

**BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND**

**AIR FORCE MATERIEL COMMAND
INSTRUCTION 10-210**



30 SEPTEMBER 2024

Operations

**AIRCRAFT BATTLE DAMAGE REPAIR
ENGINEERING/ DEPOT LIAISON
ENGINEERING**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available for downloading or ordering on the ePublishing web site at www.e-Publishing.af.mil.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: HQ AFMC/EN

Certified by: HQ AFMC/A4/10-EN
(Mr. Ed Berro)

Supersedes: AFMCI 10-210, 14 February 2020

Pages: 19

This instruction implements Department of the Air Force Policy Directive (DAFPD) 10-2, *Readiness*. Additionally, it aligns guidance with DAFPD 21-1, *Maintenance of Military Materiel*, Department of the Air Force Instruction (DAFI) 21-101, *Aircraft Equipment and Maintenance Management*, and Department of Defense Instruction (DODI) 5000.89_DAFI 99-103, *Capabilities-Based Test and Evaluation*. It establishes policy and assigns responsibilities for AFMC's Expeditionary Aircraft Battle Damage Repair Engineers (ABDREs) and deployed Depot Liaison Engineers (DLEs) as they prepare to achieve and maintain the required level of readiness necessary to meet their assigned tasking. Air Force Materiel Command, Engineering and Technical Management (AFMC/EN) is the waiver authority for individual education and training requirements for ABDRE eligibility and certification in accordance with this instruction. This publication applies to all civilian employees and uniformed members of the Regular Air Force. This publication does not apply to the United States Space Force, the Air Force Reserve and the Air National Guard. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed in accordance with (IAW) the Air Force Records Disposition Schedule which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. This publication may be supplemented at any level, but all supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing, unit, delta or

garrison level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority or alternately to the publication OPR for non-tired compliance items. See Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the tier numbers. Include a copy of any waivers or exceptions issued regarding the publications and forms management requirements found in this publication when submitting products to AFDPO for publishing.

SUMMARY OF CHANGES

This document has been extensively rewritten and should be read in its entirety. This revision defines the roles of the ABDRE performing duties as an ABDRE and as a DLE. This revision incorporates the changes to deployment status due to the Dynamic Force Employment concept and the new AF Force Generation (AFFORGEN) model. It also removes the requirement for mandatory certification at Hill, Robins, Tinker, and Wright-Patterson AFBs for new accessions of applicable (specific Air Force Specialty Code (AFSC)) engineers.

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Chapter 1

OVERVIEW

1.1. Mission. ABDREs provide on-site structural engineering support to unified Combatant Commanders and AF commanders for all phases of maintenance, modification, and aircraft damage assessment and repair during contingency or wartime operations. They are also utilized in the role as DLEs to support deployed Maintenance Groups to evaluate and/or assist in the repair of damaged aircraft from non-combat related events.

1.1.1. The primary mission of the ABDRE program is to train and certify ABDREs to support Expeditionary Depot Maintenance (EDMX) teams for Aircraft Battle Damage Repair (ABDR) incidents. The term “battle” refers to the need to perform expedited repairs in urgent situations to allow an aircraft to perform a contingency mission, perform a mission in a partial mission capable or degraded status, or make a one-time flight to a more capable repair location. All ABDR repairs are considered temporary repairs unless repairs are accomplished IAW peacetime procedures or are reviewed and approved by the Chief Engineer for that particular platform and designated as a permanent repair. ABDREs perform damage assessments, design non-standard repairs, define and impose flight restrictions, and authorize deviations to Technical Order (TO) 1-1H-39, *Aircraft Battle Damage Repair*. ABDREs are normally deployed in this role for aircraft requiring a rapid turnaround with damage that typically exceeds the capabilities of the deployed organizational maintenance group. In rare circumstances, the ABDRE may serve as the engineering authority to design and oversee repairs as outlined in [paragraph 2.7.9.3](#).

1.1.2. ABDREs may be deployed in the role of a DLE to support contingency operations, other operational support to Combatant Commanders, deployed Air Wings or other expeditionary forces. The DLE coordinates with the System Program Office (SPO) engineers to expedite the analysis process, repair design and ensure any technical assistance requests are given the proper level of urgency given an aircraft’s current status, location, and mission impact.

1.1.3. ABDREs deployed to various Combatant Command Areas of Responsibility (AORs) should assist and work closely with the Joint Combat Assessment Team (JCAT) members in the collection of combat damage data. This data is used to enhance the survivability of aircraft systems and provide theater intelligence personnel with weapons effects information. ABDREs will coordinate the collection of aircraft battle damage with the JCAT office.

1.1.4. An ancillary function of ABDRE/DLE is to assist Live Fire Test and Evaluation (LFT&E) programs with assessing damage post-Live Fire Event. This input is specifically required within congressional reports and it is critical to leverage battle damage experience within the community. LFT&E provides timely, rigorous, and credible vulnerability or lethality test and evaluation of “covered” systems as they progress through the Engineering and Manufacturing Development Phase and early Production and Deployment Phase prior to Full Rate Production, or a major system modification that affects survivability. While assessment of battle damage repair is not a statutory requirement, test officials are encouraged to exploit opportunities to assess such capabilities whenever prudent and affordable. This also provides excellent training to ABDREs on actual threat weapons damage and reparability. DODI 5000.89_DAFI 99-103, *Capabilities-Based Test and Evaluation*, provides additional information on the Live Fire Program.

1.2. General Policy.

1.2.1. ABDRE unit type codes (UTCs) are non-standard or associate two-person UTCs providing AOR structural engineering capability. The UTCs contain Mission Capability (MISCAP) statements but are not postured within AFMC. Therefore, UTC readiness is not reported in the Defense Readiness Reporting System. However, the support provided by these positions within the AOR is critical for quickly addressing technical issues in a rapid manner. As such, ABDREs deploy independently, integrating into a host maintenance group or in conjunction with EDMX ABDR teams. Deployed engineers are dependent on available facilities and require Base Operating Support. ABDRE UTCs can also be deployed separately from normal rotations in support of one-time engineering support missions; usually in conjunction with an EDMX team.

1.2.2. The ABDR Engineering Chief will work closely with Site Leads and recommend to the ABDRE Functional Area Manager (FAM) the best qualified individuals to fill ABDRE deployment tasking requirements. The taskings are filled first by active duty military resources, then if available, by Individual Mobilization Augmentees [IAW DAFI 36-3802, *Force Support Readiness Programs*, and Air Force federal civilian resources (not contractors). ABDREs must be fully qualified prior to deployment in a designated AOR.

1.2.3. ABDRE UTC taskings are assigned by the ABDRE FAM located in HQ AFMC EN.

1.2.3.1. Civilians may volunteer as ABDREs. If a civilian volunteers, he/she must sign a DD Form 2365, *Department of Defense Civilian Employees Overseas Emergency-Essential Position Agreement*. Possible deployment then becomes a condition of employment. Actions involving civilian volunteers will be coordinated as appropriate with their Civilian Personnel Office. DAFI 36-129, *Civilian Personnel Management and Administration*, contains specific guidance for civilians.

1.2.4. Any engineer is eligible for consideration for ABDRE certification, provided that engineer meets the qualifications in **section 3.1** or possesses a waiver per **section 3.2**. Typically, ABDREs work for the various SPOs or within the Air Logistics Complexes in support of center workloads. The use of these engineers in an ABDRE capacity provides valuable experience which contributes to their increased expertise as an aircraft engineer.

1.2.5. ABDRE certification is a voluntary duty that is typically fulfilled by a component company grade officer but field grade officers may also participate. The eligibility requirements are specified in **section 3.1**. ABDRE certification shall be achieved within two years of beginning course curriculum. **(T-2)** The ABDRE Site Lead will notify an engineer's organizational commander of his/her failure to achieve ABDRE certification. The organizational commander shall then determine the appropriate action for failing to meet requirements. **(T-3)**

1.2.5.1. If the member is not able to complete ABDRE certification within the first year for reasons beyond the control of the member, that member can request a requirement waiver through the Site Lead. The ABDRE Site Leads will coordinate waivers through the ABDRE Chief and then send the waiver request to HQ AFMC EN for approval or disapproval.

1.2.5.2. The member's organization may also request a requirement waiver from training if his/her command feels operational commitments and workload dictate such. This will

be on a case by case basis and re-evaluation will be required in conjunction with any reassignment to the position.

1.3. Organizational Structure.

1.3.1. The Command AFSC 62E AFFORGEN FAM, which includes ABDRE, is located in HQ AFMC EN. The ABDRE Chief and Site Leads are assigned to the Engineering & Technical Management Directorate, Product Support Engineering Division (AFLCMC/EZP) within AFLCMC. The AFLCMC/EZP Division Chief will appoint an ABDRE Chief to manage the ABDRE functions for each of the following locations: Hill, Robins, and Tinker AFBs. The ABDRE Chief, typically stationed at Wright-Patterson AFB will also function as the FAM liaison to assist the FAM with any ABDRE/DLE issues. The FAM will designate, upon the recommendation of the applicable Site Leads, through the ABDRE Chief, qualified ABDREs for any deployment requirements. ABDREs/DLEs, once deployed, fall under the operational chain of command at the deployed location.

Chapter 2

ROLES AND RESPONSIBILITIES.

2.1. HQ AFMC EN.

2.1.1. Assigned as OPR for the ABDRE functional area. Establishes Command ABDRE AFFORGEN Functional Area Manager position. Responsible for policy, guidance, procedures, standards, and oversight of all ABDRE operations. The FAM assists in JCAT coordination and LFT&E coordination as required. Approves all ABDRE waiver requests in accordance with Section 4 of this instruction.

2.1.2. HQ AFMC 62E Functional Area Manager (FAM):

2.1.2.1. Manages the AF Materiel Command ABDRE program. Performs functional manager responsibilities outlined in AFI 10-401, *Air Force Operations Planning and Execution*, and AFI 10-403, *Deployment Planning and Execution*. The FAM is located in HQ AFMC EN. The FAM is required to have a SECRET Internet Protocol Router Network (SIPRNET) account.

2.1.2.2. Establishes policy for the ABDRE/DLE program.

2.1.2.3. An AFFORGEN Employment Force Indicator (AEFI) of “XA” through “XD” will be evenly assigned across the ABDRE engineers due to their status as an Institutional Force (as opposed to combat or combat support). At the time of writing, AFMC EN and Air Force Materiel Command, Operations and Readiness (AFMC/A3OR) are working with Air Force Personnel Command (AFPC) to get an Excepted Forces (“EF”) AFFORGEN Employment Force Indicator status approved for ABDRE/DLE qualified individuals. This will allow deployment of selected engineers regardless of their AFFORGEN training phase.

2.1.2.4. Ensures the development of IG checklists to be used during inspections or evaluations.

2.1.2.5. Assists in JCAT coordination and LFT&E coordination efforts as required.

2.2. Organizational Commanders for ABDRE officers.

2.2.1. Ensures new accessions meet ABDRE certification requirements specified in **Section 4** and timeline stated in **paragraph 1.2.5**.

2.2.2. Takes appropriate action for officers who fail to meet ABDRE certification requirements.

2.3. Air Force Life Cycle Management Center, Engineering and Technical Services Directorate (AFLCMC/EN-EZ).

2.3.1. Oversee training, certification, and readiness of ABDRE trained personnel (i.e., Active Duty, Reservists, and Civilian).

2.3.2. Acts as final approval authority for submitted Special Experience Identifiers (SEIs) for qualified ABDREs.

2.4. Air Force Life Cycle Management Center, Engineering & Technical Management Directorate, Product Support Engineering Division (AFLCMC/EZP).

2.4.1. Provides ABDRE program oversight. Advocates for manpower and funding resources necessary to sustain the ABDRE program.

2.4.1.1. Provides all necessary funding for training, travel, and equipment required by ABDREs.

2.4.2. Advocates for resources (i.e. funding, manpower) necessary to maintain engineer kits as required to execute ABDRE requirements such as deployments and supplies.

2.5. ABDRE Chief.

2.5.1. Manages ABDRE training certification program. Ensures proper tracking of training completion and recertification as required.

2.5.2. Develops, publishes, and maintains formal ABDRE training course standards, requirements, and curriculum across all depot installations.

2.5.3. Reports status of ABDRE program to AFLCMC/EZP on a regular basis. Establishes and reports metrics for the program.

2.5.4. Manages—with appropriate coordination of the Structures subject matter experts such as the Air Force Life Cycle Management Center, Engineering & Technical Management Directorate, Flight Systems Engineering Division (AFLCMC/EZF) or the United States Air Force Academy (USAFSA)—the development, publication, and maintenance of the Engineering Handbook for ABDREs.

2.5.5. Manages ABDRE kit requirements.

2.5.6. Supports AFRL and AFLCMC Program Offices as necessary in determining technical requirements, repair techniques, and repair materials to advance ABDRE capabilities.

2.5.7. Incorporates JCAT topics into existing ABDRE courses that is focused on providing limited support capability for the JCAT program in deployed environments.

2.5.8. Coordinates with the JCAT Air Force designated representative for the nomination of ABDRE trained personnel to compete for selection into the annual JCAT training program. Objective is to leverage ABDRE capability in the AOR when JCAT has not been surged for deployment.

2.5.9. Appoints a Site Lead for each of the three bases delineated above after discussing with the current Site Lead for best fit. Notifies the Command ABDRE FAM within 15 days of a new appointment.

2.5.10. Assists the FAM in the execution of his duties as needed and provides the names of qualified ABDREs for required taskings as provided by the Site Leads.

2.6. ABDRE Site Lead.

2.6.1. Acts as the Site FAM for site ABDREs IAW AFI 10-401, *Air Force Operations Planning and Execution*.

2.6.2. Conducts, schedules, and coordinates formal ABDRE training at assigned installation.

2.6.3. Establishes and conducts periodic ABDRE meetings.

2.6.4. Maintains liaison between Site ABDREs, supported SPOs, associated EDMX flight, deployed ABDREs and the ABDRE Chief.

2.6.5. Assesses effectiveness and efficiency of each ABDRE. Ensures assessment includes applicable Air Force common inspection items from DAFI 90-302, *The Inspection System of the Department of the Air Force*, and the DAFI 90-302_AFMCSUP.

2.6.6. Responsible for the overall technical competency of the locations ABDREs. This includes evaluating and reporting engineering performance during field employment and exercises for selecting the best candidate to deploy as an ABDRE or DLE.

2.6.7. Maintains a listing of all Weapon System Chief Engineers/Directors of Engineering and will relay this information to the DLEs.

2.6.8. ABDRE Site Lead is the final authority to certify engineers for deployment.

2.6.9. Responsible for coordinating, initializing, and modifying SEIs for qualified ABDREs per [paragraph 4.4](#).

2.6.10. Shall meet the requirements specified in [paragraph 4.3.3](#) for being qualified to instruct the Introduction to ABDRE course. (T-2)

2.6.11. Responsible for recommending and training replacement Site Lead prior to departure of position.

2.6.12. Responsible for recommending certified ABDREs for deployment taskings as ABDREs or DLEs. Will coordinate with ABDRE Chief to forward names to FAM.

2.7. ABDREs.

2.7.1. Accomplish mobility training specified by Unit Deployment Manager and certification training specified in [Chapter 4](#).

2.7.2. Attend engineer meetings established by the ABDRE Site Lead.

2.7.3. Ensure all required deployment documents and immunizations are up to date.

2.7.4. Inform the Site Lead of medical profiles or reasons why he/she cannot deploy if selected for deployment.

2.7.5. Obtain and maintain all required deployment training as directed by their Unit Deployment Manager and by the ABDRE Chief. Civilians will also receive training for Emergency-Essential (E-E) employees listed in DAFI 36-129, *Civilian Personnel Management and Administration*.

2.7.6. Establish and maintain contact with supported Weapon System Program Offices and Weapon System Chief Engineer prior to deployment.

2.7.7. Maintain all required personal clothing and hygiene items to satisfy deployment requirements (AFI 10-403).

2.7.8. ABDREs deploy with individual equipment, weapons, and other necessary equipment and material as specified in the host installation deployment plan.

2.7.8.1. ABDREs are responsible for notifying the ABDRE leadership and the ABDRE training manager if they are in receipt of orders for a change of command or base, as well as their desires for continuation in the program after they move.

2.7.9. ABDRE role deployed responsibilities:

2.7.9.1. Performs damage assessments, designs non-standard structural repairs utilizing the ABDRE Handbook, and defines and imposes flight restrictions outside of standard aircraft TO and TO 1-1H-39 as directed by their deployed maintenance commander.

2.7.9.2. Coordinates repair actions with SPO engineers prior to start of repair execution on aircraft whenever timely communication is possible. Sends repair analysis and documentation to the weapon system chief engineer as soon as practicable. This allows the chief engineer to provide a second examination of the analysis and allows for preparation of long-term repair or replacement of the damaged area.

2.7.9.3. Under extreme emergency circumstances where timely communication between the ABDRE and SPO is not possible, a maintenance commander may grant the ABDRE the authority to design repairs utilizing the ABDRE Handbook methods and to act as the engineering authority over approving the installation of a repair.

2.7.9.4. Under wartime operations, ABDREs are required to notify their maintenance commander that the ABDRE Handbook was used for repair methodology.

2.7.10. DLE role deployed responsibilities:

2.7.10.1. Handle maintenance assist requests from operating activities IAW T.O. 00-25-107, *Maintenance Assistance*, long and short term engineering projects, and damage evaluation as directed by their deployed maintenance commander. Ensure all mandatory and needed information is relayed to the engineering authority following T.O. 00-25-107. Monitor, coordinate, and provide status to commanders of the technical assistance request through repair completion.

2.7.10.2. Ensure an AFTO Form 97, *Aerospace Vehicle Battle Damage Incident Debrief/Assessment Record*, and 97A, *Aerospace Vehicle Battle Damage Assessment/Repair Record*, are accomplished for all Battle Damage events as applicable and defined in T.O. 1-1H-39 Table 1-2.. Completed forms will be forwarded to the Depot Maintenance Processes and Productivity Branch (AFSC/LZDB).

2.7.10.3. Notify ABDR Program Office and the appropriate AOR/A4 or Maintenance Group of damages that require -39 repairs. ABDR teams can be tasked for -39 repairs via the 107 process. Repairs will be accomplished by trained ABDR personnel IAW DAFI 21-101 and T.O. 1-1H-39.

2.7.11. JCAT support role deployed responsibilities:

2.7.11.1. Collect combat damage data and photos (if able) for damaged aircraft in order to identify the threat and causal factors. In most cases, the ABDRE who is certified for JCAT will collect data in the AOR, and then the JCAT office at home station will assess the data and determine if a JCAT deployment is necessary.

2.8. Weapon System Chief Engineer.

2.8.1. Ensure weapon system Time Compliance Technical Orders (TCTOs), and TOs are available to ABDREs. At a minimum, this should include the -1 (flight manual), the -3 (structural repair instructions), the -4 (illustrated parts breakdown), the -5 (basic weight checklist and loading data), the -6 (inspection requirements), the -23 (aircraft-specific

corrosion prevention and control handbook), the -36 (non-destructive inspection), the -38 (Aircraft Structural Integrity Program (ASIP)), and the -39 (ABDR).

2.8.2. Ensure specialty engineers are available to coordinate damage assessments and repairs in a timely fashion.

Chapter 3

ABDRE CERTIFICATION ELIGIBILITY

3.1. General.

3.1.1. Military individuals must possess an AFSC of 62EXA (aeronautical engineer), 62EXB (astronautical engineer), 62EXH (mechanical engineer), or 62EXG (project engineer with an Accreditation Board for Engineering and Technology (ABET) accredited degree in aeronautical, astronautical, or mechanical engineering). **Section 3.2** describes the waiver process for those engineers not possessing the proper AFSC or degree.

3.1.2. All military individuals interested in the ABDRE program will require a Memorandum for Record signed by their unit commander ensuring the unit commander is aware of all training necessary to get certified as well as possible deployment taskings.

3.1.3. Civilian engineers must be in an occupational series of 0861 (aerospace engineer), 0830 (mechanical engineer) or 0801 (general engineer with an ABET accredited degree in aeronautical, aerospace, astronautical or mechanical engineering). The waiver process described in **section 3.2** also applies to civilian engineers.

3.2. Engineer Eligibility Waivers.

3.2.1. Engineers seeking ABDRE training and certification who do not meet the criteria listed in **section 3.1** may request an eligibility waiver. The eligibility waiver allows the engineer to receive ABDRE certification upon completion of the training identified in **section 4.2**.

3.2.2. Eligibility Conditions: An engineer who does not meet the criteria listed in **section 3.1** may be eligible to receive an eligibility waiver if that engineer has an ABET accredited degree in engineering and documented education in Statics, Mechanics of Materials, and Solid Mechanics. Additional criteria for evaluating eligibility may include level of experience working programs involving aircraft structures and systems, such as a program office or aircraft maintenance experience. Those that do not meet above criteria will be evaluated during the EN course with no cost (no TDY funding provided) to the ABDRE program.

3.2.3. HQ AFMC EN is the authority to issue eligibility waivers for engineers who do not meet the criteria listed in **section 3.1**.

3.2.4. Once an engineer has obtained an eligibility waiver, it will be effective for the remainder of his/her career.

3.2.5. Waiver Process:

3.2.5.1. Site Lead ABDRE identifies the candidate and ensures eligibility according to **paragraph 3.2.2**. The Site Lead is responsible for maintaining documentation of the waiver.

3.2.5.2. Site Lead, ABDRE will obtain coordination for waiver from the Chief, ABDRE and the ABDRE AFFORGEN FAM.

3.2.5.3. Site Lead submits waiver request to HQ AFMC EN for approval. Requests for waivers must be in writing. Verbal requests will not be accepted. HQ AFMC EN waiver approval or disapproval will also be in writing.

3.2.5.4. Candidate completes all ABDRE engineer training as identified in **section 4.2** of this document. Site Lead, ABDRE may authorize candidate to begin training before the waiver process is completed.

Chapter 4

ABDRE TRAINING AND CERTIFICATION

4.1. General. The focus of ABDRE training will be on deployment, employment, wartime/contingency operations, and integration with supported command.

4.2. ABDRE Certification Course Requirements.

4.2.1. ABDR General Assessor (1 week).

4.2.2. ABDR General Technician (2 weeks).

4.2.3. Introduction to ABDRE (2 weeks).

4.2.4. EDMX hardstand exercise (2 weeks).

4.2.5. Refresher EDMX hardstand exercise (Every 18 months after initial exercise).

4.2.6. Although not required for certification as an ABDRE, JCAT training is highly encouraged and recommended.

4.3. ABDRE Training Program.

4.3.1. Engineers will obtain ABDRE certification upon completion of the training requirements in [paragraph 4.2](#).

4.3.2. Engineers will complete ABDRE currency training within one year of deployment.

4.3.3. Engineers who fail the Introduction to ABDRE course will be informed of their deficiencies. They will retake the exam (midterm or final) that was unsatisfactory. If they fail the retest, they will be required to attend the course again in the following year (no more than 2 attempts).

4.3.4. In order to receive credit for the ABDR General Technician course, the ABDR General Assessor course, engineers will meet the course objectives established by EDMX. In order to receive credit for the EDMX hardstand exercise, engineers will meet the course objectives established by EDMX and demonstrate proficiency in ABDRE through the completion of at least one 9-step engineering disposition. Engineers who fail to meet the objectives will be required to attend the course again.

4.3.5. Instructors for the Introduction to ABDR Engineering Course: all instructors shall first satisfactorily complete the Introduction to ABDR Engineering course, attend ABDRE Instructor Training course at the ABDRE Summit, and then teach at least one course with a fully qualified instructor before they are fully qualified to teach the course alone. **(T-2)**

4.4. ABDRE Special Experience Identifiers (SEIs). Upon initial completion of the certification requirements outlined in **section 4.2**, engineers shall be assigned an SEI of EZ7 per Air Force Manual (AFMAN) 36-2100, *Military Utilization and Classification*. **(T-2)** DAF Form 2096, *Classification/On-the-Job-Training Action*, will be initiated by the Site Chief ABDRE and submitted to AFLCMC/EZP for review and final approval. The EZ7 SEI will remain on the officer's record for the remainder of their career to reflect ABDRE experience. Upon completion of the required courses, other weapon system specific SEIs may be assigned in addition to the general EZ7. Refer to the Air Force Officer Classification Directory (AFOCD) for a list of available SEIs.

ROBERT B. FOOKES, SES
Director, Engineering and Technical Management

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

AFI 10-401, *Air Force Operations Planning and Execution*, 19 July 2024

AFI 10-403, *Deployment Planning and Execution*, 17 April 2020

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFMAN 36-2100, *Military Utilization and Classification*, 7 April 2021

AFSCI 10-202, *Aircraft Battle Damage Repair Forces*, 31 July 2024

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 16 January 2020

DAFI 36-129, *Civilian Personnel Management and Administration*, 6 April 2023

DAFI 36-3802, *Force Support Readiness Programs*, 9 January 2019

DAFI 90-302, *The Inspection System of the Department of the Air Force*, 15 March 2023

DAFI 90-302_AFMCSUP, *The Inspection System of the Department of the Air Force*, 28 March 2024

DAFMAN 90-161, *Publishing Processes and Procedures*, 18 October 2023

DAFPD 10-2, *Readiness*, 20 May 2021

DAFPD 21-1, *Maintenance of Military Materiel*, 21 February 2024

DODI 5000.89_DAFI 99-103, *Capabilities-Based Test and Evaluation*, 9 December 2021

TO 00-25-107, *Maintenance Assistance*, 1 October 2015

TO 1-1H-39, *Aircraft Battle Damage Repair, General*, 15 May 2023

Prescribed Forms

None

Adopted Forms

AFTO Form 97, *Aerospace Vehicle Battle Damage Incident Debrief/Assessment Record*

AFTO Form 97A, *Aerospace Vehicle Battle Damage Assessment/Repair Record*

DAF Form 847, *Recommendation for Change of Publication*

DAF Form 2096, *Classification/On-the-Job-Training Action*

DD Form 2365, *Department of Defense Civilian Employees Overseas Emergency-Essential Position Agreement*

Abbreviations and Acronyms

ABDR—Aircraft Battle Damage Repair

ABDRE—Aircraft Battle Damage Repair Engineer

ABET—Accreditation Board for Engineering and Technology

AEFI—AFFORGEN Employment Force Indicator

AFFORGEN—AF Force Generation

AFI—Air Force Instruction

AFLCMC—Air Force Life Cycle Management Center

AFMCI—Air Force Materiel Command Instruction

AFOCD—Air Force Officer Classification Directory

AFPC—Air Force Personnel Command

AFRL—Air Force Research Laboratory

AFSC—Air Force Specialty Code

AFSC—Air Force Sustainment Center

AOR—Area of Responsibility

ASIP—Aircraft Structural Integrity Program

CATM—Combat Arms Training and Maintenance

DAFI—Department of the Air Force Instruction

DAFMAN—Department of the Air Force Manual

DAFPD—Department of the Air Force Policy Directive

DLE—Depot Liaison Engineer

EDMX—Expeditionary Depot Maintenance

E-E—Emergency Essential

FAM—Functional Area Manager

IAW—In accordance with

JCAT—Joint Combat Assessment Team

LFT&E—Live Fire Test and Evaluation

MISCAP—Mission Capability

OPR—Office of Primary Responsibility

SEI—Special Experience Identifier

SIPRNET—SECRET Internet Protocol Router Network

SPO—System Program Office

TCTO—Time Compliance Technical Order

TO—Technical Order

USAFA—US Air Force Academy

UTC—Unit Type Code

Office Symbols

AFMC/EN—Air Force Materiel Command, Engineering and Technical Management

AFMC/A4/10-EN—Air Force Materiel Command, Logistics, Civil Engineering, Force Protection and Nuclear Integration Engineering and Technology Division

AFMC/A3OR—Air Force Materiel Command, Operations and Readiness

AFLCMC/EN-EZ—Air Force Life Cycle Management Center, Engineering and Technical Services Directorate

AFLCMC/EZF—Air Force Life Cycle Management Center, Engineering & Technical Management Directorate, Flight Systems Engineering Division

AFLCMC/EZP—Air Force Life Cycle Management Center, Engineering & Technical Management Directorate, Product Support Engineering Division

AFSC/LZDB—Air Force Sustainment Center, Depot Maintenance Processes and Productivity Branch

Terms

Aircraft Battle Damage Repair (ABDR)—The capability to quickly assess and restore a damaged aircraft to a useful level of combat capability within a tactically reasonable time period with the resources reasonably available in theater. These repairs may be temporary or permanent; they may restore full capability or partial capability compared to the undamaged state. Additionally, to accomplish necessary maintenance actions to allow extensively damaged aircraft to make a one-time flight to its home station, rear base, or major repair facility.

ABDR Forces—AFMC active duty forces of specially trained personnel who provide peacetime or wartime technical assessment and repair of damaged aircraft. It consists primarily of the ABDR team (known as EDMX during peace time), augmented by tasked DLE. If required, it can include civilian and/or contractor resources to meet specific requirements. The DLEs are not formally part of the ABDR UTC, but fall under Institutional Forces that can be trained and deployed to support ABDR efforts. See [paragraph 2.1.2.3](#) for additional information. See AFSCI 10-202, *Aircraft Battle Damage Repair Forces*, for additional information on the EDMX program.

Emergency—Essential Position—An E-E position is a civilian position located overseas or one that would be transferred overseas during a crisis situation, or which requires the incumbent to perform temporary duty assignments overseas during a crisis in support of a military operation. All employees who occupy an E-E position must sign a DD Form 2365, *DoD Civilian Employee Overseas E-E Position Agreement*.

Exercise—A military maneuver or simulated wartime operation involving planning, preparation, and execution. It is carried out for the purpose of training and evaluation. It may be a combined, joint, or single service exercise, depending on participating organizations.

Functional Area Manager (FAM)—The office of primary responsibility for a particular Air Force unit, function, or specialty.

Readiness—The ability of forces, units, weapons, or equipment to deliver the output for which they were designated. This includes the ability to deploy without unacceptable delays. The totality of proficiency and sufficiency in forces, units, air bases, weapons systems, and equipment. Prepared or available for service or action.

Special Experience Identifier (SEI)—A three-character alphanumeric code, consisting of an activity code (first character) and an experience set (last two characters) that identifies the training/experience required. In the case of ABDRE, the activity code “E” is for engineering and “Z7” is the experience set. Hence the SEI for ABDREs is EZ7.

Weapon Familiarization Training—Training in addition to weapons qualification training provided by Combat Arms Training and Maintenance (CATM) and is conducted by personnel within the unit. As a minimum, this familiarization will consist of weapon safety, loading and clearing procedures, clearing barrel procedures, disassembly and assembly, function check, care and cleaning, and visual inspection. The objective is to ensure all weapons qualified personnel can handle weapons responsibly at home station and in a deployed environment.