

**BY ORDER OF THE COMMANDER
403D WING**

403D WING INSTRUCTION 21-101

22 SEPTEMBER 2014



Maintenance

***FUNCTIONAL CHECK FLIGHTS
(FCF)/OPERATIONAL CHECK FLIGHTS
(OCF) LOCAL PROCEDURES***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 21-1, *Air and Space Maintenance*, and AFI 21-101, *Aircraft and Equipment Maintenance Management*. It outlines the procedures for accomplishment of Functional Check Flights and Operational Check Flights within the 403d Wing. It applies to all units within the 403d Wing. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Air Force Information Management Tool (AF IMT) 847, *Recommendation for Change of Publication*; Route AF IMTs 847 from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

Updated responsibilities and procedures for Aircraft Maintenance Unit, Quality Assurance, and FCF/OCF Manager.

1. Responsibilities: The Maintenance Group Commander, Operations Group Commander, Aircrews, Quality Assurance (QA), Debrief Section, Maintenance Operations Center (MOC), Plans, Scheduling, and Documentation (PS&D), and Maintenance Supervisors at all levels will ensure compliance with this instruction.

2. Definitions:

2.1. Functional Check Flights (FCFs) are performed to ensure an aircraft is airworthy and capable of accomplishing its mission. FCFs will be flown as required by applicable technical orders or as directed by the Maintenance Group Commander.

2.2. Operational Check Flights (OCFs) are defined as flights to determine safe or required operation when it cannot be accomplished by means of ground or shop tests. OCFs will be flown by experienced aircrews but does not require FCF qualified aircrew unless specifically required by applicable technical orders. Fly OCFs when an operational check is required by Maintenance Group Commander.

2.3. In case of a conflict between procedures in Model Design Series - specific T.O.'s and AFOSH Standards, the MDS-specific T.O. shall take precedence.

3. Procedures:

3.1. Aircraft Maintenance Unit will:

- 3.1.1. Identify to Quality Assurance any maintenance actions that require an FCF/OCF.
- 3.1.2. Ensure the aircraft has a current preflight inspection, is serviced with 28,000 pounds of fuel, and an exceptional release accomplished prior to the final "crew briefing" on the day aircraft is scheduled to fly, (See [Para 4.2.8](#)).
- 3.1.3. Configure the aircraft for the FCF/OCF according to applicable technical orders.
- 3.1.4. Upon request, deliver active aircraft 781 series forms to Quality Assurance office for review prior to FCF brief.
- 3.1.5. Report to the FCF/OCF aircrew brief with the active aircraft 781series forms binder and assist in the brief.

3.2. Quality Assurance will:

- 3.2.1. Schedule a meeting with FCF/OIC Manager prior to the air crew briefing to determine FCF/OCF requirements, review FCF profile, establish aircraft configuration.
- 3.2.2. Create an FCF/OCF requirement in MIS.
- 3.2.3. Notify PS&D of the FCF/OCF requirement and provide them with the aircraft tail number and reason for the flight.
- 3.2.4. Notify 403 WG/SEF of the FCF/OCF requirement and provide them with the aircraft tail number and reason for the flight.
- 3.2.5. Notify AMU, PS&D, and MX Supervision of aircrew briefing location, date/time, and aircraft configuration requirement for the FCF/OCF.
- 3.2.6. Recertify or review aircraft weight and balance as applicable.
- 3.2.7. Prepare FCF/OCF aircrew brief sheet to include aircraft vitals and reason for FCF/OCF.
- 3.2.8. Create a profile for a full or partial FCF based on requirements and information extracted during forms review by highlighting the FCF required items in the applicable FCF checklist.
- 3.2.9. Brief FCF/OCF aircrew with the assistance of the aircraft crew chief.

3.2.10. Attend debrief and ensure the Aircraft Commander annotates “released” and signs the FCF checklist and AFTO Form 781A “FCF or OCF due” discrepancy and forward checklist to PS&D for filing.

3.2.11. Clear GO81 FCF/OCF discrepancy using pilot’s information from FCF checklist.

3.3. Wing FCF/OCF Manager will:

3.3.1. Attend meeting with QA prior to aircrew briefing to determine FCF/OCF requirements, review FCIF profile and establish aircraft configuration.

3.3.2. Notify Current Operations to task the appropriate squadron and provide them with the aircraft tail number and reason for FCF/OCF.

3.3.3. 403 OG/OGV will determine if aircraft requires an FCF or OCF by referencing TO 1-1-300 para

3.3.4. If only an OCF is required, inform the SQ/DO of required actions. A FCF qualified crew is not required, but a highly experienced crew is recommended.

3.3.5. 403 OG/OGV will coordinate with 403 Current Operations and Squadron Scheduling with proposed FCF date/time and aircrew requirements. FCF will be loaded into GDSS2 as a “notional” sortie until requirements can be finalized by 403 MX. Squadron Scheduling will schedule the sortie and build the crew.

3.4. Current Operations will:

3.4.1. Provide the appropriate Squadron Operations with the aircraft tail number and reason for FCF/OCF.

3.4.2. Coordinate with appropriate Squadron Operations to determine the date and time of the FCF/OCF flight, based upon FCF/OCF crew availability.

3.4.3. Notify QA and PS&D of the date and time of the aircrew brief and FCF/OCF flight.

3.5. Plans, Scheduling and Documentation will:

3.5.1. Coordinate with AMU, Current OPS & QA, to schedule aircraft for FCF/OCF.

3.5.2. File completed FCF checklist in the aircraft jacket file.

3.6. Maintenance Operations Center will:

3.6.1. Notify Command Post of FCF/OCF aircraft release for flight.

3.6.2. Notify Quality Assurance and Aircraft Maintenance Unit of aircraft expected land time for debrief.

3.6.3. Update aircraft status as applicable.

3.7. Command Post will:

3.7.1. Notify Squadron Operations of FCF/OCF aircraft release for flight.

3.7.2. Notify MOC of aircraft inbound time and status.

3.8. Squadron Operations will:

3.8.1. Coordinate with Wing FCF/OCF Manager to provide and schedule FCF/OCF aircrew.

3.9. FCF/OCF aircrews will:

3.9.1. Attend FCF/OCF briefing with Quality Assurance and the aircraft crew chief.

3.9.2. Attend debriefing immediately following each FCF/OCF flight.

3.9.3. Ensure the FCF checklist profile is completed and annotated as released or non-released.

3.9.4. Aircraft Commander will clear FCF/OCF discrepancy in the AFTO Form 781A after successful release.

3.10. Debrief :

3.10.1. Assemble maintenance specialist and aircrew and conduct full aircraft debrief immediately after each FCF/OCF attempt or release.

FRANK L. AMODEO, Colonel, USAFR
Commander

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

AFI 21-101, AFRCSUP_I, *Aircraft and Equipment Maintenance Management*.

TO 1C-130J-6, *Aircraft Scheduled Inspection and Maintenance Requirements*.

TO 1-1-300, *Maintenance Operational Checks and Check Flights*.

Abbreviations and Acronyms

AFOSH—Air Force Occupational Safety and Health

AMU—Aircraft Maintenance Unit

DO—Duty Officer

FCF—Functional Check Flight

MDS—Mission Design Series

MIS—Maintenance Information System

MOC—Maintenance Operations Center

MX—Maintenance

OCF—Operational Check Flight

OG—Operations Group

OGV—Operations Group Standardization/Evaluation

PS&D—Plans and Scheduling

QA—Quality Assurance

SQ—Squadron

Terms

Functional Check Flight (FCF)—Flight performed to ensure an aircraft is airworthy and capable of accomplishing its mission.

Operational Check Flight (OCF)—Flight conducted after maintenance to ensure aircraft mission specific equipment is operational and mission ready.