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SECRETARY OF THE AIR FORCE**

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Flying Operations

B-1 AIRCREW TRAINING

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This manual implements Department of the Air Force Policy Directive (DAFPD) 11-2, *Aircrew Operations*; and DAFPD 11-4, *Aviation Service*; and references AFMAN 11-202V1, *Aircrew Training*. It applies to all B-1 units. This publication applies to all members of the Department of the Air Force (DAF), including all civilian employees and uniformed members of the Regular Air Force and the Air Force Reserve. It does not apply to the Air National Guard. This Manual requires the collection and/or maintenance of information protected by the Privacy Act of 1974, authorized by Title 37 United States Code Section 301a, *Incentive Pay*; Public Law (PL) 92-204, Section 715, *Appropriations Act for 1973*; PL 93-570 *Appropriations Act for 1974*; PL 93-294, *Aviation Career Incentive Act of 1974*; and Executive Order 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*. The applicable SORN F011 AF XO A, Aviation Resource Management System is available at <http://dpclo.defense.gov/Privacy/SORNs.aspx>. Ensure that all records created because of processes prescribed in this publication are maintained in accordance with AFI 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS). Recommendations for improvements to this manual will be submitted on AF Form 847, *Recommendation for Change of Publication*, through channels, to the parent Major Command (MAJCOM) Standardization/Evaluation (Stan/Eval). Parent MAJCOM Stan/Eval will forward approved recommendations to lead command OPR (Headquarters (HQ) AFGSC/A3TV, 245 Davis Avenue East, Barksdale AFB LA, 71110). MAJCOMs/Direct Reporting Units (DRUs)/ Field Operating Agencies (FOAs) will forward proposed MAJCOM/DRU/FOA-level supplements to this manual to HQ AFGSC/A3TV, for coordination prior to certification and approval. Copies of MAJCOM/DRU/FOA-level supplements, after

approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ AFGSC/A3TV, and the user MAJCOM/DRU/FOA and Air Force Reserve Command (AFRC) offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **NOTE:** The terms DRU and FOA as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ United States Air Force (USAF). Keep supplements current by complying with Department of the Air Force Instruction (DAFI) 33-360, *Publications and Forms Management*. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (T-0, T-1, T-2 or T-3) number following the compliance statement. See DAFI 33-360 for a description of the authorities associated with the Tier numbers and reference [Paragraph 1.4](#) of this manual for specific waiver guidance.

SUMMARY OF CHANGES

This document has been substantially revised and must 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, and significant administrative changes to baseline procedures across all B-1 aviators.

Chapter 1—GENERAL GUIDANCE	5
1.1. Purpose.....	5
1.2. Roles and Responsibilities.	5
1.3. Processing Supplements.	7
1.4. Waivers.	7
1.5. Training Programs, Concepts, and Guidelines.....	7
1.6. Mission Recording.....	8
1.7. In-Flight Supervision.	8
1.8. Experienced Aircrew Requirements.	8
1.9. Instructor Aircrew Requirements.....	8
1.10. RAP Instructions and Management.	8
1.11. Training Records and Reports.	9
1.12. Aircrew Utilization Guidance.....	9
1.13. Unit Manpower.....	10

Chapter 2—INITIAL QUALIFICATION TRAINING	11
2.1. General.....	11
2.2. Approval and Waiver for Local IQT.	11
2.3. Prerequisites.	11
2.4. Ground Training.	11
2.5. Flight Training.	11
2.6. Basic Qualification Course (B1BC/TX-1).....	12
2.7. Requalification Training Course (TX-2/TX-3).....	12
2.8. Senior Officer Course (SOC).....	12
Chapter 3—MISSION QUALIFICATION TRAINING	13
3.1. General.	13
3.2. Combat Coded Purpose Identifier (CC-coded) Unit MQT.....	13
3.3. Test/Training-coded Unit MQT.....	15
3.4. Flight Surgeon Ground Training.....	15
Chapter 4—CONTINUATION TRAINING	16
4.1. General.	16
4.2. Continuation Training (CT).	16
4.3. Aircrew Currencies.....	16
4.4. CC-coded Units.....	16
Figure 4.1. Regression Flow Chart.....	20
4.5. Test/Training-coded Units.	21
4.6. Special Categories.....	22
4.7. Multiple Qualification/Currency.....	22
Chapter 5—WEAPONS DELIVERY/EMPLOYMENT CERTIFICATION	23
5.1. General.....	23
5.2. Initial Qualification.....	23
5.3. CT Certification.	23
5.4. Weapons Delivery Parameters.....	24

Chapter 6—SPECIALIZED TRAINING	26
6.1. General.....	26
6.2. Night Vision Goggle (NVG) Certification.	26
6.3. Visual Formation Certification.	26
6.4. Air Refueling (AR).	27
6.5. Aircraft Commander/Single-Ship Mission Lead (AC/SML) Certification.....	28
6.6. Single-Ship Mission Lead (SML) Certification.....	29
6.7. Flight Lead Upgrade (FLUG) Certification.	30
6.8. Multi-Ship Mission Lead (MML) Certification.....	30
6.9. Mission Commander (MC) Certification.	31
6.10. Maritime Mine Planner Program.	32
6.11. JASSM Planner Program.	32
6.12. Long Range Anti-Ship Missile (LRASM) Planner.....	33
6.13. Flight Instructor Course (FIC).	33
6.14. FIC Instructor Certification.....	33
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	35

Chapter 1

GENERAL GUIDANCE

1.1. Purpose. This manual prescribes instructions and guidance for training B-1 aviators. It is supplemented by specific training programs, syllabi, and the Ready Aircrew Program (RAP) Tasking Memorandum (RTM) to further describe various phases of training. If a conflict is found between any guidance herein and such documents, contact Air Force Global Strike Command Flight Operations and Training (AFGSC/A3TO) for resolution.

1.2. Roles and Responsibilities.

1.2.1. Air Force Global Strike Command Operations and Communication (AFGSC/A3/6) is the responsible agency for this volume. AFGSC/A3/6 will:

1.2.1.1. Attend annual Combat Air Forces (CAF) Realistic Training Review Board (RTRB) to review ground and flying training requirements and programs. RTRB participation is focused at the group commander and MAJCOM/A3T level and includes active and reserve component units and organizations.

1.2.1.2. Process all change requests.

1.2.2. User MAJCOMs will determine training requirements to fulfill Designed Operational Capability (DOC) statement missions or other unit assigned missions via supplement or RTM.

1.2.3. Wings/groups will:

1.2.3.1. Review unit training programs annually. **(T-2)**. Coordinate and standardize between units where appropriate. Assist subordinate units in management and execution of training programs. **(T-2)**. References in this AFMAN for units to establish training programs or policies does not preclude groups or wings across the community from establishing programs or policies.

1.2.3.2. Attach Aircrew Position Indicator (API)-6/8 aircrew to a flying Squadron (SQ). **(T-2)**. **Exception:** when otherwise mandated, designate the training level for each API-6/8 (AFR: all aircrew). **(T-2)**. Review manning programs and position designations annually. **(T-3)**.

1.2.3.3. Annually review any unit supplements to this volume. **(T-2)**. Forward supplements to MAJCOM/A3T for information upon initial release or following significant changes (AFR: to AFRC/A3D). **(T-2)**.

1.2.3.4. Consolidate and forward group RAP reports, in accordance with the format and timing specified in the RTM, to AFGSC/A3T. **(T-2)**. AFR units will email training reports to AFRC/A3D. **(T-2)**.

1.2.3.5. Coordinate formal training requirements and enrollments. **(T-2)**.

1.2.4. **Note :** throughout this publication, where a Squadron Commander is the decisional authority for training issues, this denotes the flying Squadron Commander for the unit to which a crewmember is attached, or the gaining commander for crewmembers transferring between units. Squadrons/units will:

1.2.4.1. Certify and publish a letter of aircrew qualifications (QUAL) and certifications (Letter of Xs, or LoX). **(T-3)**. A digital equivalent is acceptable, as long as the document summarizes qualifications and certifications by individual and documents the Squadron Commander's endorsement of same, either on the document or by ready reference to the training folder.

1.2.4.2. Determine which Combat Mission Ready (CMR)/Basic Mission Capable Tier 1 (BMC1)/BMC Tier 2 (BMC2) aircrew carry special capabilities and qualifications. **(T-3)**.

1.2.4.3. Determine utilization of BMC aircrew. **(T-3)**. Determine missions/events in which individual BMC aircrew maintain qualification/certification. **(T-3)**.

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

1.2.4.5. Review training and evaluation records to determine training requirements for newly assigned aircrew to achieve BMC/CMR/Mission Ready (MR). **(T-3)**. At a minimum, archive the most recent flying assignment training folder (if available). **(T-3)**.

1.2.4.6. Develop unit training programs in accordance with RTM guidance. **(T-2)**. Consider attrition and collateral sorties when developing unit training and flying hour programs (FHP).

1.2.4.7. Review qualifications and training requirements of non-aircrew (Flight Surgeon, Ground Liaison Officer (GLO), etc.) and determine appropriate flight restrictions. **(T-3)**.

1.2.4.8. Ensure aircrew only participate in missions, events, and tasks for which they are prepared, current, qualified/certified, or are being trained for that mission, event, or task.

1.2.4.9. Submit Periodic and End-of-Cycle (EOC) Training Reports (N/A for Training Units; N/A for Designated Test (test-)/Designated Training (TF)-coded units).

1.2.4.9.1. Prepare periodic RAP reports in accordance with the format and timing given in the RTM. **(T-3)**. Submit reports to the OG/CC to consolidate and review. **(T-3)**.

1.2.4.9.2. This report will include requirements waived by operations group commanders. **(T-2)**. Commanders should use Status of Resources and Training System (SORTS) and Defense Readiness Reporting System (DRRS) to highlight specific decisions on training or equipment priorities as they relate to DOC tasking to communicate shortfalls.

1.2.4.10. Conduct a Training Review Board (TRB) to review/assign formal training allocations, review training programs and trends, and assess individual aircrew proficiency and progression. **(T-3)**. TRBs should be held quarterly.

1.2.4.11. [Formal Training Unit (FTUs) only] Report training health as directed by AFGSC/A3T via CAF Formal Training Review (CFTR). **(T-2)**.

1.2.4.12. Ensure Striker Vista aircrew are instructor qualified in the new platform within 2 years of starting Initial Qualification Training (IQT). **(T-3)**. Notify AFGSC/CD if training exceeds the two year time period. **(T-2)**.

1.2.5. Individual aircrew will:

1.2.5.1. If applicable, hand-carry Flight Evaluation Folder (FEF) and most recent gradebook/LoX to assist the gaining unit in assessing qualifications and training requirements. **(T-2)**. Records in the form of electronic media are acceptable; for such records the individual should notify appropriate personnel to facilitate transfer of records.

1.2.5.2. Monitor currencies and requirements established by this manual. **(T-3)**.

1.2.5.3. Only participate in missions, events, and tasks for which they are prepared, current, qualified/certified, or are being trained for that mission, event, or task. **(T-3)**.

1.3. Processing Supplements.

1.3.1. MAJCOM will forward proposed supplements to this volume to AF/A3O-AI, through AFGSC/A3TO, for approval prior to publication. Copies of approved supplements will be provided by the issuing office to AF/A3O-AI and AFGSC/A3TO. **(T-1)**.

1.3.2. Field units below MAJCOM will coordinate their supplements prior to publication with their parent MAJCOM. **(T-2)**.

1.3.3. Use the following workflow email addresses to coordinate:

1.3.3.1. Air Force Global Strike Command Director of Operations and Communications (AFGSC/A3/6) Workflow: AFGSC.A3Workflow@us.af.mil

1.3.3.2. Air Force Global Strike Command Director of Operations and Communications, Office of Test, Training, and Stan/Eval (AFGSC/A3T) Workflow: AFGSC.A3T.Workflow.1@us.af.mil

1.3.3.3. AFSTRAT Operations (AFSTRAT/A3-Air) Workflow: 8af.a3.5.workflowall@us.af.mil

1.3.3.4. AFRC Combat Operations (AFRC/A3D) Workflow: HQAFCR.A3D.Workflow@us.af.mil

1.4. Waivers. Forward waiver requests through appropriate channels to the applicable MAJCOM/A3 or equivalent, or Commander Air Force Forces (COMAFFOR or equivalent) for those aircrew and assets under the COMAFFOR's oversight, for approval. The COMAFFOR, MAJCOM/A3 (or equivalent) will notify AFGSC/A3 of waivers within 72 hours of issuance. Process waivers in accordance with DAFI 33-360. A copy of the approved waiver must follow within 30 days of issuance. **(T-2)**. Operations group commanders (OG)/CCs have waiver authority for RAP tasking message requirements except flight currencies. Information copies of waivers granted under **(T-3)** waiver authority will be forwarded to AFGSC/A3T and AFRC/A3D. **(T-2)**.

1.5. Training Programs, Concepts, and Guidelines.

1.5.1. Units will design training programs to achieve the highest degree of mission readiness consistent with flight safety and resource availability. **(T-2)**. Training programs progress aircrew through initial qualification training (IQT), mission qualification training (MQT), continuation training (CT), and specialized training as required.

1.5.2. Air Combat Command Training Support Squadron develops formal training syllabi when/where tasked by the Air Combat Command (ACC), Director of Operations (ACC/A3) or coordinated through AFGSC/A3. **Note:** 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-3)**.

1.6. Mission Recording.

1.6.1. Squadron Commander. Squadron Commanders will determine programs for supervisory and/or Mission Lead review of mission recording(s). **(T-3)**.

1.6.2. Aircrew will record from takeoff to landing to maximize training value. **(T-3)**.

1.7. In-Flight Supervision. Squadron supervisors will be experienced aircraft commanders or Weapon Systems Officer (WSO) as designated by the squadron commander. **(T-3)**. Squadron supervisors may be used to regain expired currencies. Squadron leadership will consider event type and length of currency expiration when using squadron supervisors. **(T-3)**. Crewmembers will be current, qualified, or supervised by an instructor of like specialty when live or inert weapons will be employed. **(T-2)**. Document squadron supervisor certification in the crewmember's training record and on the squadron LoX. **(T-3)**.

1.7.1. Instructors may supervise any training in which they are qualified/certified and current, unless otherwise stated, without any additional documentation.

1.7.2. Instructors, Flight Leads (FL), Aircraft Commanders (AC), and Mission Leads (ML) may allow any crewmember to lead limited portions of a mission if they are appropriately briefed. The instructor, FL, ML, AC, or supervisor always retains responsibility for the flight.

1.7.3. FLs or MLs may give their wingman the tactical lead for specific tasks. As the tactical lead, the wingman makes tactical decisions for the flight, but the FL or ML retains overall authority and responsibility.

1.8. Experienced Aircrew Requirements. An experienced crewmember consistently demonstrates the skills (airmanship, situational awareness and tactical leadership) required to effectively employ bomber aircraft in combat. Designation as an experienced aircrew requires aircraft commander (AC) or single-ship mission lead (SML) certification, 18 months B-1 CMR/BMC1 status, and Squadron Commander approval. **(T-3)**. All instructors are considered experienced.

1.9. Instructor Aircrew Requirements. An instructor consistently demonstrates the skills (airmanship, situational awareness, instructional ability, and tactical leadership) required to effectively instruct aircrew and employ bomber aircraft in combat. Designation as an instructor requires instructor qualification. **(T-2)**.

1.10. RAP Instructions and Management. RAP defines the minimum training required to maintain the assigned training status.

1.10.1. The RAP training cycle is 12 months, aligned with the fiscal year and executed as outlined in the RTM. RAP training is designed to focus on skills needed to accomplish DOC-tasked missions following completion of IQT and MQT.

1.10.2. All combat-coded unit Regular Air Force combat-coded units' API-1 or API-2 positions (including flying SQ/CC and Operations Officer (SQ/DO) positions) must be designated CMR or BMC1. **(T-2)**. OG/CCs may designate other API-6 positions not assigned to the flying Squadron as CMR. **Exception:** If a unit is over-manned, the Squadron will train API-1 or API-2 positions (per the unit manning document) to CMR or BMC1 and designate other crewmembers no lower than BMC2. **(T-2)**. Priority should be given to

inexperienced aircrew. **Exception:** AFRC: Any pilot/weapon system officer (WSO) may be designated CMR/BMC1/BMC2 at OG/CC discretion.

1.10.3. Regular Air Force API-6 positions above Squadron level are normally designated BMC1. These BMC1 aircrew are typically assigned to aircrew positions whose primary job lies within wing supervision or a staff function that directly supports the flying operation.

1.10.4. All test/training-coded unit Regular Air Force aircrew positions are designated MR and should fly at a BMC1 rate. **(T-2).**

1.10.5. Attached flyers may be further designated at BMC2. When BMC is used in this publication without a tier designation, it denotes both tiers of BMC. See [paragraph 4.4.2 and 4.4.3](#) for the definition of BMC tiers.

1.11. Training Records and Reports.

1.11.1. Units will maintain aircrew records for individual training and evaluation in accordance with:

1.11.1.1. AFMAN 11-202V1. **(T-2).**

1.11.1.2. AFI 11-202V2, *Aircrew Standardization/Evaluation Program*. **(T-2).**

1.11.1.3. Air Force Global Strike Command Instruction (AFGSCI) 11-464, *Training Records and Performance Evaluation in Formal Flying Training Programs*. **(T-2).**

1.11.1.4. Department of the Air Force Manual (DAFMAN) 11-401, *Aviation Management*. **(T-2).**

1.11.2. Squadron Commanders will track the following information for all crewmembers (as appropriate):

1.11.2.1. Ground training. **(T-3).**

1.11.2.2. Requirements and accomplishment of individual mission types and events cumulatively for the training cycle. **(T-3).**

1.11.2.3. One and three-month RAP lookback as outlined in the RTM. **(T-3).**

1.11.2.4. Currencies. **(T-3).**

1.11.2.5. Weapons employment records in sufficient detail to document all employment attempts and hit percentages. **(T-3).**

1.11.2.6. Units will maintain a training folder for each assigned and attached aircrew member. **(T-3).** Electronic formats (Patriot Excalibur or locally developed products) are mandatory. **(T-2).** Training folders include information on aircrew qualifications/certifications and current assignment training documentation (upgrades, regression, waivers, special qualifications, etc.). Group commanders will standardize training folders across the B-1 community. **(T-2).**

1.12. Aircrew Utilization Guidance.

1.12.1. Allocation of sorties and resources should generally prioritize CMR over BMC, API-1 over API-6, and inexperienced over experienced. Training and test units should prioritize sortie allocations using formal training and test requirements.

1.12.2. While API-1/2 aircrew 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-1/2 aircrew. **(T-3)**.

1.12.3. Crewmembers will not perform long-term duties that detract from their primary duties of training for or performing the unit flying mission. **(T-3)**. For inexperienced crewmembers in the first year of their initial operational assignment, supervisors will limit non-flying duties to those related to operational/combat activities. **(T-3)**.

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

1.13. Unit Manpower.

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

1.13.2. Wings with a formal training mission should strive to maximize instructor qualification (T-prefix) for API-6 aircrew. At least one of the following aircrew should maintain formal instructor status: wing commander (WG/CC) or vice, OG/CC or deputy.

1.13.3. API-8 aircrew authorizations and test-coded authorizations are in accordance with DAFMAN 11-401 and MAJCOM guidance. If units cannot meet attached flyer requirements, they must request relief in accordance with DAFMAN 11-401, as supplemented. **(T-2)**. Units requiring flight hour adjustments for attached API-8 and applicable API-6 aircrew must request program changes in accordance with MAJCOM directives. **(T-2)**.

Chapter 2

INITIAL QUALIFICATION TRAINING

2.1. General. This chapter outlines IQT for all B-1 aircrew. IQT provides the training necessary to qualify aircrew for flying duties without regard to a unit's mission. Upon completion of IQT, aircrew attain basic aircraft qualification (BAQ) status and begin MQT. Except for general officers above wing level, BAQ is not intended to be a long-term status.

2.1.1. Formal Training. Formal Training includes the initial qualification course (Training Course, TX-1), requalification training courses (TX-2/TX-3), and Senior Officer Course (SOC) that an FTU will normally conduct in accordance with formal syllabi unless otherwise noted.

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 this chapter. When local training is approved, the gaining MAJCOM assumes responsibility for the burden of providing this training. Local training will be conducted using the appropriate formal course syllabi. (T-2).

2.1.3. Deferred Training. Any deferred training items will be documented on a formal training completion report to the gaining unit within 14 days of aircrew graduation. (T-3).

2.1.4. FTU gradebooks will ensure detailed accounting of all events demonstrated to proficiency that can be applied to aircrew certifications listed in **Chapter 6** of this manual. (T-2). The gradebook will be sent to the gaining unit upon course completion to assist the gaining unit in development of individual MQT requirements. (T-2).

2.2. Approval and Waiver for Local IQT.

2.2.1. Gaining MAJCOM/A3 is approval authority to conduct local IQT for TX-1, TX-2 and SOC. See **paragraph 2.6** and **paragraph 2.7** for definitions. Local TX-3 courses do not require a waiver. See **paragraph 2.7** for definitions.

2.2.2. Requests to conduct local IQT will include the following:

2.2.2.1. Justification for local training in lieu of FTU training. (T-2).

2.2.2.2. Summary of the individual's flight experience. (T-2).

2.2.2.3. Expected training start and completion dates. (T-2).

2.2.2.4. Requested exceptions to formal course syllabus, with rationale. (T-2).

2.3. Prerequisites. Course prerequisites will be in accordance with the appropriate formal course syllabus and USAF Education and Training Course Announcements (ETCA) site for AFGSC: <https://cs2.eis.af.mil/sites/app10-etca/SitePages/ETCACourseList.aspx?OrgID=AFGSC>. (T-2).

2.4. Ground Training. OG/CCs may tailor ground training for local IQT to the individual's background or local conditions. Use FTU-approved courseware. (T-2).

2.5. Flight Training. Local IQT will be completed within the time specified by the approved syllabus. (T-3). Failure to complete training within the specified time limit requires notification

through channels to MAJCOM/A3 with the reason for delay, planned actions, and estimated completion date.

2.6. Basic Qualification Course (B1BC/TX-1). This course is designed to qualify aircrew in the B-1. Prerequisites, time limitations, and syllabi are listed in ETCA: <https://cs2.eis.af.mil/sites/app10-etca/SitePages/ETCACourseList.aspx?OrgID=AFGSC>.

2.7. Requalification Training Course (TX-2/TX-3). Requalification Training is in accordance with AFMAN 11-202V1, and AFI 11-202V2.

2.7.1. The TX-2 and TX-3 courses requalify non-current B-1 aircrew. Prerequisites, time limitations, and syllabi are listed in ETCA: <https://cs2.eis.af.mil/sites/app10-etca/SitePages/ETCACourseList.aspx?OrgID=AFGSC>.

2.7.2. Graduates may retain previous certifications provided documentation showing completion of the applicable training program is still in the individual's training folder and they have regained proficiency in related flight events during or after the course.

2.8. Senior Officer Course (SOC).

2.8.1. All formal training course academics for senior officers (colonel-selects and above) will be conducted at the FTU unless waived in accordance with **paragraph 2.2 (T-2)**. Senior officers must meet course entry prerequisites outlined in the ETCA B-1 syllabus (<https://cs2.eis.af.mil/sites/app10-etca/SitePages/ETCACourseList.aspx?OrgID=AFGSC>) and complete all requirements unless waived in accordance with syllabus directives or **paragraph 2.2 (T-2)**.

2.8.2. Formal flight training will be accomplished by the operational Squadron to which the senior officer is attached. **(T-3)**.

2.8.3. If a senior officer should be trained at the base to which assigned, the officer will be in formal training status. Unit duties should be delegated as appropriate until training is completed.

Chapter 3

MISSION QUALIFICATION TRAINING

3.1. General. Mission Qualification Training (MQT) is a training program that upgrades BAQ aircrew to execute unit specific missions safely. The Squadron Commander will develop and maintain responsibility for the local MQT programs based on the minimum elements in this chapter. **(T-3).**

3.1.1. Units will tailor programs based on an individual's current qualifications, experience, currency, documented performance, and formal training. **(T-3).** For test or formal training units, see [paragraph 3.3](#)

3.1.2. Squadron Commanders will publish aircrew member qualifications on a letter of Xs (LoX). **(T-3).** The LoX summarizes aircrew qualifications and certifications and the Squadron Commander's endorsement of the same. The LoX also designates BMC aircrew and their tier (annotate missions/events in which BMC individuals maintain qualification/certification). Determine which BMC/CMR aircrew carry special capabilities and qualifications. **(T-3).** For BMC aircrew, determine missions/events in which crewmembers maintain qualification/certification. **(T-3).**

3.2. Combat Coded Purpose Identifier (CC-coded) Unit MQT. Aircrew should complete MQT within 120 calendar days (Air Reserve Component: 180 days) of the crewmember's entrance into the MQT program. MQT is considered complete with the Squadron Commander certifying the aircrew as CMR/BMC1. Notify the MAJCOM/A3T or equivalent if there is a delay beginning MQT that exceeds 30 days or training exceeds the 120-day time period with total days in MQT. **(T-2).**

3.2.1. MQT Syllabus Minimum Requirements. At a minimum, Squadron Commanders will include the following events within the individualized MQT program if not already completed during IQT:

3.2.1.1. Ground Training (see [paragraph 3.2.3](#)) or as designated in RTM. **(T-2).**

3.2.1.2. Night Vision Goggle (NVG) certification. (see [paragraph 6.2](#)). **(T-2).**

3.2.1.3. Initial Weapons Employment Certification in accordance with [Chapter 5](#) of this manual and the RTM. **(T-2).**

3.2.1.4. Current Instrument (INSTM)/QUAL/mission (MSN) evaluation in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2, *B-1 Aircrew Evaluation Criteria*. **(T-2).**

3.2.1.5. Completion of all ground training/currency items required for CMR/BMC as designated in the RTM. **(T-2).**

3.2.1.6. For current and qualified CMR crewmembers transferring between units, these events may be waived at the discretion of the gaining Squadron Commander. **(T-2).**

3.2.1.7. Previous Squadron Commander signed LoXs may be used to establish aircrew qualifications if aircrew folders are incomplete or lost.

3.2.2. Restrictions. For MQT students, especially first assignment students, non-MQT sorties should be minimized. Exercise participation should be consistent with training goals. MQT students will not participate in operation/weapons system evaluations. **(T-2)**.

3.2.2.1. There is a 120 day grace period (Air Reserve Component: 180 days) granted for completion of the following training items after the Squadron certification to CMR/BMC1:

3.2.2.1.1. Initial Verification of readiness for conventional missions via briefing.

3.2.2.1.2. Aircrew Chemical, Biological, Radiological, and Nuclear Training.

3.2.2.2. Squadron Commanders will regress aircrew who fail to accomplish these tasks to non-CMR (N-CMR) or non-BMC (N-BMC). **(T-3)**. MAJCOM/A3T or equivalent will be notified. **(T-2)**.

3.2.3. Ground Training. Units will develop blocks of instruction covering areas pertinent to the unit's mission as determined by the Squadron Commander. **(T-3)**.

3.2.3.1. Theatre indoctrination training (in accordance with AFMAN 11-202V1) may be accomplished during ground training or prior to flying into a given area of responsibility (AOR). MQT will include a local mission area orientation briefing. **(T-3)**.

3.2.3.2. Combat Planning Exercises (CPEX). Aircrew will mission plan using current RTM missions while supervised by an instructor. **(T-3)**.

3.2.3.2.1. Standoff Weapons (SOW). Crewmembers will complete one SOW CPEX. **(T-3)**. At the conclusion of the exercise, the crewmember will be prepared to take part in Joint Air-to-Surface Standoff Missile (JASSM) attack-planning activities. The mission planning may be subsequently used for an MQT simulator or flying event.

3.2.3.2.2. Surface Attack (SA). Crewmembers will complete one SA CPEX. **(T-2)**. Upon completion of SA CPEX, the crewmember understands considerations and will be prepared to take part in preplanned joint direct attack munition attack-planning activities. The mission planning may be subsequently used for an MQT simulator or flying event.

3.2.4. Simulator Training. The current block training device will be used for all MQT simulator events. **(T-3)**. Simulator events may be substituted with flying events. One mission event in each category is required. **(T-3)**. Squadron Commanders will ensure MQT events are adequately resourced between simulator and flying events. **(T-3)**. Include the following simulator events:

3.2.4.1. SA/Weapons Employment (WE) **(T-3)**.

3.2.4.2. SOW. **(T-3)**.

3.2.4.3. Defensive Execution (DE). **(T-3)**.

3.2.4.4. Dynamic Targeting. **(T-3)**.

3.2.5. Flying Training. The current block aircraft will be used for all MQT sortie events. Flying events may be substituted with simulator events and one mission event in each category is required. Squadron Commanders will ensure MQT events are adequately

resourced between simulator and flying events. **(T-3)**. It should include the following events in flight training:

3.2.5.1. SA/WE

3.2.5.2. SOW

3.2.5.3. DE.

3.2.6. Supervision. FTU graduates in MQT require instructor supervision for weapon system trainer (WST) events and flights. **(T-2)**. FTU graduates in MQT may participate in any WST events the Squadron Commander deems appropriate after completion of those MQT requirements in either the WST or aircraft.

3.2.7. Initial Verification. Each crewmember demonstrates to a formal board a satisfactory knowledge of the Squadron's assigned mission. **(T-3)**. Board composition will be established by the Squadron Commander. **(T-3)**. Experienced aircrew who accomplished initial verification in a previous assignment may, at Squadron Commander discretion, complete either an initial or a continuation verification to meet the requirements of this section.

3.3. Test/Training-coded Unit MQT. MQT is a unit-developed training program that upgrades aircrew to MR status in order to accomplish the unit's specific missions. MQT is considered complete with the Squadron Commander certifying the crewmember as MR.

3.4. Flight Surgeon Ground Training. Units train/document assigned flight surgeons. For flying activities, refer to host unit-equipped procedures for ground/flight training.

3.4.1. Ground Training. Flight Surgeons who are assigned to tactical units and who have not previously flown the unit-assigned aircraft will accomplish the following before the initial flight briefing: Aircraft general review, hanging harness training, egress training, protective equipment training, and an INST/Emergency Procedures (EP) simulator (optional) with a CMR/BMC crewmember. **(T-2)**. See DAFMAN 11-401 and AFI 11-401_AFGSCSUP_1 for further requirements.

3.4.2. Flight Training. The first flight in the unit-assigned aircraft will be with an instructor. **(T-3)**. This flight may be flown in conjunction with other training sorties. The briefing and sortie will emphasize flight control interference avoidance, communications and equipment, tactical display interpretation and the aircraft's performance envelope. **(T-3)**.

Chapter 4

CONTINUATION TRAINING

4.1. General. This chapter and the current B-1 RTM establishes ground and flying training requirements for CMR, BMC1, BMC2, and MR aircrew. Aircrew must be qualified using an AF Form 8, *Certificate of Aircrew Qualification*, in accordance with AFI 11-202V2, and AFMAN 11-2B-1V2. Normally, skills are documented using the LoX. Squadron Commanders will ensure assigned aircrew complete IQT and MQT to fly in a CMR, BMC, or MR status. (T-2).

4.2. Continuation Training (CT). CT consists of the basic flight skills necessary to ensure the safe operation of the aircraft and specific mission-related training required to accomplish the unit's assigned missions.

4.3. Aircrew Currencies.

4.3.1. All aircrew currencies are defined in the RTM. Aircrew become noncurrent in a particular currency if they exceed the specified timeframe listed in the RTM (for example inexperienced pilots become noncurrent for day landing after 45 days from last landing). (T-3). If a crewmember loses a particular currency, that sortie/event may not be performed without supervision. (T-3). Loss of currency in training annotated as affecting CMR or BMC status requires regression to N-CMR/N-BMC. (T-3). At a minimum, supervision will be accomplished by an experienced crewmember. (T-3).

4.3.2. Update or regain currency by accomplishing the event to a proficient level (with supervision for recurrency) in accordance with [paragraph 1.7](#) (T-3). Regain CMR (if applicable) in accordance with [paragraph 4.3.1](#) (T-3).

4.3.3. Squadron Commanders will establish additional training requirements (if any) for extended loss of currency. (T-3).

4.3.4. Instructors who become non-current or N-CMR or N-BMC may still instruct events that they are current and qualified in at Squadron Commander discretion.

4.4. CC-coded Units.

4.4.1. Basic Aircraft Qualification (BAQ). Aircrew achieve BAQ status after successfully completing IQT and remain in BAQ status until the completion of MQT in accordance with [Chapter 3](#) of this manual. BAQ requirements include:

4.4.1.1. INSTM/QUAL evaluation (pilot) or QUAL evaluation (WSO) in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2.

4.4.1.2. Flight currencies (as applicable) in accordance with [paragraph 4.3](#)

4.4.1.3. Fly a supervised sortie with an instructor or Squadron supervisor at least once every 60 calendar days. (T-3). If a BAQ crewmember does not fly for 30 days, the next sortie must be flown with an instructor or Squadron supervisor. (T-3).

4.4.1.4. Except for general officers above the wing level, aircrew in BAQ status more than 6 months must be enrolled in a program to achieve CMR or BMC1 or BMC2. (T-2).

4.4.1.5. Except for general officers above the wing level, aircrew in BAQ status more than 6 months may not participate in any flight or WST events unless designed to progress them toward CMR or BMC1 or BMC2. **(T-2)**.

4.4.2. BMC2. BMC2 establishes the minimum training required for aircrew to be familiar with all of the primary DOC statement mission requirements of their assigned or attached unit while only being required to execute WST missions in training.

4.4.2.1. BMC2 aircrew accomplish all mission-related ground training designated by their attached Squadron. **(T-3)**. Failure to complete required training in accordance with this volume and the RTM (both flying and ground) results in regression to N-BMC status. **(T-3)**. While N-BMC, the Squadron Commander determines which missions aircrew may perform and the supervision required. **(T-3)**.

4.4.2.2. BMC2 Requirements.

4.4.2.2.1. INSTM/QUAL and MSN evaluations (pilot) or MSN and QUAL evaluations (WSO) in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2. **(T-2)**.

4.4.2.2.2. WST missions and lookback events (including weapons certifications) and applicable mission and event ground training requirements in accordance with this volume and the RTM. **(T-3)**.

4.4.2.2.3. Currencies in accordance with RTM. Takeoff, day/night landing, air refueling currencies, and actual weapons qualifications do not apply to BMC2 aircrew.

4.4.2.2.4. Aircrew in BMC2 status will complete a Squadron Commander directed re-certification program to attain BMC1 or CMR. **(T-3)**.

4.4.3. BMC1. BMC1 establishes the minimum training required for aircrew 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.

4.4.3.1. BMC1 aircrew accomplish all mission-related ground training designated by their attached Squadron, and may participate in missions for which they are qualified, current, and proficient as determined by the Squadron Commander. Failure to complete required training in accordance with this volume and the RTM (flying, WST, and ground) results in regression to N-BMC status (flying, WST, and ground) results in regression to N-BMC status. **(T-3)**. While N-BMC, the Squadron Commander determines which missions aircrew may perform and the supervision required.

4.4.3.2. BMC1 Requirements.

4.4.3.2.1. INSTM, QUAL and MSN evaluations (pilot) or MSN and QUAL evaluation (WSO) in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2.

4.4.3.2.2. RAP lookback, WST lookback, mission types, and events (including weapons certifications), and applicable mission/event ground training requirements in accordance with this volume and the RTM.

4.4.3.2.3. Currencies (as applicable) in accordance with RTM.

- 4.4.3.2.4. Aircrew in BMC1 status will complete a Squadron Commander directed re-certification program to attain CMR. **(T-3)**.
- 4.4.4. 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.
- 4.4.4.1. CMR aircrew maintain proficiency in all primary missions of the flying unit to which they are assigned or attached. CMR aircrew may accomplish any unit tasking or combat operation. Squadron Commanders will regress aircrew who fail to complete required training to N-CMR status. **(T-3)**. While N-CMR, aircrew may participate in missions, including exercises and contingency operations, in which they are proficient at the discretion of the Squadron Commander.
- 4.4.4.2. CMR Requirements.
- 4.4.4.2.1. INSTM, QUAL and MSN evaluations (pilot) or MSN and QUAL evaluation (WSO) in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2. **(T-2)**.
- 4.4.4.2.2. RAP sorties/lookback, WST lookback, mission types, and events (including weapons certifications), and ground training in accordance with this volume and the RTM. **(T-3)**.
- 4.4.4.2.3. Currencies (as applicable) in accordance with RTM. **(T-3)**.
- 4.4.4.3. Ground Training. Accomplish ground training in accordance with the parent directives in the RTM tables. Units may credit ground training accomplished during IQT or MQT toward CT requirements for the training cycle in which it was accomplished.
- 4.4.4.3.1. Weapons and Tactics Academic Training. Units will develop an annual CT weapons and tactics academics program covering new/current B-1 weapons, systems, and mission-specific tactics, techniques, and procedures. **(T-3)**.
- 4.4.4.3.2. Intelligence Training. Develop and conduct annual intelligence training for aircrew in accordance with AFI 14-1020, *Intelligence Mission Qualification and Readiness*, MAJCOM and local unit instructions. **(T-3)**.
- 4.4.4.3.3. Aircraft Servicing. Ensure aircrew are trained and prepared to accomplish all aircraft servicing actions necessary to bed down/turn aircraft when off-station without maintenance support. **(T-3)**.
- 4.4.4.3.4. CT Verification. CMR aircrew participate in a verification as a briefer, board member, or seminar participant at the frequency referenced in the RTM. **(T-2)**. BMC1 or BMC2 aircrew should participate in a verification to facilitate future upgrade to CMR status at the discretion of the Squadron Commander. Aircrew who participate in a unit deployment to a FLAG-level exercise or in support of a contingency tasking may receive credit for CT verification.
- 4.4.4.3.5. Cockpit/Crew Resource Management (CRM). Aircrew participate in CT CRM and must include CRM concepts in briefs and debriefs. **(T-2)**. Reference AFI 11-290, *Cockpit/Crew Resource Management Training Program*.
- 4.4.4.3.6. Night Vision Device Refresher Academics. Night vision device training may be conducted in conjunction with CT weapons and tactics academic training.

Refresher training will include common NVG hazards, aircraft specific hazards, spatial disorientation, limitations and preflight adjustment procedures focusing on an eye chart or a Hoffman 20/20 tester. **(T-3)**. Use of a mock-up terrain display is encouraged for this training.

4.4.4.3.7. Electromagnetic Warfare (EW) Training. EW training ensures all aircrew possess the knowledge and skills necessary to employ their aircraft's EW equipment against known threat systems. Aircrew training devices will be employed whenever possible. **(T-3)**. Specific objectives include understanding of:

4.4.4.3.7.1. EW related threat system information to include signal analysis, capabilities, limitations, strengths, weaknesses and vulnerabilities. **(T-3)**.

4.4.4.3.7.2. Aircraft EW systems hardware and software capabilities and limitations. **(T-3)**.

4.4.4.3.7.3. Signal ambiguity resolution. **(T-3)**.

4.4.4.3.7.4. Electronicmagnetic Attack techniques and application. **(T-3)**.

4.4.4.3.7.5. EW related issues to include training and operational guidance. **(T-3)**.

4.4.5. Simulator Training. Units will develop scenarios that cover RAP events and missions based on unit tactical training plans. **(T-3)**.

4.4.5.1. Situational Emergency Procedure Training (SEPT). SEPT is a review of EPs and aircraft systems operations/limitations during realistic scenarios. Units produce monthly SEPT scenarios using actual mishaps and incidents as baseline cases. Incorporate EPs and special interest items as applicable. Aircrew take actions necessary to cope with the malfunction and carry it to a logical conclusion. **(T-3)**.

4.4.5.2. Aircrew will accomplish a SEPT in each calendar month. **(T-3)**. 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 (for example, if a SEPT is accomplished on 1 May, the currency is good through 30 June). Squadron Commanders will ground aircrew for failure to maintain currency until subsequently completed. **(T-3)**.

4.4.5.3. Aircrew may satisfy their monthly SEPT requirement by accomplishing or administering an EP sim, an EP evaluation, formal course EP training, or a table- top scenario.

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

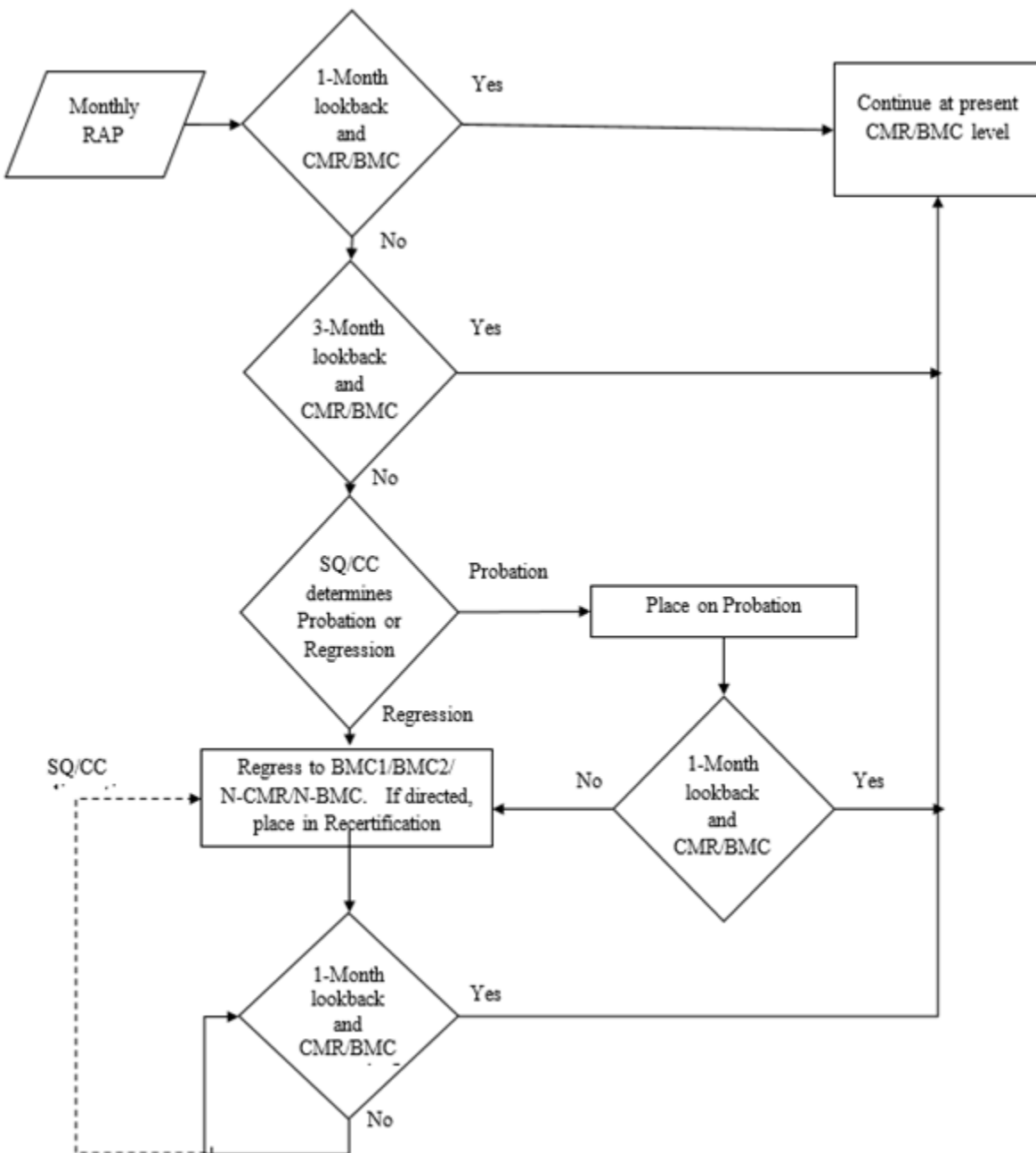
4.4.7. Regression. Reference [Figure 4.1](#) for necessary decisions or actions to maintain and/or regain CMR or BMC1 status. If aircrew do not meet lookback requirements throughout the training cycle, the Squadron Commander can either regress aircrew to N-CMR or N-BMC or initiate action to remove the pilot or WSO from active flying status.

4.4.7.1. 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 Squadron Commander discretion for 3-month lookback.

4.4.7.2. Aircrew regressed to N-CMR/N-BMC must regain all expired currencies affecting CMR/BMC and meet RTM one-month lookback requirements. **(T-3)**. Complete a Squadron Commander approved re-certification program if directed.

4.4.7.3. Flight Evaluation Failure. Aircrew will regress to N-CMR or N-BMC until requalification is complete and recertified by the Squadron Commander. **(T-2)**.

Figure 4.1. Regression Flow Chart.



4.4.8. Regression. Reference [Figure 4.1](#) for necessary decisions and actions to maintain or regain CMR or BMC1 status. If aircrew do not meet lookback requirements throughout the

training cycle, the Squadron Commander can either regress aircrew to N-CMR or N-BMC or initiate action to remove the pilot or WSO from active flying status.

4.4.8.1. Lookback computation begins following completion of MQT. 1-month lookback starts the first full month of CMR or BMC status. Post-MQT sorties flown during the month of MQT completion may be used at the Squadron Commander discretion for 3-month lookback.

4.4.8.2. Aircrew regressed to N-CMR/N-BMC must regain all expired currencies affecting CMR/BMC and meet RTM one-month lookback requirements. **(T-3)**. Complete a Squadron Commander approved re-certification program if directed.

4.4.8.3. Flight Evaluation Failure. Aircrew will regress to N-CMR or N-BMC as applicable, until requalification is complete and recertified by the Squadron Commander. **(T-2)**.

4.4.9. End of Cycle (EOC) Requirements. When RAP training requirements are not met, determine what items, if any, may be waived in accordance with RTM procedures based on the nature of the deficiency and the crewmember's underlying proficiency. Aircrew who fail to complete RAP mission event requirements by the end of training cycle may require additional training depending on the type and magnitude of the deficiency. In all cases, report training shortfalls as outlined in the RTM instructions.

4.4.9.1. Aircrew who fail to meet EOC mission or event requirements may be regressed to N-CMR/N-BMC, or continue as CMR/BMC as determined by lookback. The Squadron Commander determines if additional training is required; units will document failure to meet EOC requirements and any additional training. **(T-3)**.

4.4.9.2. Failure to accomplish missions/events required for special capabilities or certifications, may result in the loss of that certification as determined by the Squadron Commander. The Squadron Commander determines if any additional training is required to address shortfalls.

4.4.9.3. EOC requirements will be based only on the crewmember's status at the end of the year. **(T-3)**. For example, a crewmember who begins the year inexperienced but finishes experienced need only meet the experienced requirement. For requirements that were added during the training cycle (e.g due to mid-cycle MQT or upgrade), prorate the EOC requirement based on the date the crewmember began CT in the mission/event at time of upgrade.

4.4.9.4. All other proration will occur at the end of the training cycle. **(T-3)**.

4.4.9.5. CMR aircrew who attend Weapons School may be reported throughout the course as CMR. Upon return, they may accomplish a prorated share of mission/event requirements.

4.5. Test/Training-coded Units.

4.5.1. MR establishes the minimum training required for aircrew to be familiar with all (and may be certified, current, and proficient in some) of the primary mission requirements of their assigned or attached unit.

4.5.2. MR aircrew accomplish all mission-related ground training designated by their attached Squadron, and may deploy and participate in any mission for which they are qualified, current and proficient. Failure to complete required training in accordance with this volume results in regression to N-MR status. While N-MR, the Squadron Commander determines which missions an aircrew may perform and the supervision required. **(T-3)**.

4.5.3. Ground Training. Squadron Commanders will specify each unit's ground training requirements in accordance with governing AFIs. **(T-3)**. Squadron Commanders may reference the RTM Ground Training table to develop their ground training plan.

4.5.4. Simulator Training. WST RAP requirements do not apply. **Exception:** aircrew must accomplish training in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2. **(T-2)**. Part task training devices and cockpit procedure trainers are not acceptable.

4.5.5. Flight Training. Flight training is Squadron Commander directed. Flying at a BMC1 rate is recommended where possible.

4.5.5.1. Operational and Developmental Test squadrons are authorized to perform low altitude high speed flight in support of test or local training requirements. Squadron Commanders will specify each unit's ground/simulator/flight training requirements. **(T-3)**. Low altitude high-speed flight training plans will be forwarded to and approved by AFGSC/A3. **(T-2)**.

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

4.5.7. MSN, INSTM, and QUAL evaluations are conducted as applicable, in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2.

4.6. Special Categories.

4.6.1. Flight Surgeon. Flight surgeon flight rates and requirements are in accordance with AFMAN 11-202V1 and AFI 11-202V2.

4.6.2. API-8 Aircrew. API-8 aircrew designated as BMC1 should strive to fly at the BMC1 rate; however, they are exempt from non-grounding academic ground training, night aerial refueling, combat survival training, and aircrew chemical defense training. Additionally, API-8 aircrew designated as BMC1 are not required to complete BMC1 specific missions/events or meet RTM lookback requirements. Submit qualification and/or authorization documentation to the supporting Squadron Commander or authorized representative prior to flying with that Squadron. Instructors may perform instructor duties with the concurrence of the OG/CC, if current and qualified in the applicable mission and events.

4.7. Multiple Qualification/Currency. See AFMAN 11-202V1 for guidance on multiple qualifications. Submit multiple qualification requests through command channels and MAJCOM/A3T to MAJCOM/A3. 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 Aviation Resource Management System (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.

Chapter 5

WEAPONS DELIVERY/EMPLOYMENT CERTIFICATION

5.1. General. This chapter outlines requirements for initial qualification and continuation training (CT) certification in the employment of air-to-surface weapons for CMR and BMC1. In this chapter, simulated or actual weapons may be used for training events unless further specified.

5.2. Initial Qualification. Crewmembers will be qualified in all weapons listed as “proficient” in the RTM during IQT and/or MQT. **(T-2).** **Note:** One variant is sufficient (for example, proficiency in GBU-31 is sufficient for all guided munitions). CMR crewmembers will also train in “familiar” weapons. **(T-2).** If a crewmember maintains BMC, familiar weapons may be omitted in accordance with Squadron Commander discretion.

5.2.1. Initial Qualification Criteria. Initial qualification for guided and/or unguided weapons requires a qualified instructor to monitor crewmember mission planning and in flight delivery procedures (actual or simulated) during a certification flight. **(T-2).** Guided Weapons Delivery/Employment Certification will be tracked separately from Unguided Weapons Delivery/Employment Certification through documentation in the crewmember’s training record and the Squadron LoX. **(T-3).** Once certified in a weapons delivery/employment method the crewmember will be eligible to be evaluated on that employment method on all subsequent AFI 11-202 V2 evaluations.

5.2.2. Qualification achieved during IQT or MQT satisfies the requirements for initial qualification, but not for CT certification. Initial qualification and CT certification will carry over for crewmember upgrades if previously certified in the weapon type

5.2.3. LoX documentation is not required for individual weapon/event certifications if certification in the weapon/event is integral to CMR or BMC. **(T-3).** If certification in a specific weapon or event is limited to certain crewmembers, document separately on the LoX.

5.3. CT Certification. CT certification criteria establishes the minimum standards for crewmembers to maintain certification in the appropriate weapon delivery events, and does not determine evaluation criteria established by other instructions, regulations, or agencies. Weapon delivery events requiring proficiency/familiarity (PROF/FAM) are specified in the RTM.

5.3.1. CT Certification Criteria. Pilots and WSOs must achieve a 75% hit rate for guided weapons and a 50% hit rate for unguided weapons, assessed during normal reporting periods of the RAP training cycle, to remain certified. **(T-3).** Overall hit percentages for guided and unguided weapon certifications are calculated by dividing number of hits by number of attempts.

5.3.2. Mission Lead Responsibilities. Mission Leads will use all available means to accurately assess weapon delivery effectiveness of the pilot flying (PF) and offensive systems officer (OSO) for each bomb run during the mission debrief. **(T-3).**

5.3.2.1. Weapon Hit. A hit will be assessed for each bomb run where the PF and OSO deliver weapon(s) against the correct target, within the established release criteria, and

scored as a hit in accordance with Air Force Tactics, Techniques, and Procedures (AFTTP) 3-1. Shot/Kill, *Tactical Employment/Shot/Kill*. (T-3).

5.3.2.2. Weapon Miss Assessment. A miss will be assessed for each bomb run where the PF and OSO have an aircrew error that precludes an effective weapon(s) release (failure to open weapon bay doors, delivery outside briefed release criteria, wrong target coordinates entered into offensive avionics system (OAS), premature safing of stores management system and/or the release is assessed as a miss in accordance with AFTTP 3-1. *Shot/Kill*. (T-3).

5.3.2.3. If a weapons attempt is not assessable in accordance with AFTTP 3-1. *Shot/Kill*, do not log the attempt. (T-3). If miss distance cannot be determined for an actual weapon (for example, no range and bearing,) score as a simulated weapon. If an actual weapon(s) malfunction(s), aircrew may elect not to count the attempt. This is primarily intended for guided weapons as unguided weapons malfunctions are difficult to confirm and are accounted for in the unguided hit percentage.

5.3.3. CT Weapon Deliveries and Threat Activity. A weapon release is defined as an entire simulated or actual bomb run (from consent switches RELEASE, then back SAFE) that results in actual or simulated weapons being released from the aircraft. Weapon releases can be logged by the entire crew. Weapon attempts and hits can only be logged by the PF, OSO flying/executing and the instructor providing instruction during the attempt. (T-3). Threat activity can be logged by the PF, defensive system operator, and instructor providing instruction. (T-3).

5.3.4. Failure to Certify. Failure to certify in one event does not invalidate certification in others. Squadron Commanders may declare a crewmember uncertified in an event(s) and invalidate all previous record deliveries for that event at any time during a training cycle without affecting other weapons event certifications. The crewmember will revert to N-CMR or N-BMC and will remain in that status until achieving initial certification in the deficient event(s). (T-3). Crewmembers failing to meet required guided and/or unguided weapons hit percentages will become uncertified in that event(s) until a Squadron Commander directed re-certification program is completed. (T-3).

5.3.5. Certification Cycle. Weapon certification will be aligned with the Squadron's 12-month training cycle. (T-2). Crewmembers' weapons delivery scores will be reviewed to assess their certification at the end of the training cycle. If certified, the crewmember's certification is valid through the following training cycle. (T-3).

5.3.6. Failure to Maintain Weapons Proficiency. Aircrew who fail to meet weapons RAP requirements at the end of the training cycle are required to regain proficiency in the deficient weapons event in accordance with [Chapter 5](#) of this manual. (T-3). Events accomplished for regaining proficiency may count toward the cumulative CT event proficiency required at the end of the training cycle.

5.4. Weapons Delivery Parameters. The following event descriptions form the basic framework for aircrew weapons delivery training and all deliveries will conform to the criteria established for each specific event.

5.4.1. System Delivery. A delivery of a weapon using the OAS with inputs to the inertial navigation system from the radar or Global Positioning System (GPS). This type of delivery applies to unguided weapons.

5.4.1.1. Medium/High Altitude System Delivery. For the purposes of accomplishing this event, minimum altitude is at or above 5,000 feet above ground level.

5.4.2. Degraded Delivery. A delivery of a weapon by the best means available without position updates to the host aircraft from the GPS. This type of delivery applies to guided weapons.

5.4.3. Guided Delivery. A delivery of a guided weapon. Delivery of ordnance, actual or training, is not required.

5.4.4. SOW Delivery. A delivery of an SOW. Delivery of ordnance, actual or training, is not required.

Chapter 6

SPECIALIZED TRAINING

6.1. General. This chapter outlines upgrade training programs for special capabilities and certifications. These programs may be modified by the Squadron Commander based on 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 Squadron Commander.

6.1.1. Ground Training Requirements. Ground training events accomplished in one training program, and subsequently required for another training program, need not be re-accomplished unless required by the Squadron Commander. Units will annotate initial event accomplishment in the crewmember's training record. **(T-3)**.

6.1.2. Similar training events may be substituted for one another as long as the accomplished event is of higher fidelity or better training than that directed by this manual (for example, sortie in place of WST). All substitutions will be documented in the crewmember's training record and will be reviewed for trends and common errors. **(T-3)**.

6.1.3. Prior to any certification, the Squadron Commander or designated representative personally interviews the upgradee and reviews responsibilities, scope of duties, authority, and philosophy. **(T-3)**. The Squadron Commander is the authority to approve any new status (including any restrictions), in appropriate electronic format. **Exception:** Interviews are not required for [paragraphs 6.2, 6.3, or 6.4](#)

6.2. Night Vision Goggle (NVG) Certification. Accomplish all ground training before entering the NVG flight phase. **(T-2)**. Formation flight is not required.

6.3. Visual Formation Certification.

6.3.1. General. An instructor pilot will conduct all flight training. **(T-2)**. Uncertified pilots will not fly in positions or perform maneuvers not signed off as proficient in their training record without supervision. **(T-2)**.

6.3.2. Ground Training. Academic training for each phase will include, but is not limited to:

6.3.2.1. Review of applicable B-1 formation guidance and restrictions. **(T-3)**.

6.3.2.2. Study formation relevant tactics, techniques, and procedures contained in AFTTP 3-1.B-1, *Tactical Employment--B-1* with emphasis placed on:

6.3.2.2.1. Formation definitions, procedures and references. **(T-3)**.

6.3.2.2.2. Maneuvering techniques. **(T-3)**.

6.3.2.2.3. Defensive Maneuvering. **(T-3)**.

6.3.2.2.4. Mission Flow. **(T-3)**.

6.3.2.2.5. Formation hazards and formation mishaps. **(T-3)**.

6.3.3. Flight Training. Pilots will complete all flight training for each phase within 90 days of that phase's academic training. **(T-3)**. If a pilot exceeds the 90 day limit, academic training for the phase will be re-accomplished. **(T-3)**. WSOs do not require flight training.

6.3.3.1. Medium Altitude Visual Formation Phase. Pilots will be certified in medium altitude visual formation prior to flying in the tanker observation position unsupervised. **(T-3)**. Prior to medium altitude visual formation certification, pilots will be proficient in:

6.3.3.1.1. Formation departure and rejoin. **(T-3)**.

6.3.3.1.2. Turning rejoin as wing. **(T-3)**.

6.3.3.1.3. Route maneuvering, to include battle damage check. **(T-3)**.

6.3.3.1.4. AFTTP 3-3.B-1 formation positions. **(T-3)**.

6.3.3.1.5. AFTTP 3-3.B-1 tactical formation maneuvers. **(T-3)**.

6.4. Air Refueling (AR). This program qualifies a pilot to air refuel. AR qualification is required for ACs. **(T-2)**. Copilots may be qualified prior to AC upgrade, provided they demonstrate proficiency in the items listed in this section and in accordance with 11-202V2 and 11-2B-1V2. Document this designation in the pilot's training record and on the Squadron LoX.

6.4.1. AR Academics. The following items will be covered in academics:

6.4.1.1. Technical (TO) order and regulatory guidance. **(T-3)**.

6.4.1.2. Rendezvous Procedures. **(T-3)**.

6.4.1.3. Overrun Procedures. **(T-3)**.

6.4.1.4. Visual References. **(T-3)**.

6.4.1.5. Boom Limits. **(T-3)**.

6.4.1.6. Afterburner AR. **(T-3)**.

6.4.1.7. Formation AR. **(T-3)**.

6.4.1.8. Tanker Visual Observation Position. **(T-3)**.

6.4.1.9. Breakaways. **(T-3)**.

6.4.1.10. Override AR. **(T-3)**.

6.4.1.11. Spoiler-On AR. **(T-3)**.

6.4.1.12. Tanker Autopilot Off AR. **(T-3)**.

6.4.2. AR Flight Training. At a minimum, candidates will demonstrate proficiency in the following flight events:

6.4.2.1. Day AR. **(T-3)**.

6.4.2.2. Night AR. **(T-3)**.

6.4.2.3. Rendezvous Procedures. **(T-3)**.

6.4.2.4. Breakaways. **(T-3)**.

6.4.2.5. Tanker Autopilot Off AR. **(T-3)**.

6.4.3. AR Qualification. Individuals will demonstrate AR proficiency in flight to their Squadron Commander or designated representative by completing an evaluation in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2. **(T-3)**. Following successful completion of training and evaluation, the Squadron Commander will certify the pilot's new status as AR certified. **(T-3)**. Document this designation in the pilot's training record and on the squadron's LoX. **(T-3)**.

6.5. Aircraft Commander/Single-Ship Mission Lead (AC/SML) Certification. This establishes minimum guidelines for pilots identified by the Squadron Commander to upgrade to AC/SML.

6.5.1. AC/SML Program Entry Requirements:

6.5.1.1. Nominated by the Squadron Commander. **(T-2)**.

6.5.1.2. MQT complete. **(T-2)**.

6.5.1.3. Qualified pilot with Medium Visual Formation certification. **(T-3)**.

6.5.1.4. One of the following flying hour requirements:

6.5.1.4.1. 250 post FTU B-1 hours, and 12 months CMR/BMC1. **(T-3)**.

6.5.1.4.2. 1000 total hours and 100 post FTU B-1 hours, previous instructor or AC in an aircraft, and 6 months CMR/BMC1. **(T-3)**.

6.5.1.4.3. WST time may be credited for upgrade as defined in the B-1 RTM.

6.5.2. AC/SML Ground Training. Academic training will be locally developed and will include but is not limited to:

6.5.2.1. Aircraft systems, emergency procedures, emergency traffic patterns, air refueling, aircraft servicing, advanced handling characteristics and associated directives. **(T-3)**.

6.5.2.2. SML responsibilities: SML/AC relationship, unit training objectives. **(T-3)**.

6.5.2.3. Mission preparation: mission objectives, desired learning objectives, currencies, delegation of mission planning duties, tactics, attack planning, and briefing preparation. **(T-3)**.

6.5.2.4. Conduct of mission briefings and debriefings: use of briefing guides and audiovisual aids, mission reconstruction. **(T-3)**.

6.5.2.5. Combat Planning Exercises (CPEX). **(T-3)**. Combat planning exercises should be accomplished comprising SA, WE, SOW, DE and integrated tactics. The CPEXs should be accomplished with the WST of the same mission type.

6.5.3. AC/SML Simulator Training. Simulators should be comprised of SA/WE, SOW, DE, and integrated tactics/distributed mission operations (DMO). Each event should include training on aircraft systems, emergency procedures, and emergency patterns. Squadron Commanders will ensure events are adequately resourced between simulator and flying events. **(T-3)**.

6.5.4. AC/SML Flight Training. Flight training will be locally developed and will include but is not limited to:

6.5.4.1. SA/WE, DE and Dynamic Targeting. One flight should be flown as a wingman. One flight will be at night. **(T-3)**.

6.5.4.2. EP patterns during transition in accordance with AFMAN11-2B-1V3, *B-1 Operations Procedures* and Squadron Commander directed syllabi. **(T-3)**.

6.5.4.3. Flight training, as required, to complete AR training in accordance with **paragraph 6.4 (T-2)**.

6.5.5. Qualification. Individuals will demonstrate AC/SML proficiency in flight to their Squadron Commander or designated representative by completing an evaluation in accordance with AFI 11-202V2 and AFMAN 11-2B-1V2, using AC grading criteria. **(T-2)**. Following successful completion of training and evaluation, the Squadron Commander will certify the pilot's new status as an AC/SML. **(T-3)**. Document this designation in the pilot's training record and on the Squadron's LoX. **(T-3)**. AR qualification is required for AC/SML certification. **(T-2)**.

6.6. Single-Ship Mission Lead (SML) Certification. This program establishes the minimum guidelines for WSOs identified by the Squadron Commander to upgrade to SML.

6.6.1. SML Program Entry Requirements:

6.6.1.1. Nominated by the Squadron Commander. **(T-2)**.

6.6.1.2. MQT complete. **(T-2)**.

6.6.1.3. Meet one of the following criteria:

6.6.1.3.1. 250 post FTU B-1 hours, and 12 months CMR/BMC1. **(T-2)**.

6.6.1.3.2. 1000 total hours and 100 post FTU B-1 hours, previous instructor in an aircraft, and 6 months CMR/BMC1. **(T-3)**.

6.6.1.3.3. WST time may be credited for upgrade as defined in the B-1 RTM.

6.6.2. SML Ground Training. Academic training will be locally developed and will include but is not limited to:

6.6.2.1. SML responsibilities: SML/AC relationship, unit training objectives. **(T-3)**.

6.6.2.2. Mission preparation: mission objectives, desired learning objectives, currencies, delegation of mission planning duties, tactics, attack planning, and briefing preparation. **(T-3)**.

6.6.2.3. Conduct of mission briefings and debriefings: use of briefing guides and audiovisual aids, mission reconstruction. **(T-3)**.

6.6.2.4. Combat Planning Exercises (CPEX). Combat planning exercises should be accomplished comprising SA/WE, SOW, DE and integrated tactics. The CPEXs should be accomplished with the WST of the same mission type.

6.6.3. SML Simulator Training. Simulators should be comprised of SA/WE, SOW, DE, and integrated Tactics/DMO. Squadrons will ensure events are adequately resourced between simulator and flying events. **(T-3)**.

6.6.4. SML Flight Training. Flights should consist of SA/WE, DE and dynamic targeting.

6.6.5. SML Certification. WSOs will demonstrate SML proficiency in flight to their Squadron Commander or designated representative on a certification flight conducted in addition to the required flights for training. (T-3). Following successful completion of training and certification flight, the Squadron Commander will certify the WSO's new status as SML. (T-3). Document this designation in the aircrew's training record and on the Squadron's LoX. (T-3).

6.7. Flight Lead Upgrade (FLUG) Certification. This program upgrades aircraft commanders identified by the Squadron Commander to Flight Lead (FL). FL training should emphasize formation tactical employment.

6.7.1. Program Entry Requirements:

6.7.1.1. Nominated by the Squadron Commander.

6.7.1.2. Designated as experienced in accordance with this volume.

6.7.1.3. AC/SML upgrade complete.

6.7.2. Ground Training. Academic training will be locally developed and will include but is not limited to:

6.7.2.1. FL responsibilities. FL/wingman relationship, FL/ML relationship, Squadron training objectives. (T-3).

6.7.2.2. Mission Preparation. Mission objectives, wingman requirements and responsibilities. (T-3).

6.7.2.3. Wingman consideration, formation tactical employment considerations and formation attack planning. (T-3).

6.7.2.4. Conduct of missions. Control of flight, flight discipline, emergency procedures, training rules, and responsibilities to Squadron Commander. (T-3).

6.7.3. Simulator Training. Simulator events should consist of SA and SOW. Squadron Commanders will ensure events are adequately resourced between simulator and flying events. (T-3).

6.7.4. Flight Training. Flights should consist of SA/WE and DE. One flight will be flown at night. (T-3).

6.7.5. Certification. Individuals will demonstrate FL proficiency in flight to their Squadron Commander or designated representative on a certification flight conducted in addition to the required flights for training. (T-3). Following successful completion of training and certification flight, the Squadron Commander will certify the pilot's new status as a FL. (T-3). Document this designation in the pilot's training record and on the Squadron's LoX. (T-3).

6.8. Multi-Ship Mission Lead (MML) Certification. This program establishes the minimum guidelines for those WSOs identified by the Squadron Commander to upgrade to MML.

6.8.1. Program Entry Requirements:

6.8.1.1. Nominated by the Squadron Commander.

6.8.1.2. SML upgrade complete.

6.8.2. Ground Training. Academic training will be locally developed and will include but is not limited to:

6.8.2.1. MML responsibilities. MML/FL/AC relationship. (T-3).

6.8.2.2. Mission Preparation. Mission objectives, wingman requirements and responsibilities. (T-3).

6.8.2.3. Wingman consideration, formation tactical employment considerations and formation attack planning. (T-3).

6.8.2.4. Conduct of missions. Control of flight, flight discipline, emergency procedures, training rules, and responsibilities to Squadron. (T-3).

6.8.3. Simulator Training. Simulators should consist of SA and SOW. Squadron Commanders will ensure events are adequately resourced between simulator and flying events. (T-3).

6.8.4. Flight Training. Flights should consist of SA/WE and DE. One flight or WST will be conducted at night. (T-3).

6.8.5. Certification. Individuals will demonstrate MML proficiency in flight to their Squadron Commander or designated representative on a certification flight conducted in addition to the required flights for training. (T-3). Following successful completion of training and certification flight, the Squadron will certify the WSO's new status as a MML. (T-3). Document this designation in the aircrew's training record and on the Squadron's LoX. (T-3).

6.9. Mission Commander (MC) Certification. The MC is responsible for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages. Mission commanders, once certified, are authorized to lead joint/composite force missions. This program establishes the minimum guidelines for upgrade to MC. USAF Weapons School graduates are certified as Mission Commanders upon completion of the formal course.

6.9.1. Program Entry Requirements:

6.9.1.1. Nominated by the Squadron Commander. (T-3).

6.9.1.2. FLUG/MML certified. (T-3).

6.9.2. Ground Training. (T-3).

6.9.2.1. Mission brief/debrief techniques and procedures. (T-3).

6.9.2.2. CAF aircraft capabilities familiarization. (T-3).

6.9.2.3. Combat search and rescue familiarization. (T-3).

6.9.2.4. Joint theater air control systems. (T-3).

6.9.2.5. Air tasking order creation/breakout. (T-3).

6.9.2.6. Mission planning procedures. (T-3).

6.9.2.7. Review AFTTP 3-3.IPE, *Integrated Planning and Employment*, AFTTP 3-1.Threat Guide, AFTTP 3-1.B-1, *Tactical Employment-B-1*. (T-3).

6.9.2.8. Integrated air defense systems. (T-3).

6.9.2.9. Joint/composite force integration. (T-3).

6.9.3. Flight Training. The MC candidate will plan, brief, fly, and debrief a minimum of one joint/composite force mission under the supervision of a weapons officer or Squadron Commander designated instructor. (T-3).

6.9.4. Certification. Following successful completion of training, the Squadron Commander will certify the crewmember's new status as a MC. (T-3). Document this designation in the aircrew's training record and on the Squadron LoX. (T-3).

6.10. Maritime Mine Planner Program. Upon completion of the program, the crewmember will be able to correctly plan a B-1 mining operation. United States Air Force Weapons School (USAFWS) graduates are certified as Maritime Mine Planners.

6.10.1. Ground Training.

6.10.1.1. Academics. Academics will include instruction on the basics of mine design, mine sterilization, mine countermeasures, the Quickstrike series of mines, minefield planning folder (MFPF) content and how MFPF data are used to plan B-1 mine operations in support of the US Navy. (T-3).

6.10.1.2. CPEX. Quickstrike combat planning exercise based on real-world B-1 operations plan (OPLAN) and AOR. At the conclusion of the exercise, the crewmember will be prepared to take part in Quickstrike attack-planning activities. (T-3).

6.10.2. Certification. Following successful completion of training, the Squadron will certify the crewmember as a Quickstrike planner. (T-3). Document this designation in the aircrew's training record and on the Squadron LoX. (T-3).

6.11. JASSM Planner Program. The JASSM Planner program is designed to certify a crewmember to plan a JASSM mission. Upon completion of the program, the crewmember will be able to proficiently conduct JASSM mission planning for B-1 missions. USAFWS graduates are certified as JASSM Planners.

6.11.1. JASSM Ground Training. Academics include instruction on downloading terminal-area models, threat orders of battle and other pertinent information required for JASSM planning as well as how to import the appropriate data to the Joint Mission Planning System (JMPS) and a Standoff Munitions Application Center familiarity briefing. Students also receive training on planning rules and techniques for all of the possible JASSM release options.

6.11.2. JASSM CPEX. JASSM combat planning exercise based on real-world B-1 OPLAN and AOR. This practical exercise focuses on developing mission-planning cell (MPC) planning skills to solve a tactical problem. The exercise prepares crewmembers to take part in JASSM attack-planning activities. Objectives: Apply B-1 JASSM planning to mission plan a standoff weapon strike, download terminal-area models and JASSM planning data, and archive these for future use, import JASSM mission-planning data to JMPS.

6.11.3. JASSM Certification. Following successful completion of training, the Squadron Commander may certify the crewmember as a JASSM planner. Document this designation in the aircrew's training record and on the Squadron LoX.

6.12. Long Range Anti-Ship Missile (LRASM) Planner. The LRASM Planner program certifies a crewmember to plan a LRASM mission. Upon completion of the program, the crewmember will be able to proficiently plan LRASM missions. USAFWS graduates are certified as LRASM planners.

6.12.1. Ground Training. Academics will include instruction on Naval asset integration, LRASM crypto requirements, LRASM tactics, techniques, procedures, and JMPS planning considerations. (T-3).

6.12.2. CPEX. LRASM combat planning exercise based on real-world B-1 OPLAN and AOR. This practical exercise focuses on developing MPC planning skills to solve a tactical problem. At the conclusion of the exercise, the crewmember will be prepared to take part in LRASM attack-planning activities. Objectives: Apply B-1 LRASM planning to mission plan a standoff weapon strike, download terminal-area models and LRASM planning data, and archive these for future use, import LRASM mission-planning data to JMPS. (T-3).

6.12.3. Certification. Following successful completion of training, the Squadron Commander will certify the crewmember as a LRASM planner. (T-3). Document this designation in the aircrew's training record and on the Squadron LOX. (T-3). LRASM planners should be read into applicable programs.

6.13. Flight Instructor Course (FIC). FIC is a formal training program that prepares crewmembers for instructor qualification. The B-1 FIC Syllabus, prerequisites, and time limitations are listed in ETCA: <https://cs2.eis.af.mil/sites/app10-etca/SitePages/ETCACourseList.aspx?OrgID=AFGSC>. Waiver requirements for FIC are listed in the syllabus.

6.13.1. Graduates of a fighter or bomber FTU flight instructor course are not required to attend FIC at the FTU. Others must attend FIC academics administered by 28 BS/FIC. (T-3).

6.13.2. Individuals selected for FTU instructor duty must complete FIC academics at the FTU if not previously accomplished. FIC academics is a formal training program. (T-3).

6.13.3. FIC flight training for all instructor candidates may be accomplished at the operational unit or at the FTU as operational need dictates. (T-3). Only instructors who have completed FIC instructor upgrade as outlined in [paragraph 6.14](#) and have been certified as an FIC Instructor on the Squadron LoX may instruct FIC training events. (T-3). Pilots so designated are authorized to perform specific maneuvers listed in AFMAN 11-2B-1V3. (T-3).

6.14. FIC Instructor Certification. This program establishes minimum guidelines for those instructors nominated by the Squadron Commander to be FIC Instructors.

6.14.1. Requirements. Candidates must have a minimum of one year as a B-1 instructor. (T-3).

6.14.2. Ground training will be locally developed and will include but is not limited to:

6.14.2.1. Methods of instruction, including role-play. (T-3).

6.14.2.2. Review of procedures and techniques to perform specific maneuvers listed in AFMAN 11-2B-1V3. (T-3).

6.14.3. Certification. Following successful completion of training, the Squadron Commander will certify the crewmember as a FIC Instructor. **(T-3)**. Document this designation in the aircrew's training record and on the Squadron LoX. **(T-3)**.

JOSEPH T. GUASTELLA Jr., Lt Gen, USAF
Deputy Chief of Staff, Operations

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

AFGSCI 11-464, *Training Records and Performance Evaluation in Formal Flying Training Program*, 28 January 2018

AFI 11-202V2, *Aircrew Standardization and Evaluation Program*, 6 December 2018

AFI 11-290, *Cockpit/Crew Resource Management Program*, 27 May 2020

DAFMAN 11-401, *Aviation Management*, 27 October 2020

AFI 11-401_AFGSCSUP_I, *Aviation Management*, 24 July 2012

AFI 14-1020, *Intelligence Mission Qualification and Readiness*, 8 November 2017

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFMAN 11-2B-1V2, *B-1 Aircrew Evaluation Criteria*, 15 February 2019

AFMAN 11-2B-1V3, *B-1 Operations Procedures*, 20 March 2015

AFMAN 11-202V1, *Aircrew Training*, 27 September 2019

DAFPD 11-2, *Aircrew Operations*, 31 January 2019

DAFPD 11-4, *Aviation Service*, 12 April 2019

AFTTP 3-1.B-1, *Tactical Employment-- B-1 (SECRET)*, 3 April 2020

AFTTP 3-1. *Tactical Employment: Shot/Kill (SECRET)*, 22 March 2019

AFTTP 3-1. *Threat Guide. (SECRET)*, 25 September 2020

AFTTP 3-3.B-1, *Combat Aircraft Fundamentals—B-1*, 3 April 2020

DAFI 33-360, *Publications and Forms Management*, 1 December 2015

The Privacy Act of 1974, 5 U.S.C. §552a

37 U.S.C. §301a, *Incentive Pay: hazardous duty*

Public Law (PL) 92-204, *Section 715 Appropriations Act for 1973*

PL 93-570, *Appropriations Act for 1974*

PL 93-294, *Aviation Career Incentive Act of 1974*

Executive Order 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*, 22 September 2009

AF Form 8, *Certificate of Aircrew Qualification*, 26 June 2019

Abbreviations and Acronyms

A3—Director of Operations

AC—Aircraft Commander

ACC—Air Combat Command

AF—Air Force

AFGSC—Air Force Global Strike Command

AFGSCI—Air Force Global Strike Command Instruction

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFTTP—Air Force Tactics, Techniques, and Procedures

ARMS—Aviation Resource Management System

AFRC—Air Force Reserve Command

AGL—Above Ground Level

AGM—Air-to-Ground Missile

AOR—Area of Responsibility

API—Aircraft Position Identifier. (DAFMAN 11-401, Aviation Management)

AR—Air Refueling

csarBAQ—Basic Aircraft Qualification

BMC—Basic Mission Capable

BS—Bomb Squadron

CAF—Combat Air Forces

CBU—Cluster Bomb Unit

CC—Commander

CC—coded—Combat Aircraft Purpose Identifier

CMR—Combat Mission Ready

CPEX—Combat Planning Exercise

CRM—Crew Resource Management

CSAR—Combat Search and Rescue

CT—Continuation Training

DAFPD—Department of the Air Force Policy Directive

DAFI—Department of the Air Force Instruction

DAFMAN—Department of the Air Force Manual

DMO—Distributed Mission Operations

DO—Director of Operations

DOC—Designed Operational Capability

DRU—Direct Reporting Unit

DE—Defensive Execution

EC—Electronic Combat

EOC—End of Cycle, normally the fiscal year

EP—Emergency Procedure

ETCA—Education & Training Course Announcements

FAM—Familiarization

FIC—Flight Instructor Course

FL—Flight Lead

FLUG—Flight Lead Upgrade

FOA—Field Operating Agency

FTU—Formal Training Unit

GBU—Guided Bomb Unit

GPS—Global Positioning System

HQ—Headquarters

INSTM—Instrument

IQT—Initial Qualification Training

JASSM—Joint Air-to-Surface Standoff Missile

JMPS—Joint Mission Planning System

LoX—Squadron generated letter tracking qualifications of individual crewmembers

LRASM—Long Range Anti-Ship Missile

MFPPF—Minefield Planning Folder

ML—Mission Lead

MML—Multi-ship Mission Lead

MPC—Mission Planning Cell

MQT—Mission Qualification Training

MR—Mission Ready

MSL—Mean Sea Level

MSN—Mission

NVG—Night Vision Goggle
OAS—Offensive Avionics System
OG—Operations Group
OPLAN—Operational Plan
OSO—Offensive Systems Officer
PF—Pilot flying
PROF—Proficient
QUAL—Qualification
RAP—Ready Aircrew Program
RTM—RAP Training Memorandum
RTRB—Realistic Training Review Board
SA—Surface Attack
SEPT—Situational Emergency Procedure Training
SML—Single-ship Mission Lead
SOW—Standoff Weapons
SQ—Squadron
SOC—Senior Officer Course
TO—Technical Order
TRB—Training Review Board
TX—Training Course
USAF—United States Air Force
USAFWS—United States Air Force Weapons School
WE—Weapons Employment
WG—Wing
WSO—Weapon Systems Officer
WST—Weapon System Trainer

Terms

Academic Training—This training includes classroom, Computer Based Instruction and Aircrew Training Devices related to aircraft systems and operation, flight characteristics and techniques, performance, normal and emergency procedures, and safety of flight items. Academics prepare aircrew for flight training and are normally completed before flight training.

Aircraft Commander (AC)—The individual certified to perform B-1 aircrew duties, designated on the Flight Authorization as the pilot responsible for the safe and efficient conduct of flight operations.

Basic Aircraft Qualification (BAQ)—An aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to perform aircrew duties in the unit aircraft (AFMAN 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 (AFMAN 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).

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

Combat Planning Exercise (CPEX)—Unit designed mission planning exercise against current target and threat sets reflective the unit’s DOC statement.

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.

Distributed Mission Operations (DMO)—Networked simulator training integrating DMO battlespace by linking high fidelity combat and combat support training devices to exercise to permit training at the operational and strategic levels of war while facilitating unit-level training.

Electromagnetic Attack—Division of electromagnetic warfare involving the use of electromagnetic energy, directed energy, or antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires.

Electromagnetic Warfare—Military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy.

Familiar (FAM)—Crewmember has a basic knowledge of mission area and may make errors of omission or commission. Crewmember is able to operate in a permissive environment and is able to handle some basic contingencies and unusual circumstances. Familiar crewmember may need additional training prior to first mission tasking.

Flight Lead (FL)—As designated on flight orders, the aircraft commander responsible for overall conduct of mission from preflight preparation/briefing to post flight debriefing, regardless of actual position within the formation. If another crewmember is designated as the Mission Lead, that crewmember is responsible for preflight preparation/briefing and debriefing

but the FL retains responsibility for the overall conduct of the mission. The FL will brief formation management specifics during the mission brief.

Guided Weapon—A weapon capable of correcting its own trajectory after release (for example, GBU-31, CBU-103, AGM-158).

High Altitude—Above 25,000 feet MSL (for weapons delivery events above 17,000' MSL)

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 (AFMAN 11-202V1). IQT graduates demonstrate proficiency in mission tasks as indicated in the FTU syllabi.

Instructor—An individual who has been trained to instruct and is designated and certified in writing by the Squadron Commander.

Instructor Supervision—Defined as having a qualified instructor, of like specialty, supervising a maneuver or training event. Instructors must be qualified and current in all events which they instruct/ supervise.

Low Altitude—Below 5,000 feet Above Ground Level (AGL).

Medium Altitude—From 5,000 feet AGL to 25,000 feet MSL (for weapons delivery events from 5,000 feet AGL to 17,000' MSL)

Mission Commander (MC)—Individual who has completed an established training program to prepare/qualify for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages (See **paragraph 6.9**).

Multi-ship Mission Lead (MML)—The crewmember responsible for developing an overall plan for accomplishing the mission from preflight preparation/briefing to post flight debriefing, regardless of actual position within the formation. The FL retains responsibility for the overall conduct of the mission.

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

Night—The time between the end of civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time.

Proficient (PROF)—Crewmember has a thorough knowledge of mission area but occasionally may make an error or omission or commission. Crewmember is able to operate in a complex, fluid environment and is able to handle most contingencies and unusual circumstances. Proficient crewmembers are prepared for mission taskings on the first sortie in theater.

Single-ship Mission Lead (SML)—The crewmember responsible for developing an overall plan for accomplishing the mission from preflight preparation/briefing to post flight debriefing, regardless of actual crew position. The AC retains responsibility for the overall safe conduct of the mission.

Situational Emergency Procedures Training (SEPT)—A discussion and review of abnormal/emergency procedures and aircraft systems operations/limitations based on realistic scenarios.

Specialized Training—Training in specialized tactics, weapons systems, or flight responsibilities such as flight lead, multi-ship mission lead, mission commander, etc.

Squadron Supervisor—Experienced aircraft commanders or WSOs as designated by the Squadron Commander.

Striker Vista—Developmental program to build officers qualified in multiple bomber airframes with a greater breadth of nuclear and conventional expertise.

Verification—A formal board proceeding emphasizing operations convened to verify individual crewmembers' knowledge of tactical employment during unit wartime mission/tasking. Verification is conducted in both initial and follow-on phases.

Weapon Delivery (WD)—Actual or simulated release of one or more weapons. Accomplish activity at an altitude commensurate with the briefed threat scenario and mission requirements when aircraft equipment limitations, weather conditions, and aircrew proficiency allow.

Weapon Employment (WE)—Actual or simulated release of one or more weapons. Accomplish activity at an altitude commensurate with the briefed threat scenario and mission requirements when aircraft equipment limitations, weather conditions, and aircrew proficiency allow.

Weapons System Officer (WSO)—An individual qualified in both the offensive and defensive system operator positions.

Weapons Systems Trainer (WST)—A device that provides an artificial training or tactics environment in which operators learn, develop, improve, and integrate mission skills associated with their aircrew position in a specific defense system.