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SECRETARY OF THE AIR FORCE**

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VOLUME 1**



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Flying Operations

F-15--AIRCREW TRAINING

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This volume implements AFPD 11-2, *Aircraft Rules and Procedures*; AFPD 11-4, *Aviation Service*; and AFI 11-202, Volume 1, *Aircrew Training*. It establishes the minimum Air Force standards for training and qualifying personnel performing duties in the F-15 A/B/C/D. Selected paragraphs of this publication do not apply to all Air Force units. When an exception exists to the requirements of a paragraph, the exception is indicated in a parenthetical within the paragraph, or by using subparagraphs directed at specific units. See paragraph **1.12** for waiver authorities. This publication applies to the Air National Guard (ANG) and U. S. Air Force Reserve. The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360, *Publications and Forms Management*. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional's chain of command. See paragraph 1.3. for guidance on submitting comments and suggesting improvements to this publication. Major commands (MAJCOMs)/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/A3O-AT, through HQ ACC/A3TO, for approval prior to publication IAW AFPD 11-2, paragraph **4.2** Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in Air Force Records Information Management System (AFRIMS) on the AF Portal: <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. Contact supporting records managers as required. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/A3O-AT, HQ ACC/A3TO, and the user MAJCOM/DRU/FOA offices of primary responsibility. Field units

below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. This instruction requires the collection or maintenance of information protected by the Privacy Act (PA) of 1974. The authority to collect and maintain the records prescribed in this instruction are Title 37 United States Code, Section 301a; Executive Order 9397, *Numbering System for Federal Accounts Relating to Individual Persons*, November 22, 1943 as amended by Executive Order 13478, Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers, November 18, 2008; Public Law 92-204 (Appropriations Act for 1973), Section 715; Public Law 93-570 (Appropriations Act for 1974); Public Law 93-294 (Aviation Career Incentive Act of 1974); DOD Instruction 7730.57, *Aviation Career Incentive Act and Required Annual Report*; AFI 11-401, *Aviation Management*. Forms affected by the PA have an appropriate PA statement. System of records notice F011 AF XO A Aviation Resource Management System (ARMS) (December 26, 2002, 67 FR 78777) applies.

Note: This instruction contains references to the following field (subordinate level) publications and forms which, until converted to departmental level publications and forms, may be obtained from the respective MAJCOM publication distribution office.

Publications: AFTTP 3-1, *Mission Employment Tactics*, AFI 11-301, Volume 1, *Aircrew Life Support Program* and as supplemented.

SUMMARY OF CHANGES

This publication contains minor revisions. **Chapters 1, 3, 4, 5, and 6** contain multiple changes. Of note, this revision updates SQ/supervision training report procedures, deletes the requirement for the Post-AEF training report, updates Basic Mission Capable (BMC) definition, changes RAP training cycle from the AEF cycle to fiscal year, updates Total F-15 RAP Mission Requirements (12 Month Cycle), removes Table 1.1 for insertion into the RAP Tasking Memo, renumbers Table 1.2 to Table 1.1, updates Night MQT NVG guidance, updates Low Altitude Air-to-air Employment definition, deletes LASDT-1 (Dual or Single-Ship w/ Chase) with single-ship maneuvering in the low altitude block between 5,000 and 1,000 AGL, deletes LASDT-2 (Dual or Single-ship w/ Chase), renumbers and adjusts remaining LASDT sorties in, deletes credit for SIM training accomplished in special SIM devices of HHQ directed simulator test support, removes Table 3.1 LOWAT Categories, updates EP, TAC SIM and SEPT definitions and procedures, updates Weapons/Tactics Academic Training definition and instructor qualification, updates requirement for US/Russia Prevention of Dangerous Military Activities, relaxed requirement for API-8 and ACC/IGS to meet RAP events as outlined in the RTM, updates note #4 of Table 4.1, deletes the capability of using two SIM missions to meet monthly lookback, deletes AIM-7 CT training requirement, rearranges FLUG flight training flow, allows for up to 10% of MTC hours to meet 10% of Instructor Pilot (IP) Upgrade PAI hour requirement; deletes past experience with JHMCS statement in the JHMCS Qualification Training introduction, renames "EP A/G" "Surface-to-Air EW Training" and made it MTC-only, adds "sister service equivalent" to the Experienced Pilot definition, adds Red-Air TI/ACT Bandit to the Non-demanding Mission definition, expands 4-Ship Employment definition, updates EP A/A definition and removed AIM-7 FAM training guidance.

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Chapter 1

GENERAL GUIDANCE

1.1. Abbreviations, Acronyms, and Terms. See Attachment 1 and Attachment 2.

1.2. Responsibilities:

1.2.1. HQ ACC/A3 is designated as the responsible agency for this volume IAW AFPD 11-2. HQ ACC/A3 will:

1.2.1.1. Chair semi-annual ACC Realistic Training Review Boards (RTRBs) to review ground and flying training requirements/programs for CAF units. RTRB participants will include applicable ACC active and reserve component representatives. MAJCOM/A3s with major weapons systems for which ACC is lead command will be invited to send representatives and/or inputs.

1.2.1.2. Process all change requests.

1.2.2. All user major commands (MAJCOMs) will:

1.2.2.1. Determine training requirements to meet expected unit tasking.

1.2.2.2. Submit MAJCOM supplements to HQ USAF/A3O-AT, through HQ ACC/A3TO, for approval before publication. Provide HQ USAF/A3O-AT, HQ ACC/A3TO, and all applicable MAJCOM/A3s a copy of their supplements after publication. ANG units gained by AETC when flying student sorties will follow AETC supplemented data.

1.2.2.3. Review subordinate unit supplemental instructions and training programs annually.

1.2.3. DRUs will:

1.2.3.1. Provide standard instructional texts to support operational weapons/tactics training. Forward two copies to each MAJCOM and NAF/A3, and five copies to each CAF wing/group.

1.2.3.2. Review, update, and distribute changes to instructional texts annually.

1.2.3.3. Review subordinate unit training programs annually.

1.2.4. Wings/groups will:

1.2.4.1. Develop programs to ensure training objectives are met. Assist subordinate units in management of training programs, ensure programs meet unit needs, and provide necessary staff support. ACC wings/groups will also assist ANG unit training programs as required or requested IAW the applicable unit advisory support program.

1.2.4.2. Attach API -6/8 flyers to a flying squadron.

1.2.4.3. Except when otherwise mandated, designate the training level to which each API – 6 (ANG: all flyers) will train. Upon request provide ACC/A3T (ANG: ACC/A3G) with a list of BMC and CMR manning positions. Review programs and manning position designations annually.

1.2.4.4. Forward supplements of this volume and Wing syllabi to MAJCOM/A3T for review each training cycle or upon significant changes (ANG: upon request to ACC/A3G). Review supplements each training cycle.

1.2.5. SQ/supervision (ANG: Appropriate operations supervisor) will:

1.2.5.1. Ensure adequate continuity and supervision of individual training needs, experience, and proficiencies of assigned/attached pilots.

1.2.5.2. Ensure review of training and evaluation records of newly-assigned pilots and those completing formal training, to determine the training required for them to achieve BMC or CMR and to ensure provisions of this volume have been met.

1.2.5.3. Ensure Ready Aircrew Program (RAP) missions are oriented to developing basic combat skills, or practicing tactical employment simulating conditions anticipated in the unit mission. Provide guidance to ensure only effective RAP missions are logged as RAP lookback counters. See Attachment 2 and RAP Tasking memorandum for RAP mission definitions. Ensure proper allocation of experiencing, collateral and attrition sorties, and accurate designation of non-effective training missions to properly manage the unit flying hour program.

1.2.5.4. Review qualifications and training requirements of Flight Surgeons (FS) and determine appropriate flight restrictions.

1.2.5.5. Determine missions/events in which individual BMC pilots will maintain qualification versus familiarization.

1.2.5.6. Determine utilization of BMC pilots.

1.2.5.7. Determine how many and which BMC and CMR pilots will carry special capabilities/ qualifications.

1.2.5.8. Identify the levels of supervision required to accomplish the required training, unless specifically directed.

1.2.5.9. Determine program for supervisory review of armament recordings.

1.2.5.10. Assist the wing/group in developing the unit training programs.

1.2.5.11. Monitor individual assigned/attached pilot currencies and requirements.

1.2.5.12. Ensure pilots only participate in sorties, events, and tasks for which they are adequately prepared, trained, and current.

1.2.5.13. Squadrons will submit a training report to MAJCOM/A3TO (ANG: ACC/A3G) every 4th month during the training cycle (always by the 15th of Feb, Jun, Oct for all). Squadrons may submit an out of cycle report at anytime if Higher Headquarters (HHQ) assistance is required to prepare for Designed Operational Capability (DOC) or deployment task. Reports will consist of: 1.) a commander's memo summarizing previous report results/issues, current training plan summary and significant shortfalls/limiting factors (LIMFACS) affecting training. 2.) A completed squadron training health slide (revised) summarizing critical training issues. Guidance and template can be found at A3TO's COP, <https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=AC-OP-02-66>. Squadrons

will submit an End-of-Cycle Training Report each training cycle (12 months). Report all deviations from the training requirements in this volume or the RTM, after proration, to ACC/A3T at the end of the training cycle. Include in the report all training requirements waived by the OG/CC. Squadrons deployed during the end of the training cycle are still required to submit an End-of-Cycle Report by the 15th of October. Squadrons will report the number of training months and waived number of deployed months. Guidance and template can be found at A3TO's COP, <https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=AC-OP-02-66>. Report only significant shortfalls or LIMFACS that affect 20% or greater of the crew force and all events/sorties waived by the OG. Include possible solutions or specific assistance required if able. The MAJCOM will attempt to rectify or minimize noted shortfalls/LIMFACS while the training cycle is under way.

1.2.5.13.1. Shortfalls occur when required mission training tasks are not accomplished due to shortages of equipment, munitions, etc. Example: unable to accomplish actual weapons release due to a shortage of training weapons.

1.2.5.13.2. LIMFACS are factors, constraints, restrictions, etc. that degrade training effectiveness. Example: squadron's ability to accomplish actual weapons release is limited due to the lack of ranges that allow aircraft to drop munitions. This may include support hardware and software.

1.2.6. Individual pilots will:

1.2.6.1. Hand carry all available training records to assist the gaining unit in assessing qualifications and training requirements.

1.2.6.2. Be responsible for completion of training requirements and currencies within the guidelines of this volume.

1.2.6.3. Ensure they participate only in ground and flying activities for which they are qualified, current, and prepared.

1.3. Processing Changes:

1.3.1. Forward recommendations for change to this volume to MAJCOM A3 on AF Form 847.

1.3.2. MAJCOMs will forward approved recommendations to HQ ACC/A3.

1.3.3. HQ ACC/A3 will:

1.3.3.1. Coordinate all changes to the basic volume with all MAJCOM/A3s.

1.3.3.2. Forward recommendations for changes to this volume to HQ USAF/A3O-AT for HQ USAF/A3/5 approval.

1.3.3.3. Address time sensitive changes by immediate action message.

1.3.3.4. MAJCOM/A3 (ANG: ACC/A3G) will determine training requirements for subordinate units. AFI changes will be issued via revision, Interim Change (IC), or Administrative Change (AC) to this publication. Due to dynamic requirements of Combatant Commanders, training requirements and currencies may be altered regularly. These training requirement and currency adjustments may be made via RAP Tasking

Memorandum. HQ ACC/A3 will be an info addressee on all changes. HQ ACC/A3 will include MAJCOM supplemental guidance in the next publication of the AFI.

1.4. Training. Pilot training is designed to progress a pilot from Initial Qualification Training (IQT) (B Course or Transition/Re-Qualification Training (TX)), then to Mission Qualification Training (MQT), and finally to Continuation Training (CT).

1.4.1. **IQT** provides the training necessary to initially qualify pilots in a basic position and flying duties without regard to a unit's mission. Upon completion of IQT, the pilots attain Basic Aircraft Qualification (BAQ) status. BAQ is a prerequisite for MQT. Except for General Officers above the wing level, BAQ is not a long-term qualification status. Waiver authority for any pilot, other than general officers above the wing level, to remain BAQ is MAJCOM/A3 (ANG: ACC/A3G).

1.4.2. **MQT** provides the training necessary to initially qualify or re-qualify pilots in a specific position and flying duties to perform the missions assigned to a specific unit. Pilots maintain BAQ status until they complete MQT. Completion of MQT or formal training unit (FTU) instructor course is a pre-requisite for BMC and completion of MQT is a pre-requisite for CMR.

1.4.3. **CT.** There are two aspects of CT. The first consists of pilot training in the basic flying skills contained in the BAQ portion of the Training Cycle Event Requirements Table and the BAQ portion of the Mission Requirements Table (see the RTM). These skills ensure safe operation of the aircraft. The second consists of specific mission-related training required to accomplish the unit's assigned missions.

1.4.4. **Ready Aircrew Program (RAP)** is the CT program designed to focus training on capabilities needed to accomplish a unit's core tasked missions. Upon completion of IQT and MQT, pilots will have received training in all basic missions of the unit (see Chapter 3 for exceptions). Pilots will then be assigned to a Combat Mission Ready (CMR) or Basic Mission Capable (BMC) position.

1.4.4.1. **Combat Mission Ready (CMR).** The minimum training required for a pilot to be qualified and proficient in all of the primary missions tasked to their unit and weapons system.

1.4.4.2. All designated combat aircraft (CC-coded) unit active duty API-1 positions, and flying SQ/ CC and SQ/DO positions are designated CMR positions. OG/CCs may designate other API-6 positions not assigned to the flying squadron as CMR. (EXCEPTION: If a unit is over-manned, the SQ/CC may elect to train the front line of their Unit Manning Document (UMD) API-1s to CMR and designate the overage BMC. In this case, priority should be given to inexperienced pilots and no less than 50% of the total CMR positions should be inexperienced pilots (where possible)). [For ANG: Any pilot may be designated CMR or BMC at OG/CC discretion.] CMR pilots maintain proficiency and qualification in all core missions of the flying unit to which they are assigned or attached. CMR pilots maintain currencies which affect CMR status, accomplish all core designated flight training (sorties and events), and all mission ground training. Failure to complete this training or maintain these currencies results in regression to Non-CMR (N-CMR) status unless waived by appropriate authority. While

in N-CMR status, pilots may perform missions (including exercises and contingencies) and events in which they are current and qualified at the discretion of the SQ/CC.

1.4.4.3. **Basic Mission Capable (BMC).** The minimum training required for pilots to be familiar in all of the primary missions tasked to their assigned unit and weapons system. BMC allows pilots to be qualified and proficient in some of the primary missions.

1.4.4.4. Active duty pilot positions that are not CMR are BMC. Pilots who have primary jobs as wing supervision, staff officers that directly support the flying operation, FTU instructors and operational test pilots, will carry BMC designations. These pilots are required as to provide additional sortie generation capability (in lieu of or in addition to) the personnel assigned to the flying squadrons. BMC pilots will maintain familiarization with all unit core missions. They may also maintain proficiency and qualification in some of the unit core missions. ***BMC pilots must be able to transition from familiarization to proficiency and qualification in 30 days or less.*** BMC pilots will accomplish all mission related ground training designated by their attached SQ/CC. BMC pilots may deploy and may participate in any mission for which they are proficient and qualified, without additional training, as determined by the SQ/CC. Failure to complete BMC required training results in regression to non-BMC (N-BMC) status. The SQ/CC will determine missions pilots in N-BMC status may perform and what level of supervision is required.

1.4.4.5. **N-CMR/N-BMC.** Pilots that regress to N-CMR/N-BMC status will accomplish requirements in accordance with paragraph 4.7.

1.4.4.6. **Specialized Training.** Training in any special skills necessary to carry out the unit's assigned mission. It is not required by every pilot. Specialized training consists of upgrade training such as flight lead upgrade (FLUG), instructor pilot upgrade (IPUG), etc., as well as CT to maintain proficiency and qualification in unit tasked special capabilities and missions. Specialized training is normally accomplished after a pilot is assigned CMR/BMC status and is additive to CMR/BMC requirements. Unless otherwise specified, pilots in CMR or BMC positions may hold special capabilities/qualifications as long as any additional training requirements are accomplished.

1.5. Training Concepts and Policies.

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

1.5.2. ACC Training Support Squadron (ACC TRSS) will develop and validate training programs when/where tasked by the HQ ACC/A3. Other MAJCOMs may submit requests for training program support to the HQ ACC/A3. If validated, these requests will be prioritized and tasked to ACC TRSS. Designated test units (CB-coded) may develop syllabi to upgrade Operational Test Pilots in support of specific test plans. These syllabi will be approved by the OG/CC and submitted to ACC TRSS.

1.5.3. Design training missions to achieve combat capability in squadron tasked roles, maintain proficiency, and enhance mission accomplishment and safety. RAP training missions should emphasize either basic combat skills, or scenarios that reflect procedures and

operations based on employment plans, location, current intelligence, and opposition capabilities. Use of procedures and actions applicable to combat scenarios are desired (e.g., appropriate use of code words, authentication procedures, combat tactics, safe recovery procedures, tactical deception, in-flight reports, threat reactions, Intel briefing/debriefing). Tactical training will include use of inert and live ordnance, threat simulators, countermeasures, and dissimilar aircraft as much as possible.

1.5.4. In-flight Supervision.

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

1.5.4.2. IPs and flight lead (FL)-qualified SQ supervisors may allow any pilot to lead limited portions of a mission if they are appropriately briefed. This provision will only be used to allow the pilot to practice events in which the pilot is already qualified or to help determine if the pilot is ready for FLUG. In either case, the IP or SQ supervisor is responsible for the flight.

1.5.4.3. Flight leads may give their wingman the tactical lead for specific tasks. As the tactical lead, the wingman makes tactical decisions for the flight, but the flight lead retains overall authority and responsibility.

1.6. Ready Aircrew Program (RAP) Policy and Management:

1.6.1. The RAP training cycle is each fiscal year and executed IAW the RAP Tasking Memorandum. Each RAP qualification level is defined by a total number of RAP missions, broken down into mission types, plus specific weapons qualifications and associated events as determined by the MAJCOM and unit commanders.

1.6.2. The total number of RAP missions for a qualification level is the primary factor for maintaining an individual's qualification level. The breakout of mission types is provided as a guideline to be followed as closely as possible but minor variances are authorized (excludes Red Air allocations). Variations in mission types may be used as a basis for regression by the SQ/CC. Qualification in a mission is determined by the SQ/CC considering the MAJCOM guidance and the individual's capabilities.

1.6.3. An effective RAP training mission requires accomplishing a tactical mission profile or a building block type mission (BFM, etc). Each mission requires successfully completing a significant portion of the events applicable to that sortie type, as determined by the SQ/CC and [Attachment 2](#).

1.6.4. The SQ/CC's first priority should be to train all designated pilots to CMR.

1.6.5. Progression from BMC to CMR requires:

1.6.5.1. A 1-month look back at the higher mission rate.

1.6.5.2. Qualification in all core missions, and weapons events required at CMR.

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

1.6.5.4. Completion of mission-related ground training, to include a current verification or certification.

1.6.5.5. Squadron CC certification.

1.6.6. SQ/CCs will determine and assign pilots that will train for and maintain special capabilities or qualifications. Specialized training is normally accomplished in addition to baseline CMR/BMC sortie/event requirements; except for mission commander and flight lead training.

1.6.7. Wing CMR and BMC pilots will fly the required monthly mission rate. If unable, refer to Regression, paragraph 4.7

1.6.8. End of Cycle training requirements are based on the pilot's experience level on the last day of the current training cycle.

1.6.9. Units converting to another mission-design-series (MDS) may fly pilots in CMR positions at the BMC rate until one month prior to the operationally ready date if the CMR sortie rates cannot be supported. CMR pilots should be flown at a CMR rate for the month prior to initial operational capability (IOC). Active duty wings converting to new MDS are authorized one SQ equivalent (7/6 for 24/18 or less PAI) of additional API-6's during the conversion period. However, total wing staff flying the new aircraft shall not exceed total authorized for final conversion equipage.

1.7. Training Program Development:

1.7.1. RAP mission/sortie and event requirements (see Attachment 2 for definitions) apply to CMR and BMC pilots as well as those carrying special capabilities or qualifications and are IAW the RAP Tasking Memorandum (RTM). The standard mission requirements, contained in the RTM, establish the minimum number of missions per training cycle for BMC and CMR levels of training. The RTM takes precedence over this volume, and will contain updated mission requirements and/ or missions/events not yet incorporated in Attachment 2. The RTM dictates what SIM missions/ events will be logged as RAP missions/events and what currencies will be updated in the SIM. The RTM will dictate what number of RAP SIM missions will be used for lookback. **The RTM applies to all F-15 pilots.**

1.7.2. BAQ requirements are different from BMC or CMR requirements. These requirements ensure basic pilot skills are maintained (**see the RTM**). The basic BAQ requirements are incorporated into BMC and CMR requirements and can be viewed as the traditional "non-RAP" requirements. "Non-RAP" requirements no longer exist since all requirements are contained in one sortie/mission table (in the RTM) and in one event table (Training Cycle Event Requirements Table of the RTM).

1.7.3. Experiencing/Collateral mission requirements must be considered when developing unit flying hour programs.

1.7.3.1. Experiencing sorties are additional training sorties necessary to achieve desired proficiency in optimum time. RAP sorties may not provide sufficient hours to experience pilots to achieve overall unit experience levels. The USAF sets a required number of hours to experience pilots and a percentage goal of the unit pilots that should meet these requirements.

1.7.3.2. Collateral sorties are not directly related to combat employment training but are necessary in day to day unit operations. These include but are not limited to functional check flights, ferry flights, incentive/orientation flights, deployments, and air shows. For the annual training cycle, the MAJCOM may allocate a block of sorties to the unit for these purposes.

1.7.4. Unit flying hour programs are allocated a number of attrition sorties that compensate for non-effective training sorties. Non-effective sorties are logged when a training sortie is planned, but a major portion of valid training for that type of mission is not accomplished due to poor weather, air aborts, etc. In order to accurately allocate the number of attrition sorties, it is essential that non-effective sorties are logged appropriately.

1.8. Training Records and Reports:

1.8.1. Units will maintain pilot records for individual training and evaluations IAW:

1.8.1.1. AFI 11-202V1, *Aircrew Training*

1.8.1.2. AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*

1.8.1.3. AFI 11-401.

1.8.2. Track the following information for all pilots (as applicable):

1.8.2.1. Ground training.

1.8.2.2. Requirements and accomplishment of individual sorties, RAP sorties, sortie types, and events cumulatively for the training cycle.

1.8.2.3. RAP sortie requirements and accomplishment using 1-month and 3-month running totals for look-back.

1.8.2.4. Currencies:

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

1.8.3. Units may fill in ARMS with either the date of the last FTU or United States Air Force Weapons School (USAFWS) equivalent training accomplished, or the unit mission certification date.

1.9. Armament Recording:

1.9.1. Pilots will use and assess all available training documentation such as air combat maneuvering instrumentation (ACMI), aircraft video tape recorder (AVTR) tapes and/or Digital Video Recorder (DVR) images for radar, heads-up display (HUD), Joint Helmet Mounted Cueing System (JHMCS), situation displays, or any other important data on all tactical missions. Pilots will review their data with their flight/element member(s).

1.9.2. As a guide, the following items should be reviewed: titling, weapons parameters, accuracy, identification procedures, adherence to Training Rules (TRs), communications procedures and discipline, flight discipline, proper Anti-G Straining Maneuver IAW paragraph 6.4.2.5., tactical employment, and instrument approaches.

1.10. Pilot Utilization Policy:

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

1.10.2. Duties required by various publications that may be assigned to CAF API -1 pilots are weapons and tactics officer, programmer, flight safety officer, supervisor of flying (SOF), mobility/ contingency plans, training (except ARMS documentation), SQ Standardization/Evaluation Liaison Officer (SELO), squadron aircrew flight equipment officer, electronic combat pilot, and other duties directly related to flying operations (runway operations monitor [ROM], range control officer [RCO], etc.). In some instances, such as squadron-assigned flight safety officers, API -1s may be attached to the wing. API -1s will not be attached to wing staffs or man wing staff positions unless total wing pilot API -1 manning is 100 percent or better. CCs will ensure wing staff pilots (API -6s) perform duties justified in MAJCOM manpower standards documents and authorized in UMDs.

1.11. Sortie Allocation Guidance:

1.11.1. Inexperienced API -1 pilots should receive sortie allocation priority over experienced pilots. Priorities for sortie allocation are as follows:

1.11.1.1. **Formal Training Units and USAFWS.** Formal syllabus training, Instructor Upgrade, Instructor CT, authorized staff personnel not performing Instructor or FE duties (to include API-5 pilot-physicians not on instructor orders).

1.11.1.2. **Combined Formal Training and Operational Units.** Formal syllabus training, CMR API -1, MQT API -1, CMR API -6, MQT API -6, BMC, API -5 pilot physicians, others.

1.11.1.3. **Operational Units.** CMR API -1, MQT API -1, CMR API -6, MQT API -6, and BMC (to include API -5 pilot physicians).

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

1.11.2. Wing API -6 authorizations are IAW unit manning documents.

1.11.3. For FTU only wings, all API -6 pilots will maintain instructor status (optional for WG/ OG CC, functional check flight (FCF) pilots, and one other). These wings will fly API -1/6 pilots as required by programmed flying training (PFT). For wings consisting of both FTU and operational units, at least one of the following pilots will maintain formal IP status: WG/CC, WG/CV, OG/CC, and OG/CD.

1.11.4. API-8 rated personnel flying authorizations, ACC/IGS inspectors in API-6 billets and Test Unit aircrews will be IAW AFI 11-401 and MAJCOM guidance. API-8 pilots should fly the BMC rate, however they are not required to complete BMC specific missions/events or meet monthly look-back requirements. API-8 pilots will fly at least the BAQ mission/sortie

and event requirements. Test unit pilots will fly the BMC sortie rate as a minimum and will meet monthly BMC lookback. Units should provide assigned API 6/8 flyers adequate resources to maintain minimum training requirements. However, API-6 flyer support will not come at the expense of the flying squadron's primary mission. API-6 flyers will accomplish training requirements with allotted BMC sorties or MTC missions. API-8/ACC/IGS flyers will strive to accomplish all mission and event requirements with allotted BMC sorties or MTC missions. If attached units cannot meet attached flyer requirements, they must request relief IAW AFI 11-401, as supplemented. Units requiring flying hour adjustments for attached API-8 and applicable API-6 flyers must request program changes IAW MAJCOM directives.

1.11.5. (ANG: N/A) There is no maximum sortie requirement for CMR pilots. Table 1.1. defines the maximum sortie requirements for other pilots. On occasion, unique operations may require pilots to fly more than the maximum number of sorties authorized, however, this may impact training of other pilots.

1.11.6. Pilots assigned or attached to ACC/IGS as API-6s will maintain RAP currencies /lookback per API-8 guidance.

Table 1.1. F-15 Sortie Requirements for Other Than API -1 Pilots.

RPI/API Level	CT Status (Min Mission Requirement)	Unit's Aircraft Code	Organization Level	Maximum Sortie Allowance (Inexperienced/Experienced)
6	CMR	CC	Any	None
6	BMC	CC	Wing	160/140
6	BMC	TF	Wing	160/140, or as required by PFT, whichever is higher
6	BMC	CB	Wing	160/140, or as required by PFT, whichever is higher
8	BMC	CB	Wing	160/140
8	BMC	CC, TF, or CB	Above Wing	140/120 or as required
5	BMC	CC, TF, or CB	All	If qualified and current in unit aircraft - 160/140. Otherwise, IAW AFI 11-401 as supplemented
Any	BAQ	Any	Any	100/80

1.12. Waiver Authority:

1.12.1. With MAJCOM/A3 approval, waiver authority for all requirements of the RAP tasking memo is the OG/CC. Additional guidance may be provided in the memo. Unless specifically noted otherwise in the appropriate section, and also with MAJCOM/A3 approval, the OG/CC may adjust individual requirements in Chapter 4, Chapter 5, and Chapter 6, on a case-by-case basis, to accommodate variations in aircrew member experience and

performance. For all other provisions of this volume, and IAW AFI 11-202 Vol 1, the waiver authority is MAJCOM/A3 (ANG: ACC/A3G).

1.12.2. Units subordinate to a NAF will forward requests directly to MAJCOM/A3T and provide their NAF/AOG/CC/OV with an information copy. Waivers from other than MAJCOM/A3 (ANG: ACC/A3G) will include their appropriate MAJCOM/A3T (ANG: ACC/A3G) as an information addressee. All waivers will include HQ ACC/A3T as an information addressee.

1.12.3. Waivers to this volume will be valid until the approving authority cancels the waiver in writing or revises the publication.

Chapter 2

INITIAL QUALIFICATION TRAINING

2.1. General. This chapter outlines Initial Qualification Training (IQT) of pilots into unit aircraft. IQT includes Basic (B course) and transition/re-qualification/senior officer (TX) training and normally will be conducted during formal syllabus courses at formal training unit (FTU) squadron whenever possible. In exceptional circumstances, when FTU training is not available within a reasonable time period, IQT may be conducted at the local unit IAW provisions of this chapter. This local IQT will normally be conducted using appropriate formal USAF Transition or Re-qualification Training Course syllabus tracks, flow programs, and requirements. When local IQT is authorized, the gaining MAJCOM assumes responsibility for the burden of providing this training locally. The following guidance applies only to other than formal course IQT.

2.2. Approval/Waiver for IQT:

2.2.1. MAJCOM/A3 (ANG: NGB/A3T) is approval authority to conduct local IQT, and (ANG: ACC/ A3G) is waiver authority to change the formal requirements of locally conducted IQT. Info HQ ACC/ A3T.

2.2.2. MAJCOM/CC (ANG: ACC/CG) is the approval authority for non-formal course IQT for Colonel selects and above to be conducted at the unit to which the officer is assigned.

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

2.2.3.1. Justification for the local training in lieu of formal course training.

2.2.3.2. Summary of individual's flying experience, to include last centrifuge training date.

2.2.3.3. Date training will begin and expected completion date.

2.2.3.4. Requested exceptions to formal course syllabus, with rationale.

2.2.4. Successful completion of IQT requires the upgrading pilot to complete an aircraft qualification and instrument evaluation IAW AFI 11-202V2 and AFI 11-2F-15, Volume 2, *F-15--Aircrew Evaluation Criteria*).

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

2.4. Ground Training. Ground training may be tailored to the individual's background and experience or peculiar local conditions. However, available and current reference materials such as AFTTP 3-3, *Combat Aircraft Fundamentals*, instructor guides, and audiovisual programs should be used as supporting materials to the maximum extent possible. Simulator missions may be accomplished in a Full Mission Trainer (FMT), weapons and tactics trainer (WTT), cockpit familiarization trainer (CFT) or cockpit procedures trainer (CPT) if the ViWS's are not available in the MTC.

2.5. Flying Training:

2.5.1. Mission sequence and prerequisites will be IAW the appropriate formal course syllabus.

2.5.2. Training will be completed within the time specified by the syllabus, as approved. Failure to complete within the specified time limit requires notification through channels to MAJCOM/A3 (ANG: ACC/A3G) with pilot's name, rank, reason for delay, planned actions, and estimated completion date.

2.5.3. Pilots in IQT will fly under IP supervision (dual or chased) until completing the qualification checkride.

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

2.5.5. Combat Edge familiarization flight training (if unit is equipped) will be conducted before other high-G flight maneuvers are accomplished.

2.6. IQT for Senior Officers:

2.6.1. All formal training courses for senior officers (colonel selects and above) will be conducted at the FTUs unless waived IAW paragraph 2.2.

2.6.2. Senior officers must meet course entry prerequisites and will complete all syllabus requirements unless waived IAW syllabus and paragraph 2.2.

2.6.3. If senior officers must be trained at the installation to which they are assigned, they will be in formal training status. Unit duties will be turned over to appropriate deputies or vice commanders until training is completed. Exceptions to this policy must be approved by MAJCOM/CC (For ANG: ACC/ CG).

Chapter 3

MISSION QUALIFICATION TRAINING

3.1. General. Mission Qualification Training (MQT) is a unit developed training program that upgrades newly assigned pilots to BMC or CMR to accomplish the unit mission. Guidance in this chapter is provided to assist the SQ/CCs in developing their MQT program. MQT should not be built as a validation of FTU course phases. The SQ/CC is responsible for developing the unit specific MQT program and the OG/CC will approve for use. Units are allowed to further tailor their program for all pilots, based on current qualification, experience, currency, documented performance, and formal training. Applicable portions of MQT may be used to create a re-qualification program for pilots who have regressed from BMC or CMR, to specifically address deficiencies which caused regression.

3.1.1. MQT will be completed within 90 calendar days (ANG: 120 calendar days). Timing starts at the pilot's first duty day at the gaining operational unit. If a pilot elects to take leave prior to entering MQT, the timing will begin after the termination of the pilot's leave. Training is complete upon SQ/ CC certification to CMR/BMC. Notify MAJCOM/A3T if delay beginning MQT due to security clearance exceeds 30 days. If training exceeds the specified limit, units will notify MAJCOM/A3 (ANG: ACC/A3G).

3.1.2. The following CMR/BMC training items are granted grace periods for completion after MQT; failure to comply will result in regression to N-CMR/N-BMC until training is complete. AAR and night training accomplished in IQT may fulfill MQT requirements as determined by the SQ/CC. Night MQT should be flown with NVGs if the upgrading pilot is already NVG qualified. All night training requires demonstrated proficiency and currency in similar day events, unless accomplished dual with an IP. Unaccomplished AAR and night training will be accomplished NLT 90 days (ANG: 180 days) from completion of MQT.

3.1.3. Pilots in MQT will not fly in FLAG-level exercises, or Weapon System Evaluation Program (WSEP). The OG/ CC will determine MQT participation in other exercises.

3.1.4. Prior to CMR certification, if not accomplished during FTU training, pilots must complete low altitude step-down training (LASDT) and initially qualify in all weapons delivery/employment events required QUAL at CMR/BMC.

3.2. Ground Training:

3.2.1. Units will develop blocks of instruction covering areas pertinent to their mission as determined by the SQ/CC. Training accomplished during IQT may be credited towards this requirement.

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

3.2.3. **Initial Verification:** Initial verification will be completed within 90 days (ANG: 180 days) after completing MQT. Suggested briefing guide is at Attachment 3. Each pilot (not required for BMC) will demonstrate to a formal board a satisfactory knowledge of the squadron's assigned mission. Board composition will be established by the SQ/CC. Desired

composition is SQ/CC or SQ/DO (chairman), weapons, electronic combat, intelligence, and plans representatives.

3.3. Simulator Training:

3.3.1. ViWS's in the MTC will be used on SIM MQT-1 and -4 if available. If unavailable, SIM MQT-1, -2, and -3 may be combined into one or more CFT/CPT/FMT/WTT Static aircraft missions to accomplish appropriate switchology and emergency procedures training. SIM MQT-2 and -3 may be flown in the WTT. MQT pilots should fly the missions outlined below (ANG: locally developed SIM profiles). Each training device mission will include selected emergency procedures and unusual attitude/inadvertent weather entry procedures. During emergency procedure (EP) SIM missions, departure recognition and recovery procedures will be accomplished to include both autoroll and spin recoveries. SIM MQT-1 is a prerequisite for the first MQT flight.

3.3.2. MQT SIM Profiles:

3.3.2.1. **SIM MQT-1--Local Area Orientation/Instruments.** Normal ground operations, standard departure(s), navigation, emergency airfield procedures and approaches, published penetration and approach to primary alternates and home base, emergency divert procedures, EPs.

3.3.2.2. **SIM MQT-2--Tactical Intercepts.** Alert scramble and launch procedures; FENCE check; radar search techniques; AAI procedures; horizontal/slice/chandelle conversions; GCI/ SOCC procedures; MRM and SRM employment; attacks against low altitude/high speed targets; emergency procedures; instrument recovery and approach.

3.3.2.3. **SIM MQT-3--Multiple Target/EP Intercepts/Short Range Commits.** Scramble start and launch; Max climb; FENCE check; GCI/SOCC procedures; wartime ROE procedures; radar search/sort techniques; MRM/SRM employment against multiple target formations and targets with EA capability; no-lock intercepts; electronic identification; comm jamming procedures; TEWS interpretation; EWWS employment; emergency procedures; instrument recovery and approach.

3.3.2.4. **SIM MQT-4, Offensive Counter Air. Mission Objectives:** Practice crossing a FEBA and using sweep/roving cap tactics to sterilize a pre-determined area of enemy aircraft. Specific Mission Tasks: Departure; weapons system check; tactical formation; FENCE check; FEBA crossing; radar search/sort/targeting; radio discipline; element maneuvering versus hostile targets and surface threats; mutual support; weapons employment; separation/egress; wounded bird procedures; recovery and landing.

3.3.2.5. **SIM MQT-5--Emergency Procedures Evaluation (If Required).** This evaluation will be administered by a FE IAW MAJCOM and unit directives.

3.4. Flying Training. The appropriate missions from those listed below will be used to upgrade to BMC and CMR. Unit-developed MQT programs should use profiles typical of squadron missions. Maximum use of armament recording assets and captive missiles is encouraged on all MQT missions.

3.4.1. **Supervision.** A FL-qualified SQ supervisor or IP in the element is required unless specified otherwise. On some sorties, more specific guidance is provided. The SQ/CC will determine the proper flight position of the supervisor/IP unless specified otherwise.

3.4.2. If more than 14 calendar days elapse between sorties, an additional review sortie will be flown before continuing in the program.

3.4.3. All pilots must conduct practice airborne emergency procedures training during any one of the MQT sorties. As a minimum, the training will consist of briefing, flying, and debriefing a simulated critical action procedures scenario, to include airborne coordination with the SOF.

3.4.4. **Sortie Requirements.** The Mission Evaluation Checkride, flown IAW AFI 11-202V2 and AFI 11-2F-15V2 is mandatory, if not previously accomplished in the MQT portion of IQT. The sorties listed in paragraphs 3.4.5., Air-to-Air, and 3.4.6., Low Altitude Step-Down Training, are suggested mission profiles that SQ/CCs may use to develop the unit's MQT program based on unit tasking.

3.4.5. **Air-to-Air:**

3.4.5.1. **LAO/AHC/Instruments (IP Required).** Mission Objectives: Local area orientation, practice aircraft handling characteristics (AHC) and local instrument procedures. **Specific Mission Tasks:** Ground operations; departure; local area familiarization; emergency and/or alternate airfield(s) overflight/approach(es); G warm-up exercise; AHC, recovery; VFR pattern procedures; normal and simulated emergency patterns/landings. NOTE: F-15B/D model is desired for this sortie.

3.4.5.2. **Perch BFM.** Mission Objectives: Practice offensive and defensive BFM and weapons employment. **Specific Mission Tasks:** Formation takeoff (wing); weapons system check; tactical formation; FENCE check; ranging/tracking exercise; offensive and defensive BFM; weapons employment; BD check; recovery; formation approach and landing (wing).

3.4.5.3. **High Aspect BFM/Intercepts/JHMCS.** Mission Objectives: Practice tactical intercepts to high aspect BFM. **Specific Mission Tasks:** Trail departure; weapons system check; tactical formation; FENCE check; fighter/GCI controlled horizontal/slice/chandelle conversions; high aspect BFM; front hemisphere missile defenses; weapons employment; BD check; trail recovery and landing.

3.4.5.4. **Air Sovereignty ACM (2 V 1).** **Mission Objectives:** Practice trail departure and basic intercepts. **Specific Mission Tasks:** Single ship takeoff; trail departure; weapons system check; tactical formation; FENCE check; SOCC procedures; air sovereignty tasking; horizontal/slice/ chandelle intercepts against medium/low altitude targets maneuvering at or above fighter Vmin; VID procedures; Noble Eagle ROE procedures; BD check; recovery and landing.

3.4.5.5. **ACM.** **Mission Objectives:** Practice 2 V 1 offensive and defensive maneuvering and practice element tactical intercepts on a maneuvering target. **Specific Mission Tasks:** Departure; weapons system check; tactical formation; FENCE check; 2 v 1 ACM (emphasis placed on engaged/support fighter responsibilities, lookout responsibilities, radio discipline, and mutual support); tactical intercepts using separate frequencies and AWACS/GCI if available (emphasis placed on radar/visual search, radio discipline, mutual support, quick kills and/or separations); element maneuvering; weapons employment; JHMCS employment if available; front hemisphere missile defenses; BD check; instrument approach and landing.

3.4.5.6. **Night Intercepts. Mission Objectives:** Practice night intercepts, air refueling, and approaches. **Specific Mission Tasks:** Trail departure; weapons system check; join-up; close/ route formation; night AAR as required (IP required if day AAR not previously accomplished in MQT); FENCE check; fighter/GCI controlled intercepts; weapons employment; instrument recovery and approach(es); landing. May be flown with NVGs if NVG qualified from FTU.

3.4.5.7. **ACT, Defensive Counter Air (2 V 2 min). Mission Objectives:** Practice area/lane/ point defense procedures and techniques relative to a defined threat axis. (Adversaries fly current threat tactics; 25 NM set-ups minimum; AWACS/GCI desired for both elements). **Specific Mission Tasks:** Departure; weapons system check; tactical formation; FENCE check; CAP procedures; AWACS/GCI procedures; radar search/sort procedures (emphasis on detecting/sorting/ targeting separate adversaries); visual lookout; element maneuvering; weapons employment; mutual support; radio discipline; separations; BD check; recovery and landing. (ANG: ADF units will incorporate specific unit tasking to the maximum extent possible during this sortie, e.g., SOCC procedures, air sovereignty tasking (peacetime ROE), VID procedures, intercepts against targets using EA, evasion, and/or comm jamming element tactics against hostile targets, etc.)

3.4.5.8. **ACT, Air Sovereignty (2 v 1 minimum). Mission Objectives:** Demonstrate proficiency in mission related events. **Specific Mission Tasks:** Takeoff; weapons system checks; tactical formation; FENCE check; SOCC procedures; air sovereignty tasking (Noble Eagle ROE's); shadow procedures; VID procedures; Air Force Interceptor Operation (AFIO) procedures; intercepts against targets using EA, evasion, and/or comm jamming; element tactics against hostile targets; mutual support; weapons employment; BD check; recovery and landing.

3.4.5.9. **Mission Evaluation Checkride.** This sortie will be flown IAW AFI 11-202V2, AFI 11-2F-15V2, and local standardization/evaluation criteria on a mission representing the unit's primary mission tasking.

3.4.6. Low Altitude Step-Down Training (LASDT):

3.4.6.1. To conduct low altitude operations safely, pilots need to be knowledgeable of aircraft handling and performance characteristics, tactical formation, intercept, offensive maneuvering and defensive reactions, and navigation. The low altitude environment requires a well-supervised LASDT program, including initial certification and currency requirements. LASDT qualifies pilots to conduct low altitude training (LOWAT) in the block 500 feet to 1,000 feet AGL. LOWAT block certification is required prior to performing unsupervised operations in that low altitude block.

3.4.6.2. LASDT missions will be supervised by an IP or FL-qualified squadron supervisor who has completed LASDT training and is current.

3.4.6.3. Demonstrated proficiency down to 500 feet AGL is required for LOWAT qualification and is normally accomplished during IQT. Units may accept a transfer pilot's LOWAT qualification from previous IQT or MQT. LOWAT qualification is a requirement for CMR status.

3.4.6.4. Entry into LASDT (other than at FTU) requires SQ/CC approval. Upon successful completion of LASDT training, the SQ/CC will certify the pilot LOWAT

qualified. Squadrons may accept documented LASDT certification for pilots coming from other units/ commands. With SQ/CC approval, low altitude training conducted at a formal course may be used to fulfill applicable requirements of this paragraph.

3.4.6.5. LASDT will be scheduled and briefed as a primary portion of the mission. Compatible RAP CT sorties and events may be accomplished in conjunction with LASDT as long as the objectives of LASDT training are met. **LASDT training will not be accomplished on an alternate mission.** IPs/FLs must be aware of the added stress and task loading associated with low altitude operations and provide breaks in training above the training altitude. Develop training profiles to avoid over-tasking the upgrading pilot, and upgrade sortie continuity should be emphasized.

3.4.6.6. TR's will be IAW AFI 11-214, *Aircrew and Weapons Director Procedures for Air Operations*; and AFI 11-2F-15, Volume 3, *F-15--Operations Procedures*. During LASDT, KIOs will include a climb to above 1000 feet AGL.

3.4.6.7. An IP or squadron supervisor, in the element, will supervise all sorties.

3.4.6.8. **Ground Training.** LASDT training. Coverage should support the mission and concept of operations of the squadron, incorporating appropriate portions of AFTTP 3-1, and AFFTP 3-3. Complete all academic training prior to flight training/briefing.

3.4.6.8.1. **AHC.** Discuss aircraft performance as it applies to the low altitude environment, to include: control response (low/high speed, over-G potential, speed brake use, stores effects); afterburner (fuel considerations, selection techniques), acceleration/ deceleration, level turns, vertical maneuvering, climb/dive/slice, recoveries, effects of gross weight/ CFT, power settings, density altitude, G-loading, and bank angles; terrain avoidance (ridge crossings), HUD use, terrain clearance versus turning room, dangers inherent in over-banking during turns, importance of frequent cross check of aircraft attitude relative to horizon, and any available computer-based depictions of LOWAT dangers; use the media "How Low Can You Go?", or equivalent if available.

3.4.6.8.2. **Environmental Factors.** Discuss out-of-cockpit visibility and FOV restrictions, sun angle, terrain and G-excess-illusions/perceptions, WX considerations, and HUD use.

3.4.6.8.3. **Task Management.** Discuss low altitude tasks and task management/prioritization concept.

3.4.6.8.4. **Low Altitude Tactical Formation (LATF).** Discuss formations (including line abreast and wedge), hazards at low altitudes, task prioritization, tactical turns, visual lookout/ mutual support.

3.4.6.8.5. **Defensive Reactions.** Discuss visual lookout and mutual support, threat weapons systems envelopes, defensive maneuvering against air-to-air and surface-to-air threats, and flight member de-confliction.

3.4.6.8.6. **Low Level Awareness.** Discuss factors affecting low level awareness: airspeeds and maneuverability, formation size and design, formation and pilot responsibilities, environmental effects on visibility, factors influencing individual proficiency and airmanship, route familiarity and complacency, turbulence, jet wash,

bird strike, route obstacles, terrain features, planning, CHUM responsibilities, route abort procedures, techniques and considerations.

3.4.6.8.7. **Special Subjects.** Discuss training rules, WX abort procedures, aircraft emergencies, and separation/disengagement considerations.

3.4.6.8.8. **Low Altitude Air-to-Air Employment.** Discuss level intercepts, fuel, turning room, maximum dive restrictions, low altitude weapons employment, low altitude intercept, low-to-high, high-to-low, and co-altitude intercepts.

3.4.6.9. Flying Training:

3.4.6.9.1. **LASDT-1 (2-ship). Mission Objectives:** Demonstrate proficiency in 2-ship LOWAT operations. Specific Mission Tasks: AHC/vertical awareness IAW LOWAT exercises from AFTTP 3-3; G-awareness exercise; low level navigation; fuel management; low level turns; tactical formation; terrain masking maneuvering techniques for level/rolling/rough terrain; ridge crossings; visual lookout; altitude awareness/ control; practice KIOs; defensive reactions; weather route abort; offensive/defensive maneuvering low altitude basic/tactical intercepts concentrating on low altitude weapons employment considerations.

3.4.6.9.2. **LASDT-2 (2-Ship). Mission Objectives:** To introduce LOWAT 2-ship maneuvering against a low/slow targets and/or fighter adversaries. Specific Mission Tasks: G-awareness exercise; low level navigation; fuel management; low level turns; tactical formation; visual lookout; altitude awareness/ control; offensive/defensive maneuvering; practice KIOs; 2-ship low altitude tactical intercepts; low altitude weapons employment considerations; and EID/VID/ROE procedures against a low/slow target (dissimilar asset is required/helicopter if available) and/or fighter adversaries with emphasis placed on threat VID procedures IAW AFTTP 3-1. Upon satisfactory completion of this mission, the SQ/CC can certify the pilot LOWAT qualified.

3.5. Initial Aircrew Chemical Defense Training (ACDT). (N/A for CB/TF-coded and ANG ADF units) ACDT is designed to ensure pilot proficiency in the overall use of the Aircrew Chemical Defense Ensemble (ACDE) and to familiarize pilots with combat capabilities while wearing ACDE. Pilots must complete Initial ACDT NLT 90 days (ANG: 180 days) from MQT completion. Initial ACDT affects CMR/BMC, but is non-grounding. All initial ACDT is to be accomplished prior to the first ACDE flight. Pilots will be ACDE certified upon the completion of initial ACDT. Pilots who accomplished initial ACDT in previous tours in a fighter type MDS are not required to reaccomplish the ACDE Flight.

3.5.1. **Ground Training.** All pilots will complete required mobility ancillary training. Aircrew Chemical Defense Training/ACDT (LL04) initial, CT refresher, Egress Training with ACDE (LL05) are IAW AFI 11-301, and Emergency Parachute Training with ACDE are IAW AFI 16-1301, *Survival, Evasion, Resistance and Escape (SERE) Program*, will be accomplished once in a career (per MDS). See Ground Training Table (see the RTM) for currency requirements and reference instructions.

3.5.2. **Aircrew Chemical Defense Ensemble (ACDE) SIM.** A SIM mission in full ACDE gear (anti-exposure suit liner may be substituted), harness, and G-suit. Within the mission profile, practice doffing simulated contaminated equipment. An ACDE SIM mission may use

existing SIM mission profiles and count toward TAC SIM training cycle requirements. Units will use their best available simulator or actual aircraft cockpit for ACDE SIM training. The ACDE SIM will be accomplished once in a career (per MDS), and should be conducted as close as possible to the day before (but not more than 30 days prior) to the ACDE flight.

3.5.3. Aircrew Chemical Defense Ensemble (ACDE) Flight. The ACDE flight will be accomplished once in a career (unless previously accomplished in a fighter type MDS). Flight training must consider limitations of operating while wearing ACDE. Full donning and doffing procedures/ sequence will be practiced in conjunction with the ACDE flight but the only ACDE worn inflight will be mask, filter pack, and gloves.

3.5.4. ACDE Flight Restrictions:

3.5.4.1. Pilots will be fully current and qualified in an event prior to accomplishing that event on an ACDE flight.

3.5.4.2. Minimum formation spacing is route unless fingertip is required for safe mission accomplishment (i.e., WX penetration).

3.5.4.3. Minimum altitude is 500 feet AGL except takeoffs, approaches and landings.

3.5.4.4. No night sorties. AAR requires an IP in the flight.

3.5.4.5. Weather minimums are 1500 feet ceiling and 3 miles (4.8 km) visibility for pilots wearing ACDE.

3.5.4.6. Dual cockpit operations will be used to the maximum extent possible with a safety observer, qualified in the aircraft, not wearing ACDE in the rear cockpit. Solo operations will be supervised by an ACDE qualified FL from a chase position. Formations, to include chase, are limited to two-ship and only one pilot in the element will be wearing ACDE unless both aircraft are dual with an experienced pilot in each RCP. Pilots wearing ACDE gear will not fly in dissimilar formations.

3.5.4.7. Operations supervision should not conduct ACDE flying training when, in their judgment, temperature/dew point conditions are not favorable to safe operations.

3.5.4.8. Due to physical incompatibility between the JHMCS visor and the pilot's CW mask, ICWT will not be conducted with the JHMCS display unit (DU) attached to the helmet until an alternative to the current visor fitting process is developed. The traditional 55P helmet is the preferable option for the ACDE sortie, if available, until JHMCS ACDE compatibility is achieved.

3.6. Flight Surgeon:

3.6.1. Ground Training. Flight surgeons who are assigned to 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 (as applicable); egress training, protective equipment training; applicable testing, AGSM training (to include the review of "Anti-G Strain Technique Reinforcement and Assessment"), and an instrument/EP simulator (if available) with an instructor (1 hour minimum). CRM is a onetime per MDS requirement for FS that will be accomplished prior to first flight (OG waiverable).

3.6.2. Flight Training. The first flight in the unit-assigned aircraft will be with an IP and may be flown in conjunction with other training sorties. The briefing and sortie will

emphasize crew coordination, communications and equipment, instrument interpretation, and the aircraft's performance envelope.

Chapter 4

CONTINUATION TRAINING

4.1. General. This chapter and the RAP Tasking Memo (RTM) outlines ground and flying training requirements for CMR, BMC, and BAQ pilots. Pilots must be qualified IAW AFI 11-401 and 11-202V1/ V2. Additionally, they must complete IQT to fly in BAQ status, and MQT or FTU IP upgrade to fly in BMC status or MQT to fly in CMR status. Chemical warfare training requirements do not apply to ANG ADF units that are not world-wide tasked.

4.1.1. Basic Aircraft Qualification (BAQ) Requirements:

4.1.1.1. Qualification Evaluation IAW AFI 11-202V2 and AFI 11-2F-15V2.

4.1.1.2. Currencies (as applicable) IAW paragraph 4.6.

4.1.1.3. BAQ pilots will fly a supervised sortie (squadron supervisor or IP) at least once every 60 calendar days. In addition, if a BAQ pilot does not fly for 21 days (inexperienced) or 30 days (experienced), the next sortie must be flown with a squadron supervisor or an IP.

4.1.1.4. BAQ pilots that remain in BAQ status for more than 6 months will be grounded (except General Officers), unless waived by MAJCOM/A3.

4.1.2. Basic Mission Capable (BMC) Requirements:

4.1.2.1. Qualification and Mission Evaluations IAW AFI 11-202V2 and AFI 11-2F-15V2.

4.1.2.2. Currencies (as applicable) IAW paragraph 4.6.

4.1.2.3. Ground training requirements related to applicable RAP missions/events.

4.1.2.4. Sortie rate (lookback) IAW RTM and paragraph 4.7.1. (N/A API-8s and ACC/IGS inspectors).

4.1.2.5. RAP missions, mission types, and events, including weapons qualifications IAW the procedures set forth in this volume and the RTM.

4.1.3. Combat Mission Ready (CMR) Requirements:

4.1.3.1. Performance satisfactory to the SQ/CC.

4.1.3.2. Qualification and Mission Evaluations IAW AFI 11-202V2 and AFI 11-2F-15V2.

4.1.3.3. Sortie rate (lookback) IAW RTM and paragraph 4.7.1.

4.1.3.4. RAP missions, mission types, and events, including weapons qualifications IAW the procedures set forth in this volume and the RTM.

4.1.3.5. Currencies (as applicable) IAW paragraph 4.6.

4.1.3.6. LOWAT certification.

4.1.3.7. Ground Training **IAW the Ground Training Table located in the RAP Tasking Memo.**

4.2. Ground Training. Ground training will be accomplished IAW the **Ground Training Table** (see the RTM). Waiver authority for the ground training specified is IAW the reference directive. Ground training accomplished during IQT/MQT may be credited toward CT requirements for the training cycle in which it was accomplished. This list is intended to be a single source reference for MDS-specific ground training only. This list does not include non-MDS specific ancillary training. Training should be tracked in ARMS. Where discrepancies exist, the reference directive takes precedence.

4.2.1. **Simulator (SIM):** The Training Cycle Event Requirements Table in the RTM depicts the minimum EP and TAC SIM training requirements to be accomplished in the best available simulator. SQ/CC will determine the required supervision for CT SIM missions, based on SIM capabilities, and mission training objectives. Units should develop scenarios that cover both EP and tactical MTCs based on expected employment tasking and general systems knowledge requirements. Emphasis should be placed on training not easily or not attainable during live flying. Units will update scenarios as required.

4.2.1.1. EP SIM missions will accomplish the following at least once in each training cycle: unusual attitude recoveries, spatial disorientation, inadvertent weather entry, controlled flight departure recognition and recovery procedures, controlled and uncontrolled ejection parameters, aircraft subsystem failure checklist procedures, relevant critical action procedures, and precision instrument procedures.

4.2.1.2. TAC SIM missions will accomplish the following at least once in each training cycle: DOC relevant combat employment, threat recognition/reaction and counter tactics, system failure procedures, critical action procedures, departure recognition and recovery, and controlled/uncontrolled ejection parameters.

4.2.1.3. EP missions will be accomplished in the MTC or FMT. If a unit does not have access to an MTC or FMT, EP missions will be accomplished in the WTT.

4.2.2. Situational Emergency Procedures Training (SEPT).

4.2.2.1. An SEPT must be accomplished once per month. It can be accomplished by table top or SIM. Review abnormal/emergency procedures and aircraft systems operations/limitations. Use realistic scenarios and carry EPs to a logical conclusion. Critical action procedures and squadron special interest items should be emphasized. Incorporate the following into squadron SEPT programs:

4.2.2.1.1. SQ/CC/DO involvement in the selection of a monthly SEPT topic.

4.2.2.1.2. Develop SEPT scenarios using actual mishaps/incidents.

4.2.2.1.3. Discuss at least two EPs for each phase of flight.

4.2.2.1.4. Accomplish two SEPTs each training cycle with an IP or SQ supervisor to include min fuel and emergency divert training, and mid-air collision avoidance in all phases of flight.

4.2.2.2. An SEPT will be accomplished for the month a pilot is flying. Currency will expire at the end of the calendar month. An SEPT may be accomplished the month prior, but will only count for one month (i.e. an SEPT accomplished at the end of May can count for June, but June only.) A pilot is grounded until the SEPT is completed for that month.

4.2.2.3. Table top SEPTs should be accomplished with at least two pilots. Keep groups small and ensure all members participate.

4.2.2.4. Completion of a simulator EP profile satisfies the monthly SEPT requirement. For IP/ FE, administering the SEPT/EP Sim will satisfy their SEPT requirement.

4.2.3. **Weapons/Tactics Academic Training.** Units will establish a weapons/ tactics academic training program to satisfy MQT and CT requirements. Training is required in each training cycle. Audio-visual programs may be used in place of academic instruction. Successful completion of the program requires an examination (85% minimum). Use additional testing to validate qualification to the maximum extent. Pilots who score at least 85% may receive credit in lieu of ground CT where authorized by governing regulations.

4.2.3.1. Academic instructors should be USAFWS graduates or have attended WIC academics.

4.2.3.2. Instruction and tests should include (as applicable), but are not limited to:

4.2.3.2.1. Air-to-air weapons description, operation, parameters, fusing, limitations, preflight, tactics, normal and emergency procedures/techniques.

4.2.3.2.2. **ACBT.** Principles of aerodynamics, maneuverability, AHC, formations, tactical intercept principles, alert procedures and scrambles, use of GCI/AWACS, and enemy capabilities.

4.2.3.2.3. Electronic combat equipment, capabilities, operation, checks, procedures, IRMD/ RMD, and hostile and friendly EW tactics.

4.2.3.2.4. Specialized training to support specific weapons, tactics (to include threat VID tactics), mission capabilities, authentication, war and peacetime ROE, air sovereignty alert, counter narcotics, and safe passage.

4.2.3.2.5. Low altitude flying academics review IAW the outline in paragraph 3.4.6.8., LASDT Ground Training.

4.2.3.2.6. An NVG academic review, taught by an NVG qualified instructor, IAW the academic outline in paragraph 6.8.

4.2.4. Verification:

4.2.4.1. The purpose of Verification is to update pilots on their DOC tasked mission. Each pilot will participate in a squadron initial/continuation Verification as a briefer, board member, or seminar participant. Pilots who participate in a unit deployment to a tasked theater of operations may receive credit for continuation verification.

4.2.4.1.1. BMC pilots should accomplish an initial Verification and/or participate in continuation Verifications to facilitate future upgrade to CMR status, at the discretion of the SQ/CC.

4.2.5. **US/Russia Prevention of Dangerous Military Activities. (For NORAD tasked ASA units)** Initial, annual refresher, and pre-deployment training for the prevention of Dangerous Military Activities will be conducted to ensure that all pilots are familiar with the agreement and the implementing provisions contained in CJCSI 23-11.01, , *Implementation Procedures for the Agreement between the United States and Russia on the prevention of*

Dangerous Military. The procedures for the Prevention of Dangerous Military Activities between the U.S. and Russia section of the Flight Information Handbook.

4.3. Flying Training. All pilots except API-8 and ACC/IGS inspectors will accomplish the requirements in the **Training Cycle Event Requirements Table via the current RTM.** API-8 flyers and ACC/IGS inspectors should attempt, but are not required, to accomplish the events on the Training Cycle Event Requirements Table. Failure to accomplish these requirements may not affect BAQ, BMC, or CMR status but may require additional training as determined by the SQ/CC. In addition, the BAQ/BMC/CMR guidance from paragraph 4.1. and the following are required:

4.3.1. Special Capabilities/Qualification Requirements:

4.3.1.1. Specialized training IAW Chapter 6 and guiding syllabi.

4.3.1.2. Sortie/event requirements IAW the RTM.

4.3.1.3. Failure to accomplish the requirements specified in this document or the RTM requires loss of designation/qualification.

4.3.1.4. Re-certification/Re-qualification is IAW 4.8.4.

4.3.2. Designated Training (TF-Coded)/ Designated Test (CB-Coded) Aircraft Unit Requirements.

4.3.2.1. API-1/6 pilot assigned/attached to TF or CB coded units will fly at the BMC rate and accomplish the BAQ event requirements as shown on the Training Cycle Event Requirements Table (see the RTM), as applicable, and the BAQ Instrument and AHC mission/sortie requirements found in the RAP Tasking Memo. In addition to RAP missions, formal training syllabus-directed missions and approved test plan missions apply to the BMC rate requirement for TF or CB coded units respectively. For instructors, failure to accomplish these requirements will not affect instructor status, but will require additional training as determined by the SQ/CC prior to performing instructor duties in the delinquent events.

4.3.2.1.1. Pilots assigned/attached to CB-coded units and the 475 WEG need not maintain IP status.

4.3.2.2. **Weapons Events.** Instructors must be initially qualified in the weapons events they plan to instruct.

4.3.2.3. **Ground Training.** Training as directed by the SQ/CC.

4.3.2.3.1. MTC/FMT requirements do not apply to USAF WC pilots, with the following exception: each pilot must accomplish one graded (IAW AFI 11-2F-15 V1) or evaluated (IAW AFI 11-202 V2) emergency procedures simulators per calendar year. This training must be accomplished in a fully functional WST, MST, MTC, UTD or FMT. Part task training devices and cockpit mock-ups are not acceptable. Waivers to this requirement will require ACC/A3 approval.

4.3.2.4. **Mission/Instructor Evaluation.** As applicable IAW AFI 11-202V2, and AFI 11-2F-15V2.

4.3.2.5. Pilots assigned to USAFWC only require annual mission ground training as determined by the unit CC. Night flying and AAR requirements are waived unless required for syllabus requirements or to meet program objectives.

4.3.2.6. 83 FWS pilots will maintain ACBT currency and may fly in the RCP of aircraft participating in WSEP, at the 83 FWS/CC's discretion.

4.3.2.7. **Visits/Deployments.** Only qualified WIC IPs will be sent on weapons school visits/ deployments. During these visits, WIC IPs may perform FL and IP duties during tactical missions if they fly in the aircraft in which they are qualified. When flying with student pilots in F-15B/D model aircraft during deployments to FTUs, WIC IPs will occupy the FCP.

4.4. Special Categories.

4.4.1. Flight Surgeon (FS):

4.4.1.1. May fly selected missions to enhance understanding of tactical missions with which they are directly associated. Initial checkouts will be IAW paragraph 3.6.

4.4.1.2. FS flying rates and requirements will be IAW AFI 11-202V1 and AFI 11-202V2.

4.4.2. **MAJCOM and NAF API -8 Pilots and ACC/IGS Flying Inspectors.** (ANG: Responsibilities for API -8 staff flyers are contained in AFI 11-401 as supplemented by the ANG).

4.4.2.1. Mission Directed Training (MDT) for HHQ personnel (other than that conducted in support of a formal inspection) requires coordination with the supporting unit. MAJCOM Division Chiefs and NAF/A3 are reviewing authorities for assigned personnel. They will:

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

4.4.2.1.2. Review assigned pilots accomplishments and currencies prior to authorizing pilots to participate in MDT.

4.4.2.1.3. Provide each pilot with written documentation specifying the sortie types and events the pilot is authorized to fly. API -8 personnel who fly with only one unit may receive this from their attached unit commander.

4.4.2.2. HHQ flying personnel maintaining BMC status are exempt from non-grounding academic ground training, NAAR, ACDE training, and special training programs within authorized mission areas. Provide specific currencies to the host squadron and HHQ supervisors will determine pilot qualifications to participate in squadron scenarios for MDT.

4.4.2.3. HHQ Pilots will:

4.4.2.3.1. Review accomplishments and currencies for accuracy.

4.4.2.3.2. Submit qualification and/or authorization documentation to the supporting SQ/CC/ DO or authorized representative prior to flying with that squadron.

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

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

4.4.3. Active Duty Pilots Flying with ANG or AFRC Units:

4.4.3.1. Wing/group air advisor rated personnel on duty with operational units will maintain CMR/instructor status, as appropriate, and may be qualified as a FE.

4.4.3.2. Active duty pilots other than assigned advisors, are authorized to fly with reserve component units IAW AFI 11-401.

4.4.3.3. Pilots on exchange programs from active duty units are authorized mission oriented sorties IAW the specific OPLAN that establishes the exchange. Squadron commanders may authorize their participation IAW their specific experience and qualification.

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

4.5. Multiple Qualification/Currency:

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

4.5.1.1. Submit multiple qualification requests through command channels to ACC/A3 (ANG: NGB/A3). All requests must contain full justification. Approval for multiple qualification request must be provided to the appropriate host installation aviation management office; flight accomplishments are not authorized until aircraft assignment is updated into ARMS.

4.5.1.2. Individually authorized multiple qualifications are valid as long as the individual is assigned to the specific position, and aircraft requested, or until rescinded by the approval authority.

4.5.2. Paragraph 4.5. does not apply to F-15A/B and C/D aircraft. F-15A/B and F-15C/D are considered the same MDS.

4.5.3. Multiple qualification is not appropriate for senior wing supervisors of units with different types of aircraft. Wing commanders will qualify in only one of their wing's aircraft; the Wing/CV or OG/CC should qualify in another of the wing's aircraft (not the same one selected by the WG/CC).

4.5.4. **Multiple Requirements.** Pilots will satisfy at least 50 percent of the sortie requirements of their primary aircraft in that aircraft. If CMR, they will meet all RAP sortie/event requirements of the primary aircraft. In addition, pilots will fly an equitable

distribution of emergency patterns, instrument sorties, penetrations, non-precision approaches, and precision approaches in each MDS to fill their Training Cycle Event Requirements Table (see the RTM).

4.5.5. **Multiple Currencies.** Pilots will fly at least once each 45 days in each aircraft. They will comply with all other currency requirements for each aircraft.

4.5.6. Pilots must complete conversion training IAW an approved syllabus.

4.6. Currencies/Re-currencies/Re-qualification:

4.6.1. **Currency.** **Table 4.1** defines currency requirements for all F-15 A/B/C/D pilots. If a pilot loses a particular currency, that sortie/event may not be performed except for the purpose of regaining currency as noted.

4.6.2. Re-currency is required whenever a pilot exceeds a currency requirement in this volume.

4.6.2.1. Overdue training requirements must be satisfied before the pilot is considered qualified to perform tasks applicable to the type of training in which delinquent. Training annotated as affecting CMR status will require regression to N-CMR status until appropriate training as specified by SQ/ CC is accomplished. Training identified as not affecting CMR status does not require regression from CMR status although it may result in grounding until training is completed (e.g., life support training). The duration of grounding and status of sortie lookback will determine the effect on CMR status.

4.6.2.2. Unless otherwise specified, supervisory requirements pertaining to recurrency may be satisfied in the cockpit or flight position that offers the best control of the mission, as determined by the SQ/CC.

4.6.3. **MAJCOM/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.

4.6.4. Landing/Sortie Recurrency:

4.6.4.1. Loss of landing/sortie currency requires the following action (timing starts from the last landing):

4.6.4.1.1. **31-90 Days (46-90 Days - Experienced).** Regain landing currency.

4.6.4.1.2. **91-135 Days.** Same as above, plus instructor supervised SIM (tactics, normal and emergency procedures for CMR pilots; normal, instrument, and emergency procedures for BMC pilots).

4.6.4.1.3. **136-210 (225 for Experienced pilots) Days.** Same as above, plus (CMR/BMC) closed and open qualification examinations and an EPE evaluation.

4.6.4.1.4. **211 (Inexperienced) / 226 (Experienced) or More Days.** IQT, landing recurrency, LASDT re-qualification, and appropriate weapons event initial qualification.

4.6.5. ACBT:

4.6.5.1. Pilots losing currency in ACBT must accomplish the following sorties:

- 4.6.5.1.1. **61-90 Days (91-120 Experienced).** BFM.
- 4.6.5.1.2. **91-180 Days (121-180 Experienced).** AHC, and BFM.
- 4.6.5.1.3. **Over 180 Days.** Re-accomplish a tailored program IAW Chapter 3.

4.6.6. JHMCS Recurrency:

4.6.6.1. Pilots losing currency in JHMCS must accomplish the following sorties:

- 4.6.6.1.1. **121-180 Days (181-240 Experienced).** BFM.
- 4.6.6.1.2. **Over 180 Days (240 Experienced).** Re-accomplish a tailored program IAW Chapter 6.

4.6.7. **Loss of/Re-qualification to IP Status.** IPs will be decertified if:

- 4.6.7.1. Failure of a Flight Check. To regain IP status, the IP must successfully complete a flight check IAW AFI 11-202V2, and AFI 11-2F-15V2.
- 4.6.7.2. Failure of an INST/QUAL open book test. To regain IP status, the IP must successfully re-accomplish the written exam.
- 4.6.7.3. Expiration of instructor currency To regain status, see Table 4.1.
- 4.6.7.4. Loss of CMR/BMC status due to loss of currency in an event/sortie and the SQ/CC deems decertification is required. If the SQ/CC does not elect this option or if the instructor becomes non-current in events/sorties that do not require removal from CMR/BMC status, instructor status may be retained, but the IP will not instruct in that event/sortie until the required currency is regained.

4.6.8. **NVG Re-currency.** Pilots losing NVG currency must accomplish the following events plus conduct an academic refresher prior to unrestricted night operations:

- 4.6.8.1. 2-ship basic formation work / light drills and unit specific mission elements.
- 4.6.8.2. Tactical turns and maneuvers.
- 4.6.8.3. Minimum of one intercept IAW NVG-2 profile not to exceed 1v1.

Table 4.1. F-15 Pilot Currencies.

EVENT	To Update Fly:	INEXP	EXP	Affects CMR	To Regain Currency:	NOTES
DEMANDING SORTIE	Sortie	21	30	No	Non-demanding sortie	1, 10
LANDING (Appropriate Cockpit)	Landing	30	45	No	Landing	2
NIGHT LANDING	Day or night Landing	21	30	No	Day landing	
ACBT	ACBT	60	90	Yes	ACBT	3,4,10
LOW A/A	LOW A/A Event	60	90	No	LOW A/A Event	3,4, 6,7,10

AAR	Day or Night AAR	180	180	Yes	Event	3
FORMATION T/O	Event	60	90	No	Event	3,5
FORMATION LANDING	Event	60	90	No	Event	3,5
PRECISION APPROACH	Event (May be acc in the MTC down to mins)	30	45	No	Event (May be acc in the MTC down to mins)	11
INSTRUCTOR	Event (May be acc in MTC)	N/A	60	No	Event (May be acc in MTC)	8
NVG	Event (May be acc in an NVG capable MTC)	120	180	No	Do events listed in 4.6.8 plus academic review (May be acc in an NVG capable MTC)	3, 9
JHMCS	Sortie w/ JHMCS (May be accomplished in a JHMCS capable MTC)	120	180	No	Sortie w/ JHMCS (May be acc in a JHMCS capable MTC)	3,4

NOTES:

1. See Attachment 2 for demanding/non-demanding sortie definitions. In addition, BAQ pilots will fly in a supervised status (with a SQ supervisor or IP) any time a non-demanding sortie is required.
2. Re-currency supervision level will be SQ supervisor or instructor, in the aircraft or chase, qualified and current in the Event. To regain RCP IP landing currency, FCP must be occupied by a BMC/ CMR pilot current and qualified in landing.
3. Supervision will be SQ supervisor or instructor, qualified and current in the event. For NVG currency, supervision will be an NVG current, qualified pilot in aircraft or current, qualified SQ supervisor or instructor in the element.
4. Performance or instruction will update CT ACBT currency. Performance or instruction of LOW A/A will update CT LOW A/A currency.
5. Flight leaders may update currency from either lead or wing position. Recurrency will be accomplished from wing position. Wingmen may only update currency from wing position.
6. LOW A/A - Event is defined as performing realistic, mission oriented air-to-air operations while in a LOWAT certified low altitude block (at or below 1000 ft AGL over land). Event includes skills necessary to seek out, and engage offensively, an aerial target at low altitude. For the F-15A/ B/C/D, this event also includes low altitude navigation, tactical formation, defensive maneuvering to avoid or negate threats.

7. Currency is required in the pilots low altitude category for operations below 1000 feet. Loss of currency requires pilots to operate above 1000' AGL. Re-currency requires satisfactory performance in the following events: vertical awareness training, hard turns, tactical formation and defensive maneuvering.
8. Instructor pilot currency is 60 days. Non-currency for 61-180 days requires an instructor re-currency flight with an IP; over 180 days requires a Stan/Eval flight check. IP rear cockpit landing currency is 45 days. F-15 FWIC student sorties count as instructor sorties for currency. Performing as an instructor in the MTC on an upgrade will update currency.
9. An NVG academic review is required prior to the recurrency sortie.
10. For IPs, accomplishing or instructing the event from either C/P will update currency.
11. If non-current in precision approaches, increase the pilot weather minimum by one category. If day VFR, the supervision level is a pilot, current and qualified in the event; all other times require an IP IAW AFI 11-202 V3. Currency can be updated in the MTC, and pilots may regain their currency in an MTC on a case-by-case basis with SQ/CC approval.

4.7. Regression.

4.7.1. CMR/BMC Regression for Failure to Meet Lookback. Only RAP training and Contingency Operations missions may be used for lookback. If a pilot does not meet lookback requirements throughout the training cycle, SQ/CCs can either regress the pilot to N-CMR/N-BMC status, as applicable; remove the pilot from a CMR manning position; or initiate action to remove the pilot from active flying status.

4.7.1.1. Failure to meet 1-month RAP/Contingency Operations mission lookback requires a review of the pilot's 3-month mission history. If the 3-month lookback has been met, the pilot may, at SQ/CC discretion, remain in CMR/BMC status. Failure to meet the 3-month lookback will result in regression to N-CMR/N-BMC status as appropriate, or the pilot may be placed in probation status for 1 month at the SQ/CC's discretion. If probation is chosen, the only way to remove a pilot from probation and preserve the current status is to re-establish a 1-month lookback at the end of the probation period (see Figure 4.1.).

4.7.1.2. CMR/BMC pilots regressed to N-CMR/N-BMC status for lookback, must complete a SQ/CC approved re-certification program to return the pilot to CMR/BMC standards. Upon completion of the re-certification program, the CMR/BMC pilots must also meet 1-month lookback requirement prior to reclaiming CMR/BMC status. The missions and events accomplished during the re-certification program may be credited towards their total/type sortie and event requirements for the training cycle as well as for their monthly sortie requirement.

4.7.1.3. Lookback computations begin following completion of MQT. The pilot must maintain 1-month lookback until 3-month lookback is established. SQ/CCs may apply probation rules as described in paragraph 4.7.1.1. if a new CMR/BMC pilot fails to meet

1-month lookback while establishing 3-month lookback. In addition, 1-month lookback will start the first full month of CMR/BMC status.

4.7.2. Regression for Weapons Qualification. Failure to maintain RAP tasked weapons qualification at the end of the training cycle will require:

4.7.2.1. For Events Tasked as Qual at CMR/BMC. Regression to N-CMR/N-BMC. To regain CMR/BMC, the pilot must re-achieve initial qualification in the deficient weapons event (see paragraph 5.2.). Events accomplished for this initial qualification may count toward the cumulative CT event qualification required at the end of the training cycle.

4.7.2.2. For Events Tasked as Fam at CMR/BMC, Regression to N-CMR/N-BMC Status. To regain CMR/BMC, the pilot must accomplish at least three of the weapons deliveries under the supervision of a squadron supervisor or instructor. Events accomplished for this initial qualification may count toward the cumulative CT event qualification required at the end of the next training cycle.

4.7.3. Pilots who fail an aircraft qualification, mission, or instrument evaluation will be handled IAW AFI 11-202V2, and AFI 11-2F-15V2. Pilots will regress to Non-CMR/Non-BMC status as applicable. These pilots will remain N-CMR/N-BMC status until successfully completing required corrective action, a re-evaluation, and are re-certified by the SQ/CC.

4.8. End of Cycle Requirements. Pilots who fail to complete mission and/or event requirements of this volume by the end of the training cycle may require additional training depending on the type and magnitude of the deficiency. Refer to paragraph 4.9. to see if some of these requirements can be prorated. In all cases, report training shortfalls IAW paragraph 1.12.

4.8.1. Pilots that fail to meet the total annual RAP mission requirement may continue CT in CMR/ BMC status as determined by lookback. The SQ/CC will determine if additional training is required.

4.8.2. Pilots that fail to meet requirements from the Training Cycle Event Requirements Table (RAP Tasking Memorandum) event requirements may continue CT in CMR/BMC status as determined by lookback. The SQ/CC will determine if additional training is required.

4.8.3. Failure to meet RAP Mission Type Requirements will result in one of the following:

4.8.3.1. Regression to N-CMR/N-BMC if the SQ/CC determines that the mission type deficiency is significant. To regain CMR/BMC status, the pilot will complete all deficient mission types. These missions may be counted against the total requirements for the new training cycle.

4.8.3.2. Continuation at CMR/BMC if total RAP missions and lookback are maintained and the mission type deficiencies are deemed insignificant by the SQ/CC.

4.8.4. Failure to accomplish missions required for Special Capabilities/Qualifications will result in loss of that qualification. The SQ/CC will determine re-qualification requirements.

4.9. Proration of End-of-Cycle Requirements. At the end of the training cycle, the SQ/CC may prorate all training requirements when DNIFs, emergency leaves, COT leaves, non-flying TDY/exercises (ANG: and or mandatory training required by civilian employment),

combat/contingency deployments, preclude training for a portion of the training period. Normal annual leave will not be considered as non-availability. Extended bad weather, which precludes the unit from flying for more than 15 consecutive days may be considered as non-availability. (ANG: End-of-cycle proration is permitted for documented attrition (i.e. HHQ or weather cancels, MNDs, ground or air aborts) in monthly increments when the total number of occurrences ranges from one half to one times the individual's normal monthly rate of flying). The following guidelines apply:

- 4.9.1. Proration will only be used to adjust for genuine circumstances of training non-availability, not to mask training or planning deficiencies.
- 4.9.2. Proration is based on cumulative days of training non-availability in the training cycle. Use Table 4.2. to determine the number of months to be prorated based on the cumulative calendar days of training non-availability.
- 4.9.3. If IQT or MQT is re-accomplished, a pilot's training cycle will start over at a prorated share following completion of IQT/MQT training.

Table 4.2. Proration Allowance.

CUMULATIVE DAYS OF TRAINING NON-AVAILABILITY	MONTHS OF PRORATION ALLOWED
0 - 15	0
16 - 45	1
46 - 75	2
76 - 105	3
106 - 135	4
136 - 165	5
166 - 195	6
196 - 225	7
226 - 255	8
256 - 285	9
286 - 315	10
316 - 345	11
Over 345	12

4.9.4. **Example:** Capt Jenkins was granted 17 days of emergency leave in January and attended SOS in residence from March through April for 56 consecutive calendar days. His SQ/CC authorized a total of two months proration from his training cycle (two months for the 73 cumulative days of non-availability for flying). (ANG: Maj Johnson is an experienced CMR pilot with a normal monthly requirement of 6 sorties. He had eight attrition occurrences throughout the training cycle, therefore his SQ/CC can prorate one month of Maj Johnson's training requirements).

4.9.5. Prorated numbers resulting in fractions of less than 0.5 will be rounded to the next lower whole number, but no requirement may be prorated below one.

4.9.6. Newly assigned/converted pilots and pilots achieving CMR/BMC after the 15th of the month are considered to be in CT on the first day of the following month for proration purposes. Events and missions for the remainder of the training cycle may be prorated. A prorated share of RAP missions must be completed in CT.

4.9.7. Night, Deployable Aerial Reflective Target (DART)/Aerial Gunnery Target System (AGTS)/BANNER (as applicable), and AAR requirements accomplished during MQT may be credited toward prorated CT requirements if accomplished during the cycle in which the pilot was declared CMR/BMC, unless specified otherwise by MAJCOM.

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

4.9.9. CMR pilots who attend F-15 USAFWS in TDY-and-return status may be reported throughout the TDY as CMR. Upon return, those pilots will accomplish a prorated share of mission/event requirements (see Table 4.2.).

4.9.10. **Contingency Operations.** Contingency operations can have a positive or negative impact on a unit's CT program, as emphasis is on supporting the actual contingency. A potential lack of training opportunities while supporting contingency operations can place a burden on the unit, forcing it to accomplish the majority of its CT program in a reduced period of time or with reduced assets. The following proration procedures are intended to provide flexibility in accomplishing the unit's CT program.

4.9.10.1. Normally, all missions flown during contingency operations will be logged as contingency operations sorties. These sorties do not count toward total RAP requirements, but may be used for lookback purposes. Except AAR, CHAFF, FLARE, HAVE QUICK, AND SECURE VOICE, RAP events logged during contingency operations sorties do not count toward annual RAP requirements, but may be used to update currencies. Upon relief from contingency operations, units will prorate RAP missions and events for the period of time each individual was tasked. In addition, proration is authorized for the deployment preparation and deployment recovery time where home station flying is reduced by the MAJCOM.

4.9.10.1.1. For ANG units, individuals deployed for more than a seven day period may prorate a one month portion of RAP sorties and events.

4.9.10.2. As the training quality of missions flown at contingency locations may vary considerably, OG/CCs are authorized to allow sorties that provided valid training to be logged as RAP sorties. Events accomplished on these sorties count toward RAP event requirements, and these sorties/events may not be prorated.

4.9.10.2.1. Upon release from contingency operations, proration is computed by calculating the sorties to be prorated for the entire deployment, and then subtracting the number of valid RAP sorties as authorized by the OG/CC. The result is the allowable sortie proration. Negative numbers equate to zero. Events will be prorated at SQ/CC discretion based on the events accomplished during valid RAP sorties.

4.10. Regaining CMR/BMC Status:

4.10.1. If CMR/BMC status is lost due to failure to meet the end of cycle weapons qualifications and/ or event requirements, re-qualification is IAW paragraph 4.7.

4.10.2. If CMR/BMC status is lost due to failure to meet lookback IAW paragraph 4.7., the following applies (timing starts from the date the pilot came off CMR/BMC status):

4.10.2.1. **Up to 90 Days.** The pilot must complete Sq/CC directed re-certification program in accordance with paragraph 4.7.1.2. In addition, all RAP event currencies must be regained. The Sq/CC will approve any other additional training prior to re-certification to CMR.

4.10.2.2. **91-180 Days.** Same as above, plus qualification and tactical written examinations.

4.10.2.3. **181 Days and Beyond.** Re-accomplish MQT; SQ/CC will determine if the MQT certification sortie requires a Form 8 checkride.

4.11. Example of the Lookback, Regression, Proration, and Re-Qualification Process:

4.11.1. Maj Johnson is an experienced CMR pilot in ACC with a 1 and 3 month lookback requirement of 9 and 27 RAP sorties respectively. On Feb 3, he flew an ACBT sortie prior to departing for a non-flying TDY staff tour for two months. He reported back for flight duty on 6 Apr. What is his status throughout his TDY and on his return?

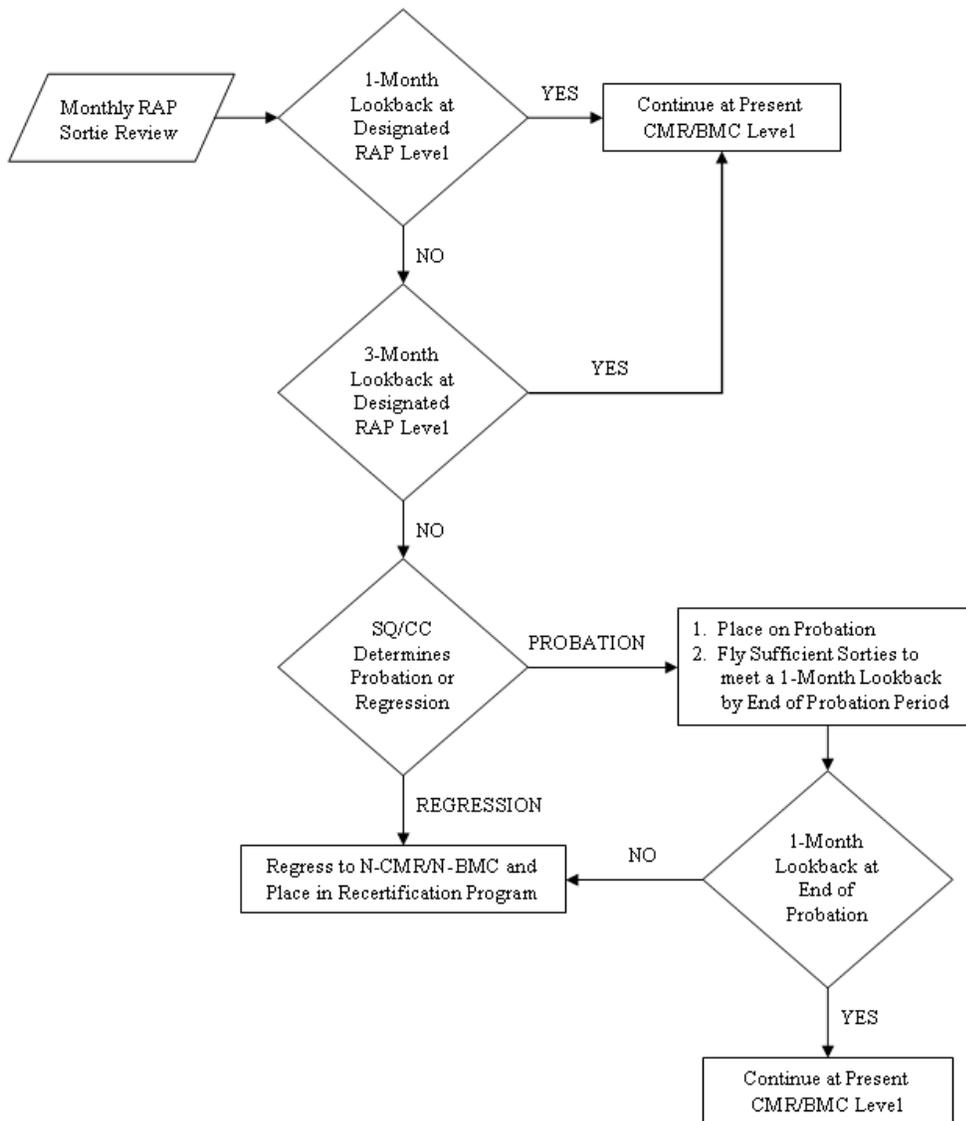
4.11.1.1. The SQ/CC wanted to list Maj Johnson as a countable CMR pilot for reporting purposes throughout the TDY. Therefore, on 1 Mar, his Flt/CC performed the mandatory 1 month lookback (Feb) on Maj Johnson. He only flew 1 RAP sortie, failing the 1 month lookback. The Flt/CC then performed a 3 month lookback (Dec, Jan, Feb). This showed that he flew only 20 sorties for this period. Had he flown seven more sorties, his SQ/CC could continue Maj Johnson at CMR. However, with 20 sorties, Maj Johnson did not meet the 3 month lookback for a CMR pilot.

4.11.1.2. The SQ/CC decided to carry Maj Johnson on 1-month probation. On 1 Apr, Maj Johnson's 1 month-lookback (Mar) was 0 sorties. The SQ/CC must now regress Maj Johnson to N-CMR. When Maj Johnson returns, the SQ/CC will have to place him in a re-certification program. Upon completing this program, Maj Johnson will need to re-establish his 1-month lookback by 1 May. Failing to do so would force him to be reported N-CMR for an additional month until the next lookback process on 1 June.

4.11.1.3. If he had returned on 22 Mar, and had last landed the jet 48 days ago, he could fly a non-demanding sortie to regain demanding sortie and landing currency. For CMR purposes, Maj Johnson would need to fly 9 RAP sorties to recapture his 1-month lookback and get off probation. Although Maj Johnson was still CMR in Mar, the SQ/CC flew him with an IP on his first few sorties in order to regain his landing, AAR, LOWAT, and Formation T/O and Landing currencies.

4.11.1.4. At the end of the training cycle on 30 Jun, the SQ/CC prorated 2 months off of Maj Johnson's total requirements. In spite of this proration, Maj Johnson was deficient in one RAP sortie category. The SQ/CC could regress Maj Johnson to Non-CMR, if deemed significant. After accomplishing the tailored re-certification program (the deficient sorties), the SQ/CC would re-certify Maj Johnson to CMR. This training counts for the new training cycle.

Figure 4.1. Regression Flow Chart.



4.12. Instruments. Develop an instrument training program to ensure instrument proficiency including lost wingman training, briefings on how to recognize and deal with spatial disorientation, HUD-off unusual attitude recoveries, and transition from visual to instrument conditions. It will also stress the use of primary and standby cockpit flight instruments, rather than the HUD, during instrument recovery from unusual attitudes or spatial disorientation and proper integration of the HUD into the normal instrument cross-check.

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

4.12.2. Pilots transferring from another theater require the theater-specific portions of IRC before flying. MQT that includes theater-specific portions of IRC academics and the MQT LAO mission may satisfy this requirement.

4.12.3. Pilots may accomplish RAP events on an instrument mission provided accomplishment does not interfere with the primary goal of instrument training. Pilots should practice the transition from instruments to visual references on all instrument approaches. Instrument missions are RAP requirements and will be logged as such.

4.13. G-Awareness Continuation Training. Units will develop a CT program that provides feedback to pilots and imprints a proper AGSM so that it becomes an integral part of pulling Gs.

4.13.1. The basis of this program is to give each FL, SQ supervisor, aerospace physiologist and flight surgeon the skills needed to evaluate a flight member's AVTR to ensure a proper AGSM is being performed. This program also makes assessment of the AGSM a normal debrief item after every flight. The assessment should be done as a normal part of AVTR assessment while reviewing other tactical portions of the mission.

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

4.13.2.1. Incorporate AGSM technique and assessment into FLUG, IPUG, and squadron CT program. Place emphasis on briefing, debriefing, and assessing the AGSM using the AVTR in the debrief on a daily basis. FLs, IPs, SQ supervisors, Aerospace Physiologists and flight surgeons should become adept at assessing and teaching the correct AGSM. The video, "Anti-G Strain Technique Reinforcement and Assessment," or Anti-G strain technique academics will be presented annually by a qualified physiologists, flight surgeon, or IP squadron supervisor to all pilots as part of weapons academics. Academics will include a discussion of the limitations imposed on aircraft performance as a result of an ineffective AGSM.

4.13.2.2. Units will include "AGSM effectiveness" on MQT and "AGSM assessment" on FLUG and IPUG grade sheets. Evaluate these areas during sorties where more than five Gs are pulled.

4.13.2.3. Fly the tactical portion of all basic missions (BFM, ACM, etc.) in hot mic to enable assessment of the AGSM. Set intercom volumes at a level which is comfortable for the pilot but still allows assessment of breathing and AGSM technique in the debrief. For high task sorties (DACT, CFTR, etc.), it is highly desired for pilots to fly hot mic. The purpose of this is to identify breakdowns in the AGSM which commonly occur during high task portions of a mission.

4.13.2.4. Film G-awareness exercises in HUD and in hot mic. The second turn of the G-awareness exercise for A/A sorties will be a minimum of 180 degrees of turn.

4.13.2.5. FLs will emphasize G-awareness when appropriate during the flight briefing.

4.13.2.6. FLs will assess the AGSM effectiveness of flight members during mission debriefings. This assessment should not be limited to the G-awareness exercise. Evaluate the AGSM after the pilot has had the time to fatigue, to get an accurate assessment of a pilot's AGSM during a tactically and G-demanding portion of flight. AGSM should also be evaluated under relatively low intensity G.

4.13.3. FLs or SQ supervisors will identify pilots having poor AGSM technique or low G-tolerance to the Flt/CC or appropriate operations supervisor. The SQ/DO or appropriate operations supervisor will determine what action is required to improve the pilot's G-

tolerance. The SQ/CC will determine if refresher training is required IAW AFI 11-404, *Centrifuge Training for High-G Aircrew*.

4.13.4. All SQ flight surgeons assigned to fighter/attack/FAC(A)/Recce/FTU are required to complete centrifuge training IAW AFI 11-404. During centrifuge training they will receive instruction on AVTR review.

4.13.5. The squadron will develop a program to ensure an A/A mission tape for each pilot is reviewed each training cycle by an aerospace physiologist or squadron flight surgeon and documented. A squadron supervisor will review the documentation. If an aerospace physiologist or squadron flight surgeon are not available, a squadron supervisor will review the tape and document appropriately.

4.14. Low/Slow Speed Electronic Identification (EID)/Visual Identification (VID) Procedures:

4.14.1. For Strategic Defense Units and units specifically tasked to perform the strategic defense mission or counter drug role, comply with current approved guidance.

4.14.2. For all other units, the objective of this low/slow EID/VID training is to expose pilots to problems associated with intercepting low/slow flying aircraft (rotary and fixed wing) for visual identification practice in a threat environment. Emphasis should be placed on dissimilar adversaries below 2000 feet AGL and 200 KIAS (helicopters are desired). Training will be conducted IAW AFTTP 3-1, AFI 11-2F-15V3, and AFI 11-214.

4.14.2.1. Unit developed ground training programs will be designed for unit specific equipage and employment taskings. Academic sessions should be conducted during weapons and tactics training and maximum use of the visual recognition program is encouraged.

4.14.2.2. Flying training missions should, to the maximum extent possible, include helicopter operations and considerations. Possible assets include USAF helicopters, USN helicopters, USA helicopters, and propeller aircraft. Creation of a realistic environment to stimulate the aircraft EID/VID suite is essential to the conduct of low/slow VID procedures. Units must make every effort to maximize effective use of limited assets as well as to instill awareness and actions appropriate to this training. SQ/CC's will determine the depth of ground and flying training necessary prior to participating in exercises and contingency operations.

Chapter 5

WEAPONS EMPLOYMENT QUALIFICATION

5.1. General. This chapter outlines requirements for the initial qualification to employ weapons (AIM-120, AIM-9 and GUN) and the requirements to maintain qualification in weapons employment during Continuation Training. Refer to Attachment 2 for further guidance in weapons events.

5.2. Initial Qualification:

5.2.1. Initial missile employment qualification is evaluated on the mission qualification check ride and is achieved by meeting the "qualified" criteria for weapons employment IAW AFI 11-2F-15V2. Qualification in one missile category is assumed for other missile categories in such cases where only one type of missile was employed.

5.2.2. Initial gun employment qualification is achieved by scoring an individual (i.e., element/team hit is not applicable for initial qualification) hit during a live fire pass on a DART/AGTS/BANNER (as applicable) target. A hit is one bullet impact on the DART/AGTS/BANNER (as applicable). For initial qualification use any dart pattern as defined in AFI 11-214. If DART/AGTS/BANNER (as applicable) are not available, gun qualification may be accomplished via tape or DVR assessment. Strafing is a valid method of exercising the gun system, but does not qualify as A/A gunnery.

5.2.3. The initial qualification satisfies weapons qualification requirements until the end of the current training period.

5.2.4. Pilots must accomplish initial qualification in any weapons requiring qualification at CMR/ BMC except the gun.

5.3. CT Qualification:

5.3.1. During CT each pilot's weapons employment will be assessed for validity IAW AFTTP 3-1 criteria and the results in each category (AIM-120, AIM-9, and GUN) will be recorded for the current training period for RAP required tasks. Qualification in weapons employment is maintained by achieving a 75 percent valid at pickle rate for AIM-120/9 shots and a 75 percent valid attempt at trigger squeeze rate for the gun. This qualification is valid throughout the next training period.

5.3.2. To maintain DART/AGTS/BANNER (as applicable) qualification, pilots will use basic or tactical patterns as defined in AFI 11-214 and must achieve a hit.

5.4. Failure to Qualify:

5.4.1. If qualification is required at CMR/BMC, failure to qualify will result in regression to N-CMR/ N-BMC and entered into re-certification until re-qualification is accomplished.

5.4.2. DART/AGTS/BANNER (as applicable) re-qualification requires an individual hit IAW hit criteria in paragraph 5.3. above. Re-qualification may be accomplished using basic or tactical patterns. If DART/AGTS/BANNER (as applicable) are not available, gun re-qualification may be accomplished via VTR assessment.

5.4.3. SQ/CC will determine the corrective action required to re-qualify a pilot in those categories in which the pilot failed to meet standards.

5.5. Weapons Employment Parameters. The following employment parameters and requirements form the basic frame work for pilot weapons employment training and all deliveries will conform to limits established for each specific event.

5.5.1. Missile employment parameters must be IAW AFTTP 3-1 criteria.

5.5.2. Gun employment parameters must be IAW AFTTP 3-1 criteria.

5.5.2.1. Gun pattern descriptions, procedures, training rules, and foul criteria are contained in AFI 11-2F-15V3 and AFI 11-214 as supplemented.

5.5.2.2. Aircraft rounds limiter will be set as desired.

5.5.2.3. Hit criteria: IAW AFTTP 3-1

5.5.2.3.1. **DART/AGTS/BANNER (as applicable).** One bullet impact is required.

5.5.2.3.2. During live-fire gun employment on an AGTS target with an inoperative scoring system a hit can be declared if VTR assessment shows that the firing parameters met AFTTP 3-1 hit criteria and the gun was fired. A hit may not be declared if the shot is non-assessable.

5.5.2.3.3. During live-fire gun employment failure to qualify during hot passes will not be reversed by VTR assessed hit on cold passes.

5.6. Live Ordnance. Live ordnance training is essential to pilot combat capability. Every attempt should be made to give each pilot the opportunity to employ as many types of weapons inventoried on the unit's UCML as possible. To provide this opportunity, as a goal, all CMR pilots should expend the following ordnance. (AFI 36-2217, *Munitions Requirements for Aircrew Training*)

5.6.1. For units tasked with DCA, Strategic Defense, and/or OCA-A missions: One live A/A missile employment per year.

Chapter 6

SPECIALIZED TRAINING

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

6.2. Simulator Instructor (SI). The following mission profiles should be used to train and qualify selected simulator instructors to operate the IOS. The contractor simulator instructor program will be IAW the appropriate contract. SQ/CCs will determine the number of SIs required to perform the unit mission. The required supervision for this upgrade program is an IOS qualified/current instructor.

6.2.1. Academic Training. Prior to the first IOS mission, the upgrading simulator instructor (USI) will complete the following unit developed blocks of instruction:

6.2.1.1. Principles of Instruction. Learning objectives, instructor responsibilities, instructor relationship, training facilities, and publications.

6.2.1.2. Techniques of Fight Instruction. Training objectives and environment; maneuver demonstration, performance, and review; recognition and analysis of common errors.

6.2.1.3. Conduct of Flight Briefing. Training objectives, order of presentation, use of briefing guides and audiovisual aids, debriefing techniques.

6.2.1.4. Conduct of Phase Briefings. Techniques for briefing, use of visual aids, review of applicable briefings.

6.2.1.5. Evaluations. Grading systems and preparation/use of gradesheets.

6.2.2. Mission Profiles (Based on Simulator Capabilities):

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

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

6.2.2.3. SI-3, Practical Exercise. The USI will conduct a regularly scheduled simulator mission from the IOS under supervision of an IOS-qualified instructor.

6.2.3. Following successful completion of SI-3, the SQ/CC will certify the pilot's SI status in appropriate written format (memorandum, ARMS, gradesheet, etc.).

6.3. Flight Lead Upgrade. SQ/CCs will select only highly qualified, motivated, and responsible pilots for this program. Initial entry may be as a 2-ship/element FL until experience

and proficiency warrant further progression, in which case, responsibilities for employment will not exceed 2 aircraft until certified as a 4-ship FL. The SQ/CC will determine when a 2-ship FL may train toward larger, more complex formations (3 or 4-ship, mission commander, etc.). FL training should place appropriate emphasis on 4-ship tactical employment.

6.3.1. The following minimum flying hours are required prior to entering FL upgrade training:

6.3.1.1. 250 hours PAI required (Up to 25 MTC hours may be applied to meeting this requirement), or

6.3.1.2. 400 hours IP/MP/FP in an 11Fxx/11K3C/11K3D AFSC of which 150 hours are PAI, or

6.3.1.3. 50 hours PAI, if previously qualified 11Fxx AFSC flight lead.

6.3.1.4. (ANG) For converting units, SQ/CCs may select prior qualified pilots to upgrade to flight lead concurrently with the MQT top-off program regardless of PAA hours.

6.3.2. **Ground training** will consist of locally developed instruction in the following areas:

6.3.2.1. **FL Responsibilities.** FL/wingman relationship, unit training objectives.

6.3.2.2. **Mission Preparation.** Mission objectives, wingman requirements and responsibilities, currencies, capabilities, delegation of mission planning duties, and briefing preparation.

6.3.2.3. **Conduct of Flight Briefings and Debriefings.** Objectives, use of briefing guides and audiovisual aids, flight member involvement, briefing techniques, debriefing/questioning techniques, tape review responsibilities and procedures.

6.3.2.4. **Conduct of Missions.** Control of flight, flight discipline, emergency procedures, training rules, and responsibilities to SQ/CC.

6.3.2.5. **AGSM Techniques.** Briefing, debriefing, and AVTR/DVR assessment. Review the video, Anti-G Strain Technique Reinforcement and Assessment.

6.3.2.6. IFEs and Emergency Diverts.

6.3.2.7. **FLUG SIMs.** Tactical intercepts, OCA, and DCA SIMs.

6.3.3. **Flight training** will be conducted in accordance with a program approved by the SQ/CC. The following is a recommended baseline program which may be modified as necessary to meet unit and/or upgradee specific needs. Missions may be flown in any order provided day training precedes respective night training. SQ/CCs will determine which sorties are required based on a review of previous experience and may certify a flight lead with appropriate restrictions based on training not accomplished (i.e. AAR, etc.). An evaluation sortie is required. Two formation takeoffs and landings, a day and night aerial refueling, and a trail recovery will be accomplished as a flight lead during the program. Tape review/assessment, to include a review of AGSM, will be accomplished on every sortie. All FLUG training will be under the supervision of an IP or flight lead-qualified squadron supervisor. Dissimilar adversaries should be used to the maximum extent practical during FLUG

training. FLUG-8 through 10 are only required for 4-ship FL upgrade. (NOTE: If 2- and 4-ship upgrade training are combined, only one evaluation sortie is required.)

6.3.3.1. **FLUG-1--BFM. Mission Objectives:** Practice leading and controlling 1v1 BFM mission. **Specific Mission Tasks:** Briefing (emphasis on pursuit curves, AHC, weapons employment zones, high AOA maneuvering, departure/loss of control prevention/recovery, and GLOC awareness); formation takeoff (lead); weapons system checks; tactical formation; offensive and defensive BFM from visual perch setups; weapons employment; BD check; recovery, single ship landing, mission reconstruction/debriefing; tape review/ assessment (to include AGSM).

6.3.3.2. **FLUG-2--ACM. Mission Objectives:** Practice leading and controlling a 2 v 1 ACM mission. **Specific Mission Tasks:** Briefing (emphasis on engaged/support fighter responsibilities, attack options, radio procedures, radar/visual lookout techniques, element initial moves and offensive maneuvering); mutual support; weapons employment; element defensive maneuvering, weapons employment, separations; BD check; recovery; formation approach and landing (lead); debriefing, tape review/assessment (to include AGSM).

6.3.3.3. **FLUG-3--Short Range Re-commits. Mission Objectives:** Practice leading and controlling a 2 v X intercept mission. **Specific Mission Tasks:** Briefing; radar trail departure; weapons system check; tactical formation; FENCE check; GCI/AWACS/SOCC procedures (as applicable); Short range intercepts, outnumbered (if possible); degraded system/EP considerations; BD check; recovery; formation approach and landing (lead); debriefing, mission reconstruction, tape review/ assessment (to include AGSM).

6.3.3.4. **FLUG-4--Tactical Intercepts. Mission Objectives:** Practice leading and controlling a 2 v 2 intercept mission. **Specific Mission Tasks:** Briefing; radar trail departure; weapons system check; tactical formation; FENCE check; GCI/AWACS/SOCC procedures (as applicable); air sovereignty task (air defense units); tactical intercepts; low altitude intercepts (if possible); degraded system/EP considerations; BD check; recovery; formation approach and landing (lead); debriefing, mission reconstruction, tape review/ assessment (to include AGSM).

6.3.3.5. **FLUG-5-- Commander's Evaluation (2-Ship) ACT. Mission Objectives:** Evaluation (by squadron commander or designated representative) of flight lead abilities in a tactical mission scenario (2 v 2 min) based on unit tasking. **Specific Mission Tasks:** Briefing; mission accomplishment; flight management and control; mission reconstruction; tape review/assessment (to include AGSM); critique.

6.3.3.6. **FLUG-6--DART/AGTS/BANNER (If Applicable). Mission Objectives:** Practice leading and controlling a gun employment mission. **Specific Mission Tasks:** Briefing (emphasis on gun preflight, BIT checks, systems check, pattern procedures, firing procedures/techniques, training rules and foul criteria, degraded system considerations and gun malfunction procedures); ground ops (arming/de-arming, etc.); departure; weapons system check; gun employment (preferably tactical intercept to combat pattern); BD check; hot gun recovery; de-arming; debriefing.

6.3.3.7. **FLUG-7--Night Intercepts. Mission Objectives:** Practice leading and controlling a night intercept and air refueling mission. **Specific Mission Tasks:** Briefing (including degraded systems considerations); radar trail departure; weapons system check; tanker rendezvous; AAR procedures; FENCE check; GCI/AWACS/SOCC procedures (as applicable); CAP procedures; night intercepts; recovery; instrument approach and landing; debriefing.

6.3.3.8. **FLUG-8-- Tactical Intercepts. Mission Objectives:** Practice leading and controlling a 4 v X intercept mission. **Specific Mission Tasks:** Briefing; radar trail departure; weapons system check; tactical formation; FENCE check; GCI/AWACS/SOCC procedures (as applicable); tactical intercepts; low altitude intercepts (if possible); degraded system/EP considerations; BD check; recovery; formation approach and landing (lead); debriefing, mission reconstruction, tape review/assessment (to include AGSM).

6.3.3.9. **FLUG-9--D/ACT. Mission Objectives:** Practice leading and controlling a 4vX D/ACT mission in an offensive or defensive counter air scenario. Emphasis will be placed on unit specific DOC and OPlan tasking for scenario development. **Specific Mission Tasks:** Briefing; four-ship tactical formation; weapons system check; BVR set-ups from CAP/Lane/Point defense posture, in sweep or escort role (as required); GCI/AWACS/ SOCC procedures (as applicable); element and flight control and employment tactics; weapons employment; radio discipline; mutual support; rejoin; BD check; recovery and landing; debriefing, tape review/assessment (to include AGSM).

6.3.3.10. **FLUG-10--Commander's Evaluation (4-Ship). Mission Objectives:** Evaluation (by squadron commander or designated representative) of flight lead abilities in an offensive or defensive counter air scenario based on unit tasking. **Specific Mission Tasks:** Briefing; mission accomplishment; flight management and control; mission reconstruction; tape review/assessment (to include AGSM); critique.

6.3.4. Following successful completion of FLUG-5 and/or FLUG-10, the SQ/CC will personally interview the upgrading pilot and review flight lead responsibilities, scope of duties, authority, and philosophy. Failure to complete scheduled training events (i.e., DART/AGTS/BANNER, AAR, etc.) need not delay certification. The SQ/CC will certify new flight lead's status, including any restrictions, in appropriate written format (letter, gradesheets, ARMS, etc.).

6.4. Instructor Pilot (IP) Upgrade. This program establishes the minimum guidelines for those pilots identified by the SQ/CC to upgrade to IP. OG/CCs may waive selected missions based on previous experience, currency, and documented performance. FTU instructors will complete a formal syllabus course as defined in the USAF Education and Training Course Announcements (ETCA). Hours logged in the SIM accomplishing RAP Tasking Memo-approved missions will be counted as "hours" and can be used for up to 10% of the PAI hours requirement.

6.4.1. Pilots selected for IP upgrade must be 4-ship FLs with either:

6.4.1.1. 1,000 hours IP/MP/FP time of which 300 hours are PAI, or

6.4.1.2. 700 IP/MP/FP hours in a 11Fxx AFSC of which 100 hours are PAI, or

6.4.1.3. 600 IP/MP/FP hours in an 11Fxx AFSC of which 200 hours are PAI, or

6.4.1.4. 500 IP/MP/FP hours in an 11Fxx AFSC of which 300 hours are PAI.

6.4.1.5. **(ANG)** For converting units, pilots may be designated by the SQ/CC for IP upgrade regardless of time in the new PAA if they have at least 1,000 hours IP/MP/FP in an 11FXX AFSC and the IP upgrade will be conducted in a formal course at an FTU.

6.4.2. **Ground Training.** Upgrading pilots must satisfactorily complete the following unit-developed blocks of instruction prior to certification as IPs:

6.4.2.1. **Principles of Instruction.** Learning objectives, instructor responsibilities, IP/upgrade pilot relationship, training facilities, and publications.

6.4.2.2. **Techniques of Flight Instruction.** Training objectives and environment, maneuver demonstration, performance and review, recognition and analysis of common pilot errors.

6.4.2.3. **Conduct of Flight Briefing.** Training objectives, order of presentation, use of briefing guides and audiovisual aids, debriefing techniques.

6.4.2.4. **Conduct of Phase Briefings.** Techniques for briefing, use of visual aids, review of applicable phase briefings.

6.4.2.5. **AGSM Techniques. Briefing, debriefing, and AVTR assessment.** Review the video, Anti-G Strain Technique Reinforcement and Assessment.

6.4.2.6. **Student Evaluations.** Grading systems and preparation/use of gradesheets.

6.4.2.7. **Cockpit Resource Management (CRM):** Techniques for increasing Airmanship, methods to maximize mission effectiveness, task/risk management and prioritization, feedback/crosscheck loops.

6.4.3. **Flying Training.** Training will be conducted according to mission outlines listed below in any order, as aircraft configurations and sortie scheduling permit. Unit programs should specify which tasks the UIP will practice demonstrating, which tasks the UIP will practice evaluating the "student's" performance, and which tasks he will do both. AAR may be completed on any mission. Failure to complete specific training events (e.g., AAR, RCP transition) need not delay certification. In such cases, SQ/CCs will certify IPs with appropriate limitations to preclude performance of duties in which training is incomplete.

6.4.3.1. **IPUG-1--AHC/Transition (F-15B/D Required w/IP in FCP for RCP Landing Practice If Accomplished). Mission Objectives:** Practice dual cockpit instruction; advanced handling; instrument approach(es); chase procedures (if F-15B/D unavailable); and VFR overhead patterns and landings (normal and no-flap). **Specific Mission Tasks:** Briefing; takeoff; departure; confidence maneuvers; advanced handling; instrument recovery; SSE straight-in; normal, no-flap, and closed patterns; touch-and-go landings; full-stop landing; debriefing.

6.4.3.2. **IPUG-2--BFM. Mission Objectives:** Brief and instruct offensive/defensive/high aspect BFM. **Specific Mission Tasks:** Briefing; formation takeoff (lead); departure; weapons system check; tactical formation; offensive and defensive BFM from visual perch set-ups; high aspect set-ups; BD check; recovery;

formation approach and landing (lead); debriefing (emphasis on accurate reconstruction and effective error analysis), tape review/assessment (to include AGSM).

6.4.3.3. IPUG-3--ACM. Mission Objectives: Brief and instruct offensive and defensive ACM (2 v 1) from visual and/or BVR set-ups (emphasis on positive flight control, visual/radar lookout, radio discipline, initial moves, element maneuvering, and mutual support). **Specific Mission Tasks:** Briefing; departure; weapons system check; tactical formation; positive flight control to ensure maximum number of set-ups; offensive and defensive engagements; BD check; recovery; debriefing, tape review/assessment (to include AGSM).

6.4.3.4. IPUG-4--Night Intercepts/AAR. Mission Objectives: Brief and instruct night AAR and intercepts (single/multiple targets, EA capability desired). **Specific Mission Tasks:** Briefing; radar trail departure; tanker rendezvous; AAR procedures; weapons system check; FENCE check; GCI/AWACS/SOCC procedures (as applicable); radar search/sort procedures/techniques; horizontal/slice/chandelle conversions; VID procedures; recovery; instrument approach and landing; debriefing.

6.4.3.5. IPUG-5--D/ACT. Mission Objectives: Brief and instruct element tactics for detecting and engaging multiple targets (emphasis on realistic scenario based on unit's specific mission/ tasking). **Specific Mission Tasks:** Briefing; departure; weapons system check; tactical formation; FENCE check; GCI/ AWACS/SOCC procedures (as applicable); CAP/ commit procedures; radar search/sort procedures; visual lookout; element tactics to destroy hostile targets or negate an attack and bring ordnance to bear or separate; mutual support; radio discipline; recovery; debriefing.

6.4.3.6. IPUG-6--DART/AGTS/BANNER (as applicable). Mission Objectives: Brief and instruct a gun employment mission. **Specific Mission Tasks:** Briefing (emphasis on gun preflight, ACS/PACS set-up, BIT checks, pattern procedures, training rules, normal/degraded system operations, fous, and gun malfunction procedures); ground ops; departure; DART/AGTS/BANNER (as applicable) pattern procedures; gun employment; BD check; hot/hung gun recovery; debriefing.

6.4.3.7. IPUG-7--IP Flight Evaluation. Complete a successful IP evaluation IAW AFI 11-202V2 and AFI 11-2F-15V2. The UIP will demonstrate proficiency in briefing, executing, and debriefing a typical MQT or continuation training sortie.

6.5. Mission Commander (MCC) Upgrade. This program establishes the minimum guidelines for upgrade to MCC.

6.5.1. Responsibilities:

6.5.1.1. The MCC is responsible for planning coordinating, briefing, executing, and debriefing joint/composite force employment packages. Mission commanders, once certified, are authorized to lead joint/composite force missions.

6.5.1.2. MCCs may delegate authority and responsibility for a portion of the mission to a secondary MCC. For example, a MCC flying in an A/S weapons system may designate a MCC in an A/ A weapons system to be in charge of the A/A portion of the mission.

6.5.2. **MCC Prerequisites.** Squadron commanders will consider ability, judgment, technical expertise, skill, and experience when selecting a pilot for mission commander upgrade.

6.5.2.1. Minimum qualification is 4-ship FL.

6.5.3. **Ground Training.** Upgrading MCCs must satisfactorily complete the following unit developed blocks of instruction prior to certification as a MCC.

6.5.3.1. **Mission Planning Considerations.** Range space and availability, ATC restrictions/considerations/flight plans, air refueling operations, inter-unit coordination, air-to-air and air-to-surface force integration, IADS penetration/avoidance, on-range controlling agencies coordination, GCI coordination.

6.5.3.2. Review appropriate AFTTP 3-1 volumes for specific mission commander checklists and considerations.

6.5.3.3. Accomplish applicable SIM requirements established at unit level prior to flights.

6.5.4. **Flying Training.** As a minimum, the upgrading MCC will observe a certified MCC during the planning, briefing, flight, and debriefing of at least one composite force mission. Prior to certification, the upgrading MCC will then plan, brief, fly, and debrief a minimum of one mission under the supervision of an IP or Squadron Supervisor who is MCC qualified. This program establishes the minimum guidelines for upgrade to MCC.

6.5.4.1. To qualify as a MCC sortie, the pilot must be acting as the Mission Commander for a joint/composite mission responsible for two or more types of aircraft with four or more total aircraft or more than four own MDS aircraft versus a minimum of four pre-planned aircraft. Unit tasking should drive force composition.

6.5.4.2. The MCC will determine overall upgrade mission effectiveness in case of fallout.

6.5.5. **Certification.** Following satisfactory completion of the above requirements, the SQ/CC will certify a new MCC by placing a letter of certification in the training folder and indicating qualifications on letter of Xs.

6.6. DART/AGTS/BANNER (as applicable) Tow.

6.6.1. **Ground Training.** Prior to the first DART/AGTS/BANNER (as applicable) tow mission, the upgrading tow pilot will be thoroughly familiar with preflight, takeoff, enroute, deployment, employment, flight restrictions, emergency procedures, towing procedures/techniques, and training rules.

6.6.2. **Flying Training.** Tow pilots will be certified by the squadron commander and accomplish a minimum of one upgrade sortie which will include one basic dart pattern and one tactical pattern (if applicable). The upgrading pilot will accomplish the upgrade sortie in the FCP of a B/D model under the supervision of a tow-qualified (for the pattern being flown) pilot in the RCP.

6.7. **Alert Camera.** CMR/BMC pilots with an operational requirement to fly with cameras on active air defense alert missions will complete this training. Ground training will be coordinated through the squadron training officer and unit intel personnel, and is only required prior to being

scheduled for alert duty where flight with a camera is required by an ATO. Possessing an adequate supply of cameras to equip a normally tasked number of alert aircraft and having a plan to accomplish training as described above satisfies the requirement to have an alert camera capability. Reference AFI 11-202V3 paragraph 2.5.1.6 for a list of certified digital cameras.

6.7.1. Ground training will cover operation of a basic point-and-shoot camera and intelligence gathering techniques, MAJCOM/local restrictions on the use of cameras in the cockpit, and hands-on cockpit training in the best available training device.

6.8. Night Vision Goggle (NVG) Qualification Program. The intent of this program is to produce fully qualified wingmen, flight leads, and instructor pilots. Completion of the qualification training allows the pilot to perform missions under NVGs at or above minimum safe altitude (MSA) or IAW AFI 11-214, whichever is greater. Operation below MSA will require additional training as determined by OG/CC.

6.8.1. **Ground Training.** Upgrading NVG pilots must satisfactorily complete the following requirements prior to NVG-1.

6.8.1.1. **Academics.**

6.8.1.1.1. Academic instruction will include NVG academics and an NVG Phase Brief. Each Squadron Commander will designate a “core” NVG academic instructor. This instructor may certify additional instructors within the Squadron and Operations Group.

6.8.1.1.2. Units will designate highly experienced NVG IPs to conduct local academic training, and will use MAJCOM approved courseware. For local academics, NVG instructional videos will be used to demonstrate NVG visual illusions in place of the terrain board.

6.8.1.1.3. Academics will be accomplished within 60 days prior to accomplishing NVG-1. If more than 60 days elapse prior to NVG-1, pilots must review the NVG academics. If more than 180 days elapse between completion of NVG academics and NVG-1, pilots must re-accomplish NVG academics.

6.8.1.2. **Simulator.**

6.8.1.2.1. **NCT (Night Cockpit Trainer, ViWS, MTC, FMT, WTT)-1--Mission Objectives.** Introduce NVG Cockpit Set-up, NVG procedures, and emergency situations. Specific Tasks: NVG ground operations, use of interior and exterior aircraft lighting, Taxi/Take-off, enroute formations, NVG procedures, blindfold cockpit check, and emergency/egress procedures. Special attention should be focused on recognition/prevention of spatial disorientation, unusual attitude recoveries, night/NVG instrument crosscheck that uses NVGs as a secondary means of maintaining SA, task saturation/prioritization, and potential FOD hazards associated with NVG use. If NVG capable MTC is available, units may add more tactical events as desired.

6.8.2. **General Instructions.**

6.8.2.1. If NVG training was accomplished during FTU, NVG-3, NVG Certification, may be combined with MQT Night.

6.8.2.2. NVG FLUG/IPUG sorties can be flown in conjunction with unit FLUG/IPUG programs.

6.8.2.3. NVG sorties will be flown in prescribed order.

6.8.2.4. NVG IP must complete a total of 5 NVG sorties, including upgrade sorties, before performing NVG IP duties.

6.8.2.5. NVG-1 will be flown dual if possible.

6.8.2.6. Multiple upgrades may be accomplished on an NVG sortie, or in conjunction with other NVG upgrades, at SQ/CC discretion.

6.8.2.7. NVG-4 may be flown as a four-ship Flight Lead Certification. UP must be current and qualified four-ship Flight Lead.

6.8.2.8. Controlled Maneuvering may be introduced after completion of initial wingman qualification. IP must document satisfactory completion of this event on gradesheet.

6.8.3. **Flying Training.** All NVG syllabus sorties will be under the supervision of a qualified NVG IP. Suggested profiles are listed below:

6.8.3.1. **NVG-1, Basic NVG Familiarization.** Mission Objectives. Primary emphasis of NVG 1 is to introduce the capabilities and limitations of NVGs and the night environment to the student. Introduce and practice NVG adjustment procedures, cockpit preparation, confidence maneuvers, basic formation, contact maneuvering, and AAMD. Demonstrate proficiency in various administrative and tactical 2-ship formation positions with a mixture of external lighting options including reduced lighting and lights out. Introduce in NVG front aspect RADAR intercepts to visual stern conversions versus both high and low-speed targets. **Specific Mission Tasks:** Trail Departure, Systems check, Ranging exercise, NVG G-awareness exercise, aircraft lighting demonstration, Administrative and tactical NVG formations, Chaff/Flare demonstration, tactical formation turns, lost wingman/blind exercise, rejoins, 1 v 1 intercepts to include: a) Low to high conversion, b) High to low conversion (Low speed target), c) AAMD (RMD), d) BVR launch and leave with short range recommit to stern conversions, NVG battle damage check, trail recovery, NVG de-goggle/stowing procedures.

6.8.3.2. **NVG-2, 2 v 2 Tactical intercepts.** Mission Objectives: Practice NVG adjustment procedures, cockpit preparation, basic formation flying skills with an increased emphasis on air-to-air employment. Must demonstrate proficiency in 1 v 1 intercepts prior to beginning 2 v 2 tactical intercepts, if they were not accomplished on NVG-1. Practice flying NVG four-ship administrative formations. **Specific Mission Tasks:** Trail Departure, Systems check, Ranging exercise, NVG G-awareness exercise, Administrative and tactical NVG formations, tactical formation turns, NVG battle damage check, trail recovery, 2 v 2 intercepts to include: a) BVR Launch and Leave, b) Low to high conversion, c) High to low conversion (Low speed target), d) AAMD (RMD), e) BVR launch and leave with short range recommit, NVG de-goggle/stowing procedures.

6.8.3.3. **NVG-3, NVG Certification.** Mission Objectives: Demonstrate proficiency in 2 v X tactical intercepts using NVGs as an additional sensor. Practice flying NVG four-ship administrative and tactical formations. **Specific Mission Tasks:** Trail Departure, Systems

check, NVG G-awareness exercise, NVG battle damage check, trail recovery, 2 v X intercepts. UP will fly in the wingman position if not Night FLUG complete. May be flown in conjunction with Night FLUG sortie at SQ/CC discretion.

6.8.3.4. **NVG-4, IP Certification.** Mission Objectives: Demonstrate proficiency as an IP in various administrative and tactical 2-ship formation positions with a mixture of external lighting options, including lights out. **Specific Mission Tasks:** Brief, lead, and debrief an NVG 1-3 type sortie to an IP level. Complete tasks for NVG 1-3 sorties, as appropriate.

6.9. Contingency/Exercise Spin-up Training. This training will be conducted prior to support of contingency operations (if time permits) or exercises. The objective of this training is to ensure the pilot's ability to conduct all missions in support of expected tasking. For contingency operations, units are responsible for contacting appropriate gaining command/operations to determine expected mission taskings. For exercises, units are responsible for referring to appropriate EXPLANS and contacting appropriate exercise POCs prior to deployment to determine expected mission taskings. These EXPLANS include COMACC EXPLANS 80 for Red, Maple, and Coalition Flags, EXPLAN 323 for Green Flag West, and EXPLAN 163 for Green Flag East. This assures the units are prepared for the appropriate tasking and allows the responding OG/CC to tailor this training for the theater, threat, and tactics for the assigned task. The SQ/CC is then responsible for implementation of this spin-up, prosecuting the required missions, and determining the specific requirements necessary to reach the desired level of proficiency. Emphasis will be placed on training needed for missions not accomplished in daily operations. This training will be conducted IAW all applicable instructions.

6.9.1. If a pilot is not assigned to the tasked squadron, they must receive spin-up training as determined by the tasked SQ/CC. This applies to all attached pilots (OG/WG/HQ staffs, etc.), and all pilots augmenting from other squadrons (operational, FTU, weapons school, test, etc.). The objective of this training is to ensure attached/augmenting pilot is proficient to conduct all missions in support of expected tasking. The deploying SQ/CC will determine the amount of spin-up training required for each attached/augmenting pilot based on the pilot's level of proficiency, currency, qualification, experience, etc. For augmenting pilots, once the amount of spin-up training is determined, the augmentee's SQ/CC is responsible for ensuring the spin-up training is accomplished.

6.9.2. **Ground Training.** All applicable pilots will complete ground training as necessary prior to their support of contingency operations or exercises.

6.9.2.1. **Academics.** Units will brief exercise SPINS, ROE/Training Rules, command and control, engagement authority and procedures, and visual identification. MAJCOM/IN will assist the unit's intelligence functions in the development of threat assessments and visual recognition training materials.

6.9.2.2. **Visual Recognition.** Pilots must be able to visually identify aircraft (rotary and fixed wing, including joint/allied assets) they are likely to encounter by name or numerical designator and determine whether the aircraft is a threat or non-threat (training should incorporate all aspects/angles, theater specific paint schemes/fin flashes, and various configurations), identify ground equipment, and determine major categories of naval vessels.

6.9.3. **Flying Training.** Tailor spin-up training to ensure all supporting pilots are proficient, current, and qualified in all expected mission taskings.

6.10. Joint Helmet Mounted Cueing System (JHMCS) Qualification Training. The purpose of this program is to train IPs, flight leads, and wingmen in JHMCS high off-boresight system (HOBS) operation and employment. The qualification program outlined below is the minimum training required to qualify inexperienced pilots in JHMCS employment. Squadron Commanders may tailor this program for experienced pilots

6.10.1. **Ground Training.** Pilots upgrading to JHMCS must complete the following requirements prior to their first sortie:

6.10.1.1. **JHMCS Academics**

6.10.1.1.1. Initial academics will be accomplished locally or during simulator orientation (if available).

6.10.1.1.2. Academic courseware will be approved by MAJCOM.

6.10.1.1.3. Academics will be accomplished within 60 days prior to the first JHMCS qualification sortie. If more than 60 days elapse between academics and the first sortie, pilots will reaccomplish academics.

6.10.1.2. **JHMCS Simulator Orientation Training**

6.10.1.2.1. Although AIM-9X capability is incorporated into unit ViWS/FMTs/WTTs with the current OFP, JHMCS-modified SIMs may not be available for initial orientation training. If a SIM with JHMCS is available, pilots will complete JHMCS SIM-1 prior to flight. Cockpit orientation and JHMCS preflight in an aircraft with external power is an acceptable substitution for JHMCS SIM-1 when MTC is not JHMCS capable.

6.10.1.2.2. **JHMCS SIM-1 Mission Objectives.** Introduce JHMCS preflight, ground operations, radar/missile cueing and employment, JHMCS degraded and failure modes, system limitations, emergency egress, ejection, and human factors implications (display fixation, fatigue, etc.). Specific Tasks: JHMCS preflight, strap-in, boresight, switchology/HOTAS functions, ground operations, JHMCS and AIM-9X Built-in Test (BIT) and indications, FENCE check, weapons/radar/navigation display orientation, helmet mounted display (HMD) auto acquisition modes, radar and missile (AIM-9M/X) cueing and employment, AIM-9X Fighter Data Link cueing, "uplook" cueing orientation, declutter modes, and after landing checks. Special subjects to be emphasized during all JHMCS training include the potential for display fixation and ejection risks.

6.10.2. **General Instructions**

6.10.2.1. Entry into JHMCS qualification training requires SQ/CC approval. Squadron commanders should allow pilots to accomplish JHMCS training concurrent with MQT.

6.10.2.2. Except for JHMCS-2, qualification training will be flown in order.

6.10.2.3. JHMCS-2 may be flown at any time after JHMCS-1 and is not required prior to JHMCS-3 certification. However, pilots may employ JHMCS IAW their LOWAT category only after completing JHMCS-2 (limited to 1000 AGL until accomplished).

6.10.2.4. JHMCS missions may be flown in conjunction with other unit upgrades with Squadron Commander approval.

6.10.2.5. Applicable JHMCS Special Subjects will be briefed on all sorties where JHMCS will be worn.

6.10.3. Flying Training. All Pilots will fly JHMCS 1, 2, and 3. IPs must also complete JHMCS-4 before they can be designated a JHMCS IP by SQ/CC.

6.10.3.1. **JHMCS-1, 1v1 Offensive/Defensive/High Aspect BFM.** Configuration: JHMCS IP / P; 2xF-15C/D; 2xAIM-9X CATM (if available). Mission Objectives: Practice JHMCS/HOBS employment and all-aspect missile defense to defeat the threat and achieve valid weapons parameters. Specific Mission Tasks: Cueing exercises; G-awareness exercise; WVR offensive/defensive BFM (as required) and WVR/BVR 1 v 1 high aspect BFM vs. an all-aspect threat; all-aspect missile defense.

6.10.3.2. **JHMCS-2, 2-Ship LASDT.** Configuration: JHMCS IP / P, or FL / JHMCS IP; 2xF-15C/D; AIM-9X CATM (if available). Mission Objectives: Demonstrate proficiency in 2-ship maneuvering and JHMCS/HOBS employment in the low altitude environment. Specific Mission Tasks: AHC (low altitude handling/flying qualities, vertical awareness exercise, climb/ dive/slice maneuvers, nose low recoveries, attitude awareness maneuvers); G-awareness exercise; low level navigation; low level turns; LATF; terrain masking maneuvering techniques for level/ rough/rolling terrain; ridge crossings; visual lookout; altitude awareness/control; attack maneuvering; defensive reactions; 2-ship low altitude tactical intercepts and low altitude JHMCS/HOBS weapons employment considerations.

6.10.3.3. **JHMCS-3, 2v1(+1, if available) ACM and Certification.** Configuration: JHMCS IP / P, or FL / JHMCS IP; 2xF-15C/D; 2xAIM-9X CATM (if available); 1 (+1) adversaries (dissimilar desired). Mission Objectives: Employ JHMCS/radar/missile HOBS capability to kill and survive vs. an all-aspect threat. JHMCS evaluation (by SQ/CC or designated representative) of the upgrading pilot's ability to employ JHMCS/HOBS weapons in a tactical mission scenario. The pilot being evaluated may fly any position within the flight, depending on qualification. Specific Mission Tasks: G-awareness exercise; FENCE check; tactical formation; 2 v 1(+1) WVR and BVR engagements in a tactical scenario based on unit tasking; element/flight control (if applicable); situational awareness and mutual support; HOBS tactical employment versus an all-aspect threat (emphasize HOBS capability, front hemisphere missile defense, and mutual support).

6.10.3.4. **JHMCS-4, JHMCS IPUG.** Configuration: IP / SQ Supervisor or designated representative; 2xF-15C/D; AIM-9X CATM (if available) and 1 (+1) adversaries (dissimilar desired) if flown as ACM. Mission Objectives: Evaluation of the IP's ability to brief, lead, and debrief a JHMCS qualification mission. The IP will demonstrate the ability to instruct JHMCS/HOBS employment and to manage the scenario to achieve the desired learning outcomes. Specific Mission Tasks: Weapons system checks; G-awareness exercise; JHMCS display orientation; FENCE check; off-boresight radar/missile cueing exercise; 1v1 offensive/defensive/high aspect BFM or 2v1 (+1) ACM; front hemisphere missile defense, and mutual support.

6.11. Form adopted. AF Form 847, *Recommendation for Change of Publication*.

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DCS, Operations, Plans and Requirements

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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Abbreviations and Acronyms

A/A—Air-to-Air

A/S—Air-to-Surface

AAMD—All Aspect Missile Defense

AAR—Air to Air Refueling

AAW—Anti-air Warfare (US Navy)

AB—Afterburner

(D)ACBT (Dissimilar)—Air Combat Training

ACC—Air Combat Command

(D)ACM (Dissimilar)—Air Combat Maneuvering

ACMI—Air Combat Maneuvering Instrumentation

(D)ACT (Dissimilar)—Air Combat Tactics

ADL—Aircraft Data Link

ADS—Air Demonstration Squadron

AF—Air Force

AFRC—Air Force Reserve Command

AFSC—United States Air Force Specialty Code

AGL—Above Ground Level

AGSM—Anti-G Straining Maneuver

AGTS—Aerial Gunnery Target System

AHC—Aircraft Handling Characteristics

AI—Airborne Interceptor (Joint Publication 1-02) [Air Intercept, Air Interdiction] {USAF only}

AILA—Airborne Instrument Low Approach

ANG—Air National Guard

AOA—Angle of Attack

AOC—Air Operations Center

AOS—Air Operations Squadron

API—Aircrew Position Indicator

ARA—Airborne Radar Approach

ARC—Air Reserve Components

ARMS—Air Force Operations Resource Management System

ARP—Armament Recording Program

ASA—Air Sovereignty Alert, Air Sovereignty Asset

ASC—Air Strike Control

ASD—Average Sortie Duration

ASLAR—Aircraft Surge Launch and Recovery

ASUW—Anti-surface Warfare (US Navy)

ATD—Aircrew Training Device

AVTR—Aircraft Video Tape Recorder

AWACS—Airborne Warning and Control System

BAI—Backup Aircraft Inventory

BAQ—Basic Aircraft Qualification

BDA—Battle Damage Assessment

(D)BFM (Dissimilar)—Basic Fighter Maneuvers/Maneuvering

BIT—Built in Test

BMC—Basic Mission Capable

BVR—Beyond Visual Range

C3—Command, Control, and Communications

C3I—Command, Control, Communications, and Intelligence

C&R—Collection and Reporting

CAF—Combat Air Forces

CALF—Chart Amendment Low Flying

CAP—Combat Air Patrol, Critical Action Procedures

CAS—Close Air Support

CAT—Category

CATM—Captive Air Training Missile

CB-Coded—Designated Test Aircraft

CC—Commander

CC—Coded—Designated Combat Aircraft

CCIP—Constantly Computed Impact Point

CCRP—Continuously Computed Release Point

CDIP—Continuously Displayed Impact Point

CE—Combat Edge
CF—Checkered Flag
CFT—Cockpit Familiarization Trainer, Conformal Fuel Tank
CFTR—Composite Force Training
CHUM—Chart Update Manual
CIRVIS—Communications Instructions for Reporting Vital Intelligence Sighting
CM—Countermeasures
CMR—Combat Mission Ready
CMS—Combat Mission Section
COMM JAM—Communications Jamming
COMSEC—Communications Security
COT—Continuous Overseas Tour
CPT—Cockpit Procedures Trainer
CRM—Crew Resource Management
CRO—Criterion Referenced Objectives
CRT—Cathode Ray Tube
CSAR—Combat Search and Rescue
CT—Continuation Training
CV—Vice Commander
CW—Chemical Warfare
CWD—Chemical Warfare Defense
DACT—Dissimilar Air Combat Tactics
DART—Deployable Aerial Reflective Target
DBFM—Dissimilar Basic Fighter Maneuvers/Maneuvering
DCA—Defensive Counter Air
DMO—Distributed Mission Operations
DNIF—Duties Not Involving Flying
DOC—Designed Operational Capability
DR—Dead Reckoning
DRU—Direct Reporting Unit
DU—Display Unit
E&R—Evasion and Recovery

EA—Electronic Attack
EC—Electronic Combat
ECO—Electronic Combat Officer
ECR—Electronic Combat Range
EEI—Essential Elements of Information
EID—Electronic Identification
EM—Energy Maneuverability
EO—Electro-Optical
EP—Electronic Protection
EP—Emergency Procedure
EPE—Emergency Procedures Evaluation
ETCA—Education and Training Course Announcements
EWWS—Electronic Warfare Warning Set
EXP—Experienced
FAM—Familiarization
FCP—Front Cockpit
FE—Flight Examiner
FEB—Flying Evaluation Board
FEF—Flying Evaluation Folder
FENCE—Firepower, Emitters, Navigation, Communications, and Electronic Countermeasures
FL—Flight Lead
FLUG—Flight Lead Upgrade
FMT—Full Mission Trainer
FOT&E—Follow-on OT&E
FOV—Field of View
FP—First Pilot
FPA—Flight Path Angle
FPM—Flight Path Marker
FS—Fighter Squadron, Flight Surgeon
FTR—Fighter
FTU—Field Training Unit
FW—Fighter Wing

G—Gravitational Load Factor
GCI—Ground Control Intercept
GLOC—G-induced Loss of Consciousness
GS—Ground Speed
HHQ—Higher Headquarters
HOBS—High Off-Boresight Seeker/System
HUD—Heads-Up Display
HVAA—High Value Airborne Asset
IAGTS—Improved AGTS
IAW—In Accordance With
ICWT—Initial Chemical Warfare Training
ID—Identify/Identification
IFF—Identification Friend or Foe
IFR—Instrument Flight Rules
ILS—Instrument Landing System
IMC—Instrument Meteorological Conditions
INFLTREP—In-flight Report (voice only)
INS—Inertial Navigation System
INTREP—Intelligence Report
IOC—Initial Operational Capability
IOS—Instructor Operator Station
IP—Instructor Pilot or Initial Point
IPSIM—IP Simulator
IPUG—Instructor Pilot Upgrade
IQT—Initial Qualification Training
IR—Infrared
IRC—Instrument Refresher Course
IRCM—Infrared Counter Measures
ISD—Instructional Systems Development
ISOPREP—Isolated Personnel Report
ITFR—IMC (or night) Terrain Following Radar
JFT—Joint Force Training

JHMCS—Joint Helmet Mounted Cueing System

JVID—Joint Visual Identification

KCAS—Knots Calibrated Airspeed

KIAS—Knots Indicated Airspeed

KIO—Knock It Off

KTAS—Knots True Airspeed

LAI—Low Altitude Intercept

LALD—Low Angle Low Drag

LAO—Local Area Orientation

LASDT—Low Altitude Step-Down Training

LASTE—Low Altitude Safety and Targeting Enhancement

LATF—Low Altitude Tactical Formation

LATN—Low Altitude Tactical Navigation

LIMFACTS— Limiting Factors

LOC—Limited Operational Capability (USAF only)

LOS—Line of Sight

LOW A/A—Low Altitude Air-to-Air

LOW ALT—Low Altitude

LOWAT—Low Altitude Training

LSO—Life Support Officer

MAJCOM—Major Command

MAR—Mission Accomplishment Report

MAV—Maverick

MCC—Mission Commander

MDS—Mission Design Series

MDT—Mission Directed Training

MEA—Minimum Enroute Altitude

MIJI—Meaconing, Interference, Jamming and Intrusion

Mil—Milliradian

MIL—Military Power

MISREP—Joint Tactical Air Reconnaissance/Surveillance Mission Report (Joint Publication 1-02)

MISREP—Mission Report (USAF only)

ML—Mission Lead
MOA—Military Operating Area
MP—Mission Pilot
MQF—Master Question File
MQT—Mission Qualification Training
MRM—Medium Range Missile
MS—Mission Support
MSA—Minimum Safe Altitude
MTT—Multi Tactics Trainer
MTC—Mission Training Center
N/A—Not Applicable
NAAR—Night Air Refueling
NAF—Numbered Air Force
NAV—Navigation
NCO—Noncommissioned Officer
NGB—National Guard Bureau
NLT—Not Later Than
NT—Night
NTC-L—Networked Training Center-Luke
NVG—Night Vision Goggle
OCA—Offensive Counter Air
OCA-A—Offensive Counter Air Air-to-Air
OCA-S—Offensive Counter Air Air-to-Surface
OG—Operations Group
OPR—Office of Primary Responsibility
OPS—Operations
OPSEC—Operations Security
OTD—Operations Training Development
OT&E—Operational Test and Evaluation
ORI—Operational Readiness Inspection
PACAF—Pacific Air Forces
PAA—Primary Aircraft Authorized

PAI—Primary Aircraft Inventory
PAR—Precision Approach Radar
PCS—Permanent Change of Station
PDAI—Primary Development/Test Aircraft Inventory
PFT—Programmed Flying Training
PGM—Precision Guided Munitions
POAI—Primary Other Aircraft Inventory
PPB—Positive Pressure Breathing
PPG—Positive Pressure Breathing for G
PTT—Partial Task Trainer
QUAL—Qualification
RAP—Ready Aircrew Program
RCO—Range Control Officer
RCP—Rear Cockpit
RCS—Radar Cross Section
RF—Radio Frequency
RFMDS—Red Flag Mission Debriefing System
RMU—Runway Monitoring Unit
ROE—Rules of Engagement (Combat only)
ROM—Runway Operations Monitor
RT—Radio Terminology
RTM—RAP Tasking Memorandum
RWR—Radar Warning Receiver
SA—Situational Awareness, Strategic Attack
SAFE—Selected Area For Evasion
SAR—Search and Rescue
SCL—Standard Conventional Load
SCP—Set Clearance Plane
SELO—Stan/Eval Liaison Officer
SEPT—Situational Emergency Procedure Training
SFO—Simulated Flameout
SI—Simulator Instructor

SIF—Selective Identification Feature
SIM—Simulator (MTC, ViWS, FMT, WTT)
SOCC—Sector Operations Control Center
SOF—Supervisor of Flying
SORTS—Status of Resources and Training System
SQ/CC—Squadron Commander
SRM—Short Range Missile
SSE—Simulated Single Engine
STR—Strategic Training Range
TA—Terrain Avoidance
TAR—Training Accomplishment Report
TACAN—Tactical Air Navigation
TACS—Theater Air Control System
TAI—Total Active Inventory
TD—Tactical Deception
TDY—Temporary Duty
TES—Tactics Eval Sq/Test & Evaluation Squadron
TEWS—Tactical Early Warning System
TF—Coded—Designated Training Aircraft
TGT—Target
TI—Theater Indoctrination, Tactical Intercept
TO—Technical Order
TOD—Time of Day
TOT—Time on Target
TR—Training Rules
TX—Transition
UCML—Unit Committed Munitions List
UE—Unit Equipment
UIP—Upgrading Instructor Pilot
UMD—Unit Manning Document
UNITREP—Unit Status and Identity Report
USAF—United States Air Force

USAFE—United States Air Forces in Europe
USAFWC—United States Air Force Warfare Center
USAFWS—United States Air Force Weapons School
USI—Upgrading Simulator Instructor
UTD—Unit Training Device
UTE—Utilization Rate
VID—Visual Identification
VFR—Visual Flight Rules
ViWS—Virtual Warfighting System
VLD—Visual Level Delivery
VMC—Visual Meteorological Conditions
VR—Visual Recognition
VRD—Vision Restricting Device
VTR—Video Tape Recorder
WD—Weapons Delivery
WDL—Weapon Data Link
WG—Wing
WIC—Weapons Instructor Course
WOD—Word-of-Day
WS—Weapons School
WSEP—Weapon System Evaluation Program
WST—Weapon System Trainer
WSTO—Weapons System Training Officer
WTT—Weapons and Tactics Trainer
WVR—Within Visual Range
WW—Wild Weasel
WX—Weather

Terms

Air Combat Training (ACBT)—A general term which includes (D)BFM, (D)ACM, and (D)ACT. The prefix (D) refers to dissimilar assets. When present, dissimilar is optional. When the prefix is missing, similar is assumed as flown/required. When present without parenthesis, dissimilar is assumed flown or required. This convention corresponds to all facets of ACBT (i.e., BFM, ACM, ACT).

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

Air Sovereignty Alert (ASA) Training—Training to maintain proficiency in day/night intercepts on slow/ low-flying aircraft and traditional intercepts, with emphasis on target identification and shadowing procedures.

Basic Mission Capable (BMC)—The status of an aircrew who has satisfactorily completed training (MQT) prescribed to be fully qualified to perform the basic unit operational missions but does not maintain CMR status. Aircrew accomplishes training required to remain familiarized in all, and may be qualified and proficient in some, of the core missions of their weapon system and unit. These aircrew members may also maintain special capabilities. (Refer to paragraph 4.3.)

Basic Aircraft Qualification (BAQ)—A status of an aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to fly the unit aircraft. The member must perform at the minimum frequency necessary to meet the most recent sortie and flight standards set for the weapons system. BAQ will only be carried by aircrew until completion of MQT. BAQ is not a permanent qualification except for General Officers above the wing level, and any other crew members specifically authorized by MAJCOM A3. Aircrews are not authorized to perform RAP-tasked combat event/sorties without instructor aircrew or SQ supervisor supervision. Flight duties will be limited to those identified in paragraph 4.3.

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

Cockpit Familiarization Trainer (CFT)—A training device in which the controls, switches, and instruments do not have to respond to trainee inputs. Used for checklist use, normal procedures, and emergency procedures, AFI 36-2251, *Management of Air Force Training Systems*).

Cockpit Procedures Trainer (CPT)—A training device in which instruments and displays are activated to respond to trainee inputs. Used for safety of flight, instrument, normal, and emergency procedures (see AFP 50-11, AFI 36-2251).

Combat Edge (CE)—A positive-pressure breathing-for-G (PPG) system which provides pilots additional protection against high positive G accelerations experienced during flight. The system consists of aircrew equipment (high-pressure mask, counter-pressure suit, G-suit), and aircraft equipment (oxygen regulator, G-valve, and interfacing sense line). At 5-G and above, regulated air and oxygen are supplied to the system to provide automatic mask tensioning, vest inflation, and positive pressure breathing to the mask.

Combat Mission Ready (CMR)—A status of a pilot who has satisfactorily completed training (MQT) prescribed to be fully qualified to perform the basic unit operational missions, and maintains qualification and proficiency in these missions. All active duty API -1/2's, Squadron Commander, Operations Officers, and OG/CC designated API -6 manning positions are required to maintain this qualification level. EXCEPTION: If a unit is over-manned, they may elect to train the front line of their UMD to CMR with the overage designated as BMC. Approximately 50% of the pilots selected for CMR must be inexperienced. (Refer to paragraph 4.3.)

Composite Force Training (CFTR)—Scenarios employing multiple flights of the same or different types of aircraft, each under the direction of its own flight leader, performing the same or different roles. (AFI 11-214)

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

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

Delivery Parameters—Data reflecting current delivery considerations for general purpose ordnance as well as tactical survivability. Appropriate aircraft/ weapons Tech Orders must be consulted for live ordnance safe escape criteria and dash one performance charts for recovery altitudes.

Electronic Protection (EP) Intercept—An intercept performed against a target using active and/or passive EA against attacker's radar, causing the attacker to employ EP techniques or tactics. Does not include co-channel interference.

Emergency Procedures Evaluation (EPE)—An evaluation of aircrew knowledge and responsiveness to critical and non-critical EPs conducted by a FE in a CPT, CFT, UTD, or aircraft cockpit.

Experienced Pilot (EXP)—Pilots require one of the following to be considered experienced:

500 hrs PAI, or
1,000 hrs (FP/IP/MP/EP), of which 300 are PAI, or
600 fighter hrs, of which 200 hrs are PAI, or
previously fighter EXPERIENCED and 100 hrs PAI .

Hours are defined as FP/IP/MP/EP time and fighter time is defined as hours logged in aircraft with an assigned AFSC of 11FX or sister service equivalent (e.g. Navy F—18 pilot). OA-10 and AT-38 are considered fighter time. Hours logged in the SIM accomplishing RAP Tasking Memo-approved missions will be counted as “hours” when determining experience level. RAP SIM Mission hours will not exceed 20% of the total required to meet the experienced threshold (ex: 100 RAP SIM Mission hours out of 500 hours PAI). See the current RAP Tasking Memo for guidance on approved RAP SIM Missions and logging procedures.

Flight Lead (FL)—As designated on flight orders, the individual responsible for overall conduct of mission from preflight preparation/briefing to postflight debriefing, regardless of actual position within the formation. A certified 4-ship FL may lead formations and missions in excess of four aircraft, unless restricted by the unit CC. A 2-ship FL is authorized to lead an element in a larger formation.

Full Mission Trainer (FMT)—An F-15 training device which dynamically simulates flight characteristics. Used for normal, emergency, and instrument procedures, to include safety of flight, warfighting tasks, and skill integration training (see AFP 50-11 and AFI 36-2251).

Initial Qualification Training (IQT)—Training to qualify the aircrew in basic aircraft flying duties without specific regard to the unit's operational mission. The minimum requirement for Basic Qualification status. Refer to paragraph 1.4.

Limited-Threat VID—Visual identification of a bogey in a limited threat environment (i.e. counter-drug operations, NORAD procedures, etc.) IAW AFTTP 3-1.

Low Altitude Training (LOWAT)—Operations in a certified low altitude block as defined in Table 3.1. LOWAT includes low altitude navigation, tactical formation, defensive maneuvering to avoid or negate threats, skills necessary to search for and offensively engage an aerial target at low altitude, and air-to-surface attacks.

Low Altitude Tactical Formation (LATF)—Flying tactical formation while conducting LATN training. (AFI 11-214)

Low Altitude Tactical Navigation (LATN)—A low altitude training event using onboard systems, dead reckoning and point-to-point low altitude navigation, with or without prior route planning. (AFI 11-214).

Medium Altitude Tactics—Day or night tactical formation (if appropriate for night mission profiles) above 5000 feet AGL, ingressing to a target area, employing actual or simulated ordnance, and egressing with mutual support (if appropriate for night mission profiles).

Mission Training Center—A collection of multiple FMTs (usually 4) that allows for high-fidelity tactical training.

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

Primary Aircraft Authorized (PAA)—Aircraft authorized for performance of the unit's mission (e.g., Combat, Combat Support, Training, Test and Evaluation, etc.). The PAA forms the basis for the allocation of operating resources, to include manpower, support equipment, and flying hour funds. The operating command determines the PAA required to meet their assigned missions.

Primary Aircraft Inventory (PAI)—Aircraft assigned to meet the PAA (See AFI 16-402, *Aerospace Vehicle Assignment, Distribution, Accounting and Termination*).

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

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

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

SIM—A training device which dynamically simulates flight characteristics. Used for tactical, emergency, and instrument procedures, to include safety of flight, warfighting tasks, and skill integration training (see AFP 50-11, AFI 36-2251).

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

Squadron Supervisor—SQ/CC, SQ/DO, SQ/ADO, Flight CCs. (ANG: As designated by the OG/CC.)

Tactical Deception—Any activity designed to mislead the enemy operational commander by manipulating, distorting, or falsifying evidence, thereby inducing the enemy to act in a manner favorable to our interests or desires.

Threat VID—Visual identification of a bogey in a threat environment IAW AFTTP 3-1.

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

Virtual Warfighting System (ViWS)—The pilot position in an MTC that dynamically simulates flight characteristics. Used for normal, emergency, and instrument procedures, to include safety of flight, warfighting tasks, and skill integration training (see AFP 50-11, AFI 36-2251). SIM time is only counted if a unit has an MTC.

Visual Identification (VID)—Often required to positively identify an aircraft using visual means.

Weapons and Tactics Trainer (WTT)—A part task training device used primarily for warfighting tasks, and skill integration training (see AFP 50-11, AFI 36-2251).

Attachment 2

GLOSSARY OF MISSION/SORTIE AND EVENT DEFINITIONS

A2.1. Mission/Sortie Definitions.

A2.1.1. **Aircraft Handling Characteristics (AHC).** Basic skills sortie. Training for proficiency in utilization and exploitation of the aircraft flight envelope, consistent with operational and safety constraints, including, but not limited to high/maximum AOA maneuvering, energy management, minimum time turns, maximum/optimum acceleration and deceleration techniques, and confidence maneuvers.

A2.1.2. **Attrition Sortie.** Programming tool used to forecast future flight hour and sortie requirements. Attrition sorties are derived from historical data and used to account for sorties cancelled before flight. Launched sorties cannot be considered attrition (see Non-effective Sortie definition).

A2.1.3. **Basic Fighter Maneuvers/Air Combat Maneuvers (BFM/ACM).** Building block sorties. BFM (1 v 1) Training designed to apply aircraft handling skills to gain proficiency in recognizing and solving range, closure, aspect, angle off, and turning room problems in relation to another aircraft to either attain a position from which weapons may be launched, or defeat weapons employed by an adversary. ACM (2 v 1 or 2 v 1+1) Training designed to achieve proficiency in element formation maneuvering and the coordinated application of BFM to achieve a simulated kill or effectively defend against one or more aircraft from a pre-planned starting position.

A2.1.4. **Collateral Sorties.** Sorties not directly related to combat employment or basic skills training but necessary for accomplishment of unit missions. These include ferry flights, deployments, FCF flights, incentive flights, orientation flights, airshows, etc. These sorties are not required for RAP training purposes.

A2.1.5. **Commander Option Sortie/Mission.** A sortie that may be used to provide individualized training based on proficiency and demonstrated performance. This sortie may be allocated above the guidelines in the RAP Tasking Memo for all mission types (Except CMR Red Air). The intent is to use these missions as necessary throughout the training cycle, rather than allocating them at the beginning of the training cycle.

A2.1.6. **Contingency Sortie.** A mission tasked and flown while deployed for a contingency operation in which training is limited. These sorties are logged as Contingency Operations Sortie (SC13) in ARMS. These sorties and events accomplished on the sorties do not count towards annual RAP requirements however, the sorties may be used for lookback and the events to update currencies.

A2.1.7. **Defensive Counter Air (DCA).** Mission sortie designed to develop proficiency in DCA mission tactics. Mission elements include: Intel scenario and mission planning, execution of tactics to detect, engage, and negate aircraft employing adversary tactics and weapons capabilities to penetrate protected airspace or attack a specific target area, and in-flight report.

A2.1.8. **Demanding Mission.** Sorties that task the pilot to the extent that flying frequency and continuity are most critical. Authorized sorties/events requiring demanding mission

currency are: (D)ACM, (D)ACT, LOWAT (below 1,000 feet AGL), SQ/CCs may add sorties/events to the demanding sortie list, depending on unit tasking and the individual's capabilities. Also see Non-demanding Sortie.

A2.1.9. 4-Ship Flight Lead (4FL) Mission/Sortie. Special qualification sortie. Sortie where FL leads a flight of 4 or more. May be logged in conjunction with baseline training requirements. Aircraft attrition to 3 ship employment may count.

A2.1.10. Force Protection. Mission sortie designed to develop proficiency in force protection tactics. Mission elements include: Intel scenario and integrated mission planning to support force package objectives, execution of tactics to detect and negate threats employing adversary tactics and weapons capabilities to disrupt force package employment/destroy package assets, and in-flight report.

A2.1.11. HVAA Protection. Mission sortie designed to develop proficiency in protecting a high value airborne asset. Mission elements include: Intel scenario and integrated mission planning to HVAA objectives, execution of tactics to detect and negate threats employing adversary tactics and weapons capabilities to disrupt/destroy employment or the asset, and in-flight report.

A2.1.12. Instructor Pilot (IP) Mission/Sortie. Special qualification sortie. Sortie where IP acted in the capacity of an instructor. IPs/supervisors will log an IP sortie when acting in that capacity on a building block MQT sortie (BFM, ACM, BSA), IPUG missions, when occupying the rear cockpit when the rear cockpit is not the primary duty location, or on any sortie where IP duties preclude effective combat mission training. On other sorties, IPs may log a rap mission sortie if quality training was obtained for the instructor. May be logged by evaluators on check rides if the above conditions apply. Will not be dual-logged with other RAP sorties.

A2.1.13. Instrument Mission/Sortie. Basic skills sortie. Training designed to ensure instrument proficiency. RAP events may be accomplished on an instrument sortie provided accomplishment does not interfere with the primary goal of instrument training. Units are allocated sorties for every pilot to accomplish their requirements.

A2.1.14. Mission Commander (MCC) Mission/Sortie. Special qualification sortie. Sortie where pilot acted in the capacity of a MCC for a joint/composite mission responsible for two or more types of aircraft with four or more total aircraft, or more than four own MDS aircraft versus a minimum of two pre-planned adversary aircraft. May be logged in conjunction with baseline training requirements.

A2.1.15. Night Mission. Sortie on which either takeoff or landing and at least 50 percent of flight duration or 1 hour, whichever is less, occur between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac.

A2.1.16. Non-demanding Mission. A day sortie that provides the pilot with the opportunity to regain basic flying proficiency without excessively tasking those skills that have been under-used during the non-flying period. Authorized sorties/events flown for/on a non-demanding sortie are: instruments, AHC, BFM, Red-Air TI/ACT bandit, low level navigation at or above 500 feet AGL, basic weapons delivery, and basic intercepts. SQ/CCs may delete sorties/events from this non-demanding sortie list, depending on unit tasking and the individual's capabilities.

A2.1.16.1. **Non Demanding NVG Event.** Any NVG sortie that accomplishes items in paragraph 4.6.7.

A2.1.17. **Non-Effective Sortie.** A sortie planned and launched as a training mission, test mission, Basic Skills sortie, or collateral sortie that, due to some circumstance (weather, IFE, maintenance, etc.), fails to accomplish a sufficient number of planned events.

A2.1.18. **RAP SIM.** SIM mission that meets requirements dictated in the RTM that is counted toward RAP lookback and experience pilot requirements.

A2.1.19. **Red Air Mission/Sortie.** A/A sortie where tactics, aircraft simulation, weapon systems, and/or maneuvering is limited to the extent that complete own MDS training is not accomplished. Restrictions which limit aircraft capabilities to some level which might be encountered in combat do not require logging the sortie as Red Air. Red Air sortie allocations in the tasking memo are a maximum cap on degraded training. Unused Red Air allocations should be flown in one of the other A/A training mission categories.

A2.1.20. **Sweep.** Mission sortie designed to develop proficiency in OCA-A sweep tactics. Mission elements include: Intel scenario and tactical mission planning, execution of tactics designed to detect, engage, and negate simulated adversary aircraft which are operating within specific commit criteria (i.e. range, airspace corridor, vul time, etc), and in-flight report.

A2.2. Event Definitions:

A2.2.1. Unless otherwise specified in these event descriptions, units will determine the necessary parameters for fulfilling and/or logging tasked events. Event is defined in one of the following manners:

A2.2.2. A specific type of weapon delivery (defined by aircraft flight path, ordnance delivered, delivery method, or target struck) performed during a sortie.

A2.2.3. Expending of ordnance against a target according to predetermined flight path parameters and delivery methods. A single delivery constitutes an event except for strafe and dart, which require satisfaction of additional criteria.

A2.2.4. Accomplishment of a specific training element, function, or task (i.e., tactical formation, AAR, Maverick, etc.)

A2.3. Weapons Delivery Events.

A2.3.1. RAP Tasking:

A2.3.1.1. **Familiarization FAM.** Denotes a level of practice in a particular event not requiring a qualification level. Unless otherwise specified in the RAP Tasking Memo or formal course syllabi, FAM tasking normally requires two DART/AGTS/BANNER (as applicable) firing passes to be completed during the training cycle.

A2.3.1.2. **Qualification QUAL.** QUAL tasking demonstrates the pilot's capability to put appropriate ordnance on target. Unless otherwise specified in the RAP Tasking Memo or formal course syllabi, QUAL criteria is established for each event in Chapter 5.

A2.3.2. Miscellaneous Weapons Delivery Definitions to be Considered for Event Descriptions:

A2.3.2.1. **Dry Pass.** Weapons delivery pass during which no ordnance is expended.

A2.3.2.2. **Foul.** A penalty directed to a specific aircraft and crew for actions inconsistent with established procedures or safety considerations. A second foul or any dangerous pass will result in mandatory expulsion from any further deliveries during that mission. A foul will be charged IAW flying directive publications.

A2.3.2.3. **Hit.** Any munitions impact within the weapons criteria established for that event. Missile and gun parameters are IAW Chapter 5.

A2.3.2.4. **Multiple Release.** More than one weapon released against the same target on a single pass.

A2.3.2.5. **Unintentional Release.** Ordnance released due to pilot error. Will be scored as gross error regardless of impact point.

A2.3.2.6. **Inadvertent Release.** Ordnance which has released without command by the pilot. Impact will not be scored.

A2.4. Tactical Events. The following is an alphabetical listing of tactical events to be used for fulfilling tasked requirements. In the absence of guidance, units will determine the content of tasked events and how often they may be logged.

A2.4.1. **4-Ship Employment.** Tactical employment of the weapons system in a formation of four or more aircraft using appropriate tactics for the mission.

A2.4.2. **ACMI.** An event which utilizes an ACMI range/facilities for flight and debrief. Only one event may be logged per sortie.

A2.4.3. **Aerial Gunnery.** A live weapons delivery event firing the gun at an airborne target (AGTS/ DART/BANNER).

A2.4.4. **Air Refueling (AAR).** An AAR event requires tanker rendezvous, hook-up and transfer of fuel or 2 minutes of dry contact. More than one event may be credited if receivers accomplish another rendezvous, hook-up and fuel transfer/dry hook-up.

A2.4.5. **Alert Scramble.** Launching on a scramble order in an Air Defense/DCA role from an alert posture (see RTM for SIM accomplishment).

A2.4.6. **Basic Intercept.** A single or two-ship intercept performed with the express purpose of practicing fundamental radar acquisition and lock-on techniques, controlling intercept geometry against LIMITED maneuvering targets, recognizing weapons employment zones and taking valid shots, practicing proper switchology and radio commentary. Tasks are performed independent of actual or briefed threat capabilities and weapons, and environmental considerations. Does not update ACBT currency. One event may be logged per engagement.

A2.4.7. **Chaff.** Inflight dispensing of chaff during a tactical mission profile in response to an actual or simulated threat. Event requires actual release (see RTM for SIM accomplishment) and is limited to logging of one event per engagement/intercept.

A2.4.8. **Comm Jam.** Inflight operations without use of active anti-jam radios in a comm jamming environment that provide realistic intervals and duration (completion of one attack

profile desired) to counter jamming and/or effective chattermark procedures. Limited to logging of one event per sortie.

A2.4.9. **Composite Force Training (CFTR).** Scenarios employing multiple flights of the same or different types of aircraft, each under the direction of its own flight leader, performing the same or different roles. Only one event may be logged per sortie (**EXCEPTION:** if an AAR separates events, a maximum of two events may be logged per sortie (AFI 11-214).

A2.4.10. **EA A/A.** An intercept where the blue fighter uses self-protection (ICS/Pod) or off-board jamming asset to negate an A/A threat. Only one event may be logged per intercept (see RTM for SIM accomplishment).

A2.4.11. **EP A/A.** An intercept where the blue fighter uses techniques to counter electronic attack from an adversary aircraft. Does not include co-channel interference. Only one event may be logged per sortie (see RTM for SIM accomplishment).

A2.4.12. **EW Range.** Inflight operations conducted on an EW range with fixed or mobile surface-to-air emitters operating and detection/threat reaction emphasized. Normally accomplished in conjunction with other EW-type events. The pilot detects a surface threat via electronic means and reacts with appropriate maneuvers, pod/internal EP switchology and/or expendables. Sorties flown against EW Aggressor or mobile threat emitters placed in a MOA, range, or along a low level route are acceptable. Only one EW range event may be logged per sortie (active EA must be used).

A2.4.13. **Flare.** Inflight release of self-protection flares during a tactical mission profile as a threat response. Event requires actual release and is limited to logging of one event per engagement (see RTM for SIM accomplishment).

A2.4.14. **HAVE QUICK.** The practice of loading the combat or MAJCOM HAVE QUICK training net WOD, world-wide TOD. Requires proper radio configuration for HAVE QUICK operation and successful utilization during tactical mission accomplishment. During extended missions, the TOD should be updated from a world-wide master clock if available. Only one event may be logged per sortie.

A2.4.15. **Instructor.** An event logged by an instructor when performing instructor duties during the sortie, or a portion thereof. The instructor qualification must be required and used for the mission itself or a mission element. Examples include upgrade sorties, updating lost currencies, etc. Evaluators will log this event on evaluation sorties. Logging this event updates instructor currency.

A2.4.16. **Joint Force Training (JFT).** Scenarios employing integrated aerospace and land/naval forces. Examples include JAAT, CAS with FAC, airdrop escort, etc. Only one event may be logged per sortie (**EXCEPTION:** If an AAR separates events, a maximum of two events may be logged per sortie).

A2.4.17. **Low Air-to-Air (LOW A/A).** An event defined as performing realistic, mission-oriented A/A operations while in a LOWAT certified low altitude block (see Table 3.1.). The event includes skills necessary to search for, and engage offensively, an aerial target at low altitude. Only one event may be logged per sortie (**EXCEPTION:** If an AAR separates events, a maximum of two events may be logged per sortie). (AFI 11-214)

A2.4.18. **Low Altitude Intercept (LAI).** An intercept conducted below 5,000 feet AGL. Only one event may be logged per target.

A2.4.19. **Low Altitude Tactical Navigation (LATN).** Training conducted below 5,000 feet AGL using onboard systems and the fundamental aspects of dead reckoning and point-to-point low altitude navigation, with or without prior route planning. Only two events may be logged per sortie. (AFI 11-214)

A2.4.20. **Low/Slow VID.** Intercepting low/slow flying aircraft (rotary and fixed wing) for visual identification purposes in a threat environment.

A2.4.21. **Low/Slow Speed Threat VID Intercept.** Tactical intercept performed to accomplish the tactical objective (ID the bogey, ID and kill the bandit, etc) on a target below 5000 feet AGL with air-speed less than 250 KIAS. Fighter should counter threat maneuvers and weapons engagement zones, consider environmental factors, attain turning room and energy at end game, practice ID/ROE procedures, and terminate when briefed objectives or training rule stops are reached. These intercepts will not update ACBT currency. Two events may be logged per sortie, but not on the same engagement.

A2.4.22. **Secure Voice.** Requires proper radio configuration during tactical mission accomplishment. Only one event may be logged per sortie.

A2.4.23. **Slow Shadow.** Intercepting slow flying aircraft (rotary or fixed wing) and maintaining surveillance without being detected.

A2.4.24. **Surface-to-Air EW Training.** An MTC event where the pilot detects a surface threat via electronic means and reacts with appropriate maneuvers, pod/internal EA switchology and/or expendables. Only one event may be logged per SIM period.

A2.4.25. **Tactical Intercept.** A single-ship or multi-ship intercept performed to accomplish the tactical objective (ID or kill the threat) in a realistic threat scenario. Fighter should counter threat maneuvers and weapons engagement zones, consider environmental factors, attain end game turning room and energy, practice ID/ROE procedures, take valid shots if presented, and terminate when briefed objectives or training rule stops are reached. One event may be logged per engagement.

A2.4.26. **VID Day.** Intercepting aircraft during the day for visual identification in a threat environment.

A2.4.27. **VID Night.** Intercepting aircraft during the night for visual identification in a threat environment.

Attachment 3

VERIFICATION GUIDE FOR AIR-TO-AIR

A3.1. Development Guidelines. The following outlines are provided as guidelines for the development of verification briefings.

A3.2. OVERVIEW:

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

A3.2.2. Mission overview.

A3.2.3. Status of friendly forces (ground, air and support).

A3.3. AREA OF OPERATIONS:

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

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

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

A3.4. STATUS OF ENEMY FORCES:

A3.4.1. Ground forces and accompanying air defense threats (SAMs, AAA, EC, and MIJI), capabilities, strengths and weaknesses.

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

A3.5. MISSION EMPLOYMENT BRIEFING:

A3.5.1. Ground operations.

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

A3.5.3. Enroute (Go/No-go considerations, comm procedures, GCI/AWACS/autonomous control procedures, friendly defenses, ROE).

A3.5.4. Engagement tactics (target data, acquisitions/validations, tactics, weapons parameters, disen-gagement).

A3.5.5. Egress plan (route, mutual support agreements).

A3.5.6. Downed pilot/wounded bird plan.

A3.5.7. Recovery (safe corridor procedures, IFF procedures, ASLAR, alternate and emergency airfields).

A3.6. ESCAPE AND EVASION:

A3.6.1. SAFEs.

A3.6.2. SAR procedures.

A3.7. ESSENTIAL ELEMENTS OF INFORMATION/REPORTS:

A3.7.1. EEIs.

A3.7.2. Required reports and reporting procedures.