

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**



**AIR FORCE INSTRUCTION
11-2QF-4, VOLUME 1**

1 OCTOBER 2003

Flying Operations

QF-4 AIRCREW TRAINING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: HQ ACC/DOTO (Lt Col Mark J. Little)

Certified by: HQ USAF/XOO
(Brig Gen Teresa M. Peterson)

Supersedes ACCI 11-F/QF-4, F/QF-106,
dated 10 Feb 95

Pages: 30
Distribution: F

This volume implements AFD 11-2, *Aircraft Flight Rules and Procedures*; AFD 11-4, *Aviation Service*; and AFI 11-202V1, *Aircrew Training*. It applies to all QF-4 units and establishes minimum Air Force standards for training and qualifying personnel to perform duties in the QF-4 and operate the QF-4 under remote control. This volume is not applicable to Air National Guard or Air Force Reserve Command units, nor is it applicable to the F-4F. MAJCOMs/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/XOOT, through HQ ACC/DOTO, for approval prior to publication IAW AFD 11-2. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/XOOT, HQ ACC/DOTO, 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 volume to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **NOTE:** 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 33-360V1, *Publications Management Program*. See paragraph 1.3. of this volume for guidance on submitting comments and suggesting improvements to this publication.

This volume requires the collection or maintenance of information protected by the Privacy Act of 1974. The authority to collect and maintain the records prescribed in this volume are 37 USC 301a, *Incentive Pay*; 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*; and E.O. 9397. System of records notice F011 AF XO A, Aviation Resource Management System (ARMS) applies. The reporting requirements in this volume are exempt from licensing in accordance with paragraph 2.11.10 of AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Intra-agency Air Force Information Collections*. Ensure that all records created by this AFI are maintained IAW AFMAN 37-123, *Management of Records*, and disposed of IAW AFMAN 37-139, *Records Disposition Schedule*.

This is the first publication of AFI 11-2QF-4 and contains substantially revised guidance from ACCI 11-F/QF-4, F/QF-106 Vol 1 dated 10 February 1995 which it supersedes.

Chapter 1— GENERAL GUIDANCE	4
1.1. Abbreviations, Acronyms, and Terms:	4
1.2. Responsibilities:	4
1.3. Processing Changes:	5
1.4. Training.	5
1.5. Training Concepts and Policies:	5
1.6. Ready Aircrew Program (RAP) Policy and Management:	6
1.7. Training Sortie Program Development:	6
1.8. Training Records and Reports:	6
1.9. Armament Recording:	7
1.10. Aircrew Utilization Policy:	7
1.11. Sortie Allocation Guidance:	7
1.12. Waiver Authority:	7
Chapter 2— FORMAL TRAINING	8
2.1. General:	8
2.2. Approval/Waiver for IQT:	8
2.3. Prerequisites:	8
2.4. Ground Training:	8
2.5. Flying Training:	9
Chapter 3— MISSION QUALIFICATION TRAINING	12
3.1. General:	12
3.2. Ground Training:	12
3.3. Flying Training:	12
Chapter 4— CONTINUATION TRAINING	15
4.1. General:	15
4.2. Ground Training:	15
Table 4.1. Ground Training.	16
4.3. Mission Capable (MC) Requirements:	17
Table 4.2. QF-4 Annual Flying Training Requirements.	17

4.4.	Flight Surgeon (FS):	17
4.5.	Currencies/Recurrencies:	17
Table 4.3.	QF-4 Pilot Currencies.	18
4.6.	End of Cycle Requirements:	18
4.7.	Proration of End-of-Cycle Requirements:	18
Table 4.4.	Proration Allowance.	19
4.8.	Landing/Sortie Recurrency:	19
4.9.	Touch and Go Landings:	20
Chapter 5—	SPECIALIZED TRAINING	21
5.1.	Orientation Flights:	21
5.2.	Flight-Lead Upgrade:	21
5.3.	Non-Rated Aircrew Member/ Flight Surgeon Flying Program:	21
5.4.	Instructor Pilot (IP) Upgrade:	22
5.5.	Instruments:	23
5.6.	Remote Controller Initial Qualification Training:	23
5.7.	Remote Controller Continuation Training:	24
Table 5.1.	QF-4 FSAT Controller Annual Flying Training Requirements.	24
Table 5.2.	QF-4 FSAT Controller Currencies for NULLO Missions.	24
5.8.	Forms Adopted.	25
Attachment 1—	GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	26

Chapter 1

GENERAL GUIDANCE

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

1.2. Responsibilities:

1.2.1. HQ ACC/DO is designated as the responsible agency for this volume IAW AFD 11-2, *Aircraft Rules and Procedures*. HQ ACC/DO will:

1.2.1.1. Chair semiannual 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/DOs 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. HQ AWFC will:

1.2.2.1. Determine training requirements to meet expected unit tasking.

1.2.2.2. Submit supplements to HQ USAF/XOOT, through HQ ACC/DOTO, for approval before publication. Provide HQ USAF/XOOT, HQ ACC/DOTO, and all applicable MAJCOM/DOs a copy of their supplements after publication.

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

1.2.3. The 53 Weapons Evaluation Group (WEG) will:

1.2.3.1. 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.

1.2.3.2. Review programs and manning position designations annually.

1.2.3.3. If applicable, forward supplements of the instruction and other supporting documents to the HQ AFWC for review. Review supplements annually.

1.2.3.4. Identify training shortfalls through appropriate channels.

1.2.4. Squadron supervision will:

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

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

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

1.2.4.4. Review qualifications and training requirements of non-crewmembers and determine appropriate flight restrictions.

1.2.4.5. Report end-of-cycle training deficiencies through channels to HQ ACC/DOT.

1.2.4.6. Monitor individual assigned/attached aircrew currencies and requirements.

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

1.2.5. Individual aircrews will:

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

1.2.5.2. Be responsible for completion of training requirements and currencies within the guidelines of this instruction.

1.2.5.3. 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 HQ AWFC on AF Form 847, **Recommendation for Change of Publication**.

1.3.2. HQ AWFC will forward approved recommendations to HQ ACC/DO.

1.3.3. HQ ACC/DO will:

1.3.3.1. Process recommendation for change after approval by HQ USAF/XO.

1.3.3.2. Address time sensitive changes by immediate action message.

1.3.4. HQ AWFC will determine training requirements for subordinate units. This includes making changes, additions, or deletions to this volume at any time. These changes may be via supplement or message. HQ ACC/DO will be an info addressee on all changes. HQ ACC/DO will include HQ AWFC supplement guidance in the next publication of the AFI.

1.4. Training. Training programs are designed to progress aircrews from Initial Qualification Training (IQT), then to Mission Qualification Training (MQT), and finally to Continuation Training (CT).

1.4.1. IQT provides the training necessary to initially qualify aircrews in a basic position and flying duties without regard to a unit's mission.

1.4.2. MQT provides the training necessary to upgrade aircrews to Mission Capable (MC) status.

1.4.3. CT provides the training necessary to maintain aircrews proficiency in unit specific missions.

1.4.3.1. Specialized training is training in any special skills necessary to carry out the unit's assigned missions that are not required by every aircrew and consists of upgrade training such as Flight Lead, Instructor, Remote Controller upgrade, etc.

1.5. Training Concepts and Policies:

1.5.1. Units will design training programs to achieve the highest degree of proficiency consistent with flight safety and resource availability. Training must balance the need for realism against aircrew capabilities and safety. This instruction 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/DO. Other MAJCOMs may submit requests for training program support to the HQ ACC/DO. If validated, these requests will be prioritized and tasked to ACC TRSS.

1.5.3. Training missions will be designed to achieve proficiency in unit-tasked roles and enhance mission accomplishment and safety. It is imperative that full-scale aerial target (FSAT) pilots receive sufficient uncoupled, hands-on flying to achieve a high state of basic transition, instrument, and formation proficiency.

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 may be required.

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

1.5.5. Aircrew proficiency and competence varies and must be closely monitored at the unit level to ensure progression from basic skills to coupled flight. Unit commanders must ensure that training programs consider local conditions and individual capabilities to maximize training continuity. Effective training is founded on aircrew confidence in basic skills such as transition, formation, and instruments. Training managers must ensure training programs include regular, recurring exposure to fighter flying fundamentals.

1.5.6. Aircrews will not be required to accomplish ground and/or ancillary training except as required by this instruction or other Air Force policy directives.

1.5.7. The aircrew training cycle is 12 months; 1 October through 30 September. Units will complete training requirements during the appropriate training cycle unless specifically exempted.

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

1.7. Training Sortie Program Development: N/A.

1.8. Training Records and Reports:

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

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

1.8.1.2. AFI 11-202V2, *Aircrew Standardization/Evaluation Program*.

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

1.8.1.4. AFMAN 37-139, *Records Disposition Schedule*.

1.8.1.5. AFM 171-190V2, Sections A through K.

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

1.8.2.1. Ground training.

1.8.2.2. Requirements and accomplishments of individual sorties and events cumulatively for the training cycle.

1.8.2.3. Currencies.

1.8.3. Units will fill in ARMS with either the date of the last FTU or USAFWS equivalent training accomplished or the unit mission certification date.

1.9. Armament Recording: N/A.

1.10. Aircrew Utilization Policy:

1.10.1. 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.

1.10.2. Duties required by various regulations that may be assigned to CAF API-1 aircrews are weapons and tactics officer, programmer, flying safety officer, SOF, mobility/contingency plans, training (except AFMS documentation), SQ Standardization/Evaluation Liaison Officer (SELO), squadron life support officer, electronic combat officer, and other duties directly related to flying operations. In some instances, such as squadron-assigned flying 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 aircrew API-1 manning is 100 percent or better. CCs will ensure wing staff aircrews (API-3/6s) perform duties justified in MAJCOM manpower standards documents and authorized in UMDs.

1.11. Sortie Allocation Guidance:

1.11.1. Inexperienced aircrews should receive sortie allocation priority over experienced aircrews.

1.11.2. Priority for sortie allocation should be requirements directed by MAJCOM, training required to prepare for assigned projects/programs/taskings, IQT/MQT, instructor upgrade, and MC training requirements that cannot be accomplished on primary missions.

1.12. Waiver Authority:

1.12.1. Unless specifically noted otherwise in the appropriate section, waiver authority for requirements of this volume is the group commander. This waiver is on a case by case basis considering the experience level of the individual aircrew.

1.12.2. Units will submit a summary of all locally waived requirements. This report will be sent directly to ACC/DOT on or before 31 October of each year.

Chapter 2

FORMAL TRAINING

2.1. General: This chapter outlines Initial Qualification Training (IQT) of aircrews into the QF-4 aircraft. IQT will be conducted using the local upgrade transition/requalification training course outlines specified in this instruction. 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.

2.1.1. Successful completion of IQT requires the upgrading crewmember to complete an aircraft qualification and instrument evaluation IAW AFI 11-2F/QF-4V2.

2.1.2. Initial/requalification flight training for colonel selectees and above requires HQ ACC/DO approval.

2.2. Approval/Waiver for IQT:

2.2.1. Waivers to the mission outline requirements must be submitted to 53 WEG/CC for approval. When requesting a waiver to mission outline, include the following:

2.2.1.1. Summary of individual's flying experience.

2.2.1.2. Date training will begin and expected completion date.

2.2.1.3. Exceptions requested, with rationale.

2.3. Prerequisites: Prerequisites will be IAW this volume and AFJI 10-220 (if appropriate).

2.3.1. Military pilots entering training will have 1000 FP/MP/IP hours in either the F-4 or other high performance jet fighters. Pilots lacking high performance jet fighter time but who have flown the (A)T-38 as an instructor may be considered, subject to 53 WEG/CC approval.

2.3.2. Civilian contractor aircrews entering training will meet the prerequisites and minimum qualifications as contained in AFJI 10-220. In addition:

2.3.2.1. Civilian contractor aircrews with no prior F-4 experience will meet the requirements for experienced aircrews (IAW paragraph **2.3.1.** above).

2.3.2.2. Civilian contractors will forward request for government training IAW procedures outlined in AFJI 10-220.

2.4. Ground Training: The government flight representative (GFR) will direct contractor academic instructors to develop blocks of instruction covering areas pertinent to the mission. Academic training will be completed and documented in the aircrew's training folder prior to beginning flying training. Since QF-4 simulators do not exist, cockpit familiarization and emergency procedures training will be accomplished in a cockpit procedures trainer or static aircraft.

2.5. Flying Training:

2.5.1. Complete training within 60 calendar days of the beginning of training. Failure to complete within the specified time requires notification to the 53 WEG/CC with aircrew name and rank, reason for delay, planned actions, and estimated completion date.

2.5.2. Aircrews in IQT will fly under IP supervision (dual or chased) until completion of the qualification check ride. If the trainee is flying solo, he must remain in VMC conditions throughout the mission. Dedicated formation sorties may be flown by MC QF-4 pilots in support of IQT formation missions if an IP occupies the trainee's RCP. In this case, remaining VMC is not required.

2.5.3. Fly TR-1 through TR-4 in sequence. TR-1 through TR-3 require a two-seat aircraft with an IP in the rear cockpit.

2.5.4. TR-1 through TR-10 will be flown for pilots without previous experience in the F-4.

2.5.5. For aircrews with previous F-4 experience, proficiency advancement may be authorized in writing by the unit CC. The following missions may be proficiency advanced during IQT: TR-2 Transition, TR-6 Formation, TR-8 Formation and Aerobatics, and TR-9 Instruments.

2.5.6. Dual Seat Aircraft. It is highly desirable to accomplish training with two-seat type aircraft for TR-7, 9 and 10. When using two-seat aircraft, touch-and-go landings may be practiced provided the IP is on board. However, if two-seat aircraft are not available the missions may be flown with the IP in a chase aircraft.

2.5.7. Aircraft Configuration. Configuration for all transition and instrument upgrade sorties will be symmetrical.

2.5.8. Night Requirements. Night IQT training is not required for QF-4 pilots. However, if night operations are required, the pilot must have flown a precision approach within 30 days and a day landing within 21 days.

2.5.9. IQT Syllabus Missions. (**NOTE:** All IQT training sorties without an IP in the student's aircraft will be conducted under VMC).

2.5.9.1. TR-1 Aircraft Familiarization:

2.5.9.1.1. QF-4 two-seat aircraft (P/IP).

2.5.9.1.2. Weather Minimums: Suitable for VFR traffic patterns.

2.5.9.1.3. Mission Description: Supervised walk-around. Normal ground checks and taxi. Takeoff and departure to area. In working area: IP demo rig/stab-aug/slat check and transition maneuvers including: confidence maneuvers, aerobatic maneuvers, steep turns, unusual attitude/ recoveries, AOA recoveries and approaches to stall (1G and configured). RTB to traffic pattern for normal straight-in and overhead touch-and-go landings.

2.5.9.2. TR-2 Transition (may be proficiency advanced IAW para 2.5.5. above):

2.5.9.2.1. QF-4 two-seat aircraft (P/IP).

2.5.9.2.2. Weather Minimums: Suitable for VFR traffic patterns.

2.5.9.2.3. Mission Description: Normal ground checks, taxi, and takeoff. Heavyweight PAR/ ILS low approach immediately after takeoff. Departure to area. In working area: Rig/stab-aug/

slat check, transition maneuvers (see TR-1), RTB for a touch-and-go from a published instrument approach. Practice emergency and normal patterns and touch-and-go landings.

2.5.9.3. TR-3 Transition:

2.5.9.3.1. QF-4 two-seat aircraft (P/IP).

2.5.9.3.2. Weather Minimums: Suitable for VFR traffic patterns.

2.5.9.3.3. Mission Description: Normal ground checks and taxi. Normal takeoff and departure to nearby suitable alternate airfield. TACAN penetration and low approach/touch and go. In working area: Rig/stab-aug/slat check, transition maneuvers (see TR-1), RTB for a touch-and-go from a published instrument approach, VFR traffic patterns and pre-coordinated approach-end cable engagement (desired, not required). Student must demonstrate proficiency in emergency and normal patterns and touch-and-go landings.

2.5.9.4. TR-4 Student Solo/Introduction to Formation:

2.5.9.4.1. Two QF-4 aircraft (P), (IP).

2.5.9.4.2. Weather Minimums: Must remain VMC.

2.5.9.4.3. Mission Description: Normal takeoff and departure with IP chase. In working area: Rig/stab-aug/slat check. Practice transition maneuvers with IP chase. IP will lead student through formation maneuvers including: route, fingertip, echelon, cross-unders and rejoins. RTB with IP chase to VFR traffic pattern for a minimum of two overhead low approaches and a full-stop landing.

2.5.9.5. TR-5 Formation:

2.5.9.5.1. Two QF-4 aircraft (P), (IP).

2.5.9.5.2. Weather Minimums: Must remain VMC (see para [2.5.2.](#)).

2.5.9.5.3. Mission Description: Student will accomplish a wing takeoff. In working area: IP will lead student through formation maneuvers. IP will lead RTB for formation low approach then chase student through a minimum of two VFR low-approaches and a full-stop landing.

2.5.9.6. TR-6 Formation (may be proficiency advanced IAW para [2.5.5.](#) above):

2.5.9.6.1. Two QF-4 aircraft (P), (IP).

2.5.9.6.2. Weather Minimums: Must remain VMC (see para [2.5.2.](#)).

2.5.9.6.3. Mission Description: IP will lead entire mission, although student may be given the tactical lead for formation work while in the working area. Student will accomplish a wing takeoff. Practice all previous formation events and fighting wing formation. Student will fly a wing formation low-approach. IP will chase student through a minimum of two VFR low-approaches and a full-stop landing.

2.5.9.7. TR-7 Instruments:

2.5.9.7.1. QF-4 two-seat aircraft (P/IP)

2.5.9.7.2. Weather Minimums: IP weather category

2.5.9.7.3. Mission Description: The student will fly to a strange airfield for TACAN holding, penetration, low approach/touch-and-go, and RTB back to home field for multiple instrument approaches. Accomplish a heavyweight PAR/ILS if not accomplished previously.

2.5.9.8. TR-8 Formation (may be proficiency advanced during IQT):

2.5.9.8.1. Two QF-4 aircraft (P), (IP).

2.5.9.8.2. Weather Minimums: Must remain VMC (see para 2.5.2.).

2.5.9.8.3. Mission Description: Wing takeoff. IP will lead student to area and accomplish all formation events with student on wing to include fighting wing. After changing lead, student will lead same profile. Student will lead during RTB for a formation low-approach from a published instrument approach if one is available. Practice VFR traffic patterns.

2.5.9.9. TR-9 Instruments (may be proficiency advanced IAW para 2.5.5. above):

2.5.9.9.1. QF-4 two-seat aircraft (P/IP).

2.5.9.9.2. Weather Minimums: Suitable for VFR traffic patterns.

2.5.9.9.3. Mission Description: Practice instrument/qual checkride profile.

2.5.9.10. TR-10 Instrument/Qual Check . Flown IAW AFI 11-2F/QF-4 Vol 2.

2.5.10. Syllabus mission tasks represent minimum requirements for IQT; however, additional training events, based on proficiency and background, may be incorporated into the IQT training program with authorization of the unit CC.

Chapter 3

MISSION QUALIFICATION TRAINING

3.1. General: This chapter outlines training requirements to upgrade an aircrew qualified in the unit aircraft to MC status. A pilot is considered mission capable after completing SP-5, however he may not perform drone chase duties until completing DC-1 and DC-2 (unless DC-2 is proficiency advanced). LASDT-1 is optional, based on local mission requirements.

3.1.1. MQT training requirements in this section are for upgrading a QF-4 pilot to formation flight lead, drone chase and safety pilot for captive missions. The MQT program should be individually tailored based on the MQT student's previous F-4 experience, total flying time, currency, documented performance and formal training.

3.1.2. A minimum of 25 hours of F-4 flying time (from IQT entry) is required before beginning the safety pilot portion of MQT for pilots with no previous F-4 experience.

3.1.3. During academic and flying training, special emphasis should be placed on remote-control systems, coupled flight, AHC, transition to instruments, spatial disorientation, effects of task saturation, G onset, and conditions leading to/ effects of GLOC.

3.1.4. MQT will be completed within 60 calendar days after the individual's completion of IQT (or from date of arrival on station if already F-4 current). Failure to complete within specified time interval requires notification to 53 WEG/CC with aircrew name and rank, reason for delay, planned actions, and estimated completion date.

3.1.5. Upon completion of MQT, pilot may be certified flight lead qualified by the Squadron CC or a designated representative. This will be documented on the unit letter of X's.

3.2. Ground Training: The GFR will direct contractor academic instructors to develop blocks of instruction covering areas pertinent to the mission.

3.3. Flying Training:

3.3.1. Supervision: IP supervision required unless specified otherwise.

3.3.2. Sortie Requirements: DC-1, and SP-1 through SP-4 are mandatory unless pilot is a previous safety pilot. SP-5 is an AF Form 8 initial mission evaluation IAW AFI 11-2F/QF-4V2.

3.3.2.1. SP-6 is required for all Holloman AFB FSAT pilots and for Tyndall-based pilots before flying at Holloman AFB as a safety pilot, unless they have flown at least two of the SP sorties at Holloman.

3.3.2.2. DC-2 is optional if all events were accomplished on DC-1.

3.3.2.3. Normal syllabus flow is SP-1 through SP-5, then DC-1 and DC-2 (if required). SP-2 through SP-4 may be flown in any order.

3.3.2.4. LASDT-1 is required before a pilot may fly LOWAT.

3.3.3. Mission Outline:

3.3.3.1. SP-1 Remote Range Procedures.- IP/SQ Supervisor in RCP.

- 3.3.3.1.1. Mission Objectives: Introduce student to FCS/ SAFE flight profile and remote range operations.
- 3.3.3.1.2. Specific Mission Tasks: Preflight (including remote control items), ATO (if practical), SAFE profile through AAR. Minimum of two of the following maneuvers: Barrel roll with two revolutions, Wrap with airspeed and bank changing, G Weave with minimum of two cycles, Altitude hold weave with minimum two cycles.
- 3.3.3.1.3. RTB to main base for patterns and landings as required.
- 3.3.3.2. SP-2 Drone Formation Procedures/Flight Lead Qual. - IP/SQ Supervisor RCP or chase.
 - 3.3.3.2.1. Mission Objectives: Introduce student to QF-4 two-ship operations and slot positions, observe two-ship and single-ship programmed maneuvers.
 - 3.3.3.2.2. Specific Mission Tasks: Preflight (including remote control items), upgrading pilot will lead a formation takeoff and lead to the area, drone slots formation: minimum of one race-track target pattern, formation weave, 180 degree turn, and slice. Split for single-ship maneuvers: minimum of two of the following (priority on maneuvers not previously accomplished): Barrel Roll with two revolutions, Wrap with airspeed and bank changing, G weave with minimum of two cycles, Altitude hold turns with 90 and 180 degrees of turn, Escape - controller commanded, LOC Routines.
 - 3.3.3.2.3. Rejoin, upgrading pilot will lead RTB to main base for a formation low approach, patterns and landings as required.
- 3.3.3.3. SP-3 Normal MCS Patterns. - IP/SQ Supervisor RCP or chase.
 - 3.3.3.3.1. Mission Objectives: Introduce student to QF-4 normal MCS patterns.
 - 3.3.3.3.2. Specific Mission Tasks: Preflight (including remote control items), wiggle, ATO (if not accomplished previously), pilot initiated go-around, landings: 2 minimum (in primary or backup), auto landing (if applicable).
- 3.3.3.4. SP-4 Abnormal MCS Patterns. - IP/SQ Supervisor RCP or chase.
 - 3.3.3.4.1. Mission Objectives: Introduce student to QF-4 emergency/damaged drone MCS patterns and demonstrate proficiency in safety pilot responsibilities during patterns/landings.
 - 3.3.3.4.2. Specific Mission Tasks: Preflight (including remote control items), ATO (optional), pilot initiated go-around if not accomplished on SP-3.
 - 3.3.3.4.3. Landings: one full-up landing (in primary or backup), one no data landing (incorporated with any other approach), a no-flap/no-slat landing, a backup EM-only landing, and a limited engine thrust landing.
- 3.3.3.5. SP-5. Mission Evaluation. – SEFE in RCP preferred.
 - 3.3.3.5.1. Mission Objective: Successfully complete IAW AFI 11-2F/QF-4 Vol 2.
- 3.3.3.6. SP-6. IP/ SQ Supervisor RCP or chase.
 - 3.3.3.6.1. Mission Objective: MCS orientation at Holloman AFB.

3.3.3.6.2. Specific Mission Tasks: Preflight (including remote control items), ATO using Holloman AFB procedures, MCS pattern orientation and procedures, range orientation and Northrop strip approach, landings as applicable.

3.3.3.7. DC-1 Drone Chase - IP/SQ Supervisor in RCP or chase.

3.3.3.7.1. Mission Objectives: Introduce student to drone chase operations.

3.3.3.7.2. Specific mission items: Briefing (chase pickup procedures, drone rejoin/failsafe procedures, MCS Pattern procedures and ground references, two no data approaches, chase position/techniques), ground operations, taxi and takeoff, boat report (Tyndall only), drone pickup, rejoin/fail safe procedures, Battle Damage Assessment (BDA). Recovery to MCS pattern: Alignment and missed approach, loss of carrier demonstration, no data approach, chase multiple MCS patterns, VFR patterns or instrument approaches as required, landing.

NOTE: If DC-1 is effective and all items are complete, then DC-2 may be proficiency advanced.

3.3.3.8. DC-2 Drone Chase - IP/SQ Supervisor in RCP or chase.

3.3.3.8.1. Mission Objectives: Complete drone chase checkout.

3.3.3.8.2. Specific Mission Tasks: Any items not accomplished on DC-1.

NOTE: Upon completion of DC-1 (and DC-2 if required) the trainee will be certified as a qualified drone chase pilot and will be allowed to perform chase pilot duties.

3.3.3.9. LASDT-1. (Low Altitude Step Down Training) – LOWAT-current IP/SQ Supervisor in RCP or chase.

3.3.3.9.1. Mission Objectives: Familiarize student with QF-4 low altitude performance, and demonstrate proficiency in low altitude QF-4 procedures.

3.3.3.9.2. Specific Mission Tasks: Altitude exercise (a.k.a. time-to-die descents wings level and in a bank), speed-brake and afterburner exercise, level hard turns, ridge crossings (for Holloman pilots), vertical awareness exercises (30° and 45° dive recoveries). Minimum altitude for this sortie is 500 feet AGL. After successful completion of LASDT-1 the upgrading pilot will be LOWAT-qualified and cleared to fly down to 500 feet AGL. Currency will be IAW [Table 4.3.](#)

3.3.4. Upon successful completion of required ground and flight training, the unit CC/GFR may certify the upgrading pilot as MC, safety pilot and flight lead qualified.

NOTE: A lead takeoff and ATO should be flown during the SP-1 through SP-5 training. Upgrading pilots will view the “How Low Can You Go” and “Visual Illusions” video prior to LASDT-1. Pilots who have not accomplished LASDT-1, or have lost currency as specified in [Table 4.3.](#), will not fly mission tasks (other than drone chase patterns) below 1000 feet AGL.

Chapter 4

CONTINUATION TRAINING

4.1. General: This chapter outlines annual training requirements for QF-4 aircrews. Refer to **Chapter 5**, Specialized Training, for additional program specifics. Civilian contractor pilots should refer to AFJI 10-220 for additional requirements. Aircrews must be qualified IAW AFI 11-2F/QF-4V2 and have completed MQT to be MC, and eligible to enter continuation training.

4.2. Ground Training: Ground training will be accomplished IAW **Table 4.1**. Waiver authority for the ground training specified is IAW the reference directive. This list is intended as a single source reference. Where discrepancies exist, the reference directive takes precedence. Ground training accomplished during IQT/MQT may be credited toward CT requirements for the training cycle in which it was accomplished. The programs in **Table 4.1** comprise ground training only. **Chapter 5** contains specialized programs with both flying and ground training requirements.

NOTE: Mobility Ground Training as well as Chemical Warfare Defense Training, Verification Training, Weapons/Tactics Academics, and Intelligence Training do not apply due to the non-mobility status of aircrews.

4.2.1. **Physiological Training.** IAW AFI 11-403 and MAJCOM supplements.

4.2.2. **Instrument Refresher Course.** IAW AFMAN 11-210, *Instrument Refresher Course (IRC) Program*, and MAJCOM supplements.

4.2.3. **Life Support.** Includes egress, ejection, hanging harness, wet drill, personal survival equipment, and local survival IAW MAJCOM life support directives.

4.2.4. **Situational Emergency Procedures Training (SEPT).**

4.2.4.1. This training is not an evaluation but a review of abnormal/emergency procedures and aircraft systems operations/limitations during realistic scenarios. One aircrew/controller should present a situation and another should discuss actions necessary to cope with the malfunction and carry it to a logical conclusion. Critical action procedures (if applicable) and squadron special interest items should be emphasized. Incorporate the following elements into squadron SEPT training programs:

4.2.4.1.1. SQ/CC or SQ/DO involvement in the selection of monthly SEPT topic.

4.2.4.1.2. Develop SEPT scenarios using F-4 mishaps/incidents as baseline cases.

4.2.4.1.3. Discuss at least two EPs for each phase of flight during the SEPT session.

4.2.4.1.4. Accomplish two SEPTs each training cycle with an IP or squadron supervisor to include min fuel and emergency divert training.

4.2.4.2. SEPT training will be accomplished each calendar month. Failure to accomplish by the end of the month will result in grounding until subsequently completed.

4.2.5. **US/Russia Prevention of Dangerous Military Activities.** Initial and annual refresher training for the prevention of Dangerous Military Activities will be conducted to ensure that all aircrews are familiar with the agreement and the implementing provisions contained in CJCS 2311.01. The

procedures for the Prevention of Dangerous Military Activities between the U.S. and Russia are located in the Flight Information Handbook.

4.2.6. **Crew Resource Management (CRM).** Units will participate in MAJCOM established CRM CT. Training builds upon the basic cockpit management skills taught in SUPT and FTU's. Each pilot and FSAT controller is required to participate in one training session every 24 months IAW AFI 11-290.

Table 4.1. Ground Training.

AIRCREW TRAINING			
Subject	Frequency	Directive	Affect MC Status
Physiological Training (Altitude Chamber)	Every 5 years	AFI 11-403	Yes
Instrument Refresher Course	Periodic	AFMAN 11-210 and AFI 11-202V2, as supplemented	No
Life Support Egress/ Ejection Training (LS 07)	180 Days	AFI 11-301 as supplemented	Yes
Life Support Hanging Harness (LS 09)	180 Days	AFI 11-301 as supplemented	Yes
Life Support Equipment Training (LS 06)	12 Months	AFI 11-301 as supplemented	Yes
Life Support Combat Survival Training (LS 11)	24 Months	AFI 11-301 as supplemented	Yes
Life Support Water Survival Training (LS 03)	24 Months	AFI 11-301 as supplemented	Yes
Flying Safety Training	Quarterly	AFI 91-202	No
Situational Emergency Procedures Training (SEPT)	Monthly	AFI 11-2QF-4V1	Yes
CRM	24 Months	AFI 11-2QF-4V1 AFI 11-290	Yes
AIR FORCE AWARENESS PROGRAM TRAINING			
Subject	Frequency	Directive	Affect MC Status
Protection of the President	PCS	AFI 71-101V2	No
Code of Conduct	24 Months	AFI 36-2209	No
Law of Armed Conflict	12 Months	AFPD 51-4, AFI 51-401	No
Us/Russia Prevention of Dangerous Military Activities	12 Months	Flight Information Handbook CJCS 2311.01	No

4.3. Mission Capable (MC) Requirements:

4.3.1. All pilots will accomplish the minimum requirements as shown in **Table 4.2.** as applicable. Failure to accomplish these requirements will not affect MC status but will require additional training as determined by the SQ/CC.

4.3.2. Pilots are not authorized to fly tactical events until having accomplished a checkout program tailored to the event, approved by the 53 WEG/CC. If appropriate, event minimums and currencies will be established and tracked as part of the checkout program.

4.3.3. Pilot Proficiency (PP) sortie minimum requirements (single-ship or formation): AHC/aerobatic maneuvers or formation equivalent, TACAN penetration, 2x instrument approaches (lead), VFR patterns (weather permitting) and touch and go landings.

Table 4.2. QF-4 Annual Flying Training Requirements.

PILOT REQUIREMENT	MC RATE	REMARKS
Pilot Proficiency Sortie	4	See 4.3.3.
Instrument Penetration	6	IAW AFM 11-217
Precision Instrument Approach	12	IAW AFM 11-217
Non-Precision Instrument Approach	12	IAW AFM 11-217
EP Patterns	12	Includes Simulated Single-Engine and No Flap/ (Slats in or out) configurations
Minimum Total Sorties	60	

4.4. Flight Surgeon (FS):

4.4.1. Flight Surgeons may fly selected missions with an experienced pilot. Initial checkout IAW paragraph **5.3.**

4.4.2. FS flying rates and requirements will be IAW AFPD 11-4 and AFI 11-401.

4.5. Currencies/Recurrencies:

4.5.1. Currency. **Table 4.3.** defines currency requirements for all QF-4 aircrews. If a pilot loses a particular currency, that sortie/event may not be performed except for regaining currency with the appropriate level of supervision IAW **Table 4.3.** Landing, and PP sortie currency expiration are “grounding” items until currency is regained.

4.5.2. “Experienced” for QF-4 pilot currency purposes is defined as: IQT/MQT complete and: 500 F/QF-4 FP/MP/IP hours, or 1000 total hours plus 200 F/QF-4 hours, or 600 total hours plus 300 F/QF-4 hours, or previously fighter experienced plus 100 QF-4 hours.

Table 4.3. QF-4 Pilot Currencies.

<i>Event</i>	<i>To Update fly:</i>	<i>INEXP</i>	<i>EXP</i>	<i>To regain currency fly:</i>	<i>Notes</i>
Demanding Sortie	Event	30	45	Non-demanding sortie	1
Day Landing	Event	30	45	Landing	2
Night Landing	Day/Night Landing	N/A	21	Day Landing	3
IP RCP Landing	Event	N/A	45	RCP Landing	4
LOWAT	< 1000 AGL	60	180	Event	5
Formation Takeoff	Event (wing or lead)	60	90	Event	6
Precision Approach	Event	30	45	Event	7
Drone Chase	Event	120	180	Event	8
PP Sortie	Event	60	90	Event	9

NOTES:

1. Non-demanding sorties are instruments, PP, VFR navigation (at or above 1000 feet AGL).
2. Recurrency supervision level is IP in the aircraft/chase, qualified and current in event.
3. Pilots will not perform a night landing unless a day landing has been accomplished within 21 days and a precision approach has been flown within 30 days.
4. IP RCP landing recurrency requires current and qualified pilot in the FCP.
5. LOWAT recurrency requires a LOWAT current and qualified IP/SQ Supervisor in the RCP or chase.
6. Recurrency supervision level is a current and qualified IP/ SQ Supervisor in the RCP or in the element.
7. IAW AFI 11-202V3.
8. To regain currency, fly a drone chase event (takeoff and/or landing) with a current and qualified IP/SQ supervisor in the aircraft or in the element.
9. To regain currency, fly a PP sortie IAW para 4.3.3. with a current/qualified IP/SQ supervisor in the RCP or in the element.

4.6. End of Cycle Requirements: Aircrews who fail to complete sortie and/or event requirements of this instruction at the end of the training cycle will either meet PQI action IAW AFD 11-4 and AFI 11-401, be regressed to MQT status, or be removed from flying status depending on the particular currency requirements and circumstances for non-currency. Refer to paragraph 4.7. to see if some of these requirements can be prorated.

4.7. 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, or non-flying TDY/exercises 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. The following guidelines apply:

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

4.7.2. Proration is based on cumulative days of non-availability for flying in the training cycle. Use [Table 4.4.](#) to determine the number of months to be prorated based on the cumulative number of calendar days the aircrew was not available for flying during the training cycle.

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

4.7.4. Newly assigned/converted aircrews and aircrews achieving MC after the 15th of the month are considered to be CT on the first day of the following month for proration purposes.

4.7.5. An aircrew's last month on station prior to departing PCS may be prorated provided 1 month's proration is not exceeded.

Table 4.4. Proration Allowance.

CUMULATIVE 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
226-255	8
256-285	9
286-315	10
316-345	11
Over 345	12

4.8. Landing/Sortie Recurrency: Loss of landing/sortie currency requires the following action (timing starts from date of last landing):

4.8.1. 31-90 Days (45-90 Days—Experienced). Regain landing currency.

4.8.2. 91-135 days: SEPT, regain landing currency with IP in RCP

4.8.3. 136-210 days: same as [4.8.2.](#), plus take the QF-4 written qualification examinations and EP evaluation.

4.8.4. 211 or more days: repeat IQT and MQT.

4.9. Touch and Go Landings: Touch and go landings are authorized during IQT, safety pilot MQT, remote controller IQT/CT and on Pilot Proficiency sorties provided the following restrictions are met:

- 4.9.1. 7000 feet of dry runway is available.
- 4.9.2. Operative departure-end arresting system is in place.
- 4.9.3. Daytime.
- 4.9.4. Military airfield or auxiliary airfields (i.e. Tyndall's Droneway), or civil airports with a letter of agreement.

Chapter 5

SPECIALIZED TRAINING

5.1. Orientation Flights: Information and procedures for familiarization, incentive, and orientation flights are in AFI 11-401 and ACCI 11-450.

5.2. Flight-Lead Upgrade: Flight-lead upgrade is normally flown during MQT. After MQT the Squadron CC or designated representative may certify a pilot as four ship flight lead qualified on the unit letter of Xs.

5.3. Non-Rated Aircrew Member/ Flight Surgeon Flying Program:

5.3.1. Ground Training. Non-rated aircrew members (i.e. flight test engineers) and flight surgeons who are attached to and periodically fly with FSAT units, and who have not previously flown the QF-4, will accomplish the following before the first flight:

5.3.1.1. Aircraft general academics with an experienced QF-4 pilot (one-time requirement)

5.3.1.2. Hanging harness/Egress training currency: 90 days for those whose primary assigned aircraft is the QF-4 (60 days for flight surgeons), otherwise 30 days.

5.3.1.3. Emergency procedures review with an experienced QF-4 pilot.

5.3.1.4. Local water survival training (else restricted to over-land flights)

5.3.1.5. Local area survival (one-time)

5.3.1.6. Aircrew life support equipment training (90 days)

5.3.1.7. Altitude chamber physiological training (else restricted to flight below FL 180)

5.3.1.8. Boldface examination (emergency ground egress portion only - monthly)

5.3.1.9. Written qualification exam (annual)

5.3.2. Flight Training. The first flight in the unit-assigned aircraft will be flown with an experienced QF-4 pilot and may be flown in conjunction with other training sorties.

5.3.2.1. FAM-1, QF-4 Familiarization.

5.3.2.1.1. Mission objectives: Introduce the trainee to basic QF-4 handling characteristics and the local flying environment.

5.3.2.1.2. Mission tasks: Briefing (emphasis on crew coordination, communications and navigation equipment, instrument interpretation, aircraft performance envelope), single-ship take-off, transition maneuver demonstrations (an IP is required for approach-to-stall demonstrations), basic aircraft control by trainee, local area orientation (emphasis on controlled bailout area location), communication/navigation panel operation, recover for patterns and landings as desired.

5.3.3. Currency. Non-rated aircrew member flying currency is 90 days. Loss of currency requires the following:

5.3.3.1. 91-135 days: Review emergency procedures with an experienced QF-4 pilot.

5.3.3.2. 135-179 days: same as **5.3.3.1.**, plus re-take the written examination.

5.3.3.3. 180 or more days: repeat events in **5.3.1.** and **5.3.2.**

5.4. Instructor Pilot (IP) Upgrade: Unit CCs will select only the most qualified aircrews as instructors, considering ability, judgment, technical knowledge, skill and experience. The 53 WEG/CC may waive individual missions based on previous instructor experience.

5.4.1. Ground Training. Upgrading aircrews must satisfactorily demonstrate competency in the following prior to certification as an IP:

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

5.4.1.2. Techniques of Flight Instruction: Training objectives and environment, recognition and analysis of common student errors.

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

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

5.4.2. Flying Training. Training will be conducted according to mission outlines listed below. IPUG-1 should be flown first, and IPUG-5 is flown last. Other sorties may be flown in any sequence. Accomplishment may be as configuration and scheduling permit.

NOTE: If UIP is a current IP in any F-4, then IPUG 1 and 2 may be waived.

5.4.2.1. IPUG-1/2 Transition/Instruments. (QF-4 two-seat aircraft required, UIP in RCP.)

5.4.2.1.1. Mission Objectives: Introduce UIP to dual-cockpit instruction, selected transition/instrument demonstrations, maneuvers and procedures. Demonstrate proficiency in RCP landings (IPUG-2).

5.4.2.1.2. Specific Mission Tasks: Briefing, rear cockpit takeoff (unless previously accomplished in any F-4), confidence maneuvers, AHC maneuvers, aerobatics, unusual attitude recoveries, instrument approach to touch-and-go landing, emergency patterns, VFR pattern and landings, and full-stop landing. If UIP accomplishes all tasks and demonstrates proficiency in RCP landings on IPUG-1, he may be proficiency advanced past IPUG-2.

5.4.2.2. IPUG-3. (Two QF-4 aircraft, UIP in RCP.)

5.4.2.2.1. Mission Objectives: Introduce UIP to instructing formation.

5.4.2.2.2. Specific Mission Tasks: briefing, formation takeoff (lead), formation departure, formation airwork, chase in traffic pattern and landing.

5.4.2.3. IPUG-4. (QF-4 two-seat aircraft required, UIP in RCP.)

5.4.2.3.1. Mission Objectives: Introduce UIP to instruction for remote-controlled flight.

5.4.2.3.2. Specific Missions Tasks: Briefing, takeoff (ATO desired), full SAFE or MCS profile, auto recovery and approach, multiple remote-controlled patterns and landings (if MCS profile), practice VFR patterns and landings as required. This sortie may be flown on an actual SAFE flight or MCS controller training mission.

5.4.2.4. IPUG-5. (QF-4 two-seat aircraft required.) SEFE in FCP.

5.4.2.4.1. Mission Objective: Successfully complete Initial Instructor Pilot Flight Evaluation IAW AFI 11-2F/QF-4V2 and unit requirements.

5.5. Instruments: During selected SEPT sessions (at the discretion of the unit), pilots will review lost wingman procedures, recognition and recovery from spatial disorientation, proper instrument cross-check, and transition from visual to instrument conditions. An instrument approach may only be logged when the approach is flown successfully to pilot or published minimums.

5.6. Remote Controller Initial Qualification Training: Contractors will develop a training syllabus to support training of remote controllers for the systems in which they will be qualified. The training syllabus will be published in the Contractor Procedures and approved by the GFR IAW AFJI 10-220.

5.6.1. Initial Qualification Training. To enter FCS/MCS controller training, one of the following is required:

5.6.1.1. Qualified as a pilot in an FSAT (current or previously qualified).

5.6.1.2. 500 hours flying time in high performance jet aircraft.

5.6.1.3. Previously qualified as a FSAT remote controller.

5.6.2. Approval Authority. The GFR is the approval authority for contractor personnel to enter into drone controller training. The GFR will sign the Certificate of Qualification as the Approving Official signifying government acceptance of the drone controller once the controller qualification evaluation is completed. A drone controller must be qualified and accepted by the government prior to controlling a NULLO mission.

5.6.3. Initial Qualification Training Events. As a minimum, training will include the following:

5.6.3.1. Ground Phase. Complete syllabus ground school covering the aircraft, command telemetry system, drone control systems (principles, operations, capabilities, communications, limitations), pre-mission profile planning, recording equipment, MCS equipment and interface.

5.6.3.2. Flying Phase. Missions will encompass training on equipment preflight and checkout, takeoff, handover procedures, drone profile procedures, concentrated emergency procedures, and degraded systems training.

5.6.3.2.1. FCS controllers (manned missions) will complete a minimum of 3 simulators, 3 manned missions and 2 maintenance wiggles before certification as a manned FCS controller.

5.6.3.2.2. FCS controllers (NULLO missions) will complete 10 training missions as controller of a manned FSAT aircraft and a minimum of 2 NULLO pre-mission/destruct checks/bomb loads before certification as a NULLO FCS controller.

5.6.3.2.3. FCS controllers, not proficient/qualified within 20 training missions or failing to pass the flight check, will be evaluated by the GFR and a contractor representative for removal or continuation.

5.6.3.2.4. MCS controllers will complete a minimum of 2 remote controlled takeoffs and 45 remote-controlled landings before certification.

5.6.3.2.5. MCS controllers, not proficient/qualified within 150 remote-controlled landings or failing to pass the flight check, will be evaluated by the GFR and a contractor representative for removal from or continuation in training status.

5.6.3.3. Evaluation. Complete an emergency procedures examination and remote-control evaluation flight check that includes realistic drone profile procedures and a realistic evaluation of controller reaction to emergency conditions. A designated controller evaluator will conduct the evaluation flight check. Annual qualification and emergency procedures examinations are required of all remote controllers.

5.7. Remote Controller Continuation Training:

5.7.1. Ground Training. Ground training accomplished during controller IQT may be credited toward CT requirements for the training cycle in which it was accomplished.

5.7.2. Remote Control Situational Emergency Procedures Training. SEPT will be completed monthly IAW paragraph 4.2.1.

5.7.3. CRM for controllers will be completed biennially IAW paragraph 4.2.6.

5.7.4. Remote Controller Flight Training. The following remote control minimum requirements are to be accomplished annually:

5.7.5. Controllers delinquent in any of the annual requirements will accomplish corrective measures as directed by the FSAT operations manager or GFR.

5.7.6. Remote controllers whose currency lapses for more than 90 days will complete a minimum of five missions prior to being certified as requalified. If currency lapses for more than 180 days, IQT will be reaccomplished.

5.7.7. The contractor will document all remote-controller training events accomplished in the same manner as AFJI 10-220 flying requirements.

Table 5.1. QF-4 FSAT Controller Annual Flying Training Requirements.

CONTROLLER REQUIREMENT	MC RATE	REMARKS
MCS Controller Missions	12	
MCS Landings	30	4 EM servos only, 4 no slat/no flap, 4 limited engine thrust, 4 no data
DFS Landings	12	
ATO Takeoffs (FCS, or sim)	6	

Table 5.2. QF-4 FSAT Controller Currencies for NULLO Missions.

Controller	To Perform Mission:	Notes
MCS controller	Accomplish 3 remote-controlled landings within previous 15 days	1, 2
FCS controller	Act as primary controller on a mission and accomplish an Auto takeoff and Auto landing within previous 15 days	3, 4

NOTES:

1. Landings may be touch-and-gos or full-stops.
2. Recurrency for MCS controllers in preparation for a NULLO mission requires sufficient captive FSAT touch-and-go landings to meet the three remote controlled landings in 15 days currency requirement.
3. FCS controllers may use simulators to fulfill this requirement.
4. Recurrency for FCS controllers requires demonstration of proficiency in FCS profiles to the GFR or Contractor Flight Operations Supervisor.

5.8. Forms Adopted. AF Form 8, **Certificate of Aircrew Qualification**; AF Form 847, **Recommendation for Change of Publication**.

RONALD E. KEYS, Lt General, USAF
DCS/Air & Space Operations

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

AFJI 10-220, *Contractor's Flight and Ground Operations*

AFI 10-2501, *Full Spectrum Threat Response (FSTR) Planning and Operations*

AFPD 11-2, *Aircraft Rules and Procedures*

AFPD 11-4, *Aviation Service*

AFI 11-202V1, *Aircrew Training*

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*

AFI 11-202V3, *General Flight Rules*

AFI 11-207, *Flight Delivery of Fighter Aircraft*

AFMAN 11-217V1, *Instrument Flight Procedures*

AFI 11-290, *Cockpit/Crew Resource Management Training Program*

AFI 11-301, *Aircrew Life Support (ALS) Program*

AFPD 11-4, *Aviation Service*

AFI 11-401, *Aviation Management*

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*

AFI 11-403, *Aerospace Physiological Training Program*

AFI 11-404, *Centrifuge Training for High-G Aircrew*

AFI 13-212V1, *Range Planning and Operations*

AFI 13-212V2, *Range Construction and Management*

AFI 13-212V3, *Range-Safe Program Methodology*

AFI 16-402, *Aerospace Vehicle Programming, Assignment, Distribution, Accounting and Termination*

AFI 36-2209, *Survival and Code of Conduct Training*

AFI 36-2251, *Management of Air Force Training Systems*

AFMAN 37-139, *Records Disposition Schedule*

AFI 51-401, *Training and Reporting to Ensure Compliance with the Law of Armed Conflict*

AFI 71-101V2, *Protective Service Matters*

AFI 91-202, *The US Air Force Mishap Prevention Program*

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection and Health (AFOSH) Program*

AFI 11-2F/QF-4V3, *F/QF-4 Operations Procedures*

AFM 171-190 V2, *Air Force Operations Resource Management System*

ACCI 11-464, *MAJCOM Aircrew Life Support Program*

DoDI 7730.57, *Aviation Career Incentive Act and Required Annual Report*

DoDD 5500.7-R, *Joint Ethics Regulation*

Abbreviations and Acronyms

AAR—All Attitude Recovery

ACC—Air Combat Command

AFSC—Air Force Specialty Code

AHC—Advanced Handling Characteristics

AOA—Angle of Attack

API—Aircrew Position Indicator

ARMS—Air Force Operations Resource Management System

ASD—Average Sortie Duration

ATD—Aircrew Training Device

ATO—Automatic Takeoff

ATRS—Aerial Targets Squadron

BDA—Battle Damage Assessment

CAF—Combat Air Forces

CC—Commander

CFT—Cockpit Familiarization Trainer

COMSEC—Communications Security

CRM—Cockpit Resource Management

CT—Continuation Training

DC—Drone Chase

DFCS—Drone Formation Control System (Holloman)

DNIF—Duty Not Involving Flying

EP—Emergency Procedure

EPE—Emergency Procedures Evaluation

FCP—Front Cockpit

FCS—Fixed Control Site (e.g. GRDCS and DFCS)

FEB—Flying Evaluation Board

FEF—Flight Evaluation Folder

FL—Flight Lead

FP—First Pilot

FS—Flight Surgeon

FSAT—Full- Scale Aerial Target

G—Gravitational Load Factor, 32.2 feet per second squared

GFR—Government Flight Representative

GLOC—G-induced Loss of Consciousness

GRDCS—Gulf Range Drone Control System (Tyndall)

HHQ—Higher Headquarters

IAW—In Accordance With

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IP—Instructor Pilot

IPUG—Instructor Pilot Upgrade

IQT—Initial Qualification Training

IRC—Instrument Refresher Course

LOC—Loss of Carrier

LOWAT—Low Altitude Awareness Training

MAJCOM—Major Command

MCS—Mobile Control System

MOA—Military Operating Area

MQT—Mission Qualification Training

NCO—Noncommissioned Officer

NULLO—Not Using Live Local Operator

OPR—Office of Primary Responsibility

OPSEC—Operational Security

P—Pilot

PAI—Primary Aircraft Inventory

PAR—Precision Approach Radar

PP—Pilot Proficiency (sortie)

PQI—Professional Qualification Index (AFPD 11-4 and AFI 11-401)

RCP—Rear Cockpit

RTB—Return to Base
SAFE—System Acceptance Flight Evaluation
SEFE—Stan/Eval Flight Examiner
SELO—Stan/Eval Liaison Officer
SEPT—Situational Emergency Procedures Training
SOF—Supervisor of Flying
SP—Safety Pilot
SQ/CC—Squadron Commander
TACAN—Tactical Air Navigation
TDY—Temporary Duty
TR—Transition (initial QF-4 qualification)
UIP—Upgrading Instructor Pilot
UMD—Unit Manning Document
USAFAWC—United States Air Force Air Warfare Center
VFR—Visual Flight Rules
VMC—Visual Meteorological Conditions
WEG—Weapons Evaluation Group

Terms

Advanced Handling Characteristics (AHC)—A series of maneuvers designed to acquaint the pilot with handling characteristic at near maximum performance. These include rudder reversals, break turns, minimum time turns, optimum turns, high speed dive recoveries and acceleration maneuvers.

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 (see AFPAM 36-2211).

Confidence Maneuvers—A series of maneuvers that demonstrate the low speed characteristics of the aircraft at both low and high AOA. This include low AOA recoveries, inverted recoveries, low AOA rolls and high AOA rolls.

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

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

Demanding Sortie—Sorties that task the aircrew to the extent that flying frequency and continuity are most critical. Included are LOWAT (below 1000 feet AGL), instructor duties, drone chase and MCS sorties.

Drone Chase Mission—Mission flown in support of a remotely-controlled Full Scale Aerial Target (manned or NULLO).

Emergency Procedures Evaluation—An evaluation of aircrew knowledge and responsiveness to critical and non-critical EPs conducted by a SEFE in an CFT or aircraft cockpit.

Experienced Aircrew—For IQT entry purposes: 1000 FP/MP/IP hours in high performance fighter or AT/T-38 Instructor hours with 53 WEG/CC approval. For CT currency purposes: IQT/MQT complete and: 500 F/QF-4 FP/MP/IP hours, or 1000 total hours plus 200 F/QF-4 hours, or 600 total hours plus 300 F/QF-4 hours, or previously fighter experienced plus 100 QF-4 hours.

Flight Lead (FL)—As designated on flight orders, the individual responsible for overall conduct of mission from preflight preparation/briefing to post-flight 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.

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 mission-support status.

Mission Capable (MC)—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.

Non-demanding Sortie—A day sortie that provides the aircrew with opportunity to regain basic flying proficiency without excessively tasking those skills that have been under used during the non-flying period. Non-demanding sorties are instruments, AHC, and low-level navigation at or above 1000 feet AGL.

Not Using Live Local Operator (NULLO)—An FSAT drone flown without a pilot on board.

Pilot Qualification Index (PQI)—AFPD 11-4 and AFI 11-401 index used to identify aircrews who fail to complete basic training minimums and requirements that have not been waived.

Primary Aircraft Inventory (PAI)—Aircraft authorized for performance of the operational mission. The PAI forms the basis for allocation of operating resources to include manpower, support equipment, and flying-hour funds. The operating command determines the PAI required to meet their assigned missions. (See AFI 16-402.)

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

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

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

Squadron Supervisor—Squadron Commander, Operations/Assistant Operations Officers, Flight Commanders, and contractor equivalents.