Training and Evaluation Outline Report

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Task Number: 01-CO-8066

Task Title: Perform Downed Aircraft Recovery Missions

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Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary	Source Information
	ATP 3-04.13	HELICOPTER AND SMALL AIRCRAFT BATTLE DAMAGE ASSESSMENT, REPAIR, AND RECOVERY	Yes	Yes	
	ATP 3-04.7	Army Aviation Maintenance	Yes	No	
	ATP 5-19	Risk Management	Yes	No	
	PAM 738-751	FUNCTIONAL USER'S MANUAL FOR THE ARMY MAINTENANCE MANAGEMENT SYSTEM-AVIATION	Yes	No	

Conditions: The unit is performing assigned operations when it receives a mission order from the higher headquarters (HQ) commander directing it to perform downed aircraft (ground or aerial) recovery in support of the operational battalion/squadron's assigned aircraft (manned and/or unmanned). The main command post (CP) is established, and the unit has the qualified personnel and operational equipment to support the mission. Trained downed aircraft recovery team (DART) personnel are available to perform day/night downed aircraft (ground or aerial) recovery or destruction as authorized by the approval authority in a dynamic and complex operational environment (OE) under all environmental conditions. Prescribed aircraft evacuation recovery kits; test, measurement, and diagnostic equipment (TMDE); and special tools are available and serviceable. A pre-accident plan outlining recovery requirements is available. Communications and digital connectivity are established with higher HQ, adjacent and supported units, and subordinate elements; and information is being passed per higher HQ requirements. Some iterations of this task should be performed in MOPP 4.

Standards: The unit's DART personnel perform downed aircraft (ground or aerial) recovery or aircraft destruction as authorized by the approval authority according to the timeline specified in the order, ATP 3-04.13 and other applicable publications, regulations, and technical manuals (TMs); unit standard operating procedures (SOP); the pre-accident plan; and command guidance. The DART assessor determines a quick-fix repair is possible allowing self-recovery by a one-time evacuation mission. When a one-time evacuation mission is not possible, the aircraft is recovered (ground or aerial) or evacuated to a unit maintenance collection point (UMCP) or nearest maintenance facility. If the aircraft is abandoned, it is sanitized or cannibalized and destroyed in place to prevent exploitation by enemy forces. The unit reports accurate and timely information to the higher HQ.

Leaders Note: Use the unit's authorized modified table of organization and equipment (MTOE) to determine the key leaders required to conduct this task. Record the percentage of Leaders present at training/authorized on the Objective Task Evaluation Criteria Matrix during task assessment. Examples of MTOE-authorized key leaders include Commanders, Executive Officers, Staff Section/Element/Team Officers, Platoon Leaders, Command Sergeants Major, First Sergeants, Platoon Sergeants, Section Sergeants, and Team Leaders.

Live Fire: No

Objective Task Evaluation Criteria Matrix:

Plan and Prepare			Execute						Evaluate	
Operational Environment		Training Environment (L/V/C)	% Leaders present at training/authorized	% Present at training/authorized	External evaluation	Performance measures	Critical performance measures	Leader performance measures	Evaluator's observed task proficiency rating	Commander's assessment
CO & BN										
Dynamic and Complex (4+ OE Variables and Hybrid Threat)	Night	Commanders will determine if task training will be conducted under live, virtual, or constructive conditions using corresponding event types (e.g., class, situational training exercise [STX], field training exercise [FTX]) in order to facilitate the crawl-walk-run methodology of training progression. External evaluations (EXEVAL) must be conducted in a live environment.	>=75%	>=80%	Yes	>=80% GO	All	>=85% GO	T	T
Dynamic (Single Threat)	Day		60-74%	60-79%	No	65-79% GO	<All	75-84% GO	P	P
Static (Single Threat)			<=59%	<=59%		<65% GO		<=74% GO	U	U

Remarks: Prior to EXEVAL, coordination should be made between the evaluator and the evaluated unit's higher HQ to discuss the details of the Objective Task Evaluation Criteria Matrix and assessment criteria for each performance step/measure (e.g. Operational Environment, leaders present/authorized, personnel present/authorized, etc.). See FM 7-0, Training, for more information. This task was updated on 22 March 2024.

YOUR FEEDBACK IS IMPORTANT TO US. For questions, reporting errors, or making recommendations for improvement, please contact usarmy.novosel.avncoe.mesg.dotd-collective@army.mil. When reporting errors/making recommendations for improvement, please provide supporting doctrinal and/or regulatory references.

All tasks are periodically revised; however, it is not uncommon for some prerequisite, supporting collective, and/or supporting individual tasks to become Superseded or Obsolete between revisions. When this task was published, all associated tasks were in an Approved Status. If a task is now in a Superseded Status, the current version may be found via the Army Training Network (ATN), Digital Training Management System (DTMS), or Central Army Registry (CAR) using the same task number/title; tasks in an Obsolete Status should be disregarded.

Notes: The Objective Task Evaluation Criteria Matrix will be used to determine task proficiency.

Scenarios: Creative use of scenario-based training allows commanders to challenge their leaders to improvise with the resources at hand to accomplish assigned missions under complicated conditions. Once task proficiency is achieved under base conditions, leaders can alter scenarios to replicate projected operational environments to enhance unit skills by offering conditions requiring leaders to adapt to degraded capabilities (e.g., position/navigation/timing denial or degraded/denied communications).

Operational Environment (OE): Army Aviation must train to fight in OEs that encompass a wide range of enemy types and combinations employing traditional, unconventional, and hybrid tactics. This includes training to counter threats such as small arms, man-portable air defense systems (MANPADS), surface-to-air missiles (SAM), anti-helicopter mines, improvised explosive devices (IED), and enemy air defense (AD) systems that may be employed independently or as part of an integrated air defense system (IADS). See ATP 3-04.1, Aviation Tactical Employment, for additional threat information.

Use the following definitions for assessing the OE:

1. Static: Aspects of operational variables (political, military, economic, social, information, infrastructure, physical environment, and time [PMESII-PT]) needed to stimulate mission variables (mission, enemy, terrain and weather, troops, and support available, time available, civil considerations, and informational considerations [METT-TC(I)]) are fixed throughout the unit's execution of the task.

2. Dynamic: Operational variables and threat tactics, techniques, and procedures (TTP) for assigned counter-tasks change in response to the execution of a blue forces (BLUFOR) task.

3. Complex: Requires a minimum of four or more operational variables (PMESII-PT); brigade and higher units require all eight operational variables to be replicated in varying degrees based on the task being trained.

4. Single Threat: Regular, irregular, criminal, or terrorist.

5. Hybrid Threat: The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, and/or criminal elements unified to achieve mutually benefitting effects.

Note: An after-action review (AAR) should be conducted at appropriate times during and at the conclusion of a training event or operation with the objective of improving future performance. See FM 7-0, Training, for additional information.

Note: The term aircraft as used in the performance steps includes manned and unmanned aircraft.

Safety Risk: Medium

Task Statements

Cue: Upon receipt of a mission order.

DANGER

Leaders are inherently responsible for conducting Risk Management to ensure the safety of all Soldiers and promote mission accomplishment.

WARNING

Risk Management is the Army's primary decision-making process for identifying hazards, reducing risk, and preventing both accidental and tactical loss. All Soldiers are responsible for learning and understanding the risks associated with this task.

CAUTION

Identifying hazards and controlling risks across the full spectrum of Army operations is the responsibility of all Soldiers.

Performance Steps and Measures

NOTE: Assess task proficiency using the task evaluation criteria matrix.

NOTE: Asterisks (*) indicate leader steps; plus signs (+) indicate critical steps.

STEP/MEASURE	GO	NO-GO	N/A
Plan			
+* 1. The commander conducts troop leading procedures upon receipt of the order.			
+* 2. The commander issues a warning order to manage time towards successful execution.			
+* 3. The commander, supported by unit leaders (e.g., maintenance officer, safety officer, etc.), identifies and mitigates hazards according to risk management throughout the operations process, to include the potential for fratricide.			
+* 4. The commander, unit leaders, and designated mission personnel analyze the mission and operational variables to gain/maintain shared situational understanding.			
+* 5. The commander, maintenance leaders, and designated mission personnel conduct mission planning/preparation to execute the recovery or evacuation mission according to unit SOP and current doctrine.			
Note: Maintenance evacuation is the physical act of moving an unserviceable aircraft from one maintenance location to another while aircraft recovery missions include the assessment, repair, and retrieval, if possible, of a downed aircraft that is not capable of continued safe flight.			
a. Assess the condition of the downed aircraft, to include the cause (e.g., malfunction, accident, combat-related damage).			
b. Determine the type of recovery required.			
(1) Self-Recovery.			
(2) Immediate recovery.			
(3) Delayed recovery.			
(a) Deliberate recovery.			
(b) Hasty recovery.			
(4) Dedicated recovery.			
Note: The aviation maintenance unit conducts dedicated aircraft recovery as a contingency operation; however, when properly resourced, can perform internal aerial and/or ground recoveries. Dedicated recoveries are typically conducted by the aviation support company (ASC).			
(a) Ground dedicated recovery.			
(b) Aerial dedicated recovery.			
+* 6. The commander issues the order, verifying subordinate understanding.			
Prepare			
+* 7. Unit leaders conduct pre-combat checks and inspections (PCC/PCI).			
+* 8. The commander or designated representative briefs the DART, to include selected security personnel, at a predetermined location according to unit SOP.			
+* 9. The DART's OIC/noncommissioned officer-in-charge (NCOIC) coordinates the mission.			
Note: Battle damage assessment and repair (BDAR) procedures may be performed as part of downed aircraft recovery missions. Unmanned aircraft recovery missions are coordinated with the parent unmanned aircraft system (UAS) unit.			
a. Coordinates with the assessor visually observing the downed aircraft to verify location, type of aircraft, and type of damage incurred (component malfunction, accident, or combat-related damage), as well as type of weapons, ammo, or hazardous materials (HAZMAT) carried onboard the aircraft.			
b. Conducts a preliminary maintenance assessment of the downed aircraft based on data provided by aircrews or the assessor to establish maintenance requirements and coordinate the aircraft recovery (ground or aerial) method.			
c. Briefs DART personnel on the maintenance preliminary assessment, recovery type, and recovery method to use based on the existing tactical situation, to include aircraft destruction, if required.			
d. Coordinates dedicated aircraft (ground or aerial) recovery missions in detail to minimize or eliminate risk, to include possible external destruction by joint assets if recovery operations are not feasible.			
e. Obtains tactical intelligence information from the battalion/squadron S-2 to coordinate and facilitate the safe insertion of DART and security personnel and equipment.			
f. Conducts operational requirements and battlefield coordination through the battalion/squadron S-3 to mitigate/eliminate the potential for fratricide.			
g. Determines requirements for fire support, engineer support, ground security, intelligence, and aerial and/or ground surveillance support, as required.			
h. Enforces safety procedures according to SOP and applicable safety publications and regulations.			
i. Enforces environmental considerations and protection program guidelines and procedures according to SOP.			
j. Identifies if additional maintenance, security, or expertise support is required to facilitate recovery or evacuation of aircraft.			
k. Conducts preparations to recover aircraft through self-recovery or dedicated recovery.			
l. Requests destruction/disposal authorization from the appropriate authority for irreparable and/or non-recoverable aircraft, if required.			
m. Conducts preparations to perform selective cannibalization, destruction, or abandonment of downed aircraft, if required.			

n. Provides aircraft recovery updates to the battalion/brigade commander, staff, and/or production control (PC) OIC/NCOIC on aircraft recoveries, to include recovery timelines, until the aircraft is safely evacuated or recovered to the nearest UMCP or maintenance facility, abandoned, or destroyed, as required.

+* 10. The DART OIC organizes aircraft recovery operations based on METT-TC conditions gained from disseminated intelligence reports.

a. Organizes the composition of the DART based on METT-TC and input received from the aircrew/unmanned aircraft crewmembers or the aviation element maintenance OIC.

b. Ensures training and rehearsals for DART members on dedicated aircraft recovery methods and aircraft destruction steps are conducted.

c. Conducts dedicated aircraft recovery training using the Unit-Maintenance Aerial Recovery Kit (U-MARK), if assigned, and pre-accident plan provisions.

d. Identifies additional training requirements for DART personnel, to include using aircraft special tools and related aircraft recovery equipment, as required.

e. Briefs DART personnel on the type of aircraft recovery method to be used.

f. Briefs DART members on safety and environmental considerations, enemy/friendly situation, terrain, weapons, communications, ground/perimeter security, communications, call signs, and HAZMAT.

+* 11. The DART OIC directs aircraft recovery missions based on METT-TC conditions gained from disseminated intelligence reports.

a. Prepares disabled aircraft for a one-time evacuation mission, if possible.

b. If a one-time evacuation mission is not possible, directs DART personnel to perform dedicated aircraft recovery.

c. Enforces safety procedures according to SOP and applicable safety publications and regulations.

d. Enforces environmental considerations and protection program guidelines and procedures according to SOP.

e. Establishes ground/perimeter security and communications at the aircraft recovery site.

f. Directs aircraft rigging for dedicated recovery.

g. Directs DART procedures while securing disabled aircraft to recovery vehicle (ground or aerial).

h. Supervises safe evacuation of disabled aircraft to nearest UMCP or maintenance facility.

i. Receives destruction/disposal authorization from the appropriate authority for non-reparable/non-recoverable aircraft.

j. Once destruction of aircraft is authorized and disposal instructions are received, supervises destruction of aircraft according to instructions and TM 750-244-1-5, as required.

k. Provides aircraft recovery updates to the chain-of-command until the disabled aircraft is safely evacuated to the nearest UMCP or maintenance facility or, if authorized, destroyed.

+* 12. The commander or designated representative coordinates with the aviation support battalion (ASB) when internal DART capabilities are exceeded to effect recovery of the downed aircraft, if required.

Execute

+ 13. DART personnel perform dedicated aircraft (ground or aerial) recovery missions based on METT-TC conditions.

a. Locate downed aircraft based on reports/reconnaissance.

b. Identify immediate dangers in the vicinity of the downed aircraft.

c. Establish ground/perimeter security.

d. Safeguard, secure, and remove sensitive or classified equipment, unit property, and associated documents as directed.

e. Install and inspect aircraft recovery rigging equipment prior to removal of damaged aircraft, if applicable.

f. Secure downed aircraft to recovery vehicle for ground recovery.

g. Complete safe evacuation of downed aircraft to the nearest UMCP or maintenance facility.

h. Comply with safety procedures according to SOP and applicable safety publications and regulations.

+ 14. DART personnel cannibalize usable components as directed and destroy non-reparable or non-recoverable aircraft, equipment, and associated documents, as required.

a. Cannibalize serviceable aircraft components based on METT-TC and per the commander or designated representative's instructions.

b. Destroy non-reparable or non-recoverable aircraft, equipment, unit property, and associated documents according to TM 750-244-1-5, on order from the appropriate authority.

c. Employ safety procedures during aircraft destruction as briefed by the DART OIC, according to SOP and applicable safety regulations and publications.

+* 15. The AMO monitors and provides maintenance and logistics related information to the commander and staff as it pertains to the DART operation, as required.

+ 16. DART personnel complete the downed aircraft recovery mission, when:

a. The unit performs self-recovery.

b. Aircraft is recovered using ground or aerial recovery methods and techniques.

c. Aircraft is selectively cannibalized, abandoned, or destroyed, as directed.

Task Performance Summary Block										
Training Unit			ITERATION							
_____			1		2		3		4	
Date of Training per Iteration:										
Day or Night Training:			Day / Night		Day / Night		Day / Night		Day / Night	
			#	%	#	%	#	%	#	%
Total Leaders Authorized		% Leaders Present								
Total Soldiers Authorized		% Soldiers Present								
Total Number of Performance Measures		% Performance Measures 'GO'								
Total Number of Critical Performance Measures		% Critical Performance Measures 'GO'								
Live Fire, Total Number of Critical Performance Measures		% Critical Performance Measures 'GO'								
Total Number of Leader Performance Measures		% Leader Performance Measures 'GO'								
MOPP LEVEL										
Evaluated Rating per Iteration T, P, U										

Mission(s) supported: None

MOPP 4: Sometimes

MOPP 4 Statement: Commanders at all levels are responsible for integrating effective chemical, biological, radiological, and nuclear (CBRN) defense measures into training and operations.

Commanders must recognize the significant increase in the time required for mission execution in MOPP 4 and anticipate the effects of that degradation on subsequent missions. Leaders must also understand the requirement to increase water intake.

The use of MOPP involves risk; the better commanders are at analyzing units needs for protection, the lower the risk. MOPP analysis enables leaders to select the appropriate MOPP level.

During MOPP analysis, the commander considers factors such as mission, work rate and duration, probable warning time, terrain, weather, time of day, unit training, additional protection available, and alarm placement.

NVG: Never

NVG Statement: N/A

Prerequisite Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
	01-CO-5198	Conduct Aviation Mission Planning/Preparation	01 - Aviation/Aviation Logistics (Collective)	Approved
	71-CO-0050	Establish a Command Post	71 - Mission Command (Collective)	Approved

Supporting Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
1.	71-CO-5100	Conduct Troop Leading Procedures	71 - Mission Command (Collective)	Approved
3.	71-CO-5145	Integrate Risk Management into the Operations Process	71 - Mission Command (Collective)	Approved
11.	63-CO-4017	Maintain Communications	63 - Multifunctional Logistics (Collective)	Approved
13.	55-CO-4006	Defend Convoy Elements	55 - Transportation (Collective)	Approved
13.	55-CO-4003	Conduct Tactical Convoy	55 - Transportation (Collective)	Approved
13.	01-CO-8065	Perform Aircraft Battle Damage Assessment and Repair (BDAR)	01 - Aviation/Aviation Logistics (Collective)	Approved

OPFOR Task(s):

Task Number	Title	Status
71-CO-8502	OPFOR Execute an Ambush	Approved

Supporting Individual Task(s):

Step Number	Task Number	Title	Proponent	Status
3.	011-15B-0003	Integrate the Risk Management Process into Aviation Operations	011 - Aviation (Individual)	Approved
7.	011-000-4045	Conduct Pre-Combat Checks/Inspections (PCC/PCI)	011 - Aviation (Individual)	Approved
9.	552-000-3003	Conduct Downed Aircraft Recovery Team (DART) Operations	552 - Aviation Logistics (Individual)	Approved
9.	552-101-3895	Coordinate Aircraft Recovery	552 - Aviation Logistics (Individual)	Approved
10.	011-150U-1175	Coordinate Downed Aircraft Recovery Operations	011 - Aviation (Individual)	Approved
11.	011-AMO-0025	Manage Aircraft Recovery Operations	011 - Aviation (Individual)	Approved
11.	011-ACC2-6000	Conduct Troop Leading Procedures	011 - Aviation (Individual)	Approved
13.	552-000-3003	Conduct Downed Aircraft Recovery Team (DART) Operations	552 - Aviation Logistics (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
SN 4	Provide Sustainment

TADSS

TADSS ID	Title	Product Type	Quantity
T 03-001	Chemical Grenade Kit	DVC	1
01-146	Aviation Combined Arms Tactical Trainer (AVCATT)	SIM	1
FTX MILES (GROUND)	FTX GROUND MILES (ALL UNIT VEHICLE, AREA WEAPONS and INDIVIDUAL and CREW SERVED WEAPONS TRANSMITTERS LASERS AND LASER DETECTORS) (Local TADSS	DVC	1
23-20	M2K Multiple Integrated Laser Engagement System 2000 (MILES 2000) M16A1/M16A2 Rifle Kit	DVC	1
03-16	Chemical Agent Monitor Simulator, STS 701	DVC	1

Equipment (LIN)

LIN	Nomenclature	Qty
No equipment specified		

Materiel Items (NSN)

NSN	LIN	Title	Qty
No materiel items specified			

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card. .

2. FM 3-34.5 has been replaced by ATP 3-34.5. All aerial defensive and offensive tactical operations require an area in which to maneuver. Most training areas have environmental restrictions units must follow during tactical operations. The flight-route parameters resulting from environmental and noise complaint restrictions are unique to Aviation. These restrictions must be considered when planning Aviation training missions and during mission briefs.

3. Aviation units use large amounts of HAZMAT during routine maintenance. Commanders will be held responsible for the proper disposal of HAZMAT. The operation of forward arming and refueling points (FARPs) is especially challenging because of the potential for major environmental catastrophes. SOPs must specify the proper disposal of HAZMAT (such as oils and lubricants, used drip pans, and grease and oil washed off vehicles).

4. All gunnery ranges have environmental SOPs Aviation units need to comply with. These restrictions include normal environmental guidance, as well as specific instructions for the disposal of casings and ammunition boxes and maneuvering weapon systems.

Note: Each U.S. installation is subject to local and state environmental regulations, as well as federal legislation. For information pertaining to a specific location, contact the installation environmental office. When overseas or on deployment, contact operations and plans, the training staff officer (S3), or the assistant chief of staff, operations (G3).

Safety: In a training environment, leaders must perform a risk assessment in accordance with current Risk Management Doctrine. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW current CBRN doctrine. .

2. Risk Management (RM) identifies operational risks so hazards can be reduced or eliminated. RM allows units to operate in high-risk environments. Leaders at every level are responsible for identifying hazards, taking measures to reduce or eliminate hazards, and accepting risk only to the point that the benefits outweigh the potential losses. The Army's doctrinal manuals articulate the risk management process as the principal risk-reduction tool. RM is not an add-on feature to the decision-making process but, rather, a fully integrated element of planning and executing operations. The goal is to make RM a routine part of planning and executing operational and training missions.

3. RM is a continuous process for each assigned mission or training event. It must be integral to military decisions tied into each training plan and become a continuous part of preparation for training. Safety demands total chain-of-command involvement in planning, preparing, executing, and evaluating training.

Note: Aviation operations are complex and incorporate many unique tactical and technical components into the operational/training environment. DD Form 2977 is the Army's standard form for deliberate risk assessment; however, Aviation units may require additional specialized documentation. The initial safety risk assessment of this task does not take into account unit-specific details [and mission and operational variables OR variables within the OE] that may increase risk as determined by unit leaders responsible for performing this task.