

**BY ORDER OF THE COMMANDER
TINKER AIR FORCE BASE**

**TINKER AIR FORCE BASE
INSTRUCTION 21-101**



18 APRIL 2024

Maintenance

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

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Eberhard Bauer)

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This instruction implements the Installation Crashed, Damaged, or Disabled Aircraft Recovery (CDDAR) Program in accordance with AFI 21-101, *Aircraft and Equipment Maintenance Management* (**Chapter 11**, Para 11-28.), AFI 21-101_AFMCSUP, AFMC Addendum A to the AFMC Supplement for Non-Standard Organizations (NSO), and TO 00-80C-1, *Crashed, Damaged, Disabled Aircraft Recovery (CDDAR) Manual*. It establishes joint procedures for the recovery of crashed, damaged or disabled aircraft on Tinker AFB or within the geographical area of responsibility of the Installation. This instruction can be implemented in conjunction with Tinker AFB Plan 10-2, *Installation Emergency Management Plan (IEMP)*, Major Accident Recovery Operations. This instruction is applicable to all organizations tasked to support aircraft recovery operations, including Tinker associate units. These organizations must be prepared to rapidly deploy crash recovery equipment and personnel for crashed, damaged, or disabled aircraft deemed necessary by Oklahoma City Air Logistics Complex and Headquarters, Tinker Air Force Base (TAFB). It applies to the Air Reserve units, except where noted otherwise. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR), 72d Air Base Wing Plans and Programs Office (72 ABW/XP), using the AF Form 847, *Recommendation for Change of Publication*. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

This publication has been substantially revised to meet the intent of the Installation CDDAR program and must be reviewed in its entirety. The revisions clarify procedures which include the roles of the Host Wing, Oklahoma City Air Logistic Complex, and Tinker AFB associate organizations. This revision also includes refinements to procedures taken from lessons learned during CDDAR Team support to real world aircraft incidents and procedural changes driven by higher-level guidance.

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1. Responsibilities.

1.1. General. Installation host wings and associate units with flying missions or active airfields/runways are required to maintain a CDDAR capability to recover installation or transient crashed or disabled aircraft on or within the geographical area of responsibility of the installation (See TAFB Plan 10-2, *Installation Emergency Management Plan (IEMP)*, for the designated geographical area of responsibility for TAFB). The 72d Air Base Wing (72 ABW), as the Host Wing for Tinker AFB, is responsible for developing the Installation CDDAR program. Program management responsibility is assigned to the 72 ABW Plans and Programs Office (72 ABW/XP).

1.1.1. Execution of the recovery operations is managed by the 72 ABW Emergency Operations Center (EOC). Execution of the CDDAR Program is the responsibility of CDDAR teams from the three flying associate organizations at TAFB (552d Air Control Wing, (552 ACW), 507th Air Refueling Wing (507 ARW) and STRATCOMMWING-1 (SCW-1), the 76th Aircraft Maintenance Group (76 AMXG) CDDAR Team and Transient Alert (72 OSS/OSTA). Collectively these organizations have the maintenance capability and equipment to physically recover crashed, damaged or disabled aircraft on the airfield.

1.1.2. The 76 AMXG is the OPR for the purchase, ownership, and maintenance of all necessary equipment to conduct CDDAR operations for all airframes which undergo PDM at OC-ALC. There are no requirements for associate units to duplicate this effort. Specifically, this covers the equipment requirements for the 552 ACW.

1.1.3. The Installation CDDAR Program Manager will ensure CDDAR procedures are coordinated with aircraft maintenance (76 AMXG and associate organizations), Fire and Emergency Services (72 ABW/CEXF), Safety (72 ABW/SE), Civil Engineering (72 ABW/CE), Emergency Management (72ABW/CEXM), Security Forces (72 SFS), Bioenvironmental (72 MDG), Airfield Management (72 OSS/OSAM), Transient Alert (72 OSS/OSTA), Logistics Readiness Squadron (72 LRS) (support agreements fuel and ground transportation), Contracting (AFSC/PK), all TAFB associate flying organizations and other supporting organizations, as applicable.

1.1.4. The Installation CDDAR Program Manager will ensure the support agreement office (72 LRS/LGR) includes CDDAR support in the agreements with all associate flying units.

1.2. The CDDAR program will be used to recover transient aircraft if within the capability of the 76 AMXG CDDAR Team and associate organization's supporting CDDAR teams. It is designed to recover crashed, damaged or disabled aircraft in a minimum time period and returning the airfield to operational capability consistent with the following consideration(s):

1.2.1. Open runway for operational use.

1.2.2. Prevent secondary damage to the aircraft.

1.2.3. Preserve evidence for mishap or accident investigations IAW AFI 91-202, *The AF Mishap Prevention Program*, AFI 91-204, *Safety Investigations and Reports*, and TAFB Plan 91-1, *Aircraft Mishap Response Plan*.

1.2.4. Mitigate the mishap's impact on the owning organization's flying mission requirements.

1.2.5. Input from the flying organizations on their mission requirements must be considered.

1.3. CDDAR support notification will be by Primary or Secondary Crash Nets, 76 AMXG Maintenance Operations Center (MOC) or the Command Post (CP).

1.3.1. All organizational team chiefs will develop emergency recall rosters to identify and notify required recovery team members during duty and non-duty hours. Units must account for team members being deployed, TDY or on leave. 76 AMXG and associate units will designate a 24/7 POC within their organization tasked to maintain their unit's recall information and is able to recall their CDDAR team chief as needed. (e.g., unit's command post or maintenance operations center). The POCs' contact information will be updated as soon as possible as changes occur. This information will also be sent to all other CDDAR team chiefs and the EOC.

1.3.2. CDDAR Team Chiefs will ensure contact information is uploaded into C2IMERA under the Documents Tabs.

1.3.2.1. 72 ABW/CEX will maintain the CDDAR contact information on the EOC SharePoint site and provide a link to the site to all CDDAR team chiefs and to their 24/7 POCs.

1.3.2.2. For 552d Air Control Wing (552 ACW) responses, the 552 MXG MOC will serve as the 552 ACW's crash recovery point of contact.

1.3.2.3. For 507th Air Refueling Wing (507 ARW) responses, the 507 MXS Production Supervisor will serve as the 507 ARW's crash recovery point of contact. The Production Supervisor will notify the CDDAR Team Chief for the 507ARW to provide CDDAR personnel for the recovery operation as necessary.

1.3.2.4. For STRATCOMMWING ONE (SCW-1) responses, the SCW-1 Task Force Duty Officer (TFDO) located in the OPCON will serve as the SCW-1 crash recovery point of contact and can be reached at 405-734-9929 or DSN 884-9929. The SCW-1 TFDO will notify the N4 Repair and Reclamation (R&R) Section to provide qualified CDDAR personnel to the IC Team as necessary.

1.3.2.5. The 76 AMXG CDDAR Team members and Team Chief reside within the Aircraft Servicing Section (569 AMXS/MXDPB) with the 76 AMXG MOC serving as the POC.

1.4. Upon notification of an aircraft incident, the 72 ABW Commander (72 ABW/CC) or designated representative activates the EOC based on recommendations from the Incident Commander (IC), notifies the AFSC Commander of the incident, considers activating the Crisis Action Team (CAT) and determines the removal conditions which are designated as:

1.4.1. **Emergency.** This condition requires immediate runway clearance at the risk of losing equipment and evidence. The runway must be cleared in 30 minutes or less.

1.4.2. **Urgent.** This condition requires runway clearance as soon as possible after completion of rescue, firefighting, and explosive ordinance disposal (EOD) operations. The runway will be cleared in less than one (1) hour and 30 minutes, unless EOD considerations dictate otherwise, using techniques identified in applicable technical publications. The Incident Commander (IC) will make this determination.

1.4.3. **Routine.** This condition allows sufficient time to use recovery techniques to minimize further damage to aircraft, preserve evidence and precludes exposing personnel or equipment to danger.

1.4.4. In Flight Emergencies (IFE):

1.4.4.1. Response to IFEs will be included in the Installation CDDAR program.

1.4.4.2. The 76 AMXG Team Chief will be placed on stand-by for all IFEs and will be prepared to respond to OC-ALC aircraft incidents or to support the associate organizations' teams as required. Response to declared IFEs for AFMC organizations potentially consists of assembling a tow team, pre-positioning it for immediate response and remaining in place until the IFE is terminated or until the aircraft is towed back to the parking apron if required. Depending on the nature of the emergency, other technicians may be required to stand-by to provide immediate response capability if the situation warrants.

1.4.4.3. For non-AFMC associates, specific response posture for IFEs will be dependent on the nature of the emergency and the owning organization's applicable instructions.

1.5. The Disaster Response Force (DRF) IC will decide which first responder actions may or may not proceed and is responsible for ensuring CDDAR Team assistance is requested through the EOC. During all emergency response situations, the IC is the final authority for determining when the mishap site is safe, and when the investigating authority and/or responsible CDDAR team may approach the mishap site and begin recovery operations.

1.6. The IC, in consultation with the Airfield Manager (72 OSS/OSAM), Base Safety Officer (72 ABW/SE), responsible CDDAR team chief and unit owning the aircraft, will recommend to the 72 ABW Commander and receive his/her approval for which removal method will be used.

1.7. Tinker AFB has two active runways. If an aircraft crash-lands in the runway crossing point known as the "checkerboard" area between the two, it may be necessary to clear the aircraft/wreckage as soon as possible to facilitate reactivation of at least one of the runways. If necessary, this action will be directed by 72 ABW/CC upon the recommendation of the Airfield Manager or designated official.

1.8. Typical incident sequence of events:

1.8.1. Immediately after the incident, first responders proceed IAW with TAFB Plan 10-2, Major Accident Recovery Operations and the EOC is activated by 72 ABW/CC. This initiates the Response Phase of the plan.

1.8.2. The IC ensures initial rescue, firefighting, security, and safing of the aircraft is performed. No one other than first responders can enter the mishap area during the response phase. The mishap scene must be determined safe by the IC prior to any investigation or CDDAR Team actions. Until which time, control of the mishap scene/site remains with the IC.

1.8.3. The unit owning the aircraft will work through their designated representatives via the EOC to advise the IC of any special considerations. When the incident site is secure, the owning unit representatives will coordinate actions through the EOC to provide assistance or information on special recovery requirements (e.g., classified material/equipment).

1.8.4. The incident aircraft and its equipment must not be disturbed or removed unless directed or released by the IC, Interim Safety Board (ISB) President or Impoundment Official/owning unit representative.

1.8.5. Under Emergency or Urgent removal conditions, the recovery/investigation phase may be waived by the 72 ABW Commander.

1.8.6. While response actions are ongoing, the EOC Director with the approval of the 72 ABW Commander develops a recovery plan.

1.8.7. After initial response is complete and site is safe, the ISB takes command of the site. Once ISB actions are complete, the site is transferred back to IC.

1.8.8. While the initial response is in progress, all CDDAR Team members should prepare and posture the equipment and materials required to recover the aircraft.

1.8.9. The IC then coordinates recovery actions with appointed investigation officials and the responsible CDDAR team chief.

1.8.10. Emergency or urgent removal conditions may bypass the deliberate recovery/investigation phase and dictate expedient ad-hoc planning and execution of CDDAR duties.

1.8.11. Under routine removal conditions when the investigation actions are complete, the Investigation Authority transfers command of the incident aircraft/wreckage to the IC. The responding CDDAR team chief, with support from other Installation CDDAR teams, will then coordinate with the IC to have the recovery or salvage teams restore, reclaim, or dispose of the aircraft. Once incident aircraft/wreckage is recovered, command of the aircraft/wreckage is transferred back to the Investigative Authority.

2. Host Base/Associate/Transient Aircraft CDDAR Responsibilities:

2.1. CDDAR operations will be accomplished using a Team Tinker approach. Team members for executing CDDAR capability will consist of individuals from 76 AMXG and all Tinker associate flying units with support from all other 72 ABW, AFSC and Air Force Life Cycle Management Center (AFLCMC) organizations as required.

2.2. The CDDAR team from the unit owning the incident aircraft will be the “lead” CDDAR team during aircraft recovery. If an associate organization’s CDDAR team responds to the incident site as the “lead” team, it will be fully supported by the 76 AMXG CDDAR Team and all other associate teams with personnel and aircraft recovery equipment.

2.3. The Team Tinker CDDAR approach will ensure the Installation is capable of providing or supporting recovery operations for all base assigned aircraft.

2.4. Associate units must coordinate with 76 AMXG and other CDDAR team chiefs for CDDAR recovery support, training, exercises, and equipment inventories (See [Para 9](#) for training requirements).

2.5. The 72 ABW, 76 AMXG and associate commanders are responsible for ensuring sufficient equipment is available for mobility/deployed operations, as authorized in the applicable allowance standards.

2.6. AFLCMC/HBSLB, Process Control and Improvement Division, will provide personnel and expertise on structural damage evaluation to the responding CDDAR team chief. Selected individual(s) will bring applicable Technical Data to aid recovery operations and to evaluate structural damage.

3. Vehicle/Equipment Requirements.

3.1. Equipment, vehicles, personal protective equipment (PPE) and any other CDDAR requirements needed to recover Tinker assigned aircraft will be identified by each flying unit. CDDAR and other specialized equipment inventory lists will be maintained by each organization and shared with all other Installation teams. CDDAR operations will maximize sharing of resources and specifically identify which resources each organization will be responsible for maintaining. CDDAR equipment will be managed to minimize duplication of resources among CDDAR teams. (Also see [Paragraph 11](#)).

3.2. The 76 AMXG CDDAR Team is tasked to recover OC-ALC aircraft undergoing Programmed Depot Maintenance (PDM) if they are involved in an incident. Associate organization teams may be called on for support as needed. The 76 AMXG will purchase, own, and maintain all the necessary equipment to conduct recovery operations for these aircraft as well as associate unit aircraft. Associate units need only procure and maintain equipment they deem necessary for the recovery of their specific aircraft, over and above what the 76 AMXG already possesses. Since the Tinker associate organizations' aircraft are based on the same C-135 airframe which undergoes PDM at OC-ALC, the 76 AMXG CDDAR equipment should be sufficient for most aircraft recovery operations.

3.3. Since associate units are responsible for the condition/repair of assigned aircraft, associate units will be actively involved in recovery operations during real world responses. Technical expertise, technical data, mission design series (MDS) unique tools/special equipment, expert manpower and airframe/system familiarization are all valuable contributions associate units towards the CDDAR program.

3.4. The 76 AMXG/CC, in coordination with all associate MXG/CCs and the 72d Mission Support Group Commander (72 MSG/CC), will make the final determination on unit vehicle/support equipment requirements, within the limits provided by allowance standards (AS). See [Attachment 3](#) and Addendum A to the AFI 21-101_AFMCSUP for AFMC vehicle/support equipment requirements.

3.5. Vehicle Maintenance and Ground Transportation (72 LRS/LGRV) will assist in locating additional trucks, tractor trailers, etc. up to the limits of the u-drive fleet, to transport CDDAR support equipment to the mishap site, as well as transport wreckage to the wreckage assembly point. 72 LRS/LGRV may institute the Vehicle Priority Recall Listing (VPRL) to provide support as needed. 72 LRS/LGRV will validate and coordinate any rental/lease agreements for additional tractors and trailers if required.

3.6. Depending on the nature of the mishap, associate units will be required to supply additional specialized equipment to support the recovery of their aircraft.

3.7. Civil Engineering Directorate (72 ABW/CE) will provide available heavy equipment (bulldozers, dump trucks, etc.) and drivers to support recovery operations.

3.8. When 76 AMXG cannot support heavy equipment requirements such as additional cranes, AFSC/PZIO, Operational Contracting Branch, maintains a contingency vendor listing of contractors to provide cranes and other equipment for emergency operations. These are established with local suppliers in accordance with lease procedures established in AFI24-302. Any rental/lease must be coordinated through 72 LRS/LGRV prior to submission to contracting. The AFSC/PZIO or PZA representative to the EOC will be contacted to implement these leases.

4. Inspection and Inventory:

4.1. The 76 AMXG and all associate organizations CDDAR equipment managers will inspect all assigned recovery equipment to include air bags, manifolds, jacks, slings, shoring, etc., for serviceability before and after each incident/exercise use. Periodic equipment inspections must be accomplished per intervals established in technical orders or as a minimum, annually.

4.2. The 76 AMXG and all associate organization CDDAR teams will ensure an annual inventory is completed for all assigned CDDAR equipment and an inventory report containing CDDAR excess and shortage of equipment items is sent to the CDDAR Program Manager in 72 ABW/XP, who will in turn, send it to the MAJCOM CDDAR OPR annually, NLT 30 Sep.

4.3. Associate organizations may record inventory documentation according to their own procedures.

5. The 76th Aircraft Maintenance Operations Control Center (MOC) will:

5.1. Notify the Oklahoma City Air Logistics Complex Commander (OC-ALC/CC) upon notification of an incident.

5.2. When notified by the crash nets, 72 OSS or CP of aircraft mishap, inflight emergencies, or ground incidents, the MOC will notify the CDDAR Team Chief, 569 AMXS/MXDPB. Notification will include call sign, aircraft type, nature of emergency, position of aircraft, pilot's intentions, estimated time of arrival (ETA), landing runway, wind, fuel remaining, personnel on board and known extent of the aircraft damage. The Servicing Section must be contacted upon termination of emergency or incident.

5.3. Upon direction by 76 AMXG/CC, ensure OC-ALC aircraft records are secured by the respective maintenance squadrons. All other aircraft records will be obtained IAW TAFB Plan 91-1, *Aircraft Mishap Response Plan*.

5.4. Contact 72 LRS/LGRF, Fuels Management Flight, to impound any fuel trucks used during ground refueling operations if mishap occurred after aircraft refueling at or in Programmed Depot Maintenance Scheduling System (PDMSS) at Tinker AFB.

5.5. Request 72 LRS/LGRF de-fuel equipment be placed in stand-by status for possible uses in recovery operations (i.e., aircraft nose gear collapse).

5.6. Contact the Aerospace Ground Equipment contractor if additional equipment (air compressors, light carts, jacks, etc.) needs to be transported to the incident site.

5.7. Contact appropriate squadron to identify subject matter experts (SME) in the event aircraft mishap involves PDM aircraft and to prepare necessary aircraft specific equipment upon request from the IC.

5.8. Coordinate with 569 AMXS/MXDPB Tow Team Supervisor to assemble tow team, tow vehicle and tow bar, to prepare for emergency tow of aircraft from runway.

6. The 76 AMXG CDDAR Team Chief will:

6.1. Be a SNCO or civilian equivalent. 76 AMXG may waive the grade requirement by obtaining approval of the 76 AMXG/CC. The 76 AMXG CDDAR Team Chief and Alternate are identified by appointment through the 76 AMXG/CC and added to the special certification roster (SCR). **NOTE:** Aircraft recovery efforts may require AFSC (Air Force Specialty Code) specific personnel to accomplish special tasks such as identifying and handling of classified equipment, life support or egress systems specific tasks, etc.

6.2. Establish the CDDAR program within the Aircraft Servicing Section (569 AMXS/MXDPB) and maintain detailed CDDAR Team aircraft recovery operating procedures IAW TO 00-80C-1.

6.3. The 76 AMXG CDDAR Team Chief and alternate will be designated as the Installation's subject matter expert on OC-ALC aircraft recovery operations and equipment and will be thoroughly familiar with and perform their Team Chief duties IAW TO 00-80C-1.

6.4. Develop, in conjunction with the Maintenance Training Flight, course control documents for crash recovery training accomplished by CDDAR Team members.

6.5. Review associate unit's support agreements, TAFB Plan 10-2 and TAFB Plan 91-1, annually. Provide inputs to plan OPRs for changes as required.

6.6. Inform 569 AMXS/CL who in turn, will inform 76 AMXG/CC, 72 ABW/CC and the CDDAR Program Manager in writing of equipment shortages/serviceability precluding effective CDDAR support. (See [para 4.2](#) for MAJCOM reporting requirements).

6.7. Ensure sufficient personnel/teams are trained and equipment is available to support CDDAR operations. This includes:

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

6.7.2. Familiarization to identify any unique characteristics/hazards/materials for aircraft (i.e., F-16 EPU hydrazine, C-130 ballast depleted uranium, aircraft composite materials, etc.) (See [Para 10.5](#)).

6.7.3. Availability and proper use of personal protective equipment (PPE) as determined by technical data and the base Bioenvironmental Engineer.

6.7.4. The 76 AMXG CDDAR Team Chief will ensure required number of the Servicing Section CDDAR personnel are respirator qualified IAW TO 00-80C-1 and ensure Team Supervisor maintains a respirator program. 72 MDG Bioenvironmental Engineering Office (BIO) on-call cell phone number for after-hour incidents or mishaps is (405) 823-3949/593-7805.

- 6.8. Ensure special qualifications for 76 AMXG personnel are identified and documented. Identify individual team member qualifications for specific equipment operations (e.g., towing, jacking, support equipment, special purpose vehicle, etc.).
- 6.9. Ensure adequate tools and support equipment for recovery (i.e., air bags, slings, manifolds, tow bars, shoring, etc.) are serviceable and available. Maintain a list of all CDDAR tools and equipment.
- 6.10. Conduct/participate in annual training exercises. Coordinate exercises with the 72 ABW/IG Inspection Branch (72 ABW/IGI).
- 6.11. Annually demonstrate team's capability to recover crashed/damaged small and large aircraft.
- 6.12. CDDAR exercises must be coordinated with Quality Assurance and applicable wing agencies.
- 6.13. CDDAR exercises will consist of lifting device positioning, sling hookup and simulating hoisting or lifting. Accomplish hoisting or lifting IAW applicable aircraft T.O. During hoisting or lifting exercises, observe surface wind limitations. **NOTE:** When using a crash crane, the unit will accomplish removal procedures up through attaching the lifting sling to aircraft and applying tension to cables. When ground instructional trainer aircraft (GITA) or aircraft battle damage repair (ABDR) aircraft are used, the aircraft should be lifted.
- 6.14. Coordinate with unit QA Weight and Balance manager when weight and center of gravity (CG) conditions are unknown.
- 6.15. Coordinate recovery actions with the appropriate contractor(s) and weapons system expert(s) as needed.
- 6.16. If required, request a tow vehicle with tow bar, tow vehicle operator, Tow Team Supervisor/or Tow Team Leader to stand by during recovery operations. Tow Supervisor/or Tow Team Leader will take direction from the IC. Tow team will remain available to the IC for any assistance necessary to aid in the aircraft recovery.
- 6.17. Ensure team supervisors maintain a recall roster of all 76 AMXG CDDAR Team Members to ensure supportable 24-hr operations to support aircraft mishaps/incidents as directed by the 76 AMXG/CC. Provide the EOC and all other associate team CDDAR team chiefs points of contact for recall of his/her organization's CDDAR team. **NOTE:** There are two distinct phases of an aircraft mishap: initial response and recovery. First responders face the probability of an aircraft fire. As any composite material burns, gases, vapors, and solid particles are released into the smoke plume. Recovery team members may be exposed to fibers and inhalable dusts as aircraft parts are moved, modified by cutting, breaking, twisting, or hammering. Personnel tasked to participate in a crash or post-crash response, recovery, maintenance and/or clean-up operations must be aware of/briefed on all possible health issues involved. Units must ensure local policies and procedures for handling crash damaged composites are addressed, including training and personnel protective equipment.

7. The 72 ABW, through the Emergency Operations Center (EOC) and the Incident Commander (IC) will:

7.1. Ensure all emergency response actions are completed and the IC has reported that it is safe to approach the aircraft. The IC will then be notified to direct the responsible CDDAR team chief to begin the approved recovery operations.

7.2. Provide for the incident site security and maintain the site cordon as long as necessary as directed by the IC. For off-base incidents where 72 SFS has no legal authority and a National Defense Area (NDA) is not declared, 72 SFS will coordinate with local authority exercising legal jurisdiction of the location for cordon requirements. (72d Security Forces Squadron, 72 SFS).

7.3. Provide vehicle and fuel support per [paragraph 3](#) and [paragraph 5](#) above. (72d Logistics Readiness Squadron, 72 LRS). Obtain required fuel samples IAW TAFB Plan 91-1 (72 LRS/LGRF).

7.4. The IC may establish a staging area to hold equipment until required at the site. The Maintenance representative on site will ensure CDDAR Teams and all additional maintenance response personnel are briefed on staging area procedures and site safety requirements.

7.5. Provide contracting support to obtain any required equipment and supplies not available on-base. The Operational Contracting Division (AFSC/PZIO) maintains an Emergency Management Contingency Kit (kit contains binder with contracting and emergency management regulations, contingency vendor listing, laptop, maps, admin forms, etc.). The contingency vendor listing contains names/numbers of contractors who have verbally pledged to respond 24- 7 if called. The AFSC/PZIO representative to the EOC will let a contract with the vendor for the required material when notified by the CDDAR team.

7.6. If the aircraft cannot be moved or removed for an extended time the responsible CDDAR team chief can request relief facilities (porta-john) through the EOC to be placed near the incident site. These will be requested through 72 ABW/CE, Customer Service Desk, 405-734-3117 (24/7 number). Movement to the site must be coordinated with Airfield Management, 72 OSS/OSM, 405-734-2191. The team chief will need to arrange to escort the delivery vehicle while on the airfield. **CAUTION:** The crash site will only be disturbed to the extent necessary to eliminate a situation that is detrimental to the aircraft, support equipment or personnel. The area will be maintained in an undisturbed state until the aircraft is released to the Safety Investigation Board (SIB) President by the IC or appropriate authority. Once the SIB has determined the aircraft can be moved, the aircraft will be turned over to maintenance by the SIB President. Once recovery actions begin, ONLY personnel designated by the CDDAR team will enter the recovery area.

7.7. Ensure all requirements of TAFB Plan 91-1 are accomplished. This includes notifying the installation where aircraft was last fueled to obtain required fuel samples. (72d Air Base Wing Safety Office, 72 ABW/SE).

8. Reports: IAW AFMAN 10-206, *Operational Reporting*.**9. CDDAR Recovery Team Qualifications and Training:**

9.1. All team members must be qualified in basic CDDAR operations and trained in recovery procedures IAW AFI 21-101, TO 00-80C-1, *CDDAR Manual*, and applicable MAJCOM supplements, MDS specific technical data, other applicable Air Force and MAJCOM directives and unit-developed training guides. Qualification will require initial and annual training comprised of both academic and hands-on training/exercises.

9.2. Initial training will include actual lifting of an aircraft. Aircraft lifting exercises may be accomplished by using owned aircraft, utilizing training hulks or participating with other organizations possessing training assets.

9.2.1. The 76 AMXG CDDAR Team Chief will coordinate with 76 AMXG/MXDSP to secure sufficient slots at the AETC CDDAR course for 76 AMXG team members to meet requirements in TO 00-80C-1. Team chiefs of associate CDDAR teams will request required training through their own training office.

9.2.2. The 76 AMXG shall provide resources and facilitate T.O. 00-80C-1 required annual training requirements for all associate unit Team Chiefs. (See *Note* below).

9.2.3. Ensure all training is documented in the appropriate system for civilians and military members. Qualifications for civilian team members will be recorded in Production Acceptance Certification. Qualifications for military team members will be recorded in their organization's appropriate training records.

9.3. CDDAR team chiefs must attend AETC Initial Training and complete an actual aircraft lift every three (3) years. This can be accomplished through real-world events, the AETC formal training course, ANG training course or locally using a GITA (Ground Instructional Training Aircraft) or aircraft battle damage repair (ABDR) aircraft.

9.4. Ensure the CDDAR team chiefs and alternate and associate organizational Maintenance Officers assigned to CDDAR Team support are familiar with Disaster Response Force (DRF) CDDAR operations. This is part of the recovery phase of incident management and these individuals must understand their basic role in order to direct the team operations.

9.5. The 76 AMXG/CC may waive the training requirement in emergency situations. However, if training is available, units must make every effort to schedule personnel consistent with requirements. Team chief and alternate team chief initial training, to include actual lifting of an aircraft, cannot be waived. NOTE: Training will be accomplished IAW T.O. 00-80C-1, para 2.3.2.. Although 76 AMXG aircraft are "depot possessed," they are not "unit" possessed. 76 AMXG will not accept the risk of lifting "depot possessed" aircraft. Also, if 76 AMXG personnel attempt actual lifts on aircraft, this would require scheduling depot aircraft for this training and impact production. Follow on (refresher) training can be accomplished organically at the unit's discretion. If possible, all team members should train on a GITA or ABDR aircraft.

9.6. Environmental, Safety and Health Hazards: The key for developing a safe and effective CDDAR program is communication and coordination. The unit maintenance crash recovery OPR must ensure the 72 MDG Bio-Environmental Engineering Flight (BEF) is consulted and directly involved in determining personnel health hazards, training required and appropriate levels of PPE.

9.7. The BEF will provide comprehensive just-in-time training for emergency and first responders and CDDAR Team members to include the potential health hazards associated with the downed aircraft and the appropriate protective measures to be utilized during response or recovery operations. This may also be required for non-assigned aircraft accidents that Tinker responds to. **NOTE:** 72 ABW/CEXF already has this training as part of their aircraft familiarization course. The CDDAR Team should also develop and maintain team specific hazard communication presentation for potential airframe responses.

9.8. The 76 AMXG CDDAR Team Chief will report CDDAR team training/exercise completion to include specific training performed plus participants to the Program Manager in 72 ABW/XP at least annually.

10. Aircraft Servicing Section (569 AMXS/MXDPB) will:

10.1. Carry out custodial and storage responsibilities for special purpose equipment specifically assigned to the crash recovery mission.

10.2. Contact and ensure 76 AMXG CDDAR Team is assembled and available to respond to the recovery site when directed by the IC.

10.3. Assemble 76 AMXG CDDAR crash trailer and equipment for rapid response to crash site upon request of IC. Transportation of the 76 AMXG CDDAR crash recovery trailer and equipment in support of an off-base mishap operation will be made upon the authorization of the IC.

10.4. Ensure complete safety briefings are given detailing hazards to personnel and equipment and ensure proper PPE is available and properly used.

10.5. Team will notify the MOC, who in-turn, will report and provide the IC with the number of qualified 569 AMXS/MXDPB personnel and available equipment.

10.6. If required, provide a tow vehicle with tow bar, tow vehicle operator and tow team to stand-by during recovery operations. Tow team will take directions from the IC. The tow team will remain available to the IC for any assistance necessary to aid in aircraft recovery operation.

10.7. Request additional qualified personnel or equipment through the MOC. If the items or personnel are not under the jurisdiction of 76 AMXG, they will be requested through the IC.

10.8. Be responsible for directing and coordinating CDDAR operations as directed by the IC.

11. Tinker AFB Associate Units will:

11.1. Assign unit personnel to support CDDAR duties. The associate unit team will be prepared to perform assigned airframe related maintenance duties, assist and provide expertise in CDDAR situations to the IC for the recovery effort.

11.2. Determine type and quantity of specialized tools, equipment and personnel required to recover their organization's aircraft. If agreed upon and outside the 76 AMXG scope of responsibility, associates will procure and maintain specialized equipment to perform recovery of their aircraft. Associates will establish an inventory listing of any specialized equipment they possess and coordinate with 72 LRS to ensure accountable items are listed on organizational equipment accounts. Changes in required resources will be identified to all other organization's CDDAR team chiefs and the Installation CDDAR Program Manager within 60 days.

11.2.1. Associate units will coordinate their specialized equipment requirements with other flying unit's CDDAR team chiefs and the Installation CDDAR Program Manager to avoid duplication of inventories.

11.2.2. If the IC or the responding CDDAR team needs a piece of specialized equipment possessed by any associate unit to recover an aircraft, they will direct the possessing unit to provide the needed equipment for the recovery operation.

11.3. The 552 ACW and 507 ARW: Provide support augmentees to the responding CDDAR team as needed (consider personnel from all AFSCs for unique aircraft requirements (e.g., classified handling)).

11.3.1. When requested, 552 MXG will provide support augmentees.

11.3.2. The 552 AMXS will provide personnel for ground handling of E-3 aircraft (e.g., de-fuel, LOX drain and towing) and 552 MXS will provide personnel to declassify the aircraft.

11.4. STRATCOMMWING-1 (SCW-1): Train and qualify assigned Emergency Reclamation Team (ERT) personnel/CDDAR members in accordance with COMNAVAIRFORINST 4790.2, OPNAVINST5100.23, OPNAVINST 3750.6 and SCW-1 *Naval Aviation Maintenance Program Standard Operating Procedures (NAMPSOPS)*.

11.5. Inspect and maintain assigned CDDAR resources. Notify all other CDDAR team chiefs and the Installation CDDAR Program Manager, in writing, if any of their assigned equipment/resources are out of service. The CDDAR Program Manager will then notify 72 ABW/CC.

11.6. Initiate their organization's crash recovery checklist in the event of a mishap (e.g., the 552 ACW crash recovery checklists are located in the 552 ACW Mishap Response Plan 91-1).

11.7. Take part in all training required for CDDAR operations. The 76 AMXG CDDAR Team Chief will organize annual training events and coordinate with associate units.

11.8. Submit all required reports to their organization's higher headquarters in the event of a mishap (e.g., the 552 ACW will direct all documents to the 552 ACW/SE).

11.9. Provide C2IMERA and all other CDDAR team chiefs points of contact for recall of their organization's CDDAR team.

12. Airfield Operations and Transient Aircraft:

12.1. Transient Alert (72 OSS/OSTA) will respond to a disabled aircraft and provide towing service if there are no other problems with the aircraft. All other incidents may require the DRF to respond and the IC to make a site assessment. In some cases, the IC may be able to request support from the 76 AMXG CDDAR Team through the 76 AMXG/CC. If the expertise and equipment required to perform CDDAR operations are beyond their capabilities, the aircraft's home station will have to provide support. In some cases, the IC may be able to request support from another installation's Expeditionary Maintenance (EDMX) team, if available.

12.2. The 72 OSS will notify and coordinate with the aircraft's home station of assignment for required expertise, personnel, and support equipment.

12.3. If weapons are on board the aircraft, an EOD team will need to be requested IAW TAFB Plan, 10-2. **NOTE:** 72 ABW/CEF can only perform emergency ground safety procedures of most ejection systems. Egress technicians must be consulted to conduct render safe procedures to ensure area is safe for investigation and recovery operations.

ABIGAIL L.W. RUSCETTA, Colonel, USAF
Commander

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

AFMAN 10-206, *Operational Reporting (OPREP)*, 31 August 2020

AFMAN 10-206_AFMCSUP, *Operational Reporting*, 20 December 2018

AFMAN13-204V3, *Air Traffic Control*, 26 June 2023

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 7 November 2022

DAFI 21-101_AFMCSUP, *Aircraft and Equipment Maintenance Management*, 23 June 2023

AFI 21-101_AFMCSUP_Addendum_A, *Non-Standard Organization (NSO) Logistics Maintenance Management*, 9 December 2020

DAFI 23-101, *Air Force Material Management*, 13 August 2023

TO 00-80C-1, *CDDAR Manual*, 20 March 2015

Tinker AFB Plan 10-2, *Installation Emergency Management Plan (IEMP)*, 10 February 2023

Tinker AFB Plan 91-1, *Aircraft Mishap Response Plan*, 19 April 2023

552 ACW *Mishap Response Plan 91-1*

COMNAVAIRFORINST 4790.2, *Naval Aviation Maintenance Program*, 15 February 2022

OPNAVINST 5100.23, *Navy Safety and Occupational Health Program Manual*, 5 June 2020

OPNAVINST 3750.6, *Naval Aviation Safety Management Systems*, 31 August 2020

SCW-1 *Naval Aviation Maintenance Program Standard Operating Procedures (NAMPSOPS)*, 15 February 2022

Adopted Forms

AFTO Form 244, *Industrial/Support Equipment Record*

AF Form 847, *Recommendation for Change of Publication*

Acronyms and Abbreviations

507 ARW—507th Air Refueling Wing

552 ACW—552d Air Control Wing

76 AMXG/CC—76th Aircraft Maintenance Group Commander

ABW—Air Base Wing

AFB—Air Force Base

AFLCMC/HBSLB—Process Control and Improvement Division

AFSC—Air Force Sustainment Center

AFSC—Air Force Specialty Code

AMXG—Aircraft Maintenance Group
BEF - 72 MDG Bio—Environmental Engineering Flight
CAT—Crisis Action Team
CDDAR—Crashed, Damaged or Disabled Aircraft Recovery
CE—Civil Engineering
CG—Center of Gravity
CP—Command Post (552 ACW/CP)
EOC—Emergency Operations Center
HAZMAT—Hazardous Materials
IC—Incident Commander
IEMP—Installation Emergency Management Plan
MAJCOM—Major Command
MARE—Major Accident Response Exercise
MDS—Mission Design Series
MIS—Maintenance Information System
MOC—Maintenance Operations Center
OC-ALC—Oklahoma City Air Logistics Complex
PDM—Programmed Depot Maintenance
PDMSS—Programmed Depot Maintenance Scheduling System
PPE—Personal Protective Equipment
QA—Quality Assurance
SA—Support Agreements
SCW-1—Strategic Communications Wing ONE or STRATCOMMWING-1 (Navy)
SCR—Special Certification Roster
TA—Transient Alert
TO—Technical Order
USAF—United States Air Force

Attachment 2**CDDAR TEAM CONTACT INFORMATION**

A2.1. Installation CCDAR team contact information will be maintained by each team's chief, the EOC, each organization's designated POC and the Installation CDDAR Program Manager.

Attachment 3

CDDAR EQUIPMENT INVENTORY

A3.1. CDDAR equipment inventories will be maintained by the CDDAR team chiefs electronically. CDDAR team chief may also use the designated EOC SharePoint site to record their CDDAR equipment inventories. This allows inventory data to be updated in real time, when equipment is removed from or restored to service.