

**BY THE ORDER OF  
THE COMMANDER**



**ANDREWS AIR FORCE BASE  
INSTRUCTION 91-101**

**12 DECEMBER 2003**

**Maintenance**

**AIRCRAFT FUEL TANK RESCUE TEAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Air Force Occupational Safety and Health Standard (AFOSH) 91-25, *Confined Spaces* and Technical Order (TO) 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells*. This publication establishes aircraft fuel tank rescue team procedures and applies to all confined space aircraft fuel tank entries on Andrews AFB MD. It implements the intent of the confined space program.

**SUMMARY OF REVISIONS**

**This document is substantially revised and must be completely reviewed.**

This document is revised to identify governing directives and reflect both military and civilian work force. Revisions in Air Force Occupational Safety and Hazard Standard, directives and aircraft maintenance requirements have been incorporated throughout this instruction.

**1. General.** The following procedures are established should an entrant become trapped or incapacitated while inside an aircraft fuel tank. Entry authority and their designated alternates will ensure all personnel are thoroughly briefed on this plan.

**2. Rescue Team.** A group of three or more specially trained employees who are designated to rescue from aircraft fuel tanks identified as confined space.

2.1. Rescue team composition:

2.1.1. Attendant: A 2A6X4 or civilian equivalent completely trained in accordance with (TO) 1-1-3 to enter aircraft fuel tanks and rescue procedures.

2.1.2. Runner: A designated individual trained to provide emergency response actions as required.

2.1.3. Entrant: Any qualified and trained individual with a purpose to enter a fuel tank.

## 2.2. Procedures:

**WARNING:** Immediately Dangerous to Life and Health (IDLH) entry for rescue purpose only may be authorized by an entry authority, after the reason for IDLH has been determined and all possible actions and precautions have been taken and are in place to eliminate the IDLH condition. This is to prevent injury to any additional entrants entering as a rescue effort.

## 2.3. Attendant will:

2.3.1. Alert the runner that a problem exists and to stand by for instructions.

**WARNING:** DO NOT ATTEMPT RESCUE without a runner present.

2.3.2. Ensure that the entrant is wearing the respirator approved for tank entry. If not, the attendant will don a respirator and enter the tank as needed, place a respirator on the entrant and exit the tank. An air supplied respirator or self contained breathing apparatus is required when there is an oxygen deficient environment. During this action the runner will assume the position of attendant.

**NOTE:** The third person/runner assuming the position of attendant, UNDER NO CIRCUMSTANCE, will ever enter the fuel tank.

2.3.3. Ensure entrant has a constant flow of fresh air blowing into the tank.

**WARNING:** Extreme caution should be exercised when removing any components that may cause a fuel spill.

2.3.4. Evaluate the situation. Entangled entrants may be able to remove a component and exit the tank. All situations must be dealt with in a safe, calm and rational manner.

2.3.5. If the entrant cannot remove himself or herself, the attendant will inform the runner of the situation and get help.

**NOTE:** DO NOT ATTEMPT RESCUE without a runner present.

## 2.4. Runner will:

2.4.1. Notify emergency help channels through the fastest, most verifiable method possible.

2.4.1.1. Radio to Maintenance Operations Control (MOC).

2.4.1.2. Hotline to MOC.

2.4.1.3. Use phone to call emergency response.

2.4.1.3.1. When using on-base phone dial 911.

2.4.1.3.2. When using off-base phone dial 911 and you will be transferred to Andrews.

2.4.1.4. Pull fire alarm in building.

2.4.1.5. Regular phone to MOC.

2.4.2. Give the following information:

2.4.2.1. Name and that you have an emergency

2.4.2.2. Aircraft tail number

2.4.2.3. Location

2.4.2.4. Describe emergency

2.4.3. Inform attendant that contacts were made and help is on the way.

**WARNING:** DO NOT ATTEMPT RESCUE without a runner present.

2.4.3.1. If additional personnel are available, the original attendant may attempt rescue with the new person acting as attendant.

**WARNING:** Extreme caution should be exercised when removing any manifolds that may cause a fuel spill.

**NOTE:** THE FIRE DEPARTMENT AND FUEL SYSTEM PERSONNEL ARE THE ONLY AUTHORIZED AGENCIES IN THE AREA. Medical personnel will enter only when called.

2.4.4. Runner: If in a hangar, open a door so that the emergency response personnel will have access to hangar area. Position the personnel static discharge plate/sign (located inside the hangar at aft end of aircraft) at the 50 foot boundary line and wait for fire department personnel. This establishes an entry control point for the fire department personnel to discharge static electricity build up prior to entering the area. Brief the senior fire officer/chief on the present situation. Give the following information:

2.4.4.1. If the tank is safe to enter.

2.4.4.2. What actions the fuel system personnel have taken and what they are doing now.

2.4.4.3. Brief on the usage of equipment; no canvas or asbestos fire suits, matches, lighters, jewelry or non-intrinsically safe radios.

**NOTE:** All intrinsically safe radios must possess a sticker showing date of inspection.

2.5. Senior fire official will relieve runner of area control and assume responsibility, ensuring all non-authorized personnel stay beyond entry control point and clear of all rescue efforts.

2.6. Runner will report back to tank entrance and assume attendant responsibility for the rescue attempt.

2.7. Attendant will don a respirator and attempt initial rescue effort.

**NOTE:** Entrapped, entangled or unconscious entrants may require more than one rescuer to enter the tank. In this event any fuel system personnel will become initial rescue entrants and fire department personnel will assume attendant duties. For Navel/Marine Corp personnel performing fuel tank maintenance that require rescue the attendant shall activate the 911 system and stand by to assist.

2.8. Fire department will monitor all actions and prepare to enter the tank to aid in rescue operations.

2.9. Emergency response medical personnel will stand by at the edge of the 50-foot boundary and give medical treatment as required. They will not enter the area unless instructed to do so.

2.10. Security personnel, when requested, will control foot and vehicular traffic in and around the area.

2.11. Non-emergency base agencies: At no time will other agencies be authorized into the area during the rescue attempts, i.e., base safety, bioenvironmental, squadron/group information offices or any quality assurance agency. All requests for information must wait until after the rescue has been completed to ensure no rescue delay.

**3. Evacuation Exercises:** This plan will be exercised with all relevant base agencies at least annually.

**4. Coordinating Personnel:** The above procedures must be coordinated by the following agencies IAW TO 1-1-3:

- 4.1. Installation medical services.
- 4.2. Fire department.
- 4.3. Base safety.
- 4.4. Bioenvironmental services.

**5. Training:** Non-2A6X4 personnel assigned to runner duties will receive additional attendant position training. Training requirements will be determined by bioenvironmental and fuels section chief or designated representative and will be addressed on the annual master confined space permit.

DAVID S. GRAY, Brigadier General, USAF  
Commander

**Attachment 1**

**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

***References***

AFOOSH Standard 91-25, *Confined Spaces*

(TO) 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells*

***Abbreviations and Acronyms***

**AFOOSH**—Air Force Occupational and Health Standard

**ASD**—Andrews Support Division

**89 AW**—89th Airlift Wing

**MOC**—Maintenance Operations Center

**MXG/CC**—Maintenance Group Commander

**(TO)**—Technical order