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35TH FIGHTER WING

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Maintenance

CRASH DAMAGED OR DISABLED AIRCRAFT RECOVERY (CDDAR) PROCEDURES

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This instruction implements AFPD 21-1, Air and Space Maintenance, and AFI 21-101, Aircraft and Equipment Maintenance Management, and is applicable to all units assigned or attached to the 35th Fighter Wing. This instruction establishes the responsibilities and procedures governing crash recovery, hot brakes, barrier engagement and In-Flight Emergency (IFE) operations at Misawa Air Base. 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 Air Force Records Information Management System records disposition schedule. Additionally, if the publication generates a report(s), alert readers in a statement and cite all applicable Reports Control Numbers in accordance with AFI 33-324. 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 AF Form 847s from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This interim change implements additional information required in 35FWI 21-102 and adds updated references.

1. Responsibilities:

1.1. The 35th Maintenance Group (MXG) Commander is responsible for the CDDAR program. Procedures must follow Air Force Incident Management System (AFIMS) and federal Occupational Safety and Health Administration (OSHA) guidelines. The MXG/CC also ensures sufficient equipment is available to include mobility/deployed operations authorized in the applicable AS. Additionally, the MXG/CC approves selections for CDDAR Team Chiefs and waivers for training. However, if training is available units must make effort to schedule personnel.

1.2. Wreckage will not be disturbed IAW AFI 91-204, Safety Investigations and Reports, with the exception of essential rescue operations. Wreckage may be moved to prevent interference with vital air operations as deemed necessary by 35 FW/CC or the Incident Commander (IC). Refer to Misawa AB Comprehensive Emergency Management Plan (CEMP) 10-2.

1.3. The Host Wing Commander and staff Agency Chiefs/Noncommissioned Officers in Charge (NCOIC) are responsible for implementing policy and ensuring compliance with this instruction.

1.4. All personnel involved in crash recovery operations will adhere to training and safety procedures established in governing directives and standards.

1.5. The 35th Transient Alert/Crash Recovery Section (35 MXS/MXMMT) will develop wing CDDAR procedures, coordinated through Fire Emergency Services (CES/CEF), Bioenvironmental Engineering (BEE) (AMDS/SGPB), CE Readiness and Emergency Management (CES/CEX), Explosive Ordnance Disposal (EOD) (CES/CED), Wing Safety (FW/SE), Airfield Management (OSS/OSA), Maintenance Operations Center (MOC) (MOS/MXOOM), Security Forces (SFS) and Quality Assurance, IAW AFI 21-101_COMBATAIRFORCESUP, Aircraft and Equipment Maintenance Management, Para. 14.10.5.5. In addition, the flight will maintain a list of all CDDAR equipment with an updated and approved inventory by the Flight Chief every 6 months, or after use during an exercise or actual recovery.

1.6. Communication between the 35 CES Fire Emergency Services Flight, and Crash Recovery on the "Crash" network is mandatory to ensure aircraft recovery actions are performed as safely and quickly as possible. The Installation Fire Chief has the responsibility for net control of the "Crash" radio network to assure clear and uninterrupted transmission between key functions during the recovery operations.

1.7. The Crash Recovery Team will respond and assist transient aircraft and Japan Air Self Defense Force (JASDF) with recovery efforts. The Crash Recovery Team will also act as a liaison to procure heavy equipment required for the Crash Recovery operations.

2. Generalized CDDAR Responsibilities:

2.1. Supervisors at all levels must recognize the sources of hazards and apply appropriate safety practices. There is an infinite variety of possible emergency and crash recovery situations; therefore, specific procedures cannot be prescribed for every situation. All aircraft recovery actions are coordinated through the Emergency Operations Center (EOC) to the IC.

Participation in wing crash recovery exercises and implementation of operational risk management techniques are imperative for all emergency and crash recovery operations.

3. Definitions:

3.1. Normal Responses: Aircrew declared emergency requiring crash recovery team response but limited action in recovering the aircraft. EXAMPLES: Flight control malfunctions, radio failures, bird strikes, hydrazine leaks/spills, low fuel, hung ordnance and gun malfunctions.

3.2. Major Responses: Aircrew declared emergency requiring crash recovery team response and action in recovering/removing the aircraft. EXAMPLES: Landing gear will not extend, collapsed landing gear, blown tires, emergency power unit fires, hot brakes, hung flares, barrier engagement/cable arrestment, aircraft departs runway/taxiway and/or aircraft crashes.

3.3. Incident Commander (IC): Individual assigned responsibility for directing and coordinating all emergency response and recovery actions.

3.4. Crash Recovery Team Chief (CRTC): Individual assigned responsibility for managing the crash recovery program according to Air Force instructions, wing mission plans and applicable host-tenant agreements. Qualification will consist of reviewing the following: 35 FWI 21-102, Crash, Damaged or Disabled Aircraft Recovery Procedures; AFI 21-101; LCL 35FW-240 EMERGENCY RESPONSE PROCEDURES FOR F-16 AIRCRAFT; and Misawa AB CEMP 10-2, ANNEX A, Appendix 2 – Aircraft Accidents.

3.5. Crash Recovery Team Supervisor (CRTS) (a qualified 2A373 or 2A571): Individual assigned responsibility for directing and coordinating aircraft recovery procedures and actions.

3.6. Crash Recovery Team Member (CRTM): Individual tasked to perform aircraft recovery duties.

3.7. The US Air Force F-16CJ/D aircraft is the primary Mission, Design, Series (MDS) assigned to 35 FW.

4. Personnel Responsibilities:

4.1. 35th Maintenance Squadron, Maintenance Flight, Transient Alert/Crash Recovery Section (35 MXS/MXMMT) is responsible for the crash recovery program. The section chief or designated representative will assume the duties of CRTS.

4.2. The CRTC (Primary) will:

4.2.1. Establish the 35 MXG CDDAR program and serve as OPR for the unit CDDAR instruction.

4.2.2. Develop, in conjunction with the 35th Maintenance Operations Squadron, Maintenance Training Flight (35 MOS/MXOT), course control documents and the course curriculum for crash recovery training.

4.2.3. Review support agreements and the base disaster response plan on an annual basis. Provide inputs/changes as required.

4.2.4. Ensure CDDAR procedures are coordinated with the 35 FW and on-/off-base agencies (as required).

4.2.5. Inform the 35 MXG/CC in writing of equipment shortages/unserviceability that preclude effective CDDAR support/response.

4.2.6. Ensure sufficient personnel are trained to support CDDAR operations, including:

4.2.6.1. Basic equipment operation (e.g., light carts, generators, etc.).

4.2.6.2. Familiarization training on any unique characteristics, hazards, and materials or assigned aircraft (i.e., F-16 EPU, hydrazine, aircraft composite material, etc.). Document training in applicable hard copy or electronic training records.

4.2.6.3. Proper use of Personnel Protection Equipment (PPE) as determined by technical data and the base Bioenvironmental Engineer. Crash Recovery PPE gear listing and training qualification/information will be maintained in the 35 MXS Transient Alert/Crash Recovery section.

4.2.6.4. Special qualifications for personnel. Ensure individual team member qualifications for specific equipment operations (i.e., lift bags, Recovery 1 truck, tow vehicle, 30 ft. trailer, crane, etc.) are identified and documented.

4.2.6.5. Serviceable tools and support equipment for recovery operations (i.e., bags, slings, manifolds, etc.) are available. Maintain a list of all CDDAR tools and equipment.

4.2.7. Normal Responses: Assign an F-16 qualified Crash Recovery Team (CRT) consisting of at least three members, including a Team Supervisor (qualified 2A373 or 2A571) and two Team Members. The two team members will be qualified as aircraft tow supervisor and tow vehicle operator IAW AFI 21-101 (Team Supervisor can also act as aircraft tow supervisor). The aircrew member (a/c pilot) will act as a brake rider if mission/time constraints dictate.

4.2.8. Major Responses: Assign an F-16 qualified CRT consisting of at least four members, including a Team Supervisor (qualified 2A373 or 2A571) and three Team Members. The three team members will be qualified as aircraft tow supervisor, tow vehicle operator, and aircraft brake rider IAW AFI 21-101(Team Supervisor can also act as aircraft tow supervisor). If additional CRT members are required, they will be augmented from the 35 MXS Phase Inspection Section. The aircrew member (a/c pilot) will act as a brake rider if mission/time constraints dictate.

4.2.9. Ensure a CRT is available during all scheduled flying hours and a standby crew is designated for all non-scheduled flying hours. A list of standby CRT members will be published weekly and furnished to the MOC, through 35 MXS supervision, on the standby duty roster. Refer to 35 MXS weekend duty standby listing.

4.2.10. Ensure the following equipment is centrally located and available for emergency dispatch:

4.2.10.1. General-purpose radio-equipped truck. In order to make the vehicle readily identifiable the call sign “RECOVERY ONE” will be stenciled on either side, on the rear and in reverse lettering on the hood. The lettering on either side will be 7-inch white vinyl while the lettering on the rear and on the hood will be 5-inch white vinyl.

4.2.10.2. Trailer and tow vehicle (for storage and transportation of recovery equipment).

4.2.10.3. Aircraft tow vehicle.

4.2.10.4. Aircraft tow bars.

4.2.10.5. Applicable 60-ton Crane. 60-ton or higher will be obtained by one of the following means:

4.2.10.5.1. Contacting 35th Civil Engineering Horizontal Repair Shop (35 CES/CEORH) (aircraft nose and tail lifts only).

4.2.10.5.2. Contacting JASDF Base Operations through USAF Base Operations.

4.2.10.5.3. Leasing through coordination with 35th Logistic Readiness Squadron Vehicle Operations Flight (35 LRS/LGRVO) and 35th Contracting Squadron (35 CONS/LGCB).

4.2.10.6. Slings, bellybands, snatch cables, chains, etc.

4.2.11. Conduct/participate in quarterly/annual training exercises. Coordinate with 35 CES/CEX before annual exercises.

4.2.12. Coordinate with unit QA weight and balance manager when weight and Center of Gravity (CG) conditions are unknown.

4.3. The CRT responds to all In Flight Emergencies (IFE) and ground emergencies (GE) and is responsible for removal of disabled, damaged and/or crashed aircraft from the active runway, taxiways or other areas on or off base. Aircraft Maintenance Unit Production Supervisor will respond to all on-base IFEs and GEs involving aircraft assigned to their unit. The CRT also has responsibility for composite material mishap containment and cleanup IAW AFI 21-101.

4.3.1. The owning agency will provide information regarding all classified equipment installed on the aircraft to the Team Chief (TC). The TC will retain control over all assets until such time that the items may be secured by the owning agency. If the classified equipment cannot be safely removed, Security Forces will maintain a cordon until safety can be ensured. (Added).

4.4. The IC is in command of IFEs and GEs until the scene is fire safe or the EOC Director/ designated representative assumes command as the IC IAW AFMAN 10-2405, which states that if two or more agencies respond, the FD will be the incident commander.

4.5. After the aircraft is fire safe, the IC will clear the CRT to the aircraft for removal/recovery operations.

4.6. The 35 MXS Production Superintendent will coordinate with the MOC for all CRTS support requests from on/off base agencies IAW AFI 21-101.

4.7. The 35 MXS Accessories Flight, Fuels Section will provide a Hydrazine Response Team (HRT) for all hydrazine related aircraft emergencies. The HRT is responsible for detection, neutralization and clean up of hydrazine leaks/spill IAW AFI 21-101.

4.8. IC will establish a cordon and SFS will maintain the cordon, entry control point and traffic control point. 35 SFS will maintain the cordon and entry/exit control point until released by the IC. The 35 SFS will notify the MOC who will in-turn notify other agencies to clear the area. The IC or HRT may expand the cordon size as the situation warrants IAW AFI 21-101.

4.9. The 35th Bioenvironmental Engineering Flight (35 AMDS/SGBP) will check the area for health hazards, hazardous vapors, etc., upon request by the IC.

4.10. The 35 MXS Munitions Flight (35 MXS/MXMW) will provide a driver and 40-foot flat bed trailer or MHU-110 munitions trailer as needed for removal of munitions/explosives.

4.11. The 35 MXS AGE Flight (35 MXS/MXMG) will provide ground equipment at the request of IC and/or CRTS. All equipment must be readily available for use during CDDAR operations. (See Attachment 2)

4.12. The 35 LRS/LGRVO will provide qualified drivers and special purpose vehicles at the request of IC and/or CRTS. All vehicles and drivers must be readily available for use during CDDAR operations. (See Attachment 3)

4.13. MOC will maintain a current MAJCOM/owning organization telephone roster of points of contact for aircraft transiting Misawa AB. This roster will be used to notify the appropriate organization in the event of a mishap. MOC will be the focal point to relay information between the CRTS and the MAJCOM/owning organization.

4.14. The 35 OSS Aircrew Flight Equipment (AFE) section will provide personnel to identify and safely secure all AFE involved with recovery operations. (Added).

4.15. The 35 MXS Accessories Flight, Egress Section will provide egress personnel to safe egress equipment as required. Egress personnel will also identify and safely secure all egress components involved with aircraft recovery operations. (Added).

4.16. The owning agency will safe all aircraft weapons systems as required to include aircraft de-arm, munitions removal, Aircraft Munitions Equipment (AME) removal, etc.

5. Crash Recovery Response Procedures:

5.1. Normal Response:

5.1.1. The CRT will consist of a recovery supervisor and two recovery members. The CRTS will respond with one CRTM in the primary crash recovery vehicle. The second CRTM will standby with an aircraft tow vehicle for further guidance from the CRTS. The CRTS will establish and maintain radio contact with the IC on the fire/crash net.

5.1.2. If upon landing the aircraft stops on the active runway, the IC will determine if hazards exist. If an explosive hazard exists, the IC will contact EOD to render safe/eliminate the hazard. Once the hazards are eliminated, the IC will direct the fire dispatch center to contact the MOC to coordinate with the applicable AMU to de-arm/remove munitions from the aircraft. Once notified, the CRTS is clear to begin recovery operations.

5.1.3. The CRT will establish interphone/hand signal communication with the aircraft commander, and if no further assistance is required, the CRT will clear the aircraft to taxi

to End of Runway (EOR) and be de-armed by the EOR crew. The IC will terminate the IFE when the scene is safe.

5.1.4. If further assistance is required, the CRTS will supervise normal engine shutdown procedures on the runway. The CRT will, with the pilot as brake rider (unless requiring medical attention), tow the aircraft to an open parking location at either West or East EOR. The EOR crew will respond to de-arm the aircraft. The CRTS will then contact the appropriate AMU and request the AMU send a tow crew to retrieve the aircraft from EOR or, based on mission requirements, tow the aircraft to its squadron location. Once the aircraft has cleared the runway, the IC will terminate the IFE.

5.2. Major Response:

5.2.1. The CRT will consist of a recovery supervisor and three recovery members. The CRTS will respond with one CRTM in the primary crash recovery vehicle. A second CRTM will standby with an aircraft tow vehicle for further guidance from the CRTS, while the remaining CRTM will assist as necessary.

5.2.2. The CRTS will, if required, notify the 35 MXS Munitions Flight, Munitions Control (35 MXS/MXMWSC) to dispatch a driver and MHU-110 trailer. The CRTS will establish and maintain radio contact with the IC on the fire/crash net.

5.2.3. Emergency Power Unit (EPU) Activations:

5.2.3.1. Upon landing, the aircraft will taxi to EOR or Hot Cargo Pad based on approach angle. The IC will establish an appropriate cordon and the fire/crash crew will install wheel chocks, pin landing gear, perform engine shutdown procedures, and then pin the EPU. The fire/crash crew will egress the pilot utilizing the crew 60 bottle (emergency escape cylinder). NOTE: The IC may expand the cordon size with HRT recommendation or as the situation warrants when hydrazine danger exists.

5.2.3.2. The HRT supervisor will verify with the IC that no fire or explosive hazard exists.

5.2.3.3. The HRT will replace the fire/crash crew's EPU safety pin with one of its own and clear/safe the EPU system IAW LCL-35FW-221, Hydrazine Response Checklist.

5.2.3.4. Once the IC declares the scene is safe, the HRT will contact the MOC who will coordinate with the applicable AMU to complete the recovery of the aircraft. At this time, the HRT will recover their EPU safety pin and have the appropriate AMU insert their safety pin.

5.2.4. Hot Brakes:

5.2.4.1. The pilot, EOR crew, or CRT will be responsible for identifying potential or actual hot brake conditions.

5.2.4.2. When an aircraft is declared as having a potential/actual hot brake condition, the IC will normally establish a 300-foot cordon and determine if a fire or explosive hazard exists. If an explosive hazard exists, the IC will direct the fire dispatch center to contact EOD. The IC will direct the fire dispatch center to contact the MOC to coordinate with the applicable AMU to de-arm/remove munitions from the aircraft.

Once the hazards are eliminated, the IC will normally clear the CRT to begin recovery operations. CAUTION: It is impossible for the ground crew to avoid the hot brake and engine danger areas while installing the landing gear, EPU and wing tank pylon safety pins, or wheel chocks; therefore, the engine will be shut down without installing the aircraft safety pins or wheel chocks. (Reference T.O. 1F-16C/CG/CJ-1, Pilots Flight Manual)

5.2.4.3. If the aircraft engine must be shutdown, the IC will contact the pilot using UHF/VHF radio to confirm the EPU switch is in the "OFF" position and instruct the pilot to hold the aircraft in position using minimal brake. After shutdown, if the wheel chalks have not been installed, the fire/crash crew will approach the aircraft from the nose and chalk the front landing gear.

5.2.4.4. The pilot will remain in the cockpit until the brakes have cooled sufficiently. If the pilot must be extracted, 35 CES/CEF personnel will chock the nose tire before pilot extraction.

5.2.4.5. The IC will normally terminate the emergency. The CRT and one fire/crash crew will monitor the aircraft.

5.2.4.6. After 45-60 minutes, the CRT will approach the wheel area from the front or rear only and examine to ensure enough heat has dissipated to safely tow the aircraft. When it is safe to approach the aircraft, the CRT will install the remainder of the safety pins and wheel chocks and EOR will de-arm the aircraft. The CRTS will notify MOC and applicable AMU to dispatch a tow team to tow the aircraft to its parking spot.

5.2.5. Hung Flare:

5.2.5.1. The IFE aircraft will taxi to EOR or Hot Cargo pad depending on approach angle. The IC will establish a cordon and determine if a fire or explosive hazard exists.

5.2.5.2. The IC will contact EOD with the location and nature of the emergency.

5.2.5.3. EOD will clear/safe the flare dispenser IAW applicable EOD 60 Series of T.Os. Once the fire or explosive hazard is eliminated, the IC will clear the CRTS to resume operations. The CRTS will establish interphone communication with the aircraft commander and supervise installation of the landing gear, EPU, wing tank pylon, chaff/flare and arresting hook safety pins.

5.2.5.4. The CRTS will supervise engine shutdown procedures and egress the pilot.

5.2.5.5. The CRTS will then clear the area. The IC will terminate the emergency once the flare is clear/safe. MOC will notify the applicable AMU to dispatch a tow team to tow the aircraft to its parking spot.

5.2.6. Blown Tires:

5.2.6.1. If upon landing the aircraft stops on the active runway, the IC will determine if hazards exist. If an explosive hazard exists, the IC will direct the fire dispatch center to contact EOD to respond to the scene, and safe the munitions. Once the scene is safe, the IC will direct the fire dispatch center to contact the MOC to coordinate

with the applicable AMU to de-arm/remove munitions from the aircraft. Once the hazards are eliminated, the IC will clear the CRT to begin recovery operations.

5.2.6.2. The CRTS will establish interphone/hand signal communication with the aircraft commander and supervise normal engine shutdown procedures. The pilot will exit the aircraft and the CRT will safe the aircraft for maintenance.

5.2.6.3. The CRT will recover the aircraft IAW applicable safety standards, T.O.s and instructions. The CRT will, with the pilot as brake rider, tow the aircraft to an open parking location at either West or East EOR. The EOR crew will respond to de-arm the aircraft. The CRTS will notify MOC and applicable AMU to dispatch a tow team to tow the aircraft to its parking spot. Once the aircraft has cleared the runway, the IC will terminate the IFE.

5.2.7. Barrier Engagement/Cable Arrestment:

5.2.7.1. If a barrier engagement is anticipated, the CRT will respond with primary crash recovery vehicle and aircraft tow truck.

5.2.7.2. If the aircraft engages the barrier, the CRT will remain behind the fire vehicles until the aircraft is declared safe by the IC. Once the hazards are eliminated, the IC will clear the CRT to begin recovery operations. The fire/crash crew will assist the CRT's extraction of the aircraft from the barrier cable. Due to the increased risk of damage to the aircraft, the use of sling shot procedures shall only be allowed during contingencies or in-flight emergencies that require rapid removal of an aircraft from a cable. The procedure must be approved by the Operations Group Commander and Maintenance Group Commander before being used for routine disengagement of aircraft during local exercises or scheduled testing of the arresting system (e.g., certification).

5.2.7.3. The CRTS will establish interphone/hand signal communication with the aircraft commander and supervise shutdown of the aircraft in the barrier.

5.2.7.4. The CRT will install the applicable safety pins and remove the aircraft from the barrier and tow off the runway to the nearest EOR.

5.2.7.5. The EOR crew will respond to de-arm the aircraft.

5.2.7.6. The CRTS will notify MOC and applicable AMU to dispatch a tow team to take possession of aircraft. Once the aircraft has cleared the runway, the IC will terminate the IFE/GE.

5.2.8. Aircraft Departs Runway/Taxiway/Crash:

5.2.8.1. Once the IC declares the scene is safe, the HRT will check for hydrazine leaks or spills. If leaks/spills are discovered, the HRT will clear/safe the area IAW LCL-35FW-221, F-16 Hydrazine Emergency Procedures for Leak Detection, Activated EPU Checks.

5.2.8.2. Once cleared by the IC, the CRT will inspect the aircraft for damage to items containing composite materials. NOTE: CRT must receive a safety briefing from the IC's Safety Officer, wear the personal protective equipment (PPE) recommended by Bioenvironmental Engineering through the IC, and may be required to wear exposure

monitoring equipment. After coordination with the Interim Safety Board (ISB) President through the FW Safety Office and 35 FW/CVN, the CRT will secure all loose composite fibers IAW T.O. 00-105E-9, Aircraft Emergency Rescue Information.

5.2.8.3. The CRT will safe the aircraft for maintenance.

5.2.8.4. The CRTS will monitor the safing and/or removal of munitions by the applicable AMU.

5.2.8.5. The CRT will recover the aircraft IAW applicable safety standards, T.O.s and instructions.

5.2.8.6. The CRT will transport the aircraft to a facility designated by the IC after coordination with the ISB President or 35 MXG/CC if an aircraft maintenance facility is to be used.

5.3. Transient Aircraft:

5.3.1. The CRT will respond to all transient aircraft. Refer to T.O. 00-105E-9 for specific US Military and Civil aircraft hazards.

5.3.2. Should a transient fighter aircraft become damaged, disabled, or crash, the MOC will notify the appropriate MAJCOM/unit for further handling instructions. If the owning unit is on Temporary Duty (TDY) at Misawa AB, the MOC will notify the TDY unit and request an aircraft technician and specialized equipment be dispatched to the scene. The dispatched technician will report to the IC and CRTS.

5.3.3. Should a wide-bodied aircraft become damaged, disabled, or crash, the MOC will notify the appropriate MAJCOM/unit for further handling instructions. Further actions must be accomplished IAW pre-established MAJCOM agreements or owning agency guidance.

5.3.4. General crash recovery procedures may be used to facilitate the safe recovery/removal of the aircraft; however, prior to any recovery/removal actions, MOC will contact the owning organization for technical support and relay acquired information to the CRTS.

5.4. Tenant Agencies, i.e. Japan Air Self Defense Forces (JASDF), are responsible for CDDAR support for their assigned aircraft. The 35 MXS CRT will respond and render assistance as requested/available.

6. On/Off-Base Recovery Procedures:

6.1. On/Off-Base Recovery Procedures. The wing commander, through the Incident Command Center (i.e., Wing Command Post (35 FW/CP), Emergency Operation Center, Unit Control Centers, Disaster Control Group and any specialized teams), coordinates on/off-base recovery actions. Refer to Misawa AB CEMP 10-2 for agency/team responsibilities.

7. Additional Training and Certification Requirements for CRT Personnel:

7.1. All CRTS will possess a valid AF Form 2293, US Air Force Motor Vehicle Operator Identification Card, and AF IMT 483, Certificate of Competency, for flight line driving with the controlled movement area access stamp.

7.2. All CRTM will possess a valid AF Form 2293 and AF IMT 483 for flight line driving with the controlled movement area access stamp.

7.3. All Crash Recovery Team Members (CRTM) must receive initial training comprised of both academic and hands on training/exercises and will include actual lifting of an aircraft if available. Personnel used to augment real-world recoveries do not require CDDAR specific training. This training will be developed and provided through an AETC formal training course. Personnel previously qualified and actively serving in a CDDAR capacity are exempt from attending the AETC CDDAR training course.

7.3.1. All CRTM will be provided initial and recurring Respiratory Protection training. Training will be tracked in IMDS IAW AFI 21-101.

7.4. All crane operators will receive initial training and be re-qualified on an annual basis IAW AFOSHSTD 91-46, Materials Handling and Storage Equipment.

7.5. Perform recovery exercises at least annually IAW AFI 21-101.

7.6. The CRT will be equipped and trained for recovery of 35th Fighter Wing primary assigned aircraft.

7.7. All CRT members will, as a minimum, receive aircraft familiarization training on any transient aircraft operating flying missions at Misawa AB for an extended length of time, (i.e., 3 or more months).

7.7.1. Aircraft familiarization training will consist of (at a minimum):

7.7.1.1. Specific aircraft -21 safety equipment locations and installation required to safe the aircraft in an emergency.

7.7.1.2. Aircraft Danger Areas: Engine inlet and exhaust(s) zones, flight control surface hazards, auxiliary power supply/unit exhaust port(s), and any other hazards CRT may encounter during an emergency response/recovery.

7.7.1.3. Training will be conducted by the transient unit, specific aircraft commander, flight crew and/or qualified aircraft crew chief(s).

7.8. CDDAR support to Navy and Marine aircraft will be performed in accordance with the local support agreement.

8. Supplemental Procedures:

8.1. Refer to the following Instructions for overall guidance:

8.1.1. Misawa AB CEMP 10-2.

8.1.2. LCL-35FW-014, Emergency Action Checklist and Severe Weather Conditions Procedures for Maintenance Personnel.

8.1.3. AFI 21-101, Aerospace Maintenance Management (including CAF supplement).

8.1.4. Deleted

8.1.5. Applicable 48 and 91-Series of AFOSH Standards.

8.1.6. Applicable -2 and -3 Technical Orders/Job Guides.

8.1.7. AFI 91-204, Safety Investigations and Reports.

8.1.8. IERA-RS-BR-TR-2001-0009, Assessment of Composite Hazards at Crash Sites: Industrial Hygiene Field Guidance for Bioenvironmental Engineers.

8.2. During wing deployments/contingencies to operational locations, this instruction will be implemented unless other directives are already in effect at the deployed location.

MICHAEL D. ROTHSTEIN, Brigadier General, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 10-206 Operational Reporting, 11 Jun 2014

AFI 10-2501 Air Force Emergency Management (EM) Program Planning and Operations, 24 Jan 2007

AFI 21-103 Equipment Inventory, Status and Utilization Reporting, 26 Jan 2012

AFPD 21-1, *Air and Space Maintenance, 25 Feb 2003*

AFI 21-101, *Aerospace Equipment Maintenance Management, 26 Jul 2010*

AFMAN 10-2504, *Air Force Incident Management Guidance for Major Accidents and Natural Disasters*

AFOSHSTD 48-137 Respiratory Protection Program, 10 Feb 2005

AFOSHSTD 91-46, *Materials Handling and Storage Equipment , 1 Aug 2002*

T.O. 00-105E-9, *Aircraft Emergency Rescue Information, 1 Feb 2006*

T.O. 1F-16C-2-1-1, *Cross Servicing Guide, 15 Sep 2008*

T.O. 1F-16C/CG/CJ-1, *Pilots Flight Manual , 15 Aug 2009*

35 FW *Contingency Response Plan, 23 Sep 2011*

35 FW *Comprehensive Emergency Management Plan 10-2, 6 May 2008*

35 FW *OPLAN 91-204, 5 Aug 2011*

Adopted Forms

AF Form 483, *Certificate of Competency, 1 Feb 1985*

AF Form 847, *Recommendation for Change of Publication, 22 Sep 2009*

AF Form 2293, *US Air Force Motor Vehicle Operator Identification Card, 1 Feb 1987*

Acronyms and Abbreviations

A/C—Aircraft

AFIMS—Air Force Incident Management System

AMU—Aircraft Maintenance Unit

CDDAR—Crash, Damaged or Disabled Aircraft Recovery

CG—Center of Gravity

CRT—Crash Recovery Team

CRTC—Crash Recovery Team Chief

CRTM—Crash Recovery Team Member

CRTS—Crash Recovery Team Supervisor

DV—Distinguished Visitor

EOR—End of Runway

EM—Emergency Management

EPU—Emergency Power Unit

HRT—Hydrazine Response Team

IC—Incident Commander

IFE—In-Flight Emergency

GE—Ground Emergency

MAJCOM—Major Command

MDS—Mission Design Series

MOC—Maintenance Operations Center

NCOIC—Noncommissioned Officer in Charge

OIC—Officer in Charge

OPLAN—Operations Plan

OSHA—Occupational Safety and Health Administration

PPE—Personnel Protection Equipment

JASDF—Japan Air Self Defense Force

TA—Transient Alert

TDY—Temporary Duty

T.O.—— Technical Order

Attachment 2

CRASH, DAMAGED OR DISABLED AIRCRAFT RECOVERY PLAN AEROSPACE GROUND EQUIPMENT LISTING

A2.1. The following listing identifies the minimum AGE required for CDDAR operations. ***NOTE:*** Each recovery operation is unique; therefore, AGE requirements are subject to change. Equipment for small bodied aircraft mishap (i.e. F-16, F-15, C-12)

Figure A2.1. Minimum AGE Required for CDDAR Operations

TYPE EQUIPMENT	QUANTITY	SPECIAL REQUIRMENTS
Light Carts	4 each	Fully fueled
MC-7	2 each 1 on standby	Fully fueled
Air Compressor (Low Pack)	1 each	Fully fueled
Portable heater	3 each	During extreme cold weather only/fully fueled
Equipment for wide-bodied aircraft mishap (i.e. C-130, KC-10, Navy P-3)		
TYPE EQUIPMENT	QUANTITY	SPECIAL REQUIRMENTS
Light Carts	6 each	Fully fueled
MC-7	2 each 1 on standby	Fully fueled
Air Compressor (Low Pack)	2 each	Fully fueled
Air Compressor (High pressure)	1 each	Fully fueled
Portable heater	3 each	During extreme cold weather only/fully fueled

Attachment 3

CRASH, DAMAGED OR DISABLED AIRCRAFT RECOVERY PLAN SPECIAL PURPOSE VEHICLES LISTING

A3.1. The following listing identifies, quantities and special requirements for vehicles provided by 35th Logistics Readiness Squadron (35 LRS) required for CDDAR operations. Each vehicle will be owned and operated by 35 LRS.

Figure A3.1. Quantity and Special Requirements For Vehicles

VEHICLE TYPE	QUANTITY	SPECAIL REQUIRMENTS
Multipurpose van	1 each	Pintle hook
All Terrain Forklift	1 each	None
40 ft. flatbed semi trailer	1 each	None
Tractor for 40 ft. trailer	1 each	None
*Bulldozer	1 each	none **(Added)_IC-1**