

**BY ORDER OF THE COMMANDER
FAIRCHILD AIR FORCE BASE (AMC)**



**FAIRCHILD AIR FORCE BASE
INSTRUCTION**

21-102

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Maintenance

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

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Fairchild Air Force Base Instruction (FAFBI) establishes guidance to effectively respond to and recover crashed, damaged or disabled aircraft during normal and major aircraft emergencies/mishaps on or off base. This FAFBI is implemented in conjunction with the Technical Order (TO) 00-105E-9 *Aircraft Emergency Rescue Information*, Fairchild Air Force Base Installation Emergency Management Plan (IEMP) 10-2, Air Force Instruction (AFI) 91-202 *The US Air Force Mishap Prevention Program*, and AFI 91-204, *Safety Investigations and Reports*. TO 00-80C-1, *Crashed, Damaged, Disabled Aircraft Recovery Manual*. This FAFBI is applicable to all organizations that may be tasked to support aircraft recovery operations. Home station will be prepared to rapidly deploy crash recovery equipment and personnel for their Mission Design Series (MDS) as directed by Tanker Tanker Airlift Control Center (TACC) in order to recover AMC assets, IAW Air Mobility Command Instruction (AMCI) 21-108, *Logistics Support Operations*. 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 (RDS). 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.

1. General

1.1. The CDDAR program applies to all United States Air Force (USAF) host and tenant organizations and is designed to recover crashed, damaged or disabled aircraft in a minimum time period consistent with the following consideration(s):

1.1.1. Open runway for operational use.

1.1.2. Prevention of secondary damage to the aircraft.

1.1.3. Preservation of evidence for mishap or accident investigations IAW AFI 91-202.

1.1.3.1. *WARNING:* Incidents involving aircraft made up of a composite structure may cause serious injury or death to those in contact with it. Technical Order (TO) 00-105E-9, Aerospace Emergency Rescue and Mishap Response Information (Emergency Services) contains information regarding aircraft-specific composite component locations, and should be consulted when responding to aircraft incidents. Contact base Bioenvironmental Engineering and the transient aircraft's home base to determine composite material risks and requirements for Personal Protective Equipment (PPE).

1.1.3.2. *WARNING:* Ensure that it is safe to approach the aircraft, all explosives, ejection seat cartridges, tires, fluids, flares, and munitions have been de-armed, expended, or otherwise rendered safe by Explosive Ordnance Disposal (EOD) and proclaimed safe by the Incident Commander (IC).

1.1.3.3. *WARNING:* Due to the many unknown factors of airframe condition immediately following a crash landing, do not attempt to use special equipment or procedures not included in the specific aircraft technical orders, or without approval of the specific airframe system manager/engineer. The owning agency of any transient aircraft will be contacted for technical advice pertaining to the specific aircraft.

1.1.3.4. *WARNING:* Make sure the aircraft remains stable at all times and that personnel use extreme caution when working in and around a disabled aircraft. Before any ground handling activities take place on or around the aircraft, CDDAR personnel will ensure that it is properly stabilized to prevent movement or shifting. It may be necessary to moor the aircraft or stabilize using air bags.

1.1.3.5. *CAUTION:* The aircraft and crash site will be disturbed only to the extent required to eliminate any potentially dangerous situation to the aircraft, support equipment, or personnel, and will remain in an undisturbed state until the aircraft is released to the Recovery Operations Chief (ROC) by the Incident Commander (IC).

2. Roles and Responsibilities:

2.1. **Disaster Response Force (DRF):** IAW Fairchild AFB IEMP 10-2, disaster response may involve the entire DRF or portions thereof, depending upon the magnitude and severity of the disaster. Additional support may be called upon from Local, State and Federal agencies. The DRF is composed of Crisis Action Team (CAT), Command Post (CP), Emergency Communications Center (ECC), Emergency Operations Center (EOC), First Responders, Emergency Responders, Unit Control Centers (UCC) , Emergency Support Functions (ESF), specialized teams, Recovery Operations Chief and Sr. Military

Representatives. For specific contact information, refer to AFI 10-2501 & Fairchild AFB IEMP 10-2.

2.2. Incident Commander and/or Recovery Operations Chief (IC/ROC): The IC/ROC is responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC/ROC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site. All responders report in accordance with procedures established by the IC/ROC to receive mission assignments. The IC/ROC shall be fully qualified to manage the response.

2.3. Off-base Response: IAW Fairchild AFB IEMP 10-2, off-base responders must observe the jurisdictional rights of civilian authorities and private citizens. Off-base accidents may require the establishment of a National Defense Area (NDA), approved by 92 ARW/CC, to permit control of civilian property by military forces. Even after establishment of the NDA, close coordination with civil law enforcement agencies is essential to ensure an effective security program.

2.4. The CDDAR Team: Also, known as the crash recovery team, is an indigenous specialized team for emergency response organization purposes. The crash recovery team is not considered a permanent part of the DRF because it has functional responsibilities beyond emergency response and not all disaster responses involve crash recovery. The crash recovery team shall support the emergency response operations of the DRF that require the recovery of an aircraft following a major accident or an aircraft-related mishap, whatever the category, classification or circumstances. Appoint enough team members to conduct 24-hour operations.

2.5. The CDDAR Team Chief: CDDAR Team Chiefs, in addition to the IC/ROC and Incident Safety Officer, are responsible for the safety of the CDDAR team members and is responsible to 92d Maintenance Squadron (MXS) supervision and the IC. The CDDAR Team Chief is the subject matter expert on aircraft recovery operations and equipment. Refer to AFI 21-101 for CDDAR Team Chief qualifications and training requirements.

2.6. CDDAR Team Members: All personnel listed on the CDDAR team roster shall be qualified to conduct CDDAR recovery operations. Refer to AFI 21-101 for CDDAR team member qualification and training requirements.

2.7. Augmentees: The recovery team may be augmented by personnel drawn from the general base military populace to support the recovery operation but are limited to tasks that do not require specialized training or skills. The CDDAR Team Chief will make requests for augmentees through the IC/ROC and EOC.

3. Recovery Program Responsibilities

3.1. The IC/ROC will:

3.1.1. Take command and control of the DRF at an incident scene.

3.1.2. Brief the CDDAR Team Chief and team members of any precautions and procedures that shall be followed to preserve evidence and/or investigative materials and avoid disrupting any mishap/crash investigations prior to recovery operations.

- 3.1.3. Ensure an Entry Access List (EAL) is published prior to recovery operations and approve all personnel requiring access to the recovery site.
- 3.1.4. Meet with the CDDAR Team Chief to establish an Aircraft Recovery Plan (ARP).
- 3.1.5. Coordinate Explosive Ordnance Disposal (EOD) support for ordnance disarming and or removal as required.

3.2. The CDDAR Team Chief will:

- 3.2.1. Be adequately trained in aircraft recovery operations IAW AFI 21-101. Recurring three-year training will be documented in the appropriate Maintenance Information System (MIS).
- 3.2.2. Control the activities of personnel and equipment involved in the aircraft recovery operation.
- 3.2.3. Develop an ARP in concert with the IC/ROC.
 - 3.2.3.1. Incorporate all information about the operational requirements, constraints and demands associated with the incident provided by the IC/ROC.
 - 3.2.3.2. Brief the ARP to the IC/ROC for approval/coordination. Once approved, the CDDAR Team Chief will brief the CDDAR Team on the details of the plan.
- 3.2.4. Determine the minimum number of CDDAR member's required IAW applicable aircraft TOs after initial assessment.
- 3.2.5. Coordinate defueling and munitions downloading activities.
- 3.2.6. Direct the activities for lifting, shoring, and transporting the damaged aircraft.
- 3.2.7. Conduct training of recovery team members.
- 3.2.8. Have knowledge of aircraft systems and support equipment.
- 3.2.9. Have knowledge in the use of cranes, jacks, and pneumatic lifting devices.
- 3.2.10. Have knowledge of aircraft fire protection, prevention, and suppression procedures.
- 3.2.11. Ensure all applicable Technical Orders (TOs) and other pertinent instructions are present for the recovery process.
- 3.2.12. Consult with QA Weight and Balance Manager prior to lifting or moving the aircraft if there is any doubt regarding the center of gravity of the damaged aircraft.
- 3.2.13. Ensure all recovery team members and augmentees wear the appropriate PPE when handling composite materials as specified by Bioenvironmental Engineering.
- 3.2.14. Assist the 36 RQS for UH-1N helicopter recovery by providing CDDAR team members and on-station available equipment for recovery operations as requested.
- 3.2.15. Assist Army National Guard C Company, 112th Search and Rescue (AASF #2) for UH-72 helicopter recovery by providing CDDAR team members and on-station available equipment for recovery operations as requested.
- 3.2.16. If applicable, consult IC/ROC on disposition for treating composite materials.

3.3. 92 MXS/Repair & Reclamation (R&R) Section will:

3.3.1. Act as the Wing's OPR for the CDDAR program and shall appoint a CDDAR Program Manager who will:

3.3.1.1. Ensure sufficient amount of personnel are adequately trained in aircraft recovery operations per AFI 21-101 & T.O. 00-80C-1. Recurring annual training will be documented in MIS. Personnel not trained in CDDAR recovery procedures will not participate in operations unless assigned augmentee duties.

3.3.1.2. Maintain and manage current recall roster of CDDAR team members.

3.3.1.3. Maintain the CDDAR continuity book and review it for currency at least bi-annually. At a minimum, the CDDAR continuity book will contain all applicable minimum requirements dictated by T.O. 00-80C-1.

3.3.1.4. Manage CDDAR equipment to ensure serviceability and minimize duplication of resources while maintaining the sufficient equipment to accomplish a recovery of the assigned MDS aircraft.

3.3.1.5. Ensure an annual CDDAR equipment inventory is completed and an inventory report containing CDDAR excess and shortage equipment items is sent to 92 MXG/CC annually, NLT 30 Aug.

3.3.1.6. Coordinate with Quality Assurance (QA) and Wing Evaluations and Inspection Program Office (WG/XP) to schedule CDDAR exercises and out briefs. 92 MXS and Tenant Units will make every effort to participate in at least one CDDAR exercise per calendar year on assigned airframes. If participation is not possible, responsible agencies will conduct a CDDAR continuity meeting for the assigned aircraft. Applicable supervision representatives/system experts will attend out briefs along with QA. All events will be recorded and kept in the CDDAR program binder.

3.4. CDDAR Team Members will:

3.4.1. Be responsible for crash recovery of all host, tenant, Transient Alert (TA) aircraft on Fairchild AFB and off base Area of Responsibility (AOR) IAW Fairchild AFB IEMP 10-2.

3.4.2. Respond to crashed, damaged, or disabled aircraft and In-Flight Emergencies (IFE) as directed.

3.4.2.1. For IFEs, come to a safe work stoppage and assume a pre-positioned posture for immediate response. This action does not require dispatch of the crash recovery trailer.

3.4.2.2. For actual crashed, damaged, or disabled aircraft, ensure the CDDAR Team Chief is notified, assemble applicable tech data as required, and stand by for further guidance unless otherwise directed by the IC/ROC. Once on scene, the IC/ROC and CDDAR Team Chief will develop an ARP.

3.5. 92d Maintenance Operations Center (MOC) will:

3.5.1. Broadcast information on appropriate nets when an aircraft has an in-flight emergency or ground incident. MOC will advise all network radios of the nature of the mishap and contact all appropriate agencies established in applicable checklists.

3.5.1.1. If crashed, damaged, or disabled aircraft incident happens after duty hours, MOC will contact the CDDAR Team Chief from the applicable roster.

3.5.2. Contact 92 MXS Munitions Flight to assess weapons/ordnance removal/disposition requirements as necessary.

3.5.3. Provide any vehicle/support requests per CDDAR Team Chief by contacting ESF 1 (Transportation) in the EOC.

3.5.4. Monitor and, upon request, coordinate recovery operation via radio communication with maintenance representatives.

3.5.5. For aircraft not assigned to Fairchild AFB, coordinate with Command Post to notify the owning base/organization of the mishap. Coordinate with the owning organization and local CDDAR Team Chief to determine support requirements for aircraft of different MDS than assigned wing aircraft.

3.5.6. Assist as necessary obtaining clearance from the control tower for maintenance response teams to cross the active runway to reach the recovery site.

3.6. 36 RQS will:

3.6.1. Provide technical expertise, technical data, mission design series (MDS) unique tools, special equipment, airframe/system familiarization, and manpower/augmentation to the host CDDAR recovery team.

3.6.2. Participate in annual joint CDDAR training and exercises to effectively assist the base recovery operations during real world responses as required.

3.7. Army National Guard C Co 1-112th Security and Support (AASF #2) will:

3.7.1. Provide technical expertise, technical data, mission design series (MDS) unique tools, special equipment, airframe/system familiarization, and manpower/augmentation to the host CDDAR recovery team.

3.7.2. Participate in annual joint CDDAR training and exercises to effectively assist the base recovery operations during real world responses as required.

3.8. 92d Civil Engineering Squadron (CES) will:

3.8.1. Fire Chief assumes Incident Commander (IC) authority over the incident until transfer of authority to the ROC.

3.8.2. Fire Chief will coordinate all fire protection and suppression capabilities along with composite material fixant application and qualified personnel as required during initial mishap response and throughout the duration of recovery operations.

3.8.3. Be prepared to provide/operate the necessary heavy equipment, qualified personnel, materials to moor aircraft and materials as required by the CDDAR Team Chief. See [Attachment 2](#) for equipment requirements. If equipment requirements are unavailable, 92 CES will coordinate with 92 Contracting to establish lease agreement(s)

with local suppliers IAW lease procedures established in AFI 24-302. Note: All wing assets will be checked for availability before proceeding with lease attempts. If available, wing assets will be prioritized toward CDDAR events.

3.8.4. Construct necessary temporary facilities as required to support the CDDAR recovery operations.

3.8.5. EA's will complete a grid survey for the location of aircraft parts and remains.

3.9. 92 ARW/Flight and/or Ground Safety will:

3.9.1. Provide guidance for preservation of evidence for the SIB and AIB, to include: complete photographic coverage, notes, liquid samples, and measurements

3.10. 92d Operations Support Squadron/Crew Comm and/or owning squadron avionics will:

3.10.1. Remove classified and cryptographic materials from the site as directed.

3.11. 92d ARW/JA:

3.11.1. Judge Advocate will provide legal advice to the IC/ROC and Wing Commander as needed based on local, state, and federal regulations.

3.12. 92d Maintenance Group (MXG)/AMXS will:

3.12.1. Provide maintenance representatives (crew chiefs and/or specialists) to augment and/or provide technical advice relative to safety, operation, or environmental hazards, as necessary.

3.12.2. Take charge of all emergency tow situations (excluding de-bogging) in the event an aircraft without structural damage requires removal from the active runway, to include in-flight emergency situations, hot brakes, and blown or flat tires.

3.13. 92 MXS/Structural Repair:

3.13.1. Provide maintenance representatives to augment and/or provide initial composite handling/retrieval until the CDDAR Team obtains respirators and are trained and fit tested by Bioenvironmental Engineering.

3.13.2. Provide expert advice to the CDDAR Team on best methods for removing damaged composite structures.

3.13.3. Provide special tools and/or personnel as required for the removal and recovery of aircraft components.

3.13.4. Composite materials are required to be coated with a fixant spray of acrylic wax and water typically at a 2:1 ratio or as otherwise stated IAW T.O. 00-80C-1. R&R CDDAR shall supply the sprayers and fixant. Fixant Spray Teams shall wear full PPE to include full face respirators or Powered Air Purifying Respirators (PAPR) to apply the fixant material.

3.14. 92d Logistical Readiness Squadron (LRS)/Transportation will:

3.14.1. Be prepared to coordinate with 92 Contracting to acquire additional items as required by the CDDAR Team Chief:

- 3.14.1.1. General vehicle/transportation support.
- 3.14.1.2. One (1) - All Terrain Forklift, 10,000 lbs or equivalent and driver as required
- 3.14.1.3. Two (2) - 40' X 8' flatbed trailer(s), tractor(s), and driver(s) for transporting light carts and general recovery equipment to the recovery site.
- 3.14.2. Will coordinate with 92d Contracting to establish lease agreement(s) with local suppliers when heavy equipment requirements such as additional cranes and/or semi tractors and trailers cannot be provided.
 - 3.14.2.1. Vehicle Maintenance will lease any vehicles associated with CDDAR if under the \$2,500 services threshold. Anything over \$2,500 will require coordination with contracting, as per GPC business rules.
- 3.14.3. Ensure de-fuel equipment will be placed in standby status for possible use in recovery operation (i.e., aircraft gear collapse).
- 3.15. 92d Aerospace Medicine Squadron (AMDS)/SGPB (Bioenvironmental Engineers) will:**
 - 3.15.1. Continuously evaluate the occupational, radiological and environmental health related hazards at the mishap site and communicate risks to the IC/ROC and CDDAR Team Chief.
 - 3.15.2. If required, Bioenvironmental Engineers will direct IC to establish a Contamination Control Station (CCS) for the processing of personnel in and out of the cordon until it is determined there is no contamination.
 - 3.15.3. Determine appropriate level of PPE to be used during the recovery process (e.g. Tyvek or Tychem suits, nitrile gloves, and type of respirators/filters).
 - 3.15.3.1. Provide the CDDAR Team Chief with necessary manufacturer information to help procure required PPE.
 - 3.15.3.2. Provide just in time respirator fit testing/training to CDDAR Team members as required.

3.16. 92d Force Support Squadron will:

- 3.16.1. Will provide billeting, meals, ice, water, etc and any other services as deemed necessary by the IC/ROC.
- 3.16.2. Be prepared to provide a Search & Recovery Team as well as Mortuary Affairs support as required in the event of deaths. Note: The Wing/CC will activate the S&R team if required.
- 3.16.3. Be prepared to stand up CAST team to meet AFPC's 5-hour window on casualty reporting.
- 3.16.4. Be prepared to place The Emergency Family Assistance Center (EFAC) on standby in the event of casualties.

DEREK M. SALMI, Colonel, USAF
Commander, 92d Air Refueling Wing

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

92 ARW Plan 31-1 (FOUO – UCNI-Integrated Defense Plan)

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

AFI 21-103, Equipment Inventory, Status and Utilization Reporting, 16 Dec 2016

AFI 24-301, Vehicle Operations, 5 May 2016

AFI 24-302, Vehicle Management, 26 Jun 2012

AFI 33-324, The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections, 6 Mar 2013

AFI 91-202, The U.S. Air Force Mishap Prevention Program, 24 Jun 2015

AFI 91-203, Air Force Consolidated Occupational Safety Instruction, 15 Jun 2012

AFI 91-206(I), Participation in a Military or Civil Aircraft Accident Safety Investigation, 8 Jul 2004

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

IEMP 10-2, Installation Emergency Management Plan, 8 Jun 2017

OSHA 1910-120

T.O. 00-80C-1, Crashed, Damaged, Disabled Aircraft Recovery Manual, 3 Mar 2015

T.O. 00-105E-9, Aerospace Emergency Rescue and Mishap Response Information, 31 Mar 2011

T.O. 1C-135-2-07, Recovery Manual, USAF C-135 Aircraft, 1 Jul 2017

Adopted Forms

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

Abbreviations and Acronyms

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFRIMS—Air Force Records Information Management System

AMDS—Aerospace Medical Squadron

AMU—Aircraft Maintenance Unit

AMXS—Aircraft Maintenance Squadron

AOR—Area of Responsibility

ARP—Aircraft Recovery Plan

ARW—Air Refueling Wing

CAT—Crisis Action Team
CC—Commander
CCS—Contamination Control Station
CDDAR—Crashed, Damaged or Disabled Aircraft Recovery
CES—Civil Engineering Squadron
CP—Command Post
DRF—Disaster Response Force
EAL—Entry Access List
ECC—Emergency Communications Center
EOC—Emergency Operations Center
EOD—Explosive Ordnance Disposal
ESFs—Emergency Supports Functions
IAW—In Accordance With
IC—Incident Commander
IEMP—Installation Emergency Management Plan
IFE—In-flight Emergency
ISB—Interim Safety Board
JA—Judge Advocate
LRS—Logistics Readiness Squadron
MDS—Mission Design Series
MIS—Maintenance Information System
MOC—Maintenance Operations Center
MXG—Maintenance Group
MXS—Maintenance Squadron
NDA—National Defense Area
FAFBI—Fairchild Air Force Base Instruction
OPR—Office of Primary Responsibility
PAPR—Powered Air Purifying Respirator
PPE—Personal Protective Equipment
QA—Quality Assurance
RDS—Records Disposition Schedule
R&R—Repair and Reclamation

ROC—Recovery Operations Chief

UCC—Unit Control Center

TA—Transient Alert

TO—Technical Order

TPC—Tactical Pilotage Chart

UCC—Unit Control Center

WG—Wing

Terms

Crashed Aircraft—An aircraft unable to return to designated or alternate field or missed landing resulting 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**ADDITIONAL SUPPORT REQUIRED (THIS IS NOT AN ALL INCLUSIVE LIST)**

- A2.1.** All Terrain Forklift, (1) 10,000 lb or equivalent and driver as required.
- A2.2.** Two Hundred (200) – Sand bags (sand must be available to fill required bags).
- A2.3.** One hundred Twenty-Five (125) – Plywood Sheets, 3/4” thick X 4’ X 8’.
- A2.4.** Twelve (12) – Steel Plates, 1” thick X 4’ X 6’.
- A2.5.** Twelve (12) – Steel Plates, 1” thick X 3’ X 3’.
- A2.6.** Five Hundred (500) – Timber, Railroad Tie, 6” X 8” X 8’.
- A2.7.** Five Hundred (500) – Wood timbers, 4” X 4” X 8’, 6” X 6” X 8’, or 8” X 8” X 8’.
- A2.8.** Five (5) – Water pump, sump or otherwise, 50 to 100 GPM.
- A2.9.** Aircraft tow vehicle (as required).
- A2.10.** Bulldozer (as required).
- A2.11.** Light carts (as required).
- A2.12.** 40 Ton crane (as required).
- A2.13.** Tow bars (as required).
- A2.14.** Aircraft jacks (as required).
- A2.15.** Powered and Non-Powered AGE as required, i.e. aircraft jacks, light carts, compressors, tow bars, heaters, etc.

Attachment 3

SAMPLE CDDAR TEAM CHIEF SAFETY BRIEFING

A3.1. Sample CDDAR Team Chief Safety Briefing

Figure A3.1. Sample CDDAR Team Chief Safety Briefing

PURPOSE: To recover crashed/damaged or disabled aircraft in a minimum time period consistent with the following considerations:

1. **Requirement to open the runway for operational use.**
 2. **To prevent secondary aircraft damage.**
 3. **Preservation of evidence for mishap or accident investigations.**
-
1. **SAFETY** is paramount and is the number one priority.
 2. A pre-brief is required before any recovery process/step established in the ARP.
 3. **DO NOT** enter mishap area until authorized by the IC.
 4. Check with Team Chief to verify aircraft is safe for maintenance.
 5. Verify BE has determined proper personal protective equipment and ensure personnel wear PPE accordingly.
 6. Stay out from underneath the wings and engines unless absolutely necessary.
 7. Many aircraft are constructed with composite materials; do not handle untreated composite materials.
 8. For some Fighter Aircraft, Hydrazine hazards exist...if these hazards are noticed, stop recovery actions. Notify Team Chief who will consult proper agencies for disposition.
 9. Watch out for each other, take a break when needed and stay hydrated.
 10. For any situation that might occur that has not been briefed, use ORM and bring it to the attention of the Team Chief.

Attachment 4

CRASH DAMAGED/DISABLED AIRCRAFT RECOVERY TEAM CHIEF CHECKLIST

Figure A4.1. Crash Damaged/Disabled Aircraft Recovery Team Chief Checklist, Part 1

- Notify Section Chief and Flight Chief of situation (if not present).
- Assemble team in Aero-Repair Section, review individual responsibilities of team members and set up a work schedule for personnel.
 - Start checklists, brief team members on assigned duties.
- Collect required data prior to leaving shop.
 - 1C-135-3-1
 - 1C-135-2-07
 - 00-105E-9
 - 00-80C-1
 - Crash recovery book (located in Aero-Repair Section Chief Office).
 - Notify vehicle operations dispatch at 7-2244 and inform of need for truck and driver.
- Ensure required equipment is ready & available. Team chief will obtain the appropriate vehicle/operator for CDDAR from Vehicle Operations to tow the CDDAR trailer. Additional vehicles will be provided to team members, as needed.
 - Jacks/jack trailer.
 - Plywood sheets/shoring (railroad ties).
 - CDDAR trailer.
 - If necessary, obtain disabled aircraft wheel dolly and T.O. 35D3-7-15-1 from the AGE flight.
- Coordinate with contracting office to procure additional, required equipment, i.e. dunnage, shoring, heavy equipment, etc.
- Do not respond to crash site until notified by Incident Commander (IC)
 - Notified by proper channels, (i.e., MOC, MS-2, flight line production supervisor, etc.).
 - Ensure proper radio communication with air traffic control tower if crossing active runway.
- Coordinate with the IC, Safety Investigation Board (SIB) or Safety representative, and BEE to determine what PPE and recovery equipment will be required for entry into the area. Determine what needs to be accomplished and when the CDDAR team will be allowed to enter the area. The CDDAR Team will stand-by once activated and will wait for directions from IC and CDDAR Team Chief
 - Identify all known hazards.
 - Review all safety pre-cautions and ensure all personnel have required PPE.
- Assess situation.
 - Use RM (Risk Management).

Figure A4.2. Crash Damaged/Disabled Aircraft Recovery Team Chief Checklist, Part 2

- Notify Depot of situation.
 - OC-ALC/LCRA (DSN 336-5620) for C-135 series or, if different aircraft, coordinate with QA and the owning agency for depot instructions.

- Conduct safety briefing for team members.
 - Ensure team members wear safety vests, reflective belts, etc.

- Ensure aircraft is defueled and safe to proceed.
 - Configure aircraft and begin recovery/removal actions.
 - Follow all Technical Data
 - Utilize AFI 91-204 to ensure preservation of evidence

- Verify safe center of gravity (coordinate through flight line production supervisor).

- Obtain crane (if needed) from downtown through IC/MOC.
 - Company listed in Team Chief CDDAR Continuity Book.

- Ensure lifting bag shoring, 60 each railroad ties on-hand (or amount required).
 - Local downtown merchants (extra, if needed).

Attachment 5

CDDAR CAPABILITY MATRIX

Table A5.1. CDDAR Capability Matrix

Aircraft	Airbag	Jacks	Towing**	Wheel Dolly	Crane*	Crane Availability Time	Main Gear Failure (Airfield Removal Capabilities)	Nose Gear Failure (Airfield Removal Capabilities)	All Tires Fail (Airfield Removal Capabilities)
707	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
727	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
A-10A	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
AV8	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
B-1B	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
B-52	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
BE-90	No	No	Yes**	Unknown	Off Base*	1-2 hours	No	No	No
C-12	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
C-130	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-140	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-17	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C182	No	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes
C-206	No	No	Yes**	N/A	Fairchild	30 min-1 hour	N/A	N/A	N/A
C-208	No	No	Yes**	N/A	Fairchild	30 min-1 hour	N/A	N/A	N/A
C-21	Yes	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes
C-22	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-23	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-26	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-33	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-5	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
C-9	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
CH-47	No	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
CH6	No	No	Yes**	N/A	Off Base*	1-2 hours	N/A	N/A	N/A
CM170	No	No	Yes**	N/A	Off Base*	1-2 hours	N/A	N/A	N/A
CT-114	Yes	No	Yes**	Unknown	Fairchild	30 min-1 hour	No	No	Unknown
E-3	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
E-4	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
E540	No	No	Yes**	No	Off Base*	1-2 hours	No	No	No

EA6-B	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
EX300	No	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes
F-111B	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
F-15	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
F-16	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
F-18	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
F-27	No	No	Yes**	Unknown	Off Base*	1-2 hours	No	No	Unknown
F-4C	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
F-5	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
F-8	No	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
H124	No	No	Yes**	No	Off Base*	1-2 hours	No	No	No
H60	No	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
HH60	No	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
KC-10	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
KC-135	Yes	Yes	Yes	No	Off Base*	1-2 hours	Yes	Yes	Yes
M1617	No	No	Yes**	No	Off Base*	1-2 hours	No	No	No
P-3	Yes	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
SW-3	No	No	Yes**	Unknown	Off Base*	1-2 hours	No	No	Unknown
SW-4	No	No	Yes**	Unknown	Off Base*	1-2 hours	No	No	Unknown
T-1	No	No	Yes**	Yes	Off Base*	1-2 hours	No	No	Yes
T-33	No	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes
T-37	Yes	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes
T-38	Yes	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes
T-43	Yes	No	Yes**	No	Off Base*	1-2 hours	No	No	No
T-6	No	No	Yes**	Unknown	Fairchild	30 min-1 hour	No	No	Unknown
T-67	No	No	Yes**	Unknown	Off Base*	1-2 hours	No	No	Unknown
UH-1N	No	Yes	Yes	Yes	Fairchild	30 min-1 hour	No	No	No
UH-72	No	Yes	Yes	Yes	Fairchild	30 min-1 hour	No	No	No
YAK-55	No	No	Yes**	Yes	Fairchild	30 min-1 hour	No	No	Yes

* Cranes contracted through local companies

** Transient Alert provides tow bars/adapters