

**BY ORDER OF THE COMMANDER
911 AIRLIFT WING**

**911TH AIRLIFT WING INSTRUCTION
21-105**



2 JUNE 2021

Maintenance

**CRASH, DAMAGED AND DISABLED
AIRCRAFT RECOVERY PROCEDURES
(CDDAR)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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RELEASABILITY: There are no releasability restrictions on this publication.

OPR: 911 MXS/MXMT

Certified by: 911 MXG/CC
(Col Katrine M. Waterman)

Supersedes: 911AWI21-105,
1 August 2014

Pages: 13

This instruction implements Air Force Instruction (AFI) 21-101, Aircraft and Equipment Maintenance Management, and Technical Order (TO) 00-80C-1, Crashed, Damaged, Disabled Aircraft Recovery Manual. This instruction describes 911th Airlift Wing (AW) procedures to be used in conjunction with the basic AFI and TO. This instruction is applicable to all personnel with applicable responsibilities in the 911th AW. This publication may be supplemented at any level, but all supplements must be routed to the Office of Primary Responsibility (OPR) listed above for coordination prior to certification and approval. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) listed above using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 from the field through the appropriate functional 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. 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). The use of the name or mark of any specific manufacturer, commercial product, commodity, 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. This rewrite was necessitated by the simultaneous Wing airframe conversion and Maintenance Group reorganization. Major changes to this document include consolidation of workcenter responsibilities into one chapter, and the addition of the procedures chapter. The new procedures chapter expands on the individual workcenter responsibilities and provides broad guidance for each workcenter to follow in preparation for, and during, a CDDAR event.

1. GENERAL INFORMATION.

1.1. This instruction provides the basic procedures to be followed for aircraft recovery/removal in the event of a crash, damaged, or disabled aircraft. The Crash, Damage, Disabled Aircraft Recovery (CDDAR) program is designed for after initial response events have been accomplished and the aircraft has been made safe for recovery. Physical aircraft removal procedures will not be implemented until approved by the Incident Commander (IC), or Fire Chief. The CDDAR program is designed to recover an aircraft in a minimum time period consistent with the following considerations:

1.1.1. Requirement to open the 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 in accordance with AFI 91-202 and AFI 91-204.

1.1.4. Mitigate incident's impact to Pittsburgh International Airport flight schedule.

1.1.5. The Team Chief, CDDAR Team, and appropriate base agencies will conduct/participate in annual training exercises.

2. RESPONSIBILITIES.

2.1. The 911th Maintenance Group Commander (MXG/CC) will:

2.1.1. Have the primary responsibility for establishing the CDDAR capability.

2.1.2. In writing, appoint the CDDAR team.

2.2. The CDDAR Team Chief and alternate will:

2.2.1. Ensure all personnel assigned to the crash recovery team are trained in accordance with MXG CDDAR Lesson Plan. The training will be both hands on and classroom based. Training will be documented Career Field Education and Training Plan (CFETP) or electronic equivalent. When available, team members should attend the Basic CDDAR Training course at Sheppard AFB, Texas.

2.2.2. Manage a CDDAR team with the minimum amount of personal to support a CDDAR recovery operation. The CDDAR Team Chief (or IC) may utilize other personnel necessary to accomplish CDDAR operations as required.

2.2.3. Maintain a current recall roster for after normal duty hours. The roster will have current assigned personal and telephone numbers. This list will be updated yearly or whenever a change occurs. MOC and Command Post will have access to this list.

2.2.4. Ensure that all CDDAR members are trained on tools, equipment, and personal protective equipment (PPE) required for safe recovery operation. Ensure training on Composite Hazard Cleanup and PPE in accordance with all local and federal safety standards, and TO 00-105E- 9, [Chapter 3](#).

2.2.5. Ensure that all CDDAR members are enrolled in medical surveillance and have completed required medical examinations. As a minimum, all CDDAR team members shall be enrolled in medical surveillance for respirator use and hazardous waste operations.

2.2.6. Ensure that adequate tools, special equipment, and PPE are serviceable and available for emergency recovery operations. A CDDAR trailer for weatherproof storage and mobility will be used and will contain at least the minimum required equipment authorized and recommended by Boeing. Ensure CDDAR team inspects CDDAR assets owned by the 911 MXG for serviceability before and after each exercise and real-world use. Accomplish and document all inspections in accordance with applicable technical orders (TOs).

2.2.7. In the event the current CDDAR event requires equipment that is unavailable, work with the Financial Management Office and Base Contracting to procure what is needed.

2.2.8. Coordinate with Quality Assurance (QA) Weight and Balance Manager when weight and Center of Gravity (CG) conditions are unknown.

2.2.9. Annually inform the MXG/CC, in writing, of any equipment shortages or serviceability issues that impact recovery operations.

2.2.10. Additionally, review the CDDAR continuity binder, all support agreements, response plans, and any CDDAR related lesson plan.

2.3. The 911 AW Command Post will:

2.3.1. Initiate QRC-203 Aircraft Mishap when a CDDAR event occurs.

2.3.2. Maintain and use the CDDAR Team recall roster for after duty hours response.

2.3.3. Submit all required incident reports to higher headquarters IAW AFMAN 10-206 Operational Report.

2.4. The 911 MXG Maintenance Operations Center (MOC) will:

2.4.1. Initiate QRC-02 Aircraft Crash and QRC-05 Major Incident checklists.

2.4.2. Notify Boeing of CDDAR event.

2.4.3. Coordinate the needs of the CDDAR Team via radio after they have been activated and onsite. All requirements will be coordinated with the IC, Team Chief, or Fire Chief while at the mishap site.

2.4.4. Obtain necessary clearance for maintenance vehicles not equipped with tower communications equipment to cross active runways or taxiways to reach the recovery site.

2.4.5. Maintain a log of all significant facts during the recovery operations. This log may be written or electronic.

2.5. The 911th Bioenvironmental Office will:

2.5.1. Evaluate the scene for potential health hazards and provide assessments to the IC and Team Chief.

2.5.2. Be consulted and directly involved in determining personnel health hazards and appropriate levels of PPE. Updating personnel as necessary when conditions change.

2.5.3. Work with the IC, CDDAR Team Chief, and Security Forces to develop Incident-specific PPE, engineering, administrative and/or procedural controls as needed, to protect the health and safety of staff. Depending on environmental conditions, the peripheral area should be at least 25 feet away from damaged composite parts. (Ref 00-105E-09, [Chapter 3.](#))

2.5.4. Be responsible for the evaluation of any contamination to the environment, assessing the necessary cleanup, disposal of contaminated components, and coordination with the appropriate federal and state regulatory agencies.

2.5.5. Provide respirator training and fit testing to all recovery personnel as necessary.

2.5.6. Make provisions to recall a representative for non-duty hours and provide the representative's contact information to the 911th Command Post.

2.6. The 911th Civil Engineering Squadron will:

2.6.1. Provide manpower (civilian or military), manpower provisions, machinery, equipment and supplies necessary to support the recovery mission as directed by the IC and CDDAR Team Chief.

2.6.2. Be responsible for the evaluation of any contamination to the environment, assessing the necessary cleanup, disposal of contaminated components, and coordination with the appropriate federal and state Regulatory agencies.

2.7. The 911 AW Base Contracting will:

2.7.1. Procure needed supplies and coordinate with the IC and CDDAR Team Chief for availability and delivery of all emergency requests. Ref. AFI21-101 AFRCSUP.

2.7.2. Make provisions to recall a representative for non-duty hours and provide the representative's contact information to the 911th Command Post.

2.8. The 911th Force Support Squadron will:

2.8.1. Provide the necessary support for the CDDAR operation. This may include billeting, meals, ice, water, mortuary affairs, etc. and any other services as deemed necessary by the IC.

2.9. 911th Financial Management Office will:

2.9.1. Establish a fund cite with an Emergency Specialty Code (ESP) to procure and track needed personnel, equipment and supplies costs necessary in the CDDAR recovery operation.

2.10. 911th Security Forces Squadron will:

2.10.1. Establish a cordon area and entry/exit control point in conjunction with the Fire Chief, Bioenvironmental Office, IC, and Team Chief. The cordon size may expand as the situation warrants. (Ref TO 00-105E-09, Chapter 3.)

- 2.10.1.1. Utilize personnel, temporary barriers, or signage to demarcate the boundaries of the cordon area when possible. In the case of a National Defense Area, utilize AFVA 31-102, *National Defense Area – Keep Out*.
- 2.10.1.2. Record all entry/exit of personnel through the entry control point on AF Form 1109, *Visitor Register Log*.
- 2.10.2. Coordinate response with local law enforcement agencies having jurisdiction over the affected area.
- 2.10.3. IAW AFI 31-101, Integrated Defense, if a National Defense Area is to be established the Installation Commander is the deciding authority and should confer with the Office of the Staff Judge Advocate. In an emergency situation during which time does not reasonably permit the Installation Commander to give the order, a subordinate commander to whom responsibility for securing the property has been entrusted may establish a National Defense Area to safeguard the property.
- 2.11. 911th Aeromedical Staging Squadron will:
 - 2.11.1. Assist the IC and CDDAR Team Chief by being available for medical consultation and evaluations of CDDAR personnel.

3. PROCEDURES.

- 3.1. In the event of a crashed/disabled aircraft, 911 AW IEMP 10-2 plan will be implemented and all applicable check sheets will be started. MOC will notify the 911 MXG/CC to appoint an IC and then the CDDAR Team Chief to assemble the CDDAR team. Boeing will also be contacted by MOC. Boeing will be available for assistance and guidance throughout the CDDAR process.
- 3.2. The site will be evaluated with the IC, CDDAR Team Chief, Safety Investigation Board (SIB) or safety representative, and Bioenvironmental. The evaluations will be to determine what needs to be accomplished for a successful and safe recovery, and when the CDDAR team will be needed to enter the area. Evaluate the site with the IC and Bioenvironmental to determine what PPE and recovery equipment will be required for entry into the area.
- 3.3. After the activation of the CDDAR team, the CDDAR Team Chief will:
 - 3.3.1. Assemble the CDDAR team in the Repair and Reclamation shop. Brief all personnel on the site condition, review individual responsibilities of team members and set up work schedule for personnel.
 - 3.3.2. Review all safety precautions and ensure all personnel have proper PPE equipment that is available and required. Additionally, provide a safety briefing to all personnel participating in the CDDAR operation.
 - 3.3.3. Obtain the assigned vehicle for CDDAR from Vehicle Maintenance to tow the CDDAR trailer. Additional vehicles will be provided to team members, as needed.
 - 3.3.4. Once directed by the IC to conduct recovery procedures, make the aircraft safe for recovery operations, configure the aircraft, and begin recovery/removal actions. The recovery operation shall take place in accordance with all applicable technical data and in accordance with AFI 91-204 to ensure preservation of evidence.

3.4. The Bioenvironmental Team will:

3.4.1. Prior to recovery operation, ensure all team members will be respirator fit tested. This will be based on the recovery operation and appropriate PPE Level.

3.4.2. Continue to monitor environmental conditions at site during recovery and advise CDDAR Team Chief of any recommended changes to PPE.

JOHN F. ROBINSON, Colonel, USAF
Commander, 911th Airlift Wing

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

TO 00-80C-1, Crashed, Damaged, Disabled Aircraft Recovery Manual, 17 Nov 2020
TO 00-105E-9-WA-1, Aerospace Emergency Rescue and Mishap Response Information, 1 May 2020
TO 1C-17A-3-1-WA-1, Structural Repair – Standard Practices Structures, 1 November 2020
AFI 21-101 AFRC Sup 1, Aircraft and Equipment Maintenance Management, 13 August 2020
AFI 21-103, Equipment Inventory, Status and Utilization Reporting, 30 April 2020
AFI 31-101, Integrated Defense, 25 March 2020
AFI 48-137, Respirator Protection Program, 12 September 2018
AFI 91-202, Mishap Prevention Program, 12 March 2020
AFI 91-204, Investigating and Reporting US Air Force Mishaps, 27 April 2018
AFMAN 13-204V2, Airfield Management, 22 July 2020
AFVA31-102, National Defense Area – Keep Out, 14 July 1995

Adopted Forms

AF Form 847, Recommendation for Change of Publication
AF Form 1109, Visitor Register Log

Abbreviations and Acronyms

AW—Airlift Wing
CDDAR—Crash, Damaged and Disabled Aircraft Recovery
EOD—Explosive Ordnance Disposal
ESP—Emergency Specialty Code
IC—Incident Commander
MOC—Maintenance Operations Center
PPE—Personnel Protective Equipment
QA—Quality Assurance
SIB—Safety Investigation Board

Attachment 2

ALLEGHENY COUNTY AGREEMENT

Figure A2.1. Allegheny County Agreement Receipt.

ALLEGHENY COUNTY AND
ALLEGHENY COUNTY INSTITUTION DISTRICT
Office of the Chief Clerk
101 Courthouse
Pittsburgh, PA 15219
412-355-4750

RE: 958-87-A

DATE RECEIVED BY COMMISSIONERS: 9/22/87 - 4/25/89

DATE FORWARDED TO CONTROLLER: JUL 31 1989

TO: Scott O'Donnell
Aviation

25609

FROM: SALVATORE M. SIRABELLA
CHIEF CLERK

REFER TO AGREEMENT#: _____

CONTRACT #: _____

SPECIFICATION #: _____

RE: USE AGREEMENT - UNITED STATES OF AMERICA

For the term effective through June 30, 2001 or and extension granted under Land Lease Agreement No. DA-15-029-ENG-7929 which provides for the lease of land and use in common facilities at Greater Pittsburgh International Airport by Allegheny County to the United States Govnt. - payment will be in the amount of \$20,000.00 per annum, and as more fully set forth in the submission. I.C. 090423.

Land Lease expires 30 June 2015.
2038

DATE AUTHORIZED: 7/23/87

Properly executed copies of the above-referenced agreement are returned herewith. You are requested to distribute those returned to you.

SMS/cam

cc: Controller
Law Department
United States of America

CC: HQAFRES/DEH
AC
DOO

Figure A2.2. Allegheny County Agreement (Page 1).

JOINT USE AGREEMENT BETWEEN
THE AIR FORCE RESERVE AND ALLEGHENY COUNTY

THIS AGREEMENT made and entered into this 10th day of May, 1989, by and between the County of Allegheny, Commonwealth of Pennsylvania (herein after referred to as the "County"), and the United States of America, acting by and through the Air Force Reserve (hereinafter referred to as the "Government"):

WITNESSETH: The parties hereto enter into a joint use agreement for Greater Pittsburgh International Airport (hereinafter referred to as the "Airport"), covenant and agree as follows:

1. JOINT AND CONCURRENT USE: The Government shall have the right to use jointly with the County, its officers, agencies, assignees, permittees, licensees, or other lessees, the landing field area of said Airport and appurtenances necessary thereto, in the take-off and landing of aircraft, and provided further that the rights of the Government set forth herein shall include the use of all additions, extensions and improvements to the existing runways, taxiways land appurtenances thereto, together with the right of ingress and egress thereto.

2. Subject to availability of appropriations therefore, the Government will reimburse the County \$20,000 per year for a portion of the cost of maintaining and servicing the joint use areas of the Airport land for giving the Government structural fire protection, aircraft fire and crash rescue services land emergency ambulance/medical services.

a. Payment under the terms of this agreement shall be effective 1 January 1989 and shall provide for two \$10,000 payments per year. The first \$10,000 payment is due 1 January and the second 1 July. Future payments are due on those same dates for future years as long as this agreement is in effect. Such payments shall be made upon submission of appropriate bills to the Government.

b. The reimbursement rate is subject to renegotiation each year during a 90-day period prior to 30 June beginning with 30 June 1990. The fixed annual charge may be renegotiated upon 30 days notice by the Government provided that a substantial change (programmed or actual) occurs in the Air Force missions located at Greater Pittsburgh International Airport.

3. The County agrees to keep records and books of account, showing the actual cost to it of all items of labor, materials, equipment, supplies, services, and other expenditures made in fulfilling the obligations of this Agreement, and the Comptroller General of the United States or any of his/her duly authorized representatives shall, until the expiration of three (3) years after final payment, have access at all times to such records and books of account, or to any directly pertinent books, documents, papers, and records of any of the County's contractors or subcontractors engaged in the

Copies to: DE
County
CC
DEF
ACB

Figure A2.3. Allegheny County Agreement (Page 2).

performance of and involving transactions related to this Agreement. The County further agrees that representatives of the Air Force Audit Agency or any other designated representative of the Government shall have the same right of access to such records, books of account, documents and papers as is available to the Comptroller General.

4. The Government by giving written notice to the County may terminate the right of the County to proceed under this Agreement if it is found, after notice and hearing by the Secretary of the Air Force or his/her duly authorized representative, that gratuities in the form of entertainment, gifts, or otherwise, were offered or given by the County, or any agent or representative of the County, of any officer or employee of the Government with a view toward securing this Agreement or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such agreement, provided that the existence of the facts upon which the Secretary of the Air Force or his/her duly authorized representative makes such findings shall be an issue and may be reviewed in any competent court.

a. In the event this Agreement is terminated as provided in subparagraph 4 above, the Government shall be entitled to pursue the same remedies against the County as it could pursue in the event of a breach of the Agreement by the County, and in addition to any other damages to which it may be entitled by law, the Government shall be entitled to exemplary damages in an amount (as determined by the Secretary of the Air Force or his/her duly authorized representative) which shall be not less than three nor more than ten times the cost incurred by the County in providing any such gratuities to any such officer or employee.

b. The rights and remedies of the Government provided in this paragraph 4 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

5. The County shall comply with all federal, state and local laws, rules and regulations applicable to the activities conducted under this Agreement.

a. The County shall neither transfer nor assign this Agreement without the written consent of the Government, which shall not be unreasonably withheld.

b. Neither party shall be liable for damages to property or injuries to persons arising from acts of the other in the use of the Airport facilities or occurring as a consequence of the performance of responsibilities under this agreement.

c. No member or delegate to Congress shall be admitted to any share or part of this Agreement or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.

Figure A2.4. Allegheny County Agreement (Page 3).

d. It is expressly agreed that this written instrument embodies the entire financial arrangement of the parties regarding the use of the joint use areas of the Airport by the Government, including the provision of fire protection, crash rescue and emergency ambulance/medical services by the County, and there are no understandings or agreements, verbal or otherwise, between the parties in regard thereto except as expressly set forth herein. Specifically, no landing fees or other fees not provided in this Agreement will be assessed by the County against the Government in such use of such joint use areas during the term of this Agreement.

e. The Agreement may only be modified by mutual agreement of the parties in writing and signed by each of the parties hereto.

6. This Agreement will remain in effect until the expiration date of Lease No. DA-15-029-ENG-7929 between Allegheny County and the Government. Any extension of the Lease automatically extends this Agreement to the extension date of the Lease.

7. This Agreement was authorized by the Board of Commissioners of Allegheny County on July 23, 1987, at Agenda No. 958-A-87.

Attachment 3
SUPPLEMENT AGREEMENT

Figure A3.1. Supplement Agreement (Page 1).

**SUPPLEMENT AGREEMENT NO. 14
TO
DEPARTMENT OF THE ARMY LEASE
NO. DA-15-029-ENG-7929
BY AND BETWEEN
COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA
AND
THE UNITED STATES OF AMERICA**

WHEREAS, on October 20, 1964, the County of Allegheny, Commonwealth of Pennsylvania, hereinafter referred to as the "Lessor", and the United States of America, hereinafter referred to as the Government, entered into a lease agreement whereby the Lessor leased to the Government approximately 87.977 acres of land at the Greater Pittsburgh International Airport; and

WHEREAS, the aforesaid lease has been amended by Supplement Agreement Nos. 1-13 increasing the acreage to 103.28 and extending the land lease to 30 June 2038; and

WHEREAS, the Government desires to extend the lease term for an additional ten (10) years until 30 June 2048; and

WHEREAS, the Government desires to add approximately 25.24 acre parcel increasing the acres to 128.52 acres to include the area known as the T-Ramp, and

WHEREAS, it has been determined to be in the best interest of both parties to amend the lease as stated above.

WHEREAS, the Allegheny County Airport Authority ("Lessor") became successor in interest to the rights of the County, pursuant to the Airport Operations, Management and Transfer Agreement and Lease dated September 19, 1999, entered into by and between Lessor and the County and, by virtue thereof has the power and authority to enter into this Supplement Agreement.

Figure A3.2. Supplement Agreement (Page 2).

NOW THEREFORE, effective upon the execution hereof, the Lease is amended as follows:

1. Paragraph no. 1 in Supplement No. 10 is changed to read, "...increasing the total leased area to 128.52 acres..."
2. The lessor hereby agrees to lease the government the full time exclusive use of a parcel of land which contains approximately 25.24 acres of land thus increasing the total lease area to 128.52 acres, more or less, as described in Exhibit "A" attached hereto and made a part hereof.
3. Paragraph no. 3 in Supplement No. 10 is further modified in part to read as follows: "...that this lease shall be extended to 30 June 2048."

THAT ALL OTHER TERMS AND CONDITIONS of the lease and all amendments shall remain in full force and effect.

IN WITNESS WHEREOF, this Agreement is duly executed on the 24 day of July 2017, by the parties hereto, intending themselves to be legally bound hereby.

ALLEGHENY COUNTY AIRPORT AUTHORITY

CHRISTINA CASSOTIS
Chief, Executive Officer

UNITED STATES OF AMERICA


ROBERT E. MORIARTY, P.E., SES, DAF
Director, Installations Directorate