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Flying Operations

B-52—AIRCREW TRAINING

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This volume implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations*; AFPD 11-4, *Aviation Service*; and AFI 11-202, Volume 1, *Aircrew Training*. It establishes the minimum Air Force standards for training, qualifying, and certifying personnel performing aircrew duties in the B-52. **NOTE:** For the purposes of this manual, certification denotes a commander's action, whereas qualification denotes a formal evaluation. Reference AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*, for explanation of qualifications versus certifications. This publication applies to regular Air Force and Air Force Reserve (AFR) units and personnel. It does not apply to Air National Guard (ANG) units and personnel. 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 Forms 847 from the field through the appropriate functional chain of command. The waiver approval authority for this volume is the MAJCOM/A3, or Commander, Air Force Forces (COMAFFOR) for those aircrew and assets under COMAFFOR's oversight unless identified otherwise with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers 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.

This Manual requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by Title 37 United States Code 301a *Incentive Pay*, Public Law (PL) 92-204, Section 715 *Appropriations Act for 1973*, PLs 93-570 *Appropriations Act for 1974*, 93-294

Aviation Career Incentive Act of 1974, and Executive Order 13478, *Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers*. The applicable SORN F011 AF XO A, Aviation Resource Management System is available at: <http://dpclo.defense.gov/Privacy/SORNs.aspx>. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule located in the Air Force Records Information Management System.

SUMMARY OF CHANGES

This interim changes revises AFMAN 11-2B-52V1, B-52 Aircrew Training, by updating the opening sentence, **paragraph 6.2**, and **paragraph 6.3**. A margin bar (|) indicates newly revised material.

This volume implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations* and AFI 11-202, Volume 1, *Aircrew Training* and is consistent with AFPD 11-4, *Aviation Service*.

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Chapter 1

GENERAL GUIDANCE

1.1. Purpose. This manual prescribes basic policy and guidance for training B-52 aviators. It is supplemented by specific training programs, syllabi and the Ready Aircrew Program (RAP) Tasking Message (RTM) to further describe various phases of training. If a conflict is found between any guidance herein and such documents, contact AFGSC/A3TO for resolution.

1.2. Roles and Responsibilities.

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

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

1.2.1.2. Process all change requests.

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

1.2.3. Wings/groups will:

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

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

1.2.3.3. Annually review any unit supplements to this volume. Forward supplements to MAJCOM/A3T for information upon initial release or following significant changes (AFR: to AFRC/A3D) (T-3).

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

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

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

1.2.4.1. Certify and publish a letter of aircrew qualifications and certifications (Letter of Xs, or LoX) (T-3). A digital equivalent is acceptable, as long as the document summarizes

qualifications and certifications by individual and documents the unit commander's endorsement of same, either on the document or by ready reference to the training folder.

1.2.4.2. Determine which Combat Mission Ready (CMR)/Basic Mission Capable (BMC) aircrew carry special capabilities and qualifications (T-3).

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

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

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

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

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

1.2.4.8. Ensure aircrew only participate in missions, events, and tasks for which they are prepared, current, and trained, or are being trained for that purpose.

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

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

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

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

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

1.2.5. Individual aircrew will:

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

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

1.2.5.3. Only participate in ground and flying activities for which they are prepared, current, and trained, or are being trained for that purpose.

1.3. Processing Supplements.

1.3.1. MAJCOMs, DRUs, and other organizations forward proposed supplements to this volume with AF/A3O-AI, through AFGSC/A3TO, for approval prior to publication. Copies of approved supplements will be provided by the issuing office to AF/A3O-AI and AFGSC/A3TO.

1.3.2. Field units below MAJCOM/DRU/other level will coordinate their supplements prior to publication with their parent MAJCOM/DRU/other OPR (T-2).

1.4. Waivers. Unless another approval authority is cited, waiver authority for this volume is the MAJCOM/A3 (AFR: AFRC/A3D), or COMAFFOR for those aircrew and assets under the COMAFFOR's oversight. COMAFFOR will notify AFGSC/A3 and home station MAJCOM/A3 of waivers within 72 hours of approval.

1.5. Training Programs and Concepts.

1.5.1. AFGSC/A3TO provides functional area management for bomber training programs.

1.5.2. Units will design training programs to achieve the highest degree of combat readiness consistent with flight safety and resource availability. Training programs are designed to progress aircrew through Initial Qualification Training (IQT), Mission Qualification Training (MQT), Continuation Training (CT) and specialized training as required.

1.5.3. The ACC Training Support Squadron (TRSS) develops and coordinates formal operations training syllabi and provides support for formal operations training for all ACC weapons systems. ACC TRSS Det 13 provides these services to the B-52. **NOTE:** Test coded units may develop syllabi to upgrade operational test aircrew in support of specific test plans. These syllabi will be approved by the test group commander (T-2).

1.6. Mission Video Recording.

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

1.6.2. Record from takeoff to landing where possible to maximize training value (T-3).

1.7. In-flight Supervision.

1.7.1. Unless the type of supervision is specifically directed, the Sq/CC determines the level of supervision necessary to accomplish required training (T-3).

1.7.2. For this publication, instructor supervision indicates an instructor of like specialty as the student (e.g. instructor pilot for pilot training) unless otherwise stated. "Student" is a crewmember of any specialty, receiving training for any purpose (qual, cert, MQT, etc.). Instructor pilot (IP) supervision must be accomplished from the pilot or copilot seat for takeoff, air refueling, low-altitude training, traffic pattern operations and landing (T-3).

1.7.3. Instructors may supervise any training in which they are qualified/certified and current, unless otherwise stated, without any additional documentation. Squadron commanders will establish guidelines for any training that may be supervised by other than instructors, indicating what may be supervised, by whom, and any restrictions (T-3).

1.8. Experienced Aircrew and Upgrade requirements. Experienced aircrew and upgrade requirements are per **Table 1.1**. OG/CCs may waive up to 10% of the sortie/hours requirements; MAJCOM/A3T may waive anything beyond 10%.

1.9. Ready Aircrew Program (RAP) Tasking Message (RTM).

1.9.1. AFGSC/A3 will coordinate, publish and distribute RTMs one month prior to 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/A3T at any time. Prior to annual publication, AFGSC/A3T will normally forward the RTM for OG/CC coordination prior to the RTRB. Significant changes will be vetted during the RTRB.

1.10. RAP Management.

1.10.1. The RAP training cycle is 12 months, aligned with the fiscal year and executed IAW the RTM. RAP training is prioritized to focus on skills needed to meet taskings following completion of IQT and MQT.

1.10.2. RAP defines the *minimum* training required to maintain CMR/BMC status. Sq/CCs should prioritize CMR training in order to support assigned/tasked mission(s).

Table 1.1. Experienced Aircrew and Upgrade Requirements.

Experienced Pilot	320 B-52 pilot hours
	48 B-52 sorties
	Demonstrate sound airmanship and mastery of basic piloting skills and crew coordination
Experienced AC	800 Total hours
	250 B-52 AC hours
	36 B-52 AC sorties
	Demonstrate sound airmanship and flight discipline; demonstrate ability to lead crew in mission accomplishment and knowledge of emergency procedures
Instructor Pilot Upgrade	Squadron Commander recommendation with Operations Group Commander approval. Mission Lead Upgrade (MLUG) complete (paragraph 6.2.)
	600 B-52 hours
	90 B-52 sorties

Experienced Weapon System Officer (WSO)	Demonstrate sound airmanship and mastery of basic navigation, weapons/bombing, weaponeering, crew coordination, aircraft systems and emergency procedures
WSO Instructor Upgrade	Squadron Commander recommendation with Operations Group Commander approval. MLUG complete (paragraph 6.2.)
Experienced Electronic Warfare Officer (EW)	400 B-52 hours
	60 B-52 sorties
	Demonstrate sound airmanship and mastery of electronic warfare skills, crew coordination, aircraft systems and emergency procedures
EW Instructor Upgrade	Squadron Commander recommendation with Operations Group Commander approval. MLUG complete (paragraph 6.2.)

1.10.3. All designated combat-coded Regular Air Force (RegAF) units API-1 positions, flying Sq/CC and DO positions are designated CMR. OG/CCs may designate other API-6 positions not assigned to the flying squadron as CMR.

1.10.3.1. If a unit is over-manned, the Sq/CC will train individuals in API-1 billets on the Unit Personnel Management Roster (UPMR) to CMR. Any additional personnel will be trained no lower than BMC (T-2). Priority should be given to inexperienced aircrew.

1.10.3.2. AFR: Any aircrew may be designated CMR/BMC at OG/CC discretion based on requirements and availability.

1.10.4. Active duty API-6 positions above squadron level are normally designated BMC. These BMC aircrew are typically assigned to aviator positions whose primary job lies within wing supervision or a staff function that directly supports the flying operation.

1.10.5. All test and training coded unit RegAF aircrew positions are designated MR. Such units may train individuals to a BMC/CMR level if desired to support pending tasking, reassignment or similar.

1.10.6. An effective RAP training mission requires accomplishing a complete primary, secondary, or basic skills mission. Effective missions include a sufficient number of events applicable to that mission type, as determined by the Sq/CC and informed by the RTM. Aircrew are not required to log effective RAP missions when minimal training occurs. See RTM for non-effective post-takeoff (NEPT) sortie guidance.

1.10.6.1. For the purpose of this manual, takeoff and landing are the only event requirements for sortie credit. The intent is to reflect that every sortie regardless of event activity requires a level of Basic Aircraft Qualified (BAQ) proficiency. RAP sortie credit in the Weapons System Trainer (WST) is not permitted (T-2).

1.10.6.2. While a full crew is desired, only three crewmembers are required to log RAP missions/events (to include weapons employment) at the Sq/CC's discretion.

1.11. Training Records and Reports.

1.11.1. Units will maintain individual records of training and flight evaluations IAW: (T-2)

1.11.1.1. AFI 11-202 Vol 1, *Aircrew Training*.

1.11.1.2. AFI 11-202 Vol 2, *Aircrew Standardization/Evaluation Program*.

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

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

1.11.2. Track the following information for all aircrew, as appropriate:

1.11.2.1. Ground training.

1.11.2.2. Accomplishment of mission types and events cumulatively for the training cycle.

1.11.2.3. RAP lookback per the RTM.

1.11.2.4. Training requirements and accomplishment of individual currencies.

1.11.3. Units will maintain a training folder for each assigned and attached aircrew member (T-1). At a minimum, training folders will include the following information: (T-2)

1.11.3.1. Current aircrew qualifications.

1.11.3.2. Current assignment training documentation (upgrades, regression, waivers, special certifications, etc.).

1.11.3.3. Summary of training from previous unit (LoX or similar documentation; electronic records are acceptable).

1.12. Aircrew Utilization Policy.

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

1.12.2. While API-1 crewmembers 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-2).

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

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

1.13. Unit Manpower:

1.13.1. Commanders will ensure that crewmembers only fill authorized API-1/-2/-5/-6 positions in accordance with the unit mission document (T-2).

1.13.2. Wings with a formal training mission should strive to maximize instructor qualification (T-prefix) for API-6 aircrews. At least one of the following will maintain formal instructor status: WG/CC, WG/CV, OG/CC, OG/CD (T-3).

1.13.3. API-8 aircrew authorizations and test-coded authorizations will be IAW AFI 11-401 and MAJCOM guidance. If units cannot meet attached flyer requirements, they must request relief IAW AFI 11-401, as supplemented. Units requiring flight hour adjustments for attached API-8 and applicable API-6 aircrew must request program changes IAW MAJCOM directives.

Chapter 2

INITIAL QUALIFICATION TRAINING (IQT)

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

2.1.1. Formal Training. IQT including basic (BIQT); requalification (TX) and Senior Officer Course (SOC) training is normally conducted during formal syllabus courses at FTU squadrons. Formal course graduates are proficient in mission tasks as indicated by the Course Training Standards (CTS) and Required Proficiency Levels (RPL) of the FTU syllabi.

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

2.2. Approval and Waiver for Local IQT.

2.2.1. Gaining MAJCOM/A3 (AFR: AFRC/A3D) is the approval authority to conduct local IQT and is the waiver authority to change the requirements of the formal course syllabus.

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

2.2.2.1. Justification for the local training in lieu of FTU training.

2.2.2.2. Summary of individual's flying experience.

2.2.2.3. Date training will begin and expected completion date.

2.2.2.4. Any requested exceptions to formal course syllabus, with rationale.

2.3. Prerequisites. Course prerequisites will be IAW the appropriate formal course syllabus and USAF Education and Training Course Announcements (ETCA).

2.4. Ground Training. OG/CCs may tailor ground training to the individual's background and experience, unit mission requirements, or peculiar local conditions.

2.5. Flying Training.

2.5.1. Training should be completed within the time specified by the syllabus or expected completion date for IQT. Failure to complete within the specified time limit requires notification IAW syllabus or, in the case of local IQT, to the gaining MAJCOM/A3 (AFR: AFRC/A3D) with the reason for delay, planned actions, and estimated completion date.

2.5.1.1. For formal IQT, all syllabus items must be attempted and graded prior to PCA or PCS unless approved by the gaining unit commander. The FTU and unit commander will jointly determine how to resolve outstanding items, but the unit commander owns the final decision. The following are example solutions of common issues:

- 2.5.1.1.1. Failure to complete actual weapon release: Sq/CC accepts graduate, and the FTU transfers weapon (if available) to gaining unit's allocation.
- 2.5.1.1.2. Night syllabus items: Sq/CC accepts graduate as is, or the FTU accomplishes missing items in the WST or on extra sorties.
- 2.5.1.2. Increased FTU demands might not allow pilots to qualify in air refueling during their initial checkride. The FTU will make every effort to qualify all pilots via additional training, but failure to do so will not delay PCA/PCS. First Assignment Instructor Pilot (FAIP) and Striker Vista pilots will be proficient in air refueling prior to PCA or PCS (T-2).
- 2.5.2. Successful completion of IQT requires the student to complete aircraft Qualification (QUAL) and (if applicable) Instrument (INSTM) evaluation(s) IAW AFMAN 11-2B-52 Volume 2, *B-52 Aircrew Evaluation Criteria*. Unless restricted by the syllabus, students may concurrently complete a mission (MSN) check. Students will fly under instructor supervision until completing the INSTM and/or QUAL evaluation(s) (T-3).
- 2.5.3. Formal syllabus items are minimum requirements. The Sq/CC may authorize additional training based on student proficiency and background. Additional training due to student non-progression is available within the constraints of the formal course syllabus.

2.6. Senior Officer Course (SOC).

- 2.6.1. Formal training for senior officers (colonel-selects and above) is conducted at the FTU unless waived IAW [paragraph 2.2.1](#) Senior officers must meet prerequisites and will complete all syllabus requirements unless waived IAW syllabus directives or [paragraph 2.2.1](#).
- 2.6.2. If a senior officer must be trained at the base to which assigned, the officer will be in formal training status. Unit duties will be turned over to deputies or vice commanders until training is completed. Exceptions to this policy are approved by the gaining MAJCOM/CC submitted through MAJCOM/A3.

2.7. Requalification Training. Requalification Training is IAW AFI 11-202 Vol 1, and AFI 11-202 Vol 2, with the additions below. If an evaluation other than a spot check is indicated, see [paragraph 2.5.2](#).

- 2.7.1. The Sq/CC may determine if the TX-3 course is required for requalification training.
- 2.7.2. Individuals previously qualified as an instructor will complete the Flight Instructor Course (FIC) requal course if directed by the Sq/CC. Regain instructor status by successful evaluation in instructor-specific items normally required on a recurring INSTM/QUAL/MSN check (T-2).

Chapter 3

MISSION QUALIFICATION TRAINING (MQT)

3.1. General. MQT trains IQT-complete (BAQ) aircrew to execute squadron missions safely. The Sq/CC will develop and maintain responsibility for local MQT programs (T-3). Where applicable, items accomplished in IQT may be applied to MQT. Units are expected to tailor programs based on an individual's experience, currency, documented performance, and formal training. For test or formal training units, see [paragraph 3.3](#)

3.2. Combat Unit MQT. The Sq/CC will ensure aircrew complete nuclear and conventional MQT within 60 calendar days of arrival at the unit (Air Reserve Component (ARC): 90 calendar days) (T-3). MQT is considered complete with the Sq/CC certifying the aircrew as CMR/BMC. Notify MAJCOM/A3T (AFR: AFRC/A3D) if there is a delay beginning MQT that exceeds 30 days or training exceeds the 60-day time period.

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

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

3.2.1.2. Local mission area orientation (LMAO) sortie (if not previously accomplished).

3.2.1.3. Tactical sortie (may be combined with LMAO sortie). Unless crewmembers have previously been CMR/BMC, multiple sorties and/or WSTs are recommended to ensure familiarity with the unit's primary/secondary missions.

3.2.1.4. Current INSTM/QUAL/MSN evaluation IAW AFMAN 11-2B-52 Volume 2, *Aircrew Standardization/Evaluation Program*.

3.2.1.5. Completion of all ground training/currency items required for BMC/CMR as designated in the RTM.

3.2.1.6. Initial Verification (not required for BMC). Each crewmember demonstrates to a formal board satisfactory knowledge of a squadron assigned conventional mission. Board composition should include Sq/CC or SQ/DO, weapons and tactics, certification electronic combat, and intel. Aircrew who accomplished initial verification or nuclear certification in a previous assignment may, at Sq/CC discretion, complete either an annual or a continuation verification to meet the requirements of this section (T-3).

3.2.1.7. Initial Nuclear Certification. Complete certification IAW (S) AFGSCI 13-520 Volume 1, *Bomber Nuclear Training*.

3.2.1.8. For current and qualified CMR individuals transferring between units, these events may be waived at the discretion of the gaining Sq/CC.

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

3.2.3. Ground Training. Units will develop blocks of instruction covering areas pertinent to the unit's mission as determined by the Sq/CC, using the RTM as a guide (T-2).

3.2.4. Flying Training. MQT performance is documented in unit-developed gradebooks. The MQT program culminates with an evaluation if required. Use of mission recording assets is encouraged on all MQT missions (T-3).

3.2.5. Supervision. MQT sorties/events must be accomplished with an instructor or designated squadron supervisor (T-3).

3.3. Non-Combat-Coded Unit MQT (e.g. Test and Evaluation Squadron (TES)/WPS/FTU). MQT is a unit-developed training program that upgrades aircrew to MR status in order to accomplish the unit's specific missions. If applicable, training accomplished during IQT may be credited towards this requirement. MQT is considered complete with the Sq/CC certifying the aircrew as MR. At a minimum, Sq/CCs will include the following events within the individualized MQT program (T-2):

3.3.1. LMAO sortie (if not previously accomplished).

3.3.2. Unit mission sortie (may be combined with LMAO sortie).

3.4. Flight Surgeon and Ground Liason Officer (GLO) Training.

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

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

Chapter 4

CONTINUATION TRAINING (CT)

4.1. General. This chapter and the current B-52 RTM outlines ground and flying training requirements for BMC, CMR and MR aircrew. Crewmembers must be qualified IAW AFI 11-401, AFI 11-202 Volume 1, and AFMAN 11-2B-52 Volume 2. Sq/CCs will ensure assigned aircrew complete IQT and MQT or MR upgrade to fly in a BMC, CMR, or MR status (T-2).

4.2. Continuation Training (CT) Principles.

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

4.2.2. In units tasked with nuclear and conventional missions, BMC and CMR in each of these mission sets may be separated. This may be denoted by BMC-N/BMC-C or CMR-N/CMR-C. Use of CMR without qualification implies CMR in both mission sets.

4.2.2.1. Other than BMC crewmembers or Postive Control (PC) custodians, split qualification should be a temporary status. Crewmembers should not be separately graduated from nuclear and conventional MQT, but await completion of both portions. Crewmembers may be selectively regressed (e.g. Non-CMR-C, but still CMR-N), and be reported as such in RAP or readiness reporting, but should not remain in such a status.

4.2.2.2. The RTM specifies which status (or both) is affected by various events/currencies. If not designated (i.e. RAP lookback), both nuclear and conventional status is affected.

4.3. Currencies.

4.3.1. The RTM defines currency requirements for all aircrew. A crewmember becomes noncurrent if they exceed the specified timeframe listed in the RTM without accomplishing the event to a proficient level (e.g. an inexperienced pilot becomes noncurrent for landing 46 days after his/her last landing). Crewmembers or an Instructor (if present) may determine if an attempt meets the proficiency level to approve an update to currency requirements. This assessment is not separately documented; logging the event in ARMS is sufficient.

4.3.2. If a crewmember loses currency in an event, that event may not be performed without supervision. At a minimum, supervision will be accomplished by an experienced crewmember. Training annotated in the RTM as affecting CMR/BMC status requires regression to N-CMR/N-BMC. Regain currency by accomplishing the event to a proficient level. Regain CMR IAW [paragraph 4.4.7](#) (T-3).

4.3.3. Loss of currency greater than 6 months may result in an unqualified status, as determined by the Sq/CC. As a guide, breaks in training greater than 6 months or loss of multiple currencies should result in unqualified status. See [paragraph 2.7](#) for requalification.

4.3.4. Squadron commanders will establish flight requirements for loss of currency, additional training requirements (if any) for extended loss of currency, and determine which losses of currency will result in an unqualified status (T-3).

4.3.5. Instructors may instruct events in which they are current and qualified. Instructors who become non-current or N-CMR/N-BMC may still instruct events in which they are current and qualified in at Sq/CC discretion.

4.3.6. **Test Recurrency (49 TES).** Loss of test currency requires the following action (timing starts from date of last event): (T-3)

4.3.6.1. **61/91 (inexp/exp, per the RTM) to 180 days.** Dedicated sortie(s) including Aircraft Handling Characteristics and Basic Fighter Manuevers.

4.3.6.2. **Greater than 180 days.** Sq/CC-tailored test program IAW [Chapter 3](#) and documented in gradebook.

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

4.4. Combat-coded Units.

4.4.1. **BAQ.** Aircrew achieve BAQ status after successfully completing IQT and remain BAQ until the completion of MQT. Sq/CCs will ground aircrews in BAQ status for more than 6 months unless enrolled in a program to achieve CMR/BMC (T-3). BAQ Requirements:

4.4.1.1. INSTM/QUAL evaluation IAW AFM 11-2B-52 Vol 2 (T-2).

4.4.1.2. Currencies (as applicable) IAW RTM (T-2).

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

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

4.4.2.1. BMC aircrew maintain familiarization with all unit primary missions. BMC aircrew accomplish all mission-related ground training designated by the Sq/CC, and may participate in any mission for which they are current, qualified and proficient. Failure to complete required training IAW with this volume and the RTM results in regression to non-BMC (N-BMC) status (T-2). While N-BMC, the Sq/CC determines which missions the aircrew may perform and supervision required.

4.4.2.2. BMC Requirements:

4.4.2.2.1. INSTM, QUAL and MSN evaluations IAW AFM 11-2B-52 Vol 2 (T-2).

4.4.2.2.2. RAP sorties, missions, events (including weapons certifications) and ground training IAW the procedures set forth in this volume and the RTM (T-2).

4.4.2.2.3. Currencies (as applicable) IAW RTM (T-2).

4.4.3. **CMR.** CMR establishes the minimum training required for aircrew to qualify and remain proficient in all the primary DOC statement missions tasked to their assigned or attached unit.

4.4.3.1. CMR aircrew maintain proficiency in all primary missions of the flying unit to which they are assigned or attached. CMR aircrew may accomplish any unit tasking or combat operation. Sq/CCs will regress aircrew who fail to complete required training to non-CMR (N-CMR) status (T-2). While N-CMR, the Sq/CC determines which missions the aircrew may perform and supervision required.

4.4.3.2. CMR Requirements:

4.4.3.2.1. INSTM, QUAL and MSN evaluations IAW AFM 11-2B-52 Vol 2 (T-2).

4.4.3.2.2. RAP sorties (lookback), missions, events (including weapons certifications) and ground training IAW the procedures set forth in this volume and the RTM (T-2).

4.4.3.2.3. Currencies (as applicable) IAW RTM (T-2).

4.4.3.2.4. Verification IAW [paragraph 3.2.1](#) (T-3).

4.4.3.2.5. Nuclear Surety Training (tasked units) (T-3).

4.4.4. **Ground Training.** Accomplish ground training IAW the parent directives and the table in the RTM. Units may credit ground training accomplished during IQT/MQT toward CT requirements for the training cycle in which it was accomplished.

4.4.5. **Simulator (SIM) Training.** Conduct SIM training as directed by the RTM.

4.4.5.1. B-52 Weapons System Trainers (WSTs) must be capable of mission rehearsal up to the Top Secret/Special Access Program/Special Access Required/Nuclear Command and Control level of classification. WSTs will be used to rehearse Nuclear Command, Control and Communications and message processing, using real-world and/or training documents whenever possible (T-3).

4.4.5.2. **Situational Emergency Procedure Training (SEPT).** This training is a review of abnormal and emergency procedures and aircraft systems in realistic scenarios. Wing Safety offices will coordinate with Group Stan/Eval (OGV) to produce monthly SEPT scenarios, topics, and Special Interest Items (SIIs) using actual mishaps and incidents as baseline cases. Aircrew take actions necessary to cope with the malfunction and carry it to a logical conclusion.

4.4.5.2.1. Units should incorporate EP discussions into daily operations calls to the maximum extent possible:

4.4.5.2.1.1. Emphasize critical action procedures and SII to include any MAJCOM, OG, and SQ SIIs related to aircraft employment.

4.4.5.2.1.2. Include periodic discussions on systems and weapons malfunctions.

4.4.5.2.2. Aircrew will accomplish a SEPT in each calendar month. Currency expires at the end of the calendar month following the month in which the SEPT was credited, and non-currency is grounding. Sq/CCs may waive unaccomplished SEPTs from previous months due to non-flying Temporary Duty (TDY) or special circumstances.

4.4.6. **Flight Training.** Flying requirements are IAW the current RTM.

4.4.7. **Regression.** If a crewmember does not meet CMR requirements throughout the training cycle, the Sq/CC can either regress the crewmember to N-CMR/N-BMC, consider the

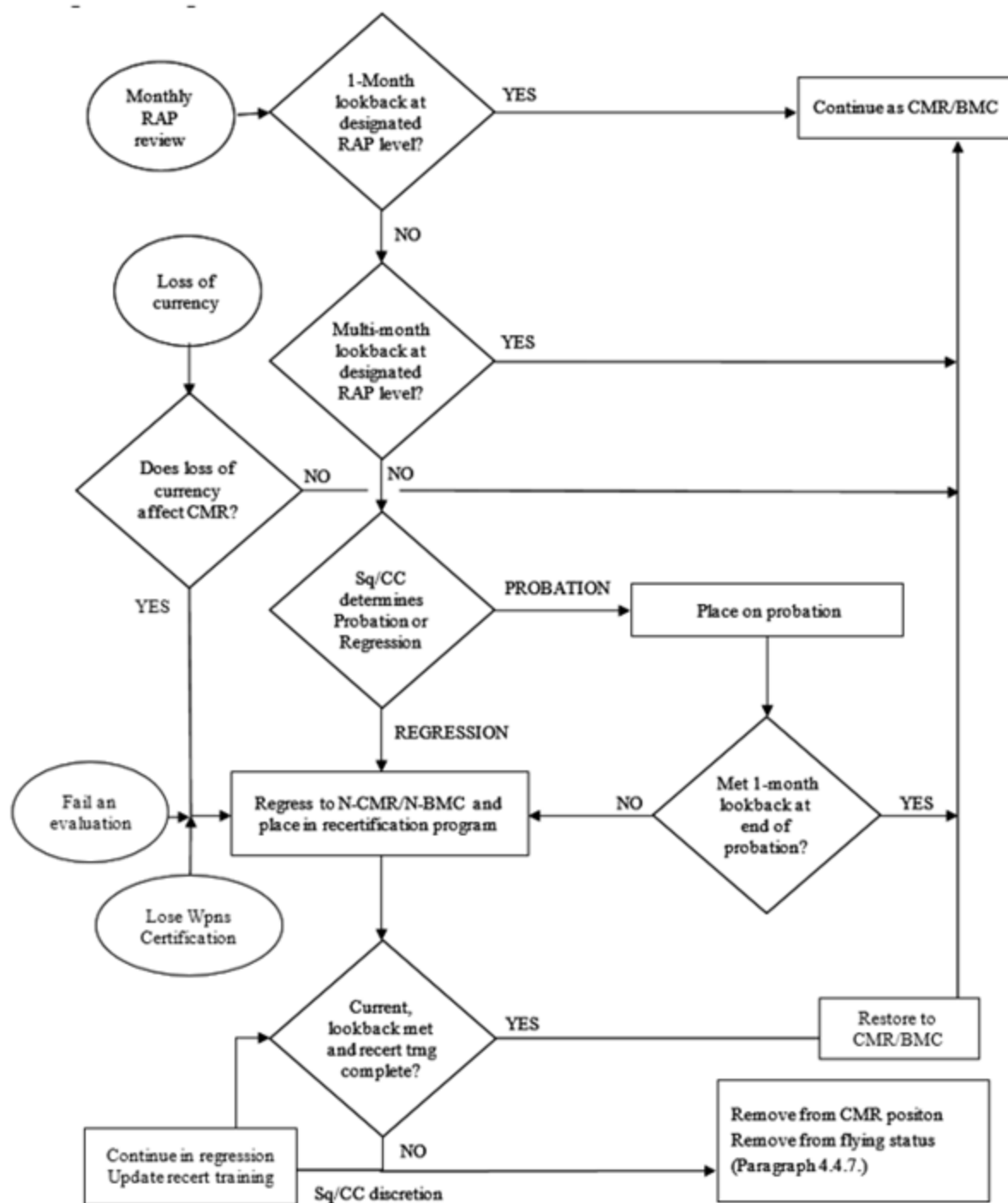
crewmember on probation (which allows for one additional month of CMR status), remove the crewmember from a CMR/BMC manning position, or initiate action to remove the crewmember from flying status.

4.4.7.1. **Lookback.** Lookback computation begins following completion of MQT. One-month lookback will start the first full month of CMR/BMC status. Post-MQT sorties flown in the month of MQT completion may be used at the Sq/CC discretion for three-month lookback.

4.4.7.2. Aircrew regressed to N-CMR/N-BMC will complete a Sq/CC-approved recertification program as applicable. Regain all expired currencies affecting CMR/BMC and one-month lookback. For isolated/short losses of currency or lapses in lookback, a “program” is not required; recurrency/reestablishment of lookback is sufficient.

4.4.7.3. **Flight Evaluation Failure.** Aircrew who fail a flight evaluation are handled IAW AFI 11-202 Vol 2, and AFM 11-2B-52 Vol 2, and regress to N-CMR/N-BMC as applicable, until requalification is complete and recertified by the Sq/CC.

Figure 4.1. Regression Flow Chart.



4.4.8. End of Cycle (EOC) Requirements. If shortfalls in RAP training requirements exist, 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.

4.4.8.1. For aircrew who fail to meet EOC mission or event requirements, the Sq/CC determines additional training required. Crewmembers 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).

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

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

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

4.5. Multiple Qualification/Currency.

4.5.1. See AFI 11-202 Vol 1 for guidance on multiple qualifications.

4.5.2. Submit multiple qualification requests through command channels and MAJCOM/A3T to MAJCOM/A3. All requests must contain full justification. Approval for multiple qualification requests must be provided to the appropriate host aviation resource management (HARM) office; flights are not authorized until aircraft assignment is updated in ARMS (T-2). Individually authorized multiple qualifications are valid as long as the individual is assigned to the specific position and aircraft requested, or rescinded by MAJCOM/A3.

4.6. Contested Degraded Operations (CDO). CDO scenario development will be included in training and be incorporated into mission evaluations and simulators. Daily CT flights and WST missions will discuss the following CDO areas in relationship to the mission's profile:

4.6.1. Contested: Electro-Magnetic Spectrum degradation from enemy action (jamming).

4.6.2. Degraded: Electro-Magnetic Spectrum and battlespace degradation caused by failed systems (degradation/denial, datalink, simple failure).

4.6.3. Operationally Limited: Reduced mission effectiveness caused by the physical or operational environment (system, force structure, ROE/SPINS, etc.).

Chapter 5

WEAPONS DELIVERY/EMPLOYMENT CERTIFICATION

5.1. General. This chapter outlines requirements for initial qualification and continuation training (CT) certification in B-52 weapons for CMR/BMC crewmembers. Refer to [Attachment 2](#) for further guidance on weapons events. Throughout this volume, simulated or actual weapons may be used for training events unless further specified.

5.2. Initial Qualification. Crewmembers will be qualified in all weapons listed as “proficient” in the RTM during IQT and/or MQT. Note that one variant is sufficient (e.g., proficiency in Mk84 is sufficient for all General Purpose (GP) munitions). CMR crewmembers will also train in “familiar” weapons. If a crewmember will maintain BMC, familiar weapons may be omitted IAW Sq/CC direction.

5.2.1. A grade of proficient (“2,” Q1, or Q2 with additional training complete) in IQT or MQT will establish qualification in the weapon/weapon type. The crewmember must also complete a MSN evaluation IAW AFM 11-2B-52 Vol 2 before any weapons qualification is valid.

5.2.2. Initial qualification and CT certification will carry over for crewmember upgrades if previously certified in the weapon type. If unqualified up to 39 months initial qualification criteria carries over from previous qualification. If unqualified for 39 months or more, the initial qualification criteria must be re-accomplished (T-3).

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

5.3. CT Certification. CT certification criteria establishes the minimum standards for crewmembers to maintain certification in the appropriate weapon delivery events, and does not determine evaluation criteria established by other instructions, regulations, or agencies.

5.3.1. **CT Certification Criteria.** CT certification criteria for pilots and WSOs is defined by the RTM. Failure to certify in one weapons class does not invalidate certification in the other. Overall hit percentages for guided and unguided weapon certifications are calculated by dividing number of hits by number of attempts.

Table 5.1. CT Certification Criteria.

<i>Guided Hit % = Guided Weapon Hits / Guided Weapon Attempts</i>
<i>Unguided Hit % = Unguided Weapon Hits / Unguided Weapon Attempts</i>

5.3.2. **CT Certification Cycle.** Weapon CT certification will be aligned with the squadron’s 12-month training cycle (T-2). If certified, the crewmember’s certification is valid through the following training cycle. Squadrons are not required to track each individual crewmember’s scores: if any individual fails to meet the hit criteria outlined in the RTM, refer to [paragraph 5.3.3](#) to determine corrective actions.

5.3.3. **Failure to Maintain Certification.** Sq/CCs may decertify a crewmember in an event(s) at any time during a training cycle without affecting other weapons event

certifications. The crewmember will revert to N-CMR/N-BMC. Crewmembers who are decertified or who fail to meet required guided and/or unguided weapons hit percentages will, if determined necessary by the Sq/CC, become uncertified in that event(s) until completion of a Sq/CC directed recertification program (T-3).

5.3.4. CT Weapon Deliveries. To maintain a combat perspective in a peacetime environment, weapons deliveries should simulate realistic employment scenarios. To take credit for a CT weapon delivery, crewmembers must be qualified in the weapon event and sitting in their primary crew position (not in an instructor seat) (T-3).

5.3.5. Weapon Delivery Assessments. Mission leads will use all available means to assess weapon delivery effectiveness accurately. Crewmembers will assist ML in data capture and reconstruction as required. Hits will be assessed based on actual weapons scores (if applicable) and Air Force Tactics Techniques and Procedures (AFTTP) 3-1.Shot/Kill criteria.

5.3.5.1. Required numbers of weapon attempts given in the RTM are the minimum. Whenever the crew is CMR, or BMC and qualified in the weapon carried/simulated, attempts and hits should be logged. In general, an attempt should be logged if the crew has turned to fly to the release point to release weapons. If a specific training objective (focusing on specific drills rather than overall effectiveness, DLOs, etc.) may compromise the weapons delivery, the crew may determine in advance that the attempt(s) will not be counted.

5.3.5.2. **Weapon Hit.** A hit will be assessed for each bomb run/weapon delivery where the crew delivers actual or simulated weapon(s) against the correct target, within the established release criteria. For actual weapons deliveries, see maximum miss distances below. For simulated releases, an attack is valid if it meets the kill criteria IAW AFTTP 3-1.Shot/Kill.

5.3.5.3. **Weapon Miss Assessment.** A miss will be assessed for each bomb run where an aircrew error prevents an effective simulated or actual weapon release; such as; failure to open bomb bay doors, delivery outside briefed release criteria, wrong target coordinates entered into offensive avionics system (OAS), etc. or when maximum miss distance is exceeded for actual deliveries. For simulated deliveries, a weapon miss could include an invalid attack, insufficient effects, or both IAW AFTTP 3-1.Shot/Kill.

5.3.5.4. If a weapons attempt is unassessable IAW AFTTP 3-1.Shot/Kill, do not log the attempt. If miss distance cannot be determined for an actual weapon (e.g. no Range and Bearing (RBS) scoring), score as a simulated weapon. If an actual weapon(s) malfunction(s), aircrew may elect not to count the attempt. This is primarily intended for guided weapons as unguided weapons malfunctions are difficult to isolate and are accounted for in the unguided hit percentage.

5.4. Weapons Delivery Parameters. The following event descriptions form the basic framework for aircrew weapons delivery training and all deliveries will conform to the criteria established for each specific event. Units may further define requirements for CT weapons deliveries (T-3).

5.4.1. Unguided weapons.

5.4.1.1. **Low Altitude Delivery.** Minimum run-in altitude is safe separation/escape/fuse arm for ordnance being delivered/simulated, aircrew minimum low altitude certification,

or range/target area restrictions, whichever is higher. Maximum altitude is 10,000 feet AGL. Hit criteria, actual release - 350 feet.

5.4.1.2. **Medium/High Altitude Delivery.** For the purposes of accomplishing this event, minimum altitude is above 10,000 feet AGL. Hit criteria, actual release: from 10,000 feet AGL up to 25,000 feet MSL - 450 feet; at or above 25,000 feet MSL - 550 feet.

5.4.2. **Guided weapons.**

5.4.2.1. **JDAM (Joint Direct Attack Munition).** During the actual or simulated release of one or more GBU-31s or GBU-38s, aircrew members must plan and execute delivery against a single target or a target set to ensure weapon(s) will achieve mission objectives and weapon parameters. Hit criteria: For actual delivery - 50 feet (15m) for GPS aided and 100 feet (30m) for inertial navigation system only.

5.4.2.2. **WCMD (Wind Corrected Munitions Dispenser).** Actual or simulated release of one or more CBU-103/104/105/107. Individuals must plan and execute delivery against a single target or a target set to ensure weapon(s) will achieve mission objectives and weapon parameters. Hit Criteria: For actual delivery - 100 feet (30m).

5.4.2.3. **ALCM (Air Launched Cruise Missile).** Actual or simulated release of one or more AGM-86B. Individuals must plan and execute delivery against a single target or a target set to ensure weapon(s) will achieve mission objectives and weapon parameters. Hit Criteria: Effective release of one or more weapon within technical order parameters.

5.4.2.4. **JASSM (Joint Air-to-Surface Standoff Missile).** Actual or simulated release of one or more AGM-158. Individuals must plan and execute delivery against a single target or a target set to ensure weapon(s) will achieve mission objectives and weapon parameters. Hit Criteria: IAW AFTTP 3-1.Shot/Kill.

5.4.2.5. **MALD/MALD-J (Miniature Air Launched Decoy-Jammer).** Actual or simulated release of one or more ADM-160B/C. Individuals must plan and execute delivery against a single target or a target set to ensure the expendable(s) will achieve mission objectives and planned parameters. Hit Criteria: IAW AFTTP 3-1.Shot/Kill.

5.4.2.6. **LGB Delivery.** An event in which the combat/training laser is employed to guide a simulated/actual LGB or GBU-54 during a given delivery. Hit Criteria: For actual delivery - 35 feet (10m).

5.5. Actual Ordnance. Actual ordnance training is essential to aircrew combat capability. Whenever possible, crewmembers should be given the opportunity to drop all weapons the unit is tasked with. Accomplish actual weapons releases on scoreable tactical ranges where possible.

Chapter 6

SPECIALIZED TRAINING

6.1. General. This chapter outlines upgrade training programs for special capabilities and certifications. Training may be modified by the Sq/CC based on the upgradee's previous experience and documented performance. Unless governed by a formal syllabus, ground and device training for these programs consists of unit-developed academics. Prior to any certification, the student will be briefed on responsibilities, scope of duties, authority and philosophy (T-3). The Sq/CC approves the new status, including any restrictions, in appropriate written format (grade sheet/training folder or LoX) (T-2).

6.2. Mission Lead Upgrade Program (MLUG). MLUG builds a CMR crewmember's ability to employ the B-52 by training the crewmember to integrate the duties of the entire crew. It provides a deliberate progression from FTU and MQT (focused on individual skill sets) to instructor upgrade. MLUG completion is desired prior to FIC attendance. If MLUG cannot be accomplished prior to FIC attendance, it will be accomplished within 180 days of FIC graduation. If MLUG is not accomplished within 180 days of FIC graduation, then a waiver must be obtained from the AFGSC A3/6 to keep the instructor on instructor orders. **(T-2)**

6.2.1. Prerequisites. Squadron commanders decide, through the TRB process, who is ready to start MLUG. MQT must be complete, but there are no hour or sortie requirements. **(T-3)**

6.2.2. Structure. MLUG is split into three parts: academics, single-ship mission lead (SML) upgrade, and multi-ship mission lead (MML) upgrade. There is no time limit, minimum, or maximum number of mission profiles or sorties required.

6.2.3. Ground Training. All instructors and training flights and are responsible for MLUG academics and syllabi. Wing weapons officers will coordinate with the squadron weapons officers, instructors, OGVs, and training flights to ensure academics meet the squadrons' DOC statements. **(T-2)** Due to the similarities in all B-52 squadrons DOC statements, a common syllabus should be maintained between the two active duty B-52 wings.

6.2.4. Flying Training.

6.2.4.1. MLUG students will lead mission execution (lead planning, flight, and debrief) IAW AFTTP 3-3.B-52 *Combat Aircraft Fundamentals (B-52)*. **(T-3)** MLUG training should not occur on show-and-go sorties. The emphasis of the sortie should be on tactical decision making, aircraft employment, and in-depth tactical debriefing.

6.2.4.2. Conduct MLUG training one-on-one, with no more than one student per mission. If a second mission profile is accomplished on the same WST or sortie, a second SML or MML may be trained if each student leads planning, execution, and debrief for their mission profile.

6.2.4.3. MLUG mission profiles will be instructed by a MLUG qualified instructor. **(T-3)**

6.2.4.4. DELETED

6.2.5. SML Upgrade. SML training should focus on sound decision making, tactical leadership, and effective weapons employment during single-ship B-52 sortie execution.

6.2.5.1. Target study training will be conducted IAW the B-52 SML syllabus, AFI 11-214 *Air Operations Rules and Procedures*, and all other applicable guidance for the mission profile being flown or simulated. **(T-3)**

6.2.5.2. SML upgrade training consists of academics and as many tactical mission profiles as required for proficiency IAW AFDP 3-03 *Counterland Operations*, AFI 11-214, and B-52 unit DOC statements. Multiple mission profiles may be accomplished in the aircraft or the WST. Upon completion of SML upgrade training, SMLs must be proficient at planning, executing, and debriefing conventional mission sets outlined in the B-52 Ready Aircrew Program Tasking Memorandum [Attachment 2](#). **(T-3)**

6.2.5.3. **Aircraft Commanders.** The Pilot-In-Command (PIC) is, by default of responsibilities, the SML if no qualified SML is on the sortie. Therefore, experienced pilots should be SML qualified prior to assuming PIC duties.

6.2.6. **MML Upgrade.** MML training should focus on B-52 formation execution (real or simulated by a qualified instructor), with an emphasis on formation leadership, tactical integration, and planning.

6.2.6.1. MML upgrade training consists of as many tactical mission profiles as required for proficiency IAW AFDP 3-03, AFI 11-214, and B-52 unit DOC statements. Multiple mission profiles may be accomplished in the aircraft or the WST. Upon completion of MML upgrade training, MMLs must be proficient at planning, executing, and debriefing formation execution of conventional mission sets outlined in the B-52 Ready Aircrew Program Tasking Memorandum [Attachment 2](#). **(T-3)**

6.2.6.2. **Flight Lead Upgrade (FLUG).** For pilots, FLUG training should occur in conjunction with MML upgrade. FLUG-specific items will be annotated as additional pilot-only items on the MML Training Activity Report. A qualified IP will be in the formation. **(T-3)** Sq/CCs may exceptionally train and certify experienced pilots as Flight Leads independent of MML.

6.2.6.3. DELETED

6.2.6.4. DELETED

6.2.6.5. DELETED

6.2.7. **Certification.** Upon satisfactory completion of SML and MML upgrade, the Sq/CC will certify the crewmember in each role on the LoX. **(T-3)** Prior certifications are handled as outlined below:

6.2.7.1. **Legacy Mission Leads.** Legacy Mission Leads may be certified as SML or MML (or both) at Sq/CC's discretion. Mission Lead should be removed from the LoX when all legacy Mission Leads are SML or MML certified.

6.2.7.2. **Legacy Instructors.** Legacy instructors may be certified as SML and/or MML at Sq/CC's discretion. If MLUG is not accomplished within 180 days of the implementation of this guidance, a waiver must be obtained from AFGSC/A3 to keep the instructor on instructor orders. **(T-2)**

6.2.7.3. **Weapons Officers.** . Instructors who have graduated from a Weapons Instructor Course at the United States Air Force Weapons School are considered SML and MML qualified unless otherwise directed by the Sq/CC.

6.2.7.4. **Legacy Flight Leads.** Flight leads who are not MLUG qualified retain their qualification, and may be certified as SML and/or MML at Sq/CC's discretion. Flight lead should remain as a qualification on the LoX.

6.2.7.5. DELETED

6.2.7.6. DELETED

6.3. Mission Commander (MC) Upgrade. MC upgrade ensures members leading the fight are qualified with the attributes and responsibilities located in 3-3.IPE *Combat Fundamentals (IPE)* paragraph 1.6.

6.3.1. **Weapons Officers.** Instructors who have graduated from a Weapons Instructor Course at the United States Air Force Weapons School are considered MC qualified unless otherwise directed by the Sq/CC.

6.3.2. **Prerequisites.** Sq/CCs select aircrew who are CMR or MR qualified for MC upgrade based on proficiency and experience. (T-3)

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

6.3.3.1. Review AFTTP 3-1/3 volumes for specific MC checklists and considerations. (T-3)

6.3.3.2. **Mission Planning Considerations:** Airspace requirements/restrictions, ATC restrictions/considerations/flight plans, air refueling operations, inter-unit coordination, air-to-air and air-to-ground force integration, IADS penetration/avoidance, on-range controlling agencies coordination, and C2 coordination. (T-3)

6.3.4. **Flight Training.** The upgrading MC observes a certified MC during the planning, briefing, flight, and debrief of at least one composite force training event prior to certification. The upgrading MC then plans, briefs, flies, and debriefs at least one composite force training event under the supervision of a MC qualified instructor. Unit tasking should drive force composition, adversaries, and minimum flight size.

6.3.5. DELETED

6.4. Low Altitude (LOWAT). LOWAT certifies aircrew to conduct low altitude operations outside of Terminal Instrument Procedures or traffic pattern procedures. LOWAT training may be conducted up to 5000 feet AGL. LOWAT certification is normally accomplished in IQT or MQT.

6.4.1. **LOWAT Ground Training.** Ground training supports the mission and concept of operations of the unit. Incorporate appropriate portions of AFTTP 3-1.B-52, and AFTTP 3-3.B-52. Complete all ground academics prior to flight and include the following: (T-3)

6.4.1.1. **Low Altitude.** Aircraft performance, density altitude, power settings, level turns and bank angles, vertical maneuvering, climb/dive, terrain avoidance and ridge crossings, overbanking during turns, and cross check of aircraft attitude relative to horizon.

6.4.1.2. **Environmental Factors.** Cockpit visibility and Field of View (FOV) restrictions, sun angle, terrain, weather considerations, air turbulence, and bird strikes.

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

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

6.4.1.5. **Special Subjects.** Training rules (TR), weather route abort procedures, aircraft emergencies, and separation/disengagement considerations.

6.4.1.6. **LOWAT Employment.** Level engagements, fuel management, required turning room, weapons employment, visual lookout and intercepts.

6.4.2. **LOWAT Flight Training.** Accomplish at least one flight including low-level navigation and weapons employment (T-2). Where possible, include flight over varying terrain heights. Demonstrate knowledge of aircraft handling and performance characteristics, weapon employment, defensive reactions, navigation and terrain/obstacle avoidance.

6.5. Night Vision Goggle (NVG) (Pilots). NVG training is normally accomplished in IQT or MQT.

6.5.1. **Ground Training.** Unit-developed training referencing, at a minimum, AFTTP 3-3.B-52. Discuss environmental factors, optical illusions/limitations w/NVGs, formation considerations, tactical pros/cons of NVGs, and targeting pod (ATP) operator coordination, to include talk-on and infrared pointer usage. Emphasize basic NVG operation, to include NVG calibration, cockpit lighting, and crew coordination (T-3).

6.5.2. **Flight Training.** Accomplish at least one NVG flight. Flight should include NVG checkout and calibration, cockpit setup, formation station keeping and use of NVGs for 30 minutes (T-3).

6.6. Functional Check Flight (FCF).

6.6.1. **Prerequisites.** OG/CCs select aircrew to enter the FCF training program based on experience and proficiency. Aircrew should have a minimum of 300 B-52 hours. The OG/CC will certify crewmembers; document certification in the individual's training folder (T-3).

6.6.2. **Supervision.** Unit-designated chief FCF pilot or representative, trains new FCF crewmembers and administers FCF certification flights IAW unit training programs. Minimum supervision for flight or simulator is a current and qualified FCF crewmember (T-2).

6.6.3. **Ground Training.** Review applicable technical orders and publications, including, at a minimum, AFI 21-101, *Aerospace Equipment Maintenance Management*; T.O. 1-1-300, *Technical Manual, Acceptance/Functional Check Flight and Maintenance Operational Checks*; 1B-52-6CF-1, *Functional Check Flight Procedures*, *USAF Series B-52 Aircraft*; and local FCF procedures. A full-profile FCF should be flown in the simulator (T-2).

6.6.4. **Flight Training.** Accomplish at least one actual or simulated FCF profile (T-3).

JOSEPH A. GUASTELLA, Lt Gen, USAF
Director, Logistics, Engineering and Force
Protection

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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Abbreviations and Acronyms

AAA—Anti-Aircraft Artillery

AC—Aircraft Commander

ACC—Air Combat Command

AC/P—Aircraft Commander/Pilot

ACQ—Acquisition

ADM—Air Delivered Munition

AFDP—Air Force Doctrine Publication

AFE—Aircrew Flight Equipment

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force

AFR—Air Force Reserves

AFRC—Air Force Reserve Command

AFTTP—Air Force Tactics, Techniques and Procedures

AGL—Above Ground Level

AGM—Air to Ground Munition

AI—Air Interdiction
ALCM—Air Launched Cruise Missile
ALR—Acceptable Level of Risk
AOC—Air Operations Center
API—Aircrew Position Indicator
AR—Air Refueling
ARA—Airborne Radar Approach
ARC—Air Reserve Component
ARMS—Aircrew Resource Mangament
ATC—Air Traffic Control
ATP—Advanced Targeting Pod
BAQ—Basic Aircraft Qualified
BMC—Basic Mission Certification
BMC-C—Basic Mission Certification Conventional
BMC-N—Basic Mission Certification Conventional
CAF—Combat Air Force
CALCM—Conventional Air Launched Cruise Missile
CAS—Close Air Support
CC—Commander
CDO—Contested and Degraded Operations
CFTR—CAF Formal Training Review
CMR—Combat Mission Ready
CM—Cruise Missile
CMF—Combat Mission Folder
CMR-C—Combat Mission Ready Conventional
CMR-N—Combat Mission Ready Nuclear
COMAFFOR—Commander Air Forces
CT—Continuation Training
CTS—Course Training Standards
CVC—Conventional Verification Course
DAFI—Department of the Air Force Instruction
DLO—Desired Learning Objective

DMO—Distributed Mission Operations
DMON—DMO Network
DO—Director of Operations
DOC—Designed Operational Capability
DoD—Department of Defense
DRRS—Defense Readiness Reporting System
DRU—Direct Reporting Unit
DT—Dynamic Targeting
EA—Electronic Attack
EAM—Emergency Action Message
EAP—Emergency Action Procedures
EEL—Essential Elements of Information
EMCON—Emission Control
EOC—End of Cycle
EP—Emergency Procedures
EPE—Emergency Procedures Exam
ETCA—Education and Training Course Announcements
EW—Early Warning
FAIP—First Assignment Instructor Pilot
FCF—Functional Check Flight
FHP—Flying Hour Program
FIC—Flight Instructor Course
FLUG—Flight Lead Upgrade
FOV—Field of View
FTU—Formal Training Unit
GCI—Ground Controlled Intercept
GLO—Ground Liason Officer
GP—General Purpose
GPS—Global Positioning System
HARM—High Speed Anti Radiation Missile
HHD—Higher Headquarters Directed
IADS—Integrated Air Defense Systems

IAW—In accordance with
IFF—Identification Friend or Foe
INSTM—Instrument
IP—Instructor Pilot
IQT—Initial Qualification Training
ISR—Intelligence Surveillance Reconnaissance
JASSM—Joint Air to Surface Standoff Missile
JDAM—Joint Directed Attack Munition
JTAC—Joint Terminal Air Controller
JTE—Joint Threat Emitter
LAR—Launch Acceptability Region
LFE—Large Force Exercise
LGB—Laser Guided Bomb
LMAO—Local Mission Area Orientation
LOWAT—Low Altitude
LoX—Letter of X
LP—Launch Point
LVC-OT—Live Virtual Construct – Operational Training
MAJCOM—Major Command
MALD/MALD-J—Miniature Air Launched Decoy/Jammer
MC—Mission Commander
MDS—Mission Design Series
MIJI—Meaconing, Interference, Jamming and Interdiction
ML—Mission Lead
MLUG—Mission Lead Upgrade
MML—Multi-Ship Mission Lead
MPC—Mission Planning Cell
MQT—Mission Qualification Training
MR—Mission Ready
MSL—Mean above Sea Level
MSN—Mission
MUTES—Multiple Threat Emitter Simulator

NEPT—Non-Effective Post-Takeoff
NVG—Night Vision Goggles
OAS—Offensive Avionics System
OCA—Offensive Counter Air
OGV—Group Stan/Eval
OMB—Office of Management and Budget
PC—Positive Control
PCA/PCS—Permanent Change of Assignment or Station
PLZT—Polarized Lead Zirconium Titanate
PNF—Pilot Not Flying
QUAL—Qualification
RAP—Ready Aircrew Program
RBS—Range and Bearing Scoring
RegAF—Regular Air Force
RF—Red Flag
RNMP—Radar Navigator Management Panel
ROE—Rules of Engagement
RPL—Required Proficiency Levels
RTM—RAP Tasking Message
RTRB—Realistic Training Review Board
SAFE—Selected Area for Evasion
SAM—Surface to Air Missile
SEAD—Suppression of Enemy Air Defenses
SEPT—Situational Emergency Procedure Training
SII—Special Interest Items
SIM—Simulated
SML—Single Ship Mission Lead
SOC—Senior Officer Course
SORTS—Status of Resources and Training System
TCG—Target Coordinate Generation
TES—Test and Evaluation Squadron
TGP—Targeting Pod

T.O.—Technical Order)

TR—Training Rules

TRB—Training Review Board

TRSS—Training Support Squadron

TSO—Target Study Officer

TX—Requalification

USAF—The United States Air Force of The United States of America

WCMD—Wind Corrected Munitions Dispenser

WCP—Weapons Control Panel

WIC—Weapons Instructor Course

WSO—Weapons System Officer

WST—Weapons System Trainer

Terms

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

Basic Aircraft Qualification (BAQ)—The training status for an aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to perform aircrew duties in the unit aircraft (AFI 11-202V1).

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

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

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

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

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

Emergency Procedures Evaluation (EPE)—See AFI 11-202 Volume 2, *Aircrew Standardization/Evaluation Program*, and AFMAN 11-2B-52 Volume 2, *B-52 Aircrew Evaluation Criteria*.

Experienced—A crewmember who has flown the aircraft for a specified criteria, which then permits training at a reduced rate to maintain a given level of proficiency (AFI 11-412). See paragraph 1.8.

Familiar—Aircrew have a basic knowledge of a mission area and may need additional training prior to first mission tasking.

Lookback—A crewmember who has the total sorties necessary to maintain CMR/BMC status per the RTM without flying the required number of sorties in a given month.

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

Mission Ready (MR)—Trained to perform unit mission in absence of a DOC statement, e.g. test or FTU.

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

Qualification—Denotes a formal evaluation and requires AF Form 8/8a documentation. Not to be confused with certification, which denotes a commander's action. See AFI 11-202 Volume 2, *Aircrew Standardization/Evaluation Program*, and AFM 11-2B-52 Volume 2, *B-52 Aircrew Evaluation Criteria*.

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

Squadron Supervisor—May include all or some of the following depending on Sq/CC certification: Sq/CC, Sq/DO, Assistant DOs, and Flight/CCs. (ARC: as designated by the OG/CC).

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

Attachment 2

READY AIRCREW PROGRAM (RAP) EVENT DEFINITIONS

A2.1. General. The RTM defines currency events and intervals. The RTM also directs which sorties, missions and events must be logged, and in what number, to maintain a given level of readiness. This attachment defines RAP events. In order to minimize overlap, ARMS identifiers are not given in this document but may be found in AFI 11-401, *Aviation Management*, and/or the RTM. In the event of discrepancies or conflicts between the RTM and AFMAN, the RTM takes precedence. Note that an item may be defined here but not required by the RTM, or may be required by the RTM but not further defined here.

A2.2. Mission Priorities and Elements. See the RTM for current definitions of mission types, relative priorities, and representative mission elements for each mission. IAW [paragraph 1.10.6](#), Sq/CCs may designate desired and minimum combinations of events for RAP mission credit. Additional RAP mission and WST types are outlined below.

A2.2.1. Commander Option Sortie. A sortie designed to be allocated by the unit to target specific training areas. Commander Option sorties are a placeholder; crews may fly and log any mission type on these sorties as directed by the unit training plan.

A2.2.2. Pilot Emergency Procedures Aircraft Commander/Pilot (AC/P). A balance of systems and flight control emergencies tailored to the needs of the crew and logged in the flight station of the WST. Should be an instructor-led event. The following areas should be incorporated annually (may require accomplishing more than one area per WST): Hydraulics, Flight Controls, Engines, Electrics, Fuel Systems, Pneumatics, and Instruments.

A2.2.3. Degraded Systems Trainer Weapons System Officer (WSO). Normally logged in the WST, but may be accomplished in flight. An instructor-led event with WSOs executing a series of degraded procedure exercises. Event may be logged when three of the following events are accomplished: Processor Recycle Exercise, Doppler Out Exercise, Radar Navigator Management Panel (RNMP) Inoperative Exercise, Weapons Control Panel (WCP) Inoperative exercise, GPS Out Exercise, Degraded GPS Weapon Release.

A2.2.4. Defensive Procedures Trainer Electronic Warfare Officer (EWO). An event normally logged in the T4, but may be accomplished in the WST. Should be an instructor-led event with the EWO executing a series of defensive procedures. Event may be logged when accomplishing an IADS penetration with at least one degraded system inject.

A2.2.5. Spatial Disorientation Exercise (AC/P). Performed in the WST. Recognize, confirm and recover from unusual attitudes.

A2.2.6. Distributed Mission Operations (DMO) WST. Any WST mission involving at least two simulators connected through the DMO Network (DMON) or similar Live Virtual Construct – Operational Training (LVC-OT) network. The connected simulator(s) may be B-52 and any other MDS.

A2.2.7. Large Force Event (LFE) WST. Must include a Mission Commander, at least two fighter/bomber sites, a C2 platform/agency, and an air-to-air/surface-to-air threat scenario.

A2.2.8. **VIRTUAL FLAG.** Log for participation in any VIRTUAL FLAG DMO exercise, Fleet Synthetic Training, RED FLAG (RF) spin-up hosted by RF-Alaska, EMERALD WARRIOR, or applicable STRATCOM-sponsored event/exercise.

A2.3. Proficiency Event Description Guide. Unless otherwise specified in these event descriptions, units may further define the necessary parameters for fulfilling and/or logging tasked events. Instructors may log 50% of their events while instructing or evaluating in any seat. Each event is defined in one of the following manners:

A2.3.1. A specific type of weapon delivery (defined by aircraft flight path, ordnance delivered, delivery method, or target struck) performed during a mission.

A2.3.2. Expending of ordnance against a target according to predetermined flight path parameters and delivery methods. A single delivery constitutes an event that requires satisfaction of additional criteria.

A2.3.3. Accomplishment of a specific training event, function, or task (i.e., air refueling (AR), landing, etc.).

A2.4. FLIGHT EVENTS.

A2.4.1. **Instrument Approach.** Event is creditable for all instrument approaches. Pilots should sample a variety of approaches for broader proficiency.

A2.4.2. **Airborne Radar Approach (ARA).** Accomplish in accordance with T.O. 1-1B52H-1, *Flight Manual Appendix*. May be logged as an instrument approach.

A2.4.3. **Simulated 6-Engine Approach and Go-Around Asymmetric.** A six-engine approach, simulating two outboard engines out on one side. Flown to a go-around using asymmetric thrust.

A2.4.4. **Simulated 6-Engine Approach and Go-Around Symmetric.** A six engine approach, simulating two outboard engines out on one side, flown using primarily only the four inboard symmetric thrust engines while utilizing the two outboard asymmetric thrust engines only if required. The go-around is accomplished by initially advancing only the inboard symmetric thrust engines and using the outboard asymmetric thrust engines only if it is required and can be controlled.

A2.4.5. **Simulated 6-Engine Approach and Landing.** A six-engine approach simulating two outboard engines out on one side, flown to a landing (either full stop or touch-and-go.)

A2.4.6. **Flaps Up Approach and Go Around.** An approach to landing flown with the flaps-up and using flaps-up speeds and procedures.

A2.4.7. **Air Refueling.** Any air refueling is creditable when at least 5 minutes of toggles engaged time is accomplished. For pilots, credit only to the pilot flying. For offense, creditable for any type of successful rendezvous (en route/point parallel/anchor). Conduct rendezvous procedures using timing and skin paint procedures.

A2.4.8. **Air Refueling, Night.** AR during hours of darkness. Primarily between the hours of sunset and sunrise, or when visual conditions are such that normal daytime cues and references are not available. Night Air Refueling updates Air Refueling.

A2.4.9. Air Refueling (EMCON 3/4). Accomplish IAW T.O. 1-B52H-1, *Flight Manual*. Coordinate altitudes and procedures with tanker in advance and establish a frequency to be used for safety of flight. After rendezvous/contact is accomplished IAW Emission Control (EMCON) 3/4 standards, a lower EMCON may be used for training.

A2.4.10. Speed Down. Accomplish maneuver IAW AFTTP 3-1.B-52. Descent should be continuous and allow the aircraft to reach maximum target speed. Emphasize crew coordination, recovery/level-off procedures, and transition to low-level as applicable.

A2.4.11. Quick Taxi/EWO Departure Exercise. A unit-tailored training exercise designed to provide aircrews the necessary skills to respond to an EWO launch or conventional dispersal message. The objective of this exercise is to minimize the amount of time required to launch the entire formation. To emphasize the trail position DLOs associated with this event, only one of the required events may be credited from the lead position per training cycle. The event will include, but is not limited to:

A2.4.11.1. Aircraft cocked to simulate alert status without weapons.

A2.4.11.2. Flaps up.

A2.4.11.3. Launch message (general purpose launch message addressed to formation).

A2.4.11.4. Cartridge Start (RA38).

A2.4.11.5. Alert start, free flow taxi, formation departure with an emphasis on 30 second spacing (if weather allows) between aircraft in the formation.

A2.4.11.6. High Speed Departure.

A2.4.12. EA Threat Activity. Countering enemy radars with jamming and expendables. This may be accomplished at Multiple Threat Emitter Simulator (MUTES)/Joint Threat Emitter (JTE) sites or ranges equipped with threat simulators. EA equipment must actually counter a victim radar for credit. Expendables are not required for credit. Dual log with appropriate activity accomplished.

A2.4.13. JASSM Launch. Simulated or actual launch utilizing published JASSM procedures. Only one event may be credited per sortie.

A2.4.14. Total Landings. Creditable only to the pilot flying. All landings should be dual credited to this event.

A2.4.15. Landing Night. Landing accomplished between the hours of sunset and sunrise, exclusive of civil twilight. Must be current in Total Landings to perform this event unsupervised. Dual log with total landings.

A2.4.16. Touch-and-Go Landing. Dual logged with total landings and night landings (if applicable).

A2.4.17. Low Altitude Training (LOWAT). Log one event per sortie. Accomplish applicable checklists to descend to, operate in and climb out from the low altitude environment. At a minimum, accomplish a weapon delivery or a route of at least three turns in the low altitude environment.

A2.4.18. ADM-160 MALD Launch Procedures. Simulated or actual launch utilizing published MALD procedures. Only one event may be credited per sortie.

A2.4.19. **Actual Weapon Release.** May be accomplished at any altitude using live or inert weapons. May be logged each time an actual weapon is released from the aircraft. Dual log with type of bomb run/release accomplished.

A2.4.20. **Weapons Delivery.** Currency only, logged once per sortie in either seat. Instructors may log from the instructor seat.

A2.4.21. **Unguided Weapon Actual Release.** Log in primary crew position. Each pass may be logged.

A2.4.22. **Nuclear Weapon Delivery.** Simulated launch accomplished at any altitude. Must include, targeting, fuel transfer (if applicable), and alignment. Only one event may be credited per sortie. Creditable in the WST. Actual nuclear deliveries may be credited if/when RAP training resumes.

A2.4.23. **AGM-86C Launch Procedures.** Simulated launch or actual launch accomplished at any altitude. Must include, targeting, fuel transfer (if applicable), and alignment. Only one event may be credited per sortie.

A2.4.24. **Cartridge Start Procedures.** Accomplish an alert response cartridge start in an alert aircraft or aircraft that has been cocked on to simulate alert status. May be accomplished in the WST.

A2.4.25. **Chaff Exercise.** In-flight dispensing of chaff in response to an actual or simulated threat or a dispenser exercise. Event requires actual release and logging is limited to one per sortie per EW. May be logged during a dispenser exercise with at least six bundles of chaff. The intent is to accomplish chaff training in conjunction with threat activity.

A2.4.26. **Flare Exercise.** In-flight dispensing of flares in response to an actual or simulated threat or a dispenser exercise. Event requires actual release and logging is limited to one per sortie per EW. The intent is to accomplish flare training in conjunction with threat activity. To enable effective intercept training a load of 16 sticks or 32 flares will be considered the minimum.

A2.4.27. **Formation.** Must include formation departure or mid-mission rejoin and mission debrief.

A2.4.28. **Unguided Weapon Attempt.** Logged anytime the aircrew intends to deliver a simulated or actual unguided weapon, whether the aircrew is successful or not.

A2.4.29. **Unguided Weapon Hit.** Logged anytime it is assessed an unguided weapon hit in accordance with criteria established in RAP tasking message (valid release per AFTTP.3-1 Shot/Kill).

A2.4.30. **Defensive Employment.** Designed to allow maximum use of defensive actions to counter threats during high/medium altitude weapons delivery. The crew must receive EA signals to receive credit. Use defensive action procedures IAW AFTTP 3-1.B52. Maneuvers must be accomplished to receive credit. This event may be logged in any scenario where the threat(s) require(s) reactive maneuvering. Aircrew should accomplish a mix of guided and unguided weapon releases against a variety of threats throughout the training cycle. Log with the appropriate weapons event.

A2.4.31. **Polarized Lead Zirconium Titanate (PLZT) training.** Flash blindness protection ground training must be accomplished prior to being scheduled for this event. The goggles must be worn for 10 minutes to receive credit. Only one individual may train at a time. PLZT training should be conducted at least once per training cycle. PLZT training may be accomplished in the WST.

A2.4.32. **JDAM/WCMD Release.** Any JDAM/WCMD release using published procedures. This event may only be logged once per sortie.

A2.4.33. **1760 Jettison Procedures.** Accomplish the JDAM/WCMD/JASSM/MALD jettison procedures checklist. May be accomplished after all bombing activity is completed. This event may only be logged once per sortie.

A2.4.34. **ALCM Jettison Procedures.** Accomplish ALCM (AGM 86B) jettison procedures IAW published checklists. This event may only be logged once per sortie. Aircrew will discuss differences between airborne and ground cruise missile (CM) jettison during mission planning.

A2.4.35. **GBU-54 Actual Release.** An actual GBU-54 weapon release from any altitude using published procedures and laser designation of target. May be dual logged with JDAM/WCMD bomb activity regardless of number of weapons released. This event may only be logged once per sortie.

A2.4.36. **JDAM/WCMD Actual Release.** An actual JDAM/WCMD weapon release from any altitude using published JDAM/WCMD procedures. May be dual logged with JDAM/WCMD Bomb Activity regardless of number of weapons released. This event may only be logged once per sortie.

A2.4.37. **Guided Weapon Attempt.** Logged anytime the aircrew intends to deliver a simulated or actual ALCM/CALCM, JDAM, JASSM, MALD, or WCMD variant at the planned LAR/LP, regardless if the aircrew is successful or not.

A2.4.38. **Guided Weapon Hit.** Logged anytime a guided weapon is assessed as a hit in accordance with qualification criteria established in RAP tasking message (valid release per AFTTP 3-1.Shot/Kill).

A2.4.39. **Terminally Lased Release.** Targeting Pod (TGP) employment with LGB or GB54. The targeting pod will be used to designate the target using either Continuous or Delayed Lasing technique as required. Must take place in laser operations approved airspace. Use AFTTP 3-1.B52, LGB employment procedures or interim command guidance. Logged per target struck.

A2.4.40. **LGB Actual Release.** An actual LGB weapon release from any altitude using ground or buddy lasing procedures. Logged once per sortie.

A2.4.41. **Takeoff.** Creditable only to the pilot performing the takeoff. The takeoff following a touch-and-go landing is not creditable, except for instructor pilots. FTU/USAFWS instructors may credit takeoff while performing PNF duties.

A2.4.42. **Simulated Engine Loss on Takeoff.** Creditable only to the pilot flying. Accomplish only during a touch and go landing by retarding an outboard engine to idle.

A2.4.43. **TGP Operations.** Log any time targeting pod is used during flight. The activities listed below should be incorporated to the maximum extent possible into TGP missions (at

least one to log event.) Log once per sortie. Any TGP (Litening or Sniper) may be used in fulfillment of this requirement.

A2.4.43.1. **Target Coordinate Generation (TCG).** TGP coordinate generation solutions must meet Category II criteria as listed AFTTP 3-1, *General Planning*. TCG record measurements should be taken against pre-planned, mensurated aim points/ targets to facilitate accuracy assessments.

A2.4.43.2. TGP-associated Weapon event.

A2.4.43.3. Non-Traditional ISR (NT-ISR). TGP is used as a sensor to capture images in an ISR role. Captured images are stored for analysis after landing or transmitted via onboard communications equipment to C2 nodes.

A2.4.44. **Realistic Aircraft/WST Emergency Action Procedures (EAP) Training.** Receive and process at least three simulated Emergency Action Messages (EAMs) in the WST or aircraft. Use real or training equivalent checklists and decoding documents. Credit one event per sortie.

A2.5. GROUND TRAINING EVENTS. References for governing directives can be found in the RTM. Only those events governed in part or whole by this volume are shown below.

A2.5.1. **AWR 1. General Purpose Munitions.** An instructor-led discussion of the various B-52 conventional gravity weapons and suspension systems found in T.O. 1B-52H-12, *Radar Navigator's/Navigator's Manual USAF Series B-52H Aircraft* and T.O. 1B-52H-34-2-1, *Aircrew Weapons Delivery Manual (Nonnuclear Gravity Weapons) Description and Procedures*. Covers weapon components, weapons rack components, locations and associated release procedures.

A2.5.2. **AWR 1P. Conventional Weapons Preflight.** An instructor-led hands-on lesson covering conventional weapon preflight. This course should be taught following AWR 1. The intent is for one course to cover all conventional weapons for which the aircrew member is qualified.

A2.5.3. **AWR 2. CALCM.** An instructor-led discussion covering CALCM and CALCM procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and technical orders.

A2.5.4. **AWR 3. CAS.** An instructor-led discussion of basic concepts and procedures associated with CAS operations including JTAC coordination, Theater C2, terminology, and kill box procedures IAW Joint Publication 3-09.3 Chg. 1, *Joint Tactics, Techniques, and Procedures for Close Air Support (CAS)*, AFTTP 3-1.B-52, AFTTP 3-3.B-52, and AFI 11-214.

A2.5.5. **AWR 4. JASSM.** An instructor-led discussion covering JASSM and JASSM Procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and technical orders, *Aircrew Weapons Delivery Manual (Nonnuclear) B-52/AGM-158 JASSM*.

A2.5.6. **AWR 5. JDAM.** An instructor-led discussion covering JDAM and JDAM Procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and technical orders, *JDAM Delivery Manual*.

A2.5.7. **AWR 6. LGB.** An instructor-led discussion covering LGB and LGB Procedures and employment IAW AFTTP 3-1.B-52 and AFTTP 3-3.B-52.

A2.5.8. **AWR 7. Nuclear Weapons.** An instructor-led discussion covering ALCM, B-83 procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and applicable technical orders.

A2.5.9. **AWR 7P. Nuclear Weapons Preflight.** An instructor-led hands-on lesson covering nuclear missiles preflight procedures IAW technical orders. The lesson will review the applicable technical data and checklists and be followed by a demonstration of correct preflight procedures for assigned nuclear weapons and their associated suspension systems. The aircrew member will demonstrate correct and proficient preflight procedures to the instructor. The reference directive for this event is AFGSCI 13-520-S Vol 3, *Bomber Nuclear Generation and Regeneration*.

A2.5.10. **AWR 8. TGP.** An instructor-led discussion covering TGP and TGP Procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and T.O. 1B-52H-12.

A2.5.11. **AWR 9. Mines.** An instructor-led lesson covering mines and mining procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and T.O. 1B-52H-34-2-1.

A2.5.12. **AWR 10. MALD.** An instructor-led lesson covering MALD procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and technical orders.

A2.5.13. **AWR 11. WCMD.** An instructor-led lesson covering WCMD procedures and employment IAW AFTTP 3-1.B-52, AFTTP 3-3.B-52, and technical orders.

A2.5.14. **Situational Emergency Procedures Training.** See [paragraph 4.4.5.2](#).

A2.5.15. **NVG Academics.** See [paragraph 6.5](#).

A2.5.16. **Conventional Verification Cycle (CVC).** Aircrew members will take an active role in a Mission Planning Cell exercise that requires ATO/ACO breakout, mission development, Combat Mission Folder (CMF), and mission brief to a certification board. Participation in a real-world HHD or contingency MPC may be counted for recurring CVC credit at Sq/CC discretion.

A2.5.17. **Nuclear Mission Recertification Cycle.** Complete nuclear recertification IAW AFGSCI 13-520 Vol 1, *Bomber Nuclear Training*.

A2.5.18. **Nuclear Force Generation.** Credit when participating as part of a Nuclear Force Generation. Instructors may take mission credit if acting as part of a Nuclear Generation as an aircrew member in a non-flying position.

A2.5.19. **Electronic Combat.** An instructor-led discussion of the B-52 EW equipment. The discussion should cover the equipment's capabilities against intended threats, early warning, and ground controlled intercepts (GCI). Discuss how B-52 EW may be used in a formation/package support role and what CAF capabilities may mitigate B-52 EW weaknesses or equipment malfunctions. Discuss the advantages of formation integrity in OCA/SEAD support. Cover decision criteria to break up the formation based on factor threat and ALR.

A2.5.20. **Aircrew Flight Equipment Fit Check.** A comprehensive fit check of all AFE gear worn in flight in ejection seat aircraft (e.g., helmet and O2 mask, survival vest, etc.). See AFI 11-301 Volume 1, *Aircrew Flight Equipment Program*. Accomplish training annually.

A2.5.21. **Aircraft Servicing.** An instructor-led hands-on lesson covering B-52 Job Guides and their application to familiarize aircrew to the tasks and procedures. Instruction should

focus on the major tasks involved with aircraft post flight and preflight, i.e. weapons safeing, engine oil servicing, drag chute installation, hydraulics servicing, and refueling.

Attachment 3

VERIFICATION GUIDE

A3.1. Guideline for Verification Briefings: The following outline is provided as a guideline for the development of verification briefings:

A3.1.1. Overview:

A3.1.1.1. Introduction (participants and briefing classification).

A3.1.1.2. Mission overview.

A3.1.1.3. Status of friendly forces (ground, air, and support).

A3.1.2. Area of Operations:

A3.1.2.1. Geography (topography, population centers, lines of communications, chokepoints and natural obstacles, major visual and radar significant identification points).

A3.1.2.2. Weather (effects on unit operations, ground movements, and inflight operations).

A3.1.2.3. Operating base (location, facilities, procedural constraints, strengths and limitations).

A3.1.3. Status of Enemy Forces:

A3.1.3.1. Ground forces and accompanying air defense threats (IADS (critical nodes), Early Warning (EW) radars, SAMs, Anti-Aircraft Artillery (AAA), and Meaconing, Interference, Jamming and Interdiction (MIJI)), capabilities, strengths and weaknesses.

A3.1.3.2. Airborne forces (numbers, locations, capabilities and tactics).

A3.1.4. Mission Employment Briefing:

A3.1.4.1. Ground operations.

A3.1.4.2. Departure (contingencies, options).

A3.1.4.3. Route of flight (threat analysis, alternatives, fuel requirements, decision points).

A3.1.4.4. Target ingress (target specifics, tactics).

A3.1.4.5. Weapons employment (target data, attack parameters, load, fusing, suitability, delivery modes/backups).

A3.1.4.6. Egress plan (route, mutual support agreements).

A3.1.4.7. Reattack plan/options.

A3.1.4.8. Downed crewmember/wounded bird plan.

A3.1.4.9. Recovery (safe corridor procedures, Identification Friend or Foe (IFF) procedures, alternate and emergency airfields).

A3.1.5. Escape and Evasion:

A3.1.5.1. Selected area for evasion (SAFEs).

A3.1.5.2. Search and rescue (SAR) procedures.

A3.1.6. Essential Elements of Information/Reports:

A3.1.6.1. Essential elements of information (EEIs).

A3.1.6.2. Required reports and reporting procedures.