BY ORDER OF THE COMMANDER
BEALE AIR FORCE BASE

BEALE AIR FORCE BASE
INSTRUCTION 21-180

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Maintenance

HYDRAZINE POLICIES AND PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Maintenance of Military Material*. This publication applies to military and civilian members of the Regular Air Force (RegAF) tasked with responding to, or with responsibilities relating to hydrazine incidents at Beale Air Force Base. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). Refer waiver requests, 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 Forms 847 from the field through the appropriate functional's chain of command.

1. GENERAL. Hydrazine incidents are categorized or defined as Emergency Start System (ESS) activation in-flight, ESS activation on the ground, hydrazine spills or leakage, or crash of a U-2S/T aircraft.

1.1. For the purpose of hydrazine response, two distinct zones shall be defined for hangared aircraft and outside aircraft:

1.2. Hangared Aircraft. Immediate area will be evacuated of non-emergency responders to 500-ft. Any facilities located within the 500-ft cordon will be in-place protected. SFS personnel shall maintain security of the 500-ft cordon. Only Hydrazine Response Team (HRT) members will enter this area until the area is determined free of hydrazine leakage. Exception: if necessary to extract the pilot/ground run operator, properly equipped fire and rescue personnel may enter the perimeter. Security Forces will also establish entry/exit control points (ECPs) to route non-essential personnel from the facility..

1.3. Outside Aircraft. Security Forces will cordon off an area 100 feet upwind and 500 feet downwind, establish an ECP, and only permit HRT and Fire Department personnel inside the cordon area. Other agencies to include Crash Recovery, Bioenvironmental Engineering (BEE), Medical, or any other agency the Incident Commander (IC) deems unnecessary shall remain outside the established cordon until the emergency is terminated.

2. RESPONSIBILITIES.

2.1. Maintenance Squadron (MXS):

2.1.1. The Aircraft Fuel Systems Section (9 MXS/MXMCF) is the office of primary responsibility for Hydrazine Response Team (HRT) functions. Note: Aircraft Fuel Systems Section personnel do not act as the IC during hydrazine incidents.

2.1.1.1. Will develop checklist for responding to hydrazine incidents.

2.1.1.2. Will establish 24-hour procedures for manning and equipping an HRT, i.e. recall procedures. **WARNING:** Only HRT members shall attempt to contain or neutralize a hydrazine leak and or spill. Specialized training and equipment are required.

2.2. Maintenance Operations Center (MOC) will develop operating instructions and/or checklists for notifying all required organizations in the event of a hydrazine incident, leak, or spill.

2.3. Security Forces Squadron (SFS):

2.3.1. Will develop a checklist for establishing flightline ECPs, routing all non-essential personnel away from hydrazine incidents.

2.3.2. Coordinate with local law enforcement agencies to secure crash scenes and minimize the danger of hydrazine contamination and ensure public safety.

2.3.3. Will provide an individual to function as liaison with the Fire Chief, normally the Security Flight Sergeant.

2.3.4. Will establish the appropriate cordon area in accordance with disaster response procedures when directed by the IC.

2.4. Civil Engineering Squadron (CES):

2.4.1. The Base Fire Department will act as IC for all hydrazine incidents.

2.4.2. Environmental Management (CEIE) will provide guidance for the disposal of neutralized hydrazine IAW applicable laws and regulations. CEIE will report hydrazine spills to appropriate regulatory agencies as required.

2.5. Medical Group (MDG):

2.5.1. Operational Medical Readiness Squadron (OMRS) Bioenvironmental (BE) Flight will approve all HRT personal protective equipment. The BE Flight will respond to HRT incidents as requested by the HRT and/or Civil Engineering Flight (CEF).

2.5.2. The 9 MDG Flight Surgeon On Call (FSOC) and Field Response Team (FRT) can be activated by the Incident Commander and/or HRT for hydrazine response. The 9 MDG/CC and 9 OMRS/CC should be informed if either are activated. The 9 MDG/SGP will be responsible for directing the FRT and Flight and Operational Medicine Clinic to develop operational instructions for hydrazine exposure. All applicable Aeromedical Personnel assigned to the 9 RW (including 9 MDG flight medicine and Squadron Medical Element personnel) will accomplish this training annually.

2.6. Wing Safety (SE):

2.6.1. In the event of damage to government property or personnel injury, Wing Safety will enter the area once cleared to assess the mishap, gather information, and interview witnesses.

3. HYDRAZINE INCIDENT RESPONSE.

3.1. ESS activation in-flight or while taxiing:

3.1.1. Pilot will accomplish checklist procedures for activated ESS/hydrazine leak and:

3.1.1.1. Contact Beale tower and declare an emergency.

3.1.1.2. If a hydrazine leak is noted, stop aircraft movement to avoid spreading contamination. Otherwise, pilots will taxi aircraft to Taxiway M during daylight, and Taxiway B or E during darkness or inclement weather (Taxiway M is unlit/closed at night).

3.1.2. Tower shall activate the primary crash net.

3.1.3. MOC will initiate emergency notification procedures.

3.1.4. HRT members will determine status of hydrazine and take appropriate actions according to the hydrazine spill/clean-up checklist.

3.1.5. If hydrazine is present, a Fire Department member will evacuate the pilot from the aircraft. The HRT will begin clean-up procedures in accordance with local checklists and ensure that all collected hydrazine is properly neutralized and contained for later disposition by base hazardous waste personnel. The area is cleared to resume normal operations.

3.2. ESS activation during ground run or maintenance (including activation prior to taxi):

3.2.1. The ground run operator/pilot will notify Ground Control.

3.2.2. Airfield Management will activate secondary crash net.

3.2.3. MOC will initiate ground emergency notification procedures.

3.2.4. The ground run operator/pilot will accomplish technical order procedures for activated ESS/hydrazine leak.

3.2.5. All other personnel will evacuate the potential hazardous zone to upwind side.

3.2.6. HRT will respond immediately to determine the status of the hydrazine and take appropriate action according to hydrazine spill/clean-up checklist.

3.2.7. If a hydrazine incident occurs inside a facility, the structure will remain evacuated until cleared for re-entry by the IC.

3.2.8. Aircraft accident.

3.2.8.1. Maintenance/aircrew personnel will notify Ground Control and Tower shall activate the primary crash net.

3.2.8.2. HRT/BEE will respond as required under the direction of the IC.

3.3. Hydrazine spills or leakage:

3.3.1. HRT/BEE will respond as required under the direction of the IC. BEE will provide health risk assessment and PPE recommendations to the IC as requested.

3.3.2. Airfield Management will activate secondary crash net.

3.3.3. MOC will initiate ground emergency notification procedures.

3.3.4. All personnel will evacuate the potential hazardous zone to upwind side.

3.3.5. HRT will respond immediately to determine the status of the hydrazine and take appropriate action according to hydrazine spill/clean-up checklist (fuel shop).

3.3.6. If a hydrazine incident occurs inside a facility, the structure will remain evacuated until cleared for reentry the IC.

3.4. Aircraft Crash:

3.4.1. HRT/BEE will respond as required under the direction of the IC. BEE will provide health risk assessment and PPE recommendations to the IC as requested.

GEOFFREY L. CHURCH Colonel
Commander, 9th Reconnaissance Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 21-1, Maintenance of Military Materiel, 1 July 2018

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

AFI 48-145, Occupational and Environmental Health Program, 28 September 2022

DAFMAN 91-203, Air Force Occupational Safety, Fire, and Health Standards, 24 March 2022

AFI 48-137, Respiratory Protection Program, 15 Jul 2018

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFMAN—Air Force Manual AFPD – Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

BEE—Bioenvironmental Engineering

CEF—Civil Engineering Flight

CES—Civil Engineering Squadron

CEIE—Environmental Management

ECP—Entry Control Point

ESS—Emergency Start System

HRT—Hydrazine Response Team

IC—Incident Commander

MDG—Medical Group

MOC—Maintenance Operation Center

MXS—Maintenance Squadron

OMRS—Operational Medical Readiness Squadron

RDS—Records Disposition Schedule

SE—Wing Safety

SFS—Security Forces Squadron

Terms

Office of Primary Responsibility—The 9 MXS/MXMCF office is the overall OPR for this OI.