BY ORDER OF THE COMMANDER 307TH BOMB WING

307TH BOMB WING INSTRUCTION 21-150

4 NOVEMBER 2020

Maintenance

AIRCRAFT TOWING AND HANGAR
OPERATIONS



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Lt Col Robert A. Griffith)

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This publication implements Air Force Instruction (AFI) 21-101, Air Force Reserve Command Supplement (AFRCSUP), Aircraft and Equipment Maintenance Management, and AFMAN 91-203, Air Force Consolidated Occupational Safety Instruction. This instruction outlines policies and procedures for the towing, hangaring of aircraft, and safe operation of hangar doors. These procedures are applicable only to personnel assigned to the 307 Bomb Wing located at Barksdale Air Force Base, Louisiana. This publication may be supplemented at any level, but all supplements must be routed to the Office of Primary Responsibility (OPR) listed above for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the OPR listed above using the Air Force (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, 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 (IAW) Air Force Instruction (AFI) 33-322, Records Management and Information Governance Program and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

This publication has been significantly revised and should be reviewed in its entirety to ensure compliance. Aircraft towing, hangar and cold weather procedures have been added to this instruction. Course Code 29111 was changed from Hangar Door Awareness to Hangar Door Operator Power. Course Code 32215 has been created to track Hangar Door Awareness.

- 1. Overview. The purpose of this instruction is to ensure the safety of all personnel performing aircraft towing and hangar operations. It addresses towing hazards and hangar door hazards, responsibilities and training requirements.
- **2. Roles and Responsibilities.** All commanders, supervisors and personnel will ensure compliance with the provisions of this instruction.

3. Aircraft Towing.

- 3.1. All assigned tow supervisors and team members must be signed off in Integrated Maintenance Data System (IMDS) and Training Business Area (TBA). All vehicle drivers must have an AF Form 2293, *US Air Force Motor Vehicle Operator Identification Card*, annotated to show the particular tow vehicle they operate. (T3)
- 3.2. Prior to actual movement of the aircraft, the tow supervisor must coordinate with and obtain permission from the Maintenance Operations Center (MOC). The tow supervisor will coordinate the tow with the Flight Line Expeditor and MOC for tow clearance and give the aircraft tail number, location, and destination. After getting tow approval from MOC, the tow supervisor or lead vehicle must be in constant radio contact with MOC until completion of the tow. No movement will be made without radio clearance from MOC. The tow supervisor will advise the Flight Line Expeditor and MOC of the tow termination. (T3)
- 3.3. Vehicle requirements:
 - 3.3.1. A lead vehicle is required and radio contact with MOC must be maintained.
 - 3.3.2. Between sunset and sunrise or anytime the visibility is less than 1600 feet, lead vehicles must have on hazards and/or a flashing amber lights and all vehicle lights will be on during towing operations.
- 3.4. The tow supervisor will as a minimum:
 - 3.4.1. Ensure all tow team members are familiar with published procedures and clearly define duties and responsibilities during pre-tow brief. Brief all tow team members on safety issues concerning the tow.
 - 3.4.2. Verify aircraft clearance. When prescribed by towing or pushing task, wing walkers/tail walkers shall be stationed at each respective location to ensure adequate aircraft clearance of any obstruction and shall signal the supervisor whenever the aircraft is in danger of colliding with an obstruction. In such cases, towing shall be stopped until clearance is personally checked by the supervisor.

4. Aircraft Hangaring.

4.1. Movement of aircraft into or out of hangars will be accomplished at the direction of the Flight Line Expeditor after coordination with MOC. (**T3**)

- 4.2. 307 BW Form 150, Aircraft Hangar Entry/Exit Checklist, will be used prior to positioning aircraft in hangar and prior to removing aircraft from hangar. (T3)
- 4.3. Tail doors will be fully opened before aircraft are moved through the door entrance.
- 4.4. Horizontal sliding doors will be opened to the widest possible position to allow clearance at each wingtip during entry and/or removal. Prior to closing doors, verify wings have proper clearance from hangar doors.

5. Hangar Door Training.

5.1. Hangar Door Hazards. Hangar door operation and movement creates a series of pinch points and crush points. If proper precautions are not adhered to, damage to equipment and injury or death to personnel can occur.

5.2. Squadron Commanders will:

- 5.2.1. The 307th Aircraft Maintenance Squadron (AMXS) and 307th Maintenance Squadron (MXS) commanders will appoint in writing a primary and alternate Hangar Door Trainer/Designated Representative. A copy of the appointment letter will be forwarded to the Maintenance Group (MXG) Quality Assurance Office. (T3)
 - 5.2.1.1. The AMXS Commander will appoint a Hangar Door Trainer for Building 6604.
 - 5.2.1.2. The MXS Commander will appoint a Hangar Door Trainer for Building 6825 and 6850.

5.3. Supervisors will:

- 5.3.1. Ensure Hangar Door Awareness Training, both Initial and Annual refresher course is given to all personnel who routinely work in hangars or require access through hanger doors. (T3)
 - 5.3.1.1. Document Hangar Door Awareness Training in IMDS with course code 029003 for Initial and course code 032215 for annual training.
- 5.3.2. Ensure Hangar Door Operator Training is given only to personnel that have a responsibility to operate hangar doors. Personnel will receive operator training only by authorized trainers appointed by the squadron commander. **(T3)**

5.4. Hangar Door Trainers will:

- 5.4.1. Perform on-the-job training with approved course lesson plans and demonstration of all safety items and emergency procedures.
- 5.4.2. Submit an AF Form 2426, *Training Request and Completion*, with appropriate course code to Maintenance Training Section for all maintenance personnel qualified to operate hangar doors.
 - 5.4.2.1. Document Electrically Operated Hangar Door Operator Training in IMDS with course code 029111.
 - 5.4.2.2. Document Manually Operated Hangar Door Operator Training in IMDS with course code 032373.

5.5. Quality Assurance will:

- 5.5.1. Develop Hangar Door Awareness Initial and Refresher training courses that establish safe operating and emergency procedures for 307th Bomb Wing personnel. Coordinate training with the Maintenance Training section.
- 5.6. Maintenance Training will:
 - 5.6.1. Assist Quality Assurance in the development Hangar Door Awareness training courses.
 - 5.6.2. Training is available on the 307th MXG Training SharePoint at https://afrc.eim.us.af.mil/sites/307BW/307MXG/QA/Programs/Forms/llItems.aspx?
 RootFolder=%2Fsites%2F307BW%2F307MXG%2FQA%2FPrograms%
 https://afrc.eim.us.af.mil/sites/307BW/307MXG/QA/Programs/Forms/llItems.aspx?
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 https://afrc.eim.us.af.mil/sites/307BW/307BW/307MXG/QA/Programs/Forms/llItems.aspx?
 - 5.6.3. Update IMDS after receipt of AF Form 2426 showing date Hangar Door Operator
- 5.7. Building Custodians will:
 - 5.7.1. Report any hangar door discrepancies immediately to 2nd Bomb Wing Civil Engineering (BW/CE). (T3)
 - 5.7.2. Ensure signage requirements outlined in AFMAN 91-203 are maintained.

6. Cold Weather Procedures.

- 6.1. These procedures contribute to the elimination of fire suppression system activations inside hangars 6604 and 6825 due to cold weather. Aqueous film forming foam (AFFF) pipes and deluge valves can freeze if hangar doors are left open for a prolonged period during temperatures below 33°F. The freezing and thawing action of water in the system can spontaneously activate the AFFF system which may result in inadvertent release and damage to aircraft. This situation can be avoided if hangar doors are closed whenever possible during periods of cold weather.
- 6.2. When temperatures fall to 40°F, MOC shall issue a cold weather advisory to 307 AMXS Indian One and 307 MXS AGE Flight for hangar doors. (**T3**)
- 6.3. When temperatures fall to 33°F or below, MOC shall issue a cold weather warning to 307 AMXS Indian One and 307 MXS AGE Flight and order execution of closing the hangar doors. (T3)
- 6.4. Building 6604 and 6825 facility managers will inform personnel in the hangar that the heating systems are designed to cut-out when doors are opened for an extended period of time. In addition, facility managers shall inform the 2 BW/CE HVAC shop immediately if the heating system malfunctions to ensure proper system operation during cold weather. (T3)

ROBERT A. GRIFFITH, Col, USAF Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, Aircraft and Equipment Maintenance Management, 15 January 2020

AFI 21-101_AFRCSUP, Aircraft and Equipment Maintenance Management, 23August 2015

AFMAN 91-203, Air Force Consolidated Occupational Safety, Fire, and Health Standards, 10 December 2018

AFI 33-360, Publications and Forms Management, 3 November 2015

AFI 33-322, Records Management and Information Governance Program, 23 March 2020

Prescribed Forms

307 BW Form 150, Aircraft Hangar Entry/Exit Checklist

Adopted Forms

AF Form 2426, Training Request and Completion

AF Form 2293, US Air Force Motor Vehicle Operator Identification Card

Abbreviations and Acronyms

AF—Air Force

AFFF—Aqueous Film Forming Foam

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFRCSUP—Air Force Reserve Command Supplement

AFRIMS—Air Force Records Information Management System

AMXS—Aircraft Maintenance Squadron

BW—Bomb Wing

CE—Civil Engineering

IAW—In Accordance With

IMDS—Integrated Maintenance Data System

MOC—Maintenance Operations Center

MXG—Maintenance Group

MXS—Maintenance Squadron

OPR—Office of Primary Responsibility

RDS—Records Disposition Schedule

TBA—Training Business Area

Terms

Designated Representative—Selected or assigned by the commander as qualified to perform specific duties.

Qualified Person—A person who by, training and experience, successfully demonstrates the ability to safely operate hangar door.