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Maintenance

F-16 AIRCRAFT HYDRAZINE PROCEDURES



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes procedures and assigns responsibilities for processing the F-16 aircraft hydrazine system through normal and emergency conditions. It implements AFRPD 21-1, *Managing Aerospace Equipment Maintenance*. It is applicable to all organizations attached or assigned to the 944th Fighter Wing.

SUMMARY OF REVISIONS

This revision changes the OPR, defines H-70 spill, adds procedures for posting guards in confined areas, reorganizes text, and changes organizational designations.

1. Introduction. Various operations performed within aircraft maintenance are in an environment where personnel injury or aircraft damage could occur if proper hydrazine maintenance procedures are not applied.

2. Responsibilities. The Fuel Systems Section will:

- 2.1. Be responsible for initial response to hydrazine spills within the maintenance complex.
- 2.2. Maintain the capability to perform normal H-70 maintenance.
- 2.3. Establish an emergency handling of F-16 hydrazine training course for spill team and augmentees.
- 2.4. Ensure that Fuel System Section personnel have adequate training in both normal and emergency H-70 handling.
- 2.5. Ensure compliance with H-70 safety directives.
- 2.6. Inform the Luke Air Force Base Bioenvironmental Engineering Services of changes to H-70 emergency equipment or procedures.

3. Sequence of Operations:

3.1. A qualified 944 Logistics Group Hydrazine Response Team (HRT) should be available to augment the host base response to hydrazine emergencies during normal duty hours. The host-tenant agreement places primary responsibility for emergency response to include hydrazine spill incidents on the 56th Fighter Wing.

3.2. F-16 aircraft scheduled to enter phase inspection must have the H-70 system purged and made safe prior to entering the phase dock.

4. Protective Equipment. Personnel assigned to H-70 maintenance or spill teams will have access to a complete set of protective equipment. This equipment will be maintained by the Fuel Systems Section and will be available in their emergency response vehicle.

5. Procedures:

5.1. Normal hydrazine maintenance will consist of the removal, installation, and operational checks of the EPU system. Normal maintenance will be performed on a designated hydrazine purge pad.

5.2. Emergency hydrazine maintenance will consist of actions necessary to make the aircraft safe for maintenance after a hydrazine leak or spill. Emergency maintenance will be performed wherever necessary until the aircraft is safe to tow to a designated hydrazine purge pad.

5.2.1. A hydrazine spill is the unintentional spillage or leakage of hydrazine. Drops of H-70 during maintenance is not a spill situation if anticipated and precautionary action is taken.

5.3. The following steps are mandatory in the event of a suspected hydrazine spill:

5.3.1. Personnel suspecting H-70 leaks will immediately evacuate the area to a minimum distance of 50 feet. If the suspected leak is in a confined space, building or hangar, evacuate the area to a minimum distance of 100 feet. Guards will be posted at entrances to ensure nobody enters the facility. They will then notify Maintenance Operations Center (MOC) of the suspected leak.

5.3.2. The MOC will initiate the H-70 Emergency Action Procedural check sheet.

5.3.3. The MOC will notify the Hydrazine Response Team.

5.3.4. The HRT will maintain contact with the MOC and inform them if a leak is confirmed as hydrazine.

5.3.5. The area involved will be marked by signs at a minimum 50 feet indicating CAUTION, HYDRAZINE, FLAMMABLE CANCER SUSPECT AGENT, AVOID VAPORS AND SKIN CONTACT, WEAR PROTECTIVE EQUIPMENT, NO SMOKING, EATING, OR DRINKING.

5.3.6. H-70 neutralization and cleanup procedures will be accomplished as prescribed by LCL 944 FW-10-01.

5.4. H-70 tanks removed from the aircraft will be placed in an authorized shipping and or storage container. The container will be labeled as to the tank serviceability and applicable aircraft tail number and then transported to the authorized H-70 servicing area.

5.5. In the event of contact with H-70, the on-scene supervisor will dispatch the affected person to the nearest source of water and instruct the individual to flush the exposed area for a minimum of 15 min-

utes with fresh water. Personnel exposed to the ammonia-like fumes or liquid hydrazine will be transported to the hospital emergency room for evaluation.

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Commander

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

AFRESI 21-101, *Objective Wing Aircraft Maintenance*.

AFI 91-204, *Air Force Occupational Safety, Fire Prevention, and Health Program*.

AFMAN 91-201, *Explosive Safety Standard*.

AFM 161-30 V2, *Liquid Propellants*.

AFOSH Standard 48-1, *Respiratory Protection Program*.

AFOSH Standard 127-31, *Personal Protective Equipment*.

AFOSH Standard 48-8, *Controlling Exposure to Hazardous Materials*.

T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*.

T.O. 1F-16C-2-49 Series, *Emergency Power System*.

56 FW OPLAN 355-1.

LCL 944 FG-10-01, *F-16 Hydrazine Procedures Checklist*.

Terms

Normal hydrazine (H-70) maintenance—Routine maintenance on any and all components of the hydrazine system during normal operating functions.

Abnormal hydrazine maintenance—Work on any portion of the F-16 hydrazine system which fails, leaks, or is inadvertently fired and considered contaminated.

Hydrazine spill—Unintentional spillage or leakage of hydrazine. Drops of H-70 during maintenance is not a spill situation if anticipated and precautionary action is taken.