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SECRETARY OF THE AIR FORCE**

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Flying Operations

B-2-AIRCREW TRAINING



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This volume implements AFPD 11-2, *Aircrew Operations*, Air Force Policy Directive (AFPD) 11-4, *Aviation Service*, and references Air Force Manual (AFMAN) 11-202V1, *Aircrew Training*. It establishes the minimum Air Force standards for training and qualifying personnel to perform duties in the B-2. This manual applies to military and civilian members assigned to Regular Air Force and Air National Guard (ANG) units. It does not apply Air Force Reserve units. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional chain of command. Process changes and supplements according to [paragraph 1.3](#). The waiver approval authority for this volume is Air Force Global Strike Command Directorate of Operations and Communications (AFGSC/A3/6), or Commander, Air Force Forces (COMAFFOR) for those aircrew and assets under COMAFFOR's oversight unless identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See Department of the Air Force instruction (DAFI) 33-360, *Records Management and Information Governance Program* for a description of the authorities associated with the Tier numbers and reference [paragraph 1.4](#) of this manual for specific waiver guidance. This publication may be supplemented at any level, but all supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-322, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule located in the Air Force Records Information Management System. Compliance with [attachment 2](#) of this publication is mandatory.

SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed.

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Chapter 1

GENERAL GUIDANCE

1.1. Purpose. This manual prescribes guidance for training B-2 pilots.

1.2. Roles and Responsibilities.

1.2.1. Air Force Global Strike Command (AFGSC) executes responsibility for this volume IAW AFPD11-2. AFGSC/A36 will:

1.2.1.1. Attend Combat Air Forces Realistic Training Review Board (RTRB) to review ground and flying training requirements/programs. Focused at the group commander and major command directorate of operations and training level, RTRB participation includes active and reserve component units/organizations.

1.2.1.2. Process all change requests.

1.2.2. Applicable MAJCOM will determine training requirements to fulfill Designed Operational Capability (DOC) statement missions via supplement or RAP Tasking Memorandum (RTM).

1.2.3. Wings/groups will:

1.2.3.1. Develop/approve/implement programs to ensure training objectives are met and assist subordinate units in management of training programs. **(T-1)**.

1.2.3.2. Attach Aircrew Position Indicator (API)-6/8 aircrew to a flying squadron. Except when otherwise mandated, designate the training level for each API-6/8 (ANG: B-2A instructors, aircraft commanders, and pilots). **(T-3)**.

1.2.3.3. Review manning programs and position designations annually. **(T-3)**.

1.2.3.4. Review unit supplements to this volume, including training programs and syllabi, annually. **(T-1)**. Forward unit supplements to AFGSC/A3T for review upon initial release or following significant changes (ANG: to NGB/A2/3/6/10). **(T-1)**.

1.2.3.5. The Operations Group Commander (OG/CC) will hold a quarterly Training Review Board (TRB) **(T-3)**. Board members should include operational Squadron Commander or Director of Operations (SQ/CC or SQ/DO), Operations Support Squadron CC or DO, representatives from squadron training, tactics, and Aviation Resource Management. The TRB typically covers the following topics: continuation training, status of any waivers requested, status of in-unit qualification training, approved upgrade actions, manning forecasts, flying hour program overview/plan, and other items as desired by the OG/CC.

1.2.3.6. Ensure Striker Vista pilots are instructor qualified in the new platform within 2 years of starting initial qualification training. Notify the Air Force Global Strike Command Deputy Commander if the training exceeds the 2-year time period. **(T-1)**.

1.2.4. Squadrons/units will:

1.2.4.1. Certify and publish a current letter of aircrew qualifications and certifications (Letter of X). **(T-1)**.

1.2.4.2. Ensure review of training and evaluation records of newly assigned pilots and those completing formal training to determine the training required for them to achieve basic mission capability (BMC) or combat mission readiness (CMR). **(T-3)**.

1.2.4.3. Ensure RAP missions develop basic combat skills or practice tactical employment simulating conditions anticipated in the unit mission. **(T-3)**. Only log effective RAP missions as RAP sorties. See [Attachment 2](#) for RAP mission definitions.

1.2.4.4. Review training and evaluation records of newly assigned aircrew and those completing formal training to determine the training required for them to achieve BMC/CMR/mission ready (MR). **(T-3)**. At a minimum, archive the most recent flying assignment training folder (if available).

1.2.4.5. Develop unit training programs in accordance with (IAW) RTM guidance. **(T-2)**. Consider attrition and collateral sorties (including associated training requirements) when developing unit training and flying hour programs.

1.2.4.6. Review qualifications and training requirements of non-aircrew and determine appropriate flight restrictions. **(T-3)**.

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

1.2.4.8. Ensure Companion Trainer Program (CTP) properly supports B-2 combat crew capability. **(T-3)**.

1.2.4.9. AFGSC squadrons will submit a training report to AFGSC/A3TO per the RAP Tasking Message. Squadrons may submit an out of cycle report if Higher Headquarters (HHQ) assistance is required to prepare for deployment or air expeditionary force tasking. **(T-1)**. Reports will consist of an email memo summarizing results or unresolved issues since the last report, current training plan summary, and significant shortfalls/Limiting Factors (LIMFACS). **(T-1)**. Report only shortfalls/LIMFACS of events/sorties that affect 15% or greater of the squadron's crew force **(T-1)**. Include possible solutions or specific assistance required if able. AFGSC will attempt to rectify or minimize noted shortfalls/LIMFACS while the training cycle is under way. Deviations from these training requirements will be reported to AFGSC/A3TO with the Rap Tasking Message. **(T-1)** This includes requirements waived by the Operations Group Commander (OG/CC). Email training reports to AFGSC/A3TO at afgsca3bo@us.af.mil.

1.2.5. Individual aircrew will:

1.2.5.1. Hand-carry flight evaluation folder and most recent gradebook/letter of Xs to assist the gaining unit in assessing qualifications and training requirements. **(T-3)**. Records in the form of electronic media are acceptable.

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

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

1.3. Processing Changes and Supplements.

1.3.1. Forward recommendations for change(s) using the AF Form 847, *Recommendation for Change of Publication*, through command Standardization and Evaluation (Stan/Eval) channels IAW **paragraph 10.2**.

1.3.2. MAJCOM will forward proposed supplements to this volume to Air Force Current Operations, AF/A3O-AI, through AFGSC/A3TO, for approval prior to publication. Field units below MAJCOM/direct reporting unit/field operating agency level will coordinate their supplements prior to publication with their parent MAJCOM/DRU/FOA OPR.

1.3.3. Copies or notification of approved and published supplements will be provided by the issuing office to AF/A3O-AI, AFGSC/A3TO, and the user MAJCOM/DRU/FOA OPR. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA OPR. **(T-1)**.

1.4. Waivers. Unless another approval authority is cited, waiver authority for this volume is AFGSC/A36 (ANG: NGB/A2/3/6/10), or COMAFFOR for those aircrew and assets under the COMAFFOR's oversight. The waivers for this volume are on a case-by-case basis considering the experience level of an individual aircrew. COMAFFOR will notify AFGSC/A36 of waivers within 72 hours of approval.

1.5. Training Programs, Concepts, and Policies.

1.5.1. Units should design training programs to achieve the highest degree of combat readiness consistent with flight safety and resource availability. Training must balance the need for realism against the expected threat, pilot capabilities, and safety. **(T-2)**. This manual provides training guidelines and policies for use with operational procedures specified in applicable flying/operations publications.

1.5.2. Air Combat Command Training Support Squadron (ACC TRSS) will develop and validate training programs when/where tasked by the ACC/A3. **(T-1)**. Other MAJCOM may submit requests for training program support to the ACC/A3. If validated, these requests will be prioritized and tasked to ACC TRSS. Designated Test Units may develop syllabi to upgrade Operation Test Aircrew in support of specific test plans. These syllabi will be approved by the OG/CC and submitted to ACC TRSS. **(T-1)**.

1.5.3. Units will design training missions to achieve combat capability in squadron-tasked roles, maintain proficiency, and enhance mission accomplishment and safety. **(T-3)**. RAP training missions should emphasize either basic combat skills, or scenarios that reflect procedures and operations based on employment plans, location, current intelligence, and opposition capabilities. Use of procedures and actions applicable to combat scenarios are desired (e.g., appropriate use of code words, authentication procedures, combat tactics, safe recovery procedures, tactical deception, threat reactions, Intel briefing/debriefing, etc.).

1.5.4. Ground and/or ancillary training will be as required by this manual or AFI 36-2670, *Total Force Development*.

1.5.5. Tactical training should include use of inert and live ordnance, threat simulators, Aircrew Training Devices (ATD), and dissimilar aircraft as much as practical.

1.6. Mission Video Recording.

1.6.1. SQ/CCs will develop a program which includes periodic supervisory and/or mission lead (MML) review of mission video recordings. **(T-3)**.

1.6.2. Aircrew will record from takeoff to landing to the max extent possible in order to maximize training value. **(T-3)**.

1.7. In-flight Supervision.

1.7.1. Unless specifically directed, the SQ/CC determines the level of supervision necessary to accomplish the required training. If the mission objectives include introduction to tasks or instruction to correct previous discrepancies, then an instructor may be required.

1.7.2. Designated Flight Lead (FL) and MML. Instructor Pilots (IP) and FL/MML certified SQ supervisors may allow any pilot to lead portions of a mission if appropriately briefed. In any case, the IP or FL/MML-certified SQ supervisor retains responsibility for the flight. **(T-1)**.

1.7.3. Tactical Lead. FL/MMLs may pass the tactical lead to their wingman for specific tasks or may fly in chase position on their wingman. As the tactical lead, the wingman may make tactical decisions for the flight, but the FL/MML retains overall authority and responsibility for the flight. **(T-1)**.

1.8. Experienced (EXP) Aircrew Criteria.

1.8.1. All aircraft commanders and instructor pilots are considered experienced upon completion of the applicable upgrade training.

1.8.2. Unit commanders may elect to retain an individual meeting the minimum requirements as inexperienced if designation as experienced is not warranted.

1.8.3. Designation of aircrew as experienced may take place when minimum requirements are met, and training requirements will be prorated. Unit commanders may return an individual to inexperienced status at any time.

1.9. RAP Tasking Message (RTM).

1.9.1. AFGSC/A3/6 will coordinate, publish, and distribute RTMs by the start of the fiscal year. File the RTM at the end of this volume.

1.9.2. RAP missions and event requirements apply to all CMR and BMC aircrew as defined by the RTM. The current RTM supersedes all previous versions and takes precedence when there are discrepancies with this volume.

1.9.3. Send all recommended changes to AFGSC/A3/6 at any time. **(T-1)**. Prior to annual publication, AFGSC/A3/6 divisions will forward the RTM for OG/CC coordination prior to the RTRB. Significant changes will be vetted during the RTRB.

1.10. RAP Guidance and Management.

1.10.1. The pilot training cycle is 12 months and is aligned with the fiscal year. Each RAP qualification level is defined by a total number of RAP missions/sorties, broken down into mission types, plus specific weapons qualifications and associated events as determined by the MAJCOM and unit commanders. **(T-2)**.

1.10.2. The total number of RAP sorties accomplished for a qualification level is the primary factor for maintaining an individual's qualification level. The breakout of sortie/mission types is provided as a guideline to be followed as closely as possible; however, minor variances are authorized. Variances in sorties/mission types may be used as a basis for regression by the SQ/CC. The squadron commander determines qualification considering MAJCOM guidance and the individual's capabilities.

1.10.3. RAP sortie and event requirements (see [Attachment 2](#)) apply to CMR and BMC pilots as well as those carrying special capabilities or qualifications and are IAW the RAP Tasking Memo. The standard sortie requirements at [Table 1.1](#) establish the minimum number of sorties per air expeditionary force training cycle for BMC and CMR levels of training. The current RAP Tasking Memo takes precedence over this manual and may contain an updated sortie requirement or missions/events not yet incorporated in [Attachment 2](#).

1.10.4. The SQ/CC's should train all designated pilots to CMR.

1.10.5. Progression from BMC to CMR requires:

1.10.5.1. A 1-month look-back (one month history) at the higher sortie rate.

1.10.5.2. Qualification in all events required by the RAP Tasking Memorandum.

1.10.5.3. Confirmation the progressed pilot can complete the prorated number of sortie/event requirements remaining at CMR by the end of the training cycle.

1.10.5.4. Squadron CC certification.

Table 1.1. B-2 RAP Sortie Requirements (12 Month Cycle).

| Cycle | CMR (Inexperienced/Experienced) | BMC (Inexperienced/Experienced) |
|---|---------------------------------|---------------------------------|
| RAP Total (1) | 26/20 | 18/16 |
| 3-Month Lookback | 6/6 | 4/4 |
| 1-Month Lookback | 2/2 | 1/1 |
| Note: Current RAP sortie requirements are based on the selection of highly qualified pilots for B-2 Initial Qualification. Expect sortie requirements to increase as pilot experience level decreases. | | |

1.10.6. SQ/CCs will determine and assign pilots that will maintain special capabilities or qualifications. (T-3). Specialized training is normally accomplished in addition to baseline CMR/BMC sortie/event requirements.

1.10.7. CMR and BMC pilots will fly at or greater than the required monthly sortie rate. (T-1). If unable, refer to Regression, [paragraph 4.7](#)

1.10.8. End of Cycle training requirements are based on the pilot's experience level on the last day of the current training cycle. **(T-1)**.

1.10.9. Units converting to another Mission Design Series (MDS) may fly pilots in CMR positions at the BMC rate until one month prior to the operationally ready date if the Utilization Rate will not support CMR sortie rates. CMR pilots should be flown at a CMR rate for the month prior to Initial Operational Capability.

1.10.10. Units will complete training requirements during the appropriate training cycle unless where given specific exemption. **(T-3)**.

1.11. Training Records and Reports.

1.11.1. Units will maintain aircrew records for individual training and flight evaluations as applicable, IAW:

1.11.1.1. AFMAN 11-202V1.

1.11.1.2. AFI 11-202V2, *Aircrew Standardization and Evaluation Program*.

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

1.11.1.4. AFGSCI 11-464, *Training Records and Performance Evaluation in Formal Flying Training Programs*.

1.11.1.5. Appropriate MAJCOM directives. **(T-1)**.

1.11.2. Units will track the following information for all pilots (as applicable):

1.11.2.1. Ground training. **(T-1)**.

1.11.2.2. Requirements and accomplishment of individual sorties, RAP sorties, sortie types, and events cumulatively for the training cycle. **(T-1)**.

1.11.2.3. RAP sortie requirements in accordance with the RAP Tasking Memorandum. **(T-1)**.

1.11.2.4. Requirements and accomplishment of individual currencies. **(T-1)**.

1.11.2.5. Weapons employment records. **(T-1)**.

1.11.3. Units may use "NO DATE" for events with either the date it was accomplished in the formal training unit (FTU) (or US Air Force Weapons School-equivalent training accomplished) or the unit mission certification date.

1.11.4. Periodic and End-Of-Cycle Training Reports (Operations Units and FTUs).

1.11.4.1. Ops Units Reporting. Ops squadrons (including those deployed) will submit periodic and End-Of-Cycle reports per the RTM. **(T-1)**. Squadrons may submit an out of cycle report at any time if HHQ assistance is required to prepare for DOC or deployment tasking. Reference current RTM for detailed instructions and report templates.

1.11.4.2. FTU Reporting. FTUs will report training health as directed by AFGSC/A3T via Combat Air Forces Formal Training Review. **(T-1)**.

1.12. Pilot Utilization Guidance.

1.12.1. Commanders will ensure that wing/group tactical pilots (API-1/2/6s) fill authorized positions IAW unit manning documents and that pilot status is properly designated. **(T-3)**. The overall objective is that pilots perform combat-related duties. Supervisors may assign pilots to valid, short-term tasks (escort officer, flying evaluation or mishap board member, etc.), but must continually weigh the factors involved, such as level of pilot tasking, flying proficiency, currency, and experience. For inexperienced pilots, supervisors should limit the non-flying duties to mission activities.

1.12.2. Duties that may be assigned to CAF API-1/2 pilots are weapons and tactics officer, scheduling officer, flying safety officer, Supervisor of Flying, mobility/contingency plans, training (except aviation resource management (ARMS) documentation), SQ Standardization/Evaluation Liaison Officer, squadron flight equipment officer, survivability officer, and other duties directly related to flying. In some instances, such as squadron-assigned flight safety officers, API-1/2s may be attached to the wing/group. API-1/2s will not be attached to wing/group staffs or man wing/group staff positions unless total wing pilot API-1/2 manning is 100 percent or better. **(T-2)**. CCs will ensure wing/group staff pilots (API-6s) perform duties justified in MAJCOM manpower standards documents and authorized in unit manning documents. **(T-3)**.

1.12.3. API-1/2 pilots will not perform long-term duties that are outside the scope of [paragraph 1.12.2](#) which detract from primary duties of training for or performing the unit flying mission for longer than 30 days for the following aircrew:

1.12.3.1. Combat-coded Units. CMR API-1, mission qualification training (MQT) API-1, CMR API-6, MQT API-6, BMC (API- All), API-5 pilot-physicians. **(T-3)**.

1.12.3.2. Formal Training Units. Formal syllabus training, Instructor Upgrade, Instructor continuation training (CT), authorized staff personnel not performing Instructor or Flight Examiner (FE) duties (to include API-5 pilot-physicians not on instructor orders). **(T-3)**.

1.12.3.3. Test Units. Requirements directed by MAJCOM, training required to prepare for assigned projects/tasking, BMC training requirements that cannot be accomplished on primary missions, API-5 pilot-physicians. **(T-3)**.

1.12.4. While API-1 crew members 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 aircrews. **(T-3)**.

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

1.12.6. Units should provide assigned/attached API-6/-8 aircrews adequate resources to maintain minimum training requirements; however, support for API-6/-8 aircrews will not come at the expense of the flying squadron's primary mission. **(T-1)**.

1.13. Unit Manpower.

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

1.13.1.1. Operational Units. CMR API-1, MQT API-1, CMR API-6, MQT API-6, BMC.

1.13.1.2. FTU and USAF Weapons School (USAFWS). Formal syllabus training, IP upgrade, IP CT, authorized staff personnel not performing IP or FE duties.

1.13.1.3. Test and Evaluation Squadron (TES) Units. Requirements directed by MAJCOM, training required to prepare for assigned projects/tasking, and BMC training requirements that cannot be accomplished on primary missions.

1.13.1.4. Test and TES Units. Requirements directed by MAJCOM, training required to prepare for assigned projects/tasking, BMC training requirements that cannot be accomplished on primary missions, API-5 aircrew physicians.

1.13.2. Wing API-6 authorizations are IAW unit manning documents. Active duty wings converting to new Primary Aircraft Inventory are authorized one SQ equivalent of additional API-6s during the conversion period. However, total wing staff flying the new aircraft shall not exceed total authorized for final conversion equipage. **(T-3)**.

1.13.3. For wings consisting of both FTU and operation units, at least one of the following pilots will maintain formal instructor status: Wing Commander (WG/CC), Vice Wing Commander (WG/CV), OG/CC, or Deputy Group Commander (OG/CD). **(T-1)**.

1.13.4. API-8 rated personnel, AFGSC Inspectors General in API-6 billets, and Test Unit aircrew flying authorizations will be IAW AFI 11-401_AFGSCSUP_1, *Aviation Management*. They will maintain BMC qualification; however, they are not required to complete BMC specific missions/events or meet monthly lookback requirements.

1.13.4.1. Test unit pilots will fly the BMC sortie rate as a minimum and should meet monthly BMC look-back. Units should provide assigned API 6/8 flyers adequate resources to maintain minimum training requirements. However, API-6/8 flyer support will not come at the expense of the flying squadron's primary mission. **(T-1)**.

1.13.4.1.1. API 6 flyers will accomplish Non-RAP requirements with allotted BMC sorties. **(T-1)**.

1.13.4.1.2. API-8 flyers will strive to accomplish Non-RAP requirements with allotted BMC sorties. **(T-1)**.

1.13.4.2. If attached units cannot meet attached flyer requirements, they must request relief IAW AFI 11-401, AFGSC Sup. Units requiring flying hour adjustments for attached API-8 and applicable API-6 flyers must request program changes IAW AFI 11-101_AFGSC Sup, *Management Reports and Guidance for Flying Hour Program*.

1.13.5. There is no maximum sortie requirement for CMR pilots. **Table 1.2** defines the minimum and maximum sortie requirements for other pilots. On occasion, unique operations may require pilots to fly more than the maximum number of sorties authorized. However, this may impact training of other pilots.

Table 1.2. B-2 Sortie Requirements for other than API-1/2.

| API Level | CT Status | Unit's Aircraft Code | Organization Level | Maximum Sortie Allowance (Inexperienced/Experienced) |
|------------------|------------------|-----------------------------|---------------------------|---|
| 6 | CMR | combat | Any | As required by qualifications |
| 6 | BMC | combat | Wing | CMR Rate |
| 6 (FTU IP) | BMC | combat or training | Wing | As required by Programmed Flying Training |
| 6 | BMC | Any | Test Unit | As determined by test program requirements |
| Any | BAQ | Any | Any | BMC Rate |
| 8 | BMC | combat, training, or test | Above Wings | As required by qualifications |

Chapter 2

INITIAL QUALIFICATION TRAINING (IQT)

2.1. General. This chapter outlines IQT requirements for all aircrew. IQT provides the training necessary to qualify crew members in a basic position and flying duties without regard to a unit's mission. Upon completion of IQT, the aircrew attain Basic Aircraft Qualification (BAQ) status. BAQ is a prerequisite for MQT. Except for general officers above wing level, BAQ is not a long term qualification status. Waiver authority for other aircrew to remain BAQ is MAJCOM/A3 (ANG: NGB/A2/3/6/10).

2.1.1. Formal Training. IQT includes Basic, Instructor, and Senior Officer Course training normally conducted during formal syllabus courses at FTU squadrons. Formal course graduates are proficient in mission tasks as indicated by the course training standards and required proficiency levels of the FTU syllabus.

2.1.2. Local Training. In exceptional circumstances when FTU training is not available within a reasonable time period, local requalification training may be conducted IAW the provisions in this chapter. When local requalification training is approved, the gaining MAJCOM assumes responsibility for the burden of providing this training. Local requalification training will be developed and conducted using the appropriate formal course syllabi **(T-1)**. Completion of local requalification training will result in personnel actions IAW AFI 36-2107 *Active Duty Service Commitments (ADSC)*. **(T-2)**.

2.2. Approval and Waiver for Local IQT.

2.2.1. AFGSC/A36 (ANG: NGB/A2/3/6/10) approves local IQT and is the waiver authority to change the requirements of the formal course syllabus. Send information copies to AFGSC/A3T.

2.2.2. Gaining AFGSC/A36 (ANG: NGB/A2/3/6/10) approves local IQT for colonel-selects and above to be conducted at the unit to which the officer is assigned. Send information copies to AFGSC/A3T.

2.2.3. Requests to conduct local IQT include the following:

2.2.3.1. Justification for the local training in lieu of FTU training. **(T-1)**.

2.2.3.2. Summary of individual's flying experience to include last centrifuge date. **(T-1)**.

2.2.3.3. Date training will begin and expected completion date. **(T-1)**.

2.2.3.4. Requested exceptions to formal course syllabus, with rationale. **(T-1)**.

2.3. Prerequisites. Course prerequisites will be IAW the appropriate syllabus and Education and Training Course Announcements (ETCA) <https://cs2.eis.af.mil/sites/app10-ETCA/SitePages/Home.aspx>, USAF Formal Schools. **(T-1)**.

2.4. Grounding Events. Training. Accomplish all events in **Table 2.1** at during initial or mission training prior to the first sortie in the B-2A. **(T-1)**.

Table 2.1. Grounding Events.

| Code | Event | Crew Position | Notes |
|--|--|---------------|-------|
| | Flight Physical | ALL | 2 |
| | Physiological Training | ALL | 2 |
| G002 | Aircraft Marshalling Exam | ALL | 1 |
| SS06 | Emergency Parachute Training | ALL | 2 |
| LL06 | Aircrew Flight Equipment | ALL | 2 |
| LL07 | Fit Check | ALL | 2 |
| LL01 | Aircrew Flight Equipment Familiarization | ALL | 1, 2 |
| LL02 | Emergency Egress Training | ALL | 2 |
| SS01 | Local Area Survival Training | ALL | 1, 2 |
| Notes: 1. Accomplish once upon arrival after each permanent change of station. 2. One-time requirement for incentive or orientation flyers. See AFI 11-403, <i>Aerospace Physiological Training Program</i> , for specific training required. | | | |

2.5. B-2 Lead-In Weapons, Tactics and Intelligence Training: Local training course is accomplished prior to start of B2 IQT at the discretion of 13 Bomb Squadron Commander. The course provides introduction to tactical aspects of the B-2 mission for pilots not previously qualified in Bomber, Fighter, or Attack aircraft. Training requires approximately 5 days. Only prerequisite is pilot must be selected to enter B-2 IQT. **(T-3).**

2.6. Flying Training:

2.6.1. Training will be completed within the time specified by the approved syllabus. **(T-1).** Failure to complete training within the specified time limit requires notification through channels to AFGSC/A36 (send information copies to AFGSC/A3/6TO and the gaining unit) with crewmember's name, rank, reason for delay, planned actions, and estimated completion date. **(T-1).**

2.6.2. Formal course syllabus mission objectives and tasks are minimum requirements. However, additional training events, based on student proficiency and background, may be incorporated into the program with authorization of the FTU SQ/CC. Additional training due to student non-progression is available within the constraints of the formal course syllabus and may be added at the discretion of the FTU SQ/CC.

2.7. Flight Instructor Course (FIC):

2.7.1. FIC qualifies pilots for instructor duties.

2.7.2. Prerequisites and time limitations are listed in ETCA <https://cs2.eis.af.mil/sites/app10-ETCA/SitePages/Home.aspx> and the B-2 FIC syllabus. Attending another aircraft's FIC does not satisfy B-2 FIC requirements. **(T-1).**

2.7.3. Units will ensure graduates complete their initial instructor evaluation IAW AFI 11-202V2 and AFMAN 11-2B-2V2, *B-2 Aircrew Evaluation Criteria*. **(T-1).**

2.7.4. Following satisfactory completion of upgrade requirements, the OG/CC will personally interview the upgrading IP and review IP responsibilities, scope of duties, authority and philosophy prior to the IP performing instructor duties. **(T-3)**.

2.7.5. Individuals selected for FTU instructor duty must complete the Faculty Training Course at the FTU.

2.8. Senior Officer Course (SOC).

2.8.1. SOC is designed for senior rated officers as well as a small number of non-senior officers in certain wing staff positions, graduates of USAF Test Pilot School, and test personnel. Course prerequisites are listed in ETCA <https://cs2.eis.af.mil/sites/app10-ETCA/SitePages/Home.aspx> and the B-2 SOC Syllabus. SOC graduates will be BAQ qualified pilots and must fly with an instructor until BMC. **(T-1)**.

2.8.2. All formal training courses conducted at FTUs for senior officers (colonel selectees and above) not assigned to Whiteman AFB command positions require approval at the following levels:

2.8.2.1. Colonel and Colonel Select: AFGSC/A3T.

2.8.2.2. Brigadier General Select and above: AFGSC/A3/6.

2.8.3. Senior officers must meet course entry prerequisites and will complete all syllabus requirements unless waived IAW syllabus directives. **(T-1)**.

2.8.4. Senior officers in training at the FTU are in formal training status. Unit duties will be turned over to appropriate deputies or vice commanders until training is completed. **(T-1)**.

Chapter 3

MISSION QUALIFICATION TRAINING

3.1. General. MQT upgrades pilots to BMC or CMR to accomplish the unit's mission. For test aircrew, MQT will normally be accomplished by the respective test unit, and qualification training will be determined by SQ/CC. Applicable portions of MQT may be used to create a requalification program for pilots who have regressed from BMC or CMR. All training events accomplished to the required proficiency level during IQT/RQT are creditable (if applicable) for MQT. Accomplish waived FTU proficiency items prior to declaring the individual BMC/CMR. **(T-1).** Squadron Commanders may tailor this program for all pilots based on experience, currency, performance, and formal training.

3.1.1. Qualifications and flight evaluations may be accepted from other MAJCOMs, provided they meet MAJCOM and unit standards.

3.1.2. Squadron commander completes MQT certification in accordance with the RAP tasking memorandum.

3.1.2.1. For nuclear certification, see AFGSCI 13-520V1, *Bomber Nuclear Training*.

3.1.2.2. For conventional verification, each pilot will demonstrate to a formal board satisfactory knowledge of the unit's assigned mission. **(T-3).** Board composition will be established by the SQ/CC **(T-3).** All squadron pilots are highly encouraged to attend. Suggested briefing guide is at [Attachment 3](#).

3.2. Ground, Simulator, and Flying Training. Units will develop blocks of instruction in accordance with the RAP Tasking Memorandum and MQT Syllabus. **(T-3).**

3.3. Transferring Between Units. BMC or CMR individuals transferring between units will complete MQT as determined by the gaining unit SQ/CC. **(T-3).**

Chapter 4

CONTINUATION TRAINING

4.1. General. This chapter and the current B-2 RAP Tasking Memo outline ground and flying training requirements for CMR, BMC, and BAQ pilots. Refer to [Chapter 6](#), Specialized Training, for additional training program specifics. Pilots must be qualified IAW AFMAN 11-202V1 and AFI 11-202V2 and will complete basic, initial, or requalification training to fly in BAQ status, and mission qualification to fly in BMC or CMR status. **(T-1)**.

4.2. Ground Training. Ground training will be accomplished IAW the RAP Tasking Memorandum. Waiver authority for ground training specified is IAW the reference directive:

4.2.1. (Weapon System Trainers) WST.

4.2.1.1. Training events in the Weapon System Trainer (WST) will be accomplished in accordance with the RAP Tasking memorandum. **(T-1)**.

4.2.1.2. Base scenarios on expected employment tasking and training device capabilities. **(T-3)**. Emphasis should be based on the OG Training Plan.

4.2.1.3. Simulator Certification. The 29 Training Support Squadron will certify the ATD to command standards before crediting transfer of task learning from the ATD to the aircrew. Flight evaluation completion may be accomplished per AFMAN 11-2B-2V2 for events certified Code 1 through the 29 Training Support Squadron. Certified Code 1 RAP and Non-RAP events accomplished in the WST may be credited towards training cycle requirements but may not be used to update currency, except for instrument approaches, takeoffs, bomb runs, single engine-out approaches and go-arounds.

4.2.2. Situational Emergency Procedure Training (SEPT).

4.2.2.1. This training is not an evaluation, but a review of abnormal/emergency procedures and aircraft systems operations/limitations during realistic scenarios.

4.2.2.2. Incorporate the following elements into squadron SEPT training programs:

4.2.2.2.1. OGV will develop monthly SEPT topic. **(T-1)**.

4.2.2.2.2. Develop SEPT scenarios using B-2 mishaps/incidents as baseline cases. **(T-1)**.

4.2.2.2.3. Completion of a WST Emergency Procedure (EP) profile satisfies the monthly SEPT requirement. For an IP, administering the WST EP simulator will satisfy their SEPT requirement.

4.2.2.2.4. Formal course student SEPTs may satisfy the monthly SEPT requirement for the IP who administers this training.

4.2.3. Conventional Verification. Conventional verification updates pilots on their squadron's wartime mission. Each pilot will participate in a squadron initial/continuation verification as a briefer, board member, or seminar participant. **(T-1)**. Pilots may also receive recurring verification credit by serving as a member of a mission planning cell designated exercise or military campaign. Suggested briefing guide is at [Attachment 3](#).

4.2.4. Weapons/Tactics Academic Training.

4.2.4.1. Units will establish a weapons/tactics academic training program to satisfy MQT and CT requirements. **(T-1)**.

4.2.4.2. Academic instructors should be USAFWS graduates, if possible.

4.2.4.3. Instruction should include (as applicable), but is not limited to:

4.2.4.3.1. Conventional weapons to include description, operation, parameters, fuzing, limitations, preflight, tactics, normal and emergency procedures/techniques.

4.2.4.3.2. Specialized training emphasizing effective employment to include targeting/weapon selection, *Joint Munitions Effectiveness Manual Weaponneering System* or Combat Weapons Delivery Software, frag deconfliction, hung stores procedures, wartime Rules of Engagement/Special Instructions, and on-scene commander procedures for combat search and rescue operations.

4.2.4.3.3. Defense management systems related threat system information to include threat analysis, capabilities, limitations, strengths, weaknesses, and vulnerabilities.

4.2.4.3.4. B-2 signature management to include (but not limited to) AFTTP 3-3. *Integrated Planning and Employment*, AFTTP 3-1. *Threat Reference Guide and Countertactics*, and AFTTP 3-1.B-2, *Tactical Employment – B-2*.

4.2.4.3.5. Nuclear weapons to include description and effects, safety and security, operation, options, delivery considerations, preflight, arming/dearming, normal and emergency procedures, safe escape, and flash blindness protection.

4.2.5. Nuclear Functional Training: Refer to **Table 7.1** in the current RAP Tasking Memo.

4.2.6. Physiological Training will be conducted IAW AFI 11-403, *Aerospace Physiological Training Program*, 30 November 2012, and MAJCOM supplements. **(T-1)**.

4.3. Flying Training: All pilots will accomplish the requirements in the RAP Tasking Memo. In addition, the following are required:

4.3.1. BAQ Requirements:

4.3.1.1. Instrument/Qualification Evaluation IAW AFI 11-202V2 and AFMAN 11-2B-2V2. **(T-1)**.

4.3.1.2. Currencies (as applicable) IAW the RAP Tasking Memorandum. **(T-1)**.

4.3.1.3. BAQ pilots should fly a supervised sortie (with a squadron supervisor or IP) at least once every 90 calendar days.

4.3.2. BMC Requirements:

4.3.2.1. Mission Evaluation IAW AFI 11-202V2 and AFMAN 11-2B-2V2. **(T-1)**.

4.3.2.2. Currencies (as applicable) IAW the RAP Tasking Memorandum. **(T-1)**.

4.3.2.3. BMC pilots fly RAP sorties and/or events as required by the RAP Tasking Memo and as authorized by the OG/CC, based on their B-2 experience and proficiency. **(T-1)**.

4.3.2.4. Ground training requirements related to applicable RAP sorties/events. **(T-1)**.

4.3.2.5. Unit developed training programs for spin-up prior to participation in exercises and deployments/combat missions. **(T-1)**.

4.3.2.6. Sortie rate (look-back) IAW the RAP tasking memorandum. **(T-1)**.

4.3.3. CMR Requirements:

4.3.3.1. Performance satisfactory to the SQ/CC. **(T-3)**.

4.3.3.2. Mission Evaluation IAW AFI 11-202V2 and AFMAN 11-2B-2V2. **(T-1)**.

4.3.3.3. Sortie rate (look-back) IAW the RAP Tasking Memorandum. **(T-1)**.

4.3.3.4. RAP sorties, mission types, and events, including weapons qualifications IAW the procedures set forth in this manual and the MAJCOM RAP Tasking Memo. **(T-1)**.

4.3.3.5. Currencies (as applicable) IAW the RAP Tasking Memorandum. **(T-1)**.

4.3.3.6. Ground training IAW the current RAP Tasking Memo. **(T-1)**.

4.3.3.7. Weapons qualification. **(T-1)**.

4.3.4. Special Capabilities/Qualification requirements:

4.3.4.1. Specialized training IAW **Chapter 6** and guiding syllabi. **(T-1)**.

4.3.4.2. Sortie requirements IAW the RAP Tasking Memo. **(T-1)**.

4.3.4.3. Failure to accomplish the requirements specified in this document or the RAP Tasking Memo requires loss of designation/qualification. **(T-1)**.

4.3.5. Designated Test Unit Requirements.

4.3.5.1. API-1/6 pilots assigned/attached to Test units will fly at the BMC rate and accomplish the Non-RAP BMC requirements as shown in the RAP Tasking Memo, as applicable. In addition to RAP missions, formal training syllabus-directed missions and approved test plan missions apply to the BMC rate requirement for assigned/attached API-1/6 pilots at Test units. For instructors, failure to accomplish these requirements will not affect instructor status but will require additional training as determined by the SQ/CC prior to performing instructor duties in the delinquent events. **(T-1)**.

4.3.5.2. The squadron commander of the Test unit will certify the pilot's capability to perform the specific test function. **(T-1)**.

4.4. Special Categories.

4.4.1. Formal training unit (FTU) instructors, 325 Weapons Squadron instructors, 29 Training Squadron Detachment 12 Subject Matter Experts (SMEs), and 29 Training Support Squadron Detachment 5 SMEs should maintain a limited combat capability. FTU, weapons instructor course (WIC), and SME sorties are not a separate RAP category, however, they can log a RAP sortie when RAP sortie requirements are met IAW **Attachment 2**. FTU/WIC/SME instructors and cadre will fly at the BMC experienced rate. **(T-1)**. To maintain BMC, FTU, WIC instructors, and SMEs must meet the BMC RAP Tasking Memorandum event totals and currencies and BMC lookback requirements. FTU, WIC instructors, and SMEs do not need to meet the RAP sortie type, event or weapon requirements specified in the RAP tasking message. A non-current or unqualified SME,

FTU, or WIC instructor will be considered N-BMC IAW [paragraph 4.6.2](#) until the currency/qualification is regained. (T-1). Regression is not applicable for this category.

4.4.2. Flight Surgeon. Due to the limited number of B-2 sorties, flight surgeons will fly in CTP aircraft (T-3).

4.4.3. MAJCOM and NAF API-8 Pilots, and AFGSC/IG Inspectors:

4.4.3.1. Mission Directed Training for HHQ personnel (other than that conducted in support of a formal inspection) requires coordination with the supporting unit. AFGSC Directors (Division Chiefs for Flight Safety and IG) and 8AF/A3 (AOG)/OV are reviewing authorities for assigned personnel. They will:

4.4.3.1.1. Coordinate with the supporting agency to ensure appropriate ARMS data is maintained and provided IAW AFI 11-401.

4.4.3.1.2. Review assigned pilot accomplishments and currencies prior to authorizing participation in mission directed training.

4.4.3.1.3. Provide each pilot with written documentation specifying the sortie types and events the crewmember is authorized to fly.

4.4.3.2. HHQ flying personnel maintaining BMC status are exempt from non-grounding academic ground training and special training programs within authorized mission areas. Specific currencies will be provided to the host squadron and HHQ supervisors will determine crewmember qualifications to participate in squadron scenarios for mission directed training.

4.4.3.3. HHQ pilots will:

4.4.3.3.1. Review accomplishments and currencies for accuracy.

4.4.3.3.2. Submit qualification/authorization documentation to the supporting SQ/CC or operations officer prior to flying with that squadron.

4.4.3.3.3. Evaluate the demands of each mission scenario and ensure that their ability/proficiency will not be exceeded.

4.4.3.4. HHQ instructor pilots may perform instructor duties, with the concurrence of the OG/CC, if qualified and current for the applicable missions/events.

4.4.3.5. HHQ staff pilots may participate in tactical training events. Pilots will present documentation summarizing currencies, egress training, flight qualifications, etc., to the unit where flying is performed.

4.5. Multiple Qualification/Currency:

4.5.1. MAJCOM/A3 may authorize qualification in more than one MDS aircraft for crew members only when such action is directed by command mission requirements and is economically justifiable. This authority cannot be delegated below MAJCOM level. Unless required for unit mission accomplishment, commanders must not permit crew members qualified in primary mission aircraft to maintain qualification in support aircraft. Individuals assigned to positions covered by [paragraph 4.4](#) or [paragraph 4.5.2](#) have MAJCOM/A3 approval, and do not need to submit specific requests.

4.5.1.1. Submit multiple qualification requests through command channels to MAJCOM/A3T. (T-1). All requests must contain full justification. (T-1). Approval for multiple qualification requests must be provided to the appropriate host base flight management office; flight accomplishments are not authorized until aircraft assignment is updated into ARMS. (T-1).

4.5.1.2. Individually authorized multiple qualifications are valid if the individual is assigned to the specific position with aircraft requested or approved by MAJCOM/A3.

4.5.2. Multiple qualifications are authorized for pilots and instructor pilots participating in the CTP or maintaining tactical aircraft qualification in the applicable companion trainer/chase aircraft.

4.5.3. Multiple qualifications are not appropriate for senior wing supervisors of units with different types of aircraft, except for the CTP program. Wing commanders will qualify in only one of their wing's aircraft. (T-1). Either the WG/CV or OG/CC should qualify in another of the wing's aircraft (not the same one selected by the WG/CC).

4.5.4. B-2 pilots dual qualified in the T-38 under the provisions of the B-2 CTP will complete both MDS annual training requirements. (T-1).

4.6. Currencies/Recurrences/Requalification:

4.6.1. Currency. The RAP Tasking Memorandum defines currency requirements for all B-2 pilots. If a pilot loses a particular currency, that sortie/event may not be performed except for the purpose of regaining currency as Noted. (T-1).

4.6.2. Nuclear surety training, if applicable, must be accomplished IAW DoD S-5210.41-M, *Nuclear Weapon Security Manual (U)*, and the ETCA website <https://cs2.eis.af.mil/sites/app10-ETCA/SitePages/Home.aspx>. Individuals delinquent in nuclear surety training will not perform alert duty, nuclear generate, or have access to nuclear weapons. (T-0).

4.6.3. Recurrence:

4.6.3.1. Recurrence is required whenever a qualified pilot does not meet currency requirements of this manual and the RAP Tasking Memorandum. (T-1).

4.6.3.2. Overdue currency is based on time elapsed from the date the individual became non-current. (T-1).

4.6.3.2.1. Up to 180 Days: Training if/as directed by the SQ/CC and a proficiency demonstration of the non-current event to an instructor. (T-3).

4.6.3.2.2. Greater than 180 days: Loss of currency greater than 6 months may result in an unqualified status, as determined by the squadron commander. As a guide, breaks in training greater than 6 months or loss of multiple currencies should result in unqualified status. If qualification is not affected, accomplish training as directed by the SQ/CC and demonstrate proficiency to an instructor. If qualification is affected, a flight check (SPOT as a minimum, to include all delinquent items) is required. (T-1).

4.6.4. Requalification Training: An aircrew member is unqualified upon expiration of his or her qualification evaluation, or completion of a qualification evaluation in a different MDS (Exception: multiple qualification in CTP aircraft).

4.6.4.1. Unqualified 2 to 8 Years: Complete an FTU requalification academic course, FTU flight training, and a flight evaluation in accordance with [paragraph 2.8](#) and the B-2 Requalification Training Course Syllabus. **(T-1)**.

4.6.4.2. Unqualified over 8 years: Individuals non-current over 8 years will complete the Initial Qualification Course. **(T-1)**.

4.6.5. Loss of Instructor Qualification. Instructors will lose qualification if:

4.6.5.1. They fail a flight check. To regain instructor status, the instructor must successfully complete a flight evaluation IAW AFI 11-202V2 and AFMAN 11-2B-2V2. **(T-1)**.

4.6.5.2. They fail a qualification, instrument, or mission examination. To regain IP status, the IP must successfully re-accomplish the written exam. **(T-1)**.

4.6.5.3. They become non-current in an event/mission which causes removal from CMR/BMC status and the SQ/CC deems that loss of currency is of sufficient importance to require decertification. If the SQ/CC does not elect this option or if the instructor becomes non-current in events/mission which do not require removal from CMR/BMC status, instructor status may be retained, but the IP will not instruct in that event/mission until the required currency is regained. **(T-1)**.

4.7. Regression:

4.7.1. CMR/BMC Regression for Failure to Meet Lookback. Only RAP training and Contingency Operations sorties may be used for lookback. **(T-1)**. If a pilot does not meet lookback requirements throughout the training cycle, SQ/CCs can either: regress the crewmember to Non-Combat Mission Ready (N-CMR)/Non-Basic Mission Capable (N-BMC) status, as applicable; remove the pilot from a CMR manning position; or initiate action to remove the pilot from active flying status. At SQ/CC discretion, regression will not affect crew position.

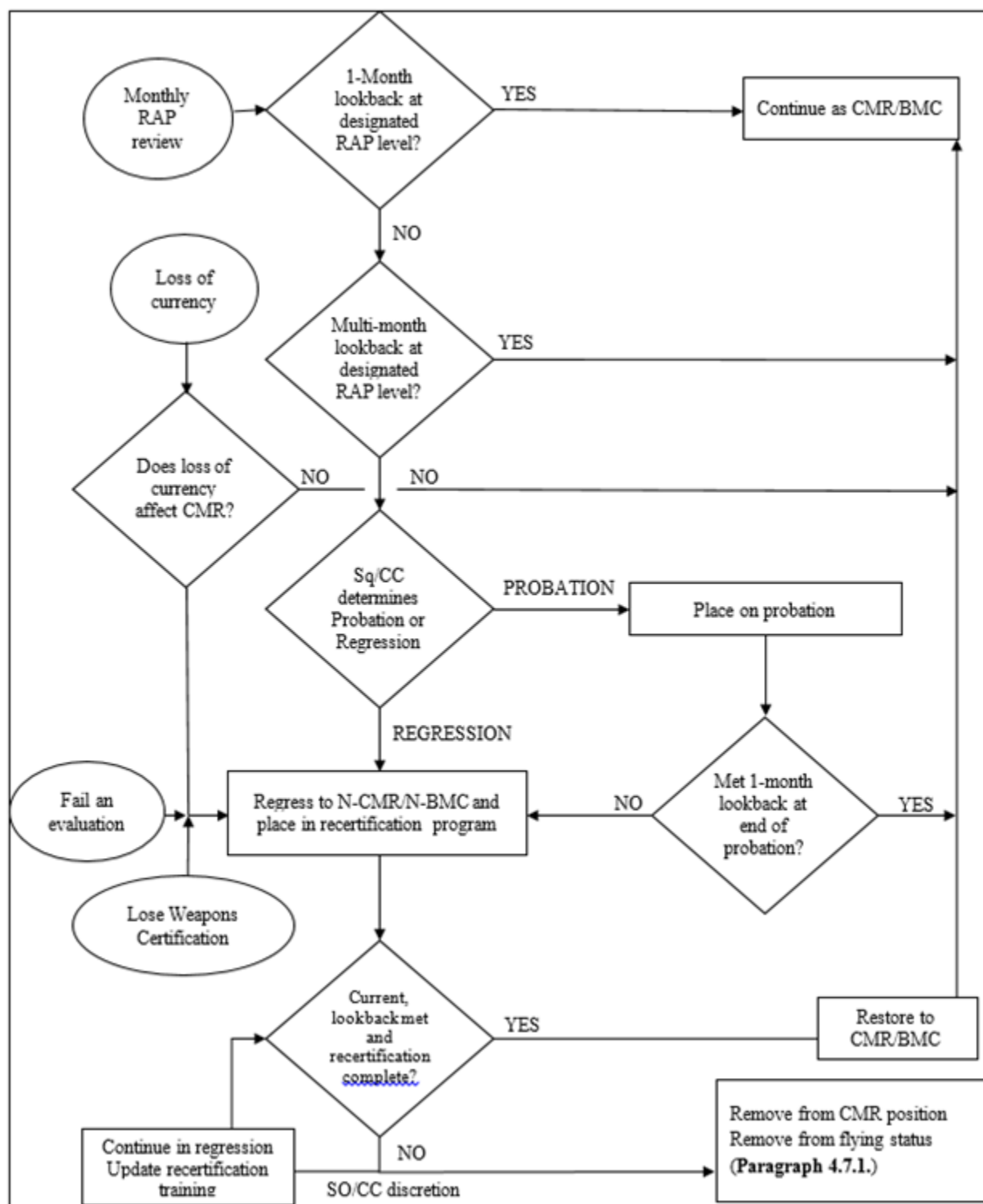
4.7.1.1. Failure to meet 1-month RAP/Contingency Operations sortie lookback requires a review of the pilot's 3-month sortie history. **(T-1)**. If the 3-month lookback has been met, pilots may, at SQ/CC discretion, remain CMR/BMC. Failure to meet the 3-month lookback will result in regression to N-CMR/N-BMC status as appropriate, or the pilot may be placed in probation status for 1 month at the SQ/CC's discretion. If probation is chosen, the only way to remove a pilot from probation and preserve the current status is to reestablish a 1-month lookback by the end of the probation period (see [Figure 4.1](#)).

4.7.1.2. CMR pilots regressed to Non-CMR for lookback must complete a SQ/CC approved program to return the crewmember to CMR status. **(T-1)**. BMC pilots regressed to Non-BMC must complete a SQ/CC directed program. Upon completion of the program, CMR/BMC pilots must also meet the subsequent 1-month lookback requirement prior to reclaiming CMR/BMC status. **(T-1)**. The sorties and events accomplished during the program may be credited towards their total/type sortie and event requirements for the training cycle as well as for their monthly sortie requirement.

4.7.1.3. Look-back computations begin the calendar month following completion of MQT. The pilot must maintain 1-month look-back until 3-month look-back is established. **(T-1)**.

4.7.2. Regression for Weapons Qualification: Failure to maintain RAP tasked weapons qualification at the end of the training cycle for events tasked as Qual at CMR/BMC will require regression to Non-CMR/Non-BMC unless waived by the OG/CC. To regain CMR/BMC, the pilot must re-achieve initial qualification in the deficient weapons event (see [paragraph 5.2](#)) . (T-1). Events accomplished for this initial qualification may count toward the cumulative CT event qualification required at the end of the next training cycle.

4.7.3. Failure of Evaluations. Pilots who fail an aircraft qualification, mission, or instrument evaluation will be handled IAW AFI 11-202V2 and AFMAN 11-2B-2V2. Pilots will regress to N-CMR or Non-BMC as applicable. These pilots will remain Non-CMR/Non-BMC until successfully completing required corrective action, a reevaluation, and are recertified by the SQ/CC. (T-1).

Figure 4.1. *Regression Flow Chart.*

4.7.4. Training annotated as affecting CMR status will require regression to Non-CMR until appropriate training is accomplished. Overdue CMR/BMC sortie requirements must be satisfied before the pilot is considered qualified to perform tasks applicable to that type of

training. **(T-1)**. Training identified as not affecting CMR status does not require regression from CMR, although it may result in grounding until training is completed (e.g., aircrew flight equipment training). The duration of grounding and status of sortie lookback will determine the effect on CMR status.

4.8. End-of-Cycle (EOC) Training Requirements. If any RAP training requirements are not met, determine what items, if any, may be waived IAW RTM procedures based on the nature of the deficiency and the crewmember's underlying proficiency. Aircrew who fail to complete RAP mission or event requirements may require additional training depending on the type and magnitude of the deficiency. In all cases, report training shortfalls and waivers granted IAW RTM instructions.

4.8.1. For pilots who fail to meet EOC mission or event requirements, the squadron commander determines additional training required. Pilots may be regressed to N-CMR/N-BMC or continue as CMR/BMC during retraining if supported by lookback. Units will document any aircrew who do not meet EOC requirements and additional training if directed. **(T-3)**.

4.8.2. 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.

4.8.3. EOC requirements will be based only on the pilot's status at the end of the year. **(T-1)**. 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. **(T-3)**.

4.8.4. CMR aircrew who attend Weapons School, or the FIC may be reported throughout the course as CMR. Upon return, they may accomplish a prorated share of mission/event requirements. **(T-1)**.

4.9. Contested Degraded Operations (CDO). CDO scenario development will be included in daily training (aircraft, academics, and simulator), and be incorporated into mission and emergency procedure evaluations. **(T-3)**. Daily CT flights and WST missions will discuss the following CDO areas in relationship to the mission's profile:

4.9.1. Contested: Electro-Magnetic Spectrum degradation caused by enemy action (jamming). **(T-3)**.

4.9.2. Degraded: Electro-Magnetic Spectrum and battlespace degradation caused by failed systems (Global Positioning System degradation/denial, datalink, simple failure). **(T-3)**.

4.9.3. Operationally Limited: Reduced mission effectiveness caused by the physical or operational environment. **(T-3)**.

4.9.4. Opposed: Operations tactically limited by realistic air defenses representing the worst-case opposition of potential adversaries. **(T-3)**.

Chapter 5

WEAPONS DELIVERY/EMPLOYMENT CERTIFICATION

5.1. General. This chapter outlines requirements for attaining initial qualification and maintaining CT qualification for CMR pilots in the employment of air-to-surface weapons. Refer to "Description of Events" at [Attachment 2](#) for further guidance on weapons events. Weapons delivery/employment qualification is not required for Test aircrew.

5.1.1. The operations group has overall responsibility for establishing and maintaining the weapons qualification program. **(T-1).**

5.1.2. Weapons qualification consists of a minimum number of record releases. **(T-1).**

5.1.3. A mission evaluation qualifies aircrew to employ the member's assigned weapon system in accomplishing the unit's operational or DOC statement mission. Squadron commanders will certify aircrews in weapon type before employing without instructor supervision. **(T-3).**

5.2. Initial Qualification. Graduates of the B-2 IQT syllabus should accomplish the requirements for initial qualification in any weapons event, but items may be accomplished during MQT. Initial qualification requirements achieved in IQT or MQT satisfy requirements for annual CT qualification but not for annual RAP Tasking Memorandum event requirements. Initial qualification will carry over for previously weapons qualified B-2 pilots. RQT students previously weapons qualified need to meet the requirements of the RQT syllabus to regain weapons qualification status **(T-1)**. Upon completion of RQT, the pilot will need to accomplish required record releases IAW [paragraph 5.3](#) **(T-1)**.

5.2.1. Six record deliveries (actual or simulated) for each of the following weapons satisfies initial qualification: GBU-31/28, GBU-38, GBU-57, and AGM-158, B61/83, and Conventional Unguided weapon record releases **(T-1)**. The requirements for GBU-57 may be reduced to 4 record deliveries for initial weapons qualification. 50% of the required deliveries may be accomplished in the WST.

5.2.2. See [Attachment 2](#) for hit criteria.

5.3. CT Qualification. These criteria establish the minimum standards to maintain qualification in the appropriate RAP-tasked weapons delivery events. These qualifications are valid throughout the following training cycle. Qualification criteria consist of the number of record releases listed in the RAP tasking message with an overall hit rate of 75% for guided weapons and 50% for unguided weapons. CT weapons qualification will not be accomplished in the WST. **(T-1).**

5.3.1. CT weapons deliveries will be tactical deliveries, using (but not limited to) published safe escape maneuvers and egress procedures. **(T-3)**. Consideration should be given to appropriate fuzing options, probability of damage, and safe separation criteria. CT weapons event requirements will be accomplished on scoreable tactical ranges to the maximum extent possible. To maintain a combat perspective, weapons deliveries should simulate realistic employment of live munitions.

5.3.2. Weapons qualification will be maintained by completing minimum number of record deliveries and by achieving appropriate qualification percentage during the training cycle. (T-1). Video recorded scoring may be used.

5.3.3. Weapon qualification will be aligned with the squadron's 12-month training cycle. (T-1). At the end of the training cycle, weapons delivery scores will be reviewed to assess qualifications. (T-1). If qualified, the pilot's qualification is valid through the following training cycle.

5.4. Failure to Qualify. Failure to qualify in one event does not invalidate qualification in others. SQ/CCs may declare a pilot/mission commander unqualified 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 qualifications. If qualification is required at CMR, failure to qualify will result in regression to Non-CMR and entry into re-certification until re-qualification is accomplished. (T-1). Achieving the hit rate per [paragraph 5.3](#) may restore qualification.

Chapter 6

SPECIALIZED TRAINING

6.1. General. This chapter outlines upgrade training programs for special capabilities, certifications, and qualifications. These programs are intended to provide a basic starting point and may be modified by the SQ/CC based on the unit's requirements and/or the upgrade pilot's (UP) 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 IAW a program approved by the SQ/CC.

6.1.1. Prior to any certification, the SQ/CC personally interviews the UP and reviews responsibilities, scope of duties, authority, and philosophy. The SQ/CC approves the new status, including any restrictions, in appropriate written format (grade sheet, training folder, Letter of Xs, etc.) . **(T-3)**.

6.1.2. Units review the progress of each unqualified pilot for trends and common errors. **(T-3)**.

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

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

6.1.5. Ground training events accomplished in one training program, and subsequently required for another training program, need not be re-accomplished unless required by the SQ/CC. Annotate event accomplishment in the individual's training record. **(T-3)**.

6.2. Aircraft Commander (AC) Upgrade. This program establishes minimum requirements for upgrade to aircraft commander. This program will be accomplished IAW the current OG/CC approved Aircraft Commander Upgrade syllabus **(T-3)**. Following successful completion of program requirements, the SQ/CC will personally interview the upgrade pilot and review responsibilities, scope of duties, authority, and philosophy. **(T-3)**. The SQ/CC will certify qualified status, including any restrictions, in appropriate written format (letter of X's, grade sheets, ARMS, etc.). **(T-3)**. Prerequisites are per the USAF ETCA site at <https://cs2.eis.af.mil/sites/app10-ETCA/SitePages/Home.aspx>.

6.3. Flight Lead Upgrade Training. This program establishes minimum requirements for upgrade to Flight Lead. This program will be accomplished IAW the current OG/CC approved Flight Lead Upgrade syllabus. **(T-3)**. Following successful completion of program requirements, the SQ/CC will personally interview the UP and review responsibilities, scope of duties, authority, and philosophy. **(T-3)**. The SQ/CC will certify qualified status, including any restrictions, in appropriate written format (letter of X's, grade sheets, ARMS, etc.). **(T-3)**.

6.4. Flight Instructor Course (FIC). FIC establishes minimum requirements for upgrade to Instructor Pilot. This program will be accomplished IAW the current AFGSC/A3/6 approved FIC syllabus and the 509 OG/CC approved addendum. **(T-1)**. Following successful completion of program requirements, the OG/CC will personally interview the UP and review responsibilities, scope of duties, authority, and philosophy. **(T-3)**. The OG/CC will certify

qualified status, including any restrictions, in appropriate written format (letter of X's, grade sheets, ARMS, etc.). (T-3).

6.5. Mission Commander (MC) Upgrade. This program establishes the minimum requirements for upgrade to MC. WIC graduates are qualified as MCs.

6.5.1. MC Responsibility: The MC is responsible for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages. (T-3). MCs, once certified, are authorized to lead joint/composite force missions.

6.5.2. MC Prerequisites: SQ/CCs/operations officers will consider judgment, technical expertise, experience, and unit weapons officer recommendations when selecting pilots for MC upgrade. MCs will be instructors or experienced ACs. (T-3).

6.5.3. Ground Training: Upgrading MCs should satisfactorily complete the following unit developed blocks of instruction prior to certification as an MC:

6.5.3.1. Mission Brief/Debrief techniques and procedures.

6.5.3.2. Weapons.

6.5.3.3. Joint Munitions Effectiveness Manual/Automated Weapon Optimization Program.

6.5.3.4. Bomber Maneuvers.

6.5.3.5. Joint Theater Air Control Systems.

6.5.3.6. Air Tasking Order creation/breakout.

6.5.3.7. Mission Planning Procedures.

6.5.3.8. AFTTP 3-1. *Threat Reference Guide and Countertactics*, AFTTP 3-1. *B-2 Tactical Employment – B-2*, and AFTTP 3-3.B-2 *Combat Aircraft Fundamentals – B-2* review, AFTTP 3-3. *Integrated Planning and Employment*.

6.5.3.9. Integrated Air Defense Systems.

6.5.3.10. Joint/Composite Force Integration.

6.5.4. Flying Training. As a minimum, the MC candidate will plan, brief, fly, and debrief a minimum of one mission under the supervision of a unit weapons officer, SQ/DO or SQ/CC. (T-3).

6.5.5. Certification. Following satisfactory completion of the above requirements, the SQ/CC will certify the MC status, including any restrictions, in appropriate written format (letter of X's, grade sheets, ARMS, etc.). (T-3).

6.6. Pre-Deployment Spin-Up Training. This training should be conducted prior to deploying in support of contingency operations (if time permits) or exercises. Tasked units are responsible for contacting appropriate gaining command/operations to determine expected mission tasking. (T-1). Contact AFGSC/A3X for site survey requirements. (T-1). The SQ/CC is then responsible to implement this spin-up training. (T-3).

6.6.1. Ground Training: Pilots will complete academic training prior to deployment. (T-3). Units will brief rules of engagement or training rules, command and control, engagement authority and procedures, special instructions, airspace restrictions, unique communications

requirements, Emissions Control procedures, Operational Control, and theater Order of Battle. (T-3). Accomplish a review of foreign clearance information at <https://www.fcg.pentagon.mil/fcg.cfm>, for the unique procedures and requirements of the destination country. (T-3). Additionally, this exercise will include a discussion of the airfield description and operating peculiarities. (T-3). This review of the location's unique operational environmental features should include but is not limited to inflight procedures, seasonal weather, other unique weather phenomena (e.g., space weather impacts), wind shear potential and characteristics (e.g., sea breeze front, low altitude jet stream potential, etc.), airfield restrictions, taxi routes, and operating data if available. The local weather flight can assist with weather training.

6.6.2. Flying Training: Spin-up training will be tailored to ensure all deploying pilots are proficient, current, and qualified in all expected mission tasks. (T-3).

6.7. USAF Weapons Instructor Course (WIC). A formal flight training program designed to qualify B-2 pilots as weapons officers. Prerequisites are listed in the Air Force Education and Training Course Announcements and the WIC syllabus. Upon WIC completion, IPs are qualified in all B-2 formations as Mission/Package Commanders, and as Flight Leads. WIC graduates are also qualified as Executive Officer, Team Chief, and Mission Lead in the Mission Planning Cell as well as Liaison Officer for theater planning and coordination.

6.8. USAFWS Instructor Upgrade Course. Qualifies B-2 USAFWS instructors to perform instructor duties both in flight and platform. Upon completion, USAFWS instructors are qualified in each phase of training and may be assigned as primary mission instructors for flying as well as the primary instructor for specific platform courses.

6.9. Operational Test and Evaluation (OT&E) Training Program. Qualifies B-2 Instructor Pilots to perform B-2 OT&E missions including force development evaluation, Operational Utility Evaluation, Operational Assessment (OA), etc. The 72 TES will conduct training in accordance with 53d Wing test training requirements (T-1). The 72 TES will maintain record of OT&E training completion. (T-3).

6.10. Requalification Training (RQT):

6.10.1. Requalifies non-current B-2 pilots. Prerequisites and time limitations are listed in ETCA <https://cs2.eis.af.mil/sites/app10-ETCA/SitePages/Home.aspx> and the B-2 RQT syllabus.

6.10.2. Upon completion of RQT individuals will regain previous qualifications and certifications with approval of the SQ/CC. (T-3). Individuals requiring CMR/BMC requalification training will be BAQ until completion of MQT. (T-1).

6.10.3. Units will assign requalified pilots to an active flying position for a minimum of 18 months. (T-3).

6.11. Functional Check Flight (FCF) Certification.

6.11.1. Prerequisites. OG/CCs select aircrew to enter the FCF training program based on experience and proficiency. Aircrew should at a minimum be experienced in the B-2. (T-3).

6.11.2. Supervision. Unit-designated chief FCF pilot, or their representative, trains new FCF pilots and administer FCF certification flights according to local unit training programs. (T-3). Minimum supervision for flight or simulator is a current and qualified FCF pilot. (T-3).

6.11.3. FCF Ground Training. Ground training includes a review of applicable technical orders and publications, including, at a minimum, AFI 21-101, *Aircraft and Equipment Maintenance Management*, TO 1-1-300; *Technical Manual, Acceptance/Functional Check Flight and Maintenance Operational Checks*; 1B-2-6CF-1, *Functional Check Flight Procedures, USAF Series B-2 Aircraft*; and local FCF procedures. (T-1). A full-profile FCF should be flown in the ATD.

6.11.4. FCF Flight Training. Upon completion of the training program, the OG/FG/CC or designated representative certifies the aircrew via a memorandum, placed in the crewmember's training record. (T-3).

6.12. Long-Duration Qualification Training. A one-time, long-duration B-2 WST (minimum 24-hour duration) must be accomplished prior to a pilot's first long-duration aircraft sortie (>16 hours). (T-3). Emphasis should be placed on preflight/inflight fatigue countermeasures to include supervised use of approved pharmaceuticals administered by an authorized flight surgeon. Long duration qualification training can carry over for consecutive tours in the B-2.

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

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

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Note: Publication information may change. Check <https://www.e-publishing.af.mil/> or other authoritative sources for updates to the references.

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations & Acronyms

AAR—Air to Air Refueling

AC—Aircraft Commander

ACC—Air Combat Command

AF—Air Force

AFDD—Air Force Doctrine Document

AFGSC—Air Force Global Strike Command

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

ANG—Air National Guard

AOG—Air Operations Group

API—Aircrew Position Indicator

ARMS—Aviation Resource Management System

ATD—Aircrew Training Device

BAQ—Basic Aircraft Qualification

BMC—Basic Mission Capable

C2—Command and Control

CAS—Close Air Support

CC—Commander

CDO—Contested, Degraded Operations

CFF—Counter Fast Attack Craft/Fast Inshore Attack Craft (CFF)

CMR—Combat Mission Ready

COMAFFOR—Commander, Air Force Forces
CT—Continuation Training
CTP—Companion Trainer Program
DAFI—Department of the Air Force Instruction
DOC—Designed Operational Capability
DOD—Department of Defense
DRU—Direct Reporting Unit
EOC—End of Cycle
EP—Emergency Procedure
ESS—Electronic Scoring Site
ETCA—Education and Training Course Announcement
EW—Electronic Warfare
EXP—Experienced Aircrew
FAC—Forward Air Controller
FAM—Familiarization
FCF—Functional Check Flight
FE—Flight Examiner
FIC—Flight Instructor Course
FL—Flight Lead
FOA—Field Operating Agency
FTU—Formal Training Unit
GPS—Global Positioning System
HQ—Headquarters
HHQ—Higher Headquarters
IAW—In Accordance With
IFF—Identification Friend or Foe
IG—Inspector General
IP—Instructor Pilot or Initial Point
IQT—Initial Qualification Training
JTAC—Joint Terminal Attack Controller
LGB—Laser Guided Bomb
LIMFACS—Limiting Factors

LOC—Line of Communication
MAJCOM—Major Command
MC—Mission Commander
MDS—Mission Design Series
MML—Multi-Mission Lead
MR—Mission Ready
MQT—Mission Qualification Training
NAF—Numbered Air Force
NATO—North Atlantic Treaty Organization
N-BMC—Non-Basic Mission Capable
N-CMR—Non-Combat Mission Ready
OA—Operational Assessment
OG—Operations Group
OG/CC—Operations Group Commander
OG/CD—Deputy Group Commander
OPR—Office of Primary Responsibility
OT&E—Operational Test and Evaluation
P—Pilot
PROF—Proficient
RAP—Ready Aircrew Program
RBS—Radar Bomb Score
RQT—Re-Qualification Training
RTM—Ready Aircrew Program Tasking Message
SA—Surface Attack
SEPT—Situational Emergency Procedure Training
SME—Subject Matter Expert
Stan/Eval—Standardization/Evaluation
SOC—Senior Officer Course
SQ—Squadron
SQ/CC—Squadron Commander
SQ/DO—Squadron Operations Officer
TES—Tactics Evaluation Squadron/Test & Evaluation Squadron

TRB—Training Review Board

TRSS—Training Support Squadron

UP—Upgrade Pilot

USAFWS—United States Air Force Weapons School

WG/CC—Wing Commander

WG/CV—Vice Wing Commander

WIC—Weapons Instructor Course

WST—Weapon System Trainer

Terms

Academic Training—Training including classroom, Computer Based Instruction, and simulator related to aircraft systems and operation, flight characteristics and techniques, performance, normal and emergency procedures, and safety of flight items. Students normally complete academic courses before flight training.

Aircraft Commander (AC)—The individual qualified to perform B-2 aircrew duties, designated on the Flight Authorization as the pilot responsible for the safe and efficient conduct of flight operations.

Aircrew Training Device (ATD)—The ATD is intended to enhance, not replace actual flight training. ATDs do this by allowing aircrew to practice tactics, malfunctions, and emergency procedures which cannot be practiced inflight. ATD missions must be designed to ensure that the prescribed subject matter is presented in a realistic manner that resembles to the maximum extent possible actual flight procedures, tactics, and threat environments.

Basic Aircraft Qualification (BAQ)—A status of an aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to fly the unit aircraft. The member must perform at the minimum frequency necessary to meet the most recent sortie and flight standards set for the weapons system. BAQ will only be carried by aircrew until completion of MQT. BAQ is not a permanent qualification except for General Officers above the wing level, and any other crew members specifically authorized by AFGSC/A3/6.

Basic Mission Capable (BMC)—The status of an aircrew who has satisfactorily completed training (MQT) prescribed to be fully qualified to perform the basic unit operational missions but does not maintain CMR status. Aircrew accomplishes training required to remain familiarized in all, and may be qualified and proficient in some, of the primary missions of their weapon system and unit. These aircrew members may also maintain special capabilities (Refer to **paragraph 4.3.4**).

Certification—The process of certifying aircrew tactical employment and special weapons capabilities, procedures, and rules. Replaces verification for nuclear tasked units.

Collateral Sorties—Sorties not directly related to combat employment or basic skills training but necessary for accomplishment of unit training programs, such as ferry flights, deployments, instructor sortie, incentive flights, orientation flights, airshows, etc. MAJCOM will normally

assign collateral sorties in lump sum, adjusted for local conditions and circumstances. These sorties are not required for RAP training purposes.

Companion Trainer Program (CTP)—Program to augment the limited flying opportunity afforded B-2 pilots and select wing support pilots by honing airmanship by flying sorties in the T38.

Continuation Training (CT)—Training to maintain proficiency and improve aircrew capabilities to perform unit missions and aircrew proficiency sorties not flown in formal syllabus missions, tests, or evaluations. Applicable to CMR and BMC aircrew.

Currency—The minimum frequency required to perform an event or sortie safely.

Emergency Procedures Evaluation—An evaluation of crewmember knowledge and responsiveness to critical and non-critical EPs conducted by a standardization and evaluation flight examiner in a WST, cockpit procedural trainer, or aircraft cockpit.

Experienced Aircrew (EXP)—All aircraft commanders and instructor pilots are considered experienced upon completion of the applicable upgrade training. Unit commanders may elect to retain an individual meeting the minimum requirements as inexperienced if designation as experienced is not warranted. Designation of aircrew as experienced may take place when minimum requirements are met, and training requirements will be prorated. Unit commanders may return an individual to inexperienced status at any time.

Familiarization (FAM)—Normally requires a minimum of five weapons deliveries be completed during the training cycle. FAM events are established in the RAP Tasking Memo.

Flight Lead (FL)—As designated on flight orders, the individual responsible for overall conduct of mission from preflight preparation/briefing to postflight debriefing, regardless of actual position within the formation.

High Altitude—conventionally, an altitude above 25,000 feet (mean sea level).

Initial Qualification Training (IQT)—Training to qualify the aircrew in basic aircraft flying duties without specific regard to the unit's operational mission, the minimum requirement for Basic Aircrew Qualification status.

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.

Long Duration Sortie—Any sortie planned to exceed the maximum flight duty period specified in Chapter 9 of AFMAN 11-202V3.

Low Altitude—Below 5,000 feet above ground level.

Mission Commander (MC)—The MC is responsible for planning, coordinating, briefing, executing, and debriefing joint/composite force employment packages. Package commanders are authorized to lead joint/composite force missions (See **paragraph 6.5**).

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.

Pilot (P)—individual qualified to perform B-2 aircrew duties.

Primary Aircraft Authorization—The primary aircraft authorization forms the basis for allocation of operating resources to include manpower, support equipment, and flying-hour funds.

Primary Aircraft Inventory—The aircraft assigned to meet the primary aircraft authorization. Aircraft authorized to a unit for the performance of its operational mission.

Proficiency—Demonstrated ability to successfully accomplish tasked event safely and effectively. For purposes of this manual, proficiency also requires currency in the event, if applicable.

Qualification—Aircrew has demonstrated capability to put appropriate ordnance on target according to criteria established for that event in **Chapter 5**.

Requalification Training (RQT)—Training necessary to requalify a crewmember in the aircraft.

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

Sortie—(DoD, NATO) In air operations, an operational flight by one aircraft. Dual log with RAP and Non-RAP sorties.

Specialized Training—Training in specialized tactics, weapons systems, or flight responsibilities such as flight lead, instructor, etc. This training may be conducted in MQT or CT, as required.

Squadron Supervisor—Squadron Commander, Assistant/Operations Officers, or Designated Flight Commanders.

Supervised Status—The status of an individual delinquent in a currency event, unqualified IAW AFI 11-202V2, or designated by the squadron commander.

Tactical Deception—Any activity designed to mislead the enemy operational commander by manipulating, distorting, or falsifying evidence, thereby inducing the enemy to act in a manner favorable to our interests or desires (see AFI 10-704-S, *Military Deception Program*).

Verification—(AF) Applies to the procedure aimed at verifying and refreshing aircrew tactical employment knowledge, emphasizing conventional operations. Conduct verification in both initial and follow-on phases. Initial verification phase is a formal board proceeding convened to verify individual aircrew knowledge. Continuation training is to reinforce, refresh, and update aircrews on unit wartime mission/tasking, tactics, and procedures.

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 crew position in a specific defense system.

Attachment 2

GLOSSARY OF MISSION AND EVENT DEFINITIONS

A2.1. Mission/Event Definitions.

A2.1.1. The following list is representative of current missions and events. It does not preclude accomplishment of other training where needed.

A2.1.2. Air-to-Air Refueling (AAR) Event. An AAR event requires tanker rendezvous, hook-up and transfer of fuel or stabilized dry hook-up. More than one event may be credited if receivers accomplish another rendezvous, hook-up and fuel transfer/dry hook-up.

A2.1.3. Alert Scramble Event. From an alert posture, launch on a scramble order in any tasked role. C2 agencies may terminate simulated events after initial taxi. Only one event may be logged per sortie.

A2.1.4. Surface Attack (SA) Mission. Training designed to achieve proficiency in air- to-surface weapons delivery events.

A2.1.5. Chaff/Flare Event. Inflight dispensing of chaff/flare during a tactical mission profile in response to an actual or simulated threat. Event requires actual release and is limited to logging of one event per engagement.

A2.1.6. Close Air Support (CAS) Mission. Mission flown with detailed coordination in support of ground forces under the positive control of a Joint Tactical Attack Controller/Airborne Forward Air Controller (JTAC/FAC/A). Mission elements include intel scenario, tactical mission planning, interface with the tactical air control system or the Army air-ground system network, execution against threats, and weapons employment against JTAC/FAC(A)-designated targets. Except for the role of a JTAC/FAC(A), mission elements and roles may be simulated during training.

A2.1.7. Commander (CC) Option Mission. An allotment of missions to each pilot for allocation at commander's discretion in support of training requirements and unit objectives. CC Option missions are part of the pilot's overall training cycle sortie allotment and may be designated uniquely for each pilot or generally for all in the unit.

A2.1.8. Composite Force Training. Scenarios employing multiple flights of the same or different MDS aircraft, each under the direction of its own flight leader, performing the same or different roles (AFI 11-214). Blue air sorties including multiple fighter/bomber MDSs, a C2 platform (desired for flight event), and an air-to-air and/or air-to-ground threat scenario. Reference RTM for specific flight and simulator event requirements.

A2.1.9. Contingency Sortie. A sortie tasked and flown while deployed for a contingency operation. We do not conduct training during contingency operations; however, SQ/CCs will determine when pilot/aircrew can log training for contingency sorties.

A2.1.10. Counter Fast Attack Craft/Fast Inshore Attack Craft (CFF) Mission. CFF is a concept that adapts elements of Air Operations in Maritime Surface Warfare, is conducted in direct defense of maritime assets, and requires increased integration between air and surface delivered fires and the movement of maritime forces. Primary consideration is rapid

response to counter immediate threats and attack targets of opportunity. For more on CFF, see Air Force doctrine documents (AFDD) Annex 3-04, *Countersea Operations*.

A2.1.11. Degraded/Denied Communication. Inflight operations in a communications-jamming environment that provides realistic effects (intervals and duration) without use of active anti-jam radios and/or effective briefed counter-jamming procedures.

A2.1.12. Degraded/Denied Datalink. Inflight operations with degraded or denied datalink. Log only one event per sortie. In the absence of systems capable of degrading or denying datalink, the effects may be generated by turning systems OFF or SILENT.

A2.1.13. Degraded/Denied GPS. Inflight operations with degraded or denied GPS which impacts navigation and/or weapons capability at a minimum. In the absence of actual systems capable of degrading or denying GPS, the effects may be generated by selecting a non-GPS navigational aid or turning GPS OFF.

A2.1.14. Dynamic Targeting Air to Ground Event. Complete an air-to-ground attack/engagement against a target (time sensitive target relayed or passed by an appropriate C2 asset). Targeting within a CAS scenario does not meet the intent of this event.

A2.1.15. Event. Unless otherwise specified in these event descriptions, units will determine the necessary parameters for fulfilling and/or logging tasked events. An event is defined in one of the following manners:

A2.1.16. Accomplishment of a specific training element, function, or task.

A2.1.17. A specific type of weapon delivery performed during a mission, defined by aircraft flight path, ordnance delivered, delivery method, or target struck.

A2.1.18. Expendable ordnance, or simulated attack where allowed, against a target according to predetermined flight path parameters and delivery methods. A single delivery constitutes an event.

A2.1.19. Electronic Warfare (EW) Range Event. Inflight operations conducted on an EW range with fixed or mobile surface-to-air emitters operating and detection/threat reaction emphasized. Normally accomplished in conjunction with other EW-type events. The pilot detects a surface threat via electronic means and reacts with appropriate maneuvers, pod/internal EP operation and/or expendables. Missions flown against EW Aggressor or mobile threat emitters placed in non-Special Use Airspace are acceptable.

A2.1.20. Formation Approach. Begins no later than the final approach fix and may terminate in a restricted low approach, low approach.

A2.1.21. HAVE QUICK/Secure Voice Event. Requires proper radio configuration for HAVE QUICK / Secure Voice operation and successful utilization during tactical mission accomplishment and/or effective counter-jamming procedures.

A2.1.22. Instrument Mission. Training designed to ensure instrument proficiency. RAP events may be accomplished on an Instrument sortie mission provided accomplishment does not interfere with the primary goal of instrument training. Units are allocated sorties for every pilot to accomplish their basic skills requirements and maintain minimum basic skills.

A2.1.23. Night Sortie. Sortie on which either takeoff or landing and at least 50 percent of flight duration or 1 hour, whichever is less, occur between the end of evening civil twilight (sun within 6 degrees of the horizon) and the beginning of morning civil twilight.

A2.1.24. Red Air Mission. Mission where adversary tactics, aircraft simulation, weapon systems, and/or maneuvering is replicated in support of blue air.

A2.1.25. Sortie. An operational flight from takeoff to final full stop landing which includes a set of tasks that lead to an (airborne) objective, to include associated planning, brief, enroute, mission execution, recovery, and debrief events.

A2.2. Weapon Employment Terms.

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

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

A2.2.1.2. Tactical Delivery. A delivery using patterns and techniques that minimize final flight path predictability yet allow sufficient time for accurate weapons delivery. All tactical deliveries will normally include recovery to egress parameters.

A2.2.2. A delivery constitutes a Weapons Delivery Event based on two categories, record keeping (Record or Non-Record), and RAP tasking as follows:

A2.2.2.1. Record Keeping.

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

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

A2.2.2.1.2.1. Basic. Must be scored on a Class A range (IAW AFMAN 13-212 Volume 1, *Range Planning and Operations*, 22 Jun 2018).

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

A2.2.2.1.2.3. Laser-Guided Bomb (LGB). Designator and bomber functions may be accomplished simultaneously by a single aircraft or separately using buddy

guide techniques. To record a complete LGB delivery, a simulated or actual weapons release and/or guide must be performed. Laser tracker accuracy may be scored by digital video recorder or laser target designator scoring system.

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

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

A2.2.2.2.2. Proficient. Weapons events tasked at proficiency (PROF) must be tactical, record deliveries. PROF tasking demonstrates the pilot's ability to put appropriate ordnance on target. Unless otherwise specified in the RTM or formal course syllabi, [chapter 5](#) establishes PROF criteria for each event.

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

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

A2.2.3.2. Foul. A penalty directed to a specific aircraft and pilot for actions inconsistent with established procedures or safety considerations. A foul will result in a gross error for that delivery. A second foul or any dangerous pass will result in mandatory expulsion from any further deliveries during that mission and a gross error score for the event. A foul will be charged IAW flying directive publications. Verbal warnings do not constitute a foul.

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

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

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

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

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

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

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

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

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

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

Attachment 3

VERIFICATION GUIDE

A3.1. Outlines for briefs. Use the following guidelines for the development of verification briefs:

A3.2. Overview:

- A3.2.1. Introduction (participants and brief classification).
- A3.2.2. Status of friendly forces (ground, air, and support).

A3.3. Area of Operations:

- A3.3.1. Geography (topography, population centers, LOCs, chokepoints, and natural obstacles, major visual and radar significant identification points).
- A3.3.2. Climatology (effects on unit operations, ground troop movements, and in-flight operations).
- A3.3.3. Operating base (location, facilities, procedural constraints, strengths, and limitations).

A3.4. Status of Enemy Forces:

- A3.4.1. Ground forces and accompanying air defenses, capabilities, strengths, and weaknesses.
- A3.4.2. Airborne forces (numbers, locations, capabilities, and tactics).

A3.5. Mission Employment Brief:

- A3.5.1. Ground operations.
- A3.5.2. Departure (Weather contingencies, options).
- A3.5.3. Route of flight (threat analysis, alternatives, fuel requirements, decision points).
- A3.5.4. Target ingress (IP-to-target specifics, tactics).
- A3.5.5. Weapons employment (including but not limited to target, attack parameters, weapon, fusing, and delivery modes).
- A3.5.6. Sensor management plan.
- A3.5.7. Egress plan (route, mutual support agreements).
- A3.5.8. Reattack plan, options.
- A3.5.9. Downed pilot, wounded bird plan.
- A3.5.10. Recovery (safe corridor procedures, IFF procedures, alternate and emergency airfields).

A3.6. Escape and Evasion:

- A3.6.1. Selected Areas for Evasion.
- A3.6.2. Search and Rescue procedures.

A3.7. Essential Elements of Information /Reports:

A3.7.1. Essential Elements of Information.

A3.7.2. Required reports and reporting procedures.