

**BY ORDER OF THE COMMANDER
439TH AIRLIFT WING**

**439 AIRLIFT WING INSTRUCTION
21-101**



4 AUGUST 2025

Maintenance

**FUNCTIONAL/OPERATIONAL CHECK
FLIGHT AND HIGH SPEED TAXI
CHECKS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Department of the Air Force Policy Directive (DAFPD) 21-1, *Maintenance of Military Materiel*, 21 February 2024 and Department of the Air Force Instruction (DAFI) 21-101, *Aircraft and Equipment Maintenance Management*, 20 December 2023. It establishes procedures for the control of the functional check flight/operational check flight (FCF/OCF) and high-speed taxi programs. This applies to the 439th Operations Group Commander (439 OG/CC), 439th Operations Squadron, Airfield Management (439 OSS/OSA), 439th Airlift Wing, Command Post (439 AW/CP) and all of the Maintenance Group (439 MXG) work centers. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction (AFI) 33-322, *Records Management Program*, 23 March 2020, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at <https://afrims.cce.af.mil/>. 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 847 to 439 MXG/MXQ, 350 Hangar Ave, Box 21, Westover Air Reserve Base (WARB), Chicopee, MA 01022.

SUMMARY OF CHANGES

Reference publication titles have been updated. All references to C-5A technical orders have also been replaced with appropriate M-Model references. The FCF/OCF process remains unchanged.

1. General. The 439th Maintenance Group, Quality Assurance (439 MXG/MXQ) and the applicable Aircraft Maintenance Squadron or Maintenance Squadron superintendent will evaluate aircraft maintenance activities to determine if a Functional Check Flight (FCF) or Operational

Check Flight (OCF) is required before returning an aircraft to regular service. Aircraft being recovered from cannibalization status, isochronal inspections, Contract or Depot Field Team, or other major repair will be evaluated to determine if a FCF or OCF is required based on the type and degree of maintenance performed. WARB aircrews are not qualified to perform Check Flights (to include OCF, In-Flight Operational Check (IFOC) and FCF) except for items specified in Air Force Manual (AFMAN) 11-2C-5V3, C-5 Operations Procedures, 20 October 2022 and AFMAN 11-2C-5V3_439AWSUP. The 439 MXG/CC will coordinate with Robins AFB, GA to schedule qualified aircrews for Check Flights as needed.

2. FCF. FCFs will be conducted as determined by requirements in Technical Order (T.O.) 1-1-300, *Maintenance Operational Checks and Check Flights*, 1C-5M-6, *Scheduled Inspections and Maintenance Requirements*, and as directed by the 439 MXG/CC.

2.1. The 439 MXG/MXQ and the applicable maintenance flight chief will serve as the focal point to brief the FCF aircrew on matters concerning the discrepancies and/or conditions prompting the necessity of the FCF.

2.2. The 439 MXG/MXQ will utilize the FCF Coordination Checklist ([Attachment 2](#)), maintain an information file for briefing aircrews, ensure aircraft Weight and Balance (W&B) documents are reviewed prior to FCF, and document all FCF/OCF.

3. OCF. OCFs will be conducted as determined by requirements in applicable Technical Orders (T.O.) 1-1-300, *Maintenance Operational Checks and Check Flights*, 15 December 2023 and T.O. 1C-5M-6, *Scheduled Inspections and Maintenance Requirements*, 21 September 2021, or as directed by the 439 MXG/CC.

3.1. The 439 MXG/MXQ Supervisor and the applicable maintenance flight chief will serve as the focal point for contact between the 439 MXG and 439 OG to discuss requirements of OCFs. On the day of the OCF, a member of the 439 MXG/MXQ office will brief the OCF aircrew on the requirements for the OCF and/or conditions prompting the need for the OCF.

3.2. The Maintenance Group Plans, Scheduling and Documentation (439 MXG/MXOP) Supervisor will provide the 439 OG with a minimum of 24-hours notification to ensure a smooth transition and for scheduling the most qualified aircrew to complete the required checks. The 439 MXG/MXOP supervisor will also coordinate and schedule OCFs with the 439 OG/CC.

3.3. The 439 OG, Standardization/Evaluation (439 OG/OGV) section, will assign qualified aircrew to accomplish the required OCF and will meet, if necessary, with the 439 MXG/MXQ Supervisor to discuss the requirements of the OCF.

4. High Speed Taxi-Checks. Westover does not perform high speed taxi checks.

AMY K. TULLIS, Colonel, USAF
Commander

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

AFMAN 11-2C-5V3, *C-5 Operations Procedures*, 20 October 2022

AFMAN 11-2C-5V3_439AWSUP, *C-5 Operations Procedures*, 24 September 2024

DAFPD 21-1, *Maintenance of Military Materiel*, 21 February 2024

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 20 December 2023

T.O. 1-1-300, *Maintenance Operational Checks and Check Flights*, 15 December 2023

T.O. 1C-5M-6, *Scheduled Inspections and Maintenance Requirements*, 21 September 2023

T.O. 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures*, 19 December 2023

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 2400, *Functional Check Flight Log*

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

ARB—Air Reserve Base

CC—Commander

DAFI—Department of the Air Force Instruction

DAFPD—Department of the Air Force Policy Directive

FCF—Functional Check Flight

IFOC—In-Flight Operational Check

MXG—Maintenance Group

OCF—Operational Check Flight

OG—Operations Group

OPR—Office of Primary Responsibility

RDS—Records Disposition Schedule

TO—Technical Orders

W&B—Weight and Balance

Office Symbols

439 AW/CC—439th Airlift Wing, Commander

439 AW/CP—439th Airlift Wing, Command Post

439 MXG—439th Maintenance Group

439 MXG/CC—439th Maintenance Group, Commander

439 MXG/MXQ—439th Maintenance Group, Quality Assurance

439 MXG/MXOP—439th Maintenance Group, Plans, Scheduling and Documentation

439 OG—439th Operations Group

439 OG/CC—439th Operations Group, Commander

439 OG/OGV—439th Operations Group, Standardization and Evaluation

439 OSS/OSA—439th Operations Squadron, Airfield Management

Attachment 2

C-5 FUNCTIONAL CHECK FLIGHT COORDINATION CHECKLIST

Figure A2.1. C-5 FUNCTIONAL CHECK FLIGHT COORDINATION CHECKLIST (PAGE 1 of 2).

ALL PURPOSE CHECKLIST		PAGE 1	OF 2	PAGES
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA		OPR MXG/MXQ	DATE	
Attachment 2 C-5 FUNCTIONAL CHECK FLIGHT COORDINATION CHECKLIST			20250430	
NO.	ITEM <i>(Assign a paragraph number to each item. Draw a horizontal line between each major paragraph.)</i>	YES	NO	N/A
1.	Upon notification from AMXS/MXS, review applicable MDS-6 series T.O. to ensure maintenance condition necessitates a Functional Check Flight (FCF).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Coordinate activation of the FCF crew from the 339th Flight Test Squadron (FTS) at Warner-Robbins AFB, GA with Plans and Scheduling and the 337 OG FCF ORE.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Complete an FCF Activation Letter and hand carry it to the MXG Resource Advisor so a fund site can be released to the 339FTS crew.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Establish a point of contact for each of the following agencies:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4a.	-----439th Operations Group Standardization/Evaluation FCF OPR 413-557-3177 (DSN 589).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4b.	-----439th Maintenance Group Plans and Scheduling 413-557-2765 (DSN 589).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4c.	-----Applicable squadron's Maintenance Superintendent (also coordinate availability of maintenance technician or lead technician for briefings).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4d.	-----Assigned Weight and Balance personnel from MXQ.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Schedule date, time and location for crew briefing. Briefing should include:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5a.	-----Purpose of flight and previous maintenance problems and discrepancies recorded on aircraft or engines that directly relate to the FCF.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5b.	-----Review aircraft weight and balance records.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5c.	-----Review of the 781 series forms (including pertinent previously transcribed forms).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5d.	-----Provide all crew members with an FCF (MDS-6CL) checklist for the flight.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AF IMT 2519, 19911101 V5 PREVIOUS EDITIONS ARE OBSOLETE.

