scored impacts or independently observed impacts (suitable target) on any pass.

**5.5.1.3. Long Range Strafe.** Planned dive angle of 15 degrees or less. Cease fire range is 5,000 feet. Open fire range is in accordance with range restrictions. Minimum recovery altitude is 75 feet AGL. Minimum number of rounds per event is 50. Hit Criteria: five acoustically scored impacts or independently observed impacts (suitable target) on any pass.

**5.5.1.4. Two-Target Strafe.** Planned dive angle of 15 degrees or less. Cease fire is 2,000 feet. Minimum recovery altitude is 75 feet AGL. Minimum number of rounds per event is 80. Hit Criteria: satisfy one of either long range strafe or low angle strafe hit criteria on a single pass strafing two targets. Impacts may be acoustically scored or independently observed (suitable targets).

**5.5.1.5. High Angle Strafe.** Planned dive angle of greater than 15 degrees. Minimum recovery altitudes are 1,000 feet AGL for planned dive angles 30 degrees or less and 1,500 feet AGL for planned dive angles above 30 degrees. Minimum number of rounds per event is 50. Hit Criteria: acoustically scored or independently observed impact on a point target, or bullet dispersion within 75 feet (23 meters) of any target.

**5.5.2. Unguided Munitions Events.**

**5.5.2.1. Low Altitude Delivery.** A valid attack is in accordance with AFTTP 3-1.Shot Kill.

**5.5.2.1.1. Visual Level Delivery.** Planned level delivery with actual parameters at release of less than five degrees climb or dive. Minimum recovery altitude on final is

safe escape/fuse arm for ordnance being delivered/simulated, range/target area restrictions, or 200 feet, whichever is higher. Run in altitude prior to final or pull up point is no lower than the pilot's LASDT category. Hit criteria: 125 feet (38 meters) for computed delivery and 250 feet (76 meters) for manual delivery.

**5.5.2.1.2. Low Angle High Drag.** Planned dive angle of less than 30 degrees for a high drag or cluster munition. Minimum recovery altitude is safe escape/fuse arm for ordnance being simulated/delivered, one-half the computed altitude loss during dive recovery, or 100 feet AGL (300 feet on a Class B/C range or over water), whichever is higher. Hit criteria: 75 feet (23 meters) for computed delivery and 105 feet (32 meters) for manual delivery.

**5.5.2.1.3. Low Angle Low Drag.** Planned dive angle of less than 30 degrees for a low drag weapon. Minimum recovery altitude is safe escape/fuse arm for ordnance being simulated/delivered or 800 feet AGL, whichever is higher. Hit criteria: 100 feet (31 meters) for computed delivery and 175 feet (53 meters) for manual delivery.

**5.5.2.1.4. Low Altitude Toss.** Release altitude is below 10,000 feet AGL. Minimum recovery is safe escape for the ordnance being simulated/delivered. Hit criteria: 175 feet (53 meters).

**5.5.2.2. Medium Altitude Delivery.** A valid attack is in accordance with AFTTP 3-1. Shot Kill.

**5.5.2.2.1. Dive Bomb.** Planned dive angle of 30 degrees or greater. Minimum recovery altitude is safe escape/fuse arm (as appropriate) for ordnance being simulated/delivered or as required to recover above 1,000 feet AGL, whichever is higher. Hit criteria: 85 feet (26 meters) for computed delivery and 145 feet (44 meters) for manual delivery.

**5.5.2.2.2. High Altitude Dive Bomb.** Planned dive angle of 30 degrees or greater. Minimum recovery altitude is 4,500 feet AGL. Hit criteria: 125 feet (38 meters) for computed delivery and 250 feet (76 meters) for manual delivery.

**5.5.2.2.3. High Altitude Release Bomb.** Planned dive angle of 30 degrees or greater. Minimum recovery altitude is 10,000 feet AGL. Hit criteria: 255 feet (78 meters) for computed delivery and 510 feet (136 meters) for manual delivery.

**5.5.2.2.4. Medium Altitude Toss.** Release altitude is 10,000 feet AGL or higher. Minimum recovery is safe escape for the ordnance being simulated/delivered. Hit criteria: 300 feet (91 meters).

### **5.5.3. Precision Guided Munitions Events.**

**5.5.3.1. Maverick Missile.** An event initiated from a level, diving, or pop-up maneuver to achieve line-of-sight to the target(s), followed by acquisition, missile lock-on and launch (or two seconds stable lock-on in "no-launch" conditions), followed by a tactical escape maneuver. Hit criteria: either actual target impact or valid, recorded captive missile simulated weapon release within launch parameters with stabilized target tracking.

**5.5.3.2. Laser Guided Bomb.** An event in which a combat or training laser is employed to self-lase simulated/actual ordnance during a weapon delivery. Minimum recovery is safe escape/fuse arm/guide time required for the ordnance being simulated/delivered.

5.5.3.3. **Inertially Aided Munition.** An event in which an aircraft system is used to determine release parameters for Joint Direct Attack Munition and Wind Corrected Munitions Dispenser weapons. Delivery of ordnance, actual or training, is not required. Minimum recovery is safe escape for the ordnance being simulated/delivered.

5.5.4. **Laser Guided Rocket and Unguided Rocket Events.** Hit criteria applies only to controlled deliveries against a point target intended for direct attack. Impromptu Forward Air Controller (Airborne) (FAC(A)) target marking is validated by the timeliness and effectiveness for fighters to locate a target based on rocket placement.

5.5.4.1. **Low Angle Rocket.** Planned dive angle of 15 degrees or less. Minimum slant range is 4,000 feet or 0.7 nautical miles (NM). Minimum recovery altitude is 100 feet AGL. Hit criteria: 75 feet (23 meters) for computed delivery and 100 feet (30 meters) for manual delivery.

5.5.4.2. **High Angle Rocket.** Planned dive angle of greater than 15 degrees. Minimum recovery altitude is 1,000 feet AGL. Hit Criteria: 75 feet (23 meters) for computed delivery and 100 feet (30 meters) for manual delivery

5.5.4.3. **Low Altitude Tactical Rocket.** Planned dive angle of 20 degrees or less. Tactical delivery with a slant range at release of 10,000 feet or greater from the target. Minimum recovery altitude 1,000 feet AGL. Hit Criteria: 500 feet (152 meters) for computed delivery and 1,000 feet (300 meters) for manual delivery.

5.5.4.4. **High Altitude Tactical Rocket.** Tactical delivery with a slant range at release of 10,000 feet or greater from the target. Minimum recovery altitude is 4,500 feet AGL. Hit Criteria: 250 feet (76 meters) for computed delivery and 500 feet (152 meters) for manual delivery.

5.5.4.5. **High Altitude Release Rocket.** Minimum recovery altitude is 10,000 feet AGL. Hit Criteria: 500 feet (152 meters) for computed delivery and 1,000 feet (300 meters) for manual delivery.

5.5.4.6. **Loft Rocket.** Planned release angle of level to 45 degrees of climb. Tactical delivery with a slant range at release of 10,000 feet or greater from the target. Hit Criteria: 1,650 feet (500 meters).

5.5.5. **Air-to-Air Weapons Events (AIM-9 and Gun).** Hit criteria: in accordance with AFTTPs 3-1.A-10C, *Tactical Employment – A-10C*, and 3-1.Shot Kill criteria, determined by mission recording review or actual delivery.

**5.6. Full Scale/Live Ordnance.** Full scale weapons delivery and live ordnance training is essential to pilot combat capability. Each pilot should be given the opportunity to deliver/employ as many types of weapons inventoried on the unit committed munitions list as possible. Delivery of live or inert ordnance representing a typical combat configuration in a tactical scenario qualifies as a full scale weapons delivery event. Only one event per weapon type may be logged per sortie. See the RTM for additional full scale weapons delivery requirements.

## Chapter 6

### SPECIALIZED TRAINING

**6.1. General.** This chapter outlines upgrade training programs for special capabilities, certifications, and qualifications. These programs are intended to provide a basic starting point and may be modified by the SQ/CC based on the unit's requirements and/or the upgradee's previous experience, qualifications, and documented performance. Unless governed by a formal syllabus, ground and device training for these programs consists of unit-developed academics and scenarios. Conduct flight training in accordance with a program approved by the SQ/CC.

6.1.1. Prior to any certification, the SQ/CC personally interviews the UP and reviews responsibilities, scope of duties, authority, and philosophy. The SQ/CC approves the new status, including any restrictions, in appropriate written format (grade sheet, training folder, Letter of X's, etc.).

6.1.2. Units review the progress of each UP for trends and common errors.

6.1.3. Unaccomplished Tasks. Scheduled training events unaccomplished need not delay certification/qualification. In such cases, SQ/CCs certifies individuals with appropriate limitations to preclude performance of duties in which training is incomplete (e.g., AAR).

6.1.4. **Scope.** The RTM may list additional specialized training requirements.

### **6.2. Flight Lead Upgrade (FLUG) - Certification.**

6.2.1. Initial FLUG entry is as a 2-ship/element FL until experience and proficiency warrant further progression.

6.2.2. SQ/CCs select pilots for FLUG entry based on proficiency and experience. Pilots selected for FLUG training must have:

6.2.2.1. 300 hours A-10C, or

6.2.2.2. 200 hours A-10C with 400 hours First Pilot/Mission Pilot/IP/Evaluator Pilot in a 11K3F (T-6) or 11K3D (T-38) Air Force Specialty Code, or

6.2.2.3. 50 hours A-10C if previously certified as a 11Fxx FL or sister service equivalent (e.g., F/A-18 pilot).

6.2.2.4. For converting units, OG/FG/CCs may select prior FL-certified pilots to upgrade to FL concurrent with MQT regardless of A-10C hours.

6.2.3. **FLUG Ground Training.** Units are responsible for developing local training.

6.2.3.1. **FL Responsibilities.** Wingman relationship, unit training objectives, and squadron responsibilities. Review of appropriate Joint/MAJCOM Instructions, AFIs, and local guidance.

6.2.3.2. **Mission Preparation.** Wingman requirements and responsibilities, currencies, proficiencies, capabilities, delegation of mission planning duties, developing appropriate mission objectives, and briefing preparation.

6.2.3.3. **Conduct of Flight Briefings and Debriefings.** Mission objectives, use of briefing guides and audiovisual aids, wingmen involvement, briefing techniques,

debriefing/questioning techniques, mission recording review responsibilities and procedures.

6.2.3.4. **Conduct of Missions.** Leadership and control of flight, flight discipline, and training rules.

6.2.3.5. **Practice Briefing(s).** Administrative items, mission tasks, and contingencies.

6.2.3.6. **AGSM Techniques.** Briefing, debriefing, and mission recording assessment.

6.2.3.7. **In-flight Emergencies and Emergency Diverts.** Divert decisions as an element, support of wingman during EPs, FL responsibility and authority, minimum fuel planning, and air traffic control assistance.

6.2.4. **FLUG SIM Training.** Units should incorporate FMT profiles into the FLUG to the maximum extent practical, depending on FMT capabilities and availability.

6.2.5. **FLUG Flight Training.**

6.2.5.1. SQ/CCs ensure the following guidelines are met:

6.2.5.1.1. All FLUG training will be under the direct supervision of an IP. (T-3).

6.2.5.1.2. A dedicated FL certification mission will be flown with the SQ/CC or a designated representative. (T-3).

6.2.5.1.3. Schedule dissimilar and support assets to the maximum extent practical.

6.2.5.2. **FLUG Missions and Events.** Missions may be flown in any order provided day training precedes respective night training. FLUG events can be accomplished anywhere in the FLUG. The following missions and events are recommended to be baseline FLUG.

6.2.5.2.1. **FLUG Events.** Day/Night AAR, instrument trail departure, threat reactions, hung ordnance recoveries, CDO, wounded bird, formation approach, and lost wingman procedures.

6.2.5.2.2. **FLUG Missions.** BFM, ACM, BSA, surface attack tactics, close air support (CAS), and certification. See [paragraph 6.6](#) for night certification.

**6.3. Instructor Pilot Upgrade (IPUG) – Qualification and Certification.** Upgrading instructor pilots (UIPs) at a FTU complete the formal syllabus IPUG.

6.3.1. SQ/CCs select pilots certified as a 4-ship FL for IPUG entry based on proficiency and experience. Pilots selected for IPUG will be an experienced 4-ship FL with either:

6.3.1.1. 400 hours A-10C, or

6.3.1.2. 300 hours A-10C with 400 hours First Pilot/Mission Pilot/IP/Evaluator Pilot in a 11K3F (T-6) or 11K3D (T-38) Air Force Specialty Code, or

6.3.1.3. 100 hours in A-10C if previously qualified as a 11Fxx IP or sister service equivalent (e.g., F/A-18 pilot).

6.3.1.4. For converting units, pilots may be designated by the OG/FG/CC for IPUG regardless of time in the new MDS if they have at least 1,000 hours First Pilot/Mission Pilot/IP/Evaluator Pilot in a fighter Air Force Specialty Code.

**6.3.2. IPUG Ground Training.** UIPs complete the following unit-developed blocks of instruction prior to IP qualification. **(T-3).**

**6.3.2.1. Principles of Instruction.** Creating clear learning objectives, training facilities and publications, IP/UP roles, instructing versus evaluating, and responsibility for UP progression.

**6.3.2.2. Techniques of Instruction.** Training objectives, UP interaction, learning environment and IP demeanor, maneuver demonstration, performance assessment, recognition and analysis of common errors, in-flight corrections and assistance, immediate IP correction versus allowing UP to recognize/correct errors, post-flight review and instruction, and setting objectives for follow-on missions.

**6.3.2.3. Conduct of flight briefings.** Mission objectives, adherence to training requirements, order of presentation, use of briefing guides and audiovisual aids, and debriefing techniques.

**6.3.2.4. Conduct of Phase Briefings.** Review of applicable phase briefings, use of visual aids, review of flying and grading standards, common UP errors, and flight preparation techniques.

**6.3.2.5. UP Grading.** Performance objectives, training standards, grading systems, determining unsatisfactory performance, and grade sheet completion.

**6.3.2.6. Practice Briefing(s).** Administrative items and instruction of mission events.

**6.3.2.7. AGSM Techniques.** Briefing, debriefing, and mission recording assessment.

**6.3.2.8. Chase Techniques.** Techniques for flying evaluation chase to include recommended parameters to effectively determine aim point/glide path, airspeed, altitude, and the effects of level off on final. Discuss limitation of evaluation chase versus safety chase with regard to terrain/obstacle clearance.

**6.3.2.9. CRM.** Techniques for increasing airmanship, methods to improve mission effectiveness, task/risk management and prioritization, feedback and crosscheck loops.

**6.3.3. IPUG SIM Training.** Units should incorporate FMT profiles into the IPUG to the maximum extent practical, depending on FMT capabilities and availability.

**6.3.4. IPUG Flight Training.** Conduct flight training in accordance with an upgrade program approved by the OG/FG/CC.

**6.3.4.1.** The SQ/CC ensures the following guidelines are met:

**6.3.4.1.1.** All IPUG training will be under the direct supervision of an IP. **(T-3).**

**6.3.4.1.2.** A dedicated IP qualification mission will be flown with the SQ/CC or a designated representative. **(T-3).**

**6.3.4.1.3.** IPUG training objectives are based on instruction of MQT, FLUG, and specialized training. Mission scenarios reflect typical unit training missions/events and the simulation of common UP errors.

**6.3.4.1.4. Method of Instruction.** UIPs practice assessing performance, immediately recognizing errors, and providing timely in-flight corrections. UIPs may also instruct

mission tasks through maneuver demonstration as specified in the IPUG flight profile. Briefings should cover guidelines for in/out-of-scenario instruction, and methods for pausing and/or resuming the scenario, as appropriate.

**6.3.4.2. IPUG Missions and Events.** Unit programs should clearly specify which tasks the UIP demonstrates, which tasks the UIP practices evaluating the "student's" performance, and which tasks the UIP does both. The following missions and events are recommended for the baseline IPUG. IPUG events can be accomplished anywhere in the IPUG. IPUG missions consist of BFM, ACM, BSA, Surface Attack Tactics, CAS, and qualification, See [paragraph 6.6](#) for night certification.

#### **6.4. Mission Commander (MC) Upgrade – Certification.**

**6.4.1. MC Prerequisites.** SQ/CCs select pilots certified as a 4-ship FL for MC upgrade based on proficiency and experience.

##### **6.4.2. MC Responsibilities:**

**6.4.2.1.** The MC is responsible for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages. Certified MCs are authorized to lead joint/composite force training.

**6.4.2.2.** MCs may delegate authority and responsibility for a portion of the mission to a package commander/deputy MC.

##### **6.4.3. MC Ground Training.** Units develop local training in the following areas (**T-3**):

**6.4.3.1.** Review AFTTP 3-1 volumes for specific MC checklists and considerations.

**6.4.3.2. Mission Planning Considerations.** Airspace requirements/restrictions, air traffic control restrictions/considerations/flight plans, air refueling operations, inter-unit coordination, A/A and A/G force integration, integrated air defense system penetration/avoidance, on-range controlling agencies coordination, and command and control coordination.

**6.4.4. MC SIM Training.** Units should incorporate, as available, one FMT MC profile prior to MC certification.

**6.4.5. MC Flight Training.** The upgrading MC observes a certified MC during the planning, briefing, flight, and debriefing of at least one composite force mission prior to certification. The upgrading MC then plans, briefs, flies, and debriefs a minimum of one mission under the supervision of an MC-certified IP. Unit tasking should drive force composition, adversaries, and minimum flight size.

#### **6.5. LASDT – Certification.**

**6.5.1.** LASDT completion in accordance with [paragraph 6.5.5](#) certifies pilots to conduct LOWAT at the altitudes listed in [table 6.1](#) Category I certification is the minimum requirement for CMR status and is normally accomplished in IQT or MQT. Category II or III training may not be conducted during MQT.

**6.5.2.** Entry into LASDT (other than at FTU) requires SQ/CC approval. The category to which a pilot is certified is determined by the SQ/CC and based upon the lowest altitude at which all tasks can be performed and proficiency demonstrated.

6.5.3. The LASDT program is built on a multi-phase training process in accordance with [table 6.1](#). There is no time limit to progress beyond Category I and progress is based upon individual pilot proficiency and training availability. SQ/CC will ensure all LASDT sorties are supervised by an instructor who is certified and current in Low A/A or Low A/G. (T-3).

**Table 6.1. LOWAT Categories.**

Category	Altitude Block (feet AGL)	Minimum Requirements To Certify
I	1,000-500	LASDT-1, -2, -3
II	499-300	LOWAT Cat I Certified; LASDT-4, -5, -6
III	299-100	LOWAT Cat II Certified; LASDT-7, -8, -9

6.5.4. **LASDT Ground Training.** Ground training supports the mission and concept of operations of the individual squadron. Incorporate appropriate portions of AFTTP 3-1.A-10C, and AFTTP 3-3.A-10C. Complete all ground academics prior to the flight brief and include discussion of the following:

6.5.4.1. **Low Altitude AHC.** Aircraft performance, density altitude, G-loading, power settings, level turns and bank angles, vertical maneuvering, climb/dive/slice, recoveries, terrain avoidance and ridge crossings, helmet mounted display use, overbanking during turns, and cross check of aircraft attitude relative to horizon.

6.5.4.2. **Environmental Factors.** Cockpit visibility and field of view restrictions, sun angle, terrain, G-excess illusions/perceptions, weather considerations, air turbulence, jet wash, and bird strike.

6.5.4.3. **Task Management.** Low altitude tasks, task management and prioritization, factors influencing individual proficiency, route familiarity and complacency, and airmanship.

6.5.4.4. **Low Altitude Tactical Navigation/Formation.** Dead Reckoning, embedded GPS/inertial navigation system use/techniques, tactical formations, hazards at low altitudes, task prioritization, tactical turns, and visual lookout/mutual support.

6.5.4.5. **Defensive Reactions.** Visual lookout and mutual support, threat weapons systems envelopes, threat reactions, and flight member deconfliction.

6.5.4.6. **Special Subjects.** Training rules, weather route abort procedures, aircraft emergencies, and separation/disengagement considerations.

6.5.4.7. **LOWAT Employment.** Level engagements, fuel management, required turning room, maximum dive angle restrictions, weapons employment, visual lookout and intercepts.

6.5.5. **LASDT Flight Training.** SQ/CCs may combine and/or modify profiles as necessary, based on UP's experience. To conduct low altitude operations safely, pilots need to be knowledgeable of aircraft handling and performance characteristics, tactical formation, intercept, offensive maneuvering, defensive reactions, and navigation. **Note:** LASDT-1,4,7,8,9 are dedicated missions. At the SQ/CC discretion, LASDT-4 and -5 may be combined.



#### 6.5.5.1. LOWAT Category I.

6.5.5.1.1. **LASDT-1 (Single ship w/chase).** Mission Objectives: Demonstrate proficiency in single-ship maneuvering between 5,000 and 1,000 feet AGL. Introduce Category I operations based on AFTTP 3-3.A-10C. Mission tasks consist of AHC (low altitude handling/flight qualities, vertical awareness exercise, climb/dive/slice maneuvers, nose low recoveries, attitude awareness maneuvers); G warm up exercise, low level navigation, airspeed control, fuel management, low level turns, ridge crossings, terrain masking/maneuvering techniques for level/rolling/rough terrain, visual lookout, altitude awareness/control, attack maneuvering, practice “knock-it-offs,” defensive reactions, and low altitude tactical intercepts.

6.5.5.1.2. **LASDT-2 (2-ship).** Mission Objectives: Demonstrate proficiency in single-ship LOWAT Category I operations and introduce 2-ship low altitude operations down to 500 feet AGL. Mission Tasks: Same as LASDT-1 only accomplished down to 500 feet AGL as UP proficiency increases.

6.5.5.1.3. **LASDT-3 (2-ship) – LOWAT CAT I Certification.** Mission Objectives: Demonstrate proficiency in low altitude operations down to 500 feet AGL. Mission Tasks: Same as LASDT-1. Upon satisfactory completion of this mission, the SQ/CC can certify the pilot to LOWAT Category I.

#### 6.5.5.2. LOWAT Category II.

6.5.5.2.1. **LASDT-4 (Single-ship w/chase).** Mission Objectives: Introduce LOWAT Category II operations. Mission Tasks: Same as LASDT-1 only accomplish in the 300-500 foot AGL environment as UP proficiency increases.

6.5.5.2.2. **LASDT-5 (2-ship).** Mission Objectives: Demonstrate proficiency in single-ship LOWAT Category II operations and introduce 2-ship/element low altitude formations. Mission Tasks: Same as LASDT-1.

6.5.5.2.3. **LASDT-6 (2-ship) - LOWAT CAT II Certification.** Mission Objectives: Demonstrate proficiency in LOWAT Category II operations down to 300 feet AGL. Mission Tasks: Same as LASDT-1. Upon satisfactory completion of this mission, the SQ/CC can certify the pilot to LOWAT Category II.

#### 6.5.5.3. LOWAT Category III.

6.5.5.3.1. **LASDT-7 (Single-ship w/chase).** Mission Objectives: Introduce LOWAT Category III operations. Mission Tasks: Same as LASDT-1 minus threat reactions, only accomplish in the 100-300 foot AGL environment as UP proficiency increases.

6.5.5.3.2. **LASDT-8 (2-ship).** Mission Objectives: Demonstrate proficiency in single-ship LOWAT Category III operations and introduce 2-ship/element low altitude formations. Mission Tasks: Same as LASDT-1 minus tactical intercepts/threat reaction.

6.5.5.3.3. **LASDT-9 (2-ship) - LOWAT CAT III Certification.** Mission Objectives: Demonstrate proficiency in LOWAT Category III operations down to 100 feet AGL. Mission Tasks: Same as LASDT-1 minus tactical intercepts/threat reaction. Upon satisfactory completion of this mission, the SQ/CC can certify aircrew to LOWAT Category III.

## 6.6. NVG – Certification.

6.6.1. **NVG.** Upon successful completion of IQT in accordance with formal FTU course syllabi (B-course), pilots should be NVG certified. For pilots reporting to a unit who did not complete NVG training in a formal course (e.g., TX), tailor the FTU NVG syllabus based upon individual's previous experience, qualifications, and documented performance.

6.6.2. **FL.** Certified NVG pilots who upgrade to FL need one supervised (IP) flight as a FL on NVGs before performing unsupervised NVG FL duties. This flight may be conducted at anytime during or after the FLUG syllabus.

6.6.3. **IP.** A NVG Instructor must accomplish the following before being certified to perform instructor duties while using NVGs. Fly one supervised (IP) instructional night sortie under NVGs before performing unsupervised night instructor duties while under NVGs. **(T-3).** Multiple upgrades may be accomplished on a NVG sortie, or in conjunction with other NVG upgrades, at the SQ/CC discretion.

## 6.7. Functional Check Flight (FCF) – Certification.

6.7.1. **Prerequisites.** OG/FG/CCs select pilots to enter the FCF training program based on experience and proficiency. Pilots will have a minimum of 300 hours in the A-10C.

6.7.2. **Supervision.** Unit-designated chief FCF pilot, or their representative, trains new FCF pilots and administers FCF certification flights according to local unit training programs. Minimum supervision for flight or simulator is a current and certified FCF pilot.

6.7.3. **FCF Ground Training.** Ground training includes a review of applicable technical orders and publications, including, at a minimum, AFI 21-101, *Aerospace Equipment Maintenance Management*; TO 1-1-300; *Maintenance Operational Checks and Check Flights*; 1A-10C-6CF-1, *Functional Check Flight Procedures*, *USAF Series A-10C Aircraft*; and local FCF procedures. A full-profile FCF will be flown in the FMT.

6.7.4. **FCF Flight Training.** Upon completion of the training program, the OG/FG/CC or designated representative certifies the pilot via a memorandum, placed in the pilot's training record.

6.7.5. **CT.** Establish a CT program for review of FCF techniques and procedures. Refer to [table 4.1](#) for FCF currency requirements.

## 6.8. FAC(A) – Certification.

6.8.1. SQ/CCs review each FAC(A) throughout the upgrade for trends and common errors, and add appropriate training events in the FMT to avoid recurrence. If OG/CCs elect to conduct FAC(A) upgrades locally, training will be in accordance with the formal training syllabus. **(T-2).**

6.8.2. Conduct FAC(A) upgrade training in accordance with the current Joint Fire Support Executive Steering Committee Action Plan Memorandum of Agreement (JFS ESC AP MOA) 2004-02, *Joint Forward Air Controller (Airborne) (FAC(A))*, abbreviated as JFS ESC FAC(A) MOA. The MOA defines the Joint mission task list for a FAC(A) to attain certification and maintain qualification. If there is a discrepancy between this volume and the JFS ESC FAC(A) MOA, the FAC(A) MOA takes precedence.

**6.8.3. FAC(A) Certification Documentation.** FAC(A)-Instructors document UP successful terminal attack controls and completion of a dedicated FAC(A) certification mission (see [Attachment 4](#)).

**6.8.4.** SQ/CCs selects pilots for FAC(A) entry based on proficiency and experience. Pilots selected for FAC(A) upgrade must have:

6.8.4.1. 200 hours A-10, or

6.8.4.2. 50 hours A-10, if previously qualified as a FAC(A) in any aircraft.

**6.8.5. FAC(A) Ground Training.** In addition to the following FAC(A) training, UPs must successfully complete formal FAC(A) academics at an accredited school. **(T-2)**. The joint FAC(A) (JFAC(A)) course hosted by the 6th Combat Training Squadron at Nellis AFB is the primary formal course unless otherwise specified by MAJCOM/A3.

**6.8.5.1. FAC(A) Academics and JMTL Review.** Asset coordination and deconfliction, terminal attack control (Type 1, 2, and 3), target marking and designation, coordinate generation, suppression of enemy air defenses, coordination, indirect fires integration and calls for fire, reconnaissance, radio relay, and battle damage assessment.

**6.8.5.2. FAC(A) Responsibilities.** Unit training objectives, review of appropriate Joint/MAJCOM instructions, AFIs, and local guidance. Single-ship approach to enroute procedures, employment, obtaining mutual support, and local responsibilities.

**6.8.5.3. Mission Preparation.** Airborne asset and joint tactical attack controller (JTAC) requirements, currencies, proficiencies, and capabilities. Develop appropriate mission objectives and mission briefing.

**6.8.5.4. Conduct of Missions.** Leadership and control within the area of operations, interaction with ground forces, employment with joint terminal attack controllers, coordination with other FAC(A)s, EPs, and Training Rules.

6.8.5.5. Practice FAC(A) briefing.

**6.8.6. FAC(A) SIM Training.** The FMT should be used to the maximum extent practical to introduce FAC(A) principles and solidify FAC(A) habit patterns. At the SQ/CC's discretion, FMT training may substitute live training for certain tasks in accordance with the MOA minimum successful terminal attack controls for FAC(A) certification.

**6.8.7. FAC(A) Flight Training.**

6.8.7.1. All FAC(A) upgrade training will be under the supervision of qualified FAC(A)-Instructors. **(T-3)**.

6.8.7.2. A dedicated FAC(A) certification mission is required and will be flown with the SQ/CC or designated representative. The certifying official must be a FAC(A)-Instructor. **(T-2)**.

**6.8.7.3. Required FAC(A) upgrade events.** Type 1, 2, and 3 medium altitude, low altitude, and night terminal attack control (TAC) of fixed and rotary wing assets with live or training ordnance in permissive and non-permissive environments, utilization of airborne and ground-based laser target designators and/or infra red pointers, and execution in support of a JTAC.

6.8.7.4. **Desired FAC(A) Upgrade Events.** Visual route, low altitude tactical navigation, live dissimilar airborne assets, indirect fires integration, troops in contact, CDO procedures.

6.8.7.5. **Unaccomplished Tasks.** Unaccomplished training events need not delay certification; however, UPs accomplish the minimum successful terminal attack controls for FAC(A) certification requirements in accordance with the MOA prior to certification. The SQ/CC may NOT certify the FAC(A) with any restrictions based on unaccomplished minimum successful terminal attack controls certification to include night TAC.

6.8.7.6. FAC(A) upgrade missions and events may be flown in any order, provided day training precedes night.

6.8.7.7. Schedule live JTAC, similar, and dissimilar asset support to the maximum extent practical.

6.8.7.8. **FAC(A) Missions.**

6.8.7.8.1. **FAC(A)-1. BSA.** Mission Objectives: Introduce/demonstrate basic FAC(A) principles and practice weapons delivery on a controlled range.

6.8.7.8.2. **FAC(A)-2.** Medium Altitude TAC. Mission Objectives: Practice TAC techniques and procedures at medium altitude in support of a JTAC with a focus on Type 1 control.

6.8.7.8.3. **FAC(A)-3.** Medium Altitude TAC. Mission Objectives: Practice medium altitude TAC with or without the support of a JTAC and introduce troops in contact, indirect fires integration, and CDO procedures

6.8.7.8.4. **FAC(A)-4.** Low Altitude TAC. Mission Objective: Practice TAC at low altitude with or without the support a JTAC.

6.8.7.8.5. **FAC(A)-5.** Night TAC. Mission Objectives: Practice TAC at night with or without the support a JTAC.

6.8.7.8.6. **FAC(A)-6 – FAC(A) Certification.** Mission Objective: FAC(A)-Instructor evaluates FAC(A) performance in a tactical mission scenario.

6.8.8. **FAC(A)-Instructor.** SQ/CCs designate pilots as FAC(A)-Instructor who are a certified FAC(A) and qualified A-10C IP based on proficiency and experience.

**6.9. Combat Search and Rescue (CSAR) Upgrade – Certification.** Pilots retain CSAR certification with aircraft qualification. Prior to CSAR certification the SQ/CC personally reviews CSAR responsibilities, scope of duties, authority, and philosophy with the upgradee. The SQ/CC certifies the new pilot's "Sandy" status, including any restrictions, in appropriate written format (grade sheet, training folder, Letter of X's, etc.). SQ/CCs may certify "Sandy 1" upgradee's as MC upon completing of the Sandy 1 upgrade.

6.9.1. **CSAR Ground Training.**

6.9.1.1. **CSAR Procedures.** Command and control, CSAR ordnance, tactics and techniques.

6.9.1.2. **Search Patterns and Procedures.** Electronic and visual search, LARSv12 (or equivalent), and Quickdraw radios.

6.9.1.3. **Helicopter Escort.** Rendezvous, escort, and hover cover.

6.9.1.4. **FAC(A) Procedures.** Target identification, ordnance selection, pre-strike preparation, target marking, strike control procedures, and battle damage assessment.

6.9.1.5. **CSAR Simulator Training.** Units should incorporate FMT profiles into the CSAR upgrade to the maximum extent practical, depending on FMT capabilities and availability.

#### 6.9.2. **CSAR Flight Training.**

6.9.2.1. The SQ/CC may modify profiles as necessary, but ensures the following basic guidelines/proficiency levels are met:

6.9.2.1.1. CSAR upgrade training to Sandy 1 or Sandy 2 is under the supervision of a Sandy 1 IP. CSAR upgrade training to Sandy 3 or Sandy 4 is under the supervision of a Sandy 3 IP or higher.

6.9.2.1.2. **Required CSAR Upgrade Missions/Events.** All Sandy upgrade sorties will be flown as a 3-ship; 4-ship desired. **Note:** Sandy-4 upgrade can be flown as a 2-ship minimum. Helicopters are mandatory for CSAR-4, CSAR-3, and either CSAR-1a or CSAR-1b. Actual on-ground personnel simulating survivor(s) are required on either CSAR-4 or CSAR-3 and both CSAR-1a and CSAR-1b. One night sortie is required on any of the CSAR-1 or 2 sorties. SQ/CCs may waive CSAR-2a for certified FAC(A) with appropriate experience.

#### 6.9.2.2. **CSAR Missions.**

6.9.2.2.1. **CSAR-4.** Mission Objectives: Practice Sandy 4 duties of rescue vehicle escort, route reconnaissance, and threat awareness.

6.9.2.2.2. **CSAR-3.** Mission Objectives: Practice Sandy 3 duties of rescue vehicle coordination, route reconnaissance, rescue vehicle escort, and 15 line updates.

6.9.2.2.3. **CSAR-2a.** Mission Objectives: Practice Sandy 2 FAC(A) and suppression.

6.9.2.2.4. **CSAR-2b.** Mission Objectives: Demonstrate proficiency in Sandy 2 FAC(A) and suppression duties.

6.9.2.2.5. **CSAR-1a.** Mission Objectives: Practice coordinating and controlling a pre-planned CSAR.

6.9.2.2.6. **CSAR-1b.** Mission Objectives: Demonstrate proficiency in coordinating and controlling an alert CSAR.

**6.10. FMT Operator Upgrade – Certification.** SQ/CCs determine the number of FMT operators required to perform the unit mission. The required supervision for this upgrade program is an instructor operator system (IOS)-certified instructor. The following guidelines are provided to SQ/CCs for use in developing the unit training plan to certify selected pilots to operate the FMT.

6.10.1. **FMT Operator Ground Training.** Units develop an academic training program to familiarize pilots with normal and emergency operating procedures of the IOS.

6.10.2. **FMT Operator SIM Training (Based on simulator capabilities).**

6.10.2.1. **SI-1, IOS Operations.** Mission initialization, setup review and modification, keyboard operation, light pen operation, emergency shutdown, record/playback, hard copy, performance, and procedures monitoring.

6.10.2.2. **SI-2, IOS Operations.** Tactics mission file, console-operated air intercepts and options, A/A weapons scoring, ground threats and modifications, A/G weapons scoring, surface-to-air engagement scoring, program and simulator freeze, mission parameter modifications.

6.10.2.3. **SI-3, Practical Exercise.** The FMT operator should conduct a regularly scheduled simulator mission from the IOS under supervision of an IOS-certified instructor.

6.10.3. **Certification.** Following successful completion of SI-3, the SQ/CC certifies the pilot's FMT operator status in appropriate written format (Letter of X's, ARMS, gradesheet, etc.).

## **6.11. Night Vision Goggle (NVG) Takeoff and Landing (T/L) Upgrade – Certification.**

6.11.1. **NVG T/L Ground Training.** Units use formally produced academics and develop local training in the following areas:

6.11.1.1. **Publications Review.** AFI 11-2A-10CV3, AFTTPs 3-1.A-10/3-3.A-10, and local operating procedures.

6.11.1.2. **Mission Planning Considerations.** Airfield and runway approach lighting configurations, non-standard ground operations, lights-out taxi procedures, moon illumination, sky glow impacts, cultural lighting, alternate recovery plan, and immediate reaction to malfunctions.

6.11.1.3. **Techniques and Procedures.** Takeoff rotation and climbout, visual scan techniques, steerpoint selection, glide path discipline, vertical velocity reference, transition to visual references, setting altitude alerts, ground rush and flare anomalies.

### **6.11.2. NVG T/L Flight Training.**

6.11.2.1. Perform NVG T/L upgrade training under the supervision of a current IP.

6.11.2.2. Minimum weather requirements for the NVG T/L upgrade mission is 3,000 feet and 5 miles.

6.11.2.3. **Airfield Lighting.** Units conduct NVG T/L training at airfields with reduced or covert lighting when practical.

6.11.2.4. **NVG T/L Mission.** Mission Objectives: Introduce NVG T/L operations. Mission Tasks: NVG ground operations, taxi with reduced lighting, airfield lighting awareness, NVG takeoff, departure, planned mission accomplishment, two NVG approaches to low approach and climbout, runway approach lighting variations, NVG approach and landing.

## **6.12. Not Used.**

**6.13. Targeting Pod (TGP) LASDT (TLASDT) Upgrade – Certification.** Pilots must have LOWAT and demanding mission currency for the day sortie, and night sortie currency for the night sortie. (T-3).

6.13.1. Supervision is an IP certified in TLASDT.

6.13.2. **TLASDT Ground Training.** Pilots should review the TGP-specific documents produced by the 422d Test and Evaluation Squadron and Air National Guard, Air Force Reserve, Test Center: *TGP LASDT Recommendations*, and ACC Project 04-126R, *A/OA-10 Targeting Pod Tactics Development and Evaluation Interim Summary Report*. Unit-designed academics that summarize/expand these reports and incorporate lessons-learned are highly encouraged. Units should incorporate FMT profiles into the TLASDT to the maximum extent practical, depending on FMT capabilities and availability.

6.13.3. **FMT-TL.** Mission Objectives: Day incremental step-down training to 3,000 feet AGL and 1,000 feet AGL as well as night step-down training to 2,000 feet AGL. Mission Tasks: holding techniques; autopilot use; masking issues; mutual support contracts; target identification and confirmation at 3 NM, 5 NM, 10 NM, and >10 NM; 9-line/target information coordination; target coordinate generation and marking; hit assessment; unusual attitude recovery; and attacks with and without TGP video.

6.13.4. **TLASDT Flight Training.** SQ/CCs may combine and/or modify events as necessary, based on an individual UP's experience. Restrictions: Pilots must have an operational autopilot, ground collision avoidance system, and NVGs. **(T-2).** Below 5,000 feet AGL, pilots should utilize the TGP in wings level flight with autopilot to the maximum extent possible.

6.13.4.1. **TLASDT-1. Day Certification.** Single-ship (IP chase). Mission Objectives: Demonstrate proficiency in TGP low altitude operations down to 3,000 feet AGL and then 1,000 feet AGL. Mission Tasks: Same as the day portion of the FMT. Also include AGSM, overbank exercise, vertical awareness exercise, nose low recoveries, altitude/attitude awareness, defensive reactions, and route abort procedures. **Note:** Demonstration proficiency at 1,000 feet AGL before progressing to TLASDT-2.

6.13.4.2. **TLASDT-2. Night Certification.** Mission Objectives: Demonstrate proficiency in TGP night low altitude operations down to 2,000 feet AGL or minimum safe altitude whichever is higher. Mission Tasks: Same as TLASDT-1 with emphasis on cross check; target marking; self-marking attacks; and hit assessment. Use overt lighting for night TLASDT-2.

#### **6.14. Anti-Helicopter/Low/Slow Upgrade – Certification.**

6.14.1. **Anti-Helicopter/Low/Slow Ground Training.** Helicopter/Low/slow threat, visual identification, low/slow aircraft handling, weapons employment, anti-helicopter/low/slow tactics and techniques, and training rules.

6.14.2. **Anti-Helicopter/Low/Slow Flying Training.** This upgrade consists of two missions flown in sequence and supervised by IP/ FL-certified squadron supervisor. UPs must be current and qualified in ACBT and LOW A/A. **(T-3).**

6.14.2.1. **BFM-H/L/S (1v1 Helicopter/Low/Slow).** Mission Objectives: Practice BFM and employment techniques to kill a slow-speed target. Mission Tasks: A/A employment at various closure velocities and aspect angles against a slow-speed target simulated by an A-10. Helicopter/Low/Slow BFM: Visual search techniques, ranging exercises, aspect and angle off determination, offensive/defensive maneuvering, weapons selection and

employment. **Note:** Demonstrate proficiency at 5,000 feet AGL and 1,000 feet AGL before progressing to lower altitudes.

6.14.2.2. **ACM-H/L/S (2v1 Helicopter/Low/Slow).** Mission Objectives: Practice mutual support contracts and employment to kill a slow-speed target. Mission Tasks: same as BFM-H/L/S plus mutual support maneuvering. **Note:** Demonstrate proficiency at 1,000 feet AGL before progressing to lower altitudes.

## **6.15. Unimproved Surface/Austere Field Training and/or Forward Area/Arming Refueling Point – Certification.**

6.15.1. **Supervision.** If required, the SQ/CC designates an initial cadre of IPs to complete this training prior to upgrading other squadron pilots. Other than initial cadre training, supervision is an IP who has completed this certification program.

### **6.15.2. General Instructions.**

6.15.2.1. UPs identified by the SQ/CC must be a FL. Document training in the UP's training folder and certification on the Letter of X's.

6.15.2.2. Pilots ensure an USAF site survey is certified and current prior to conducting unimproved surface/austere operations.

6.15.2.3. Air traffic local control duties must be performed by a current and qualified Combat Control Team to conduct landing, takeoff, or ground operations. **(T-2).**

6.15.2.4. Unimproved surface operations may be conducted in conjunction with Forward Area Refueling Point operations.

6.15.2.5. The training emphasis should be mission planning and the coordination rather than a specific type of surface to execute operations. Unimproved surface/austere field training can be accomplished on various prepared and/or semi-prepared surfaces. Some example runways – matted, dirt, sand, gravel, clay, grass, roads, and uncontrolled general aviation fields. Once certified, squadron commanders can tailor future training to meet future tasking.

6.15.3. **Ground Training.** Units develop local academic training conducted by a qualified IP. Academics are based on the unimproved/austere material obtained through ACC/A3TO. Due to the infrequent nature of this event, units will accomplish refresher academic training prior to unimproved surface/austere field operations for qualified pilots.

6.15.4. **Flight Training.** This upgrade consists of two missions, one day and one night. Graded events include two landings (one day and one night) and two takeoffs (one day and one night). Night training does not preclude day certification.

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Deputy Chief of Staff, Operations



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

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### ***Adopted Forms***

AF Form 847, *Recommendation for Change of Publication*

AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval*

AF Form 8, *Certificate of Aircrew Qualification*

### ***Abbreviations and Acronyms***

**A/A**—Air-to-Air

**A/G**—Air-to-Ground

**AAR**—Air-to-Air Refueling

**ACBRN**—Aircrew Chemical, Biological, Radiological, Nuclear

**ACBT**—Air Combat Training

**ACC**—Air Combat Command

**ACM**—Air Combat Maneuvering

**AERP**—Aircrew Eye and Respiratory Protection

**AF**—Air Force

**AFDD**—Air Force Doctrine Document

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFPD**—Air Force Policy Directive

**AFR**—Air Force Reserve

**AFRC**—Air Force Reserve Command  
**AFTTP**—Air Force Tactics Techniques and Procedures  
**AGL**—Above Ground Level  
**AGSM**—Anti-G Straining Maneuver  
**AHC**—Aircraft Handling Characteristics  
**AIM**—Air Intercept Missile  
**ANG**—Air National Guard  
**API**—Aircrew Position Indicator  
**ARC**—Air Reserve Component (ANG and AFR)  
**ARMS**—Aviation Resource Management System  
**B**—Basic  
**BAQ**—Basic Aircraft Qualification  
**BFM**—Basic Fighter Maneuvers/Maneuvering  
**BMC**—Basic Mission Capable  
**BSA**—Basic Surface Attack  
**CAS**—Close Air Support  
**CC**—Commander  
**CDO**—Contested, Degraded, Operationally Limited  
**CMR**—Combat Mission Ready  
**COMAFFOR**—Commander, Air Force Forces  
**CRM**—Cockpit/Crew Resource Management  
**CSAR**—Combat Search and Rescue  
**CT**—Continuation Training  
**DO**—Operations Officer  
**DOC**—Designed Operational Capability  
**DRU**—Direct Reporting Unit  
**EOC**—End of Cycle  
**EP**—Emergency Procedure  
**EXP**—Experienced  
**FAC(A)**—Forward Air Controller (Airborne)  
**FAM**—Familiar  
**FCF**—Functional Check Flight

**FG**—Fighter Group  
**FL**—Flight Lead  
**FLUG**—Flight Lead Upgrade  
**FMT**—Full Mission Trainer  
**FOA**—Field Operating Agency  
**FTU**—Formal Training Unit  
**G**—Gravitational Load Factor  
**GPS**—Global Positioning System  
**INEXP**—Inexperienced  
**INSTM**—Instrument  
**IOS**—Instructor Operator System  
**IP**—Instructor Pilot  
**IPUG**—Instructor Pilot Upgrade  
**IQT**—Initial Qualification Training  
**JTAC**—Joint Tactical Attack Controller  
**LAO**—Local Area Orientation  
**LASDT**—Low Altitude Step Down Training  
**LOW**—Low Altitude  
**LOWAT**—Low Altitude Training  
**MAJCOM**—Major Command  
**MC**—Mission Commander  
**MDS**—Mission Design Series  
**MQT**—Mission Qualification Training  
**MR**—Mission Ready  
**MSN**—Mission  
**N**—Non-  
**NGB**—National Guard Bureau  
**NM**—Nautical Mile  
**NVD**—Night Vision Device  
**NVG**—Night Vision Goggles  
**OG**—Operations Group  
**OG/CC**—Operations Group Commander

**OG/FG/CC**—Operations Group or Fighter Group Commander

**OPR**—Office of Primary Responsibility

**PROF**—Proficient

**QUAL**—Qualification

**RAP**—Ready Aircrew Program

**RTM**—RAP Tasking Memorandum

**SEPT**—Situational Emergency Procedure Training

**SIM**—Simulator(s)

**SQ**—Squadron

**TAC**—Terminal Attack Control

**TDY**—Temporary Duty

**TGP**—Targeting Pod

**T/L**—Takeoff and Landing

**TLASDT**—Targeting Pod LASDT

**TO**—Technical Order

**TX**—Transition

**UIP**—Upgrading Instructor Pilot

**UP**—Upgrading Pilot

**USAF**—United States Air Force

**USAFWS**—United States Air Force Weapons School

**WG**—Wing

**WG/CC**—Wing Commander

### ***Terms***

**Note**—See AFI 11-214 for further clarification on definitions/terms throughout the following attachments. If there is a conflict, AFI 11-214 will take precedence.

**Air Combat Tactics (ACT)**—Training in the application of BFM, ACM, and tactical intercept skills to achieve a tactical air-to-air objective (AFI 11-214).

**Air Combat Training (ACBT)**—A general training term that encompasses dissimilar (Dissimilar)BFM, (Dissimilar)ACM, and (Dissimilar)Air Combat Tactics (AFI 11-214).

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

**Basic Mission Capable (BMC)**—An aircrew member who has satisfactorily completed mission qualification training, is qualified in some aspect of the unit mission, but does not maintain MR/CMR status (AFI 11-202V1).

**Certification**—Procedure used to document competency in a particular task. Not interchangeable with “qualification,” which requires formal AF Form 8 documentation (AFI 11-202V2, *Aircrew Standardization/ Evaluation Program*).

**Circular Error**—Miss distance of a given weapon impact expressed in radial distance from center of target.

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

**Continuation Training (CT)**—Training to maintain proficiency and improve pilot capabilities to perform unit missions. CT includes pilot proficiency sorties and upgrades not flown in IQT/MQT.

**Currency**—The minimum frequency required to maintain proficiency and allow safe performance of an event or mission.

**Delivery Parameters**—Weapons-related data reflecting current delivery considerations for proper ordnance function and tactical survivability. Appropriate aircraft/weapons technical orders must be consulted for live ordnance safe escape criteria and aircraft performance charts for recovery altitudes.

**Emergency Procedures Evaluation**—See AFI 11-202V2 and AFMAN 11-2A-10CV2, *A-10C—Aircrew Evaluation Criteria*

**Experienced Pilot (Exp)**—A pilot who has flown the aircraft for a specified criteria, which then permits training at a reduced rate to maintain a safe level of proficiency (AFI 11-412, *Aircrew Management*). See **paragraph 1.6**.

**Familiar**—Aircrew have a basic knowledge of mission area and may make errors of omission or commission. Aircrew are able to operate in a permissive environment and are able to handle some basic contingencies and unusual circumstances. Familiar aircrew may need additional training prior to first mission tasking

**Flag Exercises**—Red Flag, Maple Flag, etc

**Flight Lead (FL)**—As designated on flight orders, the pilot responsible for overall mission conduct from preflight preparation and briefing to post-flight debriefing, regardless of actual position within the formation. A 2-ship FL is authorized to lead an element in a larger formation. If approved by the SQ/CC, a 4-ship FL is considered a multi-ship FL and may lead formations and missions in excess of four aircraft.

**Hot Pit**—Term for an engine running aircraft refueling and/or rearming procedure where the aircraft lands, taxis to a designated location, refuels/rearms, then takes off for another mission.

**Initial Qualification Training (IQT)**—Training needed to qualify aircrew for basic aircrew duties in an assigned crew position for a specific aircraft, without regard for the unit’s operational mission (AFI 11-202V1). IQT graduates demonstrate proficiency in mission tasks as indicated in the FTU syllabi.

**Knock-it-Off**—Brevity communications term used to stop or end tactical maneuvering and immediately transition to an administrative formation, or reset to begin another training situation. Also used in the event of an emergency, to stop training and focus on safely dealing with an abnormal situation.

**Letter of X's**—A monthly summary of assigned and attached pilots that lists qualifications and certifications. An "X" is put in the appropriate column next to the pilot name showing their qualification or certification, hence its name.

**Lookback**—Used to assist a commander in determining a pilot's status (CMR/BMC - Probation - N-CMR/N-BMC). Lookback reflects RAP sortie and simulator counts over 1 and 3 month periods. Reference **paragraph 4.4.7** and **figure 4.1** for lookback use in regression determination.

**Mission Commander (MC)**—A SQ/CC certified 4-ship FL designated to lead large force employment (see AFI 11-214) and joint/composite force missions.

**Mission Qualification Training (MQT)**—Training required to achieve the required level of competence in a unit's primary-task missions. This training follows IQT and is a prerequisite for CMR/BMC status. MQT provides an aircraft mission qualification certificate, and allows the pilot to prepare for follow-on specialized training.

**Mission Ready (MR)**—An aircrew member who has satisfactorily completed MQT and maintains qualification and proficiency in the command or unit operational mission (AFI 11-202V1).

**Proficient**—Aircrew have a thorough knowledge of mission area but occasionally may make an error or omission or commission. Aircrew are able to operate in a complex, fluid environment and are able to handle most contingencies and unusual circumstances. Proficient aircrew are prepared for mission tasking on the first sortie in theater.

**Qualification**—See AFIs 11-202V2 and 11-2A-10CV2.

**Sandy**—A call-sign given to pilots qualified in CSAR. Also used to describe training, weapons and tactics within the CSAR mission.

**Specialized Training**—Specialized training provides CMR/BMC pilots with advanced qualifications or certifications to support the unit's mission tasking. This training normally follows MQT as pilot skills and proficiency warrant, but may be conducted during MQT or CT, as required.

**Squadron Supervisor**—May include all or some of the following depending on SQ/CC certification: SQ/CC, SQ/DO, assistant DOs, and flight CCs. (ARC: as designated by the OG/FG/CC).

**Verification**—A unit briefing for pilots to update and verify tactical knowledge required to accomplish the unit's wartime mission tasking. Verification includes initial and continuation phases in which a formal board is normally convened to assess pilot knowledge of tactical employment.

## Attachment 2

### GLOSSARY OF MISSION AND EVENT DEFINITIONS

#### A2.1. Mission/Event Definitions.

A2.1.1. Air Interdiction/ Offensive Counter Air – Attack Operations Mission. Mission designed to develop proficiency in Air Interdiction/Offensive Counter Air – Attack Operations tactics. Mission elements include: Intel scenario and tactical mission planning, execution of strikers diverting, disrupting, delaying or destroying the enemy's military capabilities while negating simulated adversary aircraft which are operating within specific commit criteria (i.e., range, airspace corridor, vulnerability time, etc.), and in-flight report.

A2.1.2. Air Combat Maneuvers Mission. 2vX training mission designed to achieve proficiency in element formation maneuvering and the coordinated application of BFM to achieve a simulated kill or effectively defend against one or more aircraft from a pre-planned starting position (AFI 11-214).

A2.1.3. Aircraft Handling Characteristics (AHC) Mission. Training for proficiency in utilization and exploitation of the aircraft flight envelope, consistent with operational and safety constraints, including, but not limited to: high/maximum angle of attack maneuvering, energy management, minimum-time turns, maximum/optimum acceleration and deceleration techniques and confidence maneuvers (AFI 11-214).

A2.1.4. Air-to-Air Refueling (AAR) Event. An AAR event requires tanker rendezvous, hook-up and transfer of fuel or stabilized dry hook-up. More than one event may be credited if receivers accomplish another rendezvous, hook-up and fuel transfer/dry hook-up.

A2.1.5. Air Strike Control Event. See Terminal Attack Control Event

A2.1.6. Basic Fighting Maneuvers (BFM) Mission. 1v1 training mission designed to apply aircraft handling skills to gain proficiency in recognizing and solving range, closure, aspect, angle off, and turning room problems in relation to another aircraft to either attain a position from which weapons may be launched or defeat weapons employed by an adversary (AFI 11-214).

A2.1.7. Basic Surface Attack (BSA) Mission. Training designed to achieve proficiency in air-to-surface weapons delivery events.

A2.1.8. Chaff/Flare Event. Inflight dispensing of chaff/flare during a tactical mission profile in response to an actual or simulated threat. Event requires actual release and is limited to logging of one event per engagement.

A2.1.9. Close Air Support (CAS) Mission. Mission flown with detailed coordination in support of ground forces under the positive control of a joint terminal attack controller (JTAC)/FAC(A). Mission elements include: intel scenario, tactical mission planning, interface with the terminal attack control system / Army air-to-ground system network, execution against threats, and weapons employment against JTAC/FAC(A)-designated targets. Except for the role of a JTAC/FAC(A), mission elements and roles may be simulated during training.



A2.1.10. CAS in Urban Terrain. CAS in urban terrain emphasizes target identification, attack axis limitations, and avoiding collateral damage in close proximity to and coordination with friendly forces.

A2.1.11. CAS with Special Operations Forces Event. Special Operations interoperability and support during non-traditional CAS missions. Training requires scenario development, terminal attack, and brief/debrief with Special Operations personnel.

A2.1.12. Combat Search and Rescue (CSAR) Mission. A specific mission performed by rescue forces to recover distressed personnel during war or military operations other than war. Mission elements include: Intel scenario and mission planning, actual or simulated interface with theater air control system command and control network, electronic and visual search patterns and procedures, identification and authentication of survivor, target marking, ordnance selection, positive control of ground attack fighters employing simulated or actual ordnance against designated threats to survivor, identification and neutralization of ingress and egress route enemy air defenses, rescue force protection (including rendezvous, escort, and hover cover), battle damage assessment, and in-flight report.

A2.1.13. Commander Option Mission. An allotment of missions to each pilot for allocation at commander's discretion in support of training requirements and unit objectives. Commander option missions are part of the pilot's overall training cycle sortie allotment and may be designated uniquely for each pilot or generally for all in the unit.

A2.1.14. Composite Force Training. Scenarios employing multiple flights of the same or different MDS aircraft, each under the direction of its own flight leader, performing the same or different roles (AFI 11-214). Blue air sorties including multiple fighter/bomber MDSs, a command and control platform (desired for flight event), and an A/A and/or A/G threat scenario. Reference RTM for specific flight and SIM event requirements.

A2.1.15. Contingency Sortie. A sortie tasked and flown while deployed for a contingency operation. Training is not normally conducted during contingency operations; however, SQ/CCs will determine when pilot/aircrew can log training for contingency sorties.

A2.1.16. Counter Fast Attack Craft/Fast Inshore Attack Craft Mission. A concept that adapts elements of Air Operations in Maritime Surface Warfare, is conducted in direct defense of maritime assets and requires increased integration between air and surface delivered fires and the movement of maritime forces. Primary consideration is rapid response to counter immediate threats and attack targets of opportunity. For more on Counter Fast Attack Craft/Fast Inshore Attack Craft, see Air Force Doctrine Document (AFDD) 3-04 Change 1, *Countersea Operations*.

A2.1.17. Degraded/Denied Communications. Inflight operations in a comm jamming environment that provides realistic effects (intervals and duration) without use of active anti-jam radios and/or effective chattermark procedures to counter jamming.

A2.1.18. Degraded/Denied Datalink. Inflight operations with degraded or denied datalink. Log only one event per sortie. In the absence of systems capable of degrading or denying datalink, the effects may be generated by turning systems OFF or SILENT.

A2.1.19. Degraded/Denied GPS. Inflight operations with degraded or denied GPS which impacts navigation and/or weapons capability at a minimum. In the absence of actual systems

capable of degrading or denying GPS, the effects may be generated by selecting a non-GPS navigational aid or turning GPS OFF.

A2.1.20. Demanding Mission. Missions that task the pilot to the extent that flying currency and proficiency are most critical. Missions and events requiring demanding mission currency are: ACM, Air Combat Tactics, LOWAT below 1,000 feet AGL, CAS, Surface Attack Tactics, joint/composite force training, and aerial demonstrations. SQ/CCs may add missions/events to the demanding mission list, depending on unit tasking and pilot capabilities. See Non-Demanding Mission.

A2.1.21. Dynamic Targeting A/G Event. Complete an air-to-ground attack/engagement against a target/time sensitive target relayed/passed by an appropriate command and control asset. Targeting within a CAS scenario does not meet the intent of this event.

A2.1.22. Electronic Combat Event A/A. Detecting an airborne threat via electronic means and reacting with appropriate maneuvers, pod/internal electronic countermeasures switchology, and expendables. Airborne threat training will be accomplished only with a dedicated adversary attacking from beyond visual range. Only one event may be logged per mission.

A2.1.23. Electronic Combat Event A/G. Detecting a surface threat via electronic means and reacting with appropriate maneuvers, pod/internal electronic countermeasures switchology and/or expendables. Only one event may be logged per mission.

A2.1.24. Electronic Attack A/A Event. An intercept performed against a target using active and/or passive electronic protection against attacker's radar, causing the attacker to employ electronic attack techniques or tactics. Does not include co-channel interference.

A2.1.25. Event. Unless otherwise specified in these event descriptions, units will determine the necessary parameters for fulfilling and/or logging tasked events. An event is defined in one of the following manners:

A2.1.25.1. Accomplishment of a specific training element, function, or task.

A2.1.25.2. A specific type of weapon delivery performed during a mission, defined by aircraft flight path, ordnance delivered, delivery method, or target struck.

A2.1.25.3. Expending ordnance, or simulated attack where allowed, against a target according to predetermined flight path parameters and delivery methods. A single delivery constitutes an event.

A2.1.26. Formation Approach. Begins no later than the final approach fix and may terminate in a restricted low approach or low approach.

A2.1.27. Forward Air Controller (Airborne) (FAC(A)) Mission. Special capability mission designed to develop proficiency in airborne forward air control of armed attack fighters in support of actual or simulated ground forces, and can be flown as element lead or the supporting wingman (if FAC(A) qualified). Mission elements include: intel scenario and mission planning, actual or simulated interface with ground command and control network, target acquisition and identification, FAC-to-fighter brief, target marking, positive control (Type 1, 2, or 3) of ground attack fighters employing simulated or actual ordnance against designated targets, integration of ground and heliborne fire support elements (if available), identification and neutralization of enemy air defenses, battle damage assessment, and inflight report.

A2.1.28. Have Quick / Secure Voice Event. Requires proper radio configuration for HAVE QUICK / Secure Voice operation and successful utilization during tactical mission accomplishment and/or effective chattermark procedures.

A2.1.29. Illumination Event. Delivery of target area illumination in a tactical scenario for the purpose of enhancing weapons delivery. Event includes LUU-type parachute flares and illumination rockets, but does not include self protection flares. Only one event may be logged per mission.

A2.1.30. Instrument Mission. Training designed to ensure instrument proficiency. RAP events may be accomplished on an instrument sortie mission provided accomplishment does not interfere with the primary goal of instrument training. Units are allocated sorties for every pilot to accomplish their basic skills requirements and maintain minimum basic skills.

A2.1.31. Low Altitude Intercept. An intercept conducted below 5,000 feet AGL.

A2.1.32. Low Altitude Training (LOWAT). Tactical training operations in a certified low altitude block, which is divided into low altitude step-down training (LASDT) categories. This tactical training does not apply to traffic pattern operations or other basic transitions through the low-altitude structure. A LOWAT event involves performing realistic, mission-oriented low altitude operations while in a LOWAT-certified low altitude block, in which pilots practice realistic reactions to air and ground threats. LOWAT is divided into two currencies/events, LOW A/A and LOW A/G.

A2.1.33. LOW A/A Currency. Mission-oriented A/A operations while in a LOWAT certified LOWAT altitude (see [table 6.1](#)). Includes skills necessary to search for and engage an aerial target at low altitude offensively or defensively.

A2.1.34. LOW A/G Currency. Mission-oriented A/G operations while in a LOWAT certified LOWAT block (see [table 6.1](#)). LOW A/G events include low altitude tactical navigation/formation, defensive maneuvering to avoid or negate ground threats, and low altitude weapons delivery.

A2.1.35. Night Sortie. Sortie on which either takeoff or landing and at least 50 percent of flight duration or 1 hour, whichever is less, occur between the end of evening civil twilight and the beginning of morning civil twilight.

A2.1.36. Non-Automatic Direction Finder Electronic Search Event. Applies to CSAR-certified pilots only. Event using on-board non-direction finding electronic search equipment (such as LARS or Quickdraw) for the purpose of locating ground personnel in a tactical scenario. Only one event may be logged per mission.

A2.1.37. Non-Demanding Mission. Missions that provide the pilot with the opportunity to regain basic flying proficiency after a period of non-flying. Events in this mission do not excessively task pilot skills that have been underused. Missions not included in A.2.1.20. are non-demanding missions. SQ/CCs take into account operational risk management before determining whether a mission is non-demanding depending on unit tasking and the individual's capabilities. See Demanding Mission.

A2.1.38. Red Air Mission. Mission where adversary tactics, aircraft simulation, weapon systems, and/or maneuvering is replicated in support of blue air.

A2.1.39. **Sortie.** An operational flight from takeoff to final full stop landing which includes a set of tasks that lead to an (airborne) objective, to include associated planning, brief, enroute, mission execution, recovery, and debrief events.

A2.1.40. **Strike Coordination and Reconnaissance Mission.** Mission flown for the purpose of detecting targets and coordinating or performing attack or reconnaissance on those targets (AFTTP 3-2.72, *Multi-Service Tactics, Techniques, and Procedures for Strike Coordination and Reconnaissance (SCAR)*).

A2.1.41. **Surface Attack Tactics Mission.** Mission designed to develop tactical surface attack proficiency. Mission elements include: mission planning, execution with actual or simulated threats, and weapons delivery in accordance with unit taskings, simulating unit committed munitions list munitions, and standard conventional loads. Simulated attacks may be conducted against realistic targets in accordance with local restrictions.

A2.1.42. **Terminal Attack Control Event.** Consists of at least one live, dry, or simulated aircraft (fixed/rotary wing) attacking a surface target. The control should follow the CAS execution template in accordance with JP 3-09.3, *Close Air Support*. An actual weapons release is not required. No more than one control per aircraft can be counted per CAS briefing. Events only apply to FAC(A) qualified pilots and are in accordance with current Joint Fire Support Executive Steering Committee Action Plan Memorandum of Agreement 2004-02, *Joint Forward Air Controller (Airborne) (FAC(A))*, (JFS ESC AP MOA). Track each event performed by type as defined by FAC(A) MOA documentation requirements. FAC(A)s should satisfy their requirements with ground units or Tactical Air Control Parties to the maximum extent possible.

## **A2.2. Weapon Employment Terms.**

A2.2.1. A delivery is defined as a pass at a target on which ordnance is expended or simulated and meets the criteria defining a specific weapon delivery. Weapon events are defined in [Chapter 5](#). All deliveries are recorded, but not necessarily as a record delivery. The two types of deliveries are as follows:

A2.2.1.1. **Basic Delivery.** A delivery using a conventional box pattern. It may be used as a record event only for initial certification. There is no restriction on the number of dry passes made before or during basic deliveries in a record event for initial certification; however, only the first two deliveries per event may count for record.

A2.2.1.2. **Tactical Delivery.** A delivery using patterns and techniques that minimize final flight path predictability, yet allow sufficient time for accurate weapons delivery. When a tactical delivery is flown for record, dry passes in the event are not permitted before or during the event. Wings level time on final is limited to five seconds when the aircraft will descend below 4,500 feet AGL, except for level, inertially aided munition, laser guided bomb, Maverick, and climbing deliveries. Timing will be from completion of roll-out until initiation of weapons release and exceeding five seconds will result in gross error. All tactical deliveries will normally include recovery to egress parameters.

A2.2.2. A delivery constitutes a weapons delivery event based on two categories, record keeping (Record or Non-Record), and RAP tasking familiar (FAM) and proficient (PROF), as follows:

#### A2.2.2.1. Record Keeping.

A2.2.2.1.1. Non-Record. Weapons delivery accomplishments not credited toward weapons proficiency provided the pilot declares “non-record” prior to beginning the event.

A2.2.2.1.2. Record. Weapons delivery scored for individual proficiency. Scoring shall be accomplished by ground, air, or mission recording (for guided weapons), as appropriate. A maximum of two record deliveries may be credited during a mission from a single run-in heading. Additional record deliveries may be accomplished from headings differing by at least 90 degrees or on different targets/ranges. Record deliveries may not be preceded by non-record deliveries in the event on the same sortie. The first two deliveries in each event are considered record unless otherwise declared prior to the roll-in to final. Additional guidelines are:

A2.2.2.1.2.1. Basic. Delivery scored on a Class A range (in accordance with AFI 13-212V1, *Range Planning and Operations*).

A2.2.2.1.2.2. Tactical. A minimum of 50 percent must be accomplished on a ground scored range, except for simulated precision munition events. Remaining record hits may be air scored by reference to known distances from the target. **(T-3)**.

A2.2.2.1.2.3. Strafe. Aircraft rounds limiter is set to total number of rounds for the planned strafe events but no less than 100 rounds. A minimum of 50 rounds per strafe event must be set and expended to satisfy RAP strafe requirements. **(T-3)**.

A2.2.2.1.2.4. Laser Guided Bomb. Designator and bomber functions are accomplished simultaneously by a single aircraft using self-lase procedures. To record a complete laser guided bomb delivery using buddy-lase designation techniques, one simulated or actual weapons release and one designation must be performed, if authorized by the SQ/CC. **(T-3)**.

#### A2.2.2.2. RAP Tasking. See current RTM for training cycle requirements.

A2.2.2.2.1. Familiar. Weapons events tasked at FAM may be basic/tactical record deliveries. Each single hot pass counts as one delivery. Hit percentage criteria for FAM events is not specified and is tracked at unit’s discretion.

A2.2.2.2.2. Proficient. Weapons events tasked at PROF must be tactical, record deliveries. **(T-3)**. PROF tasking demonstrates the pilot's ability to put appropriate ordnance on target. Unless otherwise specified in the RTM or formal course syllabi, **Chapter 5** establishes PROF criteria for each event.

#### A2.2.3. Miscellaneous definitions of weapons deliveries and events.

A2.2.3.1. Dry Pass. Weapons delivery pass during which no ordnance is expended. Such dry passes prior to completion of record deliveries in an event are charged to the pilot as gross error unless the pass was dry because of safety considerations, system malfunctions, basic delivery requirements, or directed for flight integrity purposes.

A2.2.3.2. Foul. A penalty directed to a specific aircraft and pilot for actions inconsistent with established procedures or safety considerations. A foul will result in a gross error for

that delivery (except non-acoustic-scored strafe that will be penalized one-half the event score). A second foul or any dangerous pass will result in mandatory expulsion from any further deliveries during that mission and a gross error score for the event. A foul will be charged in accordance with flying directive publications. Verbal warnings do not constitute a foul.

A2.2.3.3. Full Scale Weapons Delivery. Delivery of live or inert ordnance representing a typical combat configuration or standard configuration load in a tactical scenario.

A2.2.3.4. Gross Error. A penalty score or miss assigned to a pilot's records when a weapons delivery attempt results in: munitions impact outside the range scoring capability, a chargeable dry pass, a foul, an unintentional release, or exceeding tactical delivery time on final requirements.

A2.2.3.5. Hit. Any munitions impact within the weapons criteria established for that event. For simulated weapons employment, hits will be assessed by mission recording review.

A2.2.3.6. Multiple or Unexpected Release. More than one weapon released against the same target on a single pass or a weapon released without approval, and assessed as follows:

A2.2.3.6.1. Intentional. Predetermined multiple ordnance release. The pilot will advise the range officer prior to delivery and may designate which impact to score.

A2.2.3.6.2. System Malfunction. Undeclared multiple release caused by a verified system malfunction. Score is void after the system malfunction is verified, otherwise unintentional rules apply.

A2.2.3.6.3. Inadvertent. Unexpected ordnance release by the aircraft, uncommanded by the pilot. Impact will not be scored.

A2.2.3.6.4. Unintentional. Unexpected ordnance released due to pilot error. Scored as a gross error regardless of impact point.

A2.2.3.7. No Spot. A weapons release during which no impact was observed. No score or error will be assigned.

A2.2.3.8. Void Delivery. Weapons delivery not successfully completed due to a documented and verified weapons system malfunction, a pass aborted for safety, no spot, or circumstances beyond the control of the pilot.

### Attachment 3

#### VERIFICATION GUIDE FOR A/G

**A3.1. Verification Briefing Outline.** The following outlines are provided as guidelines for the development of verification briefs (reference [paragraph 3.2.3.2](#)).

**A3.2. Overview.**

A3.2.1. Introduction (participants and brief classification).

A3.2.2. Status of friendly forces (ground, air and support).

**A3.3. Area of Operations.**

A3.3.1. Geography (topography, population centers, lines of communications, chokepoints and natural obstacles, major visual and radar significant identification points).

A3.3.2. Climatology (effects on unit operations, ground troop movements, and in-flight operations).

A3.3.3. Operating base (location, facilities, procedural constraints, strengths and limitations).

**A3.4. Status of Enemy Forces.**

A3.4.1. Ground forces and accompanying air defense threats (enemy order of battle, surface to air missiles, anti-aircraft artillery, electronic combat, and meaconing intrusion jamming and interference), capabilities, strengths and weaknesses.

A3.4.2. Airborne forces (numbers, locations, capabilities and tactics).

**A3.5. Mission Employment Brief.**

A3.5.1. Ground operations.

A3.5.2. Departure (weather contingencies, options).

A3.5.3. Route of flight (threat analysis, alternatives, fuel requirements, decision points).

A3.5.4. Target ingress (initial point-to-target specifics, tactics).

A3.5.5. Weapons employment (target data, desired munitions point of impact, attack parameters, load, fusing, suitability, delivery modes, backups).

A3.5.6. Sensor management plan.

A3.5.7. Egress plan (route, mutual support agreements).

A3.5.8. Reattack plan, options.

A3.5.9. Downed pilot, wounded bird plan.

A3.5.10. Recovery (safe corridor procedures, identification friend or foe procedures, alternate and emergency airfields).

**A3.6. Escape and Evasion.**

A3.6.1. Areas for evasion.

A3.6.2. Search and rescue procedures.

**A3.7. Essential Elements of Information/Reports.**

A3.7.1. Essential Elements of Information.

A3.7.2. Required reports and reporting procedures.



## Attachment 4

## EXAMPLE FAC(A) CERTIFICATION MEMORANDUM

Figure A4.1. Example FAC(A) Certification Memorandum.

<b>FAC(A) Certification Document</b>												
Name: _____ <div style="text-align: center; font-size: small;">First, MI, Last</div>												
<b>SECTION 1 - Minimum Successful Terminal Attack Controls*</b>												
Event	# Req'd	Date and Number of Events Accomplished										Totals
FW CAS Aircraft	6											
RW CAS Aircraft	1 <sup>(1)</sup>											
Type 1	6											
Type 2	2 <sup>(1)</sup>											
Type 3	1 <sup>(1)</sup>											
LTD/R Pointer	2 <sup>(1)(2)</sup>											
Non-permissive	2											
Day	2											
Night	2											
Live/Tmg Ord	4											
ISO JTAC	2 <sup>(1)</sup>											

\* Minimum total of 12 Terminal Attack Controls  
 (1) Live, Dry, or Simulated Terminal Attack Control  
 (2) Will include use of one airborne and one ground based LTD or R Pointer. LTD may be used to provide target mark, correlation, and/or weapons guidance.

<b>SECTION 2 - Course Completion</b>
<p>This is to certify that _____ (First, MI, Last) successfully completed FAC(A) certification IAW the JFS ESC FAC(A) MOA (10 Feb 15) and AFI 11-2A-OA-10V1 (31 Aug 06) on _____ (DD MMM YY). This document, along with a current Letter of X, CAS Log, recurring FAC(A) Evaluation Form, and JFAC(A) Course Certificate, will serve as evidence that this individual is a qualified FAC(A).</p> <div style="text-align: right; margin-top: 20px;">           _____            Rank and Name of Certifying Official         </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="text-align: center;">             _____              Signature of Certifying Official           </div> <div style="text-align: center;">             /              / Date           </div> </div>

## Attachment 5

## EXAMPLE FAC(A) REQUALIFICATION DOCUMENT

Figure A5.1. Example FAC(A) Requalification Document.

FAC(A) Requalification Document												
As of _____ (DDMMYY), _____ (First, MI, Last) is unqualified as a FAC(A) due to												
failure to meet the requirements IAW JFS ESC FAC(A) MOA (10 Feb 2015) Para. 5.3.5 and/or the RTM for the _____ (AS-X) cycle.												
In order to requalify, he/she must meet the requirements listed below NLT _____ (DDMMYY) + 6 months.												
Supervision required: SECTION 1 - a qualified FAC(A) or FAC(A)-I; SECTION 2 - a qualified FAC(A)-L.												
<small>Note: A FAC(A) who is unqualified for more than six months, but less than 24 months, must complete the control requirements IAW JFS ESC FAC(A) MOA Para. 5.3.5 under the supervision of a qualified FAC(A)-L.</small> <small>A FAC(A) who is unqualified for 24 consecutive months must regain qualification by completing the certification syllabus and the control requirements IAW the JFS ESC FAC(A) MOA Para. 5.3.5 under the supervision of a qualified FAC(A)-L.</small>												
SECTION 1 - JFS ESC FAC(A) MOA Control Requirements*												
Event	# Req'd	Date and Number of Events Accomplished										Totals
Total TACs	(1)											
RW CAS Aircraft												
RW CAS Aircraft	(1)											
Type 1	(1)											
Type 2	(1)											
Type 3	(1)											
LTD/IR Pointer	(1)(2)											
Non-permissive	(1)											
Day	(1)											
Night	(1)											
Live Trng Ord												
ISO JTAC	(1)											
<small>* Minimum of 12 terminal attack controls per annual cycle.</small> <small>(1) Live, Dry, or Simulated Terminal Attack Control.</small> <small>(2) LTD or IR Pointer can be airborne or ground based. LTD may be used to provide target mark, correlation, and/or weapons guidance.</small>												
SECTION 2 - RTM Sortie Requirements**												
Event	# Req'd	Date Accomplished										Totals
Day Sortie												
Night Sortie												
<small>** N/A for TF and CB coded units.</small>												
SECTION 3 - Requalification Certification												
This is to certify that _____ (First, MI, Last) successfully completed FAC(A) requalification IAW the												
JFS ESC FAC(A) MOA (10 Feb 15) and AF 11-2A-CA-10V1 (31 Aug 08) on _____ (DDMMYY). This document,												
along with a current Letter of X, CAS Log, recurring FAC(A) Evaluation Form, JFAC(A) Course Certificate, and FAC(A) Certification Document,												
will serve as evidence that this individual is a qualified FAC(A).												
<div style="text-align: center;">           _____            Rank and Name Of Certifying Official         </div>												
<div style="text-align: center;">           _____ / _____            Signature Of Certifying Official / Date         </div>												

## Attachment 6

# **EXAMPLE FAC(A) REQUALIFICATION DOCUMENT (6-24 MONTHS UNQUALIFIED)**

Figure A6.1. Example FAC(A) Requalification Document (6-24 Months Unqualified).

FAC(A) Requalification Document (6-24 Months Unqualified)												
As of _____ (DDMMYY), _____ (First, M. Last) has been unqualified as a FAC(A)												
for six months. In order to requalify, he/she must complete the control requirements IAW JFS ESC FAC(A) MOA (10 Feb 15) Para. 5.3.5												
under the supervision of a qualified FAC(A)-INLT _____ (DDMMYY + 18 months).												
<small>Note: A FAC(A) who is unqualified for more than six months, but less than 24 months, must complete the control requirements IAW JFS ESC FAC(A) MOA Para. 5.3.5 under the supervision of a qualified FAC(A)-I.</small> <small>A FAC(A) who is unqualified for 24 consecutive months must regain qualification by completing the certification syllabus and the control requirements IAW the JFS ESC FAC(A) MOA Para. 5.3.5 under the supervision of a qualified FAC(A)-I.</small>												
SECTION 1 - JFS ESC FAC(A) MOA Para. 5.3.5 Control Requirements*												
Event	# Req'd	Date and Number of Events Accomplished										Totals
FW CAS Aircraft	2											
RW CAS Aircraft	1 <sup>(1)</sup>											
Type 1	2 <sup>(1)</sup>											
Type 2	2 <sup>(1)</sup>											
Type 3	1 <sup>(1)</sup>											
LTD/IR Pointer	1 <sup>(1)(2)</sup>											
Non-permissive	2 <sup>(1)</sup>											
Day	1 <sup>(1)</sup>											
Night	1 <sup>(1)</sup>											
Live/Timg Ord	1											
ISO JTAC	1 <sup>(1)</sup>											
<small>* Minimum of 6 Terminal Attack Controls</small> <small>(1) Live, Dry, or Simulated Terminal Attack Control</small> <small>(2) LTD or IR Pointer can be airborne or ground based. LTD may be used to provide target mark, correlation, and/or weapons guidance.</small>												
SECTION 2 - Requalification Certification												
<p>This is to certify that _____ (First, M. Last) successfully completed FAC(A) requalification IAW the</p> <p>JFS ESC FAC(A) MOA (10 Feb 15) and AFI 11-2A-OA-10V1 (31 Aug 06) on _____ (DDMMYY). This document,</p> <p>along with a current Letter of X, CAS Log, recurring FAC(A) Evaluation Form, JFAC(A) Course Certificate, and FAC(A) Certification Document,</p> <p>will serve as evidence that this individual is a qualified FAC(A).</p>												
<p align="center">Rank and Name Of Certifying Official</p>												
<p align="center">_____ Signature Of Certifying Official</p>												
<p align="center">_____ Date</p>												

## Attachment 7

### EXAMPLE FAC(A) REQUALIFICATION DOCUMENT (GREATER THAN 24 MONTHS UNQUALIFIED)

**Figure A7.1. Example FAC(A) Requalification Document (Greater Than 24 Months Unqualified).**

FAC(A) Requalification Document (Greater Than 24 Months Unqualified)												
As of _____ (DDMMYY), _____ (First MI, Last) has been unqualified as a FAC(A)												
for 24 months. In order to requalify, he/she must complete the certification syllabus and the control requirements IAW												
JFS ESC FAC(A) MOA (10 Feb 15) Para. 5.3.5 under the supervision of a qualified FAC(A)-L.												
<p>Note: A FAC(A) who is unqualified for more than six months, but less than 24 months, must complete the control requirements IAW JFS ESC FAC(A) MOA Para. 5.3.5 under the supervision of a qualified FAC(A)-L.</p> <p>A FAC(A) who is unqualified for 24 consecutive months must regain qualification by completing the certification syllabus and the control requirements IAW the JFS ESC FAC(A) MOA Para. 5.3.5 under the supervision of a qualified FAC(A)-L.</p>												
SECTION 1 - JFS ESC FAC(A) MOA Para. 5.3.5 Control Requirements*												
Event	# Req'd	Date and Number of Events Accomplished										Totals
FW CAS Aircraft	2											
RWCAS Aircraft	1 <sup>(1)</sup>											
Type 1	2 <sup>(1)</sup>											
Type 2	2 <sup>(1)</sup>											
Type 3	1 <sup>(1)</sup>											
LTD/IR Pointer	1 <sup>(1)(2)</sup>											
Non-permissive	2 <sup>(1)</sup>											
Day	1 <sup>(1)</sup>											
Night	1 <sup>(1)</sup>											
Live Trng Ord	1											
ISO JTAC	1 <sup>(1)</sup>											
<p>* Minimum of 6 terminal attack controls</p> <p>(1) Live, Dry, or Simulated Terminal Attack Control</p> <p>(2) LTD or IR Pointer can be airborne or ground based. LTD may be used to provide target mark, correlation, and/or weapons guidance.</p>												
SECTION 2 - Requalification Certification												
This is to certify that _____ (First MI, Last) successfully completed FAC(A) requalification IAW the												
JFS ESC FAC(A) MOA (10 Feb 15) and AFI 11-2A-OA-10V1 (31 Aug 06) on _____ (DDMMYY). This document,												
along with a current Letter of X, CAS Log, recurring FAC(A) Evaluation Form, JFAC(A) Course Certificate, and FAC(A) Certification Document,												
will serve as evidence that this individual is a qualified FAC(A).												
<p>Rank and Name Of Certifying Official</p> <p>Signature Of Certifying Official _____ / _____</p> <p>Date</p>												