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Maintenance

HANGAR / BUILDING DOOR OPERATIONS

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*. This instruction extends the guidance of Air Force Instruction (AFI) 21-101, *Aircraft and Equipment Maintenance Management* and is applicable to all 445th Airlift Wing (AW) Personnel. This instruction establishes hangar/building powered and non-powered door operator training. 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 functionals chain of command. 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 the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>.

SUMMARY OF CHANGES

This instruction has been substantially revised and must be completely reviewed.

1. Responsibilities.

1.1. Operators of hangar/building doors, including but not limited to manual and/or powered center closing hangar doors (not personnel doors) will be thoroughly familiar with operating instructions, precautions (i.e., operating controls, pinch points, crush hazards, etc.), and Protective Personnel Equipment (PPE) as necessary for safe operation. Operators will consider all hazards associated with door operations, such as aperture openings,

counterweight mechanisms, moveable/non-moveable obstructions, cables/pulley mechanisms, etc.

1.1.1. Hangars/Buildings identified will include 4007, 4015, 4016, 4020, 4024 and 4026.

1.1.2. Hangar/building door operators will be qualified and approved by the designated squadron approving authority.

1.2. Supervisors will be knowledgeable of all Occupational Safety and Health Administration (OSHA) Standards, Air Force Occupational Safety and Health (AFOSH) Standards, Technical Orders, and AFI applicable to all hangar door operations and ensure personnel are educated on safe operations, proper lockout/tag out procedures, and required training.

1.3. Real Property Building Managers (RPBM) will include an operational check of all hangar doors during their monthly inspections in accordance with (IAW) Wright-Patterson Air Force Base (WPAFB) Pamphlet (PAM) 32-2, *Real Property Building Manager (RPBM)*, paragraph 10.1.1. Should the RPBM become aware of an unsafe condition through monthly inspections, individual notifications, supervisor safety surveillances, or from 445 AW Safety Office (AW/SE), corrective action must be initiated. All guidelines for corrective action will be IAW WPAFBPAM 32-2. RPBM will provide a courtesy copy of the AF Form 1118, *Notice of Hazard*, to the Quality Assurance (QA) Office when Risk Assessment Codes (RAC) 1, 2, and 3 have been assigned by the AW/SE for all hangar doors. Submit and aggressively follow up work orders for any deficiencies noted in door checkout procedure.

2. Hangar Door Training Requirements.

2.1. Supervisors or designated representatives are responsible for providing initial hangar door operator training for all personnel required to operate doors.

2.2. Initial Hangar door operator training will be conducted at the hangar door location.

2.3. Powered and manual hangar doors will utilize the RPBM developed procedures for training personnel. RPBM's will develop a hands-on On the Job Training (OJT) training program for all personnel who operate electric and/or manual hangar doors. As a minimum, qualification training will include hangar door hazards, operation, and emergency procedures. Developed lesson plans will be forwarded through the QA Office for approval, then forwarded to MXG Training Office before personnel are trained. Lesson plans will include date developed, supervisor name, RPBM name, hangar/building number, type of door, and lesson content. Training will include academic and practical performance demonstration. *NOTE:* Any changes to the hangar/building affecting door operations (e.g. approved modifications, etc.) will require written or electronic notification to AW/SE and the QA Offices. Hangar doors will only be operated by personnel who receive the revised operator training approved through the QA Office.

2.4. Training will be documented in the employees AF Form 55, *Employee Safety and Health Record*, AF Form 797, *Job Qualification Standard Continuation/Command JQS*, G081, *Maintenance Information System (MIS)* or other available means (i.e. for non maintenance personnel to whom the AF Form 55 and AF Form 797 do not apply). All MXG personnel training documentation will utilize the automated G081. All MXG door operators will be qualified via an AF Form 2426, *Training Request and Completion*, signed by the

designated approving authority, respective to each squadron, utilizing the appropriate G081 course code.

2.4.1. The MXG/CC will designate squadron representatives as approving authorities. This delegation will be no lower than the Maintenance Superintendent level of supervision.

2.5. Requirements and course code documentation will be as follows:

Hangar Door Operator Course Codes:

WPAT 000060 - Qualification - Frequency: One Time

Manual Hangar Door - Building 4020/4024/4026

WPAT 000070 - Qualification - Frequency: One Time

Powered Hangar Door - Building 4007

WPAT 000080 - Qualification - Frequency: One Time

Powered Hangar Door - Building 4015/4016

WPAT 000090 - Qualification - Frequency: One Time

Powered Hangar Door - Building 4026

2.6. For all non-MXG personnel, squadron commanders will forward a letter to the MXG/CC listing qualified and authorized door operators for each type of hangar door. An AF Form 2426, *Training Request and Completion*, signed by the applicable buildings designated trainer will be attached prior to forwarding to the MXG/CC. Non MXG personnel authorization letters WILL be posted on the door; beside the door control panel, if applicable.

3. Hangar Door Identification of Hazards Requirements.

3.1. All vertical and horizontal areas posing a potential pinch point or crush hazard will be marked, both inside and outside, to warn personnel of the potential danger.

3.2. Identification of hazard marking will be IAW AFI 21-101 AFRC Supplement 1, *Aircraft and Equipment Maintenance Management*.

4. Signage Requirements.

4.1. Sign design and placement on hangar doors will be IAW 21-101 AFRC Supplement 1. Proper signage must additionally meet AFOSH STDs 91-100, *Aircraft Flight Line-Ground Operations and Activities* and 91-501, *Air Force Consolidated Occupational Safety Standard* requirements.

4.2. Hangar door control danger signs and hangar door/bay danger signs will be painted/affixed on hangar doors and on door bays/alcoves/wells. Floor signs are optional.

5. Other Door Types.

5.1. Identification of hazard requirements for all fold-up, counterbalanced, and roll-up doors will be addressed on a case-by-case basis through the RPBM, Wing Safety and the QA offices. The requirements for these doors will meet AFOSH & OSHA standards. Any areas

outside the requirements needing strengthened will utilize the Operational Risk Management (ORM) program.

6. Control Panel Requirements.

6.1. All powered hangar will have luminescent or reflective directional arrows placed adjacent to each switch to indicate the direction of door travel for each corresponding switch.

6.2. All powered hangar doors will have a detailed operating functional checklist displayed at each hangar door control panel. Functional checklist will include step-by-step procedures, outlining all safety precautions to be followed and list the name of the RPBM.

6.3. A hinged cover should be installed over the close switch if required to prevent inadvertent activation.

7. Hanger Door Procedures.

7.1. Powered hangar doors will be opened a minimum of 10 feet. A 10 foot mark will be identified on the floor, visible from the door control panel. If operational constraints require the doors to be opened less than 10 feet, the main electrical power switch for the door will be locked out (OFF) and remain locked out until the door is opened more than 10 feet or closed.

7.2. Any single section of manual hangar doors will be opened a minimum of 5 feet. A 5 foot mark will be identified on the floor at each door section, both inside and outside.

STEPHEN D. GOEMAN, Col, USAFR
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 JULY 2010

AFI 21-101 AFRC Supplement, *Aircraft and Equipment Maintenance Management*, 13 JAN 2011

AFOOSH STD 91-66, *General Industrial Operations*, 1 OCT 1997

AFOOSH STD 91-100, *Aircraft Flightline-Ground Operations and Activities*, 1 MAY 1998

AFOOSH STD 91-501, *Air Force Consolidated Occupational Safety Standard*, 7 JULY 2004

WPAFB PAM 32-2, *Real Property Building Manager (RPBM)*, 15 APR 2005

OSHA CFR 29, *Occupational Safety and Health Administration, Code of Federal Regulations*, 10 Aug 2007

Adopted Forms

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

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

AF Form 1118, *Notice of Hazard*,

AF Form 2426, *Training Request and Completion*.