

**BY ORDER OF THE COMMANDER
8TH FIGHTER WING**

**8TH FIGHTER WING INSTRUCTION
91-201**



17 DECEMBER 2021

Safety

**PROTECTIVE AIRCRAFT SHELTER
(PAS) AND HANGAR DOOR
OPERATION**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Visual Aid (AFVA) 91-209, *Air Force Occupational Safety and Health Program*, Departmental Air Force Instruction (DAFI) 21-101, *Aircraft and Equipment Maintenance Management*, and Air Force Manual (AFMAN) 91-203, *Air Force Occupational Safety, Fire, and Health Standards*. It is intended to reduce or eliminate injury to personnel during manual and powered Protective Aircraft Shelter (PAS) and hangar door operation. This instruction applies to all assigned, attached and associated units to the 8th Fighter Wing supported by a support agreement on Kunsan Air Base, Republic of Korea. This publication establishes minimum responsibilities for commanders, functional managers, supervisors, unit safety representatives and 8 Fighter Wing agencies. 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 the AF Forms 847 from the field through the appropriate functional chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFI 33-322 Records Management and Information Governance Program, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). 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 document has been substantially revised and must be completely reviewed.

Major changes include: Updated references, 8 MOS/MXOT is now 8 MXG/MXOT, removed AF Form 797 and training will be documented on TBA JQS, changed emergency work orders, added building numbers, and all signs in the attachments are updated.

1. Definitions. For the purposes of this instruction, the term —doors refers to the large main aircraft PAS, hangar, or Aircraft Hush House (hush house) doors that aircraft and equipment pass through. Personnel doors and manually operated overhead doors that do not pose a substantial pinch or crush hazard are not subject to this instruction.

2. Training. All supervisors are responsible for ensuring their personnel are trained prior to operating manual and powered PAS, hangar, and hush house doors. Training is required for all personnel expected to operate, or work in the immediate vicinity of these doors.

2.1. Maintenance Training Flight (8 MXG/MXOT) will conduct PAS, hangar, and hush house door safety and awareness training for all personnel who work in or around PAS, hangars, or hush houses as a part of maintenance orientation training. As a minimum, door safety and awareness training will include door operation hazards, warnings and cautions, and emergency procedures.

2.2. Squadron commanders will ensure units conduct in-house, hands-on operation qualification training for all personnel expected to operate manual and powered PAS, hangar, and/or hush house doors. As a minimum, training will include door hazards, operations, and emergency procedures.

2.3. Maintenance Supervision with custodian authority will develop procedures for manual door operations in the event that powered PAS, hangar, or hush house doors fail to operate. See LCL-8MXG-012, *Local Checklist for Manually Opening and Closing of PAS Doors with Inoperative Motors*, for manual PAS door operation and 8 MXG Form 15, *Manual Hangar Door Opening and Closing Procedures* for manual hangar door operation.

2.4. Training will be documented in the Integrated Maintenance Data System (IMDS). For those personnel not loaded in the IMDS data base, training will be documented on TBA JQS and AF Form 55, *Employee Safety and Health Record*. The IMDS course codes will be as follows:

2.4.1. 36-Month PAS, Hangar, and Hush House Door Awareness training-29110.

2.4.2. Hands-On Manual Hangar Door Training-032373.

2.4.3. Hands-On Powered PAS and Hangar Door Operation-29111.

2.4.4. Hands-On Hush House Door Operation-000064.

3. Door Operational Checkout.

3.1. Squadron commanders will ensure all building custodians perform monthly inspections of PAS, hangar and hush house door operations and safety features in accordance with (IAW) AFMAN 91-203.

3.2. All discrepancies will be noted and emergency work orders submitted to 8th Civil Engineer Squadron (8 CES). Ensure that doors that are found to be unsafe or unusable to operate are identified and locked out IAW AFMAN 91-203.

3.3. Additionally, building custodians will schedule annual 8 CES inspection and preventive maintenance visits to ensure door mechanisms and safety features are properly maintained.

3.4. Cold Weather Hangar Door Operation.

3.4.1. Upon notification of freezing conditions these actions will be complied with for facilities with Aqueous Film Forming Foam (AFFF). The list of affected facilities is as follows:

- 3.4.1.1. BUILDING S-20, POL
- 3.4.1.2. BUILDING 2241, EGRESS
- 3.4.1.3. BUILDING 2257, FUEL BARN
- 3.4.1.4. BUILDING 2820, PAINT BARN
- 3.4.1.5. BUILDING 2827, WASH RACK
- 3.4.1.6. BUILDING 3835-3854, GEN 3 PAS

3.4.2. Temperatures between 0 to 32 degrees Fahrenheit; bay doors will remain open no longer than 30 minutes and remain closed for 30 minutes before re-opening.

3.4.3. Temperatures below 0 degrees Fahrenheit, bay doors will remain open no longer than 15 minutes and remain closed for a minimum of 60 minutes before re-opening.

3.4.4. Heaters may be applied to the aircraft bay to shorten the recovery time.

4. Identification of Hazards. All areas that pose a potential pinch or crush hazard must be marked to ensure no one enters that area during door operation. This will be designated the clear zone. It is the responsibility of the door operator(s) to ensure the area remains clear of non-essential personnel during door operation. The clear zone will be identified as follows:

4.1. Powered PAS, hangar, or hush house doors will always be opened to a width of at least ten feet. For special operations, such as during extreme weather conditions, the door may be opened less than ten feet only if the door control switch is locked off or out and remains locked out until the door can be opened to ten feet or more or be closed. (See AFMAN 91-203 for lockout requirements.)

4.2. Manually operated doors have no minimum opening distance requirement, but a clear zone exists. A clear zone will be defined for any area that creates a pinch or crush hazard.

4.3. For all doors, the clear zone must be established on the floor inside and on the ground outside with a three-inch-wide yellow and black striped line. Ensure that the clear zone provides the minimal safe distance required to prevent injury. Additionally, ensure that a clear zone is defined for each door, as in multiple door situations.

5. Manual and Powered PAS and Hangar Door Operating Procedures.

5.1. Maintenance Supervision with custodian authority will develop operational procedures peculiar to each type of manual and powered PAS and hangar door and post at each of the door control panels.

5.1.1. Procedures will be coordinated through 8 MXG/MXOT and 8 MXG/MXQ prior to 8 MXG/CC approval. The procedures will be reviewed annually. See LCL-8MXG-012 for manual PAS door operation and 8 MXG Form 15 for manual hangar door operation

6. Signage Requirements. Proper signage, in both English and Hangul (Korean) languages, will be posted as a minimum requirement for all aircraft hangar and PAS doors. The following signs are required:

- 6.1. A 7 by 10 inch DANGER sign will be posted at the door control and/or grab area. It will display the word —DANGER in a 1 inch white font on a red oval background, with the statement, —ONLY QUALIFIED PERSONNEL AUTHORIZED BY THEIR SQUADRON COMMANDER MAY OPERATE HANGAR/SHELTER DOORS IAW AFMAN 91-203, para 24.14.8.3 printed below it. (See [Attachment 2](#), Door Control Sign Example).
- 6.2. A 14 by 20 inch DANGER sign will be posted at a location clearly visible to personnel approaching the hazard area. It will display the word —DANGER in a 2 inch white font on a red background, with the statement, —HAZARDOUS AREA – STAND CLEAR DURING DOOR OPERATIONS printed below it. (See [Attachment 3](#), Clear Zone Sign Example).
- 6.3. Ensure directional arrows are placed next to the door controls that clearly indicate the direction of door travel for each corresponding switch or button. Directional arrows must be luminescent or reflective, IAW AFMAN 91-203, para 24.14.8.2.2.
- 6.4. Additionally, each powered PAS door will have a placard posted adjacent to the door controls that indicates the door's serviceability. A green placard with the words, —DOOR OPERATIVE will be used to identify serviceable, operative doors. A red placard with the words, —DOOR INOPERATIVE will be used to identify unserviceable, inoperative doors, and will have the CE work order number annotated. For those doors that are inoperative, lockout or tagout requirements remain.

JOHN B. GALLEMORE, Colonel, USAF
Commander

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

AFVA 91-209, *Air Force Occupational Safety and Health Program*, 21 Oct 2020

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 16 Jan 2020

AFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, 11 Dec 2018

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

LCL-8 MXG-012, *Local Checklist for Manually Opening and Closing of PAS Doors with Inoperative Motors*, 3 January 2019

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 55, *Employee Safety and Health Record*

8 MXG Form 15, *Manual Hangar Door Opening and Closing Procedures*

Abbreviations and Acronyms

AFFF—Aqueous Film Forming Foam

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFVA—Air Force Visual Aid

AFRIMS—Air Force Records Information Management System

DAFI—Departmental Air Force Instruction

IAW—In Accordance With

IMDS—Integrated Maintenance Data System

MACOM—Major Command

OPR—Office of Primary Responsibility

PAS—Protective/Hardened Aircraft Shelter

RDS—Records Disposition Schedule

Attachment 2

DOOR CONTROL SIGN EXAMPLES

Figure A2.1. English Version.



English language "Door Control" sign dimensions:
7"x10" "DANGER" in 1" white font

Figure A2.2. Korean Version.



Korean language "Door Control" sign dimensions:
7"x10" "DANGER" in 1" white font

Attachment 3

CLEAR ZONE SIGN EXAMPLES

Figure A3.1. English Version.



English language "Clear Zone" sign dimensions:
14"x20" "DANGER" in 2" white font

Figure A3.2. Korean Version.



Korean language "Clear Zone" sign dimensions:
14"x20" "DANGER" in 2" white font