

**BY ORDER OF THE
352 SOW COMMANDER (USAFE)**

**352 SPECIAL OPERATIONS WING
INSTRUCTION**



21-113

20 APRIL 2021

Maintenance

**FUNCTIONAL CHECK FLIGHT (FCF)
PROGRAM**

COMPLIANCE WITH THIS INSTRUCTION IS MANDATORY

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This instruction implements the FCF Program and provides guidance in addition to Air Force Instruction (AFI) 21-101, AFSOC Supplement, Technical Order (TO) 1-1-300 and TO 00-20- 1, AFSOC SUP. It establishes local procedures for the operation of the FCF Program (including operational check flights (OCF) and high speed taxi checks (HSTC) within the 352 Special Operations Wing (SOW) and applies to all personnel working with 352 SOW Aircraft. Refer recommended changes and questions about this publication to the OPR listed above using the AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, Publications and Forms Management, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFI 33-222, Records Management and Information Governance Program, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

This document is substantially revised and must be reviewed in its entirety.

1. FCF SPECIFIC RESPONSIBILITIES.

1.1. The FCF Program Officer In-Charge will execute responsibilities IAW AFI 11-202V3 AFSOC Sup **Attachment 8**.

1.2. The Production Superintendent will:

1.2.1. Notify 352 SOMXG Quality Assurance (QA) and Plans, Scheduling and Documentation (PS&D) that an FCF requirement exists to allow scheduling of personnel. Give the following information:

1.2.1.1. Aircraft type.

1.2.1.2. Serial number.

1.2.1.3. Estimated crew ready date/time.

1.2.1.4. Nature of the discrepancy driving the FCF

1.2.2. Coordinate with QA office for final forms review. Ensure QA is provided the forms in sufficient time to facilitate a thorough review of the maintenance performed prior to scheduling crew brief.

1.2.3. Chair the FCF briefing ensuring qualified maintenance personnel are available to answer questions about performed maintenance.

1.2.4. Coordinate with respective flying squadron/contractors and QA to establish a briefing time. If possible, schedule aircrew briefing the day prior to the intended flight, to allow adequate time for a thorough forms review.

1.2.5. Ensure an FCF line is added to the flight schedule.

1.3. The workcenter(s) that performed the maintenance driving the requirement for an FCF will:

1.3.1. Ensure all FCF related forms are kept with active forms until aircraft is released from FCF or with the concurrence of QA.

1.3.2. Notify Production Superintendent when aircraft forms are ready for review.

1.3.3. Upon completion of forms review by the Production Superintendent, bring aircraft forms and all transcribed forms pertaining to the FCF/OCF/HSTC to QA at the designated time and remain to answer any questions that may arise during the forms review.

1.4. The QA Section will:

1.4.1. Fill out the heading of the FCF checklist and bring checklist to crew briefing. Identify FCF profile to be accomplished during the FCF briefing with applicable flight crew.

1.4.2. Perform a non-rated AFTO 781-series review of all active aircraft forms to ensure maintenance task completion/documentation accuracy. When complete, document an info

note in the next open block of the 781A stating “QA FCF forms review completed” and date.

1.4.3. Provide reviewed forms to Production Superintendent for flight crew briefing.

1.4.4. Brief aircrew on maintenance actions driving FCF requirement in accordance with TO 1-1-300, AFI 21-101, and appropriate -6.

1.4.4.1. Flight crew briefing must be re-accomplished if any of the following occur:

1.4.4.1.1. Changes are made that affect any FCF condition.

1.4.4.1.2. There is a change of aircraft commander.

1.4.5. Maintain FCF Continuity Books containing applicable AFIs and supplements, TOs, training programs, FCF Logs, and appointment letters as appropriate. Applicable pages to larger instructions may be used if complete instructions are available in FCF library.

1.5. The FCF Aircrew will:

1.5.1. Attend FCF crew briefing with the Production Superintendent, QA, and the workcenter(s) that performed the maintenance driving the FCF.

1.5.2. Review the aircraft forms and FCF checklist to ensure all requirements of the FCF are understood. In conjunction with the Production Superintendent, determine which FCF/OCF profile/section requires accomplishment and all required ground and flight requirements.

1.5.3. FCF checklist will be secured in the 781 forms binder until FCF release. Upon FCF release, the checklist will be returned to QA for final review before being filed with aircraft historical records.

1.5.4. FCF aircrews should refer to 352 SOW FCF/OCF AIRCREW CHECKLIST (see [Attachment 2](#)), when preparing for and conducting FCF/OCF.

2. FCF CREW COMPLEMENT SELECTION.

2.1. FCF aircrew requirements are defined in AFI or AFMAN 11-202V3 AFSOC Sup [Attachment 8](#), T.O. 1-1-300, and 11-2MDSV3.

2.2. MC-130J Specifics:

2.2.1. Crew positions required to maintain an FCF qualification are Pilot and Loadmaster; Co-Pilot and CSO, if required, must be mission qualified and current in the events to be accomplished.

2.3. CV-22 Specifics:

2.3.1. Crew complement and qualifications will be IAW AFMAN 11-2CV-22V3.

2.4. Contractor Aircrew. Check flights accomplished on 352 SOW aircraft by contractor aircrew will be performed IAW the provisions DCMAI 8210.1/AFI 10-220, Contractor Flight and Ground Operations, and approved by the government flight representative (GFR). All waivers to operations must be approved by the GFR in addition to 752 SOG/CC.

3. TRAINING REQUIREMENTS.

3.1. Aircrew will be trained IAW MDS-specific Vol 1. And applicable AFSOC/A3TA products IAW AFI or AFMAN 11-202V3 AFSOC Sup **Attachment 8**. Unit commanders may augment training as required based on experience and proficiency.

4. OPERATIONAL CHECK FLIGHTS/HIGH SPEED TAXI CHECKS.

4.1. Operational Check Flights will follow same procedures as FCF to include the review of aircraft forms. For further guidance refer to AFI 21-101.

4.1.1. Conduct OCFs IAW 11-2MDS-specific Vol. 3 operating procedures, T.O. 1-1-300 (**para. 6**), and local directives.

4.2. High-speed taxi checks will follow the FCF procedures outline in this Operating Instruction (OI). For further guidance refer to AFI 21-101.

5. WEATHER MINIMUMS.

5.1. Weather requirements for FCF will be IAW T.O 1-1-300 and 11-2MDSV3.

5.2. FCF hover checks require only 300-ft ceiling / ½ SM visibility (day or night).

6. LOCAL FCF AREA.

6.1. Local Tilt-rotor FCF area is defined in MILDENHALLI 13-204. They will occur in either the defined area or in a block of airspace coordinated with RAPCON.

6.2. Aircrew will coordinate with RAF Lakenheath RAPCON through RAF Mildenhall and RAF Lakenheath Airfield Management prior to flight to ensure airspace deconfliction.

7. DEPLOYED PROCEDURES.

7.1. The general procedures found within this instruction will apply with few exceptions. The senior deployed maintenance supervisor will notify the mission commander of the condition requiring the FCF. Deployed mission commanders must apply sound risk management principals when authorizing the flight. Waivers will be coordinated as required through the appropriate approval authorities. Mission commanders/aircrews must coordinate with host nation base leadership/airfield manager as necessary to ensure local restrictions are observed and appropriate airspace is coordinated.

7.2. For deployed FCF (QA unavailable):

7.2.1. Qualified aircrew members will perform the QA weight & balance functions.

7.2.2. The Production Superintendent will perform the QA functions.

7.3. QA will make a deployable FCF kit available for sign out. Kit will contain at a minimum: FCF checklists, AF Form 2400, a copy of this instruction.

7.4. Forms and checklists for these FCFs will be routed to QA upon return to home station for review by QA.

NATHAN L. OWENDOFF, Colonel, USAF
Commander

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

AFI 11-202V3, AFSOC Supplement, *Flying Operations General Flight Rules*, 28 July 2017

AFMAN 11-2CV-22V3, *CV-22 Operations Procedures*, 26 July 2019

AFMAN 11-2MC-130JV3, *MC-130J—Operations Procedures*, 03 April 2020

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 16 January 2020

MILDENHALLI 13-204, *Airfield and Air Traffic Control Operations*, 14 October 2014

T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures*, 06 September 2019

T.O. 1-1-300, *Acceptance/Functional Check Flt and Maintenance OPR Checks*, 15 March 2012

Adopted Forms

AF Form 2400, *Functional Check Flight Log*

Abbreviations and Acronyms

AFI—Air Force Instruction

AFSOC—Air Force Special Operations Command

FCF—Functional Check Flight

HSTC—High Speed Taxi Check

IMC—Instrument Meteorological Conditions

MDS—Mission Design Series

OCF—Operational Check Flight

OI—Operating Instruction

OG—Operations Group

PS&D—Plans Scheduling and Documentation

QA—Quality Assurance

RAPCON—Radar Approach Control

SOW—Special Operations Wing

TO—Technical Order

VMC—Visual Meteorological Conditions

Attachment 2**352 SOW/OCF AIRCREW CHECKLIST**

A2.1. Review the following publications as necessary:

A2.1.1. T.O. 1-1-300, Acceptance/Functional Check Flights and Maintenance Operational checks.

A2.1.2. T.O. 1 –MDS-6CF-1, Acceptance and/or Functional Check Flight Procedures. MDS-specific.

A2.1.3. T.O. 1-MDS-6CL-1, Checklist, Acceptance and/or Functional Check Flight Procedures, MDS-specific.

A2.1.4. 352 SOWI 21-113, Functional Check Flight Program.

A2.1.5. MILDI 13-201, Air Traffic Control, Airfield Operations and Local Flying Procedures.

A2.1.6. T.O. 1-MDS-1, Flight Manual, MDS-specific.

A2.1.7. AFI 11-202 Volume 3, AFSOC Supplement, Attachment 8

A2.2. Conduct a detailed briefing with 352 SOAMXS/752 SOAMXS and QA representatives as necessary. Review current and historical aircraft forms. Review -6CL-1 or -6CF-1 and ensure checklists to be completed are printed and available to the aircrew. Develop a profile with maintenance representatives that will accomplish FCF/OCF in most efficient manner.

A2.3. Accomplish the FCF/OCF. Complete all events to the maximum extent possible.

A2.4. Conduct debriefs with 352 SOAMXS/752 SOAMXS and QA representatives. Ensure all checklists and 781 entries are completed.