

**BY ORDER OF THE COMMANDER
1 ST SPECIAL OPERATIONS WING
(AFSOC)**

HURLBURTFIELD INSTRUCTION 21-102

13 JULY 2016



Maintenance

**CRASHED, DAMAGED OR DISABLED
AIRCRAFT RECOVERY (CDDAR)
PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements Air Force Instruction 21-101, *Aircraft and Equipment Maintenance Management*. The 1 SOW OPLAN 91-1 *Mishap Response Plan*, Hurlburt Field IEMP 10-2, *Installation Emergency Management Plan*, applicable 48 and 91-series AFOSHSTDs, Technical Order (TO) 00-105E-9, *Aerospace Emergency Rescue and Mishap Response Information*, Technical Order (TO) 00-80C-1, *Crashed, Damaged, Disabled Aircraft Recovery CCDDAR Manual*, AFI 21-103, *Equipment Inventory, Status and Utilization Reporting*, as well as Mission Designation Series specific -2 and -3 series TOs were used or considered in development of this instruction. It provides guidance and procedures to the 1 SOW for the CDDAR Program. All agencies involved with recovery operations will ensure compliance with this instruction to ensure a coordinated response to CDDAR situations. This publication does not apply to Air Force Reserve Command units (AFRC) or Air National Guard (ANG). 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 (AFRIMS) Records Disposition Schedule (RDS0). 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's chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. The use of the name or mark of any specific manufacture, commercial product, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include: the removal of the 6th Special Operations Squadron from Hurlburt Field's CDDAR responsibilities; the deletion of 1 SOW C-130 CDDAR coverage at Eglin AFB; and updated reporting and notification procedures for multiple Hurlburt Field agencies.

1. Policy.

1.1. The CDDAR program is designed to recover crashed, damaged or disabled aircraft in a minimum time period consistent with the following considerations:

1.1.1. The safety of all personnel involved with recovery operations.

1.1.2. The requirement to reopen the airfield for operational use.

1.1.3. Prevention of secondary damage to the aircraft.

1.1.4. Preservation of evidence for mishap investigations IAW AFI 91 -202, *The US Air Force Mishap Prevention Program* and AFI 91-204, *Safety Investigations and Reports*.

1.1.4.1. *Note:* The Incident Commander (IC), as prescribed in AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, is responsible for making all command decisions at the incident scene. The Incident Commander (IC) will consult with the Staff Judge Advocate to determine whether a National Defense Area (NDA) is needed or if there are any claims issues.

1.1.4.2. *CAUTION:* The aircraft and crash site will be disturbed only to the extent required to eliminate a potentially dangerous situation to the aircraft, support equipment or personnel, and will otherwise remain in an undisturbed state until the aircraft is released to maintenance by the Incident Commander.

1.1.5. In accordance with (IAW) AFI 91-204, *Safety Investigations and Reports*, when an aircraft is under investigation by Interim Safety Investigation Board, recovery operations will not proceed until the board president releases the aircraft. Personnel who are not engaged in the investigation will remain outside of the recovery area. The crash recovery team may be called upon to perform tasks as required by the investigation team.

1.2. The CDDAR program instruction is procedural and will not take precedence over aircraft-specific technical data in recovery of crashed, damaged or disabled aircraft.

1.2.1. Incidents involving aircraft made up of a composite structure may cause serious injury or death to those in contact with it. TO 00-105E-9, *Aerospace Emergency Rescue and Mishap Response Information*, contains information regarding aircraft-specific composite component locations and should be consulted when responding to aircraft incidents.

2. Responsibilities.

2.1. 1SOMXS Maintenance Flight:

2.1.1. The Maintenance Flight is the Office of Primary Responsibility (OPR) and manages the CDDAR program for all base, tenant, and transient aircraft. In addition to the general responsibilities outlined in AFI 21-101, section 11.28, the Maintenance Flight will:

2.1.2. Ensure at a minimum, sufficient aircraft lifting equipment is available to accomplish a complete lift of all host and tenant unit Mission Design Series (MDS) aircraft assigned to Hurlburt Field .(See Attachment 2).

2.1.3. Maintain CDDAR support equipment for all base assigned aircraft, to include tenant aircraft. Inventory and inspect for serviceability all recovery equipment to include air bags, manifolds, slings, shoring, etc., before and after use. All equipment inspections/operational checks will be accomplished IAW intervals established in TOs, equipment manuals or annually, if no TO intervals have been identified. Document all inspections and maintenance actions using either TCMAX or an AFTO Form244, *Industrial Support Equipment Record*.

2.1.4. Ensure all CDDAR team members are adequately trained in aircraft recovery operations IAW T0.00-80C-1, *Crashed, Damaged, Disabled Aircraft Recovery Manual*, paragraphs 2.3.2 and 2.3.2.2.

2.1.5. All training will be documented using the Integrated Maintenance Data System (IMDS) and Training Business Area (TBA) IAW TO.00-80C-1, paragraph 2.3.2.1.

2.1.6. Ensure CDDAR members are respirator trained and fit tested annually IAW AFI 48-137, *Respiratory Protection Program (RPP)*.

2.1.7. Maintain a current recall roster of all CDDAR personnel

2.2. 1 SOMXS Aerospace Ground Equipment Flight (AGE):

2.2.1. Maintain and deliver serviceable powered and non-powered equipment required to perform CDDAR operations (e.g. MC-7 air compressors, Light carts, etc.).

2.3. 1 SOMXG/MXOC Maintenance Operations Center (MOC):

2.3.1. Coordinate with supporting organizations/agencies for resources or actions required for CDDAR operations IAW 1 SOW OPLAN 91-1 and Hurlburt Field Installation Emergency Management Plan (IEMP) 10-2.

2.4. 1 SOMXG Quality Assurance (QA):

2.4.1. Ensure all aircraft AFTO Form 781, *Mission Data*, series documentation/historical records, servicing equipment, and personnel training records are impounded upon notification of an accident/mishap.

2.4.2. Inform the Maintenance Operations Center (MOC) to lock out (isolate) IMDS on the affected aircraft.

2.4.3. Assist in calculating the weight and balance of the mishap aircraft, if required.

2.5. 801st Special Operations Aircraft Maintenance Squadron (801 SOAMXS):

2.5.1. The 801st Special Operations Aircraft Maintenance Squadron (801 SOAMXS) will procure, maintain and store the Rotary and Tilt Rotor aircraft damaged/gear-up landing pads and ensure 24 hour availability.

2.5.2. For incidents involving tilt-rotor aircraft with retractable gear, the 801st AMU with assistance from the CDDAR team will transport, arrange, and secure the gear-up landing pads IAW applicable technical data, at the established landing location specified in the checklist 1 SOW LCL-015, *Hung Landing Gear Procedures*.

2.5.3. The CDDAR Team Chief will coordinate with the 801st SOAMXS Production Superintendent and ERT Leader for lift requirements at the completion of checklist 1 SOW LCL-015, *Hung Landing Gear Procedures*.

2.6. All Maintenance Units:

2.6.1. When determined by the CDDAR Team Chief, all units will assemble and provide a fully qualified tow team and all tow equipment to stand-by during recovery operations and in-flight emergencies (IFE). Tow team will take directions from the CDDAR Team Chief and remain available to provide assistance with recovery operations as determined by the CDDAR Team Chief. The tow team will be dismissed by the CDDAR Team Chief.

2.6.2. Provide airframe specific subject matter experts for technical assistance during CDDAR operations.

2.7. 1st Special Operations Aerospace Medicine Squadron/Bioenvironmental Engineering (AMDS/SGPB):

2.7.1. Assist in determining the environmental health hazards present at the incident site.

2.7.2. Provide Personal Protective Equipment (PPE) requirements for incident site and material handling.

2.7.3. Establish hot, warm, and cold zones for decontamination procedures if not previously established by Incident Commander.

2.8. 1st Special Operations Support Squadron Airfield Management (1 SOSS):

2.8.1. Notify the CDDAR Team Chief to any circumstances that renders either Rotary/Tilt wing aircraft gear-up landing spots unusable.

2.9. 1st Special Operations Security Forces Squadron (1 SOSFS):

2.9.1. Provide Security Forces personnel to secure mishap scene and wreckage assembly point as directed by the Incident Commander.

2.10. 1st Special Operations Civil Engineering Squadron (1 SOCES):

2.10.1. Provide emergency crash and fire response.

2.10.2. Provide explosive ordnance disposal response.

2.10.3. Ensure 24 hr. availability of the vehicles identified in [Attachment 2](#) of this publication, as well as provide drivers when requested by the CDDAR Team Chief.

- 2.10.4. Provide engineering assistance to perform site survey of crash site.
- 2.10.5. Transport CDDAR equipment to and from mishap site
- 2.10.6. Transport wreckage as necessary or directed by CDDAR Team Chief.
- 2.11. 1st Special Operations Logistics Readiness Squadron (1 SOLRS):
 - 2.11.1. Ensure 24 hour availability of the vehicles identified in *Attachment 2* of this publication, as well as provide drivers when requested by the CDDAR Team Chief.
 - 2.11.2. Transport CDDAR equipment to and from mishap site.
 - 2.11.3. Transport wreckage as necessary or directed by CDDAR Team Chief.
 - 2.11.4. Provide maintenance support for heavy equipment participating in the recovery operations as directed by the Incident Commander.
 - 2.11.5. Provide on-scene fuel servicing of recovery support equipment, to include AGE and heavy equipment.

3. Procedures.

- 3.1. Upon declaration of an aircraft mishap on or off base, the following sequence of events will be implemented in conjunction with 1 SOW OPLAN 91-1 and Hurlburt Field IEMP 10-2. Additionally, this sequence of events will be followed for in-flight emergency (IFE) response.
- 3.2. The MOC will:
 - 3.2.1. Initiate the Aircraft Crash Checklist (MOC QR Checklist 2) or Aircraft Emergencies/Incident Checklist (MOC QR Checklist 3).
 - 3.2.2. Notify 1 SOMXS Production Superintendent to notify/recall the CDDAR Team Chief.
- 3.3. 1 SOMXS Production Supervisor (Mike 2) will:
 - 3.3.1. Notify the on-duty CDDAR Team Chief if incident occurs during duty hours. During non-duty hours, notify the on-call CDDAR Team Chief using CDDAR recall roster.
 - 3.3.2. Ensure CDDAR team is assembled and available to respond to the recovery site when directed by the Incident Commander. For IFE's, the CDDAR team will be put on stand-by only and will assemble in the event an incident actually occurs.
- 3.4. The CDDAR team chief will:
 - 3.4.1. Consult the CDDAR continuity binder, as well as all MDS specific -2 and -3 series TO's to develop a recovery plan of action. The minimum number of CDDAR team members and special vehicle operators required to respond to a crashed or disabled aircraft will be determined after this initial assessment.
 - 3.4.2. Assemble the CDDAR Team at Eason Hangar (Bldg. 90700) with the immediate response trailer and stand by for further guidance.

3.4.3. Respond to the mishap scene when requested. Notify the Incident Commander and the UCC/EOC if activated, upon arrival. If UCC/EOC is not activated, notify the Maintenance Operations Center (MOC).

3.4.4. Brief all team members on all incident scene hazards and required PPE needed for recovery duties.

3.4.5. Notify the UCC/EOC if activated. If the UCC/EOC is not activated notify the Maintenance Operations Center (MOC) when the CDDAR team has assumed recovery responsibilities and upon completion of duties under the direction of the IC.

SEAN M. FARRELL, Colonel, USAF
Commander, 1 Special Operations Wing

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

AFI 10-2501, *Air Force Emergency Management*, 19 Apr 2016

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 21 May 2015

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

AFI 24-302, *Vehicle Management*, 26 June 2012

AFI 31-101, *Integrated Defense (FOUO)*, 8 Oct 2009

AFI 48-137, *Respiratory Protection Program*, 15 July 2014

AFI 91-202, *The US Air Force Mishap Prevention Program*, 24 June 2015

AFI 91-204, *Safety Investigations and Reports*, 12 Feb 2014

AFMAN 33-363, *Management of Records*, 1 Mar 2008

AFOSHSTD 48-20, *Occupational Noise and Hearing Conservation Program*, 10 May 2013

AFOSHSTD 48-9, *Radio Frequency Radiation (RFR) Safety Program*, 1 Aug 2014

AFPD 21-1, *Maintenance of Military Materiel*, 29 Oct 2015

HURLBURTFIELDI 13-204, *Airfield Operational Instructions*, 11 Dec 2015

OPLAN 91-1, *1st Special Operations Wing Mishap Response Plan*

IEMP 10-2, *Hurlburt Field Installation Emergency Management Plan*

TO 00-80C-1, *Crashed, Damaged, Disabled Aircraft Recovery Manual*

TO 00-105E-9, *Aircraft Emergency Rescue Information*. 1 April 2015

Prescribed Forms

None

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AFTO Form 244, *Industrial Support Equipment Record*

AFTO Form 781, *Mission Data*

Abbreviations and Acronyms

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFTO—Air Force Technical Order

AGE—Aerospace Ground Equipment

AMU—Aircraft Maintenance Unit

BEE-Bio—Environmental Engineering

CDDAR—Crashed, Damaged or Disabled Aircraft Recovery

HTSA-Host—Tenant Support Agreement

IAW—In Accordance With

IC—Incident Commander

IFE-In—Flight Emergency

IMDS—Integrated Maintenance Data System

IMT—Information Management Tool

MOS—Mission Design Series

MOC—Maintenance Operations Center

OPR—Office of Primary Responsibility

PPE—Personal Protective Equipment

QA—Quality Assurance

RDS—Records Disposition Schedule

SI—Squadron Instruction

TAS—Tool Accountability System

TO—Technical Order

Terms

Crashed Aircraft—An aircraft which impacts another object or the ground during flight operations and the incident results in major or total destruction of the aircraft.

Damaged Aircraft—An aircraft that cannot be moved under its own power or supported by its undercarriage without sustaining secondary damage.

Disabled Aircraft—An aircraft that cannot or should not be moved under its own power, but can be towed using its own undercarriage.

Attachment 2**VEHICLE/EQUIPMENT REQUIREMENTS (THIS IS NOT AN ALL INCLUSIVE LIST)****A2.1. Vehicles.**

A2.1.1. Radio-equipped general purpose truck.

A2.1.2. Aircraft tow vehicle.

A2.1.3. All Terrain Forklift (10K).

A2.1.4. Semi-trailer, flat bed (40 ft.).

A2.1.5. Tractor (5-10T).

A2.1.6. Bulldozer.

A2.1.7. Dump truck.

A2.1.8. Crane (15T).

A2.1.9. Crane (50T; *Note: LRS will coordinate use of crane with 823 Red Horse Squadron).

A2.1.10. When base units cannot support heavy equipment requirements, units will establish lease agreement(s) with local suppliers IAW lease procedures established in AFI 23-302, *Vehicle Management*.

A2.2. Equipment.

A2.2.1. Airbag kits 15T (6 ea.).

A2.2.2. Airbag kits 26T (2 ea.).

A2.2.3. Belly band 80 ft. (2 ea.).

A2.2.4. Belly band 40 ft. (2 ea.).

A2.2.5. CV-22 sling (1 ea.).

A2.2.6. Assorted general purpose slings and associated hardware (15, 20, 40, 60 ft.).

A2.2.7. Adjustable spreader bar 15T (2 ea.).

A2.2.8. MDS specific aircraft jacks.

A2.2.9. MDS specific tow bars.

A2.2.10. Dunnage/shoring.

A2.2.11. Load Meter 50T (1 ea.).