

**BY ORDER OF THE
SECRETARY OF THE AIRFORCE**

**AIR FORCE INSTRUCTION 11-2E-9
VOLUME 1**



10 JULY 2012

Flying Operations

E-9—AIRCREW TRAINING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.epublishing.af.mil for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication

OPR: ACC/A3TO

Certified by: AF/A3O-A
(Col James W. Crowhurst)

Supersedes: AFI11-2E-9V1,
8 December 2000

Pages: 27

This volume implements AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, and AFI 11-202, Volume 1, *Aircrew Training*. It establishes the minimum Air Force standards for training and qualifying personnel performing duties in the E-9. This publication does not apply to the Air National Guard (ANG) and U. S. Air Force Reserve. 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. Major commands (MAJCOMs) are to forward proposed MAJCOM-level supplements to this volume to HQ USAF/A3O-AI, through HQ ACC/A3TO, for approval prior to publication IAW (In Accordance With) AFI 33-360, paragraph **2.12.7.4**. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) maintained in the Air Force Records Management System (AFRIMS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. 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 XOA Aviation Resource Management System (ARMS) (December 26, 2002, 67 FR 78777) applies.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed.

The following is a synopsis of major changes set forth in this instruction: defined phases of aircrew training (paragraph 1.4); updated waiver authority guidance (paragraph 1.9); changed formal training to Co-Pilot Initial Qualification Training (IQT) (Chapter 2); added flying training to be accomplished in accordance with syllabus requirements (paragraph 2.3); added simulator training requirements (paragraph 2.4); changed flying completion training from 90 days to 60 duty days of first unit training event (paragraph 2.5.1); changed mission qualification training (MQT) completion within 90 days to within 60 duty days of first MQT sortie (paragraph 3.1.3); Chapter 4 designated to Aircraft Commander (AC) and Instructor Pilot Upgrade (IPUG) training (chapter 4); added simulator training requirements (paragraph 4.3); changed AC upgrade flying training requirements (Table 4.1); changed Chapter 5 to Continuation Training (chapter 5); added Chapter 6 for Specialized Training (chapter 6); added entire new chapter for Mission System Operator training (chapter 7).

Chapter 1—GENERAL GUIDANCE	5
1.1. References, Abbreviations, Acronyms, and Terms.	5
1.2. Responsibilities:	5
1.3. Processing Changes:	5
1.4. Phases of Training:	5
1.5. Training Concepts and Policies:	6
1.6. Training Records and Reports:	6
1.7. Aircrew Utilization Policy:	7
1.8. Sortie Allocation Guidance:	7
1.9. Waiver Authority With MAJCOM/A3 approval, waiver authority for all requirements of the RAP tasking memo is the 53d Weapons Evaluation Group Commander (WEG/CC).	7
Chapter 2—CO-PILOT INITIAL QUALIFICATION TRAINING (IQT)	8
2.1. IQT.	8
2.2. Ground Training Prerequisites.	8
2.3. Flying Training Prerequisites.	8
2.4. Simulator Training.	8

2.5.	Flying Training:	8
Table 2.1.	CP IQT Flying Requirements.	8
Chapter 3—CO-PILOT MISSION QUALIFICATION TRAINING (MQT)		10
3.1.	Co-Pilot Mission Qualification Training (MQT).	10
Table 3.1.	CP MQT Flying Requirements.	10
Chapter 4—AIRCRAFT COMMANDER FORMAL TRAINING		11
4.1.	AC Upgrade General.	11
4.2.	Prerequisites.	11
4.3.	Simulator Training.	11
4.4.	Ground Training.	11
4.5.	AC Flying Training:	11
Table 4.1.	AC Upgrade Flying Requirements.	12
4.6.	Instructor Pilot (IP) Upgrade (IPUG).	12
Table 4.2.	Instructor Pilot Upgrade Flying Requirements.	13
Chapter 5—CONTINUATION TRAINING		15
5.1.	General.	15
5.2.	Ground Training.	15
Table 5.1.	E-9A Ground Training Requirements.	16
Table 5.2.	E-9A Annual Flying Training Requirements.	16
5.3.	Flight Surgeon (FS)/Non-Rated Aircrew:	17
5.4.	Currencies/Recurrencies:	17
Table 5.3.	E-9A Pilot Currencies in days.	17
5.5.	Proration of Training.	18
Table 5.4.	Proration Allowance.	18
5.6.	Requalification.	18
Chapter 6—SPECIALIZED TRAINING		19
6.1.	Flight Surgeon/Non-Rated Aircrew.	19
Table 6.1.	Flight Surgeon/Non-Rated Aircrew Ground Training Requirements.	19
Table 6.2.	Flight Surgeon Sorties/Training Requirements.	19
6.2.	First Pilot Program.	19
6.3.	Night Qualification.	20
6.4.	Fueling/Post Flight Servicing Certification.	20

Table 6.3.	Fueling Procedures.	20
Chapter 7—MISSION SYSTEM OPERATOR TRAINING		21
7.1.	TM and SSR Operator Basic Mission Capable (BMC) Requirements.	21
Table 7.1.	TM/SSR Operator Annual Flying Training Requirements.	21
7.2.	TM and SSR Operator Currencies.	21
Table 7.2.	TM/SSR Operator Event Currencies.	21
7.3.	Requalification.	21
Table 7.3.	TM/SSR Operator Recurrency Requirements.	21
7.4.	TM and SSR Operator Mission Qualification Training (MQT).	21
7.5.	Syllabus Training.	22
7.6.	TM and SSR Instructor Operator Upgrade Program.	22
Table 7.4.	TM/SSR Instructor Operator Upgrade Flying Requirements.	22
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION		24

Chapter 1

GENERAL GUIDANCE

1.1. References, Abbreviations, Acronyms, and Terms. See [Attachment 1](#).

1.2. Responsibilities:

1.2.1. **HQ ACC/A3.** Is designated as the responsible agency for this volume. It will process all changes to the OPR. AFD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, designates lead commands.

1.2.2. **Unit Commanders.** The unit CC will:

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

1.2.2.2. Review training and evaluation records of newly assigned aircrews and those completing training to ensure provisions of this volume are met.

1.2.2.3. Ensure training scenarios and missions are oriented to conditions anticipated in the unit mission.

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

1.2.2.5. Report end-of-cycle (01 Oct – 30 Sep) training deficiencies/shortfalls through channels to HQ ACC/A3TO. Review training programs annually.

1.2.2.6. Monitor individual currencies and requirements for assigned and attached aircrew.

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

1.2.3. **Aircrews.** Individual aircrews will:

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

1.2.3.2. Ensure they are neither scheduled for, nor participate in, flying activities for which they are not qualified and current.

1.3. Processing Changes:

1.3.1. Forward recommendations for change to this volume to HQ ACC/A3TV on AF Form 847, *Recommendation for Change of Publication*.

1.3.2. HQ ACC/A3TO will process recommendation for change.

1.3.3. Time sensitive changes will be addressed IAW AFI 33-360 guidance.

1.4. Phases of Training:

1.4.1. **Initial Qualification Training (IQT).** 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. See [Chapter 2](#) for IQT program requirements.

1.4.2. **Mission Qualification Training (MQT).** MQT provides the training necessary to initially qualify or requalify 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. See [Chapter 3](#) for MQT program requirements.

1.4.3. **Continuation Training (CT).** This training is necessary for qualified aircrew to maintain their assigned level of currency and proficiency. It provides the minimum recurring ground and flight training requirements. See [Chapter 5](#) for CT program requirements.

1.4.4. **Specialized Training.** This training is necessary to carry out the unit's assigned missions, but is not required of every crewmember. Examples of specialized training include, but are not limited to First Pilot Program, aircraft commander upgrade, instructor pilot upgrade (IPUG), and flight surgeon/non-rated aircrew. Individuals designated by the unit commander will accomplish squadron developed training programs to gain qualification or certification in specialized areas. See [Chapter 6](#) for specialized training program requirements.

1.5. Training Concepts and Policies:

1.5.1. CT for the E-9 does not utilize the Ready Aircrew Program (RAP) and will be conducted IAW [Chapter 5](#) of this instruction. Training programs will be designed to achieve the highest degree of proficiency consistent with flight safety and resource availability. Training must consider aircrew capabilities and safety.

1.5.2. Training missions will be designed to achieve proficiency in unit-tasked roles and enhance mission accomplishment and safety.

1.5.3. Aircrew proficiency and competence varies and must be closely monitored at the unit level to ensure progression. Unit commanders must ensure that training programs consider local conditions and individual capabilities to maximize training continuity.

1.5.4. For ACC units, the aircrew training cycle is 12 months (1 October through 30 September). Units will complete training requirements during the training cycle except where specifically exempted.

1.6. Training Records and Reports:

1.6.1. Units will maintain aircrew records for individual training and evaluations IAW AFI 11-401; and appropriate MAJCOM directives. Also, units will document and maintain aircrew certification/upgrade training in individual training folders IAW AFI 11-202V2, *Aircrew Standardization/Evaluation Program*.

1.6.2. The following information will be tracked for all aircrews (as applicable):

1.6.2.1. Ground training.

1.6.2.2. Individual sortie requirements and accomplishments. Event requirements and accomplishments will be tracked by cumulative total completed and remaining for the training cycle.

1.6.2.3. Currencies.

1.7. Aircrew Utilization Policy:

1.7.1. Commanders will ensure that aircrews (API-1/6s) fill authorized positions IAW unit manning documents and that crew status is properly designated. The overall objective is that aircrews perform flying related duties. Supervisors may assign aircrews to valid, short-term tasks (escort officer, FEB/mishap board member, etc.) but must continually weigh the factors involved, such as level of aircrew tasking, flying proficiency, currency, and experience.

1.7.2. No additional duties will be assigned during IQT/MQT training.

1.8. Sortie Allocation Guidance:

1.8.1. Inexperienced aircrews will receive sortie allocation priority over experienced aircrews. Attached personnel for flying will receive minimum required sorties to maintain currency requirements.

1.8.2. MAJCOMs will allocate sorties based upon the following requirements: Training to meet assigned projects, programs, and taskings; initial and mission qualification training; instructor upgrades; and basic mission capable (BMC) training that cannot be accomplished on primary missions.

1.9. Waiver Authority With MAJCOM/A3 approval, waiver authority for all requirements of the RAP tasking memo is the 53d Weapons Evaluation Group Commander (WEG/CC). Additional guidance may be provided in the memo. Unless specifically noted otherwise in the appropriate section, and also with MAJCOM/A3 approval, the WEG/CC may adjust individual requirements in Chapter 4, Chapter 5, Chapter 6, and Chapter 7 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. Waiver authority for supplemental guidance will be as specified in the supplement and approved through higher level coordination authority.

1.9.1. Individual waivers to this volume will remain valid until end of the training cycle (30 Sep) and will be reviewed annually for continued applicability.

Chapter 2

CO-PILOT INITIAL QUALIFICATION TRAINING (IQT)

2.1. IQT. This chapter outlines the initial qualifications of Co-Pilots (CP) into the E-9 aircraft.

2.1.1. CP-IQT will be conducted in accordance with this instruction and the E-9A training syllabus. Tailor ground training to individual background and experience.

2.1.2. Successful completion of CP-IQT requires the upgrading crewmember to complete an aircraft instrument qualification evaluation IAW AFI 11-2E-9V2, *E-9—Aircrew Evaluation Criteria*.

2.2. Ground Training Prerequisites. IAW AFI 11-202V1, this instruction, (Reference Chapter 4), and the E-9A syllabus.

2.3. Flying Training Prerequisites. IAW E-9A training syllabus.

2.4. Simulator Training.

2.4.1. IQT students will accomplish a commercially available initial qualification course at an FAA-approved school for a Dash 8. An end of course flight evaluation will be conducted and results will be forwarded/hand-carried to 82 ATRS/DOT.

2.4.2. The Emergency Procedures portion of the IQT evaluation will be conducted by one of the following methods (in order of preference): (1) Simulator or (2) E-9A Cockpit.

2.5. Flying Training:

2.5.1. Complete IQT within 60 duty days of the first unit training event. Failure to complete within the specified time requires notification through channels to 53 WEG/CC with aircrew name and rank, reason for delay, planned actions, and estimated completion date.

2.5.2. Students in IQT will fly under supervision from an IP with direct access to the controls until completion of the qualification check ride.

2.5.3. The following tables outline the minimum items to be performed by initial qualification CP's. Actual number of sorties may vary dependent on proficiency.

Table 2.1. CP IQT Flying Requirements.

Event	Required	Notes
Sorties	5	2
Proficiency Sorties	5	2
Takeoff	20	
Departure	5	
Steep Turn Series	3	
Stalls Series	3	
Slow Flight	3	
Vertical-S	3	
Precision Approach	6	
ILS	4	
PAR	2	1

Non-precision Approach	10	
VOR	1	
ASR	1	1
LOC	2	
NDB	1	1
TACAN	1	
RNAV	2	
Circle Approach	2	
Single-Engine Approach	3	
Single-Engine Go-Around	3	
Missed Approach Procedure with Holding	1	
Go-Around	3	
Landing	20	
Single-Engine Landing	2	
Alternate Landing Gear Extension	1	
Emergency Descent	1	
Notes:		
1. If unable to perform an event because facilities are not available, a verbal debrief is authorized.		
2. Proficiency advance is authorized when warranted by the student's flight performance.		

Chapter 3

CO-PILOT MISSION QUALIFICATION TRAINING (MQT)

3.1. Co-Pilot Mission Qualification Training (MQT).

3.1.1. The prerequisite for MQT is completion of CP-IQT.

3.1.2. During CP-MQT academic and flying training, special emphasis should be placed on: Sea Surveillance Radar Operation, Telemetry Equipment, UHF Radio Relay Operation, WSEP Mission Profiles, Electrical System Considerations, and Mission System Operator responsibilities.

3.1.3. Complete MQT within 60 duty days of the first MQT sortie. Failure to complete within the specified time requires notification through channels to 53 WEG/CC with aircrew name and rank, reason for delay, planned actions, and estimated completion date.

3.1.4. Students in MQT will fly under supervision from an IP with direct access to the controls until completion of the qualification check ride.

3.1.5. Upon completion of CP-MQT, the CP will complete a Mission Evaluation IAW AFI 11-2E-9V2, *E-9—Aircrew Evaluation Criteria*.

Table 3.1. CP MQT Flying Requirements.

Event	Required	Notes
Mission Sorties	4	1
Normal Procedures	4	1
Range Patrol	4	1
Telemetry Gathering	4	1
UHF Radio Relay	1	2
Note:		
1. Proficiency advance is authorized when warranted by the student's flight performance.		
2. If unable to perform an event because facilities are not available, a verbal debrief is authorized.		

Chapter 4

AIRCRAFT COMMANDER FORMAL TRAINING

4.1. AC Upgrade General. This chapter outlines initial and mission qualification training requirements for Aircraft Commanders (AC) of E-9A aircraft.

4.1.1. The AC upgrade program will be conducted in accordance with this instruction and the E9A training syllabus. Tailor ground training to individual background and experience; however, use available phase manuals, texts, instructor guides, and audiovisual programs as supporting material to the maximum extent possible. Exceptions to mission outline requirements, other than proficiency advancement, must be submitted for 53 WEG/CC waiver.

4.1.2. Successful completion of AC upgrade program requires the upgrading crewmember to complete a combined aircraft instrument qualification and mission evaluation IAW AFI112E9V2, *E-9—Aircrew Evaluation Criteria*. If unable to perform a combined evaluation, the instrument qualification and mission evaluations may be flown separately. If separated, the AC may fly as an Aircraft Commander on sorties he/she is qualified for (i.e. Pilot Proficiency (PP) sortie if instrument qualified and MSN sortie if mission qualified).

4.2. Prerequisites. IAW E-9A syllabus, squadron commander approval and at least 100 hours total time in E-9A or Dash 8.

4.3. Simulator Training.

4.3.1. AC upgrade students should successfully accomplish a commercially available recurrent qualification course for a Dash 8 if availability permits.

4.3.2. AC upgrade students will accomplish the Emergency Procedure portion of the AC IQT/MQT Evaluation in (in order of preference): (1) Simulator, or (2) E-9A Cockpit.

4.4. Ground Training. Students must satisfactorily complete the following unit-developed blocks of instruction prior to AC-1:

4.4.1. All students will spend at least two hours in the E-9A cockpit (on the ground with engines NOT running) with an instructor. This event is intended to familiarize the student with the E-9A cockpit layout, checklists, and crew coordination. If the commercially procured simulator is used to satisfy this requirement, an E-9A differences orientation will be conducted with an instructor (time as required based upon student proficiency).

4.4.2. All students will spend at least one hour in the E-9A cockpit (on the ground with engines NOT running), with an instructor for an Emergency Procedures (EP) review.

4.5. AC Flying Training:

4.5.1. Complete AC upgrade within 60 duty days of the first flying training event. Failure to complete within the specified time requires notification through channels to 53 WEG/CC with aircrew name and rank, reason for delay, planned actions, and estimated completion date.

4.5.2. AC upgrade students will only perform aircraft commander duties while under IP supervision until completion of the qualification check ride.

4.5.3. Table 4.1 outlines the minimum items to be performed by Aircraft Commander candidates. Actual number of sorties may vary dependent on proficiency.

Table 4.1. AC Upgrade Flying Requirements.

Event	Required	Notes
Sorties	6	1,3
Proficiency Sorties	4	1,3,4
Mission Sorties	2	1,3
Takeoff	18	1
Departure	6	1
Steep Turns	2	
Stalls	2	
Precision Approach	6	1
ILS	4	
PAR	2	2
Non-precision Approach	8	1
VOR	1	
ASR	1	2
RNAV	2	
LOC	2	
NDB	1	2
Circle Approach	1	
Single-Engine Approach	2	1
Single-Engine Go Around	2	1
Missed Approach	1	1
Landing	18	1
Single-Engine Landing	2	1
Alternate Landing Gear Extension	1	
Normal (Mission) Procedures	1	
Range Patrol	1	
Telemetry Gathering	1	
UHF Radio Relay	1	2
Emergency Descent	1	
Notes:		
1. Credit events toward continuation training.		
2. If unable to do event due to facilities outage or unavailable, verbal debrief authorized.		
3. Proficiency advance is authorized if proficiency level warrants it.		
4. At least one of these sorties will be an out-and-back/cross-country for unfamiliar airfield ops and mission planning considerations.		

4.6. Instructor Pilot (IP) Upgrade (IPUG). The 82 ATRS/CC will select only the most qualified aircrew members as instructors based upon such factors as ability, judgment, technical knowledge, skill, and experience. The 53 WEG/CC may waive flight hour requirements based on previous instructor experience.

4.6.1. Instructor Pilot Prerequisites:

4.6.1.1. 1,000 total IP/MP/FP hours with at least 200 hours in E-9A or Dash 8. The 200 hours in E-9A or Dash 8 can be waived with the concurrence of the 82 ATRS/CC and 53 WEG/CC, and a memorandum for record (MFR) with waiver justification will be placed in the instructor candidate's training folder.

4.6.2. Simulator Training.

4.6.2.1. IP upgrade students should successfully accomplish a commercially available recurrent qualification course for a Dash 8 if availability permits.

4.6.2.2. IP upgrade students will successfully accomplish the Emergency Procedure portion of the IP IQT/MQT evaluation in (in order of preference): (1) simulator, or (2) E-9A cockpit.

4.6.3. Ground Training. In addition to those requirements contained in Table 4.2, IP upgrade students must satisfactorily complete the following blocks of instruction prior to IP certification.

4.6.3.1. Principles of Instruction. Learning objectives, instructor responsibilities, IP/student relationship, training facilities and publications.

4.6.3.2. Techniques of Flight Instruction. Training objectives and environment, recognition and analysis of common student errors, instructor demos, and IP only maneuver restrictions.

4.6.3.3. Conduct of Flight Briefing. Training objectives, order of presentation, use of briefing guides and audio-visual aids, debriefing techniques.

4.6.3.4. Student Evaluations. Grading systems and preparation/use of grade sheets.

4.6.3.5. EP Review. All IP's will spend at least one hour in the E-9A cockpit (on the ground with engines NOT running), prior to IPUG-1, with an instructor for an Emergency Procedures (EP) review

4.6.4. IPUG Flying Training.

4.6.4.1. Complete upgrade training within 60 days of the first flying training event. Failure to complete within the specified time requires notification through channels to 53 WEG/CC with aircrew name and rank, reason for delay, planned actions, and estimated completion date.

4.6.4.2. Successful completion of IPUG training requires the upgrading crewmember to complete an Initial Instructor Pilot Flight Evaluation IAW AFI 11-2E-9V2. Other evaluations may be combined with this sortie provided prerequisites are accomplished.

4.6.4.3. Table 5.8. outlines the minimum items to be performed during IPUG training. Actual number of sorties may vary dependent on proficiency.

Table 4.2. Instructor Pilot Upgrade Flying Requirements.

Event	Required	Note
Sortie	4	1, 3
Proficiency Sortie	3	1, 3
Mission Sortie	1	1, 3

Takeoff	15	1
Departure	4	1
Steep Turns	2	
Stalls	2	
Precision Approach	6	1
ILS	4	
PAR	2	2
Non-precision Approach	8	1
VOR	1	
ASR	1	2
RNAV	2	
LOC	2	
NDB	1	2
Circle Approach	2	2
Single-Engine Approach	3	1
Single-Engine Go Around	3	1
Missed Approach	2	1
Landing	15	1
Single-Engine Landing	2	1
Alternate Landing Gear Extension	1	
Normal (Mission) Procedures	1	
Range Patrol	1	
Telemetry Gathering	1	
UHF Radio Relay	1	2
Emergency Descent	1	

Notes:

1. Credit events toward continuation training.
2. If unable to do event due to facilities outage or unavailable, verbal debrief authorized.
3. Proficiency advance is authorized if proficiency level warrants it.

Chapter 5

CONTINUATION TRAINING

5.1. General. This chapter outlines continuation training (CT) requirements for E-9A pilots. Aircrews must have completed MQT, be qualified IAW AFI 11-2E-9V2 and have been certified as BMC to be eligible to enter continuation training.

5.2. Ground Training. Ground training in Table 4.1 accomplished during IQT/MQT may be credited toward CT requirements for the training cycle in which it was accomplished.

5.2.1. Physiological Training (Altitude Chamber). Aircrew will maintain physiological training requirements current IAW AFI 11-403, *Aerospace Physiological Training Program*, and MAJCOM supplement.

5.2.2. Instrument Refresher Course. Aircrew will maintain instrument refresher training requirements current IAW AFMAN 11-210, *Instrument Refresher Course Program*; AFI 11-202V2; and MAJCOM supplement.

5.2.3. Life Support Egress/Non-Ejection Training. Evaluates aircrew and passenger ability to demonstrate proficiency in air and ground emergency egress procedures. Stress the importance of aircrew coordination, aircrew and passenger responsibilities and use of appropriate emergency egress equipment. Ensure aircrews are aware of their responsibilities for conducting safety and passenger briefings IAW AFI 11-202V3, *General Flight Rules*.

5.2.4. Life Support Equipment Training. An academic and equipment training event, in which aircrew members demonstrate their ability to locate, preflight, and use all aircrew and passenger Aircrew Life Support Equipment (ALSE) carried aboard unit aircraft or issued to aircrew members. This training includes the limitations and safety issues related to ALSE. Additionally, include aircrew clothing items and information on hazards associated with improper wear and failure to use only authorized clothing and equipment items.

5.2.5. Life Support Water Survival Training. Aircrew will demonstrate proficiency in TTP (tactics, techniques, and procedures) for survival and recovery from a water environment using weapons system specific survival equipment. This training should be conducted in natural waters (pond, lake, or ocean) or an environmental pool if logistically possible. Training in swimming pools is authorized if overall training objectives are not compromised. WST (water survival training) will utilize the demonstration and performance method of instruction.

5.2.6. Flying Safety Training. Aircrew will attend quarterly flying safety meetings.

5.2.7. Local Area Survival (LAS). This is a one-time training requirement prior to first flight.

5.2.8. Situational Emergency Procedures Training (SEPT). This training is not an evaluation but a review of abnormal/emergency procedures and aircraft systems operations/limitations during realistic scenarios. One pilot should establish a situation and the other(s) discuss actions necessary to cope with the malfunction and carry it to a logical conclusion. All BOLDFACE procedures will be covered. Each pilot should share equal time responding to emergency situations. SEPTs will be accomplished each calendar month.

Failure to accomplish by the end of the month will result in grounding until subsequently completed.

5.2.9. Crew Resource Management (CRM). CRM trains crewmembers to cope with potential problems in human behavior affecting crew performance. Each aircrew member is required to participate in one training session every 2 years. CRM will be taught by CRM qualified Facilitators/Instructors. This is a mandatory grounding item and the individual will not fly until the required training is accomplished.

5.2.10. Ancillary Training. Ancillary training is required for all Air Force personnel. Frequency for this training will be IAW AFI 36-2201, *Air Force Training Program*. Training does not affect BMC/flying status, and does not require PQI action.

5.2.11. Emergency Procedures Simulator. E-9A pilots will accomplish one emergency procedures simulator (FAA Category C minimum) per year.

Table 5.1. E-9A Ground Training Requirements.

Subject	Frequency	Directive	Grounding
Flight Physical	Annual	AFI 48-123	Yes
Physiological Training (Altitude Chamber)	Every 5 years	AFI 11-403	Yes
Instrument Refresher Course	Annual	AFMAN 11-210 & AFI 11-202V2, as supplemented	No
Life Support Egress/Non-Ejection	Annual	AFI 11-301 as supplemented	Yes
Life Support Equipment Training	Annual	AFI 11-301,	Yes
Life Support Non-Combat Survival Training	Triennial	AFI 16-1301	No
Life Support Water Survival Training	Triennial	AFI 16-1301	No
Flying Safety Training	Quarterly	AFI 91-202, ACC SUP 1	No
Local Area Survival	Initial Only (Prior to first flight)	AFI 16-1301	Yes
Situational Emergency Procedures Training	Monthly	AFI 11-2E-9V1	Yes
Crew Resource Management (CRM)	Biennial	AFI 11-290, AFI 11-202V1	Yes
Emergency Procedures Simulator	Annual	AFI 11-2E-9V1	Yes

Table 5.2. E-9A Annual Flying Training Requirements.

Event	BMC Rate
Mission Sortie	20
Takeoff	20
Landings	20

Pilot Proficiency Sortie	10
Precision Instrument Approach	15
Non-Precision Instrument Approach	15
Single-Engine Approaches	10
Minimum Total Sorties	40

5.3. Flight Surgeon (FS)/Non-Rated Aircrew:

5.3.1. Flight surgeons and non-rated aircrew may fly selected missions. Initial checkout IAW paragraph 5.2.

5.3.2. Flight Surgeons and non-rated aircrew flying rates and requirements will be IAW AFI 11-202V1.

5.4. Currencies/Recurrencies:

5.4.1. Currency. Table 4.3. defines currency requirements for all E-9A aircrews. If a pilot loses a particular currency, that sortie/event may not be performed except under direct IP supervision.

Table 5.3. E-9A Pilot Currencies in days.

Event	INEXP	EXP	Notes
Sortie	30	45	1,2
Landing	30	45	2,3
Single-Engine Landing	45	60	2
Single-Engine Go-Around	45	60	2
Takeoff	30	45	2
Precision Approach	30	45	2
Pilot Proficiency Sortie	60	60	2
Mission Sortie	60	60	2
Go-around	30	45	2
Touch-n-Go	30	45	2,3
Night Landing	90	90	2,3

Notes:

- Sortie can be a mission or pilot proficiency sortie to regain currency.
- IP supervision required with direct access to controls to regain currency.
- A landing in either seat updates currency for dual-seat qualified pilots.

5.4.2. Proficiency Sortie. Allows pilots to practice instrument, transition, and emergency procedures. The following are the minimum required maneuvers to credit a Proficiency Sortie (comply with restrictions in AFI 11-2E9V3): review of boldface emergency procedures, one precision approach, one non-precision approach, one circling approach (traffic permitting), one simulated engine-out go-around or one simulated engine-out landing, (weather and passengers permitting), and one VFR traffic pattern (weather permitting).

5.4.3. Mission Sortie. Allows pilots and crewmembers to perform the Sea Surveillance Radar (SSR) and/or Telemetry (TM) collection roles of the E-9A. The following are the minimum required maneuvers to credit a Mission sortie (comply with restrictions in AFI 11-2E9V3): SSR, UHF Relay, and/or TM collection.

5.4.4. Regression to Non-BMC. Aircrews who fail to complete requirements of this volume will either be regressed to non-BMC status, meet PQI action IAW AFI 11-401, or be removed from flying status depending on the particular currency requirements and circumstances for non-currency. Aircrew in non-BMC status will fly with an IP until restored to BMC status.

5.5. Proration of Training. When aircrew members are not available for flying duties, the unit CC may prorate as per [Table 4.4](#)

Table 5.4. Proration Allowance.

Consecutive Days of Non-Flying	Months of Proration Allowed
0-15	0
16-45	1
46-75	2
76-105	3
106-135	4
136-165	5
166-195	6
196-225	7
Over 225	See Paragraph 4.6.3

5.5.1. Proration will only be used to adjust for genuine circumstances of training non-availability, not to mask training or planning deficiencies.

5.6. Requalification. Loss of landing currency beyond 90 days requires the following action: (timing starts from date that aircrew member last accomplished a full stop landing)

5.6.1. **91-135 Days.** Pilot proficiency sortie, regain landing currency with IP.

5.6.2. **136-210 Days.** Same as 4.6.1., plus take "Spot" Evaluation/Qualification in Landings.

5.6.3. **211 or More Days.** Repeat IQT and MQT.

Chapter 6

SPECIALIZED TRAINING

6.1. Flight Surgeon/Non-Rated Aircrew.

6.1.1. Ground Training. Flight surgeons and non-rated aircrew, who are attached to the E-9A will accomplish the training listed in [Table 5.1](#) prior to their first flight

Table 6.1. Flight Surgeon/Non-Rated Aircrew Ground Training Requirements.

Event	Frequency	Directive	Notes
Flight Physical	Annual	AFI 48-123	
Physiological Training	Every 5 years	AFI 11-403	
CRM	Initial Only	AFI 11-290, AFI 11-202V1	1
Life Support Equipment Training	Annual	X	
Egress Training	Annual		
Life Support Water Survival Training	Triennial	AFI 16-1301	
Written Examination	Initial Only	AFI 11-202 V1	
Notes:			
1. Requirement for flight surgeons only in primary assigned aircraft IAW AFI 11-202V1.			

6.1.2. Flight Training. The first flight in the unit-assigned aircraft will be flown with an IP and may be flown in conjunction with other training sorties. The briefing and sortie will emphasize crew coordination, aircraft egress, communications, emergency equipment, and local area procedures.

6.1.3. Flight surgeons will follow sortie requirements per AFI 11-202V1.

Table 6.2. Flight Surgeon Sorties/Training Requirements.

Event	Semi-Annual Period	Yearly Period	Currency
Sortie	Minimum: 6	Minimum: 12	60 Days
Note: Table is for quick reference only. Refer to AFI 11-202V1 for notes.			

6.2. First Pilot Program.

6.2.1. First Pilot Program (FPP). Intent is to provide greater opportunities for left seat experience prior to formal aircraft commander upgrade training programs. It makes best use of limited resources and allows enhanced opportunity of left seat training.

6.2.2. The 82 ATRS DO will approve entry into the first pilot program based upon experience and aptitude.

6.2.3. Ground. Pre-requisites will be IAW E-9A Training Syllabus.

6.2.4. Flight. The FPP trainee will occupy the left seat and an instructor pilot will occupy the right seat.

6.3. Night Qualification. Aircrew members will be qualified for night flying based upon mission requirements.

6.3.1. Ground Training. Before flight, aircrews must cover night specific items for a minimum of 1 hour with an instructor. Briefing should cover: operation of lights, electrical out procedures, night illusions, spatial disorientation, and other night related topics as seen appropriate by the instructor.

6.3.2. Flying Training. Training consists of one night flight with an instructor and satisfactorily making three night landings. If there are no IPs current or qualified in night landings, both pilots (one of which is the instructor) will have made a day landing within the previous 21 days.

6.4. Fueling/Post Flight Servicing Certification.

6.4.1. General. All E-9A pilots will complete specific training to become knowledgeable and proficient in E-9A post-flight servicing procedures. This training expands upon systems academics and enhances individual aircrew knowledge of these procedures should aircrew have the need to service the aircraft (i.e., weather divert, out-and-back, HUREVAC exercise). Training and certification should occur prior to AC upgrade training.

6.4.1.1. The following training events will be completed (in no specific order):

Table 6.3. Fueling Procedures.

Fueling Procedures Familiarization Training (completed at aircraft) -instructed by MX personnel or a qualified E-9A IP who has completed this training -includes, but not limited to: fueling procedures, forms procedures
Post-Flight Procedures (completed at aircraft) -instructed by MX personnel or a qualified E-9A IP who has completed this training -includes, but not limited to: checking/servicing oil, pin/prop tether installation, air intake installation and removal, inspection procedures, Forms procedures
Self-Study -T.O. 1E-9A-1 (Sect. 1: Fuel, Sect. 5: Fuel) -E-9A Aircraft Refuel/Defuel Checklist -T.O. 00-25-172 -PSM 1-8-2 (Chap. 12)
Observe a Post-Flight Refueling Sequence
Conduct a Supervised Refueling of Aircraft
Take and pass the Re/Defuel Test

Chapter 7

MISSION SYSTEM OPERATOR TRAINING

7.1. TM and SSR Operator Basic Mission Capable (BMC) Requirements.

7.1.1. TM and SSR operators will accomplish the annual training events as required by Table 7.1 below:

Table 7.1. TM/SSR Operator Annual Flying Training Requirements.

Event	BMC Rate
Telemetry Relay Sorties	20
Sea Surveillance Sorties	20

7.1.2. The 82 ATRS/DO may prorate TM and SSR operator annual training event requirements for unusual circumstances such as extended DNIFs, TDYs, etc., in accordance with Table 4.4.

7.2. TM and SSR Operator Currencies.

7.2.1. Table 6.2 below defines sortie currency requirements for TM and SSR operators. A TM or SSR operator is considered experienced if he or she has 100 flying hours as the primary TM/SSR operator.

Table 7.2. TM/SSR Operator Event Currencies.

Event	Exp	Inexp
TM Relay	45 days	30 days
Sea Surveillance	45 days	30 days

7.3. Requalification. Loss of telemetry relay or sea surveillance currency beyond the following limits requires recurrency action as specified in Table 6.3 below:

Table 7.3. TM/SSR Operator Recurrency Requirements.

Days	Recurrency Action
31-90	Review TM/SSR procedures with an instructor
91-180	Review TM/SSR procedures with an instructor and complete written qual exam
>180	Review TM/SSR procedures with an instructor, complete written qual exam, and fly a minimum of one recurrency sortie with an instructor

7.4. TM and SSR Operator Mission Qualification Training (MQT).

7.4.1. General. The objective of SSR operator MQT is to produce fully qualified E-9A SSR operators. TM operators who complete MQT are qualified to perform telemetry relay missions.

7.4.2. Course Pre-Requisites. Prior to entering E-9A TM/SSR Operator Mission Qualification Training, the student must possess a five-skill level in telemetry/radar operations, or similar military or civilian training equivalent to the five-skill level. In addition, the student will complete the following prior to enrollment in the course:

7.4.2.1. Flight Physical

7.4.2.2. Entry into ARMS

7.4.2.3. Physiological Training (altitude chamber)

7.5. Syllabus Training. Syllabi will be implemented through the 82 ATRS Chief of Training (82 ATRS/DOT). The syllabi will include all aspects of TM/SSR operator MQT to include academics, static aircraft and flying training, and overall course administration.

7.6. TM and SSR Instructor Operator Upgrade Program.

7.6.1. General. The 82 ATRS/CC will select only the most qualified E-9A TM/SSR operators as instructors, considering ability, judgment, technical knowledge, skill, and experience. The 53 WEG/CC may waive requirements based on previous instructor experience.

7.6.2. Instructor Prerequisites:

7.6.2.1. 150 primary flying hours or 3 years as primary TM/SSR operator in the E-9A.

7.6.2.2. Must possess and demonstrate communications skills, technical knowledge, abilities, and experience suitable to assume instructor duties and responsibilities.

7.6.3. Ground Training. Upgrading aircrew members must satisfactorily complete the following blocks of instruction prior to certification as a TM or SSR instructor operator:

7.6.3.1. Principles of Instruction. Learning objectives, instructor responsibilities, instructor/student relationship, training facilities, and publications (to include syllabus).

7.6.3.2. Techniques of Flight Instruction. Training objectives and environment, recognition and analysis of common student errors, instructor demonstrations, and instructor- only mission restrictions.

7.6.3.3. Conduct of Flight Briefing. Training objectives, order of presentation, use of briefing guides and audio-visual aids, and debriefing techniques.

7.6.3.4. Student Evaluations. Grading systems and preparation/use of ACC Form 206 pre-printed grade sheets.

7.6.3.5. Emergency Procedures Review. Conducted in the aircraft (engines NOT running) with an instructor.

7.6.4. Flying Training. Table 6.4 below outlines the minimum items to be performed during instructor flying training. The total number of sorties will vary depending on instructor trainee proficiency but will not be less than two sorties.

Table 7.4. TM/SSR Instructor Operator Upgrade Flying Requirements.

Event	Required	Note
Mission Flight	4	1, 2, 3

In-flight TMRS/SSR Malfunction Analysis	3	
In-flight Emergency Procedures	3	
Demonstrate Instructional Ability	4	3
Notes:		
<ol style="list-style-type: none"> 1. Credit events toward continuation training. 2. Mission flight consists 3. Proficiency advance is authorized if proficiency level warrants it. 		

7.6.5. Successful completion of TM or SSR instructor operator upgrade training requires the upgrading crewmember to complete an Initial Instructor Flight Evaluation.

HERBERT J. CARLISLE, Lt Gen, USAF
DCS, Operations, Plans and Requirements

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

- AFI 11-2E-9V2, *E-9—Aircrew Evaluation Criteria*, 16 Sep 2011
- AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 19 Jan 2012
- AFI 11-202V1, *Aircrew Training*, 22 Nov 2010
- AFI 11-202V2, *Aircrew Standardization/Evaluation Program*, 13 Sep 2010
- AFI 11-202V3, *General Flight Rules*, 22 Oct 2010
- AFI 11-290, *Cockpit/Crew Resource Management Training Program*, 11 Apr 2001
- AFI 11-301, Vol 1, *Aircrew Flight Equipment Program*, 25 Feb 2009
- AFI 11-401, *Aviation Management*, 10 Dec 2010
- AFI 11-403, *Aerospace Physiological Training Program*, 20 Feb 2001
- AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*, 06 Sep 2006
- AFI 33-360, *Publications and Forms Management Program*, 18 May 2006
- AFI 36-2201, *Air Force Training Program*, 15 Sep 2010
- AFI 91-202, *The US Air Force Mishap Prevention Program*, 05 Aug 2011
- AFMAN 11-210, *Instrument Refresher Program (IRP)*, 03 Feb 2005
- AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 8 Mar 2007
- AFPD 11-2, *Aircrew Operations*, 19 Jan 2012
- AFPD 11-4, *Aviation Service*, 1 Sep 2004

Adopted Form

- AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

- A3T**—Flight Operations Division (ACC/A3T)
- AC**—Aircraft Commander
- ACC**—Air Combat Command
- ALSE**—Aircrew Life Support Equipment
- AFORMS**—Air Force Operations Resource Management System
- AFSC**—Air Force Specialty Code
- AC**—Aircraft Commander
- API**—Aircrew Position Indicator

ASR—Airport Surveillance Radar
ATRS—Aerial Targets Squadron
AWC—Air Warfare Center
BMC—Basic Mission Capable
CAF—Combat Air Force
CC—Commander
CP—Copilot
CRM—Cockpit Resource Management
CT—Continuation Training
DNIF—Duty Not Including Flying
DO—Director of Operations
EP—Emergency Procedure
FCIF—Flight Crew Information File
FEB—Flying Evaluation Board
FP—First Pilot
FPP—First Pilot Program
FS—Flight Surgeon
HQ—Headquarters
HHQ—Higher Headquarters
HUREVAC—Hurricane evacuation
IAW—In accordance with
IFR—Instrument Flight Rules
ILS—Instrument Landing System
INTRO—Introduction
IP—Instructor Pilot
IPUG—Instructor Pilot Upgrade
IQT—Initial Qualification Training
LOC—Localizer
MAJCOM—Major command
MQT—Mission Qualification Training
NCO—Noncommissioned officer
NDB—Nondirectional Radio Beacon

OPR—Office of Primary Responsibility
OPSEC—Operational Security
PAA—Primary Aircraft Authorized
PAR—Precision Approach Radar
PQI—Professional Qualification Index
RTB—Return to Base
SEFE—Stan/Eval Flight Examiner
SELO—Stan/Eval Liaison Officer
SEPT—Situational Emergency Procedures Training
SOF—Supervisor of Flying
SQ/CC—Squadron Commander
SSR—Surface Surveillance Radar
TACAN—Tactical Air Navigation
TDY—Temporary Duty
TM—Telemetry
TTP—Tactics, Techniques, & Procedures
UIP—Upgrading Instructor Pilot
UMD—Unit Manning Document
USAFWC—United States Air Force Warfare Center
VFR—Visual Flight Rules
WEG—Weapons Evaluation Group
WST—Water Survival Training

Terms

Ancillary Aircrew Training—Ground training given to aircrews that relate to flying operations (category 2) as well as being a member of the Air Force (category 3).

Emergency Procedures Evaluation—An evaluation of aircrew knowledge and responsiveness to critical and non-critical EPs conducted by a SEFE.

Experienced Aircrew—For pilots: hours are FP/MP/IP hours logged in aircraft with an assigned AFSC of 11xx. Either 200 hrs E-9A or Dash 8 time, or 1,000 hrs FP/MP/IP, of which 100 are E-9A or Dash 8 time.

Initial Qualification Training (IQT)—Training to qualify the aircrew in basic aircraft flying duties without specific regard to the unit's operational mission.

Basic Mission Capable (BMC)—A status of an aircrew member who has satisfactorily completed training prescribed to perform the unit mission.

Mission Qualification Training (MQT)—Training required to achieve a basic level of competence in unit's primary tasked missions.

Pilot Qualification Index (PQI)—AFI 11-401 index used to identify aircrews who fail to complete basic training minimums and requirements that have not been waived.

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.

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

Squadron Supervisor—Squadron commander, operations/assistant operations officers, flight commanders.