

**BY ORDER OF THE COMMANDER  
TRAVIS AIR FORCE BASE (AMC)**

**TRAVIS AIR FORCE BASE  
INSTRUCTION**



**91-203**

**15 MARCH 2022**

**Safety**

**HANGAR PROCEDURES AND  
AIRCRAFT TOW OPERATIONS**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

---

**ACCESSIBILITY:** Publications and forms are available for downloading or ordering on the e-Publishing website at [www.e-Publishing.af.mil](http://www.e-Publishing.af.mil)

**RELEASABILITY:** There are no releasability restrictions on this publication.

---

OPR: 60 MXG/MXQS

Certified by: 60 MXG/CC  
(Colonel James D. Reaves)

Supersedes: TRAVISAFBI91-203, 27 March 2017

Pages: 8

---

This instruction implements AFPD 91-2, Safety Programs, DAFMAN 91-203 Air Force Occupational Safety, Fire, and Health Standards and AFI 21-101\_AMCSUP, Aircraft and Equipment Maintenance Management. This instruction outlines policies and procedures for towing in high risk areas on Travis Air Force Base airfield, hangaring of aircraft, and safe operation of hangar doors. It also provides guidelines and designates responsibility for training, qualification and documentation for personnel who tow aircraft and operate or work around hangar doors, as well as outlining door signage requirements. This instruction pertains to all personnel assigned or attached to Travis Air Force Base, to include Air Force Reserve Command (AFRC) Units.

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 847s from the field through Major Command (MAJCOM) publications/forms managers. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.mv.af.mil/gcss-af61a/afirms/afirms/>. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

## ***SUMMARY OF CHANGES***

This publication has been minimally revised and must be reviewed in its entirety. Minor changes include: Updated instruction names, updated references.

**1. 1. Responsibilities.** 60 MXG Quality Assurance (QA) will be the OPR for hangar door operating procedures. They will coordinate with Wing Safety, the Unit Safety Representative and Civil Engineering for outlining responsibilities and procedures for safe operation of hangar doors.

**1.2. 60th Civil Engineering Squadron (CES) will provide status to the 60th Mission Support Group Commander (MSG/CC), 60 MXG/CC, and 60th Air Mobility Wing Commander (AMW/CC) monthly on hangar door maintenance discrepancies, repair status, and get-well date of inoperable hangar door systems.**

1.2.1. CE will ensure hangar doors are on a 6 month preventative maintenance schedule.

**1.3. Hangar owning organizations are listed below:.**

1.3.1. 60 AMXS—809, 818, 841, 842, 843.

1.3.2. 860 AMXS—837.

1.3.3. 60 MXS—808, 810, P14.

1.3.4. 60 APS—845, 847.

1.3.5. 60 MXG—811.

**1.4. Building Custodians:**

1.4.1. Are responsible for ensuring hangar door serviceability.

1.4.2. Will ensure minimum signage requirements outlined in AFMAN 91-203 and this instruction are maintained.

1.4.3. Will ensure a six inch (6”) wide red line that extends three feet (3’) beyond the inside and outside of doors (perpendicular to tracks), must be painted, and stenciled with the words “Hangar Door Full Open” and be visible from both inside and outside of hangar doors. This line will indicate where the doors must be positioned prior to towing aircraft. Additionally, paint a 6-inch wide red line, 5 feet from each side of hangar door centers (perpendicular to tracks). These lines will indicate the minimum 10 foot requirement when doors are opened.

**1.5. Unit Safety Representatives (USRs):**

1.5.1. Will maintain door operating instructions and ensure operating instructions are posted at each operable hangar door (non-powered) or door control panels (powered doors). USRs may utilize local or commercially manufactured placards with operating instructions stenciled/painted on them.

1.5.2. Will maintain a list of qualified/authorized hangar door operators for each hangar owned or operated by their unit. Each list must be approved and signed by their squadron commander. No handwritten additions will be authorized.

1.5.2.1. Applicable to 60 MXG Only: Department of Defense (DoD) contractors that have the need to operate hangar doors must also be trained and on a list of

qualified/authorized hangar door operators signed by the applicable commander. Training will be provided by the owning organization's hangar door operation trainer, upon request. The authorization letter will be sent and kept on file with 60 MXG/MXQA (COR).

1.5.3. Will ensure that all personnel who routinely work in hangars or require access through hangar doors shall receive Hangar Door Awareness Training, both an initial training program and annual refresher course. Courses shall include, at a minimum, door hazards, emergency procedures (including manual door operation) and safe operation. Training shall be documented on worker's AF Form 55, Employee Safety and Health Record (or equivalent product), AF Form 623, Individual Training Record Folder, or MAJCOM authorized substitute (paper or electronic format acceptable) IAW AFMAN 91-203.

1.5.4. In the event of a hangar related mishap, the involved member, unit safety representative or designee will immediately contact the Maintenance Operations Center (MOC).

#### **1.6. Maintenance Group and Squadron Training Offices:**

1.6.1. Will jointly develop a standardized, hands-on On-the Job Training (OJT) program for all personnel who operate electric and manual hangar doors. Each training plan must be coordinated through the owning organization's Unit Safety Representative, 60 MXG/MXQS (MXG Safety Manager), 60 CES and 60 AMW/SEG (Occupational Safety Manager) prior to use.

1.6.2. Will develop standardized awareness training for all personnel who work in hangar facilities but do not need to operate electric or manual hangar doors. As a minimum, awareness training will include hangar door hazards and emergency procedures. A training video can be found at <https://60mxg.travis.af.mil/Training/> (Hangar Door Awareness-SAFE 1100).

1.6.3. Trainers from the owning squadron of the hangar facility will provide all initial and annual training for those personnel requiring certification. Hangar door operation training will be documented on the Special Certification Roster and in G081 for applicable units. Units not utilizing G081 shall annotate training in their training records. Each hangar on base has been assigned a local G081 course code as follows:

1.6.3.1. TRAV 000808—Hangar 808.

1.6.3.2. TRAV 000809—Hangar 809.

1.6.3.3. TRAV 000810—Hangar 810.

1.6.3.4. TRAV 000811—Hangar 811.

1.6.3.5. TRAV 000818—Hangar 818.

1.6.3.6. TRAV 000014—Hangar 14.

1.6.3.7. TRAV 000837—Hangar 837.

1.6.3.8. TRAV 000839—Non-powered hangar door operation for hangars 841, 842, 843, 844, 845 and 847.

1.6.4. Squadron Unit Training Managers (UTMs) will ensure hangar door operation trainers are provided within their units. Training will be documented by the appointed trainer in member's training record or tracked in G081 for applicable units.

1.6.5. Fire department personnel will receive hangar door training from the owning squadron of the hangar upon request. Training will be documented on an AF Form 797, Job Qualification Standard Continuation/Command (JQS).

### 1.7. Hangar Door Operators:

1.7.1. Will ensure they have received training and are qualified to operate the hangar doors.

1.7.2. Be familiar with hangar door procedures outlined in AFMAN 91-203.

1.7.3. Will notify the Pro-Super, MOC, and the building custodian of a malfunction during hangar door operations. Operators will not manually open powered hangar doors. Manual operation of powered hangar doors will only be authorized by qualified Civil Engineering technicians during repair and Fire Department personnel during emergencies.

1.7.4. Will receive annual refresher training to sustain qualification.

## 2. Aircraft Hangaring requirements:

2.1. **Each applicable unit will create and maintain a standardized hangaring process checklist for their Mission Design Series (MDS).** Checklists will be placed in the front of the aircraft forms binder prior to towing into hangar, and removed after towing out of hangar.

2.2. **Emergency extraction tows for hangars P14, 808, 809, 810, 811, 818 and 837 will be accomplished in accordance with the procedures posted in each hangar.**

2.3. **Aircraft with munitions (flares) loaded, will not be towed into a hangar unless authorized by AFI 91-203 and Technical Order (TO) 11A-1-33 and coordinated with installation Weapons Safety Office.**

2.4. **When towing aircraft into or out of hangars, use wing and tail walkers.** Use additional observers (with a whistle, air horn, or radio) as required to guard against collision. Tow supervisor will ensure hangar doors are in the full open position prior to towing aircraft into or out of hangar. Tow supervisor will ensure a hangar floor Foreign Object Damage (FOD) inspection is completed prior to final towing of aircraft into hangar.

2.5. **The status of fire suppression system will be verified before towing aircraft into any hangar.**

2.6. **A tail walker will be used when the aircraft is turned sharply or backed into position.**

2.7. **Upon completion of tow into hangar, place drip pans under all aircraft engines and under any other actively leaking areas to ensure leakage and/or spillage does not contact floor surface.**

2.8. **During removal from all hangars that require push back, aircraft must follow tow/taxi lines towards and fully onto either taxiway Lima or Hotel.** Following taxi lines during aircraft towing operations is mandatory, but unique circumstances or airfield conditions may require deviation which will necessitate a Risk Assessment Metric (RAM) to mitigate risk.

### 3. AIRCRAFT TOWING REQUIREMENTS.

3.1. **Each Aircraft Maintenance Squadron (AMXS) will create and maintain a standardized training process for their Mission Design Series (MDS) to include all guidance specific to Travis Air Force Base.** Units will ensure Tow Supervisors receive TAFB specific training to include airfield markings, Risk Assessment Procedures and airfield layout specifically addressing locations and other obscure towing situations specific to the Travis airfield, e.g. Spot 521, 811, Hangar 808, etc. Training will be documented in TBA as a journal entry prior to AF Form 64 certification.

3.2. **Aircraft will not be towed onto unapproved surfaces or away from the taxi lines without prior approval from Airfield Management and the completion of a Risk Assessment Management (RAM) by an on duty Production Superintendent or higher.**

3.3. **The following list is not all inclusive and the Tow Supervisor and Production Team Member shall exercise good judgement and common sense when planning to tow an aircraft to a spot not considered common practice to their “MDS” or deemed outside the “norm”.** Tow Supervisors will coordinate with their Production Element and complete a RAM and Hangaring Checklist when required.

#### 3.3.1. Towing in and out of Hangar 810 South

3.3.1.1. Towing in and out of Hangar 810 South or 810 North requires coordination with MIKE 3 to ensure spot is available for the requested amount of time, Hangar door operations, as well as Fire Support System condition.

3.3.1.2. The path of travel into 810S is Taxiway “W” via “L”. Approach the hangar nose first onto the south end, and stop the tow vehicle before 25 feet of the hangar.

3.3.1.3. The path of travel out of 810S is a full push back onto Taxiway “L” via “W”.

#### 3.3.2. Towing in and out of Hangar 810 North

3.3.2.1. The path onto 810N is Taxiway “V” via “L”. There will be a sharp left hand turn into the hangar, plan for adequate space. You will approach the hangar nose first onto the north end, and stop the tow vehicle before 25 feet of the hangar.

3.3.2.2. The path of travel out of 810N is a full push back onto Taxiway “L” via “V”. There will be a sharp right hand turn after pushing out of the hanger. Plan for adequate space. If an Aircraft is present in hangar 808, the push back should be towed on to taxiway “L” past taxiway “H.”

#### 3.3.3. Hangar 809

3.3.3.1. The use of Hangar 809 requires coordination with SIERRA 3 to ensure spot is available for the requested amount of time, hangar door operations, as well as Fire Support System condition.

3.3.3.2. The path onto 809 is Taxiway “V” via “L”. You will approach the hangar nose first onto the east end, and stop the tow vehicle before 25 feet of the hangar.

3.3.3.3. The path of travel out of 809 is a full push back onto Taxiway “L” via “V”. If an Aircraft is present in hangar 808, the push back shall be conducted on to taxiway “L” past taxiway “H”.

#### 3.3.4. Spot 300

3.3.4.1. Towing on and off of spot 300 requires coordination with Sierra 3 to ensure no scheduling conflicts.

3.3.4.2. The path of travel onto spot 300 is to approaching the spot nose in from the east side of the spot via taxiway "H".

3.3.4.3. The path of travel out of spot 300 will be a full push back onto taxiway "H".

#### 3.3.5. Spot 521

3.3.5.1. Parking on spot 521 is strictly limited to an aircraft pushback tow ONLY. Tow procedures in accordance with airframe specific tech data will be followed for towing an aircraft off of the spot.

COREY A. SIMMONS, Colonel, USAF  
Commander, 60th Air Mobility Wing

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

**AFPD 91-2**, *Safety Programs*, 2 Sep 2019

**AFMAN 91-203**, *Air Force Consolidated Occupational Safety Instruction*, 10 Dec 2018

**AFI 21-101\_AMCSUP**, *Aircraft and Equipment Maintenance Management*, 2 Aug 2020

**DAFI 21-101**, *Aircraft and Equipment Maintenance Management*, 15 Jan 2020

***Prescribed Forms***

**AF Form 847**, *Recommendation for Change of Publication*.

**AF Form 55**, *Employee Safety and Health Record*

**AF Form 797**, *Job Qualification Standard Continuation/Command JQS*

**AF Form 623**, *Individual Training Record Folder*

***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

**AMCSUP**—Air Mobility Command Supplement

**AMXS**—Aircraft Maintenance Squadron

**AMW**—Air Mobility Wing

**AMW/CC**—Air Mobility Wing Commander

**APS**—Aerial Port Squadron

**CE**—Civil Engineer

**COR**—Contracting Officer Representative

**DoD**—Department of Defense

**FOD**—Foreign Object Damage

**IAW**—In Accordance With

**JQS**—Job Qualification Standard

**MAJCOM**—Major Command

**MDS**—Mission Design Series

**MOC**—Maintenance Operations Center

**MSG/CC**—Mission Support Group Commander

**MXG/CC**—Maintenance Group Commander

**MXS**—Maintenance Squadron

**OPR**—Office of Primary Responsibility

**OJT**—On-the-Job Training

**RAM**—Risk Assessment Management

**RDS**—Records Disposition Schedule

**TO**—Technical Order

**USR**—Unit Safety Representative

**UTM**—Unit Training Manager