FM 3-08

Casualty Evacuation
Support to Operations



MAY 2026

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Field Manual
No. 3-08

Headquarters
Department of the Army
Washington, DC, 30 May 2026

Casualty Evacuation Support to Operations

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Preface

Field Manual (FM) 3-08 provides doctrinal guidance for planning and executing casualty evacuation (CASEVAC) at all echelons. It emphasizes considerations, planning, and coordination over tactical vehicle loading techniques. CASEVAC involves evacuating Soldiers from the point of injury (POI) to a medical treatment facility (MTF) and coordinating nonmedical transportation assets to complete the mission. The manual explains the differences between CASEVAC and medical evacuation (MEDEVAC), assigns CASEVAC as a commander's responsibility, and outlines the planning and training required for CASEVAC operations. The principal audience for FM 3-08 is all members of the profession of arms. Commanders, their staff, and leaders at all echelons should refer to this publication regarding the planning, training, equipping, and execution of CASEVAC operations and techniques.

Commanders, staffs, and subordinates are responsible for making decisions and actions that comply with applicable United States (U.S.), international, and in some cases host-nation laws and regulations. Commanders at all levels are expected to confirm that their Soldiers operate in accordance with the law of armed conflict and the rules of engagement. (Refer to FM 6-27).

This publication implements or is in consonance with the following North Atlantic Treaty Organization (NATO) Standardization Agreement (STANAG) and the standards of the American, British, Canadian, Australian, and New Zealand (ABCANZ) Armies program. NATO STANAGs are accessible online at the NATO Standardization Office (NSO) public website. ABCANZ standards are accessible online at the Protected Internet eXchange (PiX) – ABCANZ product library website. All referenced websites are listed in the rear matter of this publication.

TITLE	***NATO STANAG***	***ABCANZ***
Coalition Health Support Handbook, Edition 4		256
Allied Joint Doctrine for Medical Support–AJP-4.10 Edition C	2228	
NATO Land Urgent Voice Messages (LUVM) Pocket Book–ATP-97 Edition B	2627	
Aeromedical Evacuation	3204	

FM 3-08 includes joint terms when appropriate and provides definitions for both joint and Army terms in the text and glossary. Terms that FM 3-08 is the proponent (the authority) for defining are written in ***bold italics*** with definitions in **bold** in the text and marked with an asterisk (*) in the glossary. For other definitions in the text, the term is written in *italics*, followed by the reference to the proponent publication.

FM 3-08 applies to the Active Army, Army National Guard/Army National Guard of the United States and United States Army Reserve unless otherwise stated.

The proponent and preparing agency for FM 3-08 is the U.S. Army Medical Center of Excellence, Directorate of Training and Doctrine, Doctrine Division. Send comments and recommendations on a Department of the Army Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Commander, United States Army Medical Center of Excellence**,** ATTN: ATMC-DTC-F (FM 3-08), 2377 Greeley Road, Building 4011, Suite B, Fort Sam Houston, Texas 78234-7731; by e-mail to usarmy.jbsa.medical-coe.mbx.ameddcs-medical-doctrine@army.mil. All recommended changes should be keyed to a specific page, paragraph, and line number. A rationale for each proposed change is required to aid in the evaluation and adjudication of each comment.

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Introduction

FM 3-08 focuses on the essential aspects of CASEVAC within the military framework, aligning its content with the principles and strategies outlined in FM 3-0 and FM 4-02. Beyond its role in medical care, CASEVAC is a critical enabler of operational success, facilitating the rearward movement of casualties to clear the battlefield and maintain the commander's freedom of maneuver. This function is vital in preventing unit culmination by ensuring the rapid evacuation and treatment of wounded, ill and injured (WII) Soldiers, maximizing return to duty (RTD) rates, and conserving combat power. Just as sustainment efforts recover and repair damaged equipment to sustain operations, CASEVAC preserves the fighting strength of the force by minimizing preventable fatalities and medical complications. This publication modernizes and standardizes evacuation procedures, ensuring they reflect the latest and most effective practices. By providing a comprehensive, accessible guide, FM 3-08 serves as a critical resource for personnel engaged in casualty care, battlefield evacuation, and enhances proficiency in these vital operations.

FM 3-08 serves as the keystone doctrine for CASEVAC, providing a topic overview, foundational discussion, and guidance on planning at echelon. Readers should also refer to Army Techniques Publication (ATP) 4-02.13 which focuses on the tactics, techniques, and procedures (TTP) to conduct CASEVAC operations. While FM 3-08 establishes the overarching principles and planning framework, ATP 4-02.13 provides detailed execution guidance, complementing the content of this manual. Together, these documents form a cohesive doctrinal foundation for Army CASEVAC operations.

CASEVAC is critical to the success of military maneuvers and overall mission accomplishment. It provides swift and effective transportation of WII Soldiers from the battlefield to MTFs, helping preserve the unit's combat power and morale. The strategic use of CASEVAC reflects the Army's commitment to Soldier welfare and supports operational continuity. By reducing complications from injuries and preventable deaths, effective casualty management directly supports the success and endurance of military operations.

The primary aim of FM 3-08 is to equip all Army personnel with the necessary knowledge and skills for conducting efficient CASEVAC operations. This document is crafted to enhance the readiness and competence of Soldiers in handling medical emergencies and ensuring personnel can perform evacuations proficiently under diverse conditions. Through detailed guidelines and structured protocols, FM 3-08 makes the complex procedures of CASEVAC comprehensible and manageable, enabling Soldiers to maintain operational effectiveness while upholding the highest standards of care and safety for their fellow Soldiers.

FM 3-08 contains four chapters, and five appendixes as follows:

Chapter 1 establishes the foundational role of CASEVAC in Army operations and shows how it strengthens combat power, survivability, and endurance by supporting tasks across all levels of command.

Chapter 2 shows how commanders incorporate CASEVAC into joint and multidomain operations to support tempo and mission success. Describe how CASEVAC aligns with warfighting functions and adapts across operational environments.

Chapter 3 explains how units plan CASEVAC during the military decision-making process (MDMP) or troop leading procedures (TLP). Highlight how planning roles vary by echelon and require coordination across medical and operational staff.

Chapter 4 shows how units conduct CASEVAC during operations by using mission triggers, command authority, and coordination systems. It emphasizes the importance of real-time adjustments to keep evacuation efforts timely and maintain operational momentum.

Appendix A describes how commanders tailor CASEVAC strategies to diverse environments like jungle, mountain, desert, and urban terrain. Focus on terrain-specific challenges, equipment, and planning needed for successful evacuation.

Appendix B explores the complexities of managing mass casualty (MASCAL) situations, emphasizing the crucial role of CASEVAC in operations. It covers planning, coordination, and execution strategies, including how to address chemical, biological, radiological, and nuclear (CBRN) hazards and incorporate technological advancements, enabling military planners to optimize responses and improve outcomes in high-stress environments.

Appendix C examines the capabilities and uses of CASEVAC in operations, highlighting how they support and expand traditional MEDEVAC platforms. It addresses key operational considerations such as establishing CASEVAC corridors, allocating resources, and emphasizing the value of training and coordination. These efforts help create smooth transitions and continuous care during evacuation across a range of environments.

Appendix D presents a comprehensive checklist for conducting CASEVAC operations, highlighting the need for detailed planning, synchronized execution, and ongoing assessment. It outlines essential elements such as resource identification, casualty collection point setup, and logistics coordination. These tools help leaders provide effective medical support and achieve mission success across a range of operational environments.

Appendix E compares the evacuation request formats used by different countries and organizations, including the U.S. military 9-Line, ABCANZ Nine-Line, and NATO MEDEVAC 9-Liner formats. It identifies similarities and differences between these formats, offering recommendations for standardizing them to improve interoperability and coordination in multinational operations, ultimately enhancing evacuation effectiveness and patient care.

In accordance with doctrinal changes, terms for which FM 3-08 is the proponent have been included in this publication. The glossary contains acronyms and defined terms with modified or rescinded Army terms in introductory table-1.

Introductory Table-1. Modified or rescinded Army terms

Term	*Remark*
casualty evacuation	Modifies term and changes proponent publication

Chapter 1
Foundations of Casualty Evacuation

The Army uses casualty evacuation (CASEVAC) to preserve combat power by rapidly moving wounded, ill, and injured (WII) Soldiers from the battlefield to medical treatment. CASEVAC provides immediate transport using available platforms, allowing units to sustain operations while casualties receive care. In contrast, medical evacuation (MEDEVAC) involves the regulated movement of patients on dedicated, protected medical platforms with en route care provided by trained personnel. Together, CASEVAC and MEDEVAC enhance survivability and contribute to operational endurance.

This chapter introduces CASEVAC as a critical element of operational success across different environments. It explains how commanders and staffs plan and carry out. The chapter also shows how CASEVAC functions across the theater strategic, operational, and tactical levels. It highlights the key principles that guide CASEVAC planning, integration, execution, and sustainment. Leaders will gain tools to incorporate CASEVAC into broader operational plans and maintain readiness in dispersed, contested, and degraded conditions.

INTRODUCTION OF CASUALTY EVACUATION AS AN INTEGRATED OPERATIONAL TASK ACROSS ECHELON

1-1. CASEVAC contributes to planned, resourced, and synchronized evacuation operations. It moves WII personnel to a medical treatment facility (MTF). Commanders plan for CASEVAC at the strategic, operational, and tactical levels of warfare to help sustain operations and preserve combat power. For additional information on the levels of warfare, refer to FM 3-0. *Combat power* is the total means of destructive and disruptive force that a military unit/formation can apply against an enemy at a given time (Joint Publication [JP] 3-0). When built into the operational framework, CASEVAC improves unit survivability by ensuring timely medical support. *Survivability* is a quality or capability of military forces which permits them to avoid or withstand hostile actions or environmental conditions while retaining the ability to fulfill their primary mission (Army Techniques Publication [ATP] 3-37.34).

1-2. CASEVAC operations support mission success by enabling timely casualty movement and reducing disruption to combat operations. Commanders account for planning factors such as coordination, movement timelines, and casualty flow to integrate CASEVAC into the operation. When applied, CASEVAC strengthens unit endurance and allows forces to maintain effectiveness under battlefield conditions.

1-3. At the theater strategic level, commanders and staffs coordinate joint capabilities to support CASEVAC as a mission enabler. These efforts help subordinate units conduct evacuation tasks, even in contested or degraded environments. By planning CASEVAC as part of operational support at each level, leaders align resources with mission needs and tie evacuation planning into the broader operation.

1-4. At operational and tactical levels, all leaders and planners develop CASEVAC plans that support the mission, match the terrain, account for threats, and keep pace with the fight. These plans define how evacuation platforms, medical assets, and the casualty collection point (CCP) fit within the scheme of maneuver. CASEVAC execution starts at the lowest levels, with buddy teams moving casualties to platoon and company CCPs. A *casualty collection point* is a location that may or may not be staffed, where casualties are assembled for evacuation to a medical treatment facility (ATP 4-02.2). From the CCP the first sergeant (1SG), medic, or designated CASEVAC platforms move casualties toward higher roles of care. Effective plans anticipate likely obstacles, such as complex terrain, weather, or enemy contact, and include contingencies to keep evacuation support continuous and reduce risk to the force.

1-5. Agility is essential in CASEVAC planning and execution. Commanders and planners track changes in the operational environment and adjust routes, timing, and coordination procedures as needed. This demands situational awareness, clear communication, and quick decision-making across all levels of command. By

refining evacuation strategies in real time and responding to new threats, units keep CASEVAC operations moving and aligned with the maneuver plan.

UNDERSTANDING CASUALTY EVACUATION AND MEDICAL EVACUATION IN OPERATIONS

1-6. CASEVAC and MEDEVAC both move WII personnel, but they differ in purpose, platform, and medical support. ***Casualty evacuation*** **is the movement of wounded, ill, and injured personnel aboard any nonmedical platform; also called CASEVAC**. *Medical evacuation* is the timely and effective movement of the wounded, injured, or ill to and between medical treatment facilities on dedicated and properly marked medical platforms with en route care provided by medical personnel. Also called MEDEVAC (ATP 4-02.2). A *medical treatment facility* is any facility established for the purpose of providing medical treatment. This includes battalion aid stations, Role 2 facilities, dispensaries, clinics, and hospitals (Field Manual [FM] 4-02).

> ***Note.*** Joint doctrine separates CASEVAC, MEDEVAC, and multi-modal patient movement based on platform type and availability of en route care. CASEVAC, in joint doctrine, refers to unregulated transport without medical personnel. MEDEVAC is the regulated use of dedicated, marked platforms with standardized medical support. Multi-modal patient movement bridges CASEVAC and MEDEVAC and involves both regulated and unregulated movement with en route care on non-dedicated platforms.

1-7. These distinctions shape how evacuation is conducted during operations. CASEVAC is often more flexible and may be used when MEDEVAC assets are unavailable due to threat conditions. However, CASEVAC platforms generally lack the medical personnel, equipment, and legal protections granted under the Geneva Conventions. Unless preplanned or coordinated in advance, CASEVAC typically does not provide en route medical care. Despite these limitations, CASEVAC allows for faster access to treatment and supports survival in high-risk or austere environments.

1-8. Commanders and planners assess both legal and operational considerations when choosing between CASEVAC and MEDEVAC. CASEVAC may involve moving casualties who have not received care, as well as patients who have. This distinction affects planning for triage, resource allocation, and compliance with international law during transport and treatment.

1-9. A *casualty* is any person who is lost to the organization by having been declared dead, duty status – whereabouts unknown, excused absence – whereabouts unknown, missing, ill, or injured (JP 4-02). A *patient* is a wounded, ill, and injured person who receives medical care or treatment from medical personnel (ATP 4-02.10). The Army Health System (AHS) uses these terms when coordinating patient movement and determining evacuation priorities. Table 1-1 compares the categories of WII personnel to support consistent identification and management within the patient movement system. CASEVAC serves as a critical link in this system when medical platforms are unavailable or delayed.

Table 1-1. Comparison between wounded, ill, and injured personnel

Category	*Cause*	*Nature of Harm*	*Common Context*
Wounded	Hostile action, combat.	External (from enemy force).	Battle, combat, hostile zones.
Ill	Disease, sickness, or environmental.	Internal (non-traumatic).	Non-combat, medical conditions.
Injured	Intentional or unintentional physical trauma, psychological trauma, distress or damage to the body.	External (non-hostile).	Training, mishaps, falls.

1-10. CASEVAC operations often occur under fire or in degraded conditions, particularly during large-scale combat operations. These missions require thorough coordination between maneuver forces and supporting units to minimize risk and support timely casualty movement. MEDEVAC platforms may be limited by air

defense threats or weather, making CASEVAC an essential option in contested areas. When units incorporate CASEVAC into early planning, they improve alignment across movement assets, casualty tracking systems, and operational timelines.

1-11. CASEVAC planning begins with a clear understanding of the environment, available resources, and operational risk. CASEVAC is not a replacement for MEDEVAC but complements it by providing additional flexibility in casualty movement. Both systems work toward the same goal, moving casualties to higher roles of care. CASEVAC enhances survival, preserves unit strength, and enables commanders to continue operations despite adversity.

THE ROLE OF CASUALTY EVACUATION

1-12. CASEVAC supports the Army's ability to fight, endure, and recover across the full range of military operations. It contributes to combat power by reducing personnel losses and sustaining unit readiness. To conduct CASEVAC, commanders and staffs view it not only as a medical action but as an implied task for all operations. CASEVAC enables the rapid movement of WII personnel to medical care. The following paragraphs describe how CASEVAC supports Army operations across the continuum from competition to crisis to armed conflict.

1-13. CASEVAC reduces the human cost of war by providing WII personnel with timely medical care and, when possible, returning them to duty. *Return to Duty* (RTD) a patient disposition which, after medical evaluation and treatment when necessary, returns a Soldier for duty in his unit (FM 4-02). CASEVAC remains adaptable to support casualty movement under threat, along contested routes, or through degraded communications. CASEVAC strengthens morale, preserves cohesion, and helps maintain the Army's operational tempo.

1-14. During large-scale combat operations, casualty rates may exceed MEDEVAC capacity. Units coordinate CASEVAC with maneuver, medical, and sustainment efforts to avoid delays and minimize disruption. While rapid evacuation is essential, leaders also protect combat power by integrating CASEVAC into the broader operational framework. This balance helps units sustain momentum even in high-casualty environments.

TENETS OF CASUALTY EVACUATION

1-15. The following tenets give commanders and staffs a foundation to plan and carry out CASEVAC in many operational environments. These tenets describe how CASEVAC strengthens operational resilience by preserving combat power, protecting mobility, and meeting the demands of dispersed, contested, or degraded conditions. CASEVAC helps maintain continuity of operations by expanding evacuation options, supporting survivability, and enabling maneuver over time. When commanders apply these tenets with mission variables and operational tempo in mind, they help the force maintain readiness, synchronize support across domains, and continue the fight after disruption.

1-16. Casualty evacuation is organized into four major tenets: planning and adaptation, operational integration, execution and platforms, and preparedness and sustainment. Planning and adaptation helps units prepare for changes using deliberate and flexible design. Operational integration aligns CASEVAC efforts with the scheme of maneuver and commander's intent. Execution and platforms focuses on using a range of resources to maintain combat strength. Finally, preparedness and sustainment highlights the importance of training, rehearsals, logistics and integrating with unified action partners to sustain evacuation operations. Together, these tenets create a clear framework that helps commanders include CASEVAC in planning and operations at every level.

PLANNING AND ADAPTATION - HOW CASUALTY EVACUATION STARTS

1-17. CASEVAC begins with deliberate planning. This focuses on the ability to anticipate battlefield changes, adjust to evolving threats, and maintain support across dispersed formations. Attributes like proactive and adaptive planning, scalability and flexibility, redundancy and decentralization allow units to respond to disruption. Together, they help commanders design evacuation systems that remain effective even when conditions shift rapidly or support is degraded.

Proactive and Adaptive Planning

1-18. Proactive planning enables units to forecast CASEVAC needs based on terrain, threat, tempo, and available resources. Commanders identify challenges and build options for flexible execution. This attribute reinforces scalability, redundancy, and synchronization, particularly during large-scale or rapidly evolving operations.

Scalability and Flexibility

1-19. CASEVAC provides scalable and flexible capabilities that support forces across wide and contested areas. These qualities allow units to adjust support in decentralized or isolated settings. This attribute complements proactive planning by giving commanders options to adapt to changes in tempo, terrain, or threat.

Redundancy and Decentralization

1-20. Redundancy and decentralization increase reliability when primary CASEVAC systems are unavailable or compromised. Commanders develop alternate routes and platforms to maintain continuous support under threat. This attribute aligns with platform versatility by expanding the range of available options.

Operational Integration – Casualty Evacuation as a Mission Task in the Broader Fight

1-21. CASEVAC stays connected to the flow of operations. Planners align casualty movement with command structures, maneuver plans, and joint efforts. Integration across echelons and domains, combined with synchronization with warfighting functions, helps CASEVAC support the broader mission, not disrupt it. Disciplined mission command enables decentralized execution while keeping unity of effort.

Integration Across Echelons and Domains

1-22. CASEVAC planning connects capabilities across echelons and domains. Commanders match land, air, and maritime assets to the situation to move casualties in a timely manner while maintaining protection during movement. This integration supports joint operations and sustains operational reach and endurance under fire.

Synchronization with Warfighting Functions

1-23. CASEVAC synchronizes with maneuver, fires, and sustainment to prevent delays and keep tempo. Coordinated planning ties CASEVAC to the commander’s intent and links medical movement with battlefield tasks. When CASEVAC is treated as a separate action, units risk losing momentum and exposing evacuation assets to avoidable threats.

Mission Command and Disciplined Initiative

1-24. CASEVAC operations rely on mission command to function in complex or degraded environments. Commanders clearly communicate their intent, not only for the operation, but for medical support. This shared understanding allows CASEVAC teams to act with disciplined initiative, even when communications are limited or conditions change. For example, a unit may need to move a casualty to an adjacent unit’s CCP if it brings faster care. By linking CASEVAC decisions to the broader plan, commanders support decentralized execution and keep operations moving forward.

Execution and Platforms - What Moves Casualties

1-25. CASEVAC relies on the ability to move casualties using available resources. This tenet focuses on employing a variety of platforms and improving efficiency in how forces evacuate and care for the WII. Attributes such as platform versatility, resource optimization, and support to combat effectiveness help CASEVAC efforts preserve combat power and use assets wisely. These practices keep units mobile, responsive, and capable under pressure.

1-26. In large-scale combat operations, CASEVAC is often the primary method for moving casualties from the point of injury (POI) to medical treatment. Units use whatever platforms are available, stretchers, litters, cargo trucks, tactical vehicles, air assets, or unconventional means, based on terrain, threat, and urgency. This flexibility helps preserve dedicated MEDEVAC for casualties requiring en route medical care. Platform versatility is not about preference but survival. It supports decentralized execution and helps sustain casualty movement when resources are limited, routes are contested, or operations cannot pause.

1-27. Partner nation platforms, ground, air, and maritime, often require adaptation to support CASEVAC. For example, stretcher modifications, safety padding, and stocked medical supplies enhance casualty movement. Historical precedents, including World War II hospital trains in Europe and naval evacuations from Normandy, demonstrate how rail and maritime transport remain viable options today, particularly in areas like the Indo-Pacific where vast distances separated operating forces.

1-28. Joint CASEVAC planning addresses technical and procedural differences between nations. This includes aligning communications, vehicle standards, and casualty-handling protocols. Pre-arranged agreements, such as those in North Atlantic Treaty Organization (NATO) and the Republic of Korea, streamline transfers and improve interoperability. Training exercises and a shared standard operating procedure (SOP) build familiarity and reduce friction during execution.

Preparedness and Sustainment - What Keeps Casualty Evacuation Effective

1-29. CASEVAC is only effective when forces are trained, rehearsed, and properly supported. This tenet emphasizes the importance of readiness and sustained support across units and coalition partners. Attributes such as training and rehearsals, along with sustainment and multinational integration, help CASEVAC systems perform under pressure, align with partners, and continue functioning during prolonged missions. These efforts form the foundation for long-term operational endurance.

Training and Rehearsals

1-30. Training and rehearsals prepare CASEVAC personnel to confidently react under pressure. At the tactical level, aid and litter teams, medic, platoon sergeant (PSG), and company 1SG often carry out the initial evacuation. These teams practice movement, casualty handling, and coordination with higher medical assets. At higher echelons, staff rehearse mission command tasks like route clearance, asset tracking, and handoffs between units. Repeated practice improves communication and reduces friction during real operations by aligning actions across all levels of command.

Sustainment and Multinational Integration

1-31. While MEDEVAC is a component of health service support (HSS) within the sustainment warfighting function, CASEVAC synchronizes with both operations and sustainment. Commanders place CASEVAC planning in Annex C (Operations) of the operation order (OPORD) to drive planning and resource allocation as part of the scheme of maneuver. Coordination in Annex F (Sustainment) aligns CASEVAC with medical evacuation, medical treatment, and other sustainment activities. Effective CASEVAC planning accounts for routes, evacuation timelines, medical capability at transfer points, and integration with host-nation and allied partners. Treating CASEVAC as an operational task, rather than an afterthought, improves readiness, reduces delays, and maintains casualty movement even in combined or coalition environments.

1-32. CASEVAC supports freedom of action, protects combat power, and strengthens the Army’s ability to operate under stress. It remains a key enabler with the sustainment warfighting function. The tenets of CASEVAC help commanders and staffs incorporate CASEVAC into each phase of planning and execution. Chapter 2 explains how CASEVAC fits within the Army’s operational framework and links to the warfighting functions that shape mission success.

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Chapter 2
Casualty Evacuation During Operations

CASEVAC is a mission-focused task that is planned and executed across all levels of command. This chapter explains how commanders and staffs integrate CASEVAC into operations to preserve combat power and keep momentum. Effective integration requires coordination across echelons, detailed planning, and flexibility in changing battlefield conditions. CASEVAC supports broader mission goals and align with joint, multinational, and interagency efforts. When viewed as a mission enabler rather than a separate function, CASEVAC helps improve survivability, sustain tempo, and fulfill the Army's responsibility to care for WII personnel.

CASUALTY EVACUATION INTEGRATION ACROSS ECHELON AND PLANNING CONSIDERATIONS

2-1. Commanders and staffs include CASEVAC in operations at all levels to help preserve combat power and maintain momentum. Rather than treating it as a separate mission, leaders incorporate CASEVAC into the plan, linking it with maneuver, command and control (C2), and sustainment. At each echelon, planners assess how evacuation assets, CCPs, and routes support the broader scheme. They also consider environmental threats, platform limits, and operational risks. Integrating CASEVAC early across warfighting functions improves survivability, protects the force, and supports continuous operations. By embedding CASEVAC into planning, commanders help move casualties from the POI to MTFs, aligning tactical actions with broader mission goals.

INTEGRATING CASUALTY EVACUATION ACROSS ECHELON

2-2. Theater-strategic leaders shape the policies, authorities, and force structure that support CASEVAC planning and execution at lower echelons. While they do not plan individual evacuation missions, they create the framework that enables subordinate commands to do so. This includes setting agreements with interagency and multinational partners, authorizing access to host-nation medical infrastructure, and directing theater-level medical posture. These efforts are especially important during joint and coalition operations, where differences in medical capability, classification, or patient movement policies can delay or disrupt casualty evacuation. Strategic-level support does not replace tactical planning but provides the foundation for effective CASEVAC under complex or resource-constrained conditions.

2-3. At the operational level, planners shape the conditions that support CASEVAC across the theater. These responsibilities include allocating medical assets, coordinating patient movement between Roles 2 and 3 facilities, and managing evacuation priorities when resources are limited. Operational planners do not manage CCPs directly, but they understand how casualties move from the POI through the system. In large-scale combat operations, they help develop routing plans, stage evacuation platforms, and prepare for mass casualty (MASCAL) events that can overwhelm medical capabilities. These efforts connect with maneuver and sustainment plans to maintain tempo, preserve combat power, and reduce operational risk. When CASEVAC is treated as a supporting task, rather than an afterthought, units are better prepared to respond when MEDEVAC is unavailable, or the volume of casualties exceeds capacity. A *mass casualty* is any number of human casualties produced across a period of time that exceeds available medical support capabilities. Also called MASCAL (JP 4-02).

2-4. At the tactical level, CASEVAC is often executed in dynamic and hostile conditions. Maneuver commanders coordinate the use of available platforms, whether ground, air, or waterborne, to transport casualties to CCPs or higher roles of care. Tactical CASEVAC responds to immediate needs and typically lacks dedicated en route care, unless it has been preplanned or coordinated with medical assets. Its success relies on the initiative of small units, situational awareness, and adaptability.

2-5. CASEVAC supports operational endurance by moving casualties from the POI to higher roles of care, even in austere or contested environments. To remain effective, CASEVAC is deliberately incorporated into

operations and synchronized with C2, protection, and sustainment functions. This coordination clears the area of casualties, preserves combat power, and reduces disruption to maneuver forces. While most CASEVAC missions do not provide en route medical care, the act of evacuating WII Soldiers demonstrates the Army's commitment to its personnel. This reinforces morale and contributes to overall mission success.

CASUALTY EVACUATION PLANNING CONSIDERATIONS

2-6. Effective CASEVAC operations begin with deliberate planning and risk assessment tailored to the operational environment. Commanders and staffs evaluate enemy threats, air defense systems, and terrain challenges that may influence evacuation routes, and platform selection. They also assess available assets, including ground, air, and maritime transport, and coordinate with host-nation and coalition partners when required. A well-developed CASEVAC plan increases survivability, supports operational tempo, and helps casualties reach care without delaying the mission.

2-7. C2 is essential for effective CASEVAC. Commanders define roles, authorities, and communications between maneuver elements, evacuation platforms, and medical treatment facilities to avoid confusion or delays. Triage protocols are developed by medical personnel but directed through command authority. *Triage* is the system of sorting and prioritizing casualties based on the tactical situation, mission, available resources, and medical urgency (FM 4-02). Once a trained medical provider assumes responsibility for care, the casualty becomes a patient and enters the patient movement system. This transition can happen at the POI, a CCP, or any location where medical care is initiated. CASEVAC becomes part of the patient movement system when used to move patients under medical direction, even if the platform is nonmedical. In MASCAL events, commanders also coordinate with medical staff to estimate casualty volume, prioritize movement, and direct public health activities under their C2 authority.

2-8. Contested environments present unique risks to CASEVAC operations that require deliberate planning and mitigation. Peer threats such as Russia and China have demonstrated the ability to conduct electromagnetic warfare, including Global Positioning System (GPS) spoofing, signal jamming and interference, and cyberattacks against logistics and medical networks. They also use persistent surveillance and long-range fires to target evacuation routes. To reduce these risks, planners develop alternate routes, use deception and terrain masking, and include analog communications in CASEVAC plans. Coordination with joint and multinational partners adds redundancy and increases resiliency. By planning for degraded communications and enemy interference, commanders improve the continuity of CASEVAC in large-scale combat operations.

CASUALTY EVACUATION'S IMPACT ON COMBAT EFFECTIVENESS

2-9. CASEVAC directly affects unit readiness, morale, and the ability to maintain tempo in combat. Soldiers who trust they will be treated and evacuated are more confident under fire and more willing to take necessary risks. Rapid evacuation allows timely medical treatment, which reduces preventable deaths and helps preserve combat strength. When CASEVAC is delayed or disrupted, casualties increase, stress builds, and unit performance declines. Well-executed evacuation operations reassure troops, sustain morale, and help commanders keep forces in the fight longer.

2-10. CASEVAC supports endurance in large-scale or prolonged combat operations. Removing WII Soldiers from the fight allows commanders to reallocate resources, adjust task organization, and manage combat power. When CASEVAC is built into the operational plan, it helps units recover from losses, avoid early culmination, and remain effective despite fatigue or environmental stress. CASEVAC planning contributes directly to force preservation, readiness, and survivability, making it a critical part of sustained operations.

CASUALTY EVACUATION PLANNING AND EXECUTION

2-11. The operational environment significantly influences CASEVAC planning. Commanders assess feasibility using mission variables:

- Mission: Does CASEVAC support the operation's purpose?
- Enemy: Do threats impact evacuation timing or routes?
- Terrain and Weather: Do conditions restrict movement?
- Troops and Support Available: Are CASEVAC assets and medical personnel available?
- Time Available: How quickly must the casualty be moved (evacuation precedence)?

- Civil Considerations: Are host-nation MTFs or civilian hospitals available?
- Intelligence: What enemy activity may affect evacuation plans?

2-12. Applying mission variables improves adaptability and reduces risk. Commanders use this analysis to refine CASEVAC timing, routing, and platform selection, supporting survivability and mission success.

2-13. CASEVAC planning begins with anticipating when and where casualties are likely to occur. Planners assess available evacuation platforms and develop evacuation plans that support the scheme of maneuver while accounting for tempo, terrain, and threat conditions. Integrating CASEVAC early improves the delivery of care and enables timely movement of WII personnel.

2-14. Effective evacuation planning considers expected casualty rates, terrain challenges, and known threat areas. Planners study how the mission might unfold and identify areas where CASEVAC will likely be needed. This foresight helps shape a responsive and flexible system that adapts to changing battlefield conditions.

2-15. Coordination among planners, executors, and support personnel helps CASEVAC tasks operate smoothly under stress. Planners assign resources and define responsibilities. CASEVAC executors, such as unit leaders, adapt those plans on the ground. Medical staff and support personnel assist during evacuation, stabilizing casualties, and reducing delays during handoff.

2-16. CASEVAC is often a "be prepared to" task but may also be conducted as a deliberate mission in support of AHS operations, such as clearing a MTF or sustaining evacuation during high-casualty events. Units plan for CASEVAC by considering mission variables. The surgeon, exercising medical C2 on behalf of the commander, synchronizes the movement of casualties and coordinates with operational elements to maintain safe and timely evacuation. Close coordination between commanders, staff, and medical personnel reduces confusion, enables patient tracking, and supports effective casualty movement under all conditions.

2-17. Unpredictable environments and communication breakdowns create operational friction that challenges CASEVAC execution. However, CASEVAC teams should remain focused on planning, flexibility, and coordination. Their quick adjustments improve patient outcomes and strengthen overall CASEVAC resilience. Their role supports the broader goals of survivability and mission continuity.

Casualty Evacuation as a Planned Task Within Military Operations

2-18. Casualty evacuation is planned as part of the larger operation, not handled as a last-minute task. When CASEVAC is integrated into the operational framework, it helps commanders preserve freedom of maneuver and maintain freedom of action. Freedom of maneuver allows forces to reposition or advance, while freedom of action gives commanders choices about how to fight. In offensive operations, delays in evacuating casualties can slow the advance and risk losing momentum. During defense, delays can isolate maneuver units and leave them vulnerable to defeat in detail. Commanders account for terrain, enemy activity, and mission objectives when linking CASEVAC tasks to maneuver and sustainment efforts.

2-19. Effective CASEVAC planning includes selecting routes, tasking evacuation assets, and coordinating across echelons. These actions support casualty movement and reduce delays that can disrupt operations. Tying CASEVAC to mission complexity and force structure helps units adapt to changing conditions during the fight.

2-20. Using standardized procedures and common terms helps CASEVAC teams respond and maintain clear communication with medical personnel. Training and rehearsals build muscle memory for events ranging from high-risk evacuations under fire to large-scale casualty events.

2-21. A well-planned CASEVAC mission supports continuous operations by keeping Soldiers in the fight and protecting unit readiness. CASEVAC planning does not end with the OPORD, it is refined as the mission unfolds. When tied to mission goals, CASEVAC helps maintain tempo, reduce confusion, and increase survivability.

Adaptability in Casualty Evacuation Operations

2-22. CASEVAC effectiveness depends on a unit's ability to anticipate and respond to changing battlefield conditions. Visualization and preparation allow leaders to adjust procedures before conditions deteriorate. This proactive approach supports continuity of care during unexpected events.

2-23. Evacuation teams adjust to new threats, terrain, and conditions by changing evacuation routes, tactics, platforms, or treatment priorities. Their ability to react in real time strengthens the connection between the POI and higher levels of care.

2-24. Commanders maintain oversight by using real-time information to modify CASEVAC plans. These adjustments may include shifting resources, rerouting platforms, or staging assets closer to expected high-casualty areas. This foresight improves CASEVAC reliability in contested conditions.

2-25. Anticipation and adaptability work together to maintain readiness. CASEVAC leaders assess risks and develop fallback options that allow continued operations when primary plans fail. This planning culture supports both survivability and freedom of action.

2-26. When leaders visualize potential challenges, they better prepare personnel and resources for immediate use. By acting early, they reduce delays and improve the effectiveness of limited evacuation options. This approach blends discipline with flexibility.

2-27. CASEVAC depends on standard procedures, trained personnel, and accessible resources to bridge the gap between planning and execution. These elements allow units to shift between deliberate evacuation and real-time adjustment without losing tempo or cohesion.

Considerations for United States Army Conventional and Special Operations Integration

2-28. Army Special operations forces (ARSOF) often rely on CASEVAC support from conventional units. Supporting ARSOF elements in deep or denied areas is especially challenging due to their small team size, wide dispersion, and limited access to secure evacuation routes. These conditions increase the risk of prolonged delays in casualty movement. Forward patient acquisition becomes even harder when enemy activity or maneuver restrictions prevent conventional forces from reaching ARSOF elements. In such cases, medical planners anticipate the need for extended care at the POI and consider forward positioning medical personnel, such as a physician assistant or special operations medic, to provide care until evacuation becomes possible.

2-29. CASEVAC planning for ARSOF requires close coordination between AHS planners, ARSOF medical planners, and conventional force planners. This coordination integrates ARSOF requirements into both special operations and conventional plans while aligning medical capabilities, evacuation timelines, and command relationships. When medical units are not positioned forward, planners request specific AHS capabilities, identify supporting platforms, and prepare for nonstandard casualty movement, deception methods, or extended delays. Effective integration relies on shared graphics, mutual support agreements, and clearly defined command relationships, especially during joint or coalition operations. CASEVAC planning for ARSOF should include:

- Integration into conventional and special OPORDs and graphics.
- Coordination across command relationships and echelons.
- Platform readiness, access to denied terrain, and the ability to conduct patient movement under threat.

For more information on AHS support to ARSOF, refer to ATP 4-02.43. For more information on the ARSOF patient evacuation system, refer to Training Circular (TC) 18-09.

SPECIAL POPULATIONS AND ETHICAL CONSIDERATIONS

2-30. CASEVAC primarily supports the evacuation of United States (U.S.) and partner military personnel. However, commanders plan for the movement of nonstandard casualties, including military working animal (MWA), detainees, and civilians. Detainees and civilians are protected under the law of armed conflict (LOAC) and present distinct ethical, medical, and logistical challenges. Planners account for these factors in CASEVAC operations and follow unit policies and higher command guidance to uphold legal and humane treatment at every level.

Mortuary Affairs and Casualty Evacuation Boundaries

2-31. CASEVAC and mortuary affairs are distinct missions with different responsibilities, personnel, and procedures. Units must not confuse the two. According to ATP 4-46, mortuary affairs personnel recover,

process, and evacuate human remains through a separate chain of custody. CASEVAC operations focus solely on the evacuation of WII personnel to preserve life and maintain combat power. Planners integrate mortuary affairs into operations to prevent confusion, maintain unit discipline, and uphold the respectful treatment of the fallen.

2-32. Transporting deceased personnel on CASEVAC platforms may cause emotional harm and degrade unit morale. When possible, commanders should use separate assets for the deceased. Sustainment and logistics units coordinate these efforts, while religious affairs personnel support cultural or spiritual needs. Keeping the missions distinct maintains the operational focus of CASEVAC teams and upholds the Army's values.

Military Working Animal Casualty Evacuation Considerations

2-33. MWAs, such as dogs used for detection, patrol, or search and rescue, are a valuable force multiplier. Their injury can degrade mission effectiveness, so CASEVAC teams plan for their stabilization and evacuation. This may require special equipment such as muzzles, litters, or restraints. Commanders adapt ground and air platforms to move MWAs safely without delaying the evacuation of personnel.

2-34. Veterinary support to MWA CASEVAC is coordinated in advance. Trained veterinary personnel or handlers with approved canine tactical combat casualty care training provide care when available. Commanders coordinate with supporting veterinary units to plan for triage, treatment, and evacuation of MWAs as part of overall HSS.

2-35. Although human casualties always take priority, MWAs may be moved on a space-available basis. Units with MWAs develop standard procedures for their emergency care and evacuation in coordination with veterinary support.

COMPLIANCE WITH THE LAW OF ARMED CONFLICT

2-36. CASEVAC operations must comply with the Geneva Conventions and the LOAC. Commanders must understand that platforms used for CASEVAC do not receive protected status under international law unless they meet strict criteria: being unarmed, clearly marked with a Red Cross, and used exclusively for medical purposes. Most CASEVAC platforms, such as vehicles used by PSGs, 1SGs, or logistics personnel, do not meet these standards and are not protected. Their use for casualty movement is lawful, but they may be legally targeted under LOAC. Commanders should weigh the legal, operational, and ethical risks when selecting CASEVAC platforms, and consult legal advisors when necessary.

WARNING:

The misuse of the distinctive emblem (Red Cross) is strictly prohibited and could result in a war crime. The decision to temporarily mark platforms used exclusively for medical purposes with the Red Cross is the responsibility of the major tactical commander, such as a brigade commander or higher.

Marking of Platforms

2-37. The Red Cross emblem provides legal protection to medical platforms, but its use is strictly regulated by international law. Misuse can result in war crimes and jeopardize missions. Only a brigade commander or higher may authorize marking and must do so in consultation with legal counsel. To qualify for protection, platforms must be dedicated solely to medical purposes, operated by non-combatants, and free of any offensive weaponry, however, individual self-defense weapons are permitted. Platforms cannot carry troops, war materiel, or engage in any activity supporting combat operations. Examples of permitted actions while under the protected status of the Red Cross emblem are:

- Transporting wounded Soldiers from a battlefield to a medical facility.
- Operating a field hospital providing surgical care and medical treatment.
- Providing medical supplies (such as bandages or medications) to a forward aid station.
- Personnel providing direct medical care – triaging, administering aid, and performing surgery.

- Carrying medical personnel (doctors, nurses, medics) solely for medical duties.
- Self-defense: A medic carrying a personal sidearm for protection while treating patients.

2-38. Utilizing the protection of the Red Cross emblem for other actions is illegal. Violations will result in loss of protected status and can be a potential war crime. Examples of prohibited actions are:

- Transporting ammunition or weapons alongside patients.
- Using the platform to scout enemy positions or relay tactical information.
- Carrying combat troops to a forward operating base.
- Employing medical personnel in combat roles (such as a medic firing a weapon offensively).
- Providing medical care as a pretext to gain access to enemy-held territory for intelligence gathering.
- Using a marked vehicle as a command post directing combat operations.

2-39. Ground and rotary-wing CASEVAC platforms are generally unmarked and lack legal protection. If protected status is sought, strict adherence to the restrictions below is required, including disarmament. Fixed-wing aircraft and maritime vessels face even stricter rules, advance agreement from belligerents is typically needed for aircraft protection, and only specifically designated and permanently marked hospital ships qualify for maritime protection. Specific restrictions for ground vehicles include:

- No Offensive Mounts: Ground vehicles displaying the Red Cross cannot have any mounted weapons systems (such as machine guns or grenade launchers). These must be removed before marking.
- Configuration: Vehicles should primarily be configured for medical use.
- Cargo Restrictions: Cargo space must be dedicated to medical supplies and equipment. No non-medical cargo (rations, fuel, and spare parts unrelated to medical maintenance) is permitted.
- Route Adherence: While not a strict legal requirement, adhering to established and publicized evacuation routes can reinforce the perception of neutrality and reduce risk.
- No Escort: Marked medical vehicles should generally avoid traveling with armed escorts, as this can undermine their protected status. If an escort is deemed necessary for security, it must maintain a clear separation and not appear to be actively protecting the vehicle from attack.
- Signage Visibility: Red Cross markings must be clearly visible from all angles and maintained in good condition.

2-40. Commanders are responsible for understanding and enforcing these regulations. Oversight and discipline are crucial to prevent misuse. Markings must be removed immediately upon mission completion. Proper use of medical markings protects personnel, preserves legal protections, and upholds the Army's ethical standards. When in doubt, consult with a judge advocate.

EVACUATION ROUTES

2-41. CASEVAC planners identify and deconflict movement routes to evacuate casualties safely from the POI to an MTF. These routes are not labeled or controlled separately from other movement routes, but they are coordinated to avoid conflict with maneuver operations, fires, and sustainment traffic. Coordination with higher headquarters and joint partners supports timely movement, preserves operational tempo, and reduces risk to evacuation platforms and patients.

2-42. Nonmedical platforms may be used when MEDEVAC is not available. Trucks or civilian vehicles can transport casualties who do not require urgent medical care. However, these efforts are planned to avoid interference with ongoing operations. Commanders synchronize these missions with sustainment and maneuver plans to preserve tempo and safety.

2-43. In rare cases, commanders may coordinate temporary evacuation routes with belligerent forces during negotiated pauses or humanitarian operations. If such routes are used, they are reserved strictly for medical purposes. Using them to move troops, weapons, or supplies violates the LOAC, forfeits their protected status, and endangers future humanitarian coordination. While uncommon in large-scale combat, these scenarios may occur in stability operations or complex multinational environments and require close legal and operational oversight.

2-44. Using evacuation corridors for medical purposes reinforces compliance with international law. It also protects medical personnel, promotes limited trust between opposing forces, and helps maintain access for future humanitarian efforts. Clear command oversight preserves legal protections and supports the legitimacy of the mission.

Detainee and Civilian Casualty Evacuation Considerations

2-45. Effective CASEVAC planning accounts for detainees, including prisoners of war, and civilian casualties. Under the Geneva Conventions and the LOAC, detainees and civilians are entitled to medical care based on medical need, without adverse distinction. Commanders are responsible for ensuring that detainees receive care equivalent to that provided to friendly forces. Likewise, civilians in the operational area must have access to emergency care consistent with international law and Army values. For more information on civilian considerations for medical treatment, refer to ATP 4-02.55.

2-46. Commanders balance ethical obligations with mission security. While detainees must receive necessary medical support, evacuation operations must also prevent security risks such as escape or compromise of operational security. This balance becomes more complex in joint or multinational operations, where detainees may transit shared CASEVAC platforms or multinational treatment facilities. For more information on medical support to detainee operations, refer to ATP 4-02.46.

2-47. In multinational operations, CASEVAC planners often coordinate with partner forces to share evacuation assets and medical treatment capabilities. This includes aligning with partner-nation policies, identifying shared medical treatment facilities, and preparing to treat civilians who may enter the area of operations during combat. Coordination with local leaders and host-nation medical personnel helps maintain safe zones and manage disruptions. These efforts support compliance with LOAC, strengthen ethical conduct, and preserve mission legitimacy in complex environments.

Coordination with Enemies for Casualty Movement

2-48. At times, commanders may coordinate with enemy forces to evacuate casualties. This may occur during temporary ceasefires or be facilitated through third parties, such as the International Committee of the Red Cross. These actions reflect the Army's adherence to international law and its moral obligation to provide humane care.

2-49. Although working with adversaries for medical purposes may seem unconventional, it demonstrates professionalism and discipline. Saving lives and protecting dignity remain central to military values. These actions show that the Army can uphold ethical standards even during combat.

ARMY CASUALTY EVACUATION PLANNING IN JOINT AND MULTINATIONAL CONTEXTS

2-50. Army forces often operate as part of a joint or multinational force, and CASEVAC planning accounts for coordination across components and nations. Commanders and staff ensure Army CASEVAC requirements are integrated into higher-level sustainment and HSS plans, especially when relying on nonorganic capabilities such as partner-nation MTFs or evacuation platforms. For joint-level planning considerations on patient movement, including CASEVAC, refer to JP 4-02.

2-51. In coalition operations, Army CASEVAC planning aligns with host-nation or allied support systems. This includes identifying available platforms, understanding treatment capabilities, and establishing linkages with local medical systems. For example, in the Indo-Pacific and Europe, Army units may rely on host-nation MTFs under bilateral agreements or NATO frameworks. For operational examples and planning considerations, refer to ATP 4-02.55.

2-52. Nonstandard platforms, including partner-nation vehicles, civilian transports, watercraft, and aircraft, may support Army CASEVAC when dedicated platforms are unavailable. Army commanders assess risks, adapt platforms for safe movement, and coordinate approvals with higher headquarters when operating in a joint environment.

2-53. Differences in platform design, communications systems, and medical protocols can complicate multinational CASEVAC. Army units mitigate these challenges through early coordination, familiarization

training, and by following established joint and multinational procedures. Combined exercises give Army CASEVAC teams critical understanding of partner capabilities and constraints, which improves integration in operations.

DISTINCTIONS BETWEEN ARMY, JOINT CASUALTY EVACUATION AND MULTI-MODAL PATIENT MOVEMENT

2-54. Army and joint doctrine use different terms and criteria for casualty evacuation. Recognizing the distinctions helps avoid confusion and supports unified efforts across components. Commanders understand these differences to ensure proper coordination during operations.

2-55. In Army doctrine, CASEVAC includes moving casualties on nonmedical platforms, which may or may not include medical personnel or en route care. When medical support is present, but platforms remain nonmedical, the operation remains CASEVAC. This flexibility supports rapid action when MEDEVAC is not available.

2-56. Joint doctrine separates CASEVAC, MEDEVAC, and multi-modal patient movement (MMPM) based on platform type and availability of en route care. CASEVAC refers to unregulated transport without medical personnel. MMPM bridges CASEVAC and MEDEVAC, involving regulated or unregulated movement with en route care on non-dedicated platforms. MEDEVAC remains the regulated use of dedicated, marked platforms with standardized medical support.

2-57. The primary difference is that Army CASEVAC may include en route care, while joint CASEVAC does not. MMPM fills this gap, allowing medical care to continue on improvised platforms. Using the correct doctrinal term improves coordination and helps the patient receives the appropriate level of support.

2-58. MMPM involves diverse transportation methods, including aircraft, ships, rail, and ground convoys, to move casualties when dedicated MEDEVAC is limited. These movements require coordination with sustainment and protection elements but expand the options available to commanders in large-scale or extended operations. Table 2-1 on page 15 compares Army and joint doctrinal approaches to CASEVAC and MMPM, highlighting differences in platform use, medical support, and regulatory frameworks.

Note. Table 2-1 is for Army doctrinal awareness and reference only. Joint definitions are governed by JP 4-02 and related publications.

Table 2-1. Comparison of Army, Joint casualty evacuation and multi-modal patient movement

Feature	*Army CASEVAC*	*Joint CASEVAC*	*MMPM*
Definition	Movement of casualties using nonmedical platforms may include en route care if available.	Unregulated movement using nonmedical platforms, no en route care available.	Movement using non-dedicated platforms with en route care.
Medical Personnel Onboard	May or may not be present.	Not present.	Present and capable of providing en route medical care.
Geneva Protection	Not guaranteed; platforms usually unmarked.	Not applicable.	Not guaranteed but may be coordinated depending on configuration.
Platform Type	Any available platform (truck, helicopter, or similar).	Nonmedical platform only.	Any transport mode (land, sea, air), adapted with medical personnel.
Use Case	Tactical expedient under fire; when MEDEVAC is unavailable.	Emergency, unregulated movement in austere or hostile areas.	Flexible option when MEDEVAC is delayed or unavailable.
Doctrinal Source	ATP 4-02.2, FM 4-02.	JP 4-02.	JP 4-02.
En Route Care Capabilities	May be available.	None.	Required to have some level of en route care.
Regulating and Tracking	May be limited.	Unregulated.	May be regulated or unregulated, depending on asset and system.

Legend:
ATP Army techniques publication
CASEVAC casualty evacuation
FM field manual
JP Joint publication
MEDEVAC medical evacuation
MMPM multi-modal patient movement

CASUALTY EVACUATION IN MULTIDOMAIN AND CONTESTED ENVIRONMENTS

2-59. The Army plans CASEVAC operations differently depending on the operational context, even though all operations occur across multiple domains. This section explains how CASEVAC supports operations in contested, degraded, and large-scale combat conditions. It emphasizes the need for flexibility, interoperability, and survivability by providing planning considerations for each domain.

2-60. Army and joint forces operate across air, land, maritime, space, and cyberspace to complete missions and maintain combat power. CASEVAC facilitates this by transporting WII personnel to medical treatment, allowing them to RTD or continue with the evacuation. CASEVAC supports these efforts by integrating capabilities across domains to improve speed, security, flexibility, and accountability.

2-61. Each domain contributes to CASEVAC success. Air platforms move casualties over long distances. Land forces secure ground routes, establish CCPs, and provide transport when air access is limited or unavailable. Maritime forces, including joint and Army watercraft, support evacuation in coastal or river environments. Space systems assist with navigation, communication, and tracking. Cyberspace provides secure communications and supports mission command. CASEVAC planners address cyber threats to protect casualty data and keep operations moving.

2-62. CASEVAC teams leverage strengths across domains to overcome complex threats and maintain casualty movement even when the environment is contested. They plan across all domains to keep the force ready, maintain care continuity, and preserve combat power, even under pressure or in dispersed areas.

Casualty Evacuation and Large-Scale Combat Operations

2-63. CASEVAC strengthens morale and combat effectiveness during large-scale combat operations. Rapid evacuation reduces strain on Soldiers and helps maintain tempo and maneuver when conditions allow. Even when commanders cannot prioritize CASEVAC due to mission constraints, early planning and coordination help reduce delays and manage expectations. Integrating CASEVAC into the operational plan demonstrates a leader's commitment to preserving the force and sustaining unit cohesion under fire.

2-64. CASEVAC also acts as a strategic signal. It demonstrates Army readiness, reassures partners, and shows that operations can continue despite threats. In both active combat and stability efforts, well-executed CASEVAC contributes to mission success and reinforces the Army's ability to respond to threats across domains.

Adapting Casualty Evacuation to Contested Environments

2-65. CASEVAC planners anticipate contested environments where joint capabilities are disrupted or denied. Loss of air superiority, degraded communications, and blocked routes challenge traditional CASEVAC. Teams build flexible plans that use alternate transport, decentralized support, and pre-coordinated procedures to operate under fire or across long distances.

2-66. Leaders adapt CASEVAC by using the strengths of each domain. Ground forces may secure terrain or use wheeled platforms when aircraft are not available. Maritime forces may use watercraft to evacuate from island or river areas. Planners include backup command systems to handle cyber threats or jamming. Frequent rehearsals and coordination allow CASEVAC to continue even when systems fail or the situation changes.

The Role of Information Collection and Targeting in Casualty Evacuation

2-67. Information collection and targeting support CASEVAC planning by improving situational awareness. While dedicated surveillance assets may not be prioritized for evacuation missions, commanders use available intelligence to understand enemy threats, assess terrain, and select safer routes. When possible, planners coordinate with staff to align CASEVAC timing with periods of reduced threat or increased intelligence, surveillance, and reconnaissance coverage. Even limited access to predictive information helps reduce risk and supports more effective casualty movement.

2-68. CASEVAC planners also link with targeting efforts. By coordinating fire support or suppression along CASEVAC routes, units reduce risks to evacuation teams. Intelligence-led CASEVAC increases survivability and allows medical support to continue in high-threat areas.

THREAT-BASED CHALLENGES TO CASUALTY EVACUATION INTEGRATION

2-69. Enemy forces often target CASEVAC operations to delay care and disrupt force preservation. Long-range fires, cyberattacks, and disinformation campaigns can strike evacuation routes, deceive friendly forces, or damage medical networks. CASEVAC is planned as part of the protection warfighting function and synchronized with maneuver, sustainment, and communications efforts. Planning includes incorporating deception, route masking, redundant communication systems, and rapid route adaptation.

2-70. During large-scale combat operations, the wide dispersion of forces increases the time and distance required to evacuate casualties. Reliance on joint assets such as air or reconnaissance platforms may be disrupted by enemy anti-access capabilities. When external support is unavailable, dispersed formations execute CASEVAC independently. Commanders plan CASEVAC as an organic task at every echelon, with emergency procedures and ground evacuation routes rehearsed and validated in advance.

2-71. CASEVAC teams may be forced to operate in areas under fire or contaminated by chemical, biological, radiological, and nuclear (CBRN) effects. Enemy use of massed fires or weapons of mass destruction can overwhelm medical resources and temporarily block evacuation routes. Planners reduce this risk by decentralizing CCPs, dispersing CASEVAC assets, using terrain for protection, and incorporate alternate routes and force packages into the CASEVAC plan. CASEVAC remains viable, even under direct threat or MASCAL conditions.

2-72. Gaps and seams in fast-moving operations increases risk for CASEVAC. Bypassed enemy elements or unsecured terrain may disrupt casualty flow. Follow-on forces are tasked to secure evacuation routes as part of the operational framework. In strategic environments, adversaries may attack airfields, ports, or transit points to disrupt the movement of CASEVAC platforms and medical personnel. CASEVAC planning spans from the tactical edge to the strategic rear, accounting for both forward and rear-area threats.

SYNCHRONIZING CASUALTY EVACUATION THROUGH THE WARFIGHTING FUNCTIONS

2-73. A *warfighting function* is a group of tasks and systems united by a common purpose that commanders use to accomplish missions and training objectives (ADP 3-0). The Army organizes operations through six warfighting functions, C2, movement and maneuver, intelligence, fires, sustainment, and protection. CASEVAC does not stand alone as a separate function. Instead, it supports the mission through integration with each of these areas. Each function helps plan, coordinate, and execute CASEVAC in a way that protects combat power and keeps units ready to fight.

COMMAND AND CONTROL

2-74. The *command and control warfighting function* is the related tasks and a system that enable commanders to exercise authority and direction to accomplish missions (ADP 3-0). C2 allows commanders to direct and manage CASEVAC operations across all echelons. Through C2 systems, leaders issue evacuation orders, set priorities, and maintain communication with evacuation teams, even under high-threat conditions. A reliable C2 network connects CASEVAC actions to the commander's intent and keeps evacuation efforts aligned with mission goals. It also supports coordination between units and allows timely adjustments to shifting conditions or threats.

MOVEMENT AND MANEUVER

2-75. The *movement and maneuver warfighting function* is the related tasks and systems that move and employ forces to achieve a position of relative advantage with respect to the enemy (ADP 3-0). Movement and maneuver functions position CASEVAC within the flow of operations. Commanders incorporate evacuation routes and CCPs into maneuver plans to keep them accessible and responsive. CASEVAC teams operate with or near combat elements so they can reach casualties without delay. By synchronizing evacuation with tactical movement, units maintain casualty support as the mission tempo shifts or formations reposition during battle.

INTELLIGENCE

2-76. The *intelligence warfighting function* is the related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment (ADP 3-0). Intelligence helps CASEVAC planners understand where, when, and how casualties may occur. It identifies likely threat areas, predicts casualty-producing events, and monitors enemy activity that could impact evacuation routes. Intelligence also provides real-time updates that help commanders adjust CASEVAC plans as the battlefield evolves. By using reconnaissance and surveillance systems, units improve route selection and reduce risks to CASEVAC teams.

FIRES

2-77. The *fires warfighting function* is the related tasks and systems that create and converge effects in all domains against the threat to enable operations across the range of military operations (ADP 3-0). Fires support CASEVAC by shaping the battlefield and suppressing enemy threats along evacuation routes. Commanders use fires to create safe windows for air or ground movement by neutralizing or deterring enemy interference. Fires also help CASEVAC teams reach contested areas and return safely. When coordinated with CASEVAC movements, fires protect WII personnel and allow medical teams to operate under combat conditions.

SUSTAINMENT

2-78. The *sustainment warfighting function* is the related tasks and systems that provide support and services to enable freedom of action, extend operational reach, and prolong endurance (ADP 3-0). Sustainment integrates CASEVAC platforms, personnel, and equipment into ongoing operations. Units prepare by pre-positioning medical supplies, maintaining vehicles, and including CASEVAC in convoy and logistics planning. Sustainment efforts also cover fuel, maintenance, and medical resupply for evacuation missions. When commanders embed CASEVAC into sustainment planning, they extend operational reach and keep the force ready during prolonged engagements.

PROTECTION

2-79. The *protection warfighting function* is the related tasks, systems, and methods that prevent or mitigate detection, threat effects, and hazards to preserve the force, deny the enemy freedom of action, and enable commanders to apply combat power (ADP 3-0). Protection tasks defend CASEVAC teams, assets, and evacuation routes from enemy threats. Units use route security, deception, cyber defense, and electromagnetic discipline to reduce the risk of detection or attack. These measures help CASEVAC operations continue even under fire. Commanders coordinate protection efforts to limit risk and keep evacuation missions moving during combat.

INTEGRATING CASUALTY EVACUATION SUPPORT INTO COMBAT OPERATIONS

2-80. CASEVAC supports the sustainment and protection warfighting functions by preserving the force and reducing preventable deaths. Removing WII Soldiers from the battlefield helps maintain readiness and combat effectiveness. CASEVAC also boosts morale, when troops trust that they will be evacuated, they fight with more confidence and stay engaged longer. These effects contribute to overall combat power by helping commanders maintain tempo and retain effective fighting strength across the formation.

2-81. Commanders should not treat CASEVAC as a stand-alone operation or isolated task. Instead, they direct CASEVAC as a supporting task at echelon that integrates across all warfighting functions. Effective CASEVAC planning strengthens tempo, survivability, and endurance. The following examples demonstrate how CASEVAC contributes to each warfighting function:

- Command and control: Leaders integrate CASEVAC into planning, mission orders, and risk assessments.
- Movement and maneuver: Units use CASEVAC routes and platforms to reposition casualties while maintaining operational momentum.
- Intelligence: Accurate casualty reporting supports decision-making and real-time coordination across echelons.
- Fires: Suppressive fires reduce threats during evacuation and protect casualty collection points.
- Sustainment: CASEVAC links casualties to medical treatment and preserves the fighting strength of the force.
- Protection: Units safeguard medics, nonmedical platforms, and casualties through security and force protection measures.

2-82. Commanders and staffs plan, coordinate, and execute CASEVAC as part of joint, multinational, and multidomain operations. When leaders integrate CASEVAC across all warfighting functions, they help preserve combat power, maintain tempo, and treat casualties with discipline and care. Effective CASEVAC planning demonstrates readiness, builds trust, and reflects a commander’s commitment to the force.

2-83. Understanding how CASEVAC supports operations across domains and units prepares leaders for deliberate planning. Because CASEVAC connects to tasks at every echelon, commanders align evacuation efforts with mission goals, resources, and tempo. Chapter 3 builds on this foundation by describing how leaders plan CASEVAC to meet tactical, operational, and strategic demands. It explains how coordination, asset use, and mission variables shape CASEVAC planning in both routine and high-threat situations.

Chapter 3
Planning Casualty Evacuation Operations

CASEVAC is an integral part of mission planning and is coordinated alongside other operational requirements at every level. Commanders and staffs include evacuation needs early in the planning process by assigning responsibilities and coordinating available assets across all warfighting functions. This chapter explains how units plan CASEVAC using the military decision-making process (MDMP) or troop leading procedures (TLP), while considering mission variables and medical infrastructure. It also demonstrates how joint, interagency, and multinational factors influence planning and highlights the need to match CASEVAC with the operation's tempo, phases, and risk levels.

CASUALTY EVACUATION PLANNING

3-1. Commanders and staffs plan CASEVAC to support operations across joint, multinational, and interagency environments. Effective planning keeps evacuation efforts synchronized from the theater strategic level to the tactical level. Joint and multinational operations require additional coordination to overcome interoperability gaps. Coordination within the theater, with interagency partners such as the Department of State, host-nation governments, and nongovernmental organizations helps secure access to medical facilities, routes, and logistics support. Early integration allows forces to align resources, avoid duplication, and improve casualty care at every level. CASEVAC planning is fully integrated into the scheme of support and reflected in Annex C (Operations) and Annex F (Sustainment) of the operations order to ensure visibility and unity of effort across all warfighting functions.

3-2. To keep CASEVAC planning aligned across echelons, theater strategic planners create the structure, operational planners connect the systems, and tactical teams execute the mission. This alignment supports the larger operation, protects the force, and keeps momentum during joint and multinational missions. Planners include CASEVAC triggers, timing, and coordination measures in unit-level and combined arms rehearsals, ensuring that all participants from the POI to the MTF understand their role in the evacuation chain.

THEATER STRATEGIC LEVEL PLANNING

3-3. At the theater strategic level, geographic combatant commands, theater special operations commands, and supporting Army Service component commands develop policies, allocate resources, and build the foundation for joint and multinational CASEVAC support. These headquarters coordinate with national and host-nation medical authorities, including Ministries of Health, nongovernmental organizations, and coalition partners, to integrate medical support across the theater. CASEVAC planning at this level fits within broader joint, interagency, intergovernmental, and multinational efforts to maintain unity of effort and freedom of movement for patient evacuation.

3-4. Theater strategic planning aligns key resources, such as evacuation platforms, trained personnel, and medical supplies, with mission demands. Planners also coordinate access to host-nation and partner MTFs. When necessary, they identify alternative platforms like amphibious craft or naval vessels to expand evacuation options and maintain operational flexibility. They also direct the establishment of a theater-wide communications plan for CASEVAC that links strategic, operational, and tactical echelons, accounting for potential degraded or denied communications environments.

3-5. Leaders at this level develop shared SOPs that guide medical priorities, casualty tracking, and communication procedures. These SOPs improve interoperability and reduce delays caused by different equipment, policies, or standards across partner forces.

3-6. Formal agreements with coalition partners allow units to share medical facilities, logistics networks, and CASEVAC assets. These agreements are established before operations begin to support seamless integration during execution.

3-7. Civil affairs personnel support theater strategic planners by identifying local medical infrastructure, assessing host-nation treatment capabilities, and advising on legal, cultural, and ethical considerations. Their coordination with Ministries of Health, local hospitals, and international relief organizations informs the command's ability to integrate host-nation support into CASEVAC planning. This collaboration improves situational awareness and supports the broader strategic medical architecture in coalition and multinational environments.

OPERATIONAL LEVEL PLANNING

3-8. Operational planning connects theater strategic goals to mission execution by developing CASEVAC procedures suited to the specific theater. joint task forces, land component commands, or corps headquarters serving in those roles synchronize CASEVAC across units, adapt to conditions on the ground, and position resources to support maneuver and sustainment. When no field Army is present, the corps may serve as the bridge between operational and tactical levels. In all cases, the division remains the Army's primary tactical formation.

3-9. Commanders and staffs at the operational level build shared understanding across echelons and assign responsibilities for casualty movement. While CCPs are executed at the tactical level, operational planners coordinate the flow of casualties from CCPs to ambulance exchange points (AXPs) and MTFs by aligning transportation assets, route security, and handover timelines. This includes synchronizing ground and air corridors, establishing medical regulating priorities, and ensuring communication interoperability between units. They also establish reporting standards and account for joint and multinational procedural differences to create a cohesive CASEVAC architecture. An *ambulance exchange point is a* location where a patient is transferred from one ambulance to another en route to a medical treatment facility. Also called AXP (ATP 4-02.2). Operational-level CASEVAC planning explicitly integrates protection tasks, including convoy escort, route clearance, and air defense coverage, to mitigate risks to evacuation platforms in contested environments.

3-10. Planners position Role 3 MTFs and medical staging areas to deliver timely care and support extended operations. They do this by assessing anticipated casualty flow, terrain access, and evacuation timelines, then selecting sites that balance proximity to supported units with security from threat activity. Planners oversee patient tracking by integrating reporting systems, coordinate with regulating authorities to match patient needs to available facilities; and forecast medical logistics requirements to sustain casualty movement. This includes fuel planning, Class VIII distribution, and coordinating CASEVAC platform availability with supporting medical units. They also coordinate with the medical regulating officer to align patient movement control processes with operational priorities, ensuring that casualties are delivered to the appropriate facility at the right time based on clinical urgency and available capacity.

3-11. A detailed understanding of terrain, weather, enemy activity, and infrastructure damage informs operational CASEVAC planning. Planners incorporate current intelligence updates, engineer assessments, and weather forecasts to refine route selection and evacuation timing. Risk assessments drive the development of alternate routes, protected corridors, and backup medical sites, enabling units to adapt to changing threats and maintain continuity of casualty movement.

3-12. Working with host-nation and interagency partners strengthens evacuation plans by expanding available resources and access points. Civil affairs personnel and allied forces help identify available medical resources facilities, staging areas, and transportation assets, and assist in deconflicting evacuation routes with civilian and coalition activities. This coordination often involves liaison officers, joint planning sessions, and combined rehearsals to improve access and increase care options for WII personnel.

3-13. Some operational environments require CASEVAC plans to include riverine or maritime capabilities. Planners assess waterway routes for navigability, security, and connection to inland evacuation networks. Amphibious craft, naval platforms, and riverboats are integrated into the CASEVAC plan through joint coordination with naval or maritime components, ensuring seamless casualty movement between land and water systems.

TACTICAL LEVEL PLANNING: REDUNDANCY AND RESILIENCE

3-14. CASEVAC is primarily a tactical-level task conducted by company- and battalion-level units. These formations are responsible for moving casualties from the POI to the nearest MTF, often through CCPs.

Above the battalion level, casualty movement typically involves MEDEVAC or regulated transport coordinated by higher headquarters. In large-scale operations, higher echelons may support tactical CASEVAC indirectly by providing additional nonmedical vehicles or coordinating transport between MTFs when MEDEVAC capabilities are overwhelmed.

3-15. To plan CASEVAC at the tactical level, commanders and planners understand the difference between redundancy and resilience. These terms get used interchangeably sometimes, but they're distinctly different, and understanding that difference impacts how we build a robust and survivable operation.

- Redundancy is about having backups. It's about duplicating critical systems or capabilities so that if one fails, another can immediately take over. Think of it like having two identical radio systems –if one goes down, you switch to the other. It's a direct, one-to-one replacement. Redundancy prevents mission failure from a single point of failure.
- Resilience is about the ability to recover from disruption. It's about building a system that can absorb shocks, adapt to changing circumstances, and continue functioning, even if degraded, in the face of adversity. It's not necessarily about having a direct replacement; it's about having flexibility and adaptability to work around the problem.

3-16. Redundancy in CASEVAC requires building multiple identical systems and depends on manpower, funding, and logistical support. Some examples of redundancy in CASEVAC are:

- Multiple Evacuation Platforms: Having both dedicated helicopters and ground assets available. If the airspace is compromised, we can switch to ground transport. This is a direct one-to-one replacement.
- Alternate landing zone (LZ): Pre-planning and designating multiple LZs for each potential CCP. If one LZ is compromised by enemy fire or terrain, we have others ready to go.
- Backup Communication Systems: Having both primary and secondary radio frequencies, satellite communication capabilities, and even pre-arranged signal plans (visual signals, runners) in case electronic communications fail.
- Duplicate Medical Kits: Ensuring each Soldier, combat lifesaver (CLS), medic and CCP has a fully stocked medical kit with essential life-saving equipment.
- Multiple Qualified Personnel: Having more than one qualified personnel at each CCP or on each evacuation team. If one is incapacitated, another can immediately take over.

3-17. Resilience in CASEVAC, while still requiring investment, focuses on building adaptable systems, empowering decentralized decision-making, and fostering a culture of innovation. Some examples of resilience in CASEVAC are:

- Decentralized Casualty Collection: Empowering unit leaders and medics at the POI to provide initial stabilization and treatment, rather than relying solely on centralized CCPs. This reduces the strain on the evacuation system and allows for quicker intervention.
- Cross-Training: Ensuring personnel are cross-trained in multiple skills (such as a medic also trained in radio operation, a vehicle crew member trained in tactical combat casualty care (TCCC). This increases flexibility and allows personnel to fill gaps as needed.
- Networked Information System with Offline Capability: Having a digital medical tracking system while ensuring medics can record and transmit casualty information using paper-based systems if the network is down.
- Local Partnerships: Establishing relationships with local medical facilities, such as host-nation hospitals, civilian clinics, to augment the evacuation capacity if needed. This requires pre-planning and coordination.
- Adaptive Routing: Developing the capability to dynamically reroute evacuation assets based on real-time intelligence, avoiding known enemy positions, congested areas, or hazardous terrain. This requires robust situational awareness and flexible C2.
- Improvised Evacuation Techniques: Training personnel to utilize available assets, civilian vehicles, local transportation, for emergency evacuation if traditional CASEVAC platforms are unavailable. This requires risk assessment and clear guidelines.

3-18. Redundancy and resilience are most effective when used together in a layered approach. This creates a more robust and survivable CASEVAC system capable of withstanding a wider range of disruptions. This layered approach recognizes that a single point of failure is rarely the sole threat; rather, operations are often

impacted by a cascade of events. Tactical CASEVAC planning also identifies sustainment interdependencies, including fuel, maintenance, and Class IX repair parts for evacuation platforms, and synchronizes them with the unit's distribution plan.

3-19. This combined approach shifts the focus from simply preventing failure (redundancy) to proactively managing the consequences of failure (resilience) while simultaneously mitigating potential vulnerabilities. It necessitates a shift in mindset, from a rigid adherence to pre-planned procedures to a more adaptable and improvisational approach. Key factors of a combined approach are:

- Prioritize Criticality: Identify the most critical elements of the CASEVAC system, such as qualified medical personnel, communication networks. Focus redundancy and resilience efforts specifically on these critical areas to enhance overall operational effectiveness.
- Diversify Assets: Avoid relying on a single asset or method for any critical function. Diversification reduces vulnerability to specific threats.
- Empower Decentralized Decision-Making: Grant lower-echelon leaders the authority to adapt to changing circumstances. Additionally, provide training to ensure they can make informed decisions regarding CASEVAC operations.
- Continuous Assessment and Adaptation: Regularly evaluate the effectiveness of CASEVAC procedures. Use lessons learned and evolving threats to inform necessary adjustments and improvements.
- Integration with Overall Operational Planning: CASEVAC planning is integrated with overall operational planning to maintain seamless coordination and support. This integration is essential for providing effective support during operations.

3-20. In large-scale combat operations, even well-prepared patrols can face sudden disruptions that challenge casualty evacuation efforts. The following scenario illustrates how an ambush against a squad-sized element highlights the risks of relying on a single method of communication and evacuation. Employing a combined approach, integrating redundancy, resilience, and coordination, can mean the difference between delayed treatment with higher casualty rate and timely evacuation that preserves combat power.

<table>
<tr><th colspan="2">Scenario: A Squad-Sized Patrol is Ambushed Resulting in Multiple Casualties.</th></tr>
<tr><th>Casualty Evacuation (CASEVAC) without a combined approach</th><th>CASEVAC with a combined approach</th></tr>
<tr><td rowspan="3">The patrol relies on a pre-planned medical evacuation (MEDEVAC) request using a single radio frequency. The frequency is jammed by the enemy. The patrol lacks alternate communication methods and is unable to request assistance, resulting in delayed evacuation and increased casualties.</td><td>Redundancy: The patrol carries both a primary and secondary radio and has pre-designated alternate landing zone (LZ) identified. A secondary team is on standby with a ground CASEVAC or MEDEVAC.</td></tr>
<tr><td>Resilience: The patrol leader, trained in tactical combat casualty care (TCCC), immediately directs medics to provide life-saving interventions. Recognizing the jammed radio frequency, the leader utilizes a pre-arranged visual signal to alert a nearby observation post, which relays the MEDEVAC request via a different communication channel. Simultaneously, the leader assesses the terrain and prepares the alternate LZ.</td></tr>
<tr><td>Combined Effect: Despite the disruption to primary communication, the patrol successfully requests assistance, stabilizes casualties, and prepares for evacuation. The MEDEVAC helicopter, guided by the observation post, lands at the alternate LZ and evacuates the wounded. The standby ground teams are prepared to support if airspace remains contested.</td></tr>
</table>

3-21. In the example above, redundancy provided alternate communication and LZ options. Resilience supported through training, decentralized decision-making, and adaptability, enabled the patrol to overcome the communication disruption and continue the evacuation process.

3-22. A truly effective CASEVAC system requires a holistic approach that builds both redundancy and resilience. By using this approach, commanders can significantly improve the survivability of their forces

and support the timely and effective evacuation of casualties, even in the most challenging operational environments.

CASUALTY EVACUATION PLANNING CONSIDERATIONS

3-23. Planning for CASEVAC is most effective when commanders and staffs link strategic, operational, and tactical considerations into a unified plan that can adapt to battlefield realities. The considerations outlined in table 3-1 build on the tenets discussed in chapter 1, providing planners with a quick-reference tool to address terrain, threat, resources, coordination requirements, and contingency measures. These considerations help synchronize CASEVAC with maneuver, sustainment, and protection functions while integrating redundancy and resilience. Using the table during the MDMP and rehearsals supports unity of effort, reduces friction between echelons, and improves the survivability of casualties and evacuation teams.

Table 3-1. Casualty evacuation planning considerations

Planning Area	*Considerations*
Evacuation Routes	Identify primary and alternate CASEVAC routes; integrate with maneuver and sustainment overlays; plan for fording, route clearance, or other mobility support.
Collection and Transfer Points	Confirm CCPs, ALPs, AXPs, and LRPs are integrated with the ambulance shuttle system when used.
Coordination with Maneuver	Synchronize CASEVAC overlay with maneuver graphics and fire support plans; confirm security measures for evacuation routes in contested areas.
Integration with Sustainment	Align CASEVAC with Class VIII resupply, refuel-on-the-move points, and support area displacement plans.
MASCAL Response	Establish triggers for MASCAL activation; designate augmentation assets; integrate MASCAL drills into rehearsals and battle drills.
Multinational / Joint Operations	Pre-arrange communication protocols, reporting formats, and handoff points; address platform and PMI compatibility.
Contingency Planning	Identify nonmedical platforms for use when MEDEVAC is unavailable; plan for CCP/AXP relocation during mobile defense or rapid advances.
Post-Mission Reconstitution	Establish procedures for decontamination, restocking supplies, and restoring CASEVAC platforms to mission-ready status.

Legend:

ALP	ambulance load point	LRP	logistics release points
AXP	ambulance exchange point	MASCAL	mass casualty
CASEVAC	casualty evacuation	MEDEVAC	medical evacuation
CCP	casualty collection point	PMI	patient movement items

CASUALTY EVACUATION PLANNING WITHIN THE OPERATIONS PROCESS

3-24. CASEVAC planning occurs as part of every mission, beginning with mission analysis and extending through orders production. Commanders and staffs identify CASEVAC requirements early and address them through coordinated input across the warfighting functions, particularly protection, sustainment, and C2. CASEVAC is not a stand-alone medical task, it is a shared staff responsibility that supports unit readiness and operational tempo.

3-25. Commanders at all echelons are responsible for moving casualties to the point where regulated medical treatment can occur. Company- and platoon-level elements typically conduct CASEVAC to designated CCP, AXP, or MTF. When evacuation requirements exceed available evacuation capabilities, both CASEVAC and MEDEVAC, higher-level commanders coordinate for additional CASEVAC support. MEDEVAC remains the regulated movement of casualties by dedicated and medically staffed platforms. CASEVAC uses nonmedical vehicles or aircraft, often under austere conditions, when MEDEVAC is unavailable, delayed, or tactically unsuitable.

3-26. The mission variables directly shape CASEVAC planning. Planners assess terrain for route selection, consider weather impacts on ground and air movement, and evaluate enemy threats to CASEVAC operations. They should also identify and mitigate gaps in evacuation coverage. CASEVAC planning aligns with the

commander's concept of operations and integrate redundancy, emergency procedures, and prioritization schemes, especially in MASCAL scenarios or contested environments.

OPERATIONAL ENABLERS FOR CASUALTY EVACUATION SUPPORT

3-27. CASEVAC depends on reliable movement, communication, and coordination. Terrain can delay or block evacuation routes, while weather affects visibility, airlift availability, and ground mobility. Electronic warfare, jamming, and degraded network conditions can disrupt C2 during evacuation. These operational factors are assessed during planning to position CASEVAC assets, designate alternate routes, and maintain communications across formations.

3-28. Cyberspace operations can disrupt or degrade CASEVAC efforts by targeting communication nodes, patient tracking systems, or GPS-enabled navigation. Commanders and staffs plan for cyber and electronic warfare threats by establishing redundant communication channels, using pre-coordinated signal plans, and validating backup procedures. These protective measures help units sustain CASEVAC operations in complex and contested environments.

PLANNING CASUALTY EVACUATION AT ECHELON

3-29. Casualty evacuation is a task conducted at echelon to move WII personnel from the POI to the next role of care. Commanders deliberately plan CASEVAC to align with their scheme of maneuver and expected operational conditions. CASEVAC is often the primary method of evacuation when MEDEVAC is unavailable, delayed, or tactically unsuitable. Planning includes selecting and securing CCPs, identifying available evacuation platforms, determining equipment requirements such as litters and casualty handling gear, and establishing triage, communication, and casualty reporting procedures. It also includes identifying and meeting training requirements for CASEVAC crews and litter teams to ensure they can perform under operational conditions. These actions are integrated into the unit's OPORD and rehearsed before execution.

3-30. At the company level, commanders execute CASEVAC using internal assets and guidance from higher headquarters. They designate CCPs, supervise casualty movement under fire, and rely on noncommissioned officers and combat medics to adjust plans during contact. Incorporating CASEVAC into battle drills builds repetition and speed. Company-level units report casualty information upward and provide accurate location data to support movement decisions. This local execution is the foundation of successful casualty evacuation across the formation.

3-31. The battalion level leads tactical planning for CASEVAC. Battalion commanders identify key CCPs, synchronize CASEVAC routes with fire support and maneuver, and determine when CASEVAC is appropriate based on mission variables. The staff tracks casualty flow, identifies potential delays, and coordinates nonstandard platforms such as recovery vehicles or command mobility assets. Battalion-level planning includes direct coordination with adjacent units and supporting medical elements to support both organic and external CASEVAC efforts. The battalion serves as the first level at which CASEVAC decisions are evaluated against MEDEVAC availability.

3-32. At the brigade level, planners integrate CASEVAC into the sustainment and protection plans. Brigade staff coordinate evacuation support across battalions and confirm which assets are available and when. This includes deconflicting CASEVAC with MEDEVAC, especially during MASCAL events or when air platforms are limited by weather, terrain, or enemy activity. The battalion or brigade operations officer (S-3) and battalion or brigade logistics staff officer (S-4) work together to confirm availability of vehicles, recovery teams, and logistics support to sustain prolonged or large-scale casualty movement. Brigade planners may also coordinate casualty hand-offs with Role 2 MTFs and supporting medical companies.

3-33. Division and higher headquarters provide oversight, resourcing, and policy direction to support subordinate CASEVAC efforts. These echelons allocate medical support units, evacuation platforms, and coordination authorities based on the operational design. Higher headquarters may also establish CASEVAC coordination cells or patient movement control elements as part of the medical C2 structure. At this level, leaders shape the operational environment by integrating host-nation, joint, and coalition medical support, expanding treatment and transport options available to lower echelons. CASEVAC planning at these levels supports the tempo and survivability of tactical forces.

3-34. Commanders at all levels develop a commander's critical information requirement (CCIR) that relate to casualty evacuation. These CCIR may include triggers for when MEDEVAC is no longer viable due to threat, weather, or asset diversion. For example, a commander may direct a report when MEDEVAC is unavailable for more than 30 minutes or when CASEVAC is initiated without prior coordination. These decision points allow commanders to anticipate risks and shift between CASEVAC and MEDEVAC appropriately. By defining CASEVAC-related CCIR during planning, leaders can respond under pressure and maintain control over casualty movement.

3-35. CASEVAC planning begins during mission analysis and is fully integrated into the MDMP. Commanders and their medical planners identify how CASEVAC supports the concept of operations, assess asset availability, and define priorities of movement. The CASEVAC plan is developed alongside the HSS plan and synchronized with logistics, fires, and maneuver. When CASEVAC is built into the operation from the start, it becomes a deliberate supporting task, not an improvised reaction to battlefield conditions.

3-36. Staff officers across multiple warfighting functions contribute to the CASEVAC plan. The assistant chief of staff, personnel (G-1) or the battalion or brigade personnel staff officer (S-1) track casualty estimates and reports, providing input on casualty flow and projected evacuation needs. The assistant chief of staff, operations (G-3) or the battalion or brigade S-3 aligns CASEVAC with the commander's intent, scheme of maneuver, and operational phasing. The assistant chief of staff, logistics (G-4) or the battalion or brigade S-4 links CASEVAC to logistics planning, ensuring platforms, fuel, and maintenance support are available. Staff with technical expertise, such as air defense, engineer, or CBRN officers, assess environmental and threat conditions that affect evacuation. Coordinated staff input helps commanders develop CASEVAC plans that are grounded in mission realities.

3-37. CASEVAC planning also supports mission command by providing subordinate leaders with a clear understanding of how casualty movement will occur. Plans include execution criteria, command relationships, coordination measures, and reporting procedures. These details give junior leaders confidence in how to act when casualties occur. In contested environments or high-casualty scenarios, the ability to execute CASEVAC affects tempo, morale, and survivability. Commanders who make CASEVAC a visible and rehearsed part of the operation strengthen the unit's resilience in combat.

3-38. CASEVAC is not a substitute for MEDEVAC but complements it. Commanders understand when each option is appropriate and build flexible plans that account for both. CASEVAC provides a critical gap-filler when MEDEVAC is unavailable or unsuitable due to enemy activity, weather, or platform constraints. Effective CASEVAC plans include clearly defined routes, task-organized platforms, and coordination with receiving medical treatment facilities. These plans also identify conditions under which CASEVAC transitions to MEDEVAC or vice versa.

3-39. CASEVAC in support of special operations presents unique challenges. These missions often cover long distances, take place in denied terrain, and require immediate casualty movement under high risk. Because these operations evolve quickly, conventional staffs coordinate early with special operations planners to understand timelines, constraints, and required support. Commanders may refer to ATP 4-02.43 and TC 18-09 for detailed considerations. By planning early and clearly defining responsibilities, leaders can support special operations forces with tailored CASEVAC options even under complex or high-threat conditions.

CASUALTY ESTIMATES

3-40. Commanders and staff create casualty estimates early in planning to determine how WII personnel may affect operations. These estimates guide CASEVAC planning by identifying likely evacuation demands and helping leaders match resources to potential needs. At the Army Service Combat Command level, the G-1 leads the preparation and refinement of the casualty estimate in coordination with the surgeon and other staff sections, then provides it to the G-3 for integration into operational planning. Surgeon sections at echelons above brigade derive or refine medical support requirements based on updated casualty estimates. Operations and sustainment staff use the estimate to shape timelines, movement plans, and supply requirements. As the mission evolves, they revise the estimate and share updates across sections. This approach helps the unit adjust CASEVAC plans, align support with expected conditions, and prepare for the medical and logistical challenges that come with sustaining combat power.

3-41. The staff analyzes operational and mission variables to create an accurate casualty estimate. By assessing these factors, they can forecast the likelihood of casualties and identify challenges that may arise during the operation. This estimate serves as the foundation for CASEVAC planning, including the placement of evacuation resources, coordination between staff sections, and the allocation of medical supplies. A proactive estimate helps the unit prepare to manage casualties without delay and maintain readiness throughout the mission.

3-42. The operations staff uses the casualty estimate to determine the level of support needed for evacuating and treating WII personnel. They assess the number of expected casualties, the types of likely injuries, and the evacuation platforms and medical personnel required. The sustainment staff uses the same estimate to plan for medical supply needs. They calculate the types and amounts of supplies needed for both immediate treatment and follow-on care. By coordinating closely with the operations staff, the sustainment team positions resources where they are most effective to support timely and continuous CASEVAC.

3-43. The staff updates the casualty estimate throughout the operation to keep it accurate and relevant. These updates help maintain situational awareness and allow commanders and staff to adjust to changing conditions on the ground. Keeping the estimate current informs all sections, particularly operations and sustainment, of the impact on the force, and guides their planning. This continuous flow of information allows leaders to make timely decisions, allocate resources, and improve coordination across the formation. Accurate estimates also reduce confusion and help the unit respond to changing casualty conditions.

3-44. Military planners use tools such as the Joint Medical Planning Tool and the Medical Planners' Toolkit to develop realistic casualty estimates and align medical efforts with operational planning. These Department of War (DOW) tools are taught through training programs like the Joint Medical Operations Course-Basic and the Joint Medical Planning Tool Course. These courses build skills for planning CASEVAC and other medical tasks during operations. For multinational operations, the NATO Joint Medical Planner Course provides similar instruction tailored to joint and allied environments. These resources help planners refine medical estimates, coordinate evacuation requirements, and prepare for medical challenges across various missions. For more information about these tools and resources, refer to the following websites in the reference area of this publication:

- Joint Medical Planning Tool.
- Defense Medical Readiness Training Institute.
- NATO Joint Medical Planner Course.
- Joint Medical Operations Course.

INTEGRATING CASUALTY EVACUATION IN THE MILITARY DECISION-MAKING PROCESS

3-45. Casualty evacuation is not a separate mission; it is a supporting task that commanders integrate into their operation from the start. Like sustainment and protection, CASEVAC requires layered planning at echelon to match maneuver and maintain combat power. The MDMP offers a structured method to do this. Commanders and staffs address CASEVAC during MDMP so that evacuation plans support tempo, survivability, and mission execution, not just medical care.

3-46. CASEVAC integration begins during mission analysis. The assistant chief of staff, intelligence (G-2) or battalion or brigade intelligence staff officer (S-2) and G/S-3 assess terrain, weather, enemy activity, and friendly force structure to estimate casualty risks. The G/S-1 uses this input to project casualty numbers, while the G/S-4 and medical planner assess evacuation platform requirements. Planners identify potential CCP locations, evaluate route conditions, and assess how CASEVAC might affect maneuver timelines. They also consider nonstandard or coalition platforms that could supplement organic capability. CASEVAC is integrated with the unit's tactical movement plan to support, not disrupt, ongoing operations. This early analysis allows the commander to shape guidance, prioritize resources, and define CCIR related to casualty movement.

3-47. During course of action (COA) development, the staff builds CASEVAC directly into each COA. The G/S-3 leads this effort, working with the medical planner to align CASEVAC with tactical phases, casualty flow estimates, and platform availability. The G/S-4 confirms which vehicles, personnel, and sustainment resources can support evacuation tasks. The staff identifies likely CCPs and links them to both organic and external treatment capabilities. By embedding CASEVAC in the COA, commanders can test its feasibility,

adjust support requirements, and confirm that evacuation does not degrade maneuver or tempo. This step prevents CASEVAC from becoming an afterthought during execution.

3-48. During COA analysis and war-gaming, the staff evaluates how each COA performs under stress, including during MASCAL events, denied environments, or degraded communications. War-gaming tests CASEVAC routes, time-distance factors, and casualty load capacity. War-gaming identifies terrain chokepoints, airspace conflicts, or gaps in platform coverage. These insights inform risk mitigation, decision support templates, and commander guidance. If CASEVAC cannot meet operational demands under a given COA, planners revise the concept or develop branch plans to compensate.

3-49. In COA comparison, the staff evaluates each option's ability to provide fast, secure, and sustainable evacuation. CASEVAC is assessed alongside other sustainment and protection tasks. The recommended COA should reflect the most responsive and executable CASEVAC plan available. If gaps remain, the commander may direct resource shifts, adjust priorities, or refine the scheme of support before approval.

3-50. During orders production, the staff includes CASEVAC planning throughout the OPORD. Key instructions include CCP locations, movement timelines, platform tasking, unit responsibilities, and coordination measures with medical and nonmedical partners. CASEVAC planning also appears in the sustainment annex and supporting tabs. These details give subordinate units the information they need to plan, rehearse, and execute CASEVAC without delay. By integrating CASEVAC into MDMP, commanders link casualty movement to operational success and demonstrate commitment to protecting the force.

3-51. Table 3-2 lists key MDMP products, planning actions, and staff responsibilities for CASEVAC integration. CASEVAC should receive the same deliberate attention as fires, logistics, or communications. Staffs treat casualty evacuation as a mission-critical task, planned early, resourced properly, and synchronized across warfighting functions.

Table 3-2. Integrating casualty evacuation into the military decision-making process

Step	***Products***	***Working Groups***	***Decision Points***	***Responsible Staff Sections***
Receipt of Mission	WARNORD #1, Initial-Mission Analysis.	Planning Team, Operations.	Commander's Initial Guidance.	G/S-3, G/S-2, Sustainment (G/S-4/Medical)
Mission analysis	Mission Analysis Brief, Casualty Estimate.	Mission Analysis Working Group.	Approval of Problem Statement.	G/S-2, G/S-4, Surgeon
COA development	Draft COAs, CASEVAC Planning Guidance.	COA Development Team.	Commander's COA Guidance.	G/S-3, G/S-4, G/S-1, Surgeon
COA analysis	Wargaming Results, Refined CASEVAC Refinements.	Wargaming Team.	Adjustments to COAs based on analysis.	G/S-2, G/S-3, Sustainment
COA comparison	Decision Matrix, CASEVAC Priority List.	Planning Team.	COA Selection.	Commander, G/S-3, Surgeon
COA approval	Approved COA, Final CASEVAC Plan.	All Staff Sections.	Final Commander's Decision.	Commander, G/S-3, Surgeon
Orders production	OPORD with CASEVAC Tab and Graphics.	Planning Team.	OPORD Dissemination.	G/S-3, Surgeon, All Staff

Legend:

CASEVAC	casualty evacuation	G/S-3	operations officer
COA	course of action	G/S-4	sustainment officer
G-S-1	personnel officer	OPORD	operation order
G/S-2	intelligence officer	WARNORD	warning order

CASUALTY EVACUATION AND TROOP LEADING PROCEDURES

3-52. Company-level units and below employ TLPs to plan and prepare missions. CASEVAC is embedded throughout this process. Units designate primary and alternate aid and litter teams, identify evacuation platforms, and assign casualty flow responsibilities. Leaders reinforce these responsibilities through task organization, clear guidance, and prioritized rehearsals that include CASEVAC scenarios.

3-53. Upon receipt of the mission, leaders begin considering CASEVAC requirements based on mission objectives and anticipated threats. This includes identifying tentative CCP locations, understanding what evacuation support may be available, and determining any special equipment needed, such as fording gear, tools for negotiating rough terrain, or other mission-specific requirements. At this stage, the commander may assign responsibility for CASEVAC planning and rehearsals. Typically, platoon medics and PSGs help identify platoon-level CCPs, while the 1SG and senior medic identify the company CCP based on a map recon and, when possible, a physical leader's reconnaissance.

3-54. During the warning order, leaders communicate early CASEVAC expectations, including aid and litter team readiness, casualty flow routes, and equipment checks. Rehearsal priorities, especially for casualty movement, should be identified in the warning order. This helps shape expectations and guides subordinate leaders' preparation.

3-55. As leaders make a tentative plan, they assess terrain, enemy activity, and movement timelines to refine CASEVAC options. Leaders tentatively identify CCP locations, assess casualty flow against potential threats, and coordinate with supporting elements. At this point, CASEVAC planning remains flexible but is detailed enough to guide initial preparations.

3-56. Initiating movement includes checking CASEVAC equipment, positioning evacuation platforms, and confirming support relationships. Leaders may also task subordinate units with reconnoitering CCP sites or alternate routes. Equipment checks include vehicle readiness, litter availability, lashing, and communication tools.

3-57. During reconnaissance, leaders verify CASEVAC routes and CCP locations identified during course of action development. If reconnaissance confirms or invalidates initial assumptions, leaders adjust the CASEVAC plan accordingly. When time permits, leaders validate access to CCPs, terrain masking, or recovery feasibility.

3-58. As leaders complete the plan, they finalize CCP locations, designate CASEVAC responsibilities, and confirm signals or communication protocols. The CASEVAC plan is refined to align with the scheme of maneuver and is integrated into the unit OPORD.

3-59. When issuing the order, leaders brief CASEVAC responsibilities clearly. The OPORD should include CCP locations, movement routes, signals, and supporting units. Every Soldier understands the expected casualty evacuation process, including how and where to move casualties during execution.

3-60. Supervise and refine includes rehearsals that incorporate CASEVAC tasks. Leaders evaluate aid and litter drills, validate CCP placement, and ensure subordinate leaders can execute the evacuation plan. Adjustments are made based on rehearsal outcomes, changing terrain, or updated intelligence.

3-61. Incorporating CASEVAC into each step of the TLP builds unit readiness and reinforces responsibility for caring for the wounded. Early planning, clear roles, and realistic rehearsals help units maintain momentum during combat and preserve the force. Table 3-3 on page 29 illustrates how CASEVAC fits into each step of the TLP. This early and deliberate planning strengthens the operation and shows the unit's commitment to protecting its Soldiers.

Table 3-3. Integrating casualty evacuation into troop leading procedures

TLP Step	*CASEVAC Focus*	*Key Actions*	*Responsible Leaders*
1. Receive the Mission	Establish initial CASEVAC priorities and feasibility.	Identify available CASEVAC platforms, personnel, and medical supplies; issue initial guidance.	Commander, First Sergeant, Medic
2. Issue a Warning Order	Communicate CASEVAC intent early.	Include CASEVAC tasks and expectations in WARNORD; highlight CCP locations, or anticipated hazards.	Platoon Leader, First Sergeant
3. Make a Tentative Plan	Analyze terrain, threats, and resources affecting casualty movement.	Draft CASEVAC plan with potential routes, CCPs, and triggers for evacuation.	Platoon Leader, Medic
4. Initiate Movement	Position CASEVAC resources.	Stage vehicles, load aid kits, verify medical resupply; coordinate external CASEVAC support if needed.	Platoon Sergeant, Squad Leaders
5. Conduct Reconnaissance	Confirm CASEVAC feasibility on the ground.	Validate routes, CCP locations, and terrain suitability; adjust plan based on obstacles or threats.	Platoon Leader, Medic
6. Complete the Plan	Finalize CASEVAC details and alignment with scheme of maneuver.	Confirm roles, communications, and timeline for casualty movement; crosswalk with sustainment actions.	Platoon Leader, First Sergeant
7. Issue the Operation Order	Clearly assign CASEVAC roles and procedures.	Brief CASEVAC plan (routes, CCPs, responsibilities); ensure shared understanding among all personnel.	Platoon Leader, Medic
8. Supervise and Refine	Rehearse and adapt CASEVAC plan.	Conduct drills and backbriefs; inspect equipment; adjust plan based on intel or environmental changes.	Platoon Leader, NCOs

Legend:
CASEVAC casualty evacuation
CCP casualty collection point
NCO noncommissioned officer
TLP troop leading procedure
WARNORD warning order

CHALLENGES AND MITIGATION

3-62. CASEVAC operations rely on nonmedical vehicles that were not designed to carry or care for casualties. Unlike MEDEVAC platforms, which include medical equipment and trained crews, CASEVAC platforms often lack basic features like litter mounts, stabilization equipment, and protective interiors. This limitation creates significant risks during movement and places the burden of adaptation on unit leaders and Soldiers.

3-63. Most standard Army vehicles do not have dedicated CASEVAC capability, forcing Soldiers to improvise under stress. Units often use cargo trucks, utility vehicles, or rotary-wing aircraft without medical interiors to move wounded personnel. When leaders fail to plan, these efforts may result in preventable deaths, delayed care, or further additional injuries during transport.

3-64. Commanders cannot assume they will have time or flexibility to create CASEVAC solutions during contact. They assess available vehicles early in mission planning to see if they can safely carry casualties. Planners should ask:

- Can a NATO-standard litter fit inside?
- Can the litter be secured?
- If not, can the casualty be laid down and transported without risk of harm?

3-65. If the answer to any of those questions is no, commanders develop alternatives before operations begin. Units should identify CASEVAC-capable platforms, modify them to support casualty movement, and remove obstacles like troop seats or gear racks. Even when rotary-wing aircraft lack medical interiors, planners should include them in CASEVAC load plans to expand lift options.

3-66. Failing to plan for CASEVAC increases the risk of losing Soldiers who could otherwise survive. Delays or confusion during movement can make injuries worse or cause casualties to die before reaching medical care. Commanders protect their formation and fulfill their duty to the wounded by addressing CASEVAC early and deliberately.

3-67. Tactical leaders plan for casualties to receive medical care as far forward as the mission allows. Early care improves survival and helps stabilize Soldiers during CASEVAC. When needed, this may involve coordinating forward damage control resuscitative or surgical support on a temporary basis. These capabilities align with the mission and be coordinated with higher medical authorities to avoid creating unnecessary risk.

3-68. Commanders take full ownership of CASEVAC planning and include it during mission analysis. Treating CASEVAC as a last-minute problem invites loss of life and weakens combat power. CASEVAC is a tactical and operational responsibility that supports the unit's ability to fight, recover, and continue the mission.

3-69. CASEVAC platforms lack the equipment and personnel needed to treat injuries during transport. Commanders should equip designated CASEVAC vehicles with basic medical kits and train vehicle operators in TCCC. These simple steps prepare units to respond when MEDEVAC is delayed or unavailable.

3-70. CASEVAC also competes with other transportation needs during high-tempo operations. Moving casualties requires planners to balance medical needs with other mobility tasks like resupply or maneuver. By prioritizing CASEVAC in advance and coordinating lift requirements, units can avoid delays and reduce operational friction.

3-71. The psychological effects of CASEVAC should not be ignored. Watching a wounded teammate evacuated under uncertain conditions can hurt morale. Leaders should speak clearly to their formations, explain the plan, and reinforce the Army's commitment to care for every WII Soldier. Honest communication builds trust and helps maintain unit cohesion during stress.

3-72. When CASEVAC is planned and executed well, it keeps the force in the fight. It gives wounded Soldiers a better chance to survive, clears the battlefield for follow-on operations, and strengthens combat readiness. Effective CASEVAC demonstrates that Army leaders are prepared to act under pressure and meet their responsibility to protect the force, even in contested or resource-limited environments.

RISK MITIGATION AND SURVIVABILITY IN CASUALTY EVACUATION

3-73. CASEVAC operations face multiple risks that can disrupt evacuation and endanger both casualties and evacuation teams. These threats include direct and indirect fire, jamming or loss of communication systems, cyberattacks, and terrain that limits movement. Commanders and planners assess these threats early and develop mitigation strategies, such as identifying alternate evacuation routes, building communication redundancies, and coordinating with maneuver units for secure movement. Integrating these measures into the CASEVAC plan reduces the risk of mission failure and improves the chances of safely moving casualties.

3-74. In denied or degraded environments, CASEVAC may require covered and concealed movement, deception, or terrain masking to avoid detection and enemy threats. Commanders prepare for situations where MEDEVAC is not available by identifying nonmedical platforms and training personnel in basic casualty handling techniques. Since CASEVAC typically lacks en route medical care, unless specifically arranged, units focus on triage, patient stabilization, and coordination with higher medical echelons. A well-developed CASEVAC plan improves survivability by allowing evacuation to continue even when conditions worsen or adversaries attempt to interfere.

3-75. CASEVAC helps preserve combat power and supports continuous operations. It is incorporated into key warfighting functions, such as maneuver, protection, and sustainment. Commanders and staffs use the

MDMP to integrate CASEVAC at every echelon, ensuring it supports the broader concept of operations. By synchronizing CASEVAC with operational enablers and addressing threats through early planning, units maintain tempo, care for the wounded, and improve mission success.

ENVIRONMENTAL PLANNING FACTORS

3-76. Conducting CASEVAC in diverse environments, such as urban areas, subterranean spaces, mountainous terrain, cold weather regions, jungles, deserts, arctic zones, maritime settings, and CBRN conditions, requires terrain-specific planning. Each environment has its own unique challenges and mitigation measures. Commanders adjust CASEVAC procedures to account for these factors and keep evacuation efforts reliable. By tailoring operations to the environment, commanders strengthen maneuver efforts and maintain evacuation readiness across all terrain types. This flexibility helps units remain effective, even in the most demanding operational conditions.

3-77. Appendix A provides important insights into improving the Army's evacuation capabilities to meet the varied demands of CASEVAC across different terrains. Whether evacuating casualties from the arid expanses of a desert or the dense foliage of a jungle, each environment requires specific equipment and strategy adjustments. For example, in extreme cold, units address hypothermia risks during evacuation, while urban operations may require detailed route reconnaissance to navigate complex infrastructure. These adaptations help deliver timely and effective medical care, preserve Soldier health and morale, and reinforce overall operational readiness.

3-78. Commanders adjust CASEVAC strategies to address the demands of specific environments. In mountainous terrain, limited LZs may force reliance on ground evacuation or rope extractions. In jungle settings, thick vegetation may require clearing for rotary-wing aircraft or using smaller platforms with short landing capability. Urban operations often call for alternate routes and additional security due to blocked roads or enemy threats. Commanders plan for these factors by modifying equipment, adjusting training, and coordinating CASEVAC tasks to meet mission requirements in each environment.

3-79. CASEVAC planners also account for environmental hazards and seasonal conditions that may affect evacuation, such as typhoons, monsoons, flash flooding, sandstorms, or extreme heat and cold. These hazards can limit or delay evacuation operations by closing LZs, degrading visibility, or impeding ground movement. Planning should identify platform-specific capabilities, such as hoists, rescue baskets, or water-landing gear, and confirm whether supporting aviation or maritime assets have the necessary equipment for the operating environment. Early identification of these factors allows units to select alternate platforms, adjust timelines, or pre-position equipment to maintain evacuation readiness.

3-80. Well-developed CASEVAC plans in difficult environments help units deliver medical care and keep maneuver elements mission capable. Rehearsals and training tailored to the terrain sharpen coordination and improve response times. These efforts help maintain unit strength and support successful operations in complex settings. By incorporating terrain-specific CASEVAC planning into the broader scheme of maneuver, commanders strengthen survivability and operational reach. For additional planning factors or considerations, see Appendix A.

URBAN AND SUBTERRANEAN ENVIRONMENTS

3-81. Planning for CASEVAC in urban and subterranean environments requires a comprehensive approach across theater strategic, operational, and tactical levels. These environments pose unique challenges, including dense infrastructure, limited access points, civilian presence, and degraded communications. Each echelon contributes to a synchronized evacuation effort that supports uninterrupted care and movement of casualties.

3-82. At the theater strategic level, leaders prioritize resource allocation, such as prepositioning medical supplies and identifying potential triage and treatment sites in or near safe zones. Collaboration with allied forces, host-nation partners, and nongovernmental organizations expands access to supplies, facilities, and transportation assets that may not otherwise be available to the joint force. These partnerships also support shared situational awareness and promote unified messaging in densely populated areas.

3-83. Operational planning in urban and subterranean environments focuses on identifying routes, assessing risk, and coordinating movement between CCPs and evacuation nodes. These operations often include both

surface and subterranean objectives. For this reason, planners should position CCPs near identified portals of entry to support breaching and extraction. As maneuver units progress underground, CASEVAC plans include aid-and-litter team shuttle systems that can operate within confined spaces and follow the assault force. Staff also evaluate structural integrity, detect explosive or chemical threats, and establish AXPs to transfer casualties to evacuation platforms. Intelligence, engineer, and protection staff support the identification of viable routes, chokepoints, and hazards that affect CASEVAC movement.

3-84. Tactical planning centers on safe and rapid casualty extraction from confined, obstructed, or collapsed spaces. Units establish and manage CCPs close to the POI and train CASEVAC teams to use equipment such as litters, pulleys, breaching tools, and protective gear. Platform hardening, noise and light discipline, and redundant communications reduce risk during movement. In subterranean terrain, signal interference may prevent radio communication, so units plan for alternate methods to maintain contact with higher headquarters and medical elements.

Mountain and Cold Weather Environments

3-85. CASEVAC planning in mountain and cold weather environments requires a deliberate approach across theater strategic, operational, and tactical levels. These environments pose serious logistical and environmental challenges, including high altitudes, extreme temperatures, and difficult terrain. Each echelon adapts its planning to account for limited mobility, weather delays, and increased risk to both casualties and evacuation teams.

3-86. Theater strategic level planning focuses on allocating and positioning resources before operations begin. Cold-weather clothing, equipment for treating frostbite and hypothermia, and snow-capable vehicles are prepositioned to sustain casualty movement. Collaboration with allied forces or host-nation units improves resource availability by giving planners access to existing supply caches, terrain-specific transport platforms, and experienced personnel. These partnerships can reduce the need to deploy additional assets from outside the area of operations.

3-87. At the operational level, staffs plan and synchronize casualty flow across multiple units and locations. They identify viable evacuation routes, staging areas, and AXPs, while tracking weather patterns and snowpack stability. Although they do not control or directly monitor patient movement from company level CCPs, they maintain awareness of subordinate unit status, casualty trends, and operational conditions to forecast when brigade or division level CASEVAC resources may be required. Role 2 capabilities placed near assembly areas can shorten evacuation distances and improve survival rates.

3-88. Tactical planning focuses on casualty care at the POI and movement to the CCP. Units operating in cold or mountainous terrain establish CCPs close to fighting positions and manage them until casualties can be evacuated. CASEVAC teams are trained and equipped to operate in extreme cold, maintain communication under harsh conditions, and adapt to delays caused by snow, terrain, or enemy activity. When isolated, CASEVAC teams may need to use survival skills such as building shelters, melting snow for water, or managing hypothermia until evacuation resumes.

Jungle Environment

3-89. Planning for CASEVAC in the jungle environment requires consideration at theater strategic, operational, and tactical levels. Each level addresses the challenges of dense terrain, heavy rainfall, and limited infrastructure to support successful CASEVAC operations.

3-90. Theater strategic planning focuses on resource prepositioning, including medical supplies and durable equipment resistant to humidity and corrosion. Establishing MTFs close to operational areas reduces evacuation times. Collaboration with allied forces or host-nation partners familiar with jungle operations enhances resource sharing and operational effectiveness.

3-91. Operational planning prioritizes route selection, identification of ambulance loading points or AXPs, and integration of aerial assets for evacuation. Planners assess the terrain's impact on movement and identify areas that can support rotary-wing aircraft landings, hoist operations, or waterborne extractions.

3-92. Tactical planning emphasizes immediate casualty care and flexible extraction methods. Teams prepare for extended delays due to difficult terrain and weather, ensuring they carry sufficient medical supplies for

prolonged care and patient stabilization. Communication plans are critical, as the jungle often disrupts radio signals, requiring alternative signaling or relay methods.

DESERT ENVIRONMENT

3-93. Effective CASEVAC planning in desert environments requires a multi-level approach that integrates theater strategic, operational, and tactical considerations. While the core principles of CASEVAC remain consistent across all operational settings, each environment presents distinct challenges that require tailored solutions to support timely evacuation, efficient resource use, and effective risk mitigation.

3-94. Theater strategic planning in desert environments prioritizes the availability and distribution of CASEVAC assets across expansive and often inhospitable terrain. Pre-positioning essential resources, such as water, medical supplies, and CASEVAC platforms near high-risk areas, enhances response time and survivability. Close collaboration with coalition partners facilitates resource sharing and extends operational reach, mitigating the logistical burdens imposed by vast distances and harsh environmental conditions.

3-95. Operational planning focuses on mapping evacuation routes, establishing staging areas, and ensuring logistical sustainability. While CCPs remain a tactical level responsibility, operational planners maintain awareness of casualty movement from CCPs and coordinate AXPs to facilitate timely transfer to Role 2 or Role 3 MTFs. Key considerations include:

- Identifying terrain features that provide natural cover or influence movement.
- Ensuring fuel resupply points along extended routes to sustain CASEVAC mobility.
- Integrating robust communication networks to maintain coordination despite environmental disruptions.
- Coordinating with information collection assets to monitor threat levels and adjust operations accordingly.

3-96. Tactical planning emphasizes the execution of CASEVAC missions under austere and potentially hostile conditions. Units are responsible for establishing CCPs close to the POI, where casualties are triaged and stabilized for further evacuation. CASEVAC teams are prepared for:

- Casualty care techniques adapted to heat-related injuries and dehydration risks.
- Platform hardening and mobility to counter threats such as ambushes and explosive hazards on open terrain.
- Route selection and contingency planning to account for platform breakdowns, dust storms, and extended response times.

ARCTIC AND EXTREME COLD ENVIRONMENTS

3-97. Planning for CASEVAC in arctic and extreme cold environments requires theater strategic, operational, and tactical considerations to address the unique challenges of arctic and extreme cold-weather operations. Each level of planning accounts for terrain, weather, and limited resources.

3-98. Theater strategic planners focus on positioning cold-weather medical supplies, shelters, and vehicles in key locations before operations begin. These vehicles should be equipped to move over snow and ice. Planners build strong logistics networks and coordinate with allied forces experienced in cold-weather operations. They confirm that aerial evacuation assets are prepared to operate when snow and ice make ground routes unusable.

3-99. At the operational level, planners identify evacuation routes that remain open and safe during freezing conditions. They also establish warming stations or shelters along those routes to reduce cold-weather exposure. Regardless of the environment, planners include CCPs, AXPs, and ambulance loading points to support timely transfer of casualties. Coordination with intelligence teams helps monitor enemy activity and forecast changes in weather that could disrupt evacuation timelines. MTFs are prepared to manage cold-related injuries such as frostbite, trench foot, and hypothermia.

3-100. Tactical teams focus on stabilizing casualties and using gear made for cold-weather environments. They conduct detailed route checks to avoid delays. Since bad weather can stop evacuation, teams carry survival kits to protect both casualties and themselves during long prolonged holding periods.

MARITIME AND LITTORAL ENVIRONMENTS

3-101. Planning for CASEVAC in maritime and littoral environments requires theater strategic, operational, and tactical considerations to address the challenges of waterborne operations and coastal terrain. Maritime environments refer to open water and deep-sea operations conducted from naval vessels or other large watercraft. Littoral environments are coastal areas where land and sea meet, including harbors, estuaries, and near-shore waters where operations involve both land and maritime forces. Effective planning supports the safe and timely evacuation of casualties under these conditions.

3-102. Theater strategic planning focuses on allocating specialized CASEVAC assets, such as amphibious vehicles, naval vessels, and rotary-wing aircraft capable of operating in maritime environments. Prepositioning medical supplies on ships or forward operating bases in coastal regions enhances responsiveness. Collaboration with naval and coalition forces improves resource availability and operational reach.

3-103. Operational planning emphasizes identifying safe extraction points, such as docks, beaches, or designated rotary-wing aircraft LZs. Planners account for tidal patterns, weather conditions, and enemy presence in these areas. Establishing staging areas and integrating intelligence about the maritime domain are critical for ensuring effective CASEVAC operations.

3-104. Tactical planning prioritizes casualty care and secure movement to extraction points. CASEVAC teams develop contingency plans for evacuating casualties during adverse weather or enemy engagements. Rapid-reaction watercraft and small rotary-wing aircraft provide critical capability for navigating confined littoral zones and responding to emergencies.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR ENVIRONMENTS

3-105. Planning for CASEVAC in a CBRN environment requires a multi-tiered approach, addressing theater strategic, operational, and tactical considerations. The commander, CBRN staff officer, and unit leaders provide CBRN threat and hazard information during the deliberate planning process. The medical officer provides threat information, including endemic disease and other occupational environmental hazards present in the assigned area. Planning includes CBRN vulnerability assessments and casualty estimates into decision briefings and orders. Effective planning facilitates the accomplishment of the mission under hazardous conditions while minimizing casualties. For more information on CBRN planning, refer to ATP 3-11.36.

3-106. Several factors influence CASEVAC in a CBRN environment. These include DOW policies, agreements with host-nations, and theater strategic level planning. Public perception and enemy propaganda may also influence available COA involving contaminated personnel or equipment.

3-107. CASEVAC from CBRN-contaminated areas often requires theater strategic level coordination. U.S. and host-nation policies may restrict the handling, movement and transport of contaminated personnel and equipment. Strategic air evacuation is coordinated with medical authorities, the Combatant Commander, and U.S. Transportation Command. Final approval for evacuation rests with the Secretary of War.

3-108. To execute a coordinated response, commanders establish clear communication protocols for reporting contamination mission-oriented protective posture (MOPP) levels and casualties. Collaboration with allied forces and host-nation authorities enhances resource sharing and strengthens overall response efforts. For additional guidance on CBRN planning at the theater strategic level, refer to JP 3-11.

3-109. Planning for operations in a CBRN environment focuses on enabling commanders to fight and win. This includes the movement of personnel and equipment within and out of theater. Planning enables the accomplishment of mission-essential tasks under CBRN conditions. This involves vulnerability analysis, determining CBRN threat status, and ensuring the availability and employment of CBRN protective equipment and assets. The CBRN annex on an OPORD addresses critical considerations such as operational exposure guidelines, radiation exposure status, and identifying MTF capable of advanced treatment of CBRN-contaminated casualties. Incorporating this information into operational planning for CASEVAC is essential. Synchronizing CBRN, medical, and CASEVAC consolidates, and aligns resources to support the operational mission.

3-110. Tactical CBRN planning should address threats and hazards identified through intelligence and deliberate mission planning. At the tactical level, this includes conducting vulnerability assessments,

establishing automatic masking criteria, analyzing MOPP and heat stress risks, and identifying linkup points for decontamination. The CBRN Warning and Reporting System provides the primary means for alerting units to actual or anticipated hazards and supports the development of the common operational picture. Units use this system to plan CBRN operations such as route decontamination, reconnaissance, contamination crossings, and personnel warnings. CASEVAC teams must have access to this system to avoid contaminated areas and adjust evacuation routes accordingly. Teams prepare contingency plans for delayed or disrupted evacuations, including unreported or secondary contamination. Redundant communication systems help sustain CASEVAC operations in degraded or denied environments. For additional guidance, refer to Technical Manual (TM) 3-11.32.

ROUGH TERRAIN

3-111. Planning for CASEVAC in rough terrain requires a comprehensive, multi-echelon approach that integrates theater strategic, operational, and tactical considerations. Each level of planning accounts for terrain constraints, limited mobility, and the potential for prolonged evacuation times.

Theater Strategic Planning

3-112. Theater strategic planning supports CASEVAC by shaping the operational environment, not by directing tactical execution. Strategic planners focus on coordinating resources, building access to partner capabilities, and aligning medical support across joint and multinational formations. This plan includes the forward positioning of medical materiel, mobility platforms, and CASEVAC-enabling equipment to reduce response times in high-risk areas. Planners also coordinate with other Services, interagency partners, and coalition forces to improve interoperability. Because CASEVAC is a tactical task, theater-level efforts focus on setting the conditions that allow subordinate commanders to execute CASEVAC under diverse operational conditions.

3-113. Planners at this level consider variations in terrain, threat, and force composition across the theater. They may need to support operations in jungle, desert, mountain, or littoral environments, all with different implications for evacuation. To address this, strategic planners establish policy, identify resource requirements, and coordinate theater-wide training opportunities. Early issue of specialized CASEVAC related equipment, such as casualty restraints or mountaineering litters, gives tactical units time to train before deployment. These efforts follow joint doctrine and support the broader HSS architecture, including access to intertheater evacuation platforms and joint patient movement systems. Strategic-level coordination enhances the ability of subordinate formations to execute CASEVAC as part of their mission.

Operational Planning

3-114. At the operational level, planners focus on establishing the conditions necessary for subordinate units to conduct effective casualty evacuation. This includes identifying suitable terrain for CCPs, evaluating the viability of ground and air evacuation routes, and integrating evacuation into the scheme of support. Operational staffs coordinate closely with joint and multinational medical partners to ensure rotary-wing or fixed-wing platforms are positioned to support the mission. They also help define where MTFs should be staged to meet evacuation timelines and patient flow demands. CASEVAC remains a tactical task, but operational planners provide the resources, policy guidance, and situational awareness that allow subordinate units to execute it.

3-115. Key staff sections contribute to this planning effort. The G/S-3 (Operations) aligns medical evacuation support with the maneuver plan and establishes control measures for CCPs and LZs. The G/S-4 (Logistics) supports medical resupply, fuel planning, and platform maintenance. The G/S-3 Air coordinates lift assets, while the G/S-2 (Intelligence) monitors enemy activity, terrain changes, and environmental conditions. These staff sections do not manage the movement of casualties but instead support the positioning of evacuation assets, sustainment enablers, and communications systems that make CASEVAC and MEDEVAC feasible at the tactical level.

3-116. Operational staffs reassess evacuation conditions continuously. Flooded routes, damaged trails, or enemy interdiction can delay or deny evacuation, placing wounded personnel at increased risk. Intelligence updates are timely, accurate, and relevant to support rapid adjustments. This includes reporting new enemy threats along planned routes, changes in terrain accessibility, and the availability of alternate extraction sites.

When operational planners integrate this information into the common operating picture, they improve support to subordinate formations, reduce evacuation delays, and strengthen the alignment of medical capabilities with the overall operation.

Tactical Planning

3-117. Tactical-level planning prepares CASEVAC teams to operate in challenging environments. Teams are equipped with lightweight, portable medical kits, stretchers, climbing gear, and rope systems for casualty extractions in difficult terrain. They also require training that matches the demands of the operational environment.

3-118. Weather is a key consideration in planning, as rain, snow, or extreme temperatures can affect both evacuation routes and the endurance of litter teams. CASEVAC teams should have:

- Contingency plans for delayed evacuations, including alternate routes and patient sustainment measures.
- Pre-identified LZs along dismounted routes to support rapid air evacuation when aviation assets become available.
- Personnel trained in advanced litter techniques and high-angle rescue methods to move casualties safely through restrictive terrain.

CASUALTY MANAGEMENT

3-119. Casualty management during CASEVAC operations requires coordination, judgment, and trained personnel at every level. Medical personnel conduct medical regulating to determine the best destination for each casualty based on injury severity, the number of patients, and the capacity of nearby MTFs. *Medical regulating* is the coordination for the movement of patients to match patients with an appropriate medical treatment facility (JP 4-02).

3-120. If en route care is not available, leaders consider how long a casualty can survive without their condition worsening. While medical personnel are preferred for triage, all personnel involved in CASEVAC are trained to perform basic triage tasks. Nonmedical personnel are often the first to reach WII Soldiers, and their ability to assess, secure, and move casualties can save lives. Training these personnel to identify patient categories and provide basic care during transport improves the effectiveness and survivability of CASEVAC missions.

3-121. Casualties should be transported to the nearest CCP, AXP, MTF, or other sites where medical personnel are located. However, CASEVAC may not always follow a linear or rearward direction. In dynamic operational environments, casualties may need to be moved forward toward the forward line of troops (known as FLOT) or laterally to adjacent units. These movements can occur when MTFs are bounding forward to maintain proximity to maneuver forces or when relocation is required to adapt to combat operations. This non-linear approach helps maintain timely access to care despite changing battlefield conditions.

3-122. To manage these complexities, casualty movement and prioritization are coordinated. Command surgeons, working closely with the G/S-1 and G/S-4, play a key role in identifying effective evacuation routes and destinations. Although this is not a formal medical regulating process, well-coordinated casualty movement supports efficient resource allocation, prioritization based on medical urgency, and real-time awareness of available MTFs. This coordination improves the use of evacuation assets, avoids bottlenecks, and increases the survival and recovery of casualties.

3-123. Effective casualty management requires a combination of clear guidelines, flexible planning, and strong command oversight. Commanders and medical personnel establish standardized procedures for determining the severity of injuries and patient categories, ensuring consistency and accuracy in triage decisions. This proactive approach enables personnel to make informed decisions, even in high-stress situations, and helps to prevent errors that can have serious consequences.

3-124. Accurate prioritization of casualties, also known as triage, is crucial to ensuring that WII personnel receive the appropriate level of care as quickly as possible. Errors in triage can have serious consequences:

- Over-prioritization, treating minor injuries as urgent, can overload medical resources, diverting attention from critically WII personnel.
- Under-prioritization, failing to recognize life-threatening injuries, can delay urgent care, leading to preventable deaths or worsened medical outcomes.

3-125. These mistakes can result in poor care during transport, delays in patient movement, and misallocation of evacuation resources. To prevent these issues, commanders and medical personnel train their units on the principles of triage, the significance of accurate casualty assessment, and the risks of misclassification. Training should emphasize:

- Rapid injury assessment techniques to correctly determine severity.
- Proper assignment of priority levels to match casualties with the right care.
- Seeking medical expertise whenever possible to enhance decision-making under pressure.

3-126. By reinforcing these skills, units can improve decision-making in critical situations, ensuring casualties receive the care they need while maintaining the overall effectiveness of evacuation operations. Proper triage and prioritization not only enhance survival rates but also optimize the use of available medical and evacuation resources, preventing unnecessary strain on the system.

3-127. Regular review and assessment of CASEVAC operations are essential for identifying areas of improvement and optimizing the use of evacuation assets. Commanders and their teams should conduct thorough after action reviews (AARs), analyzing what worked, what did not, and how procedures can be improved. They should also gather feedback from medical personnel and other stakeholders to inform future planning. By fostering a culture of continuous evaluation and adaptation, units can keep CASEVAC operations responsive to the changing demands of the mission.

The following paragraph is in consonance with Standardization Agreement (STANAG) 3204

3-128. The most severe casualties, those categorized as URGENT or URGENT-SURG, should be evacuated before those classified as PRIORITY or ROUTINE. However, leaders monitor lower-priority casualties closely and evacuate them before their condition worsens to the point of requiring an upgrade in precedence. URGENT and URGENT-SURG casualties should be transported by ambulances that can provide en route medical care. If a nonmedical asset is used to move one of these patients, that casualty should be transferred to a ground or air ambulance at the first opportunity or delivered directly to a supporting medical treatment facility.

3-129. Planners should incorporate the use of nonmedical air assets and dedicated ground ambulances for moving PRIORITY casualties when medical evacuation platforms are limited. Similarly, nonmedical ground vehicles may be used to transport ROUTINE precedence patients if no dedicated medical assets are available. When CASEVAC platforms are used, every effort should be made to assign medical personnel to accompany the patient, even for ROUTINE cases. See table 3-4 on page 38 for categories of evacuation precedence.

Table 3-4. Categories of evacuation precedence

Priority I, URGENT (movement within 1 hour)	Is assigned to emergency cases that should be evacuated as soon as possible and within a maximum of one hour to save life, limb, or eyesight and to prevent complications of serious illness and to avoid permanent disability.
Priority IA, URGENT-SURG[1] (movement within 1 hour)	Is assigned to patients that should be evacuated as soon as possible and within a maximum of one hour, who must receive far forward surgical intervention to save life, limb, or eyesight, and to stabilize for further evacuation.
Priority II, PRIORITY (movement within 4 hours)	Is assigned to sick and wounded personnel requiring prompt medical care. This precedence is used when the individual should be evacuated within four hours, or if their medical condition could deteriorate to such a degree that they will become an URGENT precedence, or whose requirements for special treatment are not available locally, or who will suffer unnecessary pain or disability.
Priority III, ROUTINE (movement within 24 hour)	Is assigned to sick and wounded personnel requiring evacuation but whose condition is not expected to deteriorate significantly. The sick and wounded in this category should be evacuated within 24 hours.
Priority IV, CONVENIENCE[1] (movement within no time limit)	Is assigned to patients for whom evacuation by medical platform is a matter of medical convenience rather than a necessity.
Note. The NATO STANAG 3204 has deleted the categories of Priority IA (URGENT SURG) and Priority IV (CONVENIENCE); however, these categories are still included in the United States Army evacuation priorities as there is a requirement for it in an operational environment.	

RESPONSIBILITIES

3-130. The Service component commander is responsible for coordinating and executing CASEVAC. While not equipped with MEDEVAC capabilities, nonmedical platforms such as rotary-wing and fixed-wing aircraft can be used to evacuate casualties under appropriate conditions. These platforms are often provided by the Army, Air Force, or Navy, depending on operational needs, and are prepared to adapt to different CASEVAC scenarios.

3-131. CASEVAC relies on a combination of military assets, including tactical rotary-wing aircraft, transport aircraft, and other platforms that may be pressed into Service during evacuation operations. The Army may provide ground and rotary-wing transport, often leveraging its combat aircraft for tactical CASEVAC in support of joint and allied forces. For fixed-wing CASEVAC, the Air Force or Navy may assume responsibility depending on the location and available platforms.

3-132. Coordination between Services is essential for effective CASEVAC operations, especially when adapting to changing battlefield conditions, enemy threats, or logistical challenges. Nonmedical aircraft, such as the CH-47 Chinook or C-130 Hercules, are often repurposed for CASEVAC when medical platforms are unavailable or overwhelmed. Integrating CASEVAC into evacuation plans adds flexibility and enables rapid response, but it requires thorough planning, pre-mission coordination, and training to reduce risk and support the safe transport of casualties.

UTILIZING EVACUATION PRECEDENCE FOR EVACUATION DETERMINATION

3-133. In combat and operational environments, evacuating casualties is critical to preserving life and combat effectiveness. The evacuation precedence system helps medical personnel allocate resources based on the severity of each patient's condition. However, MEDEVAC may not always be available due to mission priorities, limited resources, or hostile conditions. In these situations, CASEVAC provides an alternative to prevent delays in life-saving treatment.

3-134. Commanders, medical teams, and unit leaders decide whether to use MEDEVAC or CASEVAC based on several factors:

- Evacuation Precedence:
  - Priority I (URGENT) and Priority IA (URGENT-SURG) cases require MEDEVAC whenever possible due to the need for rapid transport and en route care. However, if MEDEVAC assets

are unavailable, CASEVAC should be immediately coordinated using the fastest available transportation.
    - Priority II (PRIORITY) cases may be evacuated using either MEDEVAC or CASEVAC, depending on the availability of medical transport and the risk of deterioration.
    - Priority III (ROUTINE) and Priority IV (CONVENIENCE) cases are ideal for CASEVAC to preserve MEDEVAC resources for critical cases.
- Availability of MEDEVAC Assets:
    - If task organized MEDEVAC platforms (air or ground) are available, MEDEVAC should be the first choice for any patient with life-threatening injuries.
    - When MEDEVAC assets are unavailable, delayed, or grounded due to enemy threats, commanders should immediately coordinate CASEVAC using ground combat vehicles, rotary-wing aircraft, or logistics convoys.
- Tactical and Environmental Factors:
    - Hostile environments, contested airspace, or logistical constraints may prevent the use of MEDEVAC. In such cases, CASEVAC is implemented using available transportation.
    - Nonmedical ground or air assets (such as troop carriers, supply trucks, or cargo rotary-wing aircraft) may be adapted for emergency transport if MEDEVAC is not an option.

3-135. To support seamless casualty movement, medical planners should:
- Pre-designate CASEVAC routes using nonmedical platforms as a contingency for MEDEVAC delays.
- Train combat units on basic casualty care techniques so they can sustain patients during CASEVAC.
- Develop MEDEVAC-to-CASEVAC transition protocols so that urgent patients do not wait for unavailable MEDEVAC assets.
- Equip nonmedical platforms with basic medical supplies (such as litters, and first-aid kits) for emergency use during CASEVAC.
- Identify additional equipment casualties and patients may require in extreme environments such as extra blankets or weather-specific protective gear.
- Ensure CASEVAC teams understand and can apply standard triage categories, casualty markings, and patient documentation requirements in accordance with unit SOPs and applicable joint or multinational procedures.

3-136. Effective casualty movement requires flexibility and rapid decision-making. While ground MEDEVAC remains the primary method with air MEDEVAC as the preferred method for critically WII personnel. When MEDEVAC is unavailable, CASEVAC provides an alternate means of evacuation, reducing unnecessary delays in care. By integrating evacuation precedence into planning and establishing CASEVAC as a viable backup, commanders support timely and effective patient movement in any operational environment.

Behavioral Health Casualties

3-137. Behavioral health casualties, such as those resulting from combat and operational stress, can significantly impact readiness and command effectiveness. Commanders should coordinate with behavioral health elements to manage these cases early and close to the POI, when possible, to facilitate rapid RTD. However, evacuation may be necessary when operational demands or medical evaluations warrant removal from the combat zone. CASEVAC assets may be used to evacuate behavioral health casualties when required. Balancing the preservation of combat power with the imperative to unburden commanders is critical to sustaining long-term operational effectiveness. For detailed guidance on procedures, planning considerations, and treatment for behavioral health casualties, commanders and staff should, refer to—
- ATP 4-02.8 for combat operational stress control team structure, behavioral health triage, and treatment and return-to-duty protocols.
- ATP 4-02.13 for planning and execution of CASEVAC, including behavioral health casualty considerations.

Physiological Considerations in Casualty Evacuation

3-138. CASEVAC planning often emphasizes logistical and tactical factors such as vehicle speed, route selection, and resource availability. However, the anatomical and physiological constraints of casualties play

an equally critical role in determining the urgency, method, and feasibility of evacuation. Several factors affect whether a WII Soldier survives and recovers. These include how quickly they get treatment, how much blood they lose, how well they can breathe, whether their spine is stable, and how they can handle movement, changes in altitude, and the environment. Transporting a casualty is not simply a function of distance and speed, it accounts for individual physiological responses to evacuation stressors.

3-139. For example, casualties in hemorrhagic shock (shock from severe blood loss) deteriorate rapidly without immediate resuscitation and require the fastest evacuation method available. In contrast, a casualty with a minor fracture may not require immediate transport and can wait for optimized CASEVAC conditions. Spinal cord injuries demand risk management, which means minimal movement and body stabilization, to prevent further neurological damage, requiring specialized transport techniques. Similarly, air CASEVAC introduces considerations such as barometric pressure changes, which can worsen conditions like pneumothorax (collapsed lung) and require decompression procedures before flight.

3-140. Effective CASEVAC planning requires understanding how the human body responds to trauma, blood loss, and shock. Anatomical principles help leaders recognize which injuries are most life-threatening, such as those involving the chest, head, or major arteries. Physiological principles guide decisions about how quickly the body can deteriorate without treatment, especially when dealing with breathing problems, blood circulation, or changes in consciousness. By applying these principles, leaders prioritize the movement of casualties who need urgent care first. This approach supports both medical and operational priorities by helping units evacuate the right casualty at the right time, preserving life, and maintaining combat power.

Restriction of Movement, Isolation, and Quarantine

3-141. To prevent the spread of an infectious disease or contagious illness, public health authorities use different strategies. Three of these strategies are: restriction of movement, isolation, and quarantine. These are common practices in public health and aim to prevent and control exposure to unexposed and uninfected individuals to potentially infected or infectious persons. These measures may be voluntarily implemented or be a directive by public health authorities, or by military commanders.

3-142. Infectious disease outbreaks, such as Ebola or other high-risk pathogens, require coordination at the theater strategic level so that CASEVAC operations comply with international, national, and military health regulations. When moving casualties across international or state borders, restrictions from host-nations, coalition partners, or local governments may delay or block evacuation routes, access to definitive care, or patient transfers. Theater strategic planning addresses legal, logistical, and diplomatic factors when conducting CASEVAC during a public health emergency.

3-143. In the event of an outbreak, commanders and medical planners at the corps, theater Army, or equivalent joint or multinational headquarters engage with:

- The Department of State to secure diplomatic clearances for the evacuation of WII across international borders.
- The Centers for Disease Control and Prevention and Host-Nation Health Authorities to comply with quarantine requirements and public health protocols.
- Relevant international health organizations and regulatory frameworks (such as the World Health Organization or International Health Regulations) to support coordination with host-nations and multinational partners.
- Military and civilian air transport authorities to arrange for specialized evacuation (such as aeromedical isolation units for highly infectious patients).

3-144. Special considerations for high-risk disease CASEVAC include:

- Designating regional quarantine and treatment facilities before an outbreak occurs.
- Pre-positioning personal protective equipment (PPE) and isolation transport capabilities in high-risk theaters of operation.
- Training military medical personnel in infectious disease containment and aeromedical isolation procedures.

- Using dedicated biocontainment assets (such as Airborne Biological Containment Systems used in past Ebola responses).
- Coordinating with host-nation and coalition forces so that cross-border patient movement aligns with international travel restrictions, entry and exit requirements, and public health protocols.

3-145. During a declared public health emergency, a commander, in consultation with the public health emergency officer, may exercise special powers relating to people necessary to prevent the spread of communicable diseases. To the extent necessary for protecting or securing military property or places and associated military personnel, such special powers may also include people other than military personnel who are present on a DOW installation or other area under DOW control. For more information, refer to Department of Defense 5200.08-R.

Restriction of Movement

3-146. Restriction of movement is the limitation of movement for individuals who may have been exposed to a communicable disease to prevent its spread. This measure may apply to military personnel and civilians to reduce the risk of transmission in military settings. For military personnel, restriction of movement may include isolation, quarantine, or other necessary measures to prevent or limit disease transmission. For non-military personnel, restriction of movement may involve limiting access to or from military installations to control potential exposure.

Isolation

3-147. Isolation is the separation of individuals who have a specific infectious illness from healthy populations to prevent the spread of disease. This measure allows targeted medical care for infected individuals while ensuring that uninfected personnel remain protected. Isolated individuals may receive care in their homes, hospitals, or designated MTFs. Protective sequestration, a form of reverse isolation, separates uninfected Service members from infected populations or contaminated environments to preserve force readiness as a tactical or strategic reserve.

Quarantine

3-148. Quarantine is the separation and restriction of movement of individuals who have been exposed to an infectious agent but have not yet developed symptoms. It involves confinement and active health surveillance to monitor for signs of infection and prevent potential disease transmission. Quarantine is a medically effective measure to protect unexposed personnel and limit the spread of infectious diseases.

3-149. In most situations, it is recommended that necessary medical resources be moved to the event location (treat in place) rather than moving a contagious patient. However, CASEVAC will continue during restriction of movement, isolation, and quarantine, requiring additional protective measures, specialized transport, and coordination at multiple levels of command.

3-150. Strategic-level considerations for infectious disease CASEVAC include securing diplomatic clearances for cross-border patient movement, complying with International Health Regulations, and coordinating with host-nation governments to avoid disruptions to evacuation routes. Commanders plan for:

- Isolation transport for confirmed cases to prevent further transmission during CASEVAC.
- Contingency evacuation routes that reflect international and state travel restrictions.
- Additional protective equipment and decontamination methods for medical personnel, transport platforms, and receiving medical treatment facilities.
- Collaboration with international health authorities and military medical planners so that CASEVAC procedures align with national and global public health measures.

3-151. For more information, refer to ATP 4-02.84, the DOW Global Health Engagement policies, guidance from the Centers for Disease Control and Prevention, and the World Health Organization on infectious disease response. These references provide detailed guidance for coordinating health protection measures during joint, interagency, and multinational operations.

ADDRESSING MEDICAL, TACTICAL, AND DECONTAMINATION CONSIDERATIONS

3-152. CASEVAC helps maintain combat effectiveness by providing timely evacuation when MEDEVAC assets are unavailable. Repurposing nonmedical vehicles for CASEVAC allows casualties to receive early care and are removed from danger. This approach supports unit cohesion, limits battlefield exposure, and preserves operational capability by keeping forces intact and mobile.

3-153. Planning for CASEVAC accounts for available resources and real-world operational constraints. Strategically, leaders prioritize the allocation of supplies and CASEVAC vehicles to optimize casualty flow. Tactically, commanders should identify evacuation assets in advance, train personnel to handle casualties, and integrate CASEVAC procedures into mission rehearsals. This improves responsiveness and helps prevent unnecessary loss of life.

3-154. CASEVAC planning addresses the risks associated with transporting patients who may have infectious diseases such as tuberculosis or influenza. Commanders should consult with unit medical personnel to apply appropriate restriction of movement, quarantine procedures, and PPE requirements. These measures reduce the risk of disease spread among vehicle crews and follow-on casualties.

3-155. Decontamination of CASEVAC vehicles is essential after transporting casualties. Blood, body fluids, and biological contaminants pose ongoing risks to personnel. Commanders ensure that decontamination procedures are established and executed. These include utilizing approved military disinfectants, PPE for cleaning crews, and proper disposal of contaminated materials. For more information, refer to ATP 3-11.33 and ATP 4-02.7.

3-156. Theater strategic, operational and tactical units integrate CASEVAC decontamination protocols into their planning. Theater strategic level leaders allocate sanitation resources and issue guidance on contamination control, while tactical level units execute cleaning procedures after each CASEVAC mission. These measures support readiness and reduce the risk of further casualties due to infection.

3-157. Units should assess CASEVAC vehicles, equipment, and personnel for contamination at logical points in the mission, such as after exposure to known biological hazards, before re-entry into clean areas, or upon completion of operations. While full decontamination after every movement between CCPs, AXPs, or MTFs may not be feasible, crews remain alert to contamination risks during high-exposure missions. Company-level leaders coordinate basic cleaning efforts, such as wiping surfaces and removing waste, while battalion and brigade medical elements provide support for more thorough cleaning when needed. Reusable equipment, like litters and straps, should be cleaned in accordance with exposure levels and standard operating procedures before returning to service.

3-158. In CBRN environments, CASEVAC decontamination efforts are coordinated with broader personnel and equipment decontamination operations. Collocating patient decontamination sites with other decontamination assets helps conserve resources and prevent the spread of contamination. Refer to ATP 3-11.33 and ATP 4-02.7 for detailed guidance.

COMMAND ROLES AND RESPONSIBILITIES IN CASUALTY EVACUATION

3-159. CASEVAC planning is a responsibility shared across all echelons, from Army and theater commands to platoon-level units. It supports timely medical care for WII Soldiers while preserving mobility, sustaining morale, and reinforcing force health protection measures. For more information on force health protection, refer to FM 4-02.

3-160. At the strategic level, CASEVAC planning includes force projection, coordination with joint and multinational partners, and pre-positioning medical resources to support sustained operations. Strategic leaders also secure evacuation clearances and establish theater-wide networks that connect air and ground platforms.

3-161. At the operational level, theater and corps commands allocate CASEVAC resources across divisions and align Role 2 and Role 3 MTFs with maneuver plans. This coordination supports continuity of care and helps keeps evacuation operations feasible, even during high-casualty conditions.

3-162. Tactical CASEVAC planning occurs at all echelons from brigade to platoon. Leaders identify routes, assign platforms, and train personnel to execute casualty movement under fire. Since most units lack dedicated CASEVAC equipment in their table of organization and equipment, commanders adapt existing vehicles without diverting MEDEVAC assets or degrading MTF operations.

COMMAND CONSIDERATIONS FOR CASUALTY EVACUATION PLANNING

3-163. Commanders are responsible for integrating CASEVAC planning into the overall mission rather than treating it as a separate function. Effective CASEVAC supports survivability, morale, and readiness across the force. Commanders prioritize CASEVAC assets based on anticipated casualty flow, risk exposure, and the specific requirements of each mission. Assets should be positioned and task-organized to support these requirements without unnecessarily diverting combat power.

3-164. CASEVAC is a combat multiplier when it is responsive and aligned with operational tempo. Planners account for enemy threats, platform survivability, and resource limitations. Commanders should anticipate MASCAL events, establish clear C2 roles, and ensure that CASEVAC plans are rehearsed. In austere or contested environments, commanders may need to rely on alternate transport options and integrate CASEVAC into the overall protection and sustainment framework. This approach helps units maintain momentum despite battlefield challenges.

THEATER AND CORPS LEVEL

3-165. At the theater and corps levels, evacuation planning focuses on aligning evacuation capabilities, including CASEVAC and MEDEVAC, with medical infrastructure, sustainment operations, and mission timelines. The theater medical command and medical brigade coordinate with supported division, corps, joint task force, and other joint task force planners to assess medical capacity, patient flow, and evacuation requirements. While CASEVAC is executed at the tactical level, these higher headquarters synchronize it within the broader patient movement function to ensure unity of effort across the joint force. Their planning ensures subordinate units can move casualties out of CCPs and MTFs using available platforms when MEDEVAC is not accessible or sufficient.

3-166. Once casualties enter the AHS, regulated medical evacuation follows joint patient movement policies and MEDEVAC procedures. However, when regulated movement is delayed or unavailable, regulated CASEVAC may be required to clear Role 2 and Role 3 MTFs or to support repositioning of those facilities. At the theater and, to a degree, corps levels, CASEVAC planning also includes contingency planning and standardized procedures for deliberate and regulated CASEVAC in support of large-scale MEDEVAC operations. The theater medical command and medical brigade plan for these conditions in coordination with the theater sustainment command and the expeditionary sustainment command. This coordination allows planners to integrate nonmedical evacuation assets into the patient movement architecture, sustain casualty movement in austere or high-threat areas, and sustain patient flow across the theater.

3-167. Evacuation planning at this level requires integrated effort across medical, sustainment, protection, maneuver, and joint staff sections. CASEVAC is addressed alongside MEDEVAC to create a unified evacuation capability that adapts to operational demands. Medical and sustainment planners work together to match platform availability with medical movement requirements, identify gaps in regulated evacuation, and build options for casualty movement under varying threat and terrain conditions. This coordination supports MTF survivability, patient outcomes, and the commander's ability to maintain operational tempo.

Command Group

3-168. The command group plays a critical role in providing overall guidance, intent, and priorities for CASEVAC operations. They direct staff coordination to support a seamless and efficient process aligned with operational requirements. The command group also communicates the commander's intent for CASEVAC to all staff sections and oversees resource allocation and decision-making during execution. This oversight is essential for conducting effective and efficient CASEVAC operations.

3-169. In addition to setting overall direction, the command group ensures that all staff sections work together to support CASEVAC operations. This includes coordinating with the Theater Medical Command, Medical Brigade, Expeditionary Sustainment Command, and Combat Sustainment Support Battalion to align medical logistics and supply chain management with operational medical needs. The command group also

collaborates closely with the primary staff to confirm that CASEVAC operations are fully planned, well-integrated, and properly synchronized.

Primary Staff Sections

3-170. The primary staff sections play a critical role in supporting CASEVAC operations. The primary staff sections include:

- G-1 (Personnel): Manages casualty operations, replacement operations, and personnel readiness.
- G-2 (Intelligence): Assesses enemy threats and terrain considerations that impact CASEVAC routes.
- G-3 (Operations): Coordinates mission planning, assists with casualty and equipment evacuation operations, and synchronization with combat operations.
- G-4 (Logistics): Oversees medical supply, equipment, and evacuation assets.
- G-5 (Plans): Develops long-term operational and strategic CASEVAC plans.
- G-6 (Communications): Maintains secure communication and tracking of CASEVAC operations.
- G-7 (Training and Exercises): Oversees CASEVAC-related training and readiness assessments.
- G-8 (Finance and Resource Management): Manages CASEVAC funding and resource allocation.
- G-9 (Civil Affairs Operations): Manages the Commander's military engagement priorities and objectives with regards to unified action partners.

Special Staff Officers

3-171. Special staff officers play a critical role in planning, coordinating, and executing effective CASEVAC operations. Working closely with the command group and staff sections, these officers apply functional and technical expertise throughout all phases of the operation. Their responsibilities include:

- Surgeon (Medical Operations) who —
  - Advises the commander and staff on CASEVAC planning and medical integration across all phases of the operation.
  - Coordinates with the G-3 to align medical capabilities with the operational plan and synchronize medical asset placement within the area of operations.
  - Advises the G-2 on medical risks tied to environmental conditions, including terrain, weather, altitude, and CBRN threats.
  - Works with the G-1, Patient Administration Division, and Medical Regulating Officer to manage casualty reporting and guide patient movement decisions.
  - Coordinates with the G-4 and assistant chief of staff, signal (G-6) to prepare CASEVAC platforms with the right medical supplies and communication systems.
  - Advises the G-1 and G-4 on the handling and tracking of deceased personnel in coordination with Mortuary Affairs.
  - Supports the assistant chief of staff, training (G-7) in planning CASEVAC-related training and readiness assessments.
  - Works closely with MEDEVAC planners to synchronize evacuation efforts and prevent duplication.
  - Tracks medical resource use and compiles lessons learned to improve future CASEVAC operations and sustainment planning.
- Provost Marshal (Security Operations): Develops and executes security plans for CASEVAC routes and platforms. Coordinates military police escorts when needed; and collaborates with G-2 and G-3 to assess threats and protect casualty movement.
- Public Affairs Officer (Strategic Communication): Manages internal and external messaging about CASEVAC operations. Maintains operational security in communications, provides casualty updates to families as directed, and works with the G-1 to deliver timely, accurate, and respectful information.
- Engineer (Mobility and Infrastructure): Assesses and improves CASEVAC routes, including road repair and bridging operations. Advises on terrain effects that may impact CASEVAC mobility and works with the G-3 and G-4 to keep evacuation routes open and reliable.

Integrating Medical Regulating and Casualty Evacuation Prioritization into Operations

3-172. Medical regulating is a critical function that supports the effective use of CASEVAC and MEDEVAC assets across all echelons. It requires close coordination between medical and nonmedical staff, including operations, logistics, and personnel sections. Medical regulating links patients to the right MTF based on the severity of injury, urgency of care, available transportation, and the status of MTF capacity.

3-173. An effective medical regulating system directs casualty flow to the appropriate medical treatment facility at the right time. It prevents the overuse of specific MTFs while others remain underutilized. This regulation helps keep MEDEVAC platforms available for follow-on missions and supports timely delivery of care based on the severity and needs of each casualty. Medical regulating also improves the use of theater-level strategic evacuation assets, including both air and ground MEDEVAC capabilities.

3-174. The process begins with the Patient Administration Division, the Medical Regulating Officer, and the Surgeon (Medical Operations) who collect real-time information on patient status, treatment needs, and the availability of MTFs. These individuals coordinate closely with the command surgeon, G-1, G-3, and G-4 staff to prioritize patients, assess platform availability, and recommend destinations. When MEDEVAC aircraft are limited, the medical regulating process helps determine which casualties require urgent movement and which can be moved by CASEVAC or delayed without risk to life or limb.

3-175. Strategic asset prioritization considers several factors, including the number and severity of casualties, the urgency of operations, and the availability of routes, staging areas, or LZs. Medical regulating supports this process by identifying which patients require surgical intervention, specialty care, or long-term hospitalization. This prioritization helps prevent treatment backlogs and improves the overall flow of patients throughout the operational area.

3-176. In addition to managing MEDEVAC, medical regulating also supports the use of CASEVAC platforms. Trucks, tactical vehicles, and aircraft without onboard medical support may be used when MEDEVAC is unavailable. These platforms are coordinated through the regulating process to move lower-precedence casualties or to clear collection points during MASCAL events. While CASEVAC platforms may not offer en route medical care, they remain essential for keeping casualty flow moving.

3-177. By incorporating CASEVAC into the broader evacuation plan, commanders help preserve MEDEVAC capacity for the most critical patients. CASEVAC platforms can transport stabilized personnel to AXPs or rear-area MTFs, particularly during large-scale operations. This tiered use of evacuation platforms improves system efficiency and reduces delays in care. To be effective, units rehearse transitions between MEDEVAC and CASEVAC and clearly define roles and responsibilities in their plans.

3-178. The success of medical regulating and CASEVAC prioritization depends on shared understanding and integrated planning. Commanders, medical planners, and sustainment staff work together to synchronize evacuation priorities, route security, patient tracking, and platform management. Real-time communication, accurate reporting, and trained personnel are necessary to make timely decisions under stress.

3-179. Medical regulating helps the command allocate limited resources while maintaining combat power and operational momentum. By balancing the demand for MEDEVAC and CASEVAC, and directing casualties to the right location, medical regulating ensures that the force can sustain itself even during large-scale, resource-constrained operations. For additional guidance on medical regulating, refer to ATP 4-02.2 and ATP 4-02.55.

Casualty Evacuation Support to Intratheater and Intertheater Evacuation

3-180. CASEVAC is a vital part of military operations. It allows for the quick and safe transportation of wounded Soldiers from the battlefield to MTF. CASEVAC plays a crucial role in both intratheater and intertheater evacuations.

3-181. Intratheater evacuation refers to the movement of patients within a single theater of operation, for example, from a forward operating base to a regional MTF. This type of evacuation is typically done using tactical aircraft, like rotary-wing aircraft or planes, that are equipped with medical personnel and equipment to provide care during transport.

3-182. Intertheater evacuation involves moving patients between different theaters of operation, for example, from a combat zone in one region to a MTF in another region. This type of evacuation is usually done using strategic aircraft, like cargo planes or tanker planes, that are equipped with advanced medical equipment and personnel.

3-183. CASEVAC supports both initial casualty movement and, when required, transport between MTFs. It provides a flexible option when MEDEVAC is unavailable or when commanders need to move casualties to the next role of care. In some situations, such as during company-level operations, a PSG may move a casualty directly to a Role 1 battalion aid station if it is nearby and accessible. However, longer distances or higher casualty volumes typically require a tiered evacuation process using designated AXPs and MEDEVAC platforms. CASEVAC complements this system by bridging gaps and maintaining casualty flow under challenging conditions.

3-184. CASEVAC operations can be challenging due to various factors such as distance, terrain, weather, and patient acuity. The distance and terrain between the POI and the MTF can pose significant challenges, particularly in harsh or hostile environments. Weather conditions like extreme temperatures, dust, or fog can also impact the safety and effectiveness of CASEVAC operations. Additionally, the severity of the patient's condition and the level of care required can affect the type of aircraft and medical personnel needed for transport. To overcome these challenges, it is essential to have effective communication and coordination between medical personnel, aircrew, and other stakeholders.

3-185. Safe and effective patient transport depends on developing standardized CASEVAC procedures and conducting regular training and exercises. Standardized procedures promote consistency and safety across different operational environments. Regular training prepares CASEVAC and MEDEVAC teams for both intratheater and intertheater movements. When possible, CASEVAC operations should use medical equipment and supplies authorized through existing procurement and sustainment processes, such as those outlined in Common Tables of Allowances 8-100. This approach supports compatibility, reduces training and maintenance gaps, and strengthens long-term readiness.

3-186. CASEVAC plays a vital role in both intratheater and intertheater patient movement. To reduce the risk of further injury or complications, military medical personnel understand the unique challenges of CASEVAC operations and apply best practices during patient transport. Effective CASEVAC requires close coordination and clear communication between medical personnel, aircrews, and other supporting elements to maintain continuity of care for WII personnel. By integrating CASEVAC platforms into both intratheater and intertheater evacuation systems, the force can expand its ability to deliver care across wide operational areas, preserving combat effectiveness, and saving lives.

Liaison Officers

3-187. A liaison officer (LNO) plays a critical role in facilitating communication and coordination between units and allied forces for effective CASEVAC operations. These officers serve as direct links between units, ensuring that CASEVAC protocols are followed and that resources are utilized efficiently. By coordinating CASEVAC efforts, LNOs help reduce confusion, prevent overlapping of resources, and maintain a steady flow of information that supports the operational effectiveness, and adaptability of the Army. LNOs enhance inter-unit cooperation and streamline CASEVAC procedures, allowing for a seamless response to casualty needs on the battlefield.

Deconfliction

3-188. Deconfliction in CASEVAC planning helps prevent delays and confusion by avoiding overextension or duplication of resources. This process includes coordinating the timing, routing, and prioritization of CASEVAC operations to reduce congestion and eliminate competition between units for the same medical assets. Deconfliction supports the synchronization principles outlined in FM 3-0 by promoting an organized and efficient flow of CASEVAC operations, minimizing interference, and improving the use of available resources.

CORPS, DIVISION, BRIGADE, AND BATTALION LEVEL

3-189. The success of CASEVAC operations depends on coordinated planning and execution across all echelons. Corps provides operational oversight and links to joint and theater-level patient movement. Division integrates corps guidance with brigade requirements and synchronizes evacuation across subordinate formations. Brigade translates division direction into actionable plans for subordinate battalions. Battalion plans and executes CASEVAC at the POI and initial handoff. While responsibilities differ by echelon, planning and execution remain synchronized to preserve combat power and maintain operational tempo.

3-190. The scale of combat operations influences which headquarters lead CASEVAC. When multiple corps operate in a theater, the theater Army or joint force land component command coordinates evacuation across the area of responsibility. Corps staffs synchronize CASEVAC in their assigned area, division staffs integrate efforts between brigades, and brigade and battalion staffs conduct real-time execution.

3-191. Across all echelons, CASEVAC planning includes integrating into the OPORD, rehearsing evacuation tasks, and maintaining flexibility to adjust under combat conditions. This coordinated approach ensures each level supports the next, creating a seamless evacuation system from POI to higher roles of care. Although each echelon shares the same goal, to evacuate casualties safely and efficiently, the scope, complexity, and priorities differ.

Corps Level

3-192. Corps staffs integrate theater guidance, joint and multinational coordination, and division support requirements into a unified evacuation plan. They manage policy, resource allocation, and operational-level evacuation routes. Corps develops contingency options for regulated CASEVAC when MEDEVAC is unavailable or insufficient, allocates nonmedical platforms as required, and sets evacuation priorities for subordinate divisions.

Division Staff

3-193. The division is the Army's primary tactical formation and serves as the link between operational level and tactical level and is the link between corps direction and brigade execution. Division staffs manage CASEVAC planning across brigades, allocate resources, and deconflict routes. They maintain situational awareness of casualty flow to forecast when division-level CASEVAC resources are needed. Division staffs also oversee training and readiness for CASEVAC platforms and coordinate with corps to request additional support when required.

Brigade Level

3-194. Brigades translate division guidance into detailed CASEVAC plans that support battalion and company operations. Brigade staffs monitor CCPs and AXPs, and coordinate with MTFs to move casualties to higher roles of care. They allocate CASEVAC-capable platforms to battalions, monitor platform readiness, and synchronize evacuation timelines with maneuver and fires to reduce risk to evacuation assets. Brigade CASEVAC planning links to battalion execution through detailed tasking, rehearsals, and communications architecture.

Battalion Level

3-195. Battalion staffs integrate CASEVAC into the MDMP to align with tactical operations. They assign CASEVAC teams, identify evacuation routes, and ensure companies have the training, equipment, and communications needed for execution. Battalion CASEVAC execution links company-level casualty acquisition to brigade evacuation plans. CCPs, AXPs and the ambulance shuttle system provide a structured method for continuous casualty movement and is typically managed at this level.

Medical Treatment Facilities

3-196. Role 1 and Role 2 MTFs within brigade and battalion areas provide immediate care and prepare patients for further evacuation. Continuous coordination between MTFs maintain patient flow and ensures evacuation remains synchronized with operational tempo.

Orders and Military Decision-Making Process

3-197. Commanders and staff integrate CASEVAC planning into the MDMP to align it with the operation. As the OPORD is developed, the staff incorporates CASEVAC tasks into the scheme of maneuver, sustainment overlays, and synchronization matrices. These tasks include identifying evacuation routes, selecting locations for CCPs, and assigning CASEVAC-capable platforms. Battalion orders reflect this planning by assigning roles and responsibilities and providing the guidance subordinate units need to carry out CASEVAC under expected conditions. Integrating CASEVAC throughout the MDMP helps support timely and coordinated evacuation that protects combat power and keeps the mission on track.

3-198. Integrating CASEVAC into the MDMP also helps align evacuation tasks with the overall concept of operations. During COA analysis and comparison, planners assess the feasibility of CASEVAC alongside maneuver, sustainment, and protection considerations. CASEVAC details, such as evacuation routes, CCP locations, evacuation triggers, and task assignments by echelon, are included in the OPORD. Rehearsals and confirmation briefs allow units to validate the plan, improve coordination with supporting elements, and build shared understanding across formations. This deliberate approach enables rapid and effective CASEVAC under combat conditions, preserving combat power, and supporting mission continuity.

CASUALTY EVACUATION PLANNING CONSIDERATIONS

3-199. CASEVAC in complex operational environments requires detailed planning and attention to unique factors that affect both safety and effectiveness. In CBRN environments, contamination risks complicate evacuation and demand strict mitigation procedures to protect casualties and personnel. Units train and equip evacuation teams to operate in contaminated areas, reduce exposure, and prevent further harm. Mortuary affairs must also be considered. The respectful handling, transport, and disposition of remains can be particularly difficult in contested or resource-limited areas. Despite operational demands, units must treat the deceased with dignity while maintaining mission continuity.

3-200. Multinational casualties introduce additional complexity to CASEVAC operations. Coordination with allied and unified action partners is required to address differences in medical practices, languages, and cultural expectations for casualty treatment. Clear, standardized protocols should be developed to support the treatment and evacuation of multinational personnel while respecting operational and cultural differences. Veterinary considerations also play a key role in operations involving MWAs. These animals contribute to detection, security, and force protection missions. Maintaining their health and readiness is vital for mission success and troop morale. These planning considerations, CBRN threats, mortuary affairs, multinational coordination, and veterinary support, highlight the multifaceted nature of CASEVAC and the need for adaptable, well-integrated strategies to support effective operations in diverse environments.

CASUALTY EVACUATION IN A CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR ENVIRONMENT

3-201. Commanders conducting CASEVAC in CBRN environments protect their mission by evacuating casualties without spreading contamination to personnel or critical assets. A well-developed CASEVAC plan that accounts for CBRN hazards help maintain operational continuity and protects the health of the force. Effective planning also conserves medical and operational resources by reducing the risk of cross-contamination, which can lead to additional casualties and mission degradation. Commanders depend on trained CASEVAC teams to execute evacuation tasks safely and efficiently, ensuring that contaminated or exposed personnel are handled properly and receive the care they need without endangering others.

3-202. Key considerations for CASEVAC in a CBRN environment include establishing decontamination sites close to, but outside of, contaminated areas, equipping CASEVAC personnel with PPE, and pre-identifying evacuation routes that avoid contamination hazards. CASEVAC teams should also be trained to recognize signs of CBRN exposure, as early detection of symptoms is critical to preserving life and

preventing the spread of contamination. Additionally, MTFs receiving patients from contaminated areas establish a patient decontamination site to prevent contamination from entering the collectively protected environment of the MTF.

MULTINATIONAL CASUALTIES

3-203. Handling multinational casualties during CASEVAC operations requires early coordination and continuous communication with allied and partner forces. Each force may follow different medical protocols, casualty reporting procedures, and evacuation practices. FM 3-0 highlights the need for interoperability in joint and coalition operations, and CASEVAC is no exception. CASEVAC teams are ready to work alongside foreign medical personnel, even when those partners use different methods or type of care. Language barriers, cultural norms, and differences in medical training may create challenges. To overcome these, CASEVAC teams adapt their communication and coordination strategies to match the operational approach of allied forces. This cooperation helps ensure that all coalition casualties receive timely treatment, maintain continuity of care, and are evacuated with respect and professionalism.

3-204. Supporting multinational CASEVAC operations is critical to the commander's mission as it fosters trust and cooperation with coalition partners, enhancing overall mission, cohesion, and effectiveness. Commanders understand that taking care of allied forces' WII personnel strengthens alliances and builds goodwill among partner nations. Properly coordinated CASEVAC for multinational casualties reflects the command's commitment to protecting all personnel under its responsibility, regardless of nationality, thereby enhancing the operational unity of the coalition force and reinforcing mutual support on the battlefield.

3-205. In multinational operations, regulated CASEVAC may be used alongside or in place of MEDEVAC when coordinated patient movement across borders or between coalition facilities is required. This occurs when nonmedical platforms are deliberately tasked, resourced, and integrated into the patient movement system to support large-scale or extended operations.

3-206. Planning for multinational CASEVAC in this regulated context includes:

- Establishing shared communication protocols and medical reporting formats that are interoperable with partner forces.
- Developing pre-arranged agreements for cross-border evacuation, including diplomatic clearances and customs procedures.
- Ensuring that casualty tracking systems are compatible for joint use.

3-207. When regulated CASEVAC involves transfer between coalition medical facilities, planners account for compatibility of patient movement items, litter systems, and essential medical devices. Incompatible equipment can delay care or require unnecessary transfers.

3-208. CASEVAC teams operating in coalition environments should also be briefed on cultural considerations that may affect treatment preferences, patient handling, or disposition of deceased personnel. These cultural factors should be incorporated into rehearsals and mission planning to prevent misunderstandings and maintain trust with partner forces and local populations.

3-209. These measures apply primarily to deliberate, pre-planned CASEVAC missions conducted in support of regulated patient movement. Most tactical CASEVAC missions, moving casualties from the POI to the nearest MTF, will not require such multinational equipment standardization but may still require basic interoperability in communications and casualty reporting.

VETERINARY CONSIDERATIONS

3-210. In environments where MWAs are used, such as military working dogs, veterinary considerations become a significant part of CASEVAC planning. These animals are often critical to mission success; they provide capabilities in detection, tracking, and security. FM 3-0 acknowledges the importance of supporting all assets that contribute to mission objectives, and veterinary support in CASEVAC operations aligns with this principle. Veterinary considerations include planning for the safe evacuation of WII animals, as well as coordinating with veterinary medical personnel to provide immediate care. Just as with human casualties, timely evacuation and treatment of working animals help maintain operational capabilities.

3-211. Veterinary CASEVAC supports the commander's mission by preserving the operational effectiveness of specialized capabilities provided by MWAs. The loss of a trained MWA can significantly reduce a unit's

ability to detect explosives, conduct patrols, track personnel, or perform search-and-rescue operations. A deliberate CASEVAC plan for WII animals demonstrates the commander's commitment to sustaining these capabilities and protecting critical resources. Safeguarding animal assets ensures the unit can continue executing specialized tasks that directly support the mission.

3-212. CASEVAC teams tasked with supporting MWAs require specialized training and equipment to provide safe, effective evacuation. These teams learn basic animal first aid and carry veterinary supplies to stabilize WII MWAs before they reach a forward veterinary facility. Facilities such as Role 2 Veterinary Service Support Team or Role 3 Veterinary Medical Treatment Station provide advanced care after initial stabilization. Because MWAs have unique needs, CASEVAC platforms may need modifications or containment systems to protect the animal and reduce stress or further injury. While the overall purpose of CASEVAC remains the same, evacuating MWAs demands additional planning, specialized equipment, and tailored training to achieve the best outcome.

3-213. Commanders allocate CASEVAC assets for MWAs based on mission priorities and the urgency of the animal's condition. When MEDEVAC platforms are not available, other vehicles may be used according to standard operating procedures. In these cases, a handler or trained escort should accompany the animal whenever possible to maintain continuity of care and reduce stress. This support reflects the Army's broader commitment to preserving operational capability and maintaining the welfare of critical force assets. For more information on military working dogs and related procedures, refer to ATP 3-39.34.

Casualty Evacuation Using Contracted Agencies

3-214. Commanders may use contracted agencies to support CASEVAC when military resources are limited or unavailable. These agencies can provide ground, air, or maritime platforms that help fill critical gaps in evacuation capability. However, integrating contracted CASEVAC into operations requires planning and coordination. Planners evaluate the agency's capabilities, understand any operational limits, and ensure the service fits within the mission timeline. CASEVAC remains a military responsibility, and contracted support is treated as a supporting task that aligns with the operation's requirements, not as a stand-alone solution.

3-215. When using contracted CASEVAC platforms, commanders and staff assess several key factors. These include the agency's response time, platform reliability, and any restrictions on movement. For instance, some contractors may not operate at night or during bad weather or may face limits on payload or range. Planners address cross-border clearance requirements, which may delay or prevent evacuation. Finally, funding and authorization is in place before a mission begins. Staff identify the approving authority, the method of payment, and any sustainment or accountability procedures to support the use of contracted CASEVAC platforms.

3-216. Cultural and ethnic considerations are also critical when working with contracted agencies, especially in regions where local customs or sensitivities may influence operations. For example, contracted personnel may need cultural training to align with host-nation practices or military protocols. Furthermore, the potential need for "tail-to-tail" transfers, where patients are moved between contracted and military aircraft, requires logistical planning, particularly for long-distance evacuations. Contracts should explicitly define whether the agency will transport casualties directly to MTFs or local civilian hospitals.

3-217. Contracted platforms may support casualty movement when military assets are unavailable, but they often come with unique limitations. Unlike MEDEVAC or dedicated CASEVAC operations, contracted transport may lack onboard medical personnel or essential equipment. While this does not change the classification of the movement, if no en-route care is provided, it remains CASEVAC, it does introduce planning risks that differ from standard Army platforms. For example, compatibility issues between military medical gear and contracted vehicles can delay care. Commanders and planners assess these risks ahead of time and develop mitigation strategies, such as attaching military medical teams to contracted platforms or preloading essential equipment to reduce response time and preserve patient care standards.

3-218. Coordinating with contracted agencies for CASEVAC requires a hands-on approach and early engagement. In urgent situations, planners should meet directly with agency representatives to confirm timelines, clarify responsibilities, and identify any gaps in capability. These meetings help build trust and improve shared understanding. Commanders and staff treat contracted CASEVAC as part of the mission, not

as a separate or optional task. Early coordination ensures these assets are ready to support the operation and aligned with unit timelines, threat conditions, and evacuation priorities.

3-219. Contracted CASEVAC support aligns with the Army's operational framework, including guidance from FM 3-0, FM 4-0, and FM 6-0. Planners integrate these platforms within the scheme of maneuver, sustainment planning, and medical support operations. CASEVAC conducted by contracted assets remains a supporting task and requires deliberate synchronization across all echelons. To do this, planners coordinate with operational contract support personnel and follow the procedures outlined in ATP 4-10. This coordination ensures that contracted CASEVAC contributes to operational reach, freedom of action, and continuity of care. When integrated properly, contracted platforms can help preserve combat power and expand the Army's ability to move casualties across contested or resource-limited environments.

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Chapter 4

Executing Casualty Evacuation at Echelon

Executing CASEVAC is a dynamic task that supports ongoing operations and responds to battlefield conditions in real time. Once a plan is in place, leaders at all echelons coordinate and control the movement of casualties under pressure, often in contested environments and with limited resources. This chapter focuses on how units execute CASEVAC as part of the larger fight, including how they initiate evacuation based on triggers, manage communication and reporting, and adjust to operational changes. It also explains the roles of mission and launch authorities, the importance of rehearsals, and the actions required to maintain tempo and preserve life during execution.

INTEGRATING CASUALTY EVACUATION STRATEGIES INTO MILITARY OPERATIONS

4-1. CASEVAC planning is a deliberate commander's task that sustains operational endurance and preserves combat power. Planning links directly to the OPORD and synchronizes CASEVAC with MEDEVAC. It accounts for mission variables, expected casualty load, evacuation timelines, and operational constraints such as mobility restrictions, degraded communications, or threats along lines of communication. CASEVAC planning also anticipates MASCAL events, identify critical decision points, and link evacuation requirements to the scheme of maneuver to prevent disruption of combat operations.

4-2. Brigade and battalion staffs translate higher-level CASEVAC priorities into actionable plans that align collection points, AXPs, and evacuation routes with maneuver graphics and sustainment overlays. Brigade staffs integrate CASEVAC into supports rehearsals alongside other key actions such as detainee collection, refuel-on-the-move points, and support area displacement. Battalions focus on POI collection and movement into the ambulance shuttle system, using organic and nonmedical assets when required. Both echelons plan for mobility support, such as engineer route clearance or fording equipment, to enable CASEVAC in complex terrain.

4-3. In joint and multinational operations, CASEVAC planning requires early agreement on communications, reporting formats, and patient movement procedures. Commanders identify platform compatibility issues and resolve them before operations begin, especially for patient movement items and en route care equipment. Planning should include contingencies for when MEDEVAC assets are insufficient or unavailable, and CASEVAC bridges the gap. Coordination with coalition partners should designate specific CCPs, AXPs, and medical treatment facilities by name to reduce confusion caused by language or doctrinal differences.

4-4. Execution in contested or high-threat environments requires deliberate route security, close coordination with maneuver elements, and synchronization with operational timelines. CASEVAC accounts for possible relocation of receiving MTFs during mobile defense or rapid advances, and units should plan alternate destinations in advance. Both ground and air CASEVAC may be required to support distributed operations, with nonmedical platforms configured for casualty movement when dedicated ambulances are not available. CASEVAC should be integrated into battle drills for mass casualty response, ensuring rapid triage, evacuation, and coordination with medical regulating channels.

4-5. After each mission, evacuation platforms undergo immediate reconstitution to maintain readiness. This includes inspecting, cleaning, and refitting first aid and triage supplies, and verifying communications and mobility systems. Commanders should incorporate AARs into this process to capture lessons learned, refine SOPs, and improve interoperability with supporting units and coalition partners. Continuous readiness of CASEVAC assets ensures the formation can respond to future casualty incidents without operational delay.

EXECUTION OF ARMY CASUALTY EVACUATION

4-6. Army commanders and leaders recognize CASEVAC as more than just a means of saving lives, it is essential for maintaining operational continuity, preserving combat effectiveness, and sustaining the will to fight. The rapid evacuation of casualties reassures Soldiers that they will receive care if they are wounded,

reinforcing unit cohesion, morale, and resilience under fire. By ensuring that forces remain confident in their evacuation capabilities, CASEVAC contributes directly to a unit's ability to continue fighting and accomplish its mission.

PLATOON LEVEL

4-7. At the platoon level, CASEVAC execution is immediate and hands-on. The platoon leader and PSG ensure that all Soldiers are trained in TCCC and understand basic evacuation procedures. These leaders oversee the rapid assessment of casualties, the application of lifesaving care, and the movement of wounded Soldiers to secure pickup points. They also coordinate with company-level assets for evacuation support. The speed and effectiveness of CASEVAC at this level reflect the unit's training, discipline, and ability to act under pressure. Well-trained Soldiers who understand their roles in the CASEVAC process help maintain combat power and reduce preventable deaths on the battlefield.

Initiate Evacuation and Protect the Wounded

Platoon leaders and PSGs manage CASEVAC at the POI. They lead the rapid assessment, lifesaving care, and movement of wounded Soldiers to the platoon CCP. They coordinate pickup with company-level assets and keep communications active. By acting quickly and keeping the platoon informed, they preserve life and combat power under fire.

4-8. A clearly written platoon-level SOP for CASEVAC is essential. It standardizes responsibilities across squads and teams, helping each Soldier understand their role during an evacuation. The SOP identifies critical capabilities that are preserved, such as crew-served weapons teams and radio operators, while outlining how other personnel or resources can support casualty movement when needed. This structured approach allows the platoon to adapt without compromising mission readiness. A reliable SOP also improves coordination during rehearsals and live operations, strengthening the platoon's ability to respond when casualties occur. For formation-specific SOP templates and tactical implementation guidance, refer to applicable formation type doctrine.

Preparation and Training

4-9. Effective CASEVAC operations require deliberate preparation and regular, realistic training. Platoon and squad leaders train Soldiers in manual carries, improvised litter construction, multihinged folding litter deployment, standard litter carry techniques and vehicle loading procedures. Soldiers need to understand the unit's CASEVAC SOP, be familiar with likely casualty scenarios, and conduct rehearsals under conditions that reflect the operational environment. These preparations reduce the risk of further injury during movement and speed transfer to higher roles of care. Leaders plan evacuation routes, test communications plans, and incorporate CASEVAC rehearsals into routine training to maintain readiness.

4-10. In addition to individual training, litter teams and vehicle drivers are familiar with the locations of CCPs, ambulance loading points, AXPs, and MTFs. Each platform designated for CASEVAC should have at least one CLS-trained Soldier, with CLS bag, as part of its crew. Timely communication is also critical for minimizing delays and reducing risks. Drivers and litter teams are kept updated on any changes to the locations of CCPs, ambulance loading points, AXPs, and MTFs throughout the mission. This level of preparation and training enables CASEVAC operations to be executed efficiently, reducing exposure to hazards, while ensuring prompt medical support to WII personnel.

Physical Demands and Operational Flexibility

4-11. CASEVAC is physically demanding, and leaders recognize these challenges when planning evacuation operations. They should rotate litter team members as needed to sustain the effectiveness of CASEVAC support and prevent fatigue. In some situations, manual carrying may be necessary due to tactical constraints, limited litter availability, casualty conditions, or difficult terrain such as dense jungle, mountainous regions, or urban environments.

4-12. Additionally, operational flexibility is critical, as CASEVAC methods adapt to terrain, threat levels, and available evacuation assets. Leaders continuously assess mission conditions and select the most effective evacuation approach, ensuring that casualties receive timely medical care while maintaining operations security and mobility.

Considerations at Casualty Collection Points

4-13. Litter teams should be well trained in medical tactics, techniques, and procedures (TTP) specific to operating within CCPs. This includes managing different sections for killed in action, contaminated casualties requiring decontamination, WII enemy detainees, and civilians, as well as having a security plan for handling enemy casualties and equipment. Security and accountability are paramount; sensitive items such as weapons, maps, and communication equipment from casualties are secured and managed responsibly.

Coordination and Communication

4-14. CASEVAC remains a vital supporting task at the platoon level and is deliberately planned and regularly rehearsed. Developing a platoon-level CASEVAC SOP requires coordination with the unit's medical personnel to align procedures with tactical requirements. This coordination helps ensure that Soldiers know how to safely move casualties, load them onto available evacuation platforms, and carry out their roles during movement. Medical personnel also provide critical input on configuring the CCP. Their guidance shapes decisions about security, triage layout, aid and litter team positions, drop-off procedures for sensitive items, and medical resupply staging. These elements support a functional and responsive CCP that operates under pressure and remains synchronized with the platoon's scheme of maneuver.

4-15. While the SOP sets the foundation, CASEVAC procedures are refined through mission-specific planning. Communication methods, including radio frequencies, call signs, message formats, and digital tools such as Joint Battle Command–Platform, are addressed in the unit's signal operating instructions and updated with each OPORD. Visual signals, such as colored smoke or infrared strobes, may be addressed in SOPs but are confirmed or modified during planning and rehearsals. Planners should identify CCPs, loading points, AXPs, and supported MTFs during mission planning and update these details during key tactical transitions, such as crossing phase lines or executing a passage of lines. CASEVAC and MEDEVAC planning is integrated into the overall scheme of maneuver and sustainment operations and should be rehearsed and refined through the MDMP or TLP processes at every echelon.

COMPANY LEVEL

4-16. At the company level, CASEVAC plans are refined, through TLPs, to address the specific operational needs and resources available within the company's assigned area. Company commanders focus on ensuring that every Soldier is familiar with casualty handling protocols and knows the locations of the nearest CCPs. This level of CASEVAC planning requires meticulous attention to detail, particularly in tracking personnel, logistical assets, and medical supplies (such as CLS bags, Warrior Aid Litter Kit [WALK] or individual first aid kits), evacuation platforms, and essential equipment like litters and straps.

Organize the CCP and Lead Tactical Movement

Company commanders and 1SGs turn the battalion CASEVAC plan into action. They establish company-level CCPs, organize litter teams, and assign unit vehicles to CASEVAC tasks. They manage medical supply readiness and lead rehearsals. Their leadership ensures the unit can move casualties quickly while continuing to fight.

4-17. Commanders define the logistical requirements for CASEVAC to prevent gaps in medical support, especially during large-scale combat operations or in environments where communication breaks down. They lead by enforcing a disciplined approach that prepares every Soldier to perform essential CASEVAC tasks under pressure. This clarity and structure allow units to maintain continuous support for wounded personnel, even when conditions are difficult. A well-organized CASEVAC plan directly supports the unit's larger operational goals by preserving combat power and reinforcing force health protection.

4-18. The unit's CASEVAC plan is essential to successful MEDEVAC operations. It aligns all levels of command and prepares them to carry out evacuation tasks while staying focused on mission objectives. A clear and well-communicated plan allows company commanders to help subordinate units coordinate and support one another during medical emergencies. The plan ties CASEVAC efforts into the broader operation, linking evacuation procedures with mission needs, and improving the unit's ability to respond to battlefield casualties. A strong CASEVAC plan promotes cohesion and contributes to both mission success and troop morale.

4-19. The company level plays a critical role in the execution of CASEVAC operations, ensuring timely and effective CASEVAC within its assigned area. However, CASEVAC planning and coordination occur at multiple echelons, with key differences in roles, responsibilities, and focus between the company and higher headquarters (battalion, brigade, division, and corps staffs).

4-20. The key differences are:

- Scope of responsibility: The company level is responsible for planning and executing CASEVAC operations within their assigned area. In contrast, higher echelons manage broader efforts encompassing multiple companies, battalions, or brigades.
- Level of detail: The company level focuses on the detailed execution of CASEVAC operations, including resource allocation, coordination with subordinate units, and real-time execution. In contrast, higher echelons focus on the bigger picture, including policy development, strategic resource allocation, and multi-echelon coordination.
- Decision-making authority: The company level has limited authority and focuses mainly on executing plans and adapting to mission requirements. Battalion, brigade, division, and corps staffs have greater decision-making power to allocate resources and shape CASEVAC priorities at operational and strategic levels.
- Resource allocation: The company level has limited CASEVAC resources, relying on organic medical personnel, unit vehicles, and available assets. Higher echelons have broader access to personnel, vehicles, aircraft, and MTF, allowing for more comprehensive CASEVAC coordination.
- Coordination and integration: At the company level, leaders coordinate with adjacent units and the battalion staff to carry out CASEVAC operations without delays or confusion. Higher echelons, brigade, division, and corps, coordinate across levels to build a fully integrated evacuation system that supports the entire operation. This coordination helps move casualties through the chain of care, even in complex or fast-moving missions.
- Mission impact assessment: Company commanders identify the point at which CASEVAC supports risks degrading their unit's ability to accomplish its primary mission. CASEVAC operations should be carefully balanced against tactical objectives to prevent mission failure or excessive strain on combat power.
- Training and rehearsals: While higher echelons establish a tactical standing operating procedure, the company level is responsible for ensuring CASEVAC teams are properly trained, and that the unit rehearses CASEVAC procedures. Regular drills enhance coordination, response times, and overall CASEVAC effectiveness in combat scenarios.

4-21. The company level is focused on the tactical execution of CASEVAC operations, including:

- Allocating resources: The company commander allocates resources to support CASEVAC operations. This includes nonmedical platforms, personnel, and available medical assets, to support CASEVAC operations.
- Coordinating with subordinate units: The company commander works closely with platoon and squad leaders to carry out CASEVAC operations in a smooth and timely way. This coordination ensures that casualty movement stays aligned with the battalion's overall evacuation plan and supports the mission's medical priorities. By maintaining clear communication and shared understanding, the company keeps CASEVAC efforts effective under changing battlefield conditions.
- Executing plans: The company commander executes plans and adjusts operations based on higher-echelon directives. They must also adapt to changing battlefield conditions as necessary.
- Providing situational awareness: The company commander maintains constant communication with higher echelons to provide situational awareness. This includes reporting the status of CASEVAC operations and identifying challenges that may require battalion-level intervention.
- Ensuring training and rehearsals: The company commander makes sure that CASEVAC teams are properly trained and that all Soldiers rehearse the evacuation plan. These rehearsals align the company with the battalion's priorities and improve coordination, timing, and execution. Regular training prepares the unit to carry out CASEVAC tasks, even under stress or in complex combat conditions.

4-22. The scope of responsibility, level of detail, and decision-making authority differ at each echelon of command:

- Scope of Responsibility and Available Resources:
  - Company Level: Oversees CASEVAC operations in a defined, localized area, focusing on immediate CASEVAC and tactical medical care. Resources are limited to organic medical personnel (combat medics), CLS, unit vehicles, and litter teams.
  - Battalion Level: Manages CASEVAC across multiple companies, ensuring synchronization of efforts and prioritization of evacuation assets. Additional medical resources (such as battalion aid stations, ground ambulances) allow for more structured evacuation.
  - Brigade Level: Encompasses multiple battalions and coordinates CASEVAC at an operational level, ensuring medical planning and resource allocation. Brigades have access to echelons above brigade capabilities, including higher-level treatment facilities, aerial CASEVAC assets, and specialized medical units that extend beyond battalion-level resources.
- Level of Detail and Decision-Making Authority:
  - Company Level: Focuses on the immediate execution of CASEVAC procedures. It carries out orders within its localized operational environment.
  - Battalion Level: Takes a broader approach to CASEVAC efforts, ensuring synchronization across multiple companies. It is responsible for allocating medical resources and adjusting evacuation routes based on mission conditions.
  - Brigade Level: Directs CASEVAC efforts across multiple battalions, integrating higher medical echelons, and managing CASEVAC in conjunction with air and ground MEDEVAC assets. Brigades also liaise with joint or coalition partners, MTF, and echelons above brigade resources to sustain operations over prolonged engagements.

4-23. Company and battalion levels focus on the tactical execution of CASEVAC operations. At the company level, leaders establish CCPs, move casualties from the POI, and request evacuation support from higher headquarters. Battalion leaders provide C2 over multiple companies, synchronize CASEVAC efforts across the unit's area of operations, and adjust plans in real time based on the fight. Brigade and division staffs remain tactically engaged by directing evacuation priorities, coordinating with supporting medical assets, and managing resources across subordinate formations. Corps and higher echelons address broader operational or strategic considerations, such as long-range evacuation, theater-level policy, and sustainment alignment. This tiered approach builds a responsive CASEVAC system that links tactical execution with operational reach.

Integration and Synchronization

4-24. At the company level, CASEVAC integration begins with aligning the unit's evacuation plan to higher headquarters' concept of support, ensuring it is nested in Annex C (Operations) and Annex F (Sustainment) and reflected in company-level OPORDs. The company commander, first sergeant, and the senior combat medic jointly develop CASEVAC TTPs that account for assigned personnel, mission profile, and available assets. This includes identifying primary and alternate CCPs, designating evacuation platforms, and rehearsing handover procedures with supported and supporting units. Company-level CASEVAC plans incorporate the commander's communications plan, security measures for evacuation platforms, and risk controls identified in the unit's deliberate risk assessment.

4-25. Squad and platoon leaders are trained to execute decentralized CASEVAC in degraded conditions, using pre-identified routes, visual signals, and alternate casualty collection techniques if communications are disrupted. Leaders rehearse CASEVAC as part of the support rehearsals, integrating with maneuver and fires to maintain operational tempo during casualty movement. Platoon-level rehearsals confirm that load plans, litter teams, and casualty tracking procedures are synchronized with the company scheme of maneuver and higher headquarters' reporting standards.

4-26. The company conducts CASEVAC training to build redundancy and resilience, ensuring backup platforms, alternate CCP locations, and cross-trained personnel are available, while fostering adaptability to adjust routes and procedures in real time. Integration with attached or habitually supporting enablers, such as engineers, military police, or host-nation security, improves route security and expedites movement to the battalion CCP or ambulance exchange points. Following each mission, the company conducts an AAR to

capture lessons, update SOPs, and refine CASEVAC rehearsals, sustaining readiness for subsequent operations.

Standard Operating Procedures

4-27. SOPs for CASEVAC at the company level provide a clear and organized framework for managing casualties. These SOPs are designed to be flexible, allowing them to adapt to different mission plans and environmental conditions. They outline specific TTP that streamline the CASEVAC process, ensuring that actions can be executed with precision under challenging circumstances.

4-28. Well-rehearsed and clearly communicated SOPs allow units to adjust CASEVAC operations as battlefield conditions change. These SOPs give Soldiers the confidence to act immediately, even when the situation is uncertain or resources are limited. A structured and flexible approach reduces confusion, supports timely medical care, and helps the unit maintain operational effectiveness. By adapting SOPs to each mission and environment, commanders make CASEVAC a reliable supporting task that reinforces the unit's ability to fight and win.

4-29. Small-unit CASEVAC SOPs align with higher command SOPs and support the overall HSS plan in the OPORD. These SOPs link company- and platoon-level efforts with the medical elements at battalion and brigade levels, such as the maneuver battalion medical platoon and the brigade support medical company. By doing so, they help maintain a smooth flow of casualty care across all roles. The SOPs also outline each step of care, beginning with self-aid and buddy aid, then progressing through CLS support, and finally to care by trained combat medics. This progression reflects the principles of TCCC and ensures casualties receive the right care at each stage. For more information on HSS planning, refer to FM 4-0 and ATP 4-02.55.

4-30. SOPs also prepare units for various scenarios, including MASCAL events, by outlining the progression of care and evacuation from the POI to more advanced medical support as the situation evolves. By addressing a wide range of potential situations, these SOPs provide a structured and adaptable framework for CASEVAC operations, enabling units to respond to medical needs in a coordinated and systematic manner.

Security and Tactical Considerations

4-31. Security plays a vital role in every CASEVAC mission. It affects the safety of casualties, medical personnel, and escort teams. The most dangerous phase often occurs when moving casualties from the POI to the platoon CCP. During this phase, aid and litter teams operate in exposed conditions and may come under fire. Commanders assess enemy activity, terrain, and the posture of friendly forces to decide how to protect these routes and whether to assign escort elements. Even a small number of casualties can make a squad or platoon combat ineffective. According to FM 1-02.2, units that fall below 85 percent personnel strength are no longer fully operational. A squad reduced by just two Soldiers may drop below this threshold. CASEVAC plans recognize how these losses affect combat power and build evacuation strategies that prevent further degradation.

4-32. At every echelon, commanders weigh the urgency of evacuation against the tactical risk. This means balancing the need to move wounded Soldiers with the danger posed by enemy fire, degraded terrain, or limited visibility. CASEVAC plans should aim to protect evacuation teams while maintaining operational momentum. Survivable and secure routes enable medical personnel to reach the wounded, begin treatment, and sustain the casualty flow. Leaders treat CASEVAC as a mission-critical support task, not a separate effort. By doing so, they preserve combat power, keep units in the fight, and improve the chances of a rapid RTD. Timely evacuation reduces the likelihood of medical complications and helps prevent culmination due to personnel shortfalls.

Leader Role in Casualty Evacuation

4-33. The 1SG manages CASEVAC operations at the company level, just as the PSG does at the platoon level. While both noncommissioned officers traditionally handle logistics, such as resupply and vehicle movement, their responsibilities also include establishing and managing CCPs and coordinating evacuation. When platoons operate forward of the company headquarters, the PSG establishes the platoon CCP and oversees casualty movement to the company CCP. These duties support the timely evacuation of WII personnel and help maintain the unit's combat power during sustained operations. Together, the 1SG and

PSG create a coordinated CASEVAC system that functions across all elements of the company. For further detail on CASEVAC tasks by echelon and formation type, readers should consult the appropriate company- or platoon-level doctrine

4-34. To support this role, 1SGs lead regular CASEVAC training and rehearsals as part of the unit's warrior tasks and battle drills. These events integrate casualty care and evacuation with other core Soldier skills, shoot, move, communicate, and survive, reflecting the Army's recognition that protecting and caring for wounded personnel is a deliberate task, not an afterthought. Soldiers act immediately to provide care and begin movement toward a CCP, rather than waiting for medical teams to arrive. By leading rehearsals that include casualty movement, CCP setup, and security measures, the 1SG builds readiness across the formation and strengthens the unit's ability to maintain combat power under fire.

4-35. Through strong leadership and active involvement in casualty planning, the 1SG builds a unit culture focused on readiness, accountability, and rapid response. By making CASEVAC part of every operation, they help safeguard the unit's most valuable asset, its people. This integrated approach strengthens the company's ability to fight and recover, ensuring that both the mission and the welfare of Soldiers remain a top priority.

Support and Compliance with Standard Operating Procedure

4-36. Company leaders ensure that CASEVAC plans at the platoon level align with the company's SOPs. They are responsible for preparing their units to conduct CASEVAC operations in a variety of environments, including those that are harsh or unpredictable. This preparation includes checking that enough CLS–qualified personnel are assigned, that medical supply shortages are identified and corrected, and that vehicles set aside for CASEVAC are properly marked in line with Geneva Convention standards. These steps help ensure the unit is ready to respond when casualties occur.

4-37. Leaders embed CASEVAC procedures into the unit's regular training cycle to build consistency, confidence, and skill across the formation. This consistent exposure helps every Soldier understand their role in the evacuation process, from casualty identification to movement to the CCP. Repeated practice not only improves the speed and accuracy of the response but also reinforces the unit's ability to follow established protocols under stress. By building CASEVAC into the training culture, leaders improve mission readiness and strengthen the unit's ability to care for its wounded during combat operations.

Operational Readiness and the Unit Casualty Evacuation Plan

4-38. The company's CASEVAC plan is essential to maintaining operational readiness. It gives the unit a clear method for providing timely medical care while continuing to meet mission objectives. The plan depends on coordination across all echelons, as well as adaptability during execution and thorough preparation before operations begin. When leaders at every level understand their roles and rehearse the plan regularly, the company can carry out CASEVAC operations without disrupting the larger mission.

4-39. A well-structured CASEVAC plan enables the company to maintain mission continuity, even in the face of casualties, by seamlessly integrating medical support into operational activities. Comprehensive planning not only supports mission success but also reinforces the Army's commitment to safeguarding the health and welfare of its Soldiers, ensuring that operational goals are met while prioritizing the care and well-being of its personnel.

BATTALION LEVEL

4-40. Battalion-level leaders execute the brigade's CASEVAC plan by converting it into detailed actions that achieve the brigade commander's intent and align with the battalion's tactical mission. The battalion S-3 leads integration of casualty movement into the scheme of maneuver, synchronizing with the staff to maintain tempo and unity of effort. The executive officer coordinates inputs and manages planning timelines to keep the plan synchronized with brigade operations. The S-4 identifies, stages, and sustains CASEVAC platforms, such as repurposed tactical vehicles, while coordinating fuel and maintenance support. The S-1 maintains casualty tracking, projects evacuation needs, and manages accountability throughout the operation.

Synchronize Resources and Maintain the Flow

Battalion commanders and staff control CASEVAC operations across the company formations. They position CASEVAC assets, track casualty flow, and coordinate with adjacent units and MEDEVAC. They also monitor supply status and route security. Their coordination keeps evacuation moving and avoids bottlenecks that could overwhelm lower echelons.

4-41. The battalion medical officer or physician assistant provides clinical guidance, recommends CCP locations, and ensures CASEVAC planning supports the overall evacuation plan. The medical officer also trains unit personnel on casualty handling, equipment use, and standardized triage marking procedures, and advises when organic MEDEVAC capability may be exceeded and requires augmentation. Where necessary, the medical officer coordinates the integration of CASEVAC into the brigade's ambulance shuttle system to maintain continuous patient flow.

4-42. By synchronizing across staff sections and aligning with brigade-level planning, the battalion builds a CASEVAC plan that supports the operational framework and moves casualties from the POI to the next role of care. This synchronization ensures battalion-level actions directly reinforce higher-echelon priorities, maintain operational momentum, and preserve combat power throughout the mission.

4-43. Each battalion operates as part of a larger brigade plan, which may involve shaping operations, decisive attacks, or support tasks across a dispersed battlefield. While higher echelons, such as corps, division, and brigade, focus on setting priorities and allocating resources, battalion staffs focus on the details of tactical execution. This includes selecting CCPs, prepositioning CASEVAC assets, coordinating with company elements, and managing casualty flow during operations. Battalion staffs adjust plans as battlefield conditions change, responding to new threats, route closures, or surges in casualty numbers. These adjustments stay aligned with the brigade's overall effort to preserve combat power and maintain momentum.

4-44. CASEVAC at the battalion level is a deliberate, rehearsed task, not an improvised response. The battalion staff allocates CASEVAC platforms, assigns personnel, and ensures all units understand their roles in casualty collection and movement. Coordination across subordinate companies helps reduce delays and prevents CCP congestion. Battalion planners also maintain communication with adjacent units and higher headquarters to keep CASEVAC routes open and share situational updates. During execution, the staff reports key information, such as the number of casualties evacuated, current platform status, and delays, to brigade headquarters. These updates inform decision-making without replacing formal medical reporting channels.

4-45. While brigade and division staffs provide planning guidance and resources, battalion staffs operate closer to the POI and manage the fight as it unfolds. Their actions connect company-level execution with the operational framework developed by higher echelons. By managing CASEVAC as a tactical task, battalion leaders help prevent bottlenecks, maintain evacuation momentum, and support timely medical treatment. This coordination keeps CASEVAC synchronized with maneuver, supports survivability, and contributes directly to mission success during large-scale combat operations.

Key Staff, Functions, and Teams

4-46. CASEVAC planning and execution rely on the combined efforts of leaders and staff across the battalion. Medical officers oversee CCPs and coordinate with evacuation platforms to manage patient movement. Platoon leaders translate the battalion's CASEVAC plan into tactical actions, making sure Soldiers understand how to execute evacuation under fire. Logistics personnel keep evacuation platforms fueled and supplied while distributing medical materiel to forward positions. These roles align with each

unit's position in the chain of command and support the broader CASEVAC effort across echelons. When leaders at each level synchronize their actions, they create a seamless evacuation process that moves casualties from the POI to higher roles of care without delay. This integration reflects the commander's operational priorities and reinforces the Army's focus on unity of effort during large-scale combat operations.

Casualty Evacuation Flow

4-47. Battalion-level CASEVAC operations are managed by the command post and key staff leaders under the commander's intent. The battalion S-3, in coordination with the S-1, medical platoon leader, and senior medic, monitors casualty flow from the POI to the CCP and onward to higher roles of care. These leaders track routes, adjust timelines, and coordinate with MEDEVAC assets or adjacent units based on changes in the tactical situation. They also update subordinate units on any reroutes or delays to avoid congestion and maintain momentum. This staff-driven process allows the commander to focus on the fight while ensuring that CASEVAC operations remain responsive and synchronized with the overall mission.

4-48. Managing casualty flow helps the battalion maintain its combat power while meeting the medical needs of its Soldiers. To do this well, units conduct regular rehearsals, keep communication open across all echelons, and stay flexible as conditions change. A well-structured CASEVAC plan gives commanders the tools to respond and keep operations on track.

BRIGADE LEVEL

4-49. At the brigade staff level, planners focus on meeting immediate tactical needs for CASEVAC across the brigade's assigned area. They identify available nonmedical platforms, such as trucks or utility vehicles, and assign them to support CASEVAC when dedicated medical assets are unavailable or committed elsewhere. Brigade staff develop short-term CASEVAC plans that address unit-specific requirements, adjust to shifting priorities, and align with the overall maneuver plan.

Integrate CASEVAC into Maneuver and Sustainment

Brigade staff link CASEVAC plans to the larger scheme of maneuver. They assign nonmedical platforms, direct support between battalions, and manage CASEVAC priorities during high-casualty events. The brigade coordinates with higher and lower echelons to adapt CASEVAC to the current fight. By overseeing synchronization, brigade staff extend the unit's ability to save lives and maintain pressure on the enemy.

4-50. The brigade staff synchronizes CASEVAC operations by coordinating with battalion-level leaders and medical personnel. This coordination includes establishing shared evacuation routes, identifying available platforms, confirming CCP locations, and setting standard reporting formats. Brigade medical planners help deconflict evacuation timelines, assess overflow risk at Role 1 MTFs, and redirect casualties when needed. They also coordinate handoff to higher roles of care, including Role 2 MTFs, and provide updates to the brigade surgeon and operations officer. When evacuation routes are blocked or platforms become unavailable, the brigade staff helps redirect movement, assign alternate resources, or prioritize evacuation based on medical urgency and mission requirements. This oversight helps maintain flow from the POI to Role 2 while minimizing delays and reducing confusion under pressure.

4-51. By focusing on coordination, flexibility, and effective use of resources, the brigade staff supports CASEVAC as a critical task that preserves combat power. Integrating nonmedical platforms and personnel into evacuation planning extends the brigade's ability to respond during high casualty events or limited resource conditions. This approach allows medical assets to concentrate on urgent cases, while still ensuring that all casualties receive timely evacuation and follow-on care.

Orders

4-52. Division and brigade staffs communicate CASEVAC guidance through the OPORD, placing primary planning in Annex C (Operations) to direct execution, with supporting coordination in Annex F (Sustainment). These documents outline evacuation procedures, CCPs, routes, and responsibilities. CASEVAC planning aligns with higher-echelon guidance while addressing the specific terrain, threats, and resources available to the division or brigade. During the sustainment rehearsal, staff refine CASEVAC coordination, clarify task assignments, and address potential friction points. Orders also include marking

guidance for CASEVAC platforms in accordance with the Geneva Conventions. Publishing clear CASEVAC instructions and rehearsing them with subordinate units strengthens coordination, reduces confusion, and supports timely casualty movement in high-threat environments.

4-53. Division and brigade leaders ensure subordinate units fully understand and rehearse the CASEVAC plan before operations begin. Briefings, walkthroughs, and field rehearsals help Soldiers learn their roles, routes, and responsibilities in the evacuation process. These preparations give leaders a chance to fix problems, confirm coordination, and adjust routes or plans to fit changing battlefield conditions. By prioritizing readiness, training, and communication, division and brigade leaders reinforce CASEVAC as a supporting task at echelon, one that protects Soldiers, preserves combat power, and supports the overall mission.

Deconfliction

4-54. Deconfliction is a critical task for division and brigade staffs when planning and executing CASEVAC. It prevents units from using the same routes or evacuation platforms at the same time, which can create traffic congestion, resource shortages, or delays. Staffs coordinate CASEVAC timing, routing, and airspace use through movement tables, such as the Road Movement Table in Exhibit 3 to Appendix 1 (Logistics) of Annex F (Sustainment), and the Air Movement Table, when applicable. These tools help align CASEVAC with maneuver operations, minimize disruption, and protect evacuation personnel. By synchronizing CASEVAC with the overall scheme of maneuver, commanders uphold the principles of disciplined operations and unity of effort described in FM 3-0. This planning creates a more responsive and survivable system for moving casualties in dynamic environments.

4-55. Commanders strengthen CASEVAC deconfliction by integrating battle tracking into their C2 systems. Shared communication networks, map overlays, and real-time tracking tools help monitor casualty movement and avoid route conflicts. Leaders allocate key resources, such as radio frequencies for the evacuation operations, to maintain clear communications across units. Staffs coordinate CASEVAC planning through established forums like the operations synchronization meeting and the sustainment synchronization meeting. These meetings provide opportunities to identify risks, adjust routes, and align priorities across warfighting functions. Training exercises that simulate contested CASEVAC operations build familiarity with these tools and processes. When units rehearse communications, rerouting, and decision-making under stress, they create a more resilient and responsive CASEVAC network that supports mission success.

4-56. The following vignette, "Deconflicting Casualty Evacuation: A Tale of Two Units," is a fictional scenario based on real-world events. It shows how commanders and units can achieve effective deconfliction and coordination during intense combat operations. The example highlights the importance of preventing friendly fire, avoiding evacuation delays, and making sure medical support reaches those who need it most. Commanders apply these principles by managing CASEVAC operations with deliberate timing, route planning, and mission prioritization. By studying this scenario, leaders can better understand how to apply deconfliction techniques to improve the success of their own CASEVAC efforts.

Deconflicting Casualty Evacuation: A Tale of Two Units

During the Battle of Ironclad Alley, two battalions were operating in the same area. 1st Battalion was clearing the north side of the district, while 2nd Battalion was clearing the south side. As 1st Battalion pushed deeper into the district, they came under heavy fire from enemy forces. Several Service members were wounded, and their medical team requested help to evacuate the WII personnel.

Since the fighting was so intense, the usual medical helicopters couldn't reach the area. The unit had to use a nonmedical vehicle, a high mobility multipurpose wheeled vehicle (HMMWV), to transport the wounded Service members to safety. Meanwhile, 2nd Battalion was also taking casualties on the south side of the district. They too needed to evacuate their wounded Service members, and they used armored personnel carriers to do so. However, as these vehicles moved through the area, there was a risk of confusion and friendly fire, where one unit might accidentally attack the other.

To prevent delays and confusion, operations officers from both units coordinated with one another. They agreed on a specific evacuation route, marked with checkpoints, to guide vehicles safely through the area. Medical teams from both units shared details about the casualties, including their locations, medical conditions, and evacuation priority. This coordination allowed both units to allocate their resources and prioritize casualty movement based on urgency.

As nonmedical vehicles from both units traveled along the planned route, they used the checkpoints to maintain order and avoid overlap. Their shared understanding helped prevent delays, miscommunication, and potential fratricide. Because of this coordination, the units successfully transported wounded Soldiers to a safe location, where medical teams could provide further treatment.

This event showed how communication and planning between units during CASEVAC operations reduce risk and improve outcomes, even in combat. By integrating efforts at the tactical level, these units demonstrated how CASEVAC functions as a supporting task that helps maintain momentum, preserve combat power, and save lives. This example reinforces the need for deliberate coordination in future operations, especially during large-scale combat operations.

4-57. Units operating in the same area take an active role in coordinating CASEVAC operations. They do this by establishing clear communication channels and deconflicting their operational boundaries. Predetermined routes and checkpoints help guide nonmedical vehicles safely through the area, reducing the risk of confusion or friendly fire. Medical teams share real-time updates on casualty locations, conditions, and evacuation priorities. This shared awareness helps both units allocate resources properly and avoid delays in treatment. By making coordination and deconfliction a priority, units improve the safety and speed of CASEVAC missions, even during heavy fighting. Clear planning and open communication support the overall mission by keeping CASEVAC aligned with tactical movements and preserving combat power.

Liaison Officers

4-58. LNOs at the division and brigade levels play a key role in coordinating CASEVAC operations across units and with allied partners. They serve as the main points of contact for sharing CASEVAC plans, updates, and changes as the situation develops. LNOs help make sure that all involved units understand the CASEVAC plan and carry it out correctly, even as combat conditions shift. By working closely with adjacent units and partner forces, LNOs improve the speed, flexibility, and safety of CASEVAC. Their efforts keep CASEVAC operations connected to current tactical needs and help translate higher-level planning into action on the ground.

4-59. At the brigade level, LNOs often work more closely with subordinate units, providing real-time updates and ensuring that CASEVAC plans adapt to rapidly changing battlefield conditions. Their role includes identifying and resolving potential conflicts, such as competing resource demands or route overlap, and ensuring that all involved parties remain informed. By maintaining strong relationships with unit leaders and fostering clear, continuous communication, brigade-level LNOs contribute to the effective execution of CASEVAC operations, ensuring casualties are evacuated safely and efficiently while supporting the broader operational goals of the brigade.

DIVISION LEVEL

4-60. At the division level, commanders and staff synchronize CASEVAC across multiple brigades to support operations over a wide area. The division G-3 and G-4 coordinate with the division surgeon to identify CASEVAC priorities, allocate nonmedical platforms, and integrate CASEVAC planning into the broader operational scheme. Division medical planners do not control tactical CASEVAC execution, but they monitor medical evacuation flow, track patient status, and align CASEVAC with available MTF capacity. Division staff also synchronize CASEVAC with MEDEVAC operations to reduce bottlenecks and preserve en route care options. When required, they coordinate with corps and theater assets to request reinforcement or redirect casualties to different treatment facilities. Division CASEVAC planning supports continuity of care, helps manage limited evacuation resources, and contributes to preserving combat power across the division area of operations.

Resource the Fight and Maintain Operational Reach

Division and corps commanders provide the policies, resources, and oversight that keep CASEVAC aligned with the mission. They issue CASEVAC orders that define responsibilities, routes, and platform standards. They also support training and integration with joint or multinational forces. By managing CASEVAC at scale, they sustain the tempo of operations and preserve combat effectiveness across the area of operations.

CASUALTY REPORTING ACCOUNTABILITY

4-61. Units report and manage accountability of casualties during operations. The classification of a casualty determines whether the unit follows a single or a dual reporting process. The two processes are casualty reporting via Department of the Army (DA) Form 1156 (*Casualty Feeder Card*) and treatment reporting via Department of Defense Form (DD) 1380 (*Tactical Combat Casualty Care [TCCC] card).*

4-62. Casualty accountability is a command responsibility. Leaders account for all WII personnel throughout operations, especially during large-scale combat where casualty numbers may overwhelm reporting systems. Commanders at every echelon build accountability into planning, rehearsals, and execution, not as an administrative task but as a mission-critical function that affects force readiness and medical support. Units track casualties from the POI until they are admitted to a Role 3 medical treatment facility for inpatient care.

4-63. Effective casualty reporting supports accurate personnel tracking, timely medical response, and operational decision-making. Commanders work with both personnel and medical staffs to maintain shared awareness of each casualty's status. While the DD Form 1380 supports continuity of medical treatment, units also use DA Form 1156 to initiate administrative reporting. These two efforts are complementary and should be coordinated at every handoff.

4-64. In joint and multinational environments, casualty reporting may extend beyond U.S. Soldiers to include civilians, contractors, detainees, or unified action partners. While formal reporting responsibilities vary by category, commanders remain responsible for the accountability of all personnel under their control. Even when automated systems are unavailable or overwhelmed, units rely on clear SOPs and disciplined reporting chains to prevent loss of information.

4-65. Large-scale combat operations increase the risk of delayed reporting, duplicated efforts, or missed updates. To avoid this, commanders designate staff sections to manage casualty tracking during both routine and MASCAL events. Personnel staff sections consolidate casualty data, while medical elements track treatment and evacuation. These efforts remain linked throughout the operation. Accurate, timely updates protect the force and allow commanders to adjust task organization, request replacements, or shift resources as needed.

4-66. The Transportation Command Regulating and Command & Control Evacuation System (known as TRAC2ES) supports patient tracking in theater-regulated movement, no universal tool currently exists for tactical-level casualty tracking during CASEVAC. Until casualties reach formal medical channels, units often rely on radio reports, battle tracking tools, or written logs. This gap reinforces the need for disciplined reporting practices at all echelons and close coordination between CASEVAC teams, medical personnel, and unit headquarters. In large-scale combat operations, where the scale and tempo of operations can rapidly degrade communications, accountability remains a priority from the first report to final disposition.

CASUALTY EVACUATION METHODS AND TACTICAL EXECUTION

4-67. CASEVAC is used to keep casualties moving when MEDEVAC is unavailable, delayed, or not practical. This evacuation support is planned and rehearsed across all operational environments to stay flexible and responsive. Soldiers should be trained in multiple CASEVAC techniques, including manual carries, litter movement, and platform-based transport. These methods help preserve combat power and maintain momentum, even in denied or degraded conditions. ATP 4-02.13 outlines the TTP that guide these efforts.

MANUAL EVACUATION METHODS

4-68. Manual evacuation becomes essential when terrain, enemy activity, or logistics prevent the use of vehicles. Soldiers conduct drags or one- and two-person carries to remove casualties from danger. Drags are used under fire and cover short distances rapidly. Carries are used when the threat has diminished, and the casualty must be transported farther.

4-69. The selection of a manual evacuation technique depends on several operational factors: the casualty's weight relative to the rescuer's strength, the urgency and speed of movement, the distance to be covered, and the casualty's injuries, consciousness level, and the security situation. Soldiers evaluate these factors to minimize further injury and maintain mission tempo.

4-70. Soldiers may be required to perform manual evacuation in complex terrain, including dense forests, mountains, urban environments, tunnels, or chemically contaminated areas. These conditions increase risk and may prevent vehicle access. When evacuating in a contaminated environment, units develop plans to reduce gross contamination before movement to protect both rescuers and casualties. Leaders may also rotate teams, establish relay points, or delay movement until conditions improve.

4-71. Proficiency in manual evacuation techniques requires regular, realistic training. ATP 4-02.13 details the carries, drags, and associated TTPs. Training improves Soldier confidence and readiness to act under fire or in austere conditions.

4-72. These skills support the broader CASEVAC mission by ensuring no casualty is left behind. Effective manual evacuation strengthens unit cohesion, preserves combat strength, and enables rapid casualty removal when other assets are not available.

LITTER EVACUATION

4-73. Litter evacuation provides stable casualty movement over extended distances, reducing further injury and maintaining safe transport. Terrain, weather, and enemy actions affect litter team effectiveness. Urban terrain may include stairwells and rubble, while jungles or mountains increase physical demands. In these environments, relay points or alternative methods, such as rope-assisted extractions, may be necessary.

4-74. Combat conditions complicate litter movement. Indirect fire, CBRN threats, and limited visibility demand cover and concealment, bounding overwatch, and contingency planning. Well-trained and properly equipped litter teams help mitigate these risks and maintain effectiveness.

Types of Litters and Their Applications

4-75. Commanders understand the different types of litters to match the right equipment to the mission and environment. Each type has specific strengths based on terrain, threat, and mobility needs:

- Rigid Folding Litters (Pole Litters) are the standard for most missions, offering stable transport.

- Soft Litters offer flexibility in confined spaces.
- Rescue and Transport System Patient Basic High Density Sheet Systems support high-angle, water, or restrictive terrain extractions.
- Stokes Baskets are used for hoist, maritime, or vertical CASEVAC.
- Improvised Litters may be built from materials on hand when no standard options are available.

4-76. Commanders train and prepare litter teams to meet the physical and technical demands of CASEVAC. These teams carry load-bearing gear designed for rough terrain and long-distance movement. Training includes proper casualty handling techniques to reduce the risk of additional injury during transport. Leaders also incorporate strength and endurance conditioning into regular readiness activities, helping teams move casualties across long distances or through difficult environments. By developing these skills ahead of time, commanders increase the unit's ability to carry out CASEVAC missions in combat conditions.

Training and Operational Considerations for Litter Evacuation

4-77. CASEVAC teams operate in complex settings under pressure. ATP 4-02.13 provides detailed guidance on:

- Litter movement under fire.
- CCP setup.
- Use of relay methods for long routes.
- Knot tying and techniques for negotiating rough terrain such as steep slopes or in rubble.

4-78. Litter CASEVAC enables timely casualty transport while reducing exposure to hostile fire and environmental hazards. With proper training and the right tools, using a litter also reduces the risk of further injury to the casualty by providing stability and controlled movement. Well-trained units can sustain litter-based CASEVAC operations even in combat conditions.

Casualty Evacuation Platforms

4-79. ATP 4-02.13 outlines the use of ground vehicles, aircraft, watercraft, and alternative platforms for CASEVAC. These platforms allow rapid, safe casualty movement when operational conditions permit. Commanders select platforms that match the environment, mission urgency, and threat level.

Ground Vehicles for Casualty Evacuation

4-80. Ground vehicles are the primary CASEVAC method in mounted operations, providing protected mobility to Role 1 or Role 2 MTFs. See table C-2 on page 109 platform types and capacities.

4-81. Terrain, poor roads, and enemy threats, including indirect fire, explosive hazards, and drone attacks, can hinder ground mobility. Current conflict trends, such as in Ukraine, show the increased use of first-person view drones to target vehicles. Commanders evaluate terrain, security, and threat conditions before committing ground CASEVAC assets.

Aerial Vehicles for Casualty Evacuation

4-82. Rotary-wing and fixed-wing platforms provide rapid casualty movement, especially in areas that are hard to reach or under threat. Rotary-wing assets, such as UH-60 Black Hawks, allow for extraction close to the POI.

4-83. However, enemy air defenses, limited LZs, and poor weather can limit their use. Aerial CASEVAC is planned as part of the larger operations, with attention to LZ security, threat suppression, and viable routes. See table C-1 on page 105 for aircraft types and capacities.

Watercraft for Casualty Evacuation

4-84. In amphibious or riverine operations, watercraft support CASEVAC along inland or coastal waterways. They are useful in joint operations or when medical support is available from naval forces.

4-85. However, tides, currents, and enemy interdiction can delay evacuation. Planning should include CASEVAC routes, embarkation points, and medical integration. See table C-3 on page 114 for watercraft options.

Alternative Casualty Evacuation Methods

4-86. When standard platforms are not feasible, alternative CASEVAC methods provide flexible solutions in challenging environments. These methods include litter carries and the use of pack animals, which are particularly effective in jungle, subterranean, or rubble-filled terrain.

4-87. These options require high endurance and coordination. Manual CASEVAC is labor-intensive, and pack animals require support. Commanders evaluate risk, effectiveness, and resource availability when employing these methods.

CASUALTY EVACUATION IN MASS CASUALTY SITUATIONS

4-88. During a MASCAL event, the ability to rapidly evacuate casualties is crucial to saving lives and maintaining morale. Appendix B outlines how to manage MASCAL situations by improving CASEVAC efforts. Units do this by using nonmedical platforms for transport, setting up CCPs, and planning evacuation routes. These actions help move casualties to MTFs while using medical resources and personnel wisely. Success during CASEVAC in a MASCAL event depends on detailed planning, effective triage, and a coordinated response. This includes using host-nation support and rehearsing procedures ahead of time to stay prepared. When leaders understand the complexity of CASEVAC, they can build solid strategies to protect life, limb, and eyesight, even in the most difficult operational conditions.

4-89. Effectively managing CASEVAC in MASCAL situations is vital for supporting the maneuver commander and maintaining the continuity of operations of military units. Appendix D provides detailed guidance on key tasks such as triage, prioritization, and logistical planning, each critical when dealing with large numbers of casualties. When commanders follow clear procedures for assessing injuries and setting priorities, they direct resources to the areas of greatest need. Triage speeds up care, supports quick decisions, and allows units to keep fighting even in high-pressure situations. Proper execution of CASEVAC during a MASCAL event helps units stay in the fight, preserve combat power, and keep the mission on track.

CASUALTY EVACUATION OPERATIONS

4-90. CASEVAC provides a flexible way to move WII personnel when MEDEVAC assets are unavailable, overtasked, or unable to reach the POI. Rather than offering a one-size-fits-all solution, CASEVAC is adapted to the terrain, mission, and available resources. This section discusses common considerations such as platform type, casualty condition, security needs, and coordination challenges. Leaders may use local checklists, templates, or SOPs to support CASEVAC planning, but they should treat these tools as aids, not fixed requirements. Commanders retain the flexibility to adjust their approach to fit the operational environment while preserving combat power and keeping the mission on track.

Casualty Evacuation Capabilities and Levels of Support

4-91. Commanders use CASEVAC to maintain casualty movement when MEDEVAC platforms are unavailable, delayed, or focused on critical patients. By using options like utility vehicles or rotary-wing aircraft with security escorts, they can keep operations moving and reduce delays in care. CASEVAC provides flexibility under combat conditions, but its success depends on knowing the strengths and limits of each platform. Appendix C describes these options to help leaders plan and make informed decisions during operations.

4-92. While CASEVAC gives commanders a fast and flexible way to evacuate casualties, it comes with clear limitations. Unlike MEDEVAC platforms, CASEVAC usually lacks dedicated medical equipment and trained medical personnel, which can increase the risk to patients during transport. Still, commanders can improve CASEVAC outcomes by using available resources, planning, and training their teams. As discussed in Appendix C, important planning steps include setting up evacuation routes, assigning the right assets, and building a sustainment plan that supports the use of non-standard platforms. By focusing on training and

integrating different types of transport, commanders can keep casualty care moving, maintain the pace of operations, and improve the overall success of CASEVAC missions.

Planned and Unplanned Casualty Evacuation

4-93. CASEVAC operations are categorized as either planned or unplanned, depending on the level of preparation and available resources. Planned CASEVAC occurs when commanders pre-allocate designated platforms, trained crews, and medical resources in advance. This proactive approach minimizes delays, ensuring that WII personnel receive timely medical care while maintaining unit operational tempo. By positioning CASEVAC resources in anticipation of potential casualties, commanders can create a streamlined process that improves efficiency and reduces response time.

4-94. Unplanned CASEVAC happens when commanders respond to a casualty situation using whatever resources are immediately on hand. This type of evacuation supports rapid extraction during urgent events but comes with serious risks, such as limited medical care and higher exposure to enemy threats. To reduce these risks, commanders train their personnel to react with flexibility and confidence. Units learn to weigh the need for speed against the requirements for security and casualty care, making fast decisions that protect both the force and the wounded.

Levels of Casualty Evacuation Support

4-95. Commanders employ three levels of CASEVAC support to meet the demands of different tactical situations:

- Dedicated CASEVAC Assets: Platforms specifically assigned and equipped for CASEVAC. These assets are prioritized for CASEVAC missions, ensuring that they are readily available and medically capable of transporting casualties. Dedicated CASEVAC is essential in high-casualty scenarios where consistent evacuation support is required.
- Designated CASEVAC Assets: Dual-role platforms that perform other operational tasks but can be reallocated for CASEVAC when needed. These assets offer flexibility by allowing commanders to adapt to changing operational demands. However, their availability for CASEVAC is contingent upon mission priorities.
- Platforms of Opportunity: Ad hoc evacuation solutions using any available platform to evacuate casualties in urgent, high-risk situations when no other options exist. These platforms lack medical personnel and equipment, making them less suitable for prolonged transport but crucial in emergencies.

4-96. Each level of CASEVAC support provides unique advantages, enabling commanders to align resources with the operational environment. The use of pre-planned CASEVAC operations or opportunistic extractions helps commanders prioritize personnel safety, maintain unit effectiveness, and preserve combat power. By understanding and applying these three levels of CASEVAC support, commanders can make informed decisions that balance mission requirements with casualty care.

CASUALTY EVACUATION CHECKLIST

4-97. A CASEVAC checklist, such as the one in Appendix D, can help commanders stay organized during fast-moving or high-pressure operations. When used as a planning aid or rehearsal tool, the checklist helps leaders think through key actions and considerations, such as platform availability, coordination with medical teams, route security, and communication procedures. It supports decision-making without replacing tactical judgment or mission-specific adjustments.

4-98. The checklist is not a mandatory format but an example that units may adapt based on the mission, echelon, and environment. It can support training, help units build effective SOPs, and improve responsiveness during real-world operations. When applied appropriately, it helps commanders manage risk, coordinate CASEVAC efforts, and reinforce trust in the unit's medical response system which are critical for preserving combat power and maintaining operational momentum.

COMMUNICATION AND COORDINATION

4-99. Commanders know that strong communication and coordination are critical to evacuating WII Soldiers. To support successful CASEVAC operations, they apply standardized procedures, guide accurate execution, and monitor performance throughout the process. By reviewing each part of the evacuation, leaders better understand its complexity and the central role coordination plays in preserving life. Teamwork, discipline, and attention to detail help units achieve the best possible outcomes for WII personnel in fast-moving operational environments.

4-100. When a Soldier becomes WII, commanders act quickly because every minute matters. To provide timely and effective care, they build reliable communication between the medical team, evacuation team, and command center. These teams work side by side, sharing vital information and making rapid decisions that improve survival chances and support the overall mission.

MOVEMENT SYNCHRONIZATION

4-101. Effective movement control is critical to successful joint operations, synchronizing transportation assets with both tactical maneuvers and sustainment requirements. Movement Control Teams and Battalions are the primary organizations responsible for planning, managing, and coordinating transportation, resolving conflicts for asset utilization, and ensuring timely delivery of essential supplies, personnel, and equipment. This capability directly supports the commander's operational objectives. For additional information on movement control, refer to ATP 4-16.

Deconfliction and Resource Prioritization in Movement Control

4-102. Most CASEVAC missions occur below the brigade level and are managed by tactical units using internal coordination. However, during deliberate operations, such as clearing a Role 2 MTF or evacuating casualties during a large-scale offensive, movement control elements may play a critical role. These units help synchronize high-priority transportation tasks, using tools like movement request systems and road movement tables to reduce congestion and route conflicts. They track asset use across multiple units, identify overlapping plans, and support the commander's scheme of maneuver by keeping CASEVAC and other time-sensitive missions on schedule.

4-103. In such operations, movement control units work closely with sustainment planners and maneuver staffs to prioritize limited resources. CASEVAC may take precedence over routine resupply or retrograde tasks based on the urgency of medical need and its impact on combat power. These units help classify transportation requests by operational importance, redirect assets when threats disrupt routes, and secure alternative pathways when needed. By supporting disciplined movement across the area of operations, movement control elements contribute to coordinated CASEVAC execution and reinforce the broader sustainment and maneuver plan.

Cross-Border Movement Coordination in Joint Operations

4-104. Cross-border coordination for CASEVAC is primarily a theater-level responsibility, led by the combatant command or the designated joint force headquarters. These higher echelons establish formal agreements, permissions, and routing procedures with host-nations to support multinational operations. While lower echelons may execute CASEVAC missions near borders, they rely on policies and agreements developed during theater setting and Phase 0 activities. Early coordination with allied partners and host-nations, especially through regular medical exercises, helps expose gaps and build interoperability before actual operations begin.

4-105. Although cross-border coordination usually refers to movement between countries, similar coordination challenges can occur within a theater between different components or echelons. For example, patient handoffs from a land component to an air component or between corps and division-level commands may require deliberate deconfliction. In both cases, success depends on shared policies, pre-designated corridors, and coordinated command relationships.

4-106. Combatant command and joint force headquarters level staffs work with movement control elements, medical planners, and operational headquarters to establish CASEVAC pathways across national or

component boundaries. This includes securing crossing procedures, overflight permissions, and agreements on patient eligibility at multinational treatment facilities. These agreements should define documentation standards, care responsibilities, and transfer authorities. Sustainment commands and medical brigades may contribute to coordinating support zones and regulating medical movement between echelons.

4-107. Even when formal agreements are in place, unexpected events, such as sudden diplomatic tensions, denied airspace access, or damaged routes, can block planned CASEVAC efforts. Higher echelons develop and maintain alternate evacuation routes and redundant permissions to keep operations moving. J-4, J-5, and J-7 staff elements coordinate with the Department of State or embassy representatives to manage diplomatic clearances and facilitate emergency approvals during crises.

4-108. Real-time situational awareness is critical to prevent delays in cross-border CASEVAC. Joint and multinational staffs use LNOs, shared communication networks, and C2 platforms to monitor threats, changes in diplomatic posture, or environmental hazards. Commanders improve CASEVAC reliability by:

- Holding pre-mission coordination meetings with relevant stakeholders.
- Preparing customs and transit documentation in advance.
- Synchronizing movement plans across national and component timelines.

4-109. LNOs assigned to allied and host-nation units serve as critical links for cross-border CASEVAC. They provide direct communication to clarify national procedures, interpret policy in real time, and prevent misunderstandings that could delay medical movement. Their integration strengthens multinational command cohesion and improves responsiveness during evacuation missions.

4-110. Training units on cross-border CASEVAC goes beyond small-unit training. Regular multinational rehearsals, including live evacuation drills and simulated border clearances, build readiness and help refine coordination practices. These exercises test agreements, surface logistical or legal friction points, and promote shared understanding between partners. When higher echelons conduct deliberate planning, maintain updated agreements, and test them through rehearsal, they set the conditions for successful CASEVAC across national and organizational boundaries.

Communication and Coordination in Casualty Evacuation Operations

4-111. Commanders understand that clear and consistent communication is critical during CASEVAC operations, where every minute can impact a wounded Soldier’s survival. To support fast and accurate coordination, they apply established communication procedures, such as the 9-line MEDEVAC request and standard reporting formats. These tools help medical teams, evacuation platforms, and command elements share a common operational picture and respond to each evacuation request.

4-112. Effective communication enables teams to rapidly exchange critical information, including the casualty’s location, injury severity, and available evacuation assets. This coordination allows the command center to validate evacuation requests, medical teams to prepare for patient arrival, and evacuation units to adjust routes based on real-time battlefield conditions. By enforcing standardized communication practices, commanders reduce confusion, minimize response times, and enhance patient outcomes in both routine and high-threat evacuation scenarios.

4-113. Clear communication is critical to preventing misunderstandings and miscommunications that can lead to delays or mistakes in CASEVAC operations. For example, if the medical team is not informed of the wounded Soldier's condition or the evacuation team is not aware of the safest route to take, it can result in causing further harm to the casualty, delaying or jeopardizing the evacuation. In contrast, clear and effective communication enables teams to work together seamlessly, ensuring that WII Soldiers receive the best possible care. Effective communication also reduces stress and anxiety among teams, allowing them to focus on their tasks and perform at their best.

4-114. Commanders coordinate the efforts of the medical team, evacuation team, and command center to achieve a common goal: the safe and timely evacuation of WII Soldiers. This requires planning, precise execution, and continuous monitoring of the evacuation effort. The command center plays a critical role in coordinating the evacuation effort, tracking the location and status of the WII Soldier, as well as the progress of the evacuation team, making informed decisions and providing guidance to the teams. Effective coordination also involves the use of standardized procedures and protocols, ensuring that all teams work toward the same objective, and use the same language and terminology.

4-115. Commanders highlight the need for clear and standardized communication during CASEVAC operations to help units adapt to changing battlefield conditions. Strong communication reduces the risk of delays, mistakes, or mission failure that could cost lives. In large-scale combat operations, CASEVAC teams respond to shifting threats, damaged infrastructure, or blocked evacuation routes. When a route becomes unusable, whether due to enemy action, indirect fire, or sudden obstacles, standardized communication helps teams reroute casualties, coordinate with supporting units, and continue providing care. By enforcing clear reporting and communication protocols, commanders keep evacuation teams, medical facilities, and operational elements aligned, allowing for fast decisions and steady CASEVAC operations even in chaotic environments.

4-116. Commanders recognize that clear communication and coordination in CASEVAC operations are essential to maintaining operational efficiency and ensuring quality care. CASEVAC missions prioritize the rapid evacuation of casualties, but the process is highly stressful for both the WII Soldier and their unit. Maintaining effective reporting and coordination throughout the mission helps reduce confusion, alleviate stress, and support timely decision-making. By prioritizing accurate, professional communication across command channels, CASEVAC teams enhance both mission effectiveness and the overall level of care provided.

Evacuation Request

4-117. The 9-line MEDEVAC request includes nine standardized pieces of information, such as the pickup location, patient priority, and type of injury or illness. Although commonly used for MEDEVAC, the 9-line also plays a vital role in CASEVAC operations, especially when MEDEVAC assets are not available. In these cases, nonmedical units conducting CASEVAC still send accurate and timely MEDEVAC request to support proper coordination and resource use. CASEVAC platforms may lack en route medical care, commanders evaluate patient conditions carefully to choose the safest transport method. Units that regularly train with the MEDEVAC request format improve their response speed and reduce communication mistakes, helping casualties reach medical care faster.

4-118. Commanders understand that different organizations, such as American, British, Canadian, Australian, and New Zealand (ABCANZ) forces, as well as NATO, use their own evacuation request formats. Supporting multinational operations requires familiarity with these differences. The U.S. 9-line MEDEVAC request format focuses on sending evacuation details quickly, while NATO's version includes extra items like escort needs and threat levels. During joint operations, CASEVAC requests may need to match coalition formats to support clear communication and fast patient movement. Units working with coalition partners should train on multiple formats to coordinate across command structures. Appendix E provides a comparison of U.S. and coalition MEDEVAC request formats.

4-119. Using the U.S. military's 9-line MEDEVAC request format enhances unit communication and CASEVAC efficiency. Standardization is especially critical in high-pressure environments where every minute counts. CASEVAC operations integrate the MEDEVAC request while accounting for variations in platform capabilities, medical support availability, and threat conditions. By ensuring that the format is clearly communicated and embedded in unit training and operational planning, commanders reduce confusion, improve coordination, and ultimately save lives.

AUTHORITY AND RISK IN CASUALTY EVACUATION

4-120. In large-scale combat operations, CASEVAC requires more than medical proficiency, it depends on clearly defined and coordinated authority across all levels of warfare. Commanders understand how medical mission authority and launch authority operate independently yet in concert to ensure responsive, risk-informed evacuation. These roles are established before combat begins and aligned across echelons from national strategic to tactical levels. When treated as a supporting task at echelon, CASEVAC preserves combat power, improves survivability, and enables mission success under fire.

Medical Mission Authority and Launch Authority in Evacuation Operations

4-121. Medical mission authority and launch authority are both required to conduct evacuation missions. These authorities apply to MEDEVAC and CASEVAC alike, and commanders understand their differences and how they work together. Medical mission authority confirms that the casualty qualifies for evacuation.

Launch authority allows the mission to proceed based on the current operational risk. When these approvals are not synchronized, delays, gaps in communication, or operational failure may occur.

4-122. Medical mission authority confirms that the evacuation request meets the unit's standing policies, including medical eligibility, the theater evacuation policy, and commander's intent. It is typically delegated to the lowest level practical, such as a Role 1 or Role 2 medical officer, so that decisions can be made during operations. Higher approval is needed only when the request involves unique cases, such as civilians or detainees. Medical mission authority does not determine the casualty's destination. That decision, called medical regulating, occurs later based on patient condition and treatment availability.

4-123. Launch authority belongs to the commander who owns the movement platform. For air missions, this is the aviation commander. For ground CASEVAC, launch authority may rest with the supported maneuver commander or a sustainment unit commander who owns the platform. This commander evaluates operational risk, such as enemy contact, degraded routes, weather, or platform readiness, before approving the mission. Even when a casualty qualifies medically, launch authority may delay or cancel the mission based on tactical conditions.

4-124. These authorities are exercised in parallel. Medical teams identify valid patients and recommend evacuation, while supported commanders decide when and how the mission will move based on the fight. This coordination allows leaders to balance medical urgency against operational risk. Delegating medical mission authority helps accelerate decisions at the POI, while maintaining launch authority at the command level protects the force and supports the broader operation.

4-125. Commanders understand CASEVAC's limitations. CASEVAC platforms may not include medical personnel or stabilization equipment. This increases risk to casualties, particularly in prolonged or high-threat movements. CASEVAC should not be treated as a lesser option but as a supporting task that requires deliberate planning, appropriate launch authority, and operational protection. Commanders plan for these missions just as they would for MEDEVAC, including route security, casualty tracking, and prioritization based on the tactical situation.

Doctrinal Discussion: Authority Relationships in the Battle of Mogadishu

4-126. Confusion between medical mission authority and launch authority has led to historical failures. During the Battle of Mogadishu in 1993, delayed medical evacuation, lack of launch authority clarity, and breakdowns in risk acceptance led to prolonged exposure of wounded personnel. When helicopters could not safely launch and CASEVAC platforms were not directed to move forward, Rangers and special operations teams were forced to carry their wounded by foot under fire. This event illustrates how the absence of integrated CASEVAC and clear, synchronized authorities can result in mission breakdown, increased casualties, and tactical defeat.

4-127. The 1993 Battle of Mogadishu shows that failure to deliberately plan and synchronize CASEVAC and authorities across all levels of warfare, national-strategic, theater-strategic, operational, and tactical, can lead to mission breakdown. Though the operation was tactically focused, failure to align medical mission authority and launch authority across echelons contributed to degraded responsiveness, delayed evacuation, and avoidable risk to combat forces. This historical case offers insight into the importance of integrating CASEVAC as a supporting task rather than treating it as an afterthought.

4-128. At the national-strategic level, military forces operated under a mandate shaped by shifting political priorities and ambiguous guidance. U.S. national leadership authorized the deployment of a special operations task force without fully integrating it into the broader multinational command structure. As a result, the mission lacked unity of command, and supporting enablers, such as armored vehicles or robust MEDEVAC platforms, were not resourced or approved. This misalignment weakened the operational planning framework and affected CASEVAC responsiveness before the mission began.

4-129. At the theater-strategic level, command authorities did not clearly designate how Task Force Ranger, a joint special operations task force comprised of ARSOF, U.S. Air Force Special Tactics units, and other supporting elements, would integrate with existing theater CASEVAC infrastructure. The lack of pre-coordinated procedures for link-up, mutual support, or ground route clearance created delays when urgent evacuation was needed. Medical mission authority remained with the Joint Special Operations Command (JSOC), while launch authority for air assets resided with the 160th Special Operations Aviation Regiment

(SOAR). This split authority worked under ideal conditions but was strained by rapid tactical changes and limited interoperability with conventional forces.

4-130. At the operational level, CASEVAC was not prioritized as a critical component of mission planning. While JSOC approved evacuation requests based on medical necessity (medical mission authority), the 160th SOAR retained launch authority and was responsible for evaluating threats, route security, and airframe availability. In the absence of effective pre-mission coordination with maneuver and support elements, such as the Quick Reaction Force, CASEVAC became reactive. The supporting ground convoys were not prepared for sustained engagement, and medical assets lacked the flexibility to respond when helicopter extractions became impossible.

4-131. At the tactical level, Soldiers fought to secure crash sites while coordinating air and ground evacuation under fire. The initial helicopter evacuations removed only two casualties. Ground-based CASEVAC operations were limited by heavy fire, urban terrain, and poor situational awareness. Despite the bravery of small-unit leaders and aircrews, the lack of scalable CASEVAC options forced prolonged exposure and delayed treatment. Evacuation remained a supporting task, but in this case, it required real-time adjustments across command levels that had not been anticipated or rehearsed.

Authority in action: A Mogadishu Casualty Evacuation

On October 3, 1993, during Operation Gothic Serpent in Mogadishu, Somalia, U.S. forces conducted a daylight raid in a dense urban environment to capture enemy personnel. Two U.S. Army Black Hawk helicopters were shot down, and the mission shifted from raid execution to rescue and recovery. This shift tested how well medical mission authority and launch authority had been coordinated before the operation.

Medical mission authority remained with Joint Special Operations Command (JSOC), which assessed each casualty against MEDEVAC criteria. JSOC prioritized CASEVAC based on combat injuries, asset availability, and mission urgency. However, JSOC did not have direct control of launch authority for air assets. That authority rested with the 160th Special Operations Aviation Regiment (SOAR), whose aviation commanders had to weigh weather, enemy threats, platform survivability, and airspace conditions before approving any launch.

The 160th SOAR launched MH-6 helicopters for rapid CASEVAC, but these lacked medical personnel or equipment. As enemy fire intensified, conditions degraded. Only two casualties were evacuated by air in the initial stages. Additional helicopter evacuations became too risky. Ground convoys, including the Quick Reaction Force, attempted CASEVAC but encountered roadblocks, ambushes, and delayed routing due to limited planning and coordination. Urban combat and limited platform redundancy halted further extractions until the following morning.

The CASEVAC effort in Mogadishu demonstrates three key lessons:

- Pre-coordination between medical mission authority and launch authority is essential before operations begin.
- Tactical units understand who holds authority at each level and how decisions interact under pressure.
- CASEVAC, when treated as a supporting task at echelon, preserves combat power, and avoids compounding mission failure.

This example reinforces that CASEVAC is not just a medical response but a mission-critical function that requires deliberate planning, real-time communication, and clear command relationships.

4-132. The Mogadishu case reinforces the doctrinal imperative to synchronize medical mission authority and launch authority across echelons. Commanders recognize CASEVAC as an operational requirement that

affects tempo, survivability, and mission outcomes, not a medical function. When CASEVAC is deliberately planned as a supporting task, and authority is clearly defined and coordinated, units can manage risk, maintain combat power, and adapt to rapidly changing battlefield conditions.

4-133. This historical example highlights three critical lessons for modern commanders:

- Pre-coordinated CASEVAC procedures prevent delays.
- Clear distinction between the medical mission authority and the launch authority prevents miscommunication.
- Risk assessment in denied environments is considered before launching a mission.

4-134. By applying these principles, commanders can improve CASEVAC response times and increase the survivability of WII personnel in complex battle conditions. Effective coordination, established evacuation procedures, and strong situational awareness help units adjust to changing threats and operational limits. These efforts support timely and efficient CASEVAC across the formation.

TRAINING AND EQUIPMENT

4-135. Commanders recognize that CASEVAC plans and SOPs are effective only when reinforced through training and regular rehearsals. They include battle drills and unit-level training events to build proficiency in both individual and collective CASEVAC tasks. Through repeated practice, Soldiers learn how to respond under stress. This preparation helps units carry out CASEVAC operations with precision, supports mission success, and improves survival rates on the battlefield.

4-136. CASEVAC and casualty response depends on trained personnel at every level. All Soldiers assigned to deployable positions are certified in TCCC Tier 1. This tier provides baseline lifesaving skills, such as hemorrhage control, airway management, and casualty movement, and are renewed within 12 months prior to deployment. In addition, each squad, crew, or similar-sized element must have at least one Soldier certified in TCCC Tier 2, also known as the CLS. Tier 2 builds on Tier 1 and prepares nonmedical personnel to provide initial treatment and support CASEVAC under fire. These mandatory certification and staffing requirements ensure units can deliver far-forward care and maintain lethality while responding to casualties. For more information on TCCC training standards and recertification timelines, refer to AR 350-1. For more information on casualty response, TCCC, and first aid refer to ATP 4-02.11.

4-137. Joint and multinational training is vital for building a highly effective CASEVAC capability. Training and exercises improve interoperability, allowing combined forces to operate smoothly during real-world events. These exercises build proficiency in critical areas like casualty loading, route selection, and communication, while simultaneously familiarizing personnel with the platforms and procedures of our allies.

4-138. By regularly training together and aligning SOPs, forces gain a clear understanding of each partner's CASEVAC strengths and limitations. This proactive approach improves overall readiness, accelerates response times, and cultivates the trust and confidence essential for success within combined formations. Ultimately, these exercises translate into a more resilient and capable CASEVAC system, ready to address complex challenges alongside our partners.

COMPREHENSIVE TRAINING SCOPE

4-139. Commanders train their personnel in CASEVAC skills that go far beyond manual and litter carries. Training includes TCCC, linkups with other tactical elements, the use of camouflage and concealment, noise and light discipline, responses to enemy fire, terrain navigation, tactical convoy operations, and sending a 9-line MEDEVAC request. Commanders also incorporate simulation-based training that mirrors real-world conditions. These exercises expose teams to simulated combat, changing weather, and different terrain types. This approach helps units build the skills needed to operate under pressure and adapt to a wide range of battlefield situations.

FOCUS ON SAFETY AND EFFICIENCY

4-140. Commanders understand that rehearsing manual and litter handling techniques is essential, as outlined in ATP 4-02.13. This training helps reduce the risk of injury to both casualties and the personnel moving them, whether using ground vehicles, aircraft, or watercraft. Commanders also train CASEVAC platform

operators on the specific demands of their role, considering platform layout and the operational setting. In addition, commanders stress the importance of clear communication and coordination across teams and units. They use standard protocols and reliable equipment to help CASEVAC operations run smoothly from pickup to handoff.

Operational Preparedness and Role Designation

4-141. Commanders assign drivers, CLS, and litter teams ahead of time to support a quick and organized response when CASEVAC is needed. They also mark CASEVAC platforms to reflect their role and priority while balancing the need for concealment, so these vehicles do not become easy targets. In addition, commanders train leaders to make fast decisions, set priorities, and manage resources under pressure. This preparation helps units respond to CASEVAC needs in complex operational environments.

Utilization of Aviation Assets

4-142. Commanders incorporate Army aviation assets into CASEVAC training to significantly enhance Soldier proficiency with these critical platforms. When live aviation support is unavailable, commanders use static aircraft to practice essential skills, such as establishing LZs and mastering loading and unloading procedures.

4-143. Commanders use simulation-based training as an effective alternative to live aviation support, allowing Soldiers to experience realistic aviation scenarios. Commanders use these simulations to practice emergency procedures, refine communication protocols with aircrews, and manage the complexities of coordinating CASEVAC under combat conditions. By integrating aviation-focused training, commanders improve unit readiness to utilize aviation assets during actual operations, ensuring swift and efficient CASEVAC.

Enhancing Security Measures and Medical Insight

4-144. Commanders conduct rehearsals that focus on securing sensitive items and equipment during CASEVAC to prevent loss or compromise. They work with medical personnel during training to improve casualty movement procedures, stressing the need to prevent further injury and reduce physical strain on litter teams. Commanders also incorporate casualty handling into physical fitness plans to build strength and refine techniques. In addition, they include medical simulation training to help personnel build skills in casualty assessment, treatment, and evacuation.

Integration with Broader Medical and Safety Training

4-145. Commanders rehearse the full CASEVAC process, from the POI to CCPs and through the continuum of care, so that all team members understand their roles within the broader medical support plan. These rehearsals improve coordination and strengthen execution. Commanders also train units to operate in difficult environments, including areas contaminated by CBRN agents, where added precautions are required. They train Soldiers how to follow proper work-rest cycles to prevent heat-related injuries, as outlined in Technical Bulletin, Medical (TB MED) 507. For operations in MOPP gear, refer to ATP 3-11.32. Commanders also use scenario-based training, such as MASCAL events or urban operations, to prepare teams for complex situations, and help them perform under pressure.

Rehearsal Priority
Focus CASEVAC rehearsals on casualty pickup, CCP triage, communication, platform loading, and route security. Add CBRN tasks and heat injury prevention as needed. Train what breaks first.

4-146. Commanders use this type of training to practice coordination and refine procedures for efficiency and effectiveness. Commanders also include scenarios that replicate challenging environments, such as areas contaminated by chemical agents, where additional precautions and specialized procedures are required. Commanders emphasize the importance of understanding work-rest cycles, as outlined in ATP 3-11.32, to maintain the health and effectiveness of the team. Additionally, commanders incorporate training exercises that simulate MASCAL situations, urban warfare environments, and other complex scenarios, preparing teams to adapt to diverse challenges and perform CASEVAC operations in any situation.

EVALUATION AND ASSESSMENT

4-147. Commanders regularly evaluate and assess CASEVAC training plans to maintain their effectiveness. Commanders use various methods, including training evaluation forms, detailed observation of training scenarios, and gathering feedback from participants, to identify strengths and areas for improvement in the training process.

4-148. Commanders consistently analyze and refine CASEVAC training to enhance the efficiency, safety, and effectiveness of evacuation operations. By making this ongoing commitment to improvement, commanders boost mission success and increase survival rates on the battlefield, ensuring that personnel are better prepared to respond to casualties under real-world conditions.

IMPORTANCE OF TRAINING AND EQUIPMENT IN CASUALTY EVACUATION OPERATIONS

4-149. Training and equipment are critical to ensuring CASEVAC operations are conducted safely and effectively. The ability to rapidly evacuate WII personnel can mean the difference between life and death, making proper training and reliable equipment essential.

Casualty Evacuation Training Requirements

4-150. CASEVAC personnel receive focused training to build the skills needed for safe and efficient casualty evacuation. This includes instruction in first aid, casualty assessment, and basic evacuation techniques. Personnel also learn how to operate nonmedical platforms, navigate difficult terrain, and make fast decisions under pressure.

4-151. Since CASEVAC uses nonmedical vehicles, such as trucks, High Mobility Multipurpose Wheeled Vehicles (HMMWVs), and rotary-wing aircraft, personnel know how to load, secure, and transport casualties safely. Leaders train their teams in patient securing methods and prepare them to adjust procedures based on terrain, platform type, and environmental conditions common in austere environments.

Casualty Evacuation Equipment and its Role

4-152. Specialized medical equipment, such as stretchers, litters, and patient securing devices, helps stabilize casualties during transport. Nonmedical platforms used for CASEVAC should also carry safety gear designed to reduce movement and protect casualties from further injury across different operational environments.

4-153. Depending on the terrain and method of evacuation, additional nonmedical equipment may be needed. For waterborne operations, life vests help keep casualties afloat and steady. In extreme cold environments, additional supplies may be needed to keep the casualty warm. Extra litter straps, tie-down systems, and improvised securing tools reduce patient movement in high-mobility platforms like helicopters, ground vehicles, and boats. Leaders equip CASEVAC teams with the right tools to safely move casualties in a wide range of conditions.

4-154. Strong communication is critical during CASEVAC operations. Radios and satellite phones allow personnel to coordinate movements, share real-time casualty updates, and guide WII personnel to the right MTF.

4-155. First aid kits, splints, and tourniquets support immediate medical care during transport. These tools help reduce the risk of further injury or patient deterioration before reaching a medical treatment facility. Proper stabilization during evacuation improves survival rates and leads to better outcomes for WII personnel.

Sustaining Readiness Through Training and Equipment Maintenance

4-156. Regular training and equipment maintenance keep CASEVAC personnel ready to respond during emergencies. Ongoing training in new techniques and equipment helps teams remain proficient and capable. Routine inspections and upkeep reduce the risk of equipment failure that could put casualties at greater risk.

4-157. When personnel receive continuous training and work with reliable equipment, they can react and perform during CASEVAC operations. Well-executed procedures improve casualty outcomes, support operational success, and protect WII personnel in any environment.

Training and Equipment Requirements for Casualty Evacuation Operations

4-158. Successful CASEVAC operations rely on specialized training and mission-specific equipment to support the safe and efficient evacuation of WII personnel. Training and equipment requirements vary by mission and environment but should cover first aid, medical care, evacuation techniques, platform operation, communication, and risk management.

4-159. CASEVAC personnel train in key areas to perform in different environments. TCCC builds the skills needed to treat and stabilize casualties during transport. Evacuation technique training teaches safe movement using litters, hoists, and other tools. Platform operation training prepares personnel to use vehicles such as HMMWVs and tactical trucks and to work with rotary-wing aircraft crews. All Soldiers know how to load, secure, and unload casualties from their unit's CASEVAC platforms.

4-160. Communication training gives personnel the skills to use radios and satellite phones and follow standard procedures for coordinating evacuations. Risk management training helps identify and reduce hazards during casualty movement. Navigation skills improve through hands-on practice, whether using GPS or basic field techniques. These include reading topographic maps, estimating distances, recognizing terrain features, maintaining direction, and operating vehicles at night. Such skills support accurate and timely CASEVAC across all conditions.

4-161. CASEVAC teams require both medical and transport equipment to move casualties safely. Stretchers and litters provide stability, while straps and harnesses help secure patients during movement. In non-dedicated CASEVAC vehicles like medium tactical trucks, Soldiers often use improvised materials, such as rope or 550 cord, to secure litters to seat backs or cargo areas. Unit SOPs should clearly define these practices, and commanders equip their units accordingly. First aid kits should carry bandages, tourniquets, pain management supplies, and other essentials. Communication gear, including radios and satellite phones, connects CASEVAC teams with other units and medical treatment facilities. Navigation tools, such as maps, compasses, and GPS devices, help teams find the fastest and safest routes.

4-162. CASEVAC equipment should match the environment and method of evacuation. Air operations require litters that fit inside helicopters, along with hoists and proper securing gear. Waterborne operations call for boats, flotation devices, and marine stretchers. Evacuations over rough terrain require ropes, harnesses, and climbing systems to move casualties safely through steep or unstable ground. Using the right equipment for each environment improves both safety and mission success.

4-163. Regular maintenance and inspections keep CASEVAC equipment ready for use and includes checking for wear and damage and repairing or replacing faulty items. Inspections help identify problems early before they affect performance or safety. Commanders track and manage equipment status to keep CASEVAC assets ready for immediate use when called upon.

Simulated Casualty Scenarios to Improve Casualty Evacuation Operations

4-164. Simulated casualty scenarios strengthen evacuation readiness at every level of command. From ground teams to senior leaders at the corps level and above, these exercises help units improve how they move and treat casualties under realistic conditions. At the theater strategic level, senior commands use simulations to plan CASEVAC support across multiple brigades, reinforce engaged units, and integrate joint or coalition evacuation assets. These exercises help planners evaluate how CASEVAC fits into the broader operational plan and how to scale support for large casualty numbers. This kind of preparation builds an evacuation system that can sustain combat operations over time.

4-165. At the operational level, simulated casualty scenarios help brigade and division staffs practice how to synchronize CASEVAC across multiple units. These exercises give staffs the chance to assign evacuation resources, manage coordination across unit boundaries, and build casualty distribution plans. For example, a brigade staff may need to decide when to reinforce a battalion in contact or how to combine ground and air evacuation into the maneuver plan. Division-level training focuses on coordinating CASEVAC across brigades and reinforcing units with extra medical support. These exercises also help division staffs identify when to request corps-level capabilities, like fixed-wing assets, or reassign CASEVAC resources from reserve or neighboring units. This type of planning helps align CASEVAC with the pace of operations and the commander's intent.

4-166. At the tactical level, simulated casualty scenarios give medics and CASEVAC teams the chance to train in realistic conditions. These events focus on casualty movement, triage, en route care, and communication under stress. Tactical teams rehearse loading and unloading casualties, navigating to and from CCPs, and providing care in degraded environments. Training in low-visibility conditions, under fire, or in nonstandard vehicles adds complexity and realism, helping teams become confident and capable under pressure.

4-167. To be effective, these scenarios challenge units at all echelons. MASCAL events test how brigade and division staffs manage casualty surges, perform triage, and allocate resources across multiple units. Trauma and medical drills allow medics to practice rapid treatment and stabilization. Multi-unit CASEVAC rehearsals build coordination, requiring one unit to reinforce another and testing staff-to-staff integration. Low-visibility and nighttime operations test the effectiveness of CASEVAC in conditions where GPS, communications, and air superiority may be limited or contested.

4-168. Including simulated casualty scenarios in training helps commanders treat CASEVAC as an essential part of the operation, not an afterthought. Realistic, repeated practice allows leaders and staffs to build clear plans, define command and support roles, and prepare for casualty evacuation under combat conditions. CASEVAC rehearsals at every level, from squad to division, improve survivability, strengthen unit cohesion, and support overall mission success.

CASUALTY EVACUATION'S ROLE IN FORCE PRESERVATION AND RECOVERY

4-169. CASEVAC plays a critical role in preserving combat power by allowing commanders to remove WII personnel from the battlefield. When MEDEVAC platforms are not available, commanders may direct nonmedical assets to conduct CASEVAC. This flexibility helps deliver casualties to care in time to prevent their condition from worsening and increases the likelihood of returning to duty. Although FM 3-08 does not dictate how RTD or reconstitution is executed, CASEVAC supports both by reducing preventable deaths and starting medical treatment as early as possible. *Reconstitution* is an operation that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources (ATP 3-94.4).

4-170. Timely decision-making at the POI is critical to maximizing the recovery potential of WII Soldiers and their eventual RTD. This, in turn, directly contributes to maintaining unit cohesion, morale, and combat effectiveness. CASEVAC tasks, when integrated into tactical and operational plans, allow units to adapt to complex battlefield conditions while continuing to preserve the force.

4-171. Commanders at every level should treat CASEVAC as a key part of achieving operational success. It goes beyond moving casualties, it helps sustain combat power through timely coordination of assets, triage, and movement. When well executed, CASEVAC reduces the need for replacements, speeds up recovery, and supports the force's overall readiness and endurance.

Appendix A
Casualty Evacuation in Specific Environments

Conducting CASEVAC in complex environments requires commanders to tailor strategies to the unique challenges of each setting. These environments may limit access, restrict movement, or delay evacuation timelines, demand adaptable planning, specialized equipment, and rehearsed procedures. This appendix introduces how commanders modify CASEVAC execution based on environmental factors to maintain operational momentum, preserve life, and support the maneuver force across any terrain.

URBAN AND SUBTERRANEAN ENVIRONMENTS

A-1. In urban and subterranean environments, dense infrastructure, confined spaces, and the presence of civilians create complex challenges for military operations, including CASEVAC. These environments often hinder movement, reduce visibility, and increase the risk of ambushes, requiring adaptable and innovative CASEVAC approaches. Proper planning and execution are critical to minimizing risks and ensuring timely evacuation of casualties in these demanding environments. ATP 3-06, ATP 3-06.1, ATP 3-06.11, and ATP 3-21.51 provide essential guidance for conducting CASEVAC in urban and subterranean settings.

A-2. These publications emphasize the need to tailor operations to the unique challenges posed by urban and subterranean environments. Leaders anticipate threats, plan across all levels, and account for the specific injuries and movement considerations that arise in these environments.

THREATS

A-3. Urban and subterranean environments present a dual threat: the operational challenges of manmade infrastructure and the tactical risks posed by adversaries. High population density, structural obstructions, and concealed enemy positions necessitate advanced planning and coordination to execute CASEVAC operations.

A-4. The urban environment complicates CASEVAC with obstacles such as narrow streets, rubble from destroyed buildings, and damaged infrastructure. Subterranean spaces like tunnels, sewers, and basements amplify these challenges with confined spaces, poor ventilation, and limited visibility. CASEVAC teams navigate these hazards while managing risks like structural collapse and exposure to hazardous materials.

A-5. Adversaries use the dense, complex terrain of urban and subterranean environments to launch ambushes, set up strongholds, and place booby traps. Subterranean networks also give them the ability to move undetected and strike unexpectedly. To reduce these threats and support safe evacuation, CASEVAC teams work closely with intelligence, surveillance, reconnaissance, and security elements. This coordination helps identify hazards and develop protected routes for casualty movement.

INJURIES

A-6. The urban and subterranean environments influence the types of injuries sustained, the triage process, and treatment considerations. These factors require tailored medical interventions to address the complex challenges of operating in confined and hazardous conditions.

A-7. Urban and subterranean operations often result in injuries such as crush injuries from collapsing structures, smoke inhalation from fires, and chemical burns from hazardous materials. Blunt trauma and gunshot wounds are also common due to close quarters combat and ambushes. In subterranean spaces, blast overpressure from explosions can amplify injury severity, leading to lung trauma, internal hemorrhaging, and traumatic brain injury (known as TBI).

A-8. Triage prioritizes casualties with life-threatening injuries such as airway compromise, severe hemorrhage, and crush injuries. Blast-related injuries require rapid assessment to detect internal damage, which may not be immediately visible but can rapidly deteriorate. Subterranean conditions necessitate swift

evacuation due to poor air quality, oxygen depletion, and the potential for secondary threats such as flooding, gas leaks, or structural collapse.

A-9. Treatment addresses trauma stabilization, including hemorrhage control, pain management, and airway management in confined spaces. Teams are equipped to treat inhalation injuries and chemical exposure, often requiring specialized protective equipment and medications. For blast-related injuries, personnel recognize symptoms of blast overpressure trauma and be prepared to manage pulmonary injuries, traumatic brain injury, and internal bleeding.

MOVEMENT

A-10. Movement in urban and subterranean environments presents unique challenges due to structural damage, confined spaces, limited evacuation routes, and enemy activity in complex or multi-level structures. Unlike open environments, CASEVAC teams may have to navigate through rubble, collapsed buildings, and underground passages, often facing restricted mobility and limited platform access. Successful movement in these settings requires specialized evacuation techniques, route reconnaissance, and coordination with maneuver forces to secure pathways for casualty extraction.

A-11. CASEVAC is adapted for urban terrain, often requiring additional armor for protection and compact designs for maneuverability. In subterranean environments, manual extraction methods like stretchers, ropes, and winches may be necessary to navigate narrow tunnels and vertical shafts.

A-12. Route planning in urban settings accounts for blocked roads, rubble, and civilian congestion. Subterranean routes require reconnaissance to identify safe passages and assess structural integrity. CASEVAC teams anticipate choke points, ambushes, and hazards like flooding, or gas leaks. Redundant routes and backup plans are essential for navigating these unpredictable environments.

A-13. By addressing these unique challenges, military forces can adapt CASEVAC operations to the complex demands of urban and subterranean environments. For additional information on urban and subterranean environments, refer to ATP 3-06, ATP 3-06.1, ATP 3-06.11, and ATP 3-21.51.

MOUNTAIN AND COLD WEATHER ENVIRONMENTS

A-14. In mountain and cold weather environments, extreme cold, steep terrain, and unpredictable weather conditions create significant challenges for military operations, including CASEVAC. CASEVAC becomes critical in these environments, where limited access, low temperatures, and difficult terrain can delay care and worsen injuries. By adapting CASEVAC practices to these unique challenges, military forces can enhance casualty outcomes and maintain mission readiness. ATP 3-90.97 provides critical guidance for planning and executing CASEVAC in such demanding conditions.

A-15. This publication emphasizes the importance of tailoring CASEVAC operations to the environmental and operational realities of mountain and cold weather environments. Leaders can improve operational success by understanding the specific threats, planning considerations, injury profiles, and movement challenges associated with these settings.

THREATS

A-16. Threats in mountain and cold weather environments are twofold: natural environmental challenges and enemy activity. Harsh weather, altitude, and rugged terrain affect personnel, equipment, and operational timelines, while adversaries use these factors to their advantage. Recognizing and mitigating these threats is essential for successful CASEVAC operations.

A-17. The mountain environment presents dangers such as hypothermia, frostbite, avalanches, and altitude sickness. Prolonged exposure to freezing temperatures can lead to cold-weather injuries, while altitude impairs oxygen availability, causing fatigue and reduced effectiveness. Equipment often fails in cold weather, with batteries draining faster and vehicle mobility hindered by snow and ice. CASEVAC teams prioritize weather-appropriate clothing, proper vehicle maintenance, and altitude acclimatization to reduce these risks.

A-18. Adversaries in mountainous regions exploit terrain for ambushes and engage targets with precision fire. They use steep slopes, ridgelines, and poor visibility from snow or fog to limit friendly movement and observation. CASEVAC teams plan by incorporating reconnaissance, positioning overwatch elements for

security, and maintaining reliable communication to reduce the risk of enemy engagement and support safe evacuation.

INJURIES

A-19. Mountain and cold weather environments affect the types of injuries sustained, influence triage decisions, and shape how medical teams provide care. These challenges demand tailored approaches that align with the physical constraints of the environment.

A-20. Common injuries include hypothermia, frostbite, altitude sickness, and trauma caused by falls or avalanches. High altitudes also slow wound healing and increase infection risk due to reduced oxygen levels, which can delay recovery and complicate CASEVAC efforts. To reduce these risks, CASEVAC teams move casualties to lower altitudes when possible and carry mission-essential supplies, such as oxygen, rewarming gear, antibiotics, and splints.

A-21. Triage should give priority to casualties with severe cold-related injuries or altitude sickness. These conditions require fast action to prevent rapid deterioration. In extreme cold, full-body exposure during assessment can cause heat loss. As in CBRN conditions, patients should first be moved to a warmer space before a detailed evaluation. Medical personnel should use selective exposure, checking for critical injuries while keeping the rest of the body insulated. Harsh weather and limited resources call for quick decisions on who to evacuate first. During transport, CASEVAC teams protect patients from further heat loss using thermal blankets, wind barriers, and enclosed vehicles when available.

A-22. For hypothermia, treatment prioritizes gradual rewarming using thermal blankets and warm fluids when available. Protecting the casualty from further cold exposure is essential. Frostbite treatment involves slow warming and immobilization of affected areas to prevent further damage. For altitude sickness, evacuation to a lower elevation, coupled with oxygen and fluid administration when possible, is the primary intervention. Because severe hypothermia can slow metabolism to the point where vital signs may be undetectable, personnel should continue rewarming and monitoring until a full medical assessment can be completed. During transport, CASEVAC teams prevent further heat loss and maintain warming through continued application of thermal blankets or buddy warming.

MOVEMENT

A-23. CASEVAC movement in mountain and cold-weather environments is often the most challenging aspect due to steep, loose rocky terrain, icy terrain, and limited mobility. Proper planning and execution of movement are critical to ensuring casualty survival while maintaining operations security. Additionally, the physical demands of movement in extreme cold significantly increase energy expenditure for CASEVAC personnel, which can lead to rapid fatigue and reduced effectiveness. Excessive sweating from overexertion can also accelerate heat loss and heighten the risk of cold-weather injuries such as hypothermia.

A-24. CASEVAC often requires specialized vehicles such as snowmobiles or tracked carriers. In some cases, evacuation by rotary-wing aircraft may be necessary, though weather conditions and high altitude often limit air operations. When vehicle platforms are not viable, teams are prepared for litter carries or manual transport, which require management of physical exertion to prevent fatigue and overheating. Rotating personnel, using proper layering techniques, and ensuring hydration are key to sustaining energy levels in cold-weather evacuations.

A-25. Route planning in mountain and cold weather conditions consider snowpack stability, avalanche danger, and the limits of narrow passes. Planners should identify alternate routes in case weather or terrain changes suddenly. Reconnaissance helps assess snow and ice conditions and supports safe movement through the area. CASEVAC teams account for the physical demands of traveling through deep snow, ice, or thin air at high altitudes, adjusting speed and rest periods to match the environment. In open, snowy terrain, teams can reduce the risk of detection by using camouflage and terrain masking techniques.

A-26. Effective CASEVAC operations in mountain and cold-weather environments require addressing specific challenges to ensure mission success and optimal casualty care. Mitigating the effects of increased energy expenditure and sweating in cold environments is essential to sustaining CASEVAC personnel and preventing additional cold-weather injuries. ATP 3-90.97 and TC 3-97.61 provide a framework for overcoming these obstacles and improving overall operational effectiveness.

JUNGLE ENVIRONMENT

A-27. The jungle environment poses significant challenges for military operations, including CASEVAC. Triple-canopy forest, dense vegetation, high humidity, and limited visibility hinder movement and complicate CASEVAC. Extraction times may be prolonged due to the terrain, environmental hazards, and lack of infrastructure. ATP 3-90.98 provides doctrinal guidance for conducting operations in jungle environments, including specific considerations for CASEVAC.

A-28. This publication highlights the need to adapt CASEVAC practices to the jungle's unique challenges. Leaders address environmental threats, develop robust planning at all levels, and prepare for injuries and movement obstacles unique to jungle operations.

THREATS

A-29. Jungle environments present threats from both nature and enemy forces. Thick vegetation, triple-canopy cover, high humidity, and dangerous wildlife create serious environmental risks. At the same time, adversaries use the terrain for concealment and ambushes. CASEVAC operations address both types of hazards to support safe and effective casualty evacuation in this complex environment.

A-30. Jungle terrain is characterized by dense foliage, swamps, steep inclines, and unstable ground, all of which impede movement and visibility. High humidity accelerates equipment degradation, while heavy rains can cause flooding and create impassable areas. Wildlife, including venomous snakes, insects, and disease-carrying organisms, add another layer of risk. CASEVAC teams employ durable equipment, maintain strict hygiene protocols, and plan for contingencies like alternate routes or extraction methods.

A-31. Adversaries in the jungle environment use dense vegetation for camouflage, sniper positions, and ambushes. Booby traps, tripwires, and guerrilla tactics are common threats. CASEVAC teams maintain situational awareness, conduct thorough reconnaissance, and implement security measures to protect themselves and casualties during evacuation.

INJURIES

A-32. The jungle environment influences the types of injuries encountered, triage priorities, and treatment considerations. Common injuries include:

- Heat-related illnesses (heat exhaustion, heatstroke).
- Dehydration.
- Tropical diseases (e.g., malaria, dengue fever, leishmaniasis).
- Skin infections (e.g., trench foot, jungle rot).
- Bites and stings from venomous snakes, insects, and other wildlife.
- Traumatic injuries from falls, vegetation lacerations, or enemy contact.

A-33. Tropical diseases pose a greater threat in jungle environments, as the combination of mosquitoes, stagnant water, and limited medical access increases infection risk. CASEVAC teams carry appropriate medications, insect repellents, bandages, and hydration supplies to mitigate these risks.

A-34. Triage in the jungle prioritizes severe trauma, heat-related illnesses, and rapidly worsening infections. CASEVAC teams monitor casualties for signs of dehydration, systemic infections, or tropical disease symptoms, as these conditions can deteriorate rapidly without treatment. Limited access to higher levels of care necessitates rapid care at the POI before evacuation.

A-35. Trench foot and other foot-related injuries require close attention in wet environments where prolonged moisture exposure is common. CASEVAC teams regularly inspect casualties' feet, dry and treat affected areas, and promote the use of proper footwear and routine sock changes to keep conditions from getting worse.

A-36. Treatment in the jungle often focuses on:

- Managing wounds to prevent infection.
- Addressing dehydration and electrolyte imbalances.
- Providing treatment for venomous bites and stings.
- Immediate intervention for heatstroke or hypothermia (which can occur during night operations).

A-37. In jungle environments, CASEVAC efforts focus more on evacuation and treatment than on preventive measures. CASEVAC teams prioritize moving casualties to higher roles of care where they can receive more advanced medical treatment suited to the risks and conditions of the environment.

MOVEMENT

A-38. Movement in the jungle environment is often slow and resource-intensive due to dense vegetation, narrow trails, steep terrain, and muddy conditions. Effective planning and execution are critical for timely and safe evacuation of casualties.

A-39. CASEVAC often relies on foot movement, as vehicles are frequently unable to traverse jungle terrain. Litter teams, manual extraction methods, and makeshift carrying devices are commonly employed. Waterways, if available, provide an alternative evacuation route, while rotary-wing aircraft can be used for aerial extraction if LZs, or hoist capabilities are established.

A-40. Route planning in the jungle consider thick vegetation, mud, and water crossings. Reconnaissance helps identify safe trails and avoid both natural hazards and enemy ambushes. CASEVAC teams should prepare multiple route options to respond to sudden changes such as flooding, enemy contact, or shifting terrain. Coordination with aerial assets, GPS tools, and local guides improves navigation and supports a faster, more reliable evacuation process.

A-41. By addressing the unique demands of jungle operations, military forces can tailor CASEVAC procedures to improve casualty survival and support mission success. Effective injury management, detailed movement planning, and adaptation to the environment are key to successful CASEVAC in jungle terrain. ATP 3-90.98 provides guidance for overcoming these challenges and improving evacuation operations in dense, tropical conditions.

DESERT ENVIRONMENT

A-42. In arid desert environments, extreme heat, rugged terrain, and limited resources create unique challenges for military operations, including CASEVAC. CASEVAC becomes critical in such conditions, where medical resources may be scarce, and immediate extraction is necessary to save lives. By tailoring CASEVAC operations to the unique challenges of the arid desert environment, military forces can improve casualty outcomes and maintain operational effectiveness. ATP 3-90.99 serves as a foundational resource for adapting to these demanding conditions.

A-43. This section emphasizes the importance of adapting CASEVAC practices to meet the challenges of desert environments. By understanding these conditions, leaders can support effective joint operations, plan across all levels of command, and provide quality care for casualties while keeping the mission on track.

THREATS

A-44. In the arid desert environment, threats are multifaceted and stem from both natural conditions and enemy actions. The harsh climate can impair personnel performance and degrade equipment, while adversaries exploit the terrain to their advantage. Understanding these threats is vital for mitigating risks during CASEVAC operations and maintaining mission effectiveness.

A-45. The desert environment presents extreme heat, dehydration risks, and dust storms. Prolonged exposure to high temperatures can cause heatstroke, heat exhaustion, and dehydration. Sand and dust infiltrate vehicle components and electronic systems, causing malfunctions that complicate evacuation efforts. These environmental threats necessitate constant maintenance of vehicles and robust hydration and cooling plans to protect personnel and equipment.

A-46. Adversaries in desert environments often use hit-and-run tactics, ambushes, and explosive hazards. They leverage the open terrain for long-range attacks while utilizing natural concealment in dunes and rocky outcroppings. CASEVAC teams maintain heightened situational awareness, employ effective route reconnaissance, and integrate security measures to counter these enemy threats.

INJURIES

A-47. The arid desert environment shapes the types of injuries that occur, influences how casualties are triaged, and affects treatment decisions. Understanding these factors helps medical teams provide timely and appropriate care that addresses the specific challenges of desert operations.

A-48. Heat-related injuries, such as dehydration, heat exhaustion, and heatstroke, are prevalent. Blunt trauma from vehicle rollovers and burns from direct sunlight exposure or explosions are also common. Evacuation teams anticipate these injuries and carry appropriate medical supplies.

A-49. Triage in desert conditions prioritizes casualties suffering from heat-related illnesses and severe trauma. Environmental factors, such as heat and limited shade, require quick assessment, and care efforts to prevent secondary complications.

A-50. Treatment focuses on rapid cooling for heat injuries and providing adequate hydration. For trauma, hemorrhage control and pain management are critical. The scarcity of resources necessitates creative solutions, like using vehicle air conditioning systems for cooling, or leveraging natural terrain features for shelter during treatment.

MOVEMENT

A-51. Moving casualties in the arid desert environment demands close attention to terrain, platform limitations, and route selection. Effective planning supports the safe and timely evacuation of WII personnel while reducing their exposure to environmental hazards and enemy threats.

A-52. CASEVAC, including tactical trucks and armored personnel carriers, are often adapted in the desert. These platforms should be equipped with shade, cooling systems, and medical supplies to address environmental challenges.

A-53. Route planning accounts for loose sand, rocky terrain, and potential ambush points. Teams should avoid predictable paths and use reconnaissance to identify safe routes. Nighttime movements can mitigate heat exposure but require enhanced navigation capabilities to prevent disorientation.

ARCTIC AND EXTREME COLD ENVIRONMENTS

A-54. The arctic and extreme cold environment presents unique challenges for military operations, including CASEVAC. Extreme cold, limited visibility, and vast, barren landscapes make CASEVAC complex and resource intensive. CASEVAC becomes critical in this environment due to the potential for rapid deterioration of casualties exposed to the elements. ATP 3-90.96 provides guidance for adapting CASEVAC practices to the unique challenges of cold-weather operations.

A-55. Extreme cold environments require specific adjustments to equipment, planning, and procedures. Leaders address environmental hazards, account for cold-related injuries and movement challenges, and plan across all levels of operation to support successful CASEVAC missions.

THREATS

A-56. In the arctic and extreme cold environment, threats stem from harsh environmental conditions and enemy exploitation of terrain. Severe cold can incapacitate personnel and equipment, while adversaries leverage the challenges of the environment to disrupt operations. CASEVAC operations adapt to mitigate these threats.

A-57. Extreme cold puts personnel at risk for frostbite, hypothermia, and other cold-weather injuries that can develop. Snowstorms and poor visibility slow movement and disrupt communication, while frozen terrain makes it harder for vehicles and personnel to operate. CASEVAC teams rely on specialized vehicles, cold-weather gear, and constant weather monitoring to carry out operations safely in these conditions.

A-58. Adversaries operating in arctic environments often use the terrain for concealment and ambushes. Limited infrastructure and harsh weather can delay reinforcements or support. CASEVAC teams maintain heightened situational awareness, employ security measures, and plan for adversary disruption, such as attacks on evacuation routes.

INJURIES

A-59. Arctic and extreme cold environments affect the kinds of injuries that occur, shape triage priorities, and change how medical teams approach treatment. Addressing these factors with the right planning and care methods improves casualty outcomes and increases survival in harsh conditions.

A-60. Injuries common in extreme cold environments include frostbite, hypothermia, and blunt trauma from falls on ice. Additionally, prolonged exposure to wet and cold conditions, even above freezing temperatures, can lead to trench foot, which remains a concern in winter operations. CASEVAC teams anticipate and prepare for these injuries by carrying appropriate warming devices, insulating materials, and advanced life-support equipment.

A-61. Triage in extreme cold prioritizes casualties with life-threatening cold injuries, such as severe hypothermia. Prolonged exposure to the elements can exacerbate other injuries, necessitating rapid care and evacuation. Teams should balance the urgency of care with the operational challenges of moving casualties in harsh weather.

A-62. Treatment emphasizes rewarming techniques for hypothermia, including warm intravenous fluids and insulated blankets. Frostbite requires rewarming and protection from refreezing, while injuries like fractures are stabilized with insulated splints to prevent cold-related complications.

MOVEMENT

A-63. Movement in arctic and extreme cold environments is severely constrained by snow, ice, and extreme weather conditions. Effective planning and execution of casualty movement is critical to ensuring safety and minimizing exposure to environmental hazards.

A-64. CASEVAC often requires specialized vehicles such as snowmobiles, sleds, or tracked transport vehicles. Rotary-wing aircraft equipped for cold-weather operations may be used but are often limited by snowstorms and low visibility. Teams are prepared to carry casualties manually over short distances in extreme weather.

A-65. Route planning in extreme cold conditions considers snowpack stability, ice thickness, and avalanche risks. CASEVAC teams conduct detailed reconnaissance to identify the safest routes and develop alternate plans for sudden weather shifts. GPS tools and pre-marked evacuation paths help guide movement, while teams remain ready to adjust routes as new obstacles or hazards appear.

A-66. By addressing the unique challenges of the arctic and extreme cold environment, military forces can adapt CASEVAC operations to improve casualty outcomes and operational effectiveness. ATP 3-90.96 provides comprehensive guidance to meet these demands and optimize CASEVAC in these extreme conditions.

MARITIME AND LITTORAL ENVIRONMENTS

A-67. Maritime and littoral environments pose unique challenges for Army operations, especially during joint and multinational missions where naval forces control much of the operational environment. These environments include coastal zones, open seas, and riverine areas, where CASEVAC operations overcome movement limitations, minimal infrastructure, and harsh environmental conditions. Unlike land-based operations, Army units operating in maritime settings often rely on joint partners, amphibious platforms, and nonstandard evacuation assets to stabilize and evacuate casualties. For additional information, refer to ATP 3-04.18.

A-68. To conduct effective CASEVAC in maritime and littoral settings, Army commanders coordinate with joint and multinational partners, identify alternative evacuation routes, and manage the logistical challenges of moving casualties across water. These operations involve ship-to-shore transfers, waterborne evacuations, and often longer transport times due to limited access to MTFs. Commanders align CASEVAC plans with naval and amphibious procedures to support operational tempo and deliver timely medical care under demanding conditions.

A-69. Maritime CASEVAC operations present unique challenges, including patient stability, environmental exposure, and medical sustainment limitations. Unlike ground or air transport, maritime evacuation is

constrained by weather, sea conditions, and vessel capabilities. Many watercraft lack enclosed compartments, climate control, or sanitation facilities, exposing casualties to cold, heat, dehydration, and infection risks.

A-70. During wet-gap crossings or riverine operations, commanders designated CASEVAC vessels and verify that these platforms can carry and secure litter casualties. Improvised or nonmedical watercraft may require temporary modifications, including litter tie-down systems, waterproof storage for medical supplies, and shoreline transfer points to support patient movement under changing conditions.

A-71. Personnel aboard CASEVAC watercraft are prepared for motion-induced instability, which can complicate intravenous fluid administration and casualty monitoring. In amphibious operations, pre-planned integration with rotary-wing MEDEVAC assets is essential to minimize prolonged waterborne transport times.

THREATS

A-72. The maritime and littoral environments present threats ranging from natural hazards to operational constraints and enemy actions. CASEVAC operations account for rough seas, limited LZs, and adversarial threats while also addressing broader operational risks that could restrict MEDEVAC capabilities.

A-73. In maritime and littoral settings, environmental threats include rough seas, high winds, and limited visibility due to fog or storms. Saltwater exposure accelerates equipment corrosion, and fluctuating tides can render key access points or LZs inaccessible. CASEVAC teams employ weather-resistant watercraft or aerial assets and continuously reassess viable extraction points.

A-74. Enemy threats in these environments range from tactical to strategic risks. These threats can disrupt CASEVAC operations at multiple levels, from direct attacks on evacuation assets to broader efforts that degrade C2, restrict maneuverability, or deny access to critical evacuation routes.

A-75. Tactically, adversaries may use small boats, coastal artillery, or amphibious forces to disrupt CASEVAC operations. In littoral zones, dense vegetation and narrow waterways provide cover for ambushes. CASEVAC teams implement robust reconnaissance, maintain situational awareness, and coordinate with naval and air assets for protection.

A-76. Operationally, reliance on riverine or coastal routes creates vulnerabilities. If CASEVAC operations are restricted to waterways, adversaries can disrupt them using naval mines, maritime blockades, or shore-based missile systems. This denial of movement could prevent evacuation altogether, forcing commanders to identify alternate routes, pre-position medical assets inland, or rely on airborne evacuation when feasible.

A-77. Strategically, adversaries may employ anti-ship missiles, long-range coastal defenses, cyber or electronic warfare to disrupt C2 of CASEVAC assets. Interdiction of CASEVAC forces at the operational level could overwhelm available medical resources, impacting force health and combat power. Commanders and staff develop risk mitigation strategies, including dispersed medical support zones, redundancy in evacuation platforms, and deception techniques to reduce vulnerability.

INJURIES

A-78. The maritime and littoral environments influence the types of injuries sustained, triage priorities, and treatment approaches. These conditions do not replace traditional combat injuries but add complexity to casualty care. TCCC principles still apply in theses environments. In addition to injuries from penetrating trauma or blasts, Soldiers may face environmental hazards that worsen combat wounds or create new threats. Common injuries in maritime and littoral environments include:

- Drowning and near-drowning.
- Hypothermia from prolonged exposure to cold water.
- Blunt trauma from vessel collisions or rough seas.
- Lacerations from sharp objects on ships, coral reefs, or submerged debris.
- Crush injuries from heavy equipment movement on unstable platforms.
- Immersion injuries from prolonged exposure to wet environments, particularly in already WII personnel.

A-79. Wet water immersion injuries differ from general exposure injuries, particularly for WII individuals. Open wounds exposed to seawater, river water, or stagnant pools are highly susceptible to infection, including necrotizing fasciitis and other bacterial complications. Maceration of the skin from prolonged immersion weakens tissue integrity, delaying wound healing and increasing the risk of secondary injury. Additionally, immersion foot (a form of non-freezing cold injury) can develop in prolonged wet conditions, causing numbness, swelling, and infection risk.

A-80. In maritime and littoral environments, triage decisions account for both the type of injury and the tactical situation. When penetrating or blast trauma is not present, casualties with signs of respiratory distress from near drowning or severe hypothermia may require early intervention due to the risk of rapid deterioration. However, traditional combat injuries, such as hemorrhage or airway compromise, still take triage precedence when present. Personnel apply TCCC guidelines while considering environmental conditions that can complicate injuries or delay treatment. CASEVAC planning includes clear protocols for recognizing and managing environmental injuries, even when evacuation options are limited.

A-81. CASEVAC teams remain alert for infection risks in all wounds, especially when evacuation is delayed or casualties are exposed to wet or contaminated environments. While penetrating trauma carries a high infection risk regardless of setting, prolonged exposure to water can worsen that risk or complicate wound care. Casualties should receive prophylactic antibiotics in accordance with TCCC guidelines, and timely evacuation to a higher role of care is critical to prevent sepsis and promote proper healing.

MOVEMENT

A-82. Movement in maritime and littoral environments involves unique challenges, such as navigating waterborne obstacles, coordinating between multiple platforms, and dealing with variable weather conditions. Proper planning and execution are essential for safe and efficient CASEVAC. CASEVAC teams account for wet gap crossings and riverine operations, where terrain, currents, and limited bridging or ferrying assets complicate evacuation efforts.

A-83. CASEVAC in these environments often relies on small watercraft, amphibious vehicles, and rotary-wing aircraft. In some cases, ships serve as forward MTF, requiring casualties to be transferred between platforms. During wet gap crossings or riverine operations, CASEVAC teams may need to use improvised rafts, bridges, or ferries to transport casualties across water obstacles. Riverbanks with steep embankments, mud, or dense vegetation further complicate movement. Teams are proficient in transferring casualties safely in dynamic environments, such as moving from a small boat to a larger vessel.

A-84. Route planning for wet-gap crossings consider tidal patterns, water depth, currents, and hazards like reefs, submerged debris, or sandbars. CASEVAC teams coordinate with engineers to confirm the availability of bridges or rafts and identify alternate evacuation points on both sides of the crossing. To reduce exposure to enemy observation or attack, teams avoid predictable routes and time movements carefully. Coordination with naval and aerial assets adds flexibility and lowers the risk during evacuation operations.

A-85. By addressing the specific challenges of maritime and littoral environments, military forces can adapt CASEVAC operations to improve casualty outcomes and mission success. ATP 3-04.18 provides essential guidance for optimizing CASEVAC in these dynamic and high-risk settings.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR ENVIRONMENTS

A-86. A CBRN environment poses significant challenges for military operations, including CASEVAC. CBRN hazards, requirements for personnel protective equipment, and the need to protect both casualties and responders from contamination, create a highly complex operational situation. CASEVAC in a CBRN environment requires thorough preparation, training, hazard awareness, and understanding.

A-87. For additional information on planning and conducting CASEVAC operations in CBRN conditions, refer to ATP 3-05.11, ATP 3-11.32, ATP 3-11.33, ATP 3-11.36, ATP 4-02.7, ATP 4-02.83, ATP 4-02.84, ATP 4-02.85, and FM 3-11. These publications highlight the need to integrate CBRN defense measures, specialized medical response, and thorough planning to maintain force readiness and carry out successful CASEVAC missions.

THREATS

A-88. CBRN threats include enemies and adversaries with the intent and capability to deliver CBRN hazards. CBRN hazards include, CBRN material created from accidental or deliberate releases of toxic industrial materials, chemical and biological agents, radiological materials, nuclear materials and hazards resulting from the employment of weapons of mass destruction or encountered by U.S. Armed Forces during the execution of military operations. CBRN hazards create conditions that can damage or destroy life or vital resources or prevent mission accomplishment. CASEVAC teams use hazard awareness and understanding to protect themselves and evacuate casualties safely.

A-89. A CBRN environment is an operational environment that includes CBRN threats and hazards and their resulting effects. These hazards can cause immediate or delayed casualties, depending on the hazard, and effectiveness of mitigation measures. Weather characteristics (such as wind, humidity, temperature), time of day, and terrain determine the effects of environmental impacts on CBRN hazards. Predictive modeling assists in understanding how weather and terrain affect the hazard.

A-90. Adversaries may target land and maritime areas for CBRN attacks, such as choke points, key terrain, and transportation nodes. They may deliberately target CASEVAC operations using contamination to deny freedom of movement or employ follow-on attacks to disrupt evacuation efforts. Maintaining movement control, keeping lines of communication open, and marking CBRN hazards are critical to continuing CASEVAC operations in a CBRN environment.

INJURIES

A-91. A CBRN environment significantly influences the types of injuries sustained, triage priorities, and treatment approaches. CBRN injuries often occur with other injuries (such as shrapnel, burns, or fractures). Heat stress and dehydration from personnel protective equipment, if not mitigated by increased fluid intake, may create heat injuries. The perception of a CBRN threat, whether real or not, may increase stress in Service members and increase the likelihood of combat operational stress reactions. Understanding these factors is essential for effective care and the safe evacuation of casualties.

A-92. CBRN injuries vary depending on the hazard and contamination mitigation measures. Chemical warfare agents are classified by their physiological action or their military use. A choking agent produces irritation to the eyes and upper respiratory tract and damage to the lungs, primarily causing pulmonary edema. A nerve agent interferes with the transmission of nerve impulses, causing cholinergic crisis. Blood agents prevent the normal utilization of oxygen by body tissues, resulting in cessation of respiration followed by cardiovascular collapse. Blister agents injure the eyes and lungs, and burn or blister the skin, and when inhaled, damage mucous membranes and respiratory tract. Symptoms from biological hazards may take days to weeks to manifest. Radiological injuries occur from the effect of ionizing radiation on tissue, most notably acute radiation syndrome and cutaneous radiation syndrome. Nuclear detonation may cause blast injuries from direct blast wave overpressure (such as perforation of the ear drums), crush and translational injuries and missile injuries. Thermal burns will be the most common injuries from nuclear detonation. Combined blast, thermal and radiological injuries will be common.

A-93. Triage prioritizes casualties with immediate life-threatening conditions, such as severe respiratory distress or hemorrhage. In a CBRN environment, triage also considers the level of contamination of the patient to achieve the most orderly, timely, and efficient use of resources. Casualties are simultaneously triaged as to their need for medical care, their priority for patient decontamination, and their priority for evacuation to the next role of care. One patient may be medically triaged as immediate but not have priority for decontamination until they are medically stable. Another may have priority for evacuation but requires decontamination. The purpose of triage is to effectively allocate the medical resources available.

A-94. Treatment often requires specialized interventions, such as administering medical countermeasures for chemical agents, providing antibiotics or antivirals for biological hazards, and managing combined injuries from nuclear detonations. Decontamination is a critical step before and during treatment to minimize the spread of contamination. Evacuation teams may assist a casualty in performing immediate decontamination by using the casualty's individual decontamination equipment. Patient decontamination is performed on patients requiring treatment or evacuation to a higher role of care. Teams monitor casualties for delayed

effects, as some CBRN injuries manifest hours or days after exposure. Refer to ATP 4-02.7 for more information.

MOVEMENT

A-95. Moving casualties in a CBRN environment is particularly challenging due to cross contamination risks, limited mobility in personal protective gear, and the need for dedicated evacuation platforms in the contaminated area. Effective planning and execution are critical to ensuring casualty safety and mission success.

A-96. CASEVAC in a CBRN environment requires unit leaders to carefully assess how many evacuation platforms they will commit to contaminated areas. Ground vehicle routes that cross contaminated areas are considered dirty routes and should not be used by clean vehicles unless necessary. Commanders consider the effects of wind and time on contaminants, as some agents can persist in an area for extended periods. Aerial assets may support CASEVAC operations but mitigate contamination risks and be prepared to conduct decontamination. Movement through contaminated areas is planned to minimize exposure and prevent unnecessary contamination. Commanders should make every effort to minimize the number of evacuation assets exposed to contamination, preserving evacuation capabilities for future operations.

A-97. Patient protection during evacuation should match the unit's MOPP posture. Patient decontamination teams at the MTF's patient decontamination site should remove the patient's MOPP ensemble. The forward deployed MTFs will not have replacement MOPP ensembles for the patients. The MTFs place these patients in a patient protective wrap before they are evacuated from the clean treatment area. The patient protective wrap provides the same level of protection as the MOPP ensemble.

A-98. If evacuation personnel enter a radiologically contaminated area, it is conducted in accordance with the operational exposure guidance. Once a unit or individual is exposed to radiation, exposure records are maintained by the CBRN officer or noncommissioned officer and made available to the commander, staff, and command surgeon. The exposure is also entered into the individual's medical and or dosimetry record. Additional personnel may be required for evacuation teams, so individuals do not exceed the operational exposure guidance.

ROUGH TERRAIN

A-99. Rough terrain is found in many environments, including mountains, forests, and urban areas, and it poses significant challenges to CASEVAC operations. These landscapes include both natural and man-made obstacles such as ravines, cliffs, canals, embankments, and unstable surfaces. Moving casualties through rough terrain requires more time, effort, and resources due to the physical difficulty of extraction and the potential for delays.

A-100. CASEVAC operations in these environments demand specialized planning, equipment, and techniques to navigate obstacles safely. Delays in evacuation can severely impact casualty survival rates and mission effectiveness, making terrain adaptation a critical factor in operational success.

A-101. ATP 3-21.18, ATP 3-21.50, ATP 4-02.2, and ATP 4-02.13 provide essential guidance on conducting CASEVAC in rough terrain. These manuals emphasize adapting operations to rugged landscapes to preserve the force and maintain operational readiness.

THREATS

A-102. In rough terrain environments, CASEVAC teams face two main threats: natural hazards and enemy forces. Natural hazards, such as steep slopes, loose rocks, and rivers, make movement difficult and slow down evacuation efforts. At the same time, enemy forces take advantage of these challenges by setting up obstacles, ambushes, and indirect fire attacks to disrupt CASEVAC operations.

A-103. To conduct successful evacuations, units understand the full range of threats and take action to reduce risk. Terrain analysis, detailed route planning, and reconnaissance help CASEVAC teams move through challenging environments. Security measures, real-time intelligence, and coordinated fire support help counter enemy activity. By preparing for both environmental and enemy hazards, CASEVAC teams increase the likelihood of safely evacuating casualties and completing the mission.

NATURAL TERRAIN HAZARDS

A-104. Rough terrain poses significant mobility challenges, including steep slopes, loose rocks, dense vegetation, and river crossings. These conditions slow evacuation efforts, increase the risk of vehicle damage, and heighten the chance of injury to casualties and litter teams. Additionally, navigating terrain obstacles may require detours or specialized movement techniques, such as rappelling or constructing makeshift crossings. Other environmental constraints include:

- Limited visibility and navigational difficulty, requiring CASEVAC teams to use enhanced route planning and GPS mapping.
- Time-of-day restrictions, as movement may be restricted to darkness to reduce the likelihood of detection.
- Prolonged care requirements, as delays in evacuation may necessitate sustained medical intervention in austere conditions.

A-105. Postponing evacuation may reduce immediate risk but could also prolong the casualty's exposure to environmental hazards and medical deterioration. These considerations are factored into mission planning to determine the best course of action.

ENEMY THREATS AND EXPLOITATION OF TERRAIN

A-106. Adversaries will exploit rough terrain hazards by reinforcing obstacles, deploying mines, and using direct and indirect fires to target CASEVAC teams. The restricted mobility of rough terrain makes CASEVAC elements particularly vulnerable to ambushes and artillery strikes. To mitigate these risks, reconnaissance and planning are essential. CASEVAC teams must:

- Identify danger areas through detailed reconnaissance, including drone surveillance, scouting, and terrain analysis.
- Develop TTPs to mitigate enemy threats, such as using route deception, decoy movements, or coordinating suppressive fire support.
- Integrate security elements into CASEVAC missions, ensuring force protection assets accompany evacuation teams when operating in high-risk areas.
- Establish contingency plans for alternate CASEVAC routes in the event of ambushes, blocked terrain, or sudden enemy reinforcement.

A-107. By incorporating terrain analysis, enemy threat assessments, and CASEVAC security measures, units can minimize risks and enhance the survivability of evacuation operations. Effective coordination with intelligence, reconnaissance assets, and maneuver elements further improves CASEVAC success by identifying potential threats in advance and ensuring responsive support during evacuation.

INJURIES

A-108. The rough terrain environment significantly influences injury patterns, triage priorities, and treatment approaches. Effective medical care in these conditions requires tailored interventions based on terrain-associated risks. Medical planners conduct terrain-based medical threat analysis to anticipate injury types and logistical challenges, using this information to adjust medical supply requirements and refine CASEVAC TTPs to mitigate risk.

A-109. Injuries in rough terrain commonly include:

- Fractures, sprains, and blunt trauma from falls, slips, or rolling debris.
- Environmental exposure injuries, such as hypothermia, dehydration, and heat exhaustion, depending on terrain and climate.
- Altitude-related conditions, such as acute mountain sickness, high-altitude pulmonary edema, and high-altitude cerebral edema.
- Overuse injuries, such as stress fractures and soft tissue damage from prolonged movement in unstable terrain.

A-110. CASEVAC teams anticipate these types of injuries and carry the right supplies to manage them. This includes first-aid materials, hydration systems, and gear to protect against environmental hazards.

A-111. Personnel use a trauma algorithm to identify and treat life-threatening injuries during triage. This algorithm, known as MARC^{2}H^3-PAWS-L, stands for massive hemorrhage/MASCAL, airway, respirations, circulation, communications, hypo/hyperthermia and head injuries, pain control, antibiotics, wounds (including nursing and burns), splinting, logistics. This standard, established by the Joint Trauma System and the Committee on TCCC, provides a clear format for treatment prioritization. In rough or mountainous terrain, where evacuation is often delayed, following the MARC^{2}H^3-PAWS-L algorithm helps determine which casualties require the highest priority for evacuation and care.

A-112. Treatment in rough terrain prioritizes:

- Hemorrhage control with tourniquets and hemostatic dressings.
- Fracture stabilization using splints and improvised supports.
- Environmental injury management, including rewarming for hypothermia and aggressive hydration for heat-related conditions.
- Immobilization techniques for spinal injuries to reduce further damage during transport.

A-113. CASEVAC teams prepare for prolonged care scenarios when immediate evacuation is not possible. This requires portable medical equipment and sustainment planning to manage casualties over extended periods. Building this capability supports continuous care, protects life during evacuation delays, and helps maintain operational effectiveness in austere or contested environments.

MOVEMENT

A-114. Movement in rough terrain is one of the most complex and physically demanding aspects of CASEVAC operations. Steep slopes, gaps, cliffs, and ravines require specialized techniques and equipment to safely and efficiently evacuate casualties.

A-115. CASEVAC in rough terrain often requires manual extraction using stretchers, ropes, pulley systems, or specialized litter-carrying techniques. In mountainous areas or dense jungle, teams may use pack animals when vehicles cannot reach the casualty. All-terrain vehicles, aerial hoists, and other specialized platforms may also support movement if the terrain and threat level allow. CASEVAC teams adjust their movement methods based on terrain stability, weather conditions, and the casualty's medical needs to support safe and effective transport.

A-116. Route planning accounts for multiple terrain challenges, including:

- Terrain stability, slope gradient, and natural obstacles (such as, fallen trees, boulders, rockslides).
- Seasonal and weather effects, such as rain, snow, flooding, or extreme heat, which can alter terrain conditions.
- Enemy threats, including potential ambush points and the need for security measures along evacuation routes.
- Alternative routes and contingency plans to mitigate environmental disruptions or battlefield conditions.

A-117. Extended evacuation distances and rough terrain may require multiple litter teams to relay casualties along the route. This approach keeps movement steady while lowering the chance of fatigue-related injuries among personnel. To improve CASEVAC operations in challenging environments, units should:

- Pre-position medical assets along extended routes to maintain continuous care.
- Train personnel in specialized CASEVAC techniques, such as high-angle rescue, jungle extractions, or mountain operations.
- Coordinate with aviation or ground support units to reduce transport time when possible.

A-118. By addressing these challenges, military forces can adapt CASEVAC operations to improve casualty outcomes and sustain mission effectiveness. For detailed guidance on conducting CASEVAC in rough terrain, refer to ATP 3-21.18, ATP 3-21.50, ATP 4-02.2, and ATP 4-02.13.

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Appendix B

Mass Casualty Events

MASCAL events occur when the number of casualties overwhelms available medical resources, making timely evacuation and treatment critical to saving lives. These situations require precise planning, coordination, and adaptability across all echelons. CASEVAC plays a vital role in moving WII to MTFs where they can receive further care.

This appendix examines the complexities of managing MASCAL situations, with a focus on the critical role of nonmedical platforms in supporting CASEVAC operations. It explores planning considerations, coordination strategies, execution of CASEVAC, addressing CBRN hazards, and leveraging technological advancements. By understanding these elements, military planners can optimize their response to MASCAL events and improve outcomes in the most demanding conditions.

MASS CASUALTY SITUATIONS

B-1. MASCAL situations present some of the most challenging and resource-intensive conditions in military and operational environments. The ability to manage MASCAL scenarios depends on pre-established strategies, integration of CASEVAC platforms, and adaptability to unique threats, including communicable diseases, and biological hazards.

B-2. This section explores the core challenges of MASCAL operations, beginning with triage and decision-making under extreme conditions, including the psychological and ethical burdens placed on medical responders. It then highlights the critical role of CASEVAC assets in managing MASCAL events when traditional MEDEVAC resources are overwhelmed or unavailable. Finally, it addresses the unique considerations for MASCAL scenarios involving communicable diseases and biological threats, emphasizing the need for isolation procedures, bio-containment capabilities, and coordination with public health authorities. By understanding these key elements, commanders and medical planners can develop more effective MASCAL strategies to enhance casualty care and operational effectiveness in high-stress environments.

CHALLENGES OF MASS CASUALTY SITUATIONS

B-3. MASCAL scenarios occur when the number of casualties exceeds the available medical resources, overwhelming the system's capacity to provide immediate treatment and evacuation. These events are characterized by chaos, resource constraints, and the urgent need for rapid triage and decision-making. Without pre-planned strategies and effective coordination among medical, operational, and logistical teams, delays in evacuation and care can result in preventable loss of life.

Note. While the definition of a MASCAL does not change, its scale and operational impact vary by echelon. What overwhelms a squad's ability to respond may differ significantly from what stresses a brigade's resources. Commanders and staff assess available capabilities and respond accordingly when medical requirements exceed local capacity.

B-4. Triage is one of the most critical parts of a MASCAL response. Protocols are clear, flexible, and applied consistently so that casualties with the greatest chance of survival receive priority care. Triage becomes more complex during combat, where enemy contact, chemical or biological threats, and limited medical personnel make decision-making even more difficult.

B-5. Beyond the physical toll, MASCAL situations also present psychological and ethical challenges for responders. Moral injury, the distress experienced when individuals make difficult life-and-death decisions under extreme conditions, can have long-term impacts on medical personnel, leaders, and Soldiers. Failing to prepare first responders for these realities can lead to long-term psychological distress, reduced combat effectiveness, and diminished unit morale.

B-6. Triage during MASCAL events presents both operational and ethical challenges for medical personnel. The overwhelming number of casualties forces split-second decisions on who receives immediate care and who may not survive. These choices can lead to moral injury; psychological distress caused by violating one's ethical or professional standards. Personnel are prepared for the emotional and ethical burden of triage, particularly in scenarios where limited resources mean some casualties cannot be treated immediately.

B-7. To reduce psychological strain, commanders provide training that prepares personnel to make triage decisions under stress during MASCAL events. Support mechanisms, such as AARs, embedded behavioral health teams, and chaplain services, should be built into CASEVAC operations to support responders after the mission. Ignoring the mental well-being of CASEVAC teams can weaken operational performance and harm long-term force readiness.

The Role of Casualty Evacuation in Mass Casualty Situations

B-8. CASEVAC platforms are essential during MASCAL events, especially when MEDEVAC assets are unavailable, overwhelmed, or unable to operate due to mission constraints. Whether military or nonmilitary, CASEVAC platforms offer flexible and scalable options for moving casualties in austere conditions.

- Rapid Evacuation: CASEVAC enables the quick removal of casualties from the POI, easing congestion onsite and allowing medical teams to focus on stabilizing those who remain.
- Resource Bridging: When MEDEVAC is not available, CASEVAC still provides a means to move casualties, helping prevent conditions from worsening.
- Integration into MASCAL Planning: Commanders improve evacuation efficiency by identifying CASEVAC-capable vehicles and aircraft in advance, reducing the need for improvised solutions.

Mass Casualty Considerations for Communicable Disease and Biological Threats

B-9. MASCAL scenarios are not limited to combat-related injuries, they also include disease outbreaks, pandemics, and biological warfare incidents. In these cases, traditional triage and evacuation procedures may need modification to prevent the spread of disease while still ensuring casualty care.

- Infectious Disease Triage: In disease-driven MASCAL incidents, triage accounts for both medical severity and infection control measures, ensuring that highly contagious individuals do not compromise the safety of responders or other casualties.
- CASEVAC and Containment: Evacuating infected personnel requires dedicated isolation procedures, including specialized transport equipment (such as bio-containment units), decontamination measures, and PPE for responders.
- Logistical Strain on Medical Infrastructure: A MASCAL event involving communicable diseases can overwhelm both military and civilian medical infrastructure, requiring coordination with public health agencies, quarantine protocols, and strategic use of medical supply chains.

B-10. Commanders and planners integrate communicable disease control measures into MASCAL strategies, especially in high-risk environments where biological threats may arise. This includes setting up isolation procedures, equipping CASEVAC platforms with bio-containment features, and coordinating closely with medical and public health authorities to prevent disease spread while still providing timely care for casualties.

B-11. Communicable disease outbreaks present unique challenges for CASEVAC operations, requiring strict biosecurity measures to prevent further spread. Unlike combat trauma, infectious casualties are transported under isolation protocols to protect medical personnel and uninfected patients. Units should designate biocontainment CASEVAC platforms, establish decontamination procedures, and implement PPE protocols for medical teams.

B-12. Commanders work with medical planners to integrate biosecurity measures into MASCAL and CASEVAC operations. Important considerations include using negative-pressure isolation stretchers, identifying patient transfer points in advance, and setting up dedicated transport routes for contagious casualties. In multinational environments, units coordinate their procedures with host-nation and coalition disease control policies to support unified and effective CASEVAC across all forces.

PLANNING AND COORDINATION

B-13. Effective MASCAL management starts with detailed planning and coordination. Units develop plans that identify available resources, assign roles, and outline procedures for executing CASEVAC. Close coordination with logistics and operations officers helps medical personnel access critical assets such as evacuation platforms, medical supplies, and communication systems. Rehearsals and training exercises help expose gaps in the plan and build readiness across all participating elements.

B-14. Integrating CASEVAC into MASCAL plans requires advanced preparation. Commanders identify platforms, train drivers and nonmedical personnel in CASEVAC procedures, and equip platforms with medical supplies such as Warrior Aid and Litter Kits. Coordination with host-nation support and civilian resources further expands the units' capabilities. By planning proactively, units can reduce delays and improve casualty outcomes during high-stress situations.

HOST-NATION SUPPORT

B-15. Depending on the assigned area, host-nation support agreements may provide evacuation assets ranging from austere to extensive support. Coordination with civil affairs planners at echelon or the local embassy country team can provide information on the availability of assets. This information should be included in the operation plans. Some of the types of assets which might be available for support are:

- Buses.
- Barges and other watercraft.
- Civilian cargo vehicles.

MEDICAL STAFFING IN NONMEDICAL PLATFORMS

B-16. Staffing CASEVAC platforms with medical personnel to provide en route care requires deliberate planning and coordination. Since CASEVAC often relies on vehicles of opportunity, commanders track available medical personnel, equipment, and transport assets to support timely response. The current medical system supports this approach by allowing for task-organized medical teams, including four-person treatment teams assigned to brigade support medical companies, area support medical companies, and many battalion headquarters.

B-17. Most support organizations maintain trained CLSs who can provide basic en route care for less seriously wounded, injured, or ill patients when medical personnel are unavailable. By incorporating CLS personnel and leveraging medically manned CASEVAC principles, commanders can maximize patient movement efficiency while ensuring casualties receive timely evacuation and care.

EXECUTION OF CASUALTY EVACUATION

B-18. CASEVAC plays a vital role in executing evacuation during MASCAL events, especially in austere environments where weather, terrain, or enemy activity limits MEDEVAC operations. Properly equipped and staffed CASEVAC platforms help move casualties safely and efficiently to higher roles of care. Training nonmedical personnel to secure patients and provide basic en route care further strengthens the effectiveness of CASEVAC efforts.

B-19. The successful use of CASEVAC relies on clear communication and coordination. Commanders establish procedures for allocating these assets, ensuring they are readily available when needed. Regular rehearsals that include the use of CASEVAC help teams refine their response capabilities. By integrating CASEVAC into the broader evacuation framework, units can adapt to the dynamic demands of MASCAL scenarios and save lives.

B-20. Successful management of MASCAL situations depends on developing and rehearsing detailed MASCAL plans. Several additional factors can contribute to the effectiveness of a unit's response. These include, but are not limited to:

- Identify and train nonmedical personnel to serve on litter teams.
- Maintain trained and equipped CLSs capable of providing immediate care.
- Locate WII personnel and move them from the POI to secure locations.
- Provide effective TCCC to stabilize casualties before movement.

- Conduct accurate triage to prioritize evacuation based on injury severity.
- Prepare and stage CASEVAC platforms, including nonmedical vehicles, for rapid loading.
- Establish and operate CCPs to consolidate casualties prior to onward movement.
- Coordinate evacuation routes, ambulance loading points, and AXPs to link with higher roles of care.
- Integrate CASEVAC into the ambulance shuttle system to maintain continuous casualty flow when MEDEVAC is unavailable or overwhelmed.
- Assign medical personnel to provide en route care on CASEVAC platforms when possible.
- Exchange medical equipment (litters, patient securing straps, blankets) to keep platforms mission ready.
- Coordinate with key personnel and adjacent units for casualty transfer and onward movement to MTFs.
- Track capabilities and locations of MTFs to match casualty needs with available resources.
- Synchronize communications frequencies and call signs to support coordinated movement.
- Coordinate additional medical support, including MEDEVAC and forward resuscitative surgical teams, as required.
- Plan for CBRN-specific MASCAL considerations, including containment of hazards, protection of responders, identification of contaminated collection points, evacuation platforms and routes, and establishment of patient decontamination sites.

B-21. MASCAL situations often present significant challenges. One common obstacle during these events is poor communication and coordination among medical, logistical, and operational units, especially in dangerous environments. To overcome these issues, units should conduct regular, realistic training exercises that include MASCAL scenarios. These rehearsals improve coordination and help teams practice using interoperable communication systems. Pre-positioning critical supplies, like medical kits, in high-risk areas also supports faster response times. Host-nation support can play a crucial role in evacuation efforts, but challenges such as language barriers and operational differences may arise. Joint exercises and maintaining LNOs can help improve collaboration with host-nation assets.

B-22. Ground assets can be used for CASEVAC when the MEDEVAC system is overwhelmed. All available ground vehicles should be considered for augmenting MEDEVAC assets in an emergency. The key to success is identifying the platforms, drivers, and medical personnel or the CLS who will accompany the casualties. Each of these platforms should be equipped with a Warrior Aid and Litter Kit. The kit is designed to provide the user with enough medical supplies and a stable evacuation platform for two critically WII casualties. For more information on the Warrior Aid and Litter Kit, refer to ATP 4-02.13.

B-23. During MASCAL events, units decide when to prioritize CASEVAC over MEDEVAC. CASEVAC is ideal when MEDEVAC resources are unavailable or overwhelmed. For example, if weather prevents air MEDEVAC, nonmedical platforms like HMMWVs or cargo trucks can serve as CASEVAC platforms. To prepare for such scenarios, units should train nonmedical personnel on CASEVAC procedures, including securing patients, and providing basic care. Equipping platforms with Warrior Aid and Litter Kits helps keep them ready for emergency use.

B-24. Clear procedures for allocating and releasing CASEVAC assets are established during the planning phase to support mission success. Proactive coordination allows units to identify and prepare platforms and personnel in advance, rather than reacting once a MASCAL event begins. Strong planning and communication help integrate ground-based nonmedical assets into CASEVAC operations, improving response times and casualty outcomes.

B-25. All organizations have procedures in place to respond to MASCAL situations. The potential for disasters in war and other operations requires that the medical element be prepared to support MASCAL situations. They can receive, triage, treat, and evacuate large numbers of casualties within a short period of time. Contingency plans for supporting MASCAL operations are developed by all units in coordination with their surgeon, senior physical assistant or senior healthcare noncommissioned officer, operations staff officer, and logistics staff officer.

ADDRESSING CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR, AND COMPLEX HAZARDS IN A MASS CASUALTY SITUATION

B-26. CBRN threats add complexity to MASCAL events and require specialized planning and response procedures. Units include contamination control zones and mitigation measures in their operations. For example, CCPs for contaminated personnel should be placed upwind of hazard areas and clearly marked for triage, decontamination, and evacuation staging. Responders are trained to use personal protective equipment and recognize signs of CBRN exposure. Equipping evacuation platforms with decontamination kits and maintaining contamination-free zones helps protect both patients and responders. For more on CBRN threats and symptoms, refer to ATP 4-02.7. For guidance on MASCAL operations in CBRN environments, refer to ATP 3-11.33.

B-27. Incorporating CBRN scenarios into MASCAL rehearsals is essential for preparedness. Realistic training allows responders to practice contamination mitigation, decontamination, and evacuation procedures under simulated hazardous conditions. Exercises should include the use of CBRN detection systems, such as physical detectors and diagnostic algorithms, casualty triage in contaminated environments, and coordinated efforts with host-nation resources.

B-28. During a MASCAL event in a CBRN environment, units identify suspected CBRN hazards and report them. The CBRN Warning and Reporting System (known as CBRNWRS) helps medical personnel and first responders focus on removing casualties from the battlefield. By coordinating with CBRN units and using information from CBRNWRS, teams can find safe evacuation routes and locate decontamination sites. For more details on the CBRN Warning and Reporting System, refer to TM 3-11.32.

B-29. Proper preparation reduces risk and supports a faster, safer response to complex hazards. MASCAL planning should also include long-term considerations such as monitoring contamination levels, disposing of contaminated equipment, and treating personnel who were exposed. By addressing both immediate and ongoing challenges, units strengthen their ability to manage CBRN threats and safeguard both responders and casualties.

TECHNOLOGICAL AND PROCEDURAL ADVANCEMENTS

B-30. Technological advancements provide new tools to enhance MASCAL responses. Unmanned systems can scout evacuation routes, deliver medical supplies, and reduce risks to personnel. Telemedicine devices allow field medics to consult specialists remotely, enabling advanced care for critically WII patients even in austere environments.

B-31. Modern vehicles, like the Armored Multi-Purpose Vehicle, provide enhanced protection and flexibility for CASEVAC operations. These platforms are equipped with advanced medical systems and modular configurations, enabling rapid adaptation to various mission needs. Integrating these tools into training and planning streamlines operations, reduces response times, and improves outcomes during MASCAL scenarios. For instance, rehearsals that incorporate telemedicine devices and unmanned systems have demonstrated a measurable reduction in treatment delays during exercises.

B-32. While these technologies offer clear benefits, integrating them into MASCAL operations can be challenging due to cost, logistics, and training demands. Units invest in infrastructure and develop personnel to use these tools. Updating training to include emerging technologies helps units stay adaptable and ready for the evolving demands of modern operations.

B-33. Leveraging technology across multimodal CASEVAC operations creates a cohesive and efficient system. For example, unmanned systems can relay real-time information about evacuation routes to air and ground assets, while artificial intelligence tools coordinate casualty prioritization across platforms. By integrating these advancements into planning, training, and execution, units can address challenges, saving more lives in the most complex scenarios.

MEASURING AND IMPROVING PERFORMANCE

B-34. Evaluating the success of a MASCAL response requires tracking metrics such as evacuation times, survival rates, and resource utilization. These metrics provide insights into operational strengths and weaknesses, enabling units to identify areas for improvement. AARs are essential for analyzing how well teams adhered to protocols, how they responded, and what improvements are needed.

B-35. Structured evaluation frameworks, like Army's AAR process, NATO's lessons framework, and the Joint Trauma System, help standardize how MASCAL events are assessed. The Joint Trauma System, the DOW Center of Excellence for Trauma, offers data-driven analysis and best practices for TCCC. These tools guide units in turning lessons learned into better plans and training programs. Units that regularly revise their plans using these insights improve their readiness and ability to respond in complex situations.

B-36. Metrics and lessons learned only matter when used to make real improvements. For instance, identifying evacuation delays might identify a need to adjust CCP placement or communication procedures. If survival rates are low, leaders may need to improve casualty care training. Digital tools, such as tracking systems and dashboards, can give commanders real-time updates on patient movement and resource use during a MASCAL event. Sharing these findings across units and with coalition partners builds shared understanding and supports better coordinated responses in future operations.

MASS CASUALTY PLAN

B-37. A well-structured MASCAL plan provides a detailed framework for CASEVAC, resource allocation, and coordination with supporting units. Figure B-1 below and through page 102 illustrates a sample plan for a brigade-sized unit. While not exhaustive, this plan serves as a foundation that units can adapt to specific operational environments and requirements and include in their SOP.

Mass Casualty Standard Operating Procedure

1. (U) Purpose. This standard operations plan establishes the procedures and responsibilities in the event a MASCAL situation occurs within the brigade combat team assigned area.

2. (U) Scope. This standard operations plan is designed to provide procedures for planning for and reacting to a MASCAL event. The goal of this standard operations plan is to reduce the loss of life and limb by providing clear and concise guidance.

3. (U) Applicability. All assigned and attached personnel.

4. (U) References.

a. ATP 4-02.2.

b. ATP 4-02.13.

5. (U) Definitions.

a. *Ambulance exchange point* is a location where a patient is transferred from one ambulance to another en route to a medical treatment facility. Also called AXP.

b. *Casualty* is any person who is lost to the organization by having been declared dead, duty status – whereabouts unknown, excused absence – whereabouts unknown, missing, ill, or injured.

c. *Casualty collection point* is a location that may or may not be staffed, where casualties are assembled for evacuation to a medical treatment facility.

d. *Casualty evacuation* is the movement of wounded, ill or injured personnel aboard any nonmedical platform; also called CASEVAC.

e. *Mass casualty* is any number of human casualties produced across a period that exceeds available medical support capabilities. Also called MASCAL.

f. *Medical evacuation* is the timely and effective movement of the wounded, injured, or ill to and between medical treatment facilities on dedicated and properly marked medical platforms with en route care provided by medical personnel. Also called MEDEVAC.

SAMPLE

Figure B-1. Sample of a mass casualty standard operating procedure

Mass Casualty Standard Operating Procedure (continued)

g. *Triage* is the system of sorting and prioritizing casualties based on the tactical situation, mission, available resources, and medical urgency.

6. (U) Concept for a MASCAL situation.

a. A MASCAL situation exists when the casualty load exceeds the capability of the medical treatment assets available to the unit.

b. The scene commander will be the senior nonmedical person (medical personnel will be providing treatment). The scene commander will coordinate the efforts of site security, medical treatment teams, and evacuation teams.

c. Units without organic medical personnel will immediately contact their closest supporting medical unit, upon suffering mass casualties.

d. All casualties will be moved to designated CCPs.

e. Available medically trained personnel will assess and triage casualties at the CCP.

f. The forward support company of the brigade support battalion will send designated CLSs and CASEVAC vehicles to assist in the movement of casualties to designated battalion aid stations and MTFs. The brigade support medical company will send designated medical personnel and ambulances to assist.

g. The scene commander will establish a rotary-wing aircraft LZ for use by air MEDEVAC or CASEVAC rotary-wing aircraft.

h. A medical officer or physician assistant will head each treatment team of three to four medics.

7. (U) MASCAL triage.

a. Each unit establishes a triage station to sort casualties for treatment. This may be located at a CCP and staffed initially by trained nonmedical personnel until medical personnel arrive.

b. Units train designated personnel, including combat medics, leaders, and selected nonmedical Soldiers, in triage procedures. This allows medical personnel to focus on treatment, casualty regulation, and coordination with CASEVAC assets.

c. The most senior qualified medical provider present serves as the triage officer when available.

d. When multiple casualty waves are expected, the next most qualified and available person takes over as triage officer for subsequent arrivals, allowing the primary medical provider to direct overall treatment operations.

e. Combat Lifesavers will not normally perform triage when medical personnel are available but should be trained in its principles to support MASCAL operations. These personnel may provide the following:

(1) Trauma management within their training limits.

(2) TCCC.

(3) Treatment and monitoring of MINIMAL category casualties.

f. Triage categories. Casualties are sorted and color coded by marking the casualty's Department of Defense Form (DD) 1380 *(Tactical Combat Casualty Care [TCCC] Card)* as follows:

Mass Casualty Standard Operating Procedure (continued)

Priority	*Treatment Category*	*U.S. Color Code*	*NATO Color Code*
1	Immediate	Red	Red
2	Delayed	Yellow	Yellow
3	Minimal	Green	Green
4	Expectant	**Black**	**Blue on White**
5			**Dead-White on Black**

Figure B-1. Sample of a mass casualty standard operating procedure (continued)

SAMPLE

Mass Casualty Standard Operating Procedure (continued)

g. During limited-visibility or night operations, triage areas should be clearly marked using appropriate light sources to maintain visibility and support casualty management. Units may use color-coded chemlights (red, yellow, green, and blue or infrared) markers to correspond with triage categories and improve identification in low-light environments. These markings should be coordinated with unit SOPs and aligned with tactical considerations to avoid confusion or compromise of position.

h. Minimally injured patients may be used to assist the treatment teams at the discretion of the treatment or triage officers.

8. MASCAL medical treatment.

a. The focus of medical treatment at a MASCAL site is the preservation of life, limb, or eyesight (IMMEDIATE and DELAYED categories).

b. Medical treatment personnel will establish a post treatment evacuation holding area, clearly marked by MEDEVAC precedence. The recommended method of marking the area is to affix signs to stakes in the ground.

c. If available, the chaplain and combat and operational stress control personnel should be in the holding area.

d. The holding area should allow for the Soldier's leaders to take custody of personal effects that do not accompany the patient through the evacuation process (for example, weapons, night vision devices, and communication equipment). This holding area is easily accessible to the rotary-wing aircraft LZ and the ground ambulance route.

9. MASCAL evacuation procedures.

a. All casualties will be taken to the designated company CCP by designated litter teams. The first sergeant or their representative is responsible for identifying nonmedical Soldiers as members of litter teams.

b. All company CLSs not actively engaged in force protection will go to the company CCP to assist medical teams.

c. The medical noncommissioned officer in absence of a physician or physician assistant will supervise the assessment, triage, and evacuation of casualties at the designated site.

d. The company's first sergeant or their designated representative will be responsible for the transportation of casualties from the company CCP, to the designated MTF, or AXP via CASEVAC vehicles.

10. CASEVAC vehicles.

a. The forward support company commander will create an ordered list of the number of vehicles to be used.

(1) The forward support company supply trucks (for example M1081) will be downloaded with supplies and designated as evacuation vehicles. These vehicles can be rapidly used to clear the company CCP and facilitate rapid evacuation of litter patients.

(2) A driver and assistant driver are designated.

(3) The vehicles will be prepared, cleaned, and ready for evacuation of patients.

(4) All CASEVAC vehicles will have litters and litter straps present.

(5) An M1093 5-ton or M1081 2 1/2-ton cargo vehicle can transport a total of seven or eight litter patients, respectively.

(6) A cargo HMMWV can transport a total of five litter patients, and a four-seat configuration HMMWV can transport three litter patients.

SAMPLE

Figure B-1. Sample of a mass casualty standard operating procedure (continued)

Mass Casualty Standard Operating Procedure (continued)

b. Vehicle marking.

(1) Whenever the tactical situation allows, CASEVAC vehicles should be marked to indicate that they are carrying casualties.

(2) Day: Signaling marker panel will be placed on the hood or roof of the vehicle, orange side up, to indicate that the vehicle is carrying casualties.

(3) Night: Secure two infrared chemical lights to the top front corners of the vehicle, one on the driver's side and one on the passenger's side.

12. MASCAL AAR.

a. Following all MASCAL events, units conduct a structured AAR to evaluate the effectiveness of response efforts, coordination between medical and operational elements, and adherence to triage, treatment, and evacuation protocols.

b. The AAR should assess:

(1) The timeliness and accuracy of triage decisions.

(2) Effectiveness of CASEVAC and MEDEVAC coordination

(3) Any shortfalls in medical supplies, staffing, or equipment.

(4) The integration of CASEVAC for casualty movement.

c. Communication and coordination challenges encountered.

d. Findings from the AAR should be documented and disseminated to improve MASCAL SOPs, training plans, and logistical support planning.

13. Cleaning and Decontamination Procedures for CASEVAC Vehicles and Equipment.

b. All vehicles, equipment, and personnel involved in CASEVAC operations are assessed to determine the need for and level of decontamination following casualty transport.

c. Cleaning requirements depend on the nature of injuries, patient exposure to bodily fluids, and potential infectious disease concerns.

d. Standard decontamination procedures include:

(1) When a biological agent, such as anthrax, is suspected, follow contamination mitigation procedures, including personnel, operational, and thorough decontamination.

(2) Determine the most safe and effective way to remove biological hazards. This will depend on the nature of the hazard and equipment available.

(3) Removing all biological hazards from vehicle interiors and exteriors, paying attention to frequently used touch points.

(4) Proper disposal of medical waste, including bandages, intravenous lines, and PPE.

(5) Replacement or sterilization of litter straps, cushions, and protective coverings.

(6) Decontamination of personnel before resuming CASEVAC operations.

e. If operating in a CBRN environment, consolidate decontamination efforts whenever possible. The needs of CASEVAC and decontamination operations will compete for resources, such as water and augmentation. Patient decontamination sites should be collocated with personnel and equipment decontamination to prevent the spread of contamination and consolidate resources.

14. MASCAL Considerations for Communicable Disease and Biosecurity Measures.

a. If a MASCAL event involves casualties exposed to a communicable disease, additional triage, treatment, and transport considerations are implemented to limit disease spread while ensuring adequate medical care.

SAMPLE

Figure B-1. Sample of a mass casualty standard operating procedure (continued)

Mass Casualty Standard Operating Procedure (continued)

b. Triage stations incorporate infection control procedures, including:

(1) Isolation of those infected with a communicable disease and quarantine of those exposed but not yet ill.

(2) Use of PPE by all responders handling infectious casualties.

(3) Specialized triage categorization for infectious casualties requiring isolation or priority evacuation to designated MTF.

c. CASEVAC procedures include:

SAMPLE

(1) Coordinate for bio-containment transport capability for highly contagious casualties (such as Air Force negative pressure isolation pods).

(2) Designation of infectious CASEVAC vehicles separate from standard transport assets.

(3) Pre-planned routes to MTFs equipped for infectious disease management.

(4) All medical personnel, CASEVAC crews, and responding units follow post-mission decontamination protocols before returning to duty.

Legend:

		LZ	Landing zone
ATP	Army training publication	MASCAL	mass casualty
AXP	ambulance exchange point	MEDEVAC	medical evacuation
CASEVAC	casualty evacuation	MTF	medical treatment facility
CBRN	chemical, biological, radiological, and nuclear	NATO	North Atlantic Treaty Organization
CCP	casualty collection point	PPE	personal protective equipment
CLS	combat lifesaver	SOP	standard operating procedure
DD	Department of Defense form	STANAG	standardization agreement
HMMWV	high mobility multipurpose wheeled vehicle	TCCC	tactical combat casualty care
		U.S.	United States

Note. The U.S. Reservation 7 to NATO STANAG 2228 addresses the variance between U.S. four triage categories and the NATO's five triage categories. The NATO fifth color code is for deceased personnel.

Figure B-1. Sample of a mass casualty standard operating procedure (continued)

B-38. A comprehensive MASCAL plan should address key components, including CCP locations, triage prioritization, communication protocols, and the integration of available resources. Assigning clear roles and responsibilities helps all personnel understand their part in the response. For example, the plan should detail who oversees patient tracking, manages vehicle dispatch, and coordinates with the higher role of care MTF.

B-39. Customizing the MASCAL plan allows units to address specific challenges, including host-nation support, terrain, and CBRN threats. For instance, urban plans may emphasize non-linear evacuation routes, while rural plans may focus on long-distance ground movement. Frequent updates and rehearsals keep the plan current and help teams identify and fix potential weaknesses before an actual event occurs.

B-40. Incorporating technology can further enhance the effectiveness of MASCAL plans. Tools such as digital mapping systems help identify optimal CCP locations, while digital casualty tracking systems provide real-time updates on patient movement and resource allocation. Additionally, interoperability with allied forces and host-nation assets strengthens coordination during joint operations, ensuring seamless integration of resources and support.

B-41. A clear and actionable MASCAL plan is critical to improving response times and saving lives during MASCAL events. By focusing on comprehensive planning, customization, and regular practice, units can maintain readiness and adapt to the dynamic demands of modern operational environments.

B-42.

Appendix C

Casualty Evacuation Capabilities

While MEDEVAC remains the preferred method of evacuation, the realities of large-scale combat operations will often make CASEVAC the primary means of moving casualties. In such environments, nonmedical personnel conduct most evacuations using platforms not originally designed for medical missions. The ability of MEDEVAC to land at the POI for a single patient are unlikely during large-scale combat operations, where commanders plan to employ available assets in bulk and under threat.

The integration of these CASEVAC platforms into the Army's evacuation system supports operations at echelon by sustaining casualty movement when MEDEVAC is limited or delayed. This approach enhances operational flexibility while meeting the demands of diverse and contested environments. Effective use of these assets requires planning for CASEVAC routes, resource allocation, and logistical sustainability, as well as rigorous training and coordination. By treating CASEVAC as a mission-critical supporting task, commanders can preserve combat power and maintain continuity of care even when MEDEVAC is not available.

CASUALTY EVACUATION VEHICLE STANDARDIZATION AND DESIGN CONSTRAINTS

C-1. The lack of standardized CASEVAC platforms across Army formations remains a critical operational challenge. Most Army platforms do not have dedicated litter configurations, forcing units to retrofit nonmedical vehicles without a formal design requirement. This limitation has been evident in past conflicts, where ad hoc modifications led to delays, unsafe casualty transport, and degraded medical care during movement.

C-2. To mitigate these challenges, commanders assess available platforms and pre-designate vehicles capable of supporting CASEVAC. Ideally, a CASEVAC-capable vehicle should be able to secure standard NATO litters, provide basic environmental protection, and integrate with other evacuation assets. Commanders should advocate for integrating CASEVAC considerations into future Army vehicle acquisition programs, ensuring platforms can accommodate evacuation requirements without impeding combat operations.

AIR CASUALTY EVACUATION CAPABILITIES

C-3. CASEVAC aircraft add flexibility and scalability to evacuation operations, especially in complex environments where traditional platforms face limitations. These aircraft allow the Army to reach casualties in remote, contested, or logistically restricted areas. Their use, however, requires detailed planning, coordination, and adaptation to meet mission requirements and provide adequate care during transport.

C-4. U.S. Army aviation assets play a critical role in CASEVAC operations by offering rapid and reliable casualty movement. While they may be affected by weather, terrain, or airspace restrictions, their adaptability and range of capabilities make them essential to modern evacuation planning. Through deliberate planning and training, units can make the most of these assets and improve their ability to save lives in challenging environments.

AVIATION ASSETS OVERVIEW

C-5. CASEVAC air assets, including fixed-wing aircraft and rotary-wing aircraft, significantly enhance CASEVAC capabilities by enabling rapid evacuation over long distances. These platforms, though not MEDEVAC aircraft, can be configured to transport multiple casualties. They offer extended range, allowing them to bridge the gap between forward operating areas, and higher role of care MTFs. Additionally, their speed and ability to bypass ground obstacles make them invaluable in scenarios requiring swift medical response.

C-6. Despite their advantages, all CASEVAC air assets face inherent constraints. They often lack the specialized medical equipment and personnel found on MEDEVAC platforms, requiring modifications to accommodate medical care during transport. Additionally, their reliance on established airfields or suitable LZs not only limits their operational reach but also their ability to access casualties in restrictive terrain, dense urban areas, or contested battlefields. Weather conditions and airspace restrictions may further hinder their deployment, necessitating contingency planning and coordination with other assets.

CAPABILITIES

C-7. U.S. Army aviation assets provide a wide range of CASEVAC capabilities, including medium-lift utility helicopters and heavy-lift cargo helicopters. These platforms are not purpose-built for MEDEVAC but can be configured to move casualties based on mission requirements and aircraft availability.

C-8. Utility helicopters, such as the UH-60 Black Hawk, offer CASEVAC support for small-unit operations. Depending on configuration, the Black Hawk can carry up to four litter patients or eleven ambulatory casualties, making it a flexible option for point-of-injury evacuation and short-range medical movement.

C-9. Cargo helicopters, such as the CH-47 Chinook, provide greater capacity for mass CASEVAC. The CH-47's CASEVAC capacity varies significantly depending on its internal cargo load and configuration:

- Not configured with litter support equipment: The CH-47F can accommodate up to eight litter casualties placed directly on the aircraft floor, assuming minimal other cargo.
- Configured with 24-litter support equipment:
  - The aircraft can carry up to 24 litter patients, but this setup requires a specialized litter kit (formerly LIN M62062), which was removed from the Basis of Issue Plan in 2011 and is no longer centrally procured.
  - Units may still order the kit components individually through the supply system if assigned a 24-litter mission. Refer to ATP 4-02.13 and TM 1-1520-240-23&P for full configuration options.

C-10. For long-range evacuation, the U.S. Army relies on joint capabilities, including U.S. Air Force fixed-wing aircraft such as the C-130 Hercules. These platforms support the transport of large numbers of casualties over extended distances and provide essential reach for strategic missions. Table C-1 on page 105 highlights key aircraft types and their characteristics. For loading techniques and best practices, refer to ATP 4-02.13.

Table C-1. Army aircraft types available for casualty evacuation

Platform Type	*Model/Series*	*Primary Characteristics*	*Casualty Carrying Capacity[1, 2]*		*Planning Speed and Range*
			Ambulatory	*Litter*	
Fixed-Wing	Cargo-12 Huron	Used to move personnel and cargo.	8	0	275 mph, 1400 nautical miles.
Fixed-Wing	Cargo-26 Metroliner	Used to move personnel and cargo.	14	6	245 mph, 1400 nautical miles.
Fixed-Wing	Utility Cargo-35 Citation	Move personnel and limited cargo carrying ability.	7	2	410 mph, 1500 nautical miles.
Rotary-Wing	Cargo Helicopter-47 (Chinook)	Multimission, heavy-lift transport.	31	0	See technical manual.[3]
			25	4	
			19	8	
			16	12	
			10	16	
			4	20	
			1	24	
Rotary-Wing	Utility Helicopter-60 (Black Hawk)	Multimission, medium-lift transport.	11	4	See technical manual.
Rotary-Wing	Light Utility Helicopter-72 (Lakota)	Commercial aircraft designed to conduct light general support task.	2 litter 6 ambulatory		See technical manual.

Legend:
MPH miles per hour

Note 1. The listed litter and ambulatory capacities for all rotary-wing aircraft are not combined totals. Each aircraft can carry either litter casualties, ambulatory casualties or a combination of, this is considered carefully during planning.
Note 2. The listed litter and ambulatory capacities are based on typical mission configurations without specialized litter kits unless otherwise specified.
Note 3. The CH-47F is structurally capable of supporting up to 24 litter casualties when fully outfitted with the 24-litter kit, though most units do not possess or routinely configure to this level. Individual components remain available in the supply system and may be ordered to meet mission-specific requirements. For planning purposes, refer to ATP 4-02.13 and applicable TMs for configuration options.

Onboard Medical Equipment Adaptability

C-11. While MEDEVAC platforms are equipped with comprehensive medical systems, non-MEDEVAC Army aviation assets can be adapted to support CASEVAC operations. Modular systems such as litter racks, oxygen delivery units, and medical monitoring equipment can be installed in rotary-wing and fixed-wing aircraft to enhance casualty care during transit. However, reconfiguring these platforms requires time, proper equipment, and trained personnel, which may limit their immediate availability for evacuation missions. Despite these challenges, their adaptability provides an additional means of CASEVAC when task-organized MEDEVAC assets are unavailable.

Operational Range and Deployment Flexibility

C-12. Army aviation assets offer wide operational ranges that increase their flexibility in evacuation missions. Rotary-wing aircraft like the UH-60 can operate within a 122-nautical-mile radius without refueling, while fixed-wing aircraft can cover much longer distances. This capability supports the rapid movement of casualties from forward operating bases to higher-echelon medical facilities, even when those facilities are far away. Vertical takeoff and landing features allow rotary-wing aircraft to reach remote or restricted areas where other platforms cannot land.

CONSTRAINTS

C-13. Adverse weather conditions, including low visibility, high winds, and heavy precipitation, pose significant challenges to aviation-based CASEVAC operations. Rotary-wing aircraft are sensitive to weather constraints that may limit their ability to take off, navigate, or land safely. Extreme cold or heat can also impact engine performance and payload capacity, reducing the efficiency of CASEVAC missions in harsh climates. Additionally, high-altitude environments present significant operational limitations. As elevation increases, reduced air density diminishes engine power, lift, and overall aircraft performance, restricting payload capacity and requiring extended takeoff and landing distances.

C-14. Fixed-wing aircraft require developed airfields with runways long enough for safe takeoff and landing, which can limit their use in austere environments. Rotary-wing aircraft offer greater flexibility but still need flat, clear LZs for safe operations. High-altitude terrain creates additional challenges by reducing lift and maneuverability, which can make certain mountainous areas inaccessible to some aircraft. In combat zones or dense urban settings, finding secure and suitable LZs is difficult, especially when adversaries target these sites to disrupt evacuation efforts.

EXAMPLE USE CASE

C-15. Army aviation assets excel in evacuating casualties from remote or austere locations where ground transportation is impractical or impossible. For instance, in mountainous terrains, rotary-wing aircraft can access otherwise unreachable areas, extract casualties, and transport them to field hospitals. In one notable example, during Operation Enduring Freedom, rotary-wing aircraft were used extensively to evacuate casualties from remote outposts in Afghanistan, overcoming challenges posed by rugged terrain and hostile threats.

C-16. During large-scale combat operations, Army aviation assets provide critical CASEVAC capabilities by bridging the gap between forward MTFs and higher-echelon care facilities. Rotary-wing platforms offer rapid casualty movement under fire, while fixed-wing aircraft like the C-130 support extended-range evacuation from theater-level MTFs to continental U.S. hospitals. However, commanders balance the urgency of evacuation with the operational risk of employing aviation assets in contested environments. Deploying airframes into close areas for CASEVAC is weighed against their availability for other critical missions. A risk-to-force versus risk-to-mission analysis should guide decisions on when and how to employ air assets for CASEVAC, ensuring protection of critical capabilities and alignment with broader operational priorities. This approach emphasizes prioritizing the protection and employment of critical assets based on mission impact, availability, and operational need.

GROUND CASUALTY EVACUATION CAPABILITIES

C-17. Ground-based platforms, such as trains, buses, tracked vehicles, trucks and utility vehicles, provide essential CASEVAC capabilities in operations where air or maritime options are unavailable or impractical. Trains were adapted as mobile medical wards, offering continuous care during long transits. In modern operations, trains remain relevant for large-scale casualty movement across secure lines of communication, particularly in regions with robust rail infrastructure. For example, rail systems in Europe have been integrated into evacuation plans to manage high casualty volumes efficiently.

C-18. Trucks and utility vehicles are frequently employed for CASEVAC in both combat and non-combat environments. These platforms can be modified with litters, medical supplies, and communications systems to support immediate casualty care during evacuation. Their adaptability allows them to navigate diverse terrains, such as rugged mountain roads or urban environments. However, the effectiveness of trucks and utility vehicles depends on road conditions and off-road capabilities. In areas with poor infrastructure, tracked vehicles provide a reliable alternative, ensuring CASEVAC even in challenging conditions.

C-19. Ground CASEVAC operations face unique challenges, including vulnerability to ambushes and roadblocks in contested environments. Commanders should balance the urgency of evacuation with the need for security, often deploying armored vehicles or escorts to protect CASEVAC convoys. Advances in platform technology, such as mine-resistant ambush-protected vehicles, enhance the safety of ground-based evacuations by reducing the threat from explosive hazards, and small arms fire.

C-20. Integrating ground vehicles with air and maritime CASEVAC platforms supports a smooth and effective evacuation process. Trucks can move casualties from forward positions to staging areas, where helicopters or watercraft carry the evacuation forward to higher-role medical facilities. This multimodal approach helps units use available resources efficiently and maintain continuous care in a variety of operational environments. By applying the strengths of ground vehicles, units can sustain CASEVAC capabilities under a wide range of conditions.

TRAINS FOR CASUALTY EVACUATION

C-21. Historically, rail systems have been a critical means of transporting casualties during large-scale conflicts. During World War I and World War II, railways were extensively used to evacuate WII Soldiers from the front lines to rear-area MTF. Eventually, specialized hospital trains were developed, outfitted with medical staff, surgical equipment, and recovery areas to provide continuous care during transit. These trains allowed for the mass movement of casualties, reducing the burden on local MTF, and freeing up other evacuation assets for shorter-range missions. The use of rail demonstrated its capacity to sustain operations across vast theaters of war, offering an organized and efficient means of casualty transport.

C-22. In modern contexts, rail-based CASEVAC remains relevant, particularly during large-scale operations or areas with robust railway infrastructure. For example, during conflicts in Europe, rail systems have been integrated into evacuation plans to address the challenges posed by high casualty volumes and logistical constraints. Modern rail systems offer the advantage of speed, capacity, and the ability to operate in adverse weather conditions, which can limit air, and ground-based evacuation methods. ATP 4-02.2 highlights the importance of using all available transportation assets, including rail, to maximize the efficiency of CASEVAC operations.

Adaptation of Rail Cars for Medical Purposes

C-23. The adaptation of railcars for MEDEVAC has evolved through lessons learned in previous large-scale wars. During World War I and World War II, the U.S. Army recognized the logistical difficulty of shipping fully outfitted hospital trains overseas due to competition for transport space with combat forces, ammunition, and supplies. As a result, commanders often relied on intratheater resources, using existing railcars and locomotives encountered in theater to create ambulance trains. These converted trains included cots, basic medical supplies, and space for medical personnel, with later versions incorporating surgical areas and critical care capabilities. In the European Theater of Operations, officers like LTC Sidney Bingham led efforts to retrofit rolling stock in Italy, England, France, and Germany, demonstrating how local adaptation enabled timely evacuation under resource-constrained conditions. These historical efforts underscore the enduring value of rail-based CASEVAC and its relevance in modern large-scale combat operation environments where infrastructure exists, but deployment timelines are constrained.

C-24. Rail-based CASEVAC remains a relevant option in modern large-scale operations, especially in regions with developed railway infrastructure. In recent European conflicts, military planners have integrated rail systems into evacuation plans to manage high casualty volumes and overcome logistical challenges. Modern rail platforms offer significant advantages, including high capacity, reliable speed, and the ability to operate in adverse weather, conditions that may limit air or ground evacuation. As noted in ATP 4-02.2, commanders should leverage all available transportation assets, including rail, to improve the reach, speed, and efficiency of CASEVAC operations.

Advantages During Large-Scale Combat Operations

C-25. In large-scale combat operations, rail offers distinct advantages like a CASEVAC platform, especially in MASCAL scenarios. Large-scale combat increases the likelihood of mass casualties, which places greater demands on HSS, mortuary affairs, and replacement operations. Rail systems can transport large numbers of casualties at once, making them particularly useful when traditional evacuation methods are overwhelmed. Unlike road or air transport, rail is less affected by terrain, weather, or fuel logistics and can operate continuously across long distances. These characteristics make it a reliable and efficient option for sustaining large-scale combat operations while preserving medical capacity and improving casualty survival.

C-26. Additionally, rail-based CASEVAC reduces the operational strain on air and ground evacuation assets. By leveraging existing rail networks, commanders can allocate limited air and ground transport resources to

more immediate evacuation needs near the front lines. This multi-modal approach is consistent with the principles of integrated logistics and evacuation planning, which stresses the importance of optimizing all available resources to maintain operational tempo, and casualty survivability.

BUSES FOR CASUALTY EVACUATION

C-27. Buses have been modified in the past to move WII U.S. Service members. This capability no longer remains in the Army inventory, but buses are in most cities and can provide an additional CASEVAC capability.

C-28. Buses are a good CASEVAC platform for intermediate distances (less than 250 miles) and can easily move ambulatory patients. Movement of litter patients may be limited to the floor or other methods depending on the configuration.

C-29. There are several different bus designs and capabilities. Most buses can move approximately 38 ambulatory or 18 litter patients. These numbers vary to some degree depending on model and type of bus. Differences include the following:

- An intercity bus has a latrine but only a front door and can hold up to 40 ambulatory casualties.
- A suburban bus has only front doors but lacks the luggage space and latrines of the intercity bus. The capacity is similar.
- A transit bus is a bus with front and center doors with a rear mounted engine. These buses can hold 30 to 42 ambulatory casualties depending on platform type.
- An articulated bus consists of a rear section connected to the main body by an accordion like joint. This bus can hold up to 60 ambulatory casualties.
- A minibus is manufactured by several companies where a specially made body is placed on a truck chassis. They have walk-in and front doors. The minibus varies by design and configuration with capacity ranges of 16 to 28 ambulatory casualties.
- A school bus capacity varies by manufacturer and type. A conventional U.S. school bus has 13 rows of seats on each side which can support up to 52 ambulatory casualties.

TRACKED VEHICLES, TRUCKS, AND UTILITY VEHICLES

C-30. Tracked vehicles, trucks, and utility vehicles play a critical role in CASEVAC, especially in environments where traditional MEDEVAC assets are unavailable or impractical. These ground vehicles, ranging from military cargo trucks to locally sourced civilian vehicles, offer immediate solutions for transporting WII personnel from the battlefield to medical care. With proper customization, such as adding stretchers and medical supplies, these vehicles can be transformed into effective transport platforms for stabilizing and moving casualties. However, challenges such as difficult terrain and limited protection against enemy attacks highlight the need for planning and risk assessment. By understanding their capabilities and limitations, military forces can integrate trucks and utility vehicles into broader CASEVAC operations, ensuring critical support in both logistics and combat scenarios.

Types of Tracked Vehicles, Trucks, and Utility Vehicles used for Casualty Evacuation

C-31. Ground vehicles are often used for CASEVAC in situations where traditional MEDEVAC assets are unavailable or impractical. These vehicles include armored personnel carriers, military cargo trucks, tactical utility vehicles (such as HMMWVs), and even commercial or locally sourced vehicles adapted for casualty transport. For example, in austere or resource-limited environments, pickup trucks or civilian sport utility vehicles may be commandeered and repurposed for moving casualties. These vehicles provide immediate solutions to transport WII personnel from the POI to initial medical care.

C-32. Vehicles are especially valuable in unconventional operations or in areas lacking established evacuation infrastructure. ATP 4-02.2 emphasizes the importance of flexibility in selecting evacuation platforms and notes that vehicles are integrated into broader CASEVAC planning. Commanders assess the availability, capacity, and suitability of vehicles to confirm they support evacuation efforts.

C-33. Platform types available for CASEVAC operations will vary based on the supported unit's composition and mission requirements. However, certain platforms are commonly employed due to their availability and versatility. These platforms range from light to heavy transport platforms and include both wheeled and

tracked assets, ensuring adaptability across different operational environments. Table C-2 highlights key platform types and their characteristics. For loading techniques and best practices, refer to ATP 4-02.13.

Table C-2. Platform types available for casualty evacuation

Platform Type	*Model/Series*	*Primary Characteristics*	*Casualty Carrying Capacity (Litter/Ambulatory)*	*Planning Speed and Range*
Armored Personnel Carriers	AMPV, M2/3 Bradley, M113, M1133 Stryker, MRAP, M992	Armored vehicles for protected CASEVAC operations.	Varies	35 mph, 300 miles
HMMWV	M998 (4 Seat configuration)	Lightweight, versatile vehicle for rapid response.	3 litter/ 3 ambulatory	55 mph, 250 miles
HMMWV	M998 (2 Seat configuration)	Lightweight, versatile vehicle for rapid response.	5 litter/ 6 ambulatory	55 mph, 250 miles
JLTV	M1278, M1279, M1280, M1281	Lightweight, versatile vehicle for rapid response.	0 litter/ Varies	55 mph, 250 miles
Palletized Load System/Load Handing System	M1075A1, M1120A5	Can support evacuation with flat rack installed.	8 litter/ 0 ambulatory	Prime mover dependent
Tractor with Stake and Platform Trailer	M871 with M800 or M900 tractor	High-capacity, transport for modular payloads.	16 litter/ 0 ambulatory	Prime mover dependent
Truck, Cargo, HEMTT	M977	8x8 heavy-capacity, vehicle for rugged conditions.	9 litter/ 0 ambulatory	35 mph, 300 miles
Truck, Cargo, LMTV	M1078, M1081	2 1/2-ton capacity, enhanced mobility options.	7 litter/ 12 ambulatory	45 mph, 300 miles
Truck, Cargo, MTV (Long Wheelbase)	M1085 series	5-ton capacity, ideal for long-distance transport.	8 litter/ 14 ambulatory	40 mph, 400 miles

Legend:

AMPV	armored multi-purpose vehicle	LMTV	light medium tactical vehicle
CASEVAC	casualty evacuation	MPH	miles per hour
HEMTT	heavy expanded mobility tactical truck	MRAP	mine-resistant ambush protected
HMMWV	high mobility multipurpose wheeled vehicle	MTV	medium tactical vehicle
JLTV	joint light tactical vehicle		

Note. Platforms that state "0 Ambulatory" do not contain troop seats to facilitate ambulatory movement.

Customization of Platforms for Medical Use

C-34. Customizing platforms for medical use can greatly improve their effectiveness in CASEVAC operations. Modifications often include stretchers, stabilization equipment, and basic medical supplies such as tourniquets, intravenous kits, and oxygen. Some platforms are also equipped with communication systems to support coordination with higher medical echelons or surgical teams. These adjustments help make CASEVAC more responsive and organized in high-pressure environments.

C-35. More advanced customizations involve modular kits that can be rapidly installed or removed, turning a standard cargo truck into a mobile medical transport unit. This approach is particularly useful for adapting to diverse operational environments.

Limitations of Terrain and Platform Protection

C-36. One major challenge of using trucks and utility vehicles for CASEVAC is navigating difficult terrain. In mountainous, forested, or urban environments, these platforms may struggle to reach casualties or maintain speed during transit. Additionally, the lack of standardized medical equipment and personnel onboard platforms can delay the delivery of care, reducing their effectiveness compared to MEDEVAC platforms.

C-37. Another critical limitation is the vulnerability of these platforms to enemy attacks. Platforms often lack adequate armor or defensive capabilities, making them susceptible to small arms fire, explosive hazards, or indirect fire. Commanders weigh the risks of using platforms against the urgency of evacuating casualties, emphasizing the need to incorporate route security, convoy protection, and thorough risk assessment into CASEVAC planning to mitigate these vulnerabilities.

Examples of Application

C-38. In combat operations, trucks and utility vehicles are essential for CASEVAC when task-organized MEDEVAC platforms cannot operate due to enemy activity, weather conditions, or terrain. For example, during the Vietnam War, trucks and jeeps were commonly used to evacuate casualties from forward positions to rear-area aid stations when rotary-wing aircraft were unavailable. These platforms served as a lifeline, especially in dense jungle terrain where air evacuation was not feasible.

C-39. In modern combat scenarios, vehicles like the mine-resistant ambush protected vehicle and joint light tactical vehicle are utilized for CASEVAC due to their improved protection against threats like small arms fire and explosive hazards. Customization with litters and medical supplies allows these platforms to function as interim solutions for CASEVAC. The success of CASEVAC relies on pre-planning, ensuring platforms are ready for dual-use roles, and rehearsing CASEVAC procedures to minimize delays under fire.

C-40. These examples demonstrate the practical application of trucks and utility vehicles in CASEVAC during both logistics and combat operations. Their adaptability and availability make them indispensable assets, particularly in environments where traditional evacuation methods face constraints. Military doctrine underscores the importance of integrating these platforms into overall evacuation planning to enhance their effectiveness.

MARITIME CASUALTY EVACUATION CAPABILITIES

C-41. Army watercraft are an essential component of CASEVAC operations in littoral and riverine environments, where other modes of transport may be impractical. Maritime platforms, including landing craft and transport vessels, can evacuate large numbers of casualties while providing space for medical personnel and equipment. These vessels are particularly effective in areas with navigable waterways, offering a secure and efficient means of transport for WII personnel.

C-42. However, maritime CASEVAC faces challenges such as limited operational speed and dependence on navigable water routes. In high-threat areas, securing waterways and maintaining situational awareness are critical to minimizing risks. Additionally, the logistical complexity of transferring casualties from watercraft to other MTF requires detailed planning and coordination. Despite these limitations, maritime platforms remain vital for operations in areas where land and air access are constrained.

WATERCRAFT OVERVIEW

C-43. The U.S. Army operates a variety of watercraft that can be adapted for CASEVAC in specific environments. These include landing craft, such as the Landing Craft Utility, and transport vessels, such as the Logistics Support Vessel. While these platforms are primarily designed for transporting troops, vehicles, and supplies, they can also be modified to evacuate casualties when needed. For example, during amphibious operations or missions in riverine areas, these vessels can transport WII personnel from the POI to MTF, or larger ships equipped with advanced care capabilities. ATP 4-15 highlights the versatility of these vessels in logistical and operational support, including their potential use in CASEVAC missions.

CAPABILITIES

C-44. Army watercrafts provide significant advantages in CASEVAC operations due to their ability to carry large numbers of casualties over long distances. Platforms like the Logistics Support Vessel can accommodate dozens of patients, including those on litters, making them particularly valuable during MASCAL events or large-scale operations. Additionally, these vessels are equipped for sustained operations, enabling them to move casualties across vast waterways, or open seas to reach definitive care.

C-45. Watercrafts are particularly effective in littoral (coastal) and riverine environments, where traditional land or air CASEVAC methods may be hindered. In river-heavy regions like Southeast Asia, watercraft have historically been used to navigate through dense jungles and areas without reliable road access. For example, during the Vietnam War, riverine boats served as mobile platforms for CASEVAC and treatment. ATP 4-15 emphasizes that the ability to operate in these challenging environments makes watercraft an essential component of CASEVAC planning in areas where waterways are the primary means of transport.

CONSTRAINTS

C-46. Watercraft serves as a valuable but often challenging platform for CASEVAC in maritime and littoral operations. While they offer an alternative means of transporting casualties, particularly in riverine, coastal, and amphibious environments, they come with significant constraints that can impact the speed, safety, and effectiveness of evacuation efforts. These limitations include dependency on navigable waterways, vulnerability to enemy threats, slow movement, lack of onboard medical facilities, and difficulties in transferring casualties to higher echelons of care. Commanders assess operational risks, environmental conditions, and security threats when integrating watercraft into CASEVAC planning. Without proper mitigation strategies, reliance on waterborne evacuation could delay medical treatment, increase patient mortality rates, and complicate overall mission effectiveness. The following sections outline the key constraints of using watercraft for CASEVAC and highlight considerations for commanders in planning and executing evacuations in maritime environments.

LIMITATIONS OF WATERCRAFT FOR CASUALTY EVACUATION

C-47. One major limitation of using watercraft for CASEVAC is their reliance on navigable waterways. In areas where rivers, coastal routes, or inland water bodies are inaccessible or contested, watercraft cannot support evacuation operations. This dependence means that commanders assess water route availability, seasonal changes (such as flooding or drought), and infrastructure conditions when planning CASEVAC operations. ATP 4-02.2 emphasizes evaluating terrain and infrastructure to determine whether watercraft can support CASEVAC in each operational environment.

Vulnerability to Enemy Threats and Delayed Response Times

C-48. One significant challenge in using watercraft for CASEVAC is the potential for delayed response times in high-threat zones. Watercraft typically move slower than air or ground platforms, making them more vulnerable to enemy threats such as mines, small arms fire, or missile attacks. They also have limited maneuverability in narrow waterways or open seas, which restricts their ability to evade hostile actions. Additional vulnerabilities include:

- Security Risks. In contested environments, watercraft may require naval escorts, air cover, or onboard defensive systems to protect personnel and equipment during CASEVAC missions.
- Limited Operation Speed. Compared to helicopters or ground vehicles, watercraft travel much slower, which can delay the delivery of casualties to higher roles of care.
- Environmental Factors. Weather conditions, tidal changes, and high winds can further slow movement, reduce navigability, and disrupt CASEVAC effectiveness.

C-49. This need for enhanced protection and environmental considerations can slow operations and reduce the overall responsiveness of the evacuation effort. Commanders weigh these operational risks when determining the suitability of waterborne CASEVAC platforms, especially in contested or denied environments.

Medical Care and Patient Welfare Concerns

C-50. A significant limitation of using watercraft for CASEVAC is the lack of medical infrastructure and basic patient care accommodations during transport. Unlike ground-based ambulances or rotary-wing aircraft, many CASEVAC-capable watercraft are not designed to sustain medical treatment for extended periods. Key concerns include:

- Limited or No Onboard Medical Facilities: Most small-to-medium CASEVAC watercraft lack medical bays, power for medical equipment, or climate control, which can worsen patient conditions during transport.
- No Sanitation Facilities (Bathrooms, Waste Disposal): Many CASEVAC watercraft do not have restroom facilities, posing hygiene challenges for prolonged evacuations, especially for critically WII patients.
- Open-Air Exposure: Many watercraft used for CASEVAC do not have enclosed compartments, leaving casualties vulnerable to environmental exposure (such as rain, wind, cold, heat, sea spray), which can complicate medical care and increase risks of hypothermia, dehydration, or infection.
- Rough Seas and Patient Stability: Watercraft movement can be highly unstable in rough seas, strong currents, or high winds, making it difficult to administer intravenous fluids, conduct medical procedures, or stabilize casualties on litters.
- Extended Transport Times: Due to the slow speed of watercraft, casualties may be in transit for an extended period, requiring additional pain management, intravenous fluid administration, and continuous monitoring, capabilities that many small watercraft lack.

Challenges in Transferring Casualties from Watercraft to Higher Roles of Care

C-51. Watercraft used for CASEVAC operations generally lack the capability to support rotary-wing aircraft landings. Unlike dedicated hospital ships or vessels with flight decks, smaller CASEVAC watercraft require casualty transfers via hoist when interfacing with rotary-wing aircraft. This constraint complicates patient movement, particularly in:

- Adverse Weather Conditions: High winds, rough seas, and unstable platforms increase the difficulty of hoist operations.
- High-Threat Environments: Enemy interference or contested waters may make hovering aircraft vulnerable to attack during patient transfers.
- Limited Shore-Based Transfer Points: CASEVAC planning considers pre-identified shoreline transfer zones, where casualties can be moved from watercraft to land-based medical transport safely and efficiently.

USE IN JOINT AND MULTINATIONAL OPERATIONS

C-52. During joint and multinational operations, Army watercraft often operate alongside Navy and coalition maritime assets to expand CASEVAC capabilities. Working with the Navy allows for the transfer of casualties from Army platforms to dedicated medical ships like the U.S. Naval Ship Comfort and U.S. Naval Ship Mercy. These ships are equipped to deliver advanced medical care at sea. In multinational missions, coalition partners may also contribute watercraft or medical ships. To support effective CASEVAC across these forces, units prioritize interoperability, shared procedures, and clear communication. JP 4-02 highlights the importance of integrated planning in joint environments to align evacuation efforts and reduce delays.

C-53. Partnering with naval and coalition forces helps address the limits of Army watercraft. Navy units can provide escort or air support to protect CASEVAC missions operating in contested waters. Coalition ships with medical facilities offer treatment options closer to the POI, reducing the need for extended transport to shore. These capabilities give commanders more options when planning CASEVAC and allow for flexible responses under complex maritime conditions. When integrated early and rehearsed routinely, joint CASEVAC planning strengthens the overall operation by improving casualty care and preserving combat power at sea.

TYPES OF UNITED STATES ARMY WATERCRAFT

C-54. U.S. Army watercraft are often employed for CASEVAC operations in scenarios where traditional air or ground evacuation assets are unavailable or impractical. These vessels include logistics support vessels,

landing craft utility, landing craft mechanized, and other modular platforms such as causeway ferries. for example, in littoral environments or during amphibious operations, landing craft utility can transport casualties from shoreline positions to medical ships or higher-echelon care facilities. The adaptability of watercraft allows commanders to leverage them for casualty movement in regions where terrain, infrastructure, or enemy actions restrict other evacuation methods.

C-55. The versatility of watercraft makes them invaluable for operations in coastal, riverine, or amphibious environments. These vessels provide critical capabilities for MASCAL evacuation during large-scale operations or when extensive transport capacities are required. ATP 4-15 highlights the flexibility of Army watercraft and their integration into broader CASEVAC and logistical planning. Commanders evaluate the suitability of these platforms based on mission-specific requirements, such as the availability of navigable waterways, the distance to MTF, and the level of medical care needed during transport.

C-56. Watercraft utilized for CASEVAC operations vary in size and capability, ensuring they can support diverse mission profiles. For example, logistics support vessels can carry large numbers of casualties over extended distances, making them ideal for MASCAL scenarios. Smaller vessels, such as landing craft mechanized and rigid hull inflatable boats, offer agility and access to challenging locations, such as riverbanks or densely forested coastlines. Modular systems, such as the roll-on/roll-off discharge facility, provide additional flexibility for casualty transport. The selection of watercraft for CASEVAC depends on operational requirements, available resources, and the urgency of the situation. Table C-3 on page 114 highlights key watercraft types and their characteristics. For loading techniques and best practices, refer to ATP 4-15 and ATP 4-02.13.

Table C-3. Watercraft types available for casualty evacuation

Watercraft Type	*Model/Series*	*Primary Characteristics*	*Casualty Carrying Capacity (Litter/Ambulatory)*	*Planning Speed and Range*
LSV	General Frank S. Besson Class	Large vessel, for transporting heavy equipment and personnel.	300 litter/ 500 ambulatory	11.5 knots, 6,500 miles
LCU	2000 Series	Medium-sized vessel, for shore-to-shore transport.	92 litter/ 250 ambulatory	10 knots, 6,500 miles
LCM	8 Class	Small craft, for personnel and equipment transport.	10 litter/ 25 ambulatory	9 knots, 271 nautical miles
CF	Roll-On/Roll-Off Discharge Facility	Ferry system for transporting vehicles and personnel.	not recommended for use	Not self-propelled
WT	Varies	provides movement and positioning or non-powered modules.	not recommended for use	8 knots/not used for extended voyages
RHIB	Zodiac or equivalent	Fast, lightweight vessel for rapid response and patrol.	2 litter/ 8 ambulatory	35 knots, 200 nautical miles

Legend:

CF	causeway ferry	LSV	logistics support vessel
LCM	landing craft mechanized	RHIB	rigid hull inflatable boat
LCU	landing craft utility	WT	warping tug

Note 1. **Casualty Carrying Capacity:** Capacities are estimates based on available deck space and configuration; actual numbers may vary depending on mission requirements and equipment loads. While a vessel may be able to physically accommodate a high number of casualties (such as 300 litters), this does not account for the practical limitations of medical care, sanitation, and sustainment. Factors such as limited onboard medical personnel, lack of bathrooms, food, and prolonged transport times significantly impact the feasibility of mass casualty evacuations via watercraft.

Note 2. **Planning Speed and Range:** Ranges assume standard operational loads and weather conditions; adverse conditions may reduce these values. CASEVAC operations accounts for sea state, current, and fuel consumption, which may limit a vessel's ability to sustain prolonged evacuations.

Note 3. **Specialized Equipment:** Larger vessels (such as the LSV, LCU) can be equipped with additional medical or decontamination facilities for enhanced CASEVAC capabilities. However, even with modifications, most vessels lack the ability to provide sustained medical treatment, patient hygiene facilities, or climate-controlled environments, making timely transfer to higher echelons of care critical for casualty survival.

INTEGRATED CASUALTY EVACUATION SYSTEMS

C-57. Commanders integrate air, ground, and maritime CASEVAC assets into a single, flexible system that supports operations across multiple environments. Each platform brings different advantages to the evacuation mission. Rotary-and fixed-wing aircraft move casualties from the POI to a secure location. Ground vehicles or watercraft then continue the movement to a higher role of care MTF. This tiered, multimodal approach allows commanders to match platform capabilities to terrain, threat, and urgency. By coordinating across echelons, units reduce delays in casualty movement and maintain medical support across the depth of the battlefield.

C-58. Integrating these systems requires robust coordination to overcome challenges in communication and synchronization. Seamless communication is critical for ensuring that assets are deployed efficiently, particularly in environments where multiple platforms work together under tight timelines. Miscommunication can result in delays or gaps in care, during transitions between modes of transport.

C-59. Commanders manage medical handoffs between CASEVAC platforms to maintain continuity of care. Transferring a casualty from one vehicle or aircraft to another requires shared procedures, compatible equipment, and accurate documentation. Standard formats for patient records and handoff briefings help medical personnel stay informed and ready to act during transitions. ATP 4-02.2 highlights the value of these practices in keeping medical support consistent across different transport modes.

C-60. Using a mix of transportation platforms, such as planes, trains, trucks, and boats, builds a flexible CASEVAC system that supports large-scale or complex operations. For example, in a European theater, a casualty might move by air to a forward staging point, travel by rail across secure territory, and then board a watercraft for transport to a rear-area MTF. This type of multimodal CASEVAC helps commanders adapt to terrain, threats, and available infrastructure. ATP 4-02.13 encourages units to use all available resources to move casualties.

C-61. Multimodal CASEVAC requires tight coordination across platforms and commands. Units synchronize movement timelines and communicate clearly to prevent delays. CASEVAC teams need to know exactly when other platforms will arrive, so transitions happen without confusion. JP 4-02 emphasizes the importance of joint planning and shared communication systems to link units, Services, and coalition partners in a common evacuation effort.

C-62. Handoffs between platforms carry the risk of lost information or delayed care. To reduce that risk, medical teams follow standard procedures for transferring records, gear, and patient details. For instance, when moving a casualty from an aircraft to a ground vehicle, both teams review the patient's status and current treatments. FM 4-02 stresses the need for strong training and reliable handoff practices to keep care continuous from the POI through final treatment.

C-63. Standardizing medical equipment across CASEVAC platforms makes transitions faster and safer. When litters, intravenous kits, and monitors work the same way on aircraft, ground vehicles, and watercraft, teams spend less time switching equipment and more time focused on patient care. Shared systems also make it easier to train personnel and reduce confusion during emergencies. ATP 4-02.55 supports this approach to improve readiness and coordination in demanding operations.

C-64. A well-integrated CASEVAC system uses all transportation options, air, ground, maritime, and rail, to move casualties. Planning, communication, and equipment standardization help reduce delays and avoid gaps in care. With these elements in place, commanders and medical planners gain the flexibility to adjust to changing combat conditions and match the right resources to the mission. These combined efforts strengthen the overall evacuation network and improve casualty outcomes.

CASUALTY EVACUATION PLANNING AND OPERATIONAL CONSIDERATIONS

C-65. Planning for CASEVAC begins with establishing clear, flexible routes that connect air, ground, and maritime platforms. These routes match the terrain, anticipate enemy threats, and support movement to higher-level medical care. Planners identify CASEVAC corridors to protect movements and reduce delays. For example, air assets might evacuate casualties from the POI to a transfer site, where ground vehicles then move them to a medical treatment facility. This layered approach improves efficiency during fast-moving operations. ATP 4-02.2 stresses the importance of route planning that blends all available transportation methods into a cohesive CASEVAC network.

C-66. Commanders and planners focus on allocating CASEVAC resources to match casualty needs. During MASCAL events, they may assign large platforms such as trucks or boats to move multiple casualties, while using helicopters for critical or time-sensitive cases. This balance allows units to manage both urgent evacuations and sustained movement of wounded personnel. By matching resources to mission demands, planners preserve combat power and maintain the flow of care across the operational area.

C-67. Sustaining vehicles during CASEVAC operations hinges on logistical planning. Refueling and maintenance are essential for ensuring platform availability and reliability, particularly in prolonged or high-tempo missions. For example, tactical utility vehicles repurposed for CASEVAC require frequent fuel resupply and inspections to prevent breakdowns. FM 4-02 highlights the importance of maintaining logistical support to sustain evacuation capabilities under all conditions.

C-68. Managing load capacities is equally important. Overloading platforms can compromise safety, delay operations, or reduce the effectiveness of medical care during transit. Commanders should balance the urgency of evacuation with the limitations of each platform, ensuring that casualties are safely transported without exceeding operational capacities. SOPs for load management, combined with real-time assessments during missions, help mitigate these risks.

C-69. Training personnel to operate and configure platforms for CASEVAC is vital to mission success. Soldiers are proficient in adapting platforms for medical transport, such as securing stretchers, managing patient care en route, and using basic medical equipment. Regular drills and simulations of CASEVAC scenarios enhance readiness and coordination, ensuring that teams can respond under real-world conditions. ATP 4-02.55 stresses the importance of hands-on training to develop operational competence.

C-70. Personnel understand the strengths and limits of different CASEVAC platforms, including trucks, watercraft, aircraft, and trains. This knowledge helps teams choose the right asset for each mission and adjust when conditions change. Commanders incorporate CASEVAC into larger training exercises to test the full evacuation process under realistic conditions. These integrated rehearsals build confidence across the force and prepare units to respond during actual operations.

C-71. By integrating detailed medical planning, robust logistical support, and comprehensive training, commanders can optimize CASEVAC operations, ensuring rapid and effective CASEVAC in any operational environment. Well-coordinated evacuation efforts reduce delays, improve patient outcomes, and enhance the overall efficiency of the AHS.

C-72. CASEVAC platforms such as planes, trains, trucks, and watercraft give commanders flexible options to support casualty evacuation when MEDEVAC resources are limited or unavailable. These platforms allow the Army to adapt to different operational environments and maintain medical support across wide areas. Planners and operators understand how to match each platform’s capabilities and limits to the mission. By integrating these assets into the overall medical plan, commanders improve response times and provide life-saving care to WII personnel.

Appendix D

Casualty Evacuation Checklist

The success of CASEVAC operations depends on deliberate planning, coordinated execution, and ongoing assessment. CASEVAC helps preserve combat power and morale by moving WII personnel to medical care. The CASEVAC checklist serves as a practical tool for commanders and staff. It provides a structured way to address each phase of the operation, from initial planning to after-action reviews. This tool aligns with FM 3-0, FM 4-02, ATP 4-02.2, and ATP 4-02.13, blending doctrine with hands-on techniques to support readiness across different missions and environments.

This appendix presents a detailed checklist to guide CASEVAC operations. It starts with planning and preparation, emphasizing the need to identify available resources, establish CCPs, and confirming that personnel are trained and ready. The appendix then shifts to operational tasks, including execution, logistics, and C2. Together, these sections help leaders at every level manage CASEVAC as a supporting task that sustains operations and contributes directly to mission success.

PLANNING AND PREPARATION FOR CASUALTY EVACUATION

D-1. Thoughtful planning and preparation form the foundation of effective CASEVAC operations. Leaders anticipate challenges and address key details before a mission begins. This includes estimating casualty numbers, identifying CCPs, and assigning available vehicles. Each step contributes to getting WII personnel safely off the battlefield. When done well, planning saves lives and helps the unit maintain momentum under pressure. This section outlines the critical planning elements for CASEVAC. It highlights how proactive thinking, teamwork, and coordination with higher headquarters help create a reliable and efficient evacuation process. By focusing on these areas, leaders prepare their teams to act with speed and confidence when casualties occur.

D-2. At each echelon, specific leaders carry responsibility for planning CASEVAC. The Medical Officer manages casualty care and medical protocols. The executive officer ensures CASEVAC planning aligns with the overall mission. The sustainment leader oversees transportation assets and logistical support. By clearly assigning these roles, units improve coordination and streamline execution during CASEVAC operations.

DEVELOPING CASUALTY ESTIMATES

D-3. Before each mission, leaders estimate the number and types of casualties they might face. This estimate helps medical teams and CASEVAC planners prepare the right resources to treat and evacuate the wounded. Leaders should examine the mission's goals, likely enemy actions, terrain, and weather to develop a realistic picture of what to expect. For instance, operations in the mountains may result in more injuries from falls or cold exposure. In contrast, urban missions often involve more blast or shrapnel injuries due to confined spaces and complex threats. A solid estimate allows units to tailor their medical support to the mission and environment.

D-4. The unit commander holds overall responsibility for ensuring that casualty estimates are completed, with support from the personnel officer, the operations officer, and the senior medical officer. These personnel are tasked with analyzing past mission data, intelligence reports, and operational risks to refine predictions and identify potential patterns. Accurate casualty estimates are used to pre-position the right medical resources, such as supplies for treating burns, fractures, or gunshot wounds, ensuring that casualties receive the best possible care in a timely manner. Additionally, these estimates guide decisions regarding the allocation of CASEVAC assets, and the prioritization of evacuation efforts based on injury severity.

D-5. Having a solid casualty estimate also allows leaders to plan for worst-case scenarios, such as MASCAL events. By anticipating the maximum number of injuries, they can allocate additional resources, identify backup CASEVAC routes, and prepare contingency plans. The unit commander and staff use the casualty estimate to coordinate with medical teams and higher headquarters, ensuring sufficient capacity to manage

high casualty volumes and reduce the risk of delays in evacuating WII personnel, which could otherwise result in preventable fatalities. To address these scenarios, leaders should work closely with their supporting sustainment unit and movement control elements to secure additional CASEVAC vehicles and prioritize route clearance and security. By incorporating external support channels, units can enhance their responsiveness and maintain operational momentum.

D-6. Leaders plan for worst-case scenarios, including MASCAL events, by working with their sustainment units and higher headquarters. This coordination helps secure extra CASEVAC vehicles in advance. Having additional vehicles ready allows the unit to move large numbers of casualties and reduces the chance of delays that could lead to preventable deaths. By using support from outside the unit, commanders improve their ability to respond and keep the mission moving forward.

ESTABLISHING CASUALTY COLLECTION POINTS

D-7. CCPs are critical locations where WII personnel are gathered, stabilized, prepared for evacuation to higher roles of care, and where casualties are transloaded between different echelon's nonmedical vehicles. Leaders choose these points carefully, considering factors like accessibility, security, and position relative to the forward line of troops. A well-placed CCP can significantly reduce the time it takes for casualties to receive treatment, improving their chances of survival.

D-8. Leaders set up CCPs by working closely with medical teams to make sure they have the right supplies and enough trained personnel. Leaders choose both primary and backup CCP locations in case the situation on the battlefield changes, such as enemy actions or terrain problems. Once selected, they clearly mark these points and share that information with all units taking part in the mission to avoid confusion when time and clarity matter most.

D-9. After setting up the CCPs, units rehearse evacuation drills to practice the entire process. These rehearsals include how to move casualties to the CCP, who will provide the first medical care, and how to move them from the CCP to a medical treatment facility. By practicing these steps ahead of time, units can fix problems early and improve how fast and safely they evacuate casualties during real missions.

ALLOCATING VEHICLES AND MEDICAL SUPPLIES

D-10. Proper allocation of vehicles and medical supplies is essential to support CASEVAC operations. Leaders assign specific vehicles to the task of evacuating casualties, ensuring that both dedicated medical vehicles and nonmedical vehicles are available. Dedicated medical vehicles, such as ambulances, are equipped with advanced life-saving equipment, while repurposed combat vehicles can provide flexibility in emergencies. Additionally, aid and litter teams and vehicle drivers are trained in proper CASEVAC procedures, including patient loading and unloading, medical intervention techniques, and route navigation.

D-11. Along with assigning vehicles, leaders make sure each one is stocked with the right medical supplies. These supplies should include bandages, litters, intravenous fluids, and medications needed to treat casualties during transport. Leaders conduct precombat inspections to check that everything is in place and working. They plan resupply points along CASEVAC routes, especially for longer missions or when operating in remote areas. Aid and litter teams, along with drivers, know the locations of CCPs, AXPs, and MTFs. Units should rehearse the CASEVAC process so that every team member understands their role and follows the procedures in the unit's tactical standing operating procedure. These rehearsals should include triage markings and how to prioritize casualties during evacuation.

SYNCHRONIZING PLANS WITH HIGHER ECHELONS

D-12. Coordinating with higher echelons is critical for allocating CASEVAC resources. Leaders synchronize their plans to match the mission requirements, confirm vehicle assignments, and identify any gaps in support early. When shortfalls are found, they should request reinforcements or additional assets through established command channels. This coordination ensures that CASEVAC remains a reliable part of the larger medical and operational plan. By managing resources efficiently and keeping communication open with higher commands, units can maintain the ability to respond to casualties under changing battlefield conditions.

D-13. To move casualties securely and efficiently, leaders coordinate closely with movement control elements. These teams help manage traffic flow, deconflict CASEVAC routes, and assign movement priorities across the battlefield. Movement control personnel track main and alternate supply routes,

anticipate delays, and help develop backup plans when threats like enemy activity or route congestion arise. Leaders keep aid and litter teams, drivers, and CASEVAC personnel informed about route changes, security threats, and movement priorities. Including these personnel in coordination efforts helps prevent confusion and delays, keeping CASEVAC operations synchronized and responsive in both stable and contested environments.

EXECUTION AND OPERATIONAL CONSIDERATIONS

D-14. The execution of CASEVAC missions requires precise coordination, adaptability, and an unwavering focus on maintaining the safety and efficiency of operations. Effective communication is the backbone of these missions, ensuring that all personnel, from medical teams to command staff, work cohesively to transport casualties swiftly and safely. This section highlights the critical importance of reliable communication protocols, the readiness and security of CASEVAC vehicles, the alignment of evacuation efforts with ongoing combat maneuvers, and the ability to make real-time adjustments to plans as situations evolve on the battlefield.

D-15. Every part of the CASEVAC system contributes to mission success. Leaders establish communication protocols that provide reliable and clear channels to share information across units. These protocols help coordinate casualty movement and keep higher headquarters informed of updates.

D-16. Vehicle readiness is equally important. CASEVAC platforms are inspected, maintained, and staged for rapid use, especially in contested areas where failure can mean lost lives. Integrating CASEVAC into maneuver plans reduces the chance of friendly interference, keeps evacuation routes open, and supports the commander's overall intent. Leaders plan for real-time changes, such as shifting routes or adjusting priority levels, to keep casualty care moving despite unexpected threats or delays. These coordinated efforts form the backbone of successful CASEVAC operations and help preserve both combat power and the lives of WII personnel.

COMMUNICATION PROTOCOLS

D-17. Clear and reliable communication supports every CASEVAC mission by connecting medical teams, command staff, and transportation assets. Leaders assign specific call signs, radio frequencies, and emergency signals before operations begin. These measures help prevent confusion during high-pressure situations. Effective communication allows teams to report casualty locations, describe injuries, and request support. When units speak a common operational language, they can act faster and with greater accuracy.

D-18. Before the mission starts, leaders verify that all communication equipment works correctly. This includes testing radios, satellite phones, and backup devices. Teams should prepare alternate methods of communication, such as hand signals or visual markers, in case electronic systems fail. Regular training helps personnel apply communication protocols under stress and adjust to changing battlefield conditions.

D-19. During execution, communication stays constant, accurate, and clear. CASEVAC teams should track casualty movement from the POI to the collection point and on to the MTF. These real-time updates allow leaders to adjust routes, reassign CASEVAC assets, or prioritize support where it is needed most. This coordination keeps the mission on track and helps casualties receive care without unnecessary delay.

ENSURING VEHICLE READINESS AND SECURITY

D-20. The readiness and security of CASEVAC vehicles directly affect the success of casualty evacuation operations. Leaders inspect all designated vehicles before the mission begins. These inspections confirm that each vehicle is mechanically sound and fully stocked with required medical supplies. Units should check critical components, including tires, fuel levels, brakes, lights, and communication systems. If any part of a vehicle is faulty or missing, teams correct the problem right away. Early identification and repair of deficiencies help prevent delays and protect both personnel and casualties during evacuation.

D-21. Security is another vital aspect of CASEVAC vehicle preparation. In contested environments, vehicles may be targeted by enemy forces, making it essential to implement protective measures. This could include assigning armed escort vehicles, using camouflage, or selecting routes that minimize exposure to threats. Leaders decide whether to mark vehicles exclusively used for CASEVAC with Geneva Convention symbols, which can signal their non-combatant status but may also draw attention in some scenarios.

D-22. Teams train to respond to emergencies involving CASEVAC vehicles, including mechanical breakdowns or enemy ambushes. Leaders should develop and rehearse contingency plans that include alternate routes, backup vehicles, and security measures. These preparations allow evacuation efforts to continue even when the situation changes unexpectedly. By focusing on vehicle readiness and route security, commanders protect both the casualties and the personnel conducting the evacuation, while keeping the mission on track.

Coordination with Tactical Operations

D-23. Leaders coordinate CASEVAC missions with ongoing combat operations to protect both medical and tactical elements. Evacuation routes and timings align with the maneuver plan to avoid disrupting combat tasks or placing CASEVAC teams in danger. For instance, routes should bypass areas with active fighting or narrow corridors needed by maneuver forces.

D-24. Commanders maintain continuous communication between CASEVAC teams and combat units to stay updated on battlefield conditions. Information about enemy movement, terrain changes, or shifting lines of contact helps CASEVAC teams adjust. Leaders should also reduce risk by scheduling evacuations during lulls in fighting or by designating separate zones for medical and combat activity.

D-25. CASEVAC teams remain flexible and ready to adjust to unexpected changes, such as a surge in casualties or a shift in enemy actions. By tying CASEVAC operations directly to the unit's tactical plan, leaders ensure that medical support remains available without interfering with combat objectives.

Real-Time Adjustments to Operational Plans

D-26. No matter how well planned a CASEVAC mission is, unexpected situations can arise that require real-time adjustments. Leaders are ready to adapt their plans based on the evolving operational environment, such as changes in enemy tactics, weather conditions, or casualty numbers. Flexibility in decision-making is crucial to ensuring the continued success of evacuation operations.

D-27. To make these adjustments, leaders rely on continuous situational awareness and communication. Teams provide regular updates on the status of casualties, routes, and vehicles, allowing commanders to respond. For example, if a primary route becomes compromised, teams can be redirected to alternate routes that were identified during the planning phase. Similarly, if an MTF reaches capacity, leaders may need to coordinate with higher echelons to find additional resources.

D-28. Real-time adjustments require CASEVAC teams to make immediate decisions when needed. Leaders train personnel in mission command principles and ensure they understand the commander's intent. When teams know the mission purpose and priorities, they can act decisively without waiting for direct orders. This adaptability helps maintain the continuity of operations and ensures casualties continue to receive timely care, even under rapidly changing conditions.

SUSTAINMENT IN CASUALTY EVACUATION

D-29. Sustainment plays a critical role in ensuring the success and continuity of CASEVAC operations. Proper monitoring and replenishment of medical supplies, the ability to handle MASCAL situations, and the maintenance of CASEVAC vehicles and platforms are essential for supporting WII personnel and preserving the continuity of operations. Without a strong sustainment plan, CASEVAC efforts risk delays, resource shortages, and reduced effectiveness, all of which can negatively impact mission success and troop welfare.

D-30. This section explains the logistical and operational sustainment needed to keep CASEVAC systems working efficiently. Leaders focus on reliable medical supply management, early planning for potential MASCAL scenarios, and regular maintenance of evacuation vehicles. These steps help ensure that CASEVAC operations remain dependable, even in harsh combat conditions. By managing these elements, leaders create a strong support system that protects the health of their personnel and helps the unit meet its mission goals.

Monitoring and Resupplying Medical Supplies

D-31. Maintaining an adequate supply of medical items is essential to effective CASEVAC operations. Leaders regularly check inventories of critical items such as bandages, litters, fluids, and medications. These

checks help confirm that CASEVAC vehicles and CCPs are ready to support the mission. Before each operation, leaders should verify that all medical gear is serviceable and matched to the expected casualty load.

D-32. During operations, units should position resupply points along CASEVAC routes to keep medical items flowing. These locations allow teams to reload and stay on mission without delay. Leaders work closely with sustainment units to forecast needs, identify shortfalls, and arrange timely deliveries. Good coordination and clear communication help prevent medical supply gaps and keep the CASEVAC system running smoothly.

D-33. After each mission, teams inventory their supplies and refill anything that was used. Quick post-mission restocking helps teams stay ready for future operations, especially during long deployments or in remote areas. By maintaining a steady cycle of monitoring, resupply, and coordination, leaders build a dependable CASEVAC system that protects their personnel and supports the larger fight.

Handling Mass Casualty Situations

D-34. MASCAL events present unique challenges that require specialized planning and preparation. These situations often overwhelm standard CASEVAC systems, making it essential for leaders to have contingency plans in place. This includes identifying additional CCPs, mobilizing extra vehicles, and coordinating with higher echelons for supplementary medical support. Having a clear triage process is critical to prioritize casualties based on the severity of their injuries, and the availability of resources.

D-35. During MASCAL scenarios, leaders coordinate with CASEVAC teams and MTFs to avoid bottlenecks. Tracking casualty movement allows units to send patients to the right locations and balance the use of medical resources. Preplanned MASCAL protocols, such as backup routes, overflow holding areas, and extra personnel, help teams stay organized and maintain steady evacuation efforts, even under intense pressure.

D-36. Training exercises that simulate MASCAL situations are an invaluable tool for preparing units. These drills allow teams to practice triage, communication, and evacuation procedures, identifying areas for improvement before a real emergency occurs. By proactively addressing the challenges of MASCAL events, leaders can enhance their unit's ability to manage these critical situations, preserving combat power, and morale.

Maintaining Casualty Evacuation Vehicles and Platforms

D-37. CASEVAC operations rely on dependable vehicles. Routine maintenance keeps these platforms ready to perform under the physical and operational demands of combat. Leaders schedule regular checks for engines, tires, brakes, fuel, and communication systems. They verify that medical equipment onboard each vehicle is fully functional. Addressing mechanical problems early helps prevent mission delays and protects both patients and crew during evacuation.

D-38. During extended operations, vehicle resupply and repair become even more important. Leaders should place maintenance checkpoints along CASEVAC routes to keep vehicles in service without slowing the evacuation. When missions operate at a high tempo, commanders should position backup vehicles near support areas. These extra assets help units recover when primary platforms break down or take damage.

D-39. Security is just as important as mechanical reliability. CASEVAC vehicles operating in contested areas may need added armor or protective equipment to reduce risks from enemy fire. CASEVAC teams respond to threats, including ambushes and vehicle failures. Training for these emergencies helps units continue evacuating casualties, even in hostile conditions. By maintaining vehicle readiness and building in flexibility, leaders keep their CASEVAC systems effective and responsive throughout the mission.

CONTINUOUS IMPROVEMENT THROUGH THE ASSESSMENT

D-40. Effective CASEVAC operations require more than just planning and execution, they demand continuous evaluation and adaptation. Leaders conduct AARs, update SOPs, and share best practices across units to keep CASEVAC processes relevant and responsive. These actions help teams learn from experience,

improve their methods, and exchange insights that strengthen overall performance. This approach builds a culture of improvement and collaboration across the force.

D-41. Structured assessments and feedback help improve CASEVAC operations over time. The AAR gives units a chance to evaluate performance, identify problems, and find solutions. When leaders update SOPs based on these findings, they build lessons learned into future missions. Sharing effective techniques across units also strengthens the Army's overall CASEVAC capability. These combined efforts improve readiness, protect Soldiers' health, and support mission success.

CONDUCTING AFTER ACTION REVIEWS

D-42. After every CASEVAC operation, conducting an AAR is essential for identifying successes, challenges, and areas for improvement. The AAR provides a structured way for all participants, from CASEVAC teams to commanders, to discuss what went well and what could be improved. These reviews help capture real-time insights while they are still fresh, ensuring valuable feedback is not lost.

D-43. During an AAR, leaders should focus on key aspects of the operation, such as the timeliness of casualty movement, the effectiveness of communication, and the coordination between units. Specific issues, like delays in evacuation or shortages of medical supplies, should be thoroughly examined. Input from all participants, including medical personnel and support staff, is critical to gaining a complete understanding of the operation.

D-44. The findings from an AAR should be documented in detail, creating a clear record that can be referenced for future missions. This documentation allows units to track trends over time, ensuring that recurring issues are addressed, and that successful strategies are consistently applied. A well-conducted AAR not only improves the unit's CASEVAC capabilities but also enhances the overall effectiveness of future operations.

UPDATING STANDARD OPERATING PROCEDURE BASED ON OPERATIONAL FEEDBACK

D-45. SOPs evolve to reflect the realities of the battlefield, and the lessons learned from CASEVAC missions. Feedback from AAR provides the foundation for these updates, ensuring that procedures remain relevant and effective. Leaders should prioritize changes that address identified weaknesses, such as unclear communication protocols, or inefficient evacuation routes.

D-46. Leaders revise SOPs in collaboration with key stakeholders, including medical personnel, logistics teams, and commanders. This team approach helps ensure that updates are realistic, relevant, and support all phases of CASEVAC operations. For instance, if an AAR identifies a gap, such as vehicles being unequipped, the SOP can be changed to include specific pre-mission inspections and required supply checklists. These updates improve coordination and readiness at every level.

D-47. After making changes to SOPs, units train in the new procedures to ensure shared understanding. Routine training exercises help reinforce these updates, giving teams the chance to practice under realistic conditions. This repetition strengthens confidence and builds muscle memory. By regularly refining and rehearsing SOPs, units maintain a high level of preparedness and can execute CASEVAC tasks in support of ongoing operations.

SHARING LESSONS LEARNED ACROSS UNITS

D-48. Sharing lessons learned is a key component of improving CASEVAC operations across the Army and other Services. Insights gained from one unit's experience can benefit others, creating a collective knowledge base that enhances the force's overall capability. Leaders should prioritize communication with adjacent units, higher echelons, and training centers to disseminate lessons learned, and successful strategies.

D-49. Lessons learned can be shared through formal channels, such as reports, briefings, or training events, as well as informal discussions between units. For example, if a unit develops an innovative approach to managing MASCAL situations, this technique can be shared with other units facing similar challenges. Collaborative learning not only improves CASEVAC operations but also fosters a culture of continuous improvement and mutual support.

D-50. The Army's digital platforms, such as knowledge-sharing portals, can also play a vital role in spreading lessons learned. Units can upload AAR findings, updated SOPs, and other resources to centralized databases, making them accessible to a wider audience. By sharing these resources across echelons, commanders improve readiness and ensure CASEVAC operations adapt to meet the demands of changing environments.

CASUALTY EVACUATION STANDARD OPERATING PROCEDURE

D-51. The CASEVAC checklist (figure D-1 on page 124) gives leaders at all levels a clear and structured tool to plan, carry out, and review CASEVAC operations. It walks users through every stage of the mission, from early planning to post-mission assessment, ensuring that units stay ready to respond to battlefield injuries in any environment. Aligned with FM 3-0, FM 4-02, ATP 4-02.2, and ATP 4-02.13, the checklist supports mission planning by integrating CASEVAC as a supporting task at echelon. It also helps address challenges such as MASCAL events, resupply planning, and coordination with higher commands.

D-52. The checklist highlights the need for deliberate planning, solid preparation, and constant evaluation to protect the health and morale of Soldiers. It guides leaders through essential actions like estimating casualty numbers, setting up collection points, preparing vehicles, and managing communications. By following the checklist, units improve their readiness and can better handle the chaos of combat. This tool helps commanders support operational success by keeping casualty care reliable and timely. More than a task list, the CASEVAC checklist is an asset for preserving combat power and supporting the force.

Section 1: Planning and Preparation	***Yes***	***No***	***Remarks***
Mission orders received and understood	☐	☐	
Operational context and threats identified	☐	☐	
Casualty estimate developed and validated	☐	☐	
Primary and alternate Casualty Evacuation (CASEVAC) routes established	☐	☐	
Casualty collection points and medical stations designated	☐	☐	
CASEVAC and medical evacuation vehicles allocated	☐	☐	
CASEVAC assets equipped with medical supplies	☐	☐	
Coordination with higher command and medical units complete	☐	☐	
Section 2: Personnel, Equipment and Training	***Yes***	***No***	***Remarks***
CASEVAC personnel designated and roles assigned	☐	☐	
CASEVAC drivers licensed and certified on assigned vehicles	☐	☐	
Combat lifesavers present and certified at each unit level	☐	☐	
Personnel trained in casualty handling techniques, including litter carries, and patient loading/unloading procedures	☐	☐	
Geneva Convention and humanitarian considerations trained	☐	☐	
CASEVAC vehicles stocked with medical supplies	☐	☐	
Casualty accountability procedures established	☐	☐	
CASEVAC standard operating procedure trained and understood	☐	☐	
CASEVAC rehearsals and drills conducted	☐	☐	
At least one daytime and one nighttime rehearsal conducted	☐	☐	
Section 3: Execution and Operations	***Yes***	***No***	***Remarks***
CASEVAC vehicles properly marked	☐	☐	
Security and escorts for CASEVAC routes confirmed	☐	☐	
Communications established and tested	☐	☐	
Call signs, frequencies, and signals designated	☐	☐	
Casualty movement tracked from point of injury to medical treatment facility	☐	☐	
Geneva Convention compliance briefed	☐	☐	
Section 4: Logistics and Sustainment	***Yes***	***No***	***Remarks***
Medical supplies verified pre-mission	☐	☐	
Resupply points identified	☐	☐	
CASEVAC vehicle maintenance current	☐	☐	
CASEVAC resupply coordinated with sustainment units	☐	☐	
Mass casualty contingencies prepared	☐	☐	
Section 5: Command and Control	***Yes***	***No***	***Remarks***
CASEVAC command structure established	☐	☐	
Liaison Officer assigned at key coordination points	☐	☐	
CASEVAC operations deconflicted with maneuver plan	☐	☐	
CASEVAC orders issued to all personnel	☐	☐	
Soldier understanding of CASEVAC plan confirmed	☐	☐	
Section 6: Assessment and After Action Review	***Yes***	***No***	***Remarks***
CASEVAC operations monitored during mission	☐	☐	
Real-time adjustments made as needed	☐	☐	
After action review conducted post-mission	☐	☐	
Lessons learned documented and shared	☐	☐	

SAMPLE

Figure D-1. Sample of a casualty evacuation checklist

Appendix E

Multinational Evacuation Request Formats

This appendix actively compares the evacuation request formats used by various countries and organizations, including the U.S. military 9-Line, ABCANZ Nine-Line format, and NATO MEDEVAC 9 Liner formats. We examine the similarities and differences between these formats and identify areas for standardization to improve interoperability and coordination in multinational operations. By analyzing these formats and their variations, we provide recommendations for harmonizing evacuation request formats, ultimately enhancing the effectiveness of evacuation operations, and improving patient care. This appendix serves as a critical resource for planners, operators, and medical personnel seeking to optimize their response to evacuation requests in diverse operational environments.

The following paragraphs are in consonance with ABCANZ Publication 256 and NATO STANAG 2627

OVERVIEW OF INTERNATIONAL EVACUATION REQUEST

E-1. In multinational and joint operations, differences in MEDEVAC request formats can create challenges for effective communication and patient care. The U.S. Army uses the 9-line evacuation request format, while other countries and organizations, such as ABCANZ and NATO, have their own formats. Understanding these differences is crucial for maintaining interoperability in multinational operations.

E-2. To improve coordination and reduce confusion during evacuation missions, all personnel involved in the process train to understand and apply the appropriate evacuation request formats. This includes recognizing different reporting styles, using standardized templates, and operating digital communication systems that support multiple formats. Units may also establish pre-mission agreements on which format will be used to streamline communication. Proper training and planning ensure that critical information is transmitted accurately and on time, improving both casualty outcomes and mission success.

COMPARISON OF EVACUATION REQUEST FORMATS

E-3. The U.S. military 9-Line MEDEVAC request, ABCANZ Nine-Line and NATO 9-liner and formats share similarities but also have significant differences. The NATO format prioritizes interoperability and includes elements such as the Mechanism, Injuries, Signs, and Treatment report, which enhances the clarity and accuracy of patient information. In contrast, the U.S. Army and ABCANZ formats use standardized codes for brevity and clarity. Table E-1 on pages 126 and 127 highlights the similarities and differences between the three formats.

Table E-1. Comparison of United States and international evacuation request formats

Line Item	*U.S. Military 9-Line*	*ABCANZ Nine-Line*	*NATO MEDEVAC 9 Liner*	*Observations*
1. Pickup Location	Grid coordinates with grid zone letters	UTM or six-digit grid coordinate with MGRS grid zone designator	Location/grid reference of pickup zone	All formats emphasize precise location data.
2. Radio Frequency/Call Sign	Frequency and call sign of pickup site contact	Frequency, call sign, and suffix	Not included	NATO lacks this line, while U.S. and ABCANZ include radio frequency, and call sign.
3. Patient Priority	A (Urgent), B (Urgent Surgical), C (Priority), D (Routine), E (Convenience)	A (Urgent), B (Urgent Surgery), C (Priority), D (Routine), E (Convenience)	P1 (Urgent), P2 (Priority), P3 (Routine)	U.S. and ABCANZ formats include "Urgent-Surgical" and "Convenience" categories.
4. Special Equipment	Uses codes (such as A for None, B for Hoist)	Uses codes (such as A for None, B for Hoist)	Specifies required equipment	NATO allows descriptive entries, while U.S. and ABCANZ use standardized codes.
5. Patient Type	L+# (Litter), A+# (Ambulatory)	L+# (Litter), A+# (Ambulatory)	S (Stretcher), W (Walking), E (Escort), O (Other, details)	NATO uses descriptive types, while U.S. and ABCANZ use codes.
6A. Security	N (No enemy), P (Possible enemy), E (Enemy), X (Hot zone)	Same codes: N, P, E, X	Same codes: N, P, E, X	Security codes are identical across all formats.
6B. Nature of Injury (Peacetime)	Specific injury details	Specific injury details	Not specified	NATO omits nature of injury in peacetime.
7. Marking Pickup Site	Codes (such as A for Panels, B for Pyrotechnics)	Codes (such as A for Panels, B for Pyrotechnics)	Descriptive: Smoke/light color, panels, and so on	NATO allows free-text descriptions, while U.S. and ABCANZ use predefined codes.

Table E-1. Comparison of international medical evacuation request formats (continued)

Line Item	*U.S. Military 9-Line*	*ABCANZ Nine-Line*	*NATO MEDEVAC 9 Liner*	*Observations*
8. Patient Nationality	U.S.-specific categories: A (U.S. Military), B (U.S. Civilian)	National categories for U.S., UK, CAN, AUS, NZ, Non-Military	NATO specific categories: A (NATO Military), B (NATO Civilian),	NATO focuses on multinational operations, while ABCANZ explicitly includes the Five Eyes nations.
9A. Tactical/Chemical Info (Wartime)	Wartime: CBRN contamination; Peacetime: Terrain description	CBRN contamination (wartime). "All Clear" option included	Tactical updates and additional details	NATO focuses on tactical updates, while U.S. and ABCANZ explicitly address CBRN threats.
9B. Terrain Description (Peacetime)	Peacetime: Terrain description	Peacetime: Terrain description	Not specified	NATO does not address terrain in peacetime.

Legend:

ABCANZ	America, Britain, Canada, Australia, and New Zealand	NATO	North Atlantic Treaty Organization
AUS	Australia	NZ	New Zealand
CAN	Canada	UK	United Kingdom
CBRN	chemical, biological, radiological, and nuclear	U.S.	United States
MEDEVAC	medical evacuation	UTM	Universal Transverse Mercator
MGRS	military grid reference system		

Note. The codes listed in each line of this table are examples and not all-inclusive. For a comprehensive understanding of the codes and their applications, readers must reference the specific format's source publication, such as ATP 4-02.2, ABCANZ publication 256, or NATO STANAG 2627.

E-4. The Senior Surgeon, working with mission leaders, identify and establish a standardized MEDEVAC request format to support clear communication and effective patient care. Leaders communicate this format through the orders process and reinforce it during training and planning. By aligning the reporting standard with the mission's operational needs, units can reduce confusion and maintain interoperability across different coalitions and environments.

E-5. Standardizing evacuation request formats helps streamline operations and improve coordination. Units should:

- Combining best practices from multiple formats to create one standardized MEDEVAC request.
- Use uniform terrain and tactical descriptions to include all essential information.
- Modify the NATO format to include radio frequency and call sign that align with U.S. and ABCANZ standards.

E-6. By adopting a standardized format and ensuring that it is clearly communicated and incorporated into unit training and operational planning, units can optimize their response to evacuation requests, ultimately preserving life, limb, and eyesight in high-stress operational environments. Standardization also fosters greater trust and cooperation among multinational partners, enhancing the overall effectiveness of combined medical operations.

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Glossary

SECTION I—ACRONYMS AND ABBREVIATIONS

1SG	first sergeant
AAR	after action review
ABCANZ	American, British, Canadian, Australian, and New Zealand
AHS	Army Health System
AJP	Allied Joint Publicationx
ARSOF	Army special operations forces
ATP	Army techniques publication
AXP	ambulance exchange point
C2	command and control
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCIR	commander's critical information requirement
CCP	casualty collection point
CLS	combat lifesaver
COA	course of action
DA	Department of the Army
DD	Department of Defense form
DOW	Department of War
FM	field manual
G-1	assistant chief of staff, personnel
G-2	assistant chief of staff, intelligence
G-3	assistant chief of staff, operations
G-4	assistant chief of staff, logistics
G-5	assistant chief of staff, plans
G-6	assistant chief of staff, signal
G-7	assistant chief of staff, training
G-9	assistant chief of staff, civil affairs operations
GPS	Global Positioning System
HMMWV	high mobility multipurpose wheeled vehicle
HSS	health service support
JP	joint publication
JSOC	Joint Special Operations Command
LNO	liaison officer
LOAC	law of armed conflict

LZ	landing zone
MARC²H³-PAWS-L	Massive Hemorrhage/MASCAL, Airway, Respirations, Circulation, Communications, Hypo/Hyperthermia and Head Injuries, Pain Control, Antibiotics, Wounds (including Nursing and Burns), Splinting, Logistics
MASCAL	mass casualty
MDMP	military decision-making process
MEDEVAC	medical evacuation
MMPM	multi-modal patient movement
MOPP	mission-oriented protective posture
MTF	medical treatment facility
MWA	military working animal
NATO	North Atlantic Treaty Organization
OPORD	operation order
POI	point of injury
PPE	personal protective equipment
PSG	platoon sergeant
RTD	return to duty
S-1	battalion or brigade personnel staff officer
S-2	battalion or brigade intelligence staff officer
S-3	battalion or brigade operations staff officer
S-4	battalion or brigade logistics staff officer
SOAR	special operations aviation regiment
SOP	standard operating procedure
STANAG	standardization agreement
TB MED	technical bulletin (medical)
TC	training circular
TCCC	tactical combat casualty care
TLP	troop leading procedures
TM	technical manual
TTP	tactics, techniques, and procedures
U.S.	United States
WII	wounded, ill, and injured

SECTION II—TERMS

ambulance exchange point

A location where a patient is transferred from one ambulance to another en route to a medical treatment facility. Also called AXP. (ATP 4-02.2)

casualty

Any person who is lost to the organization by having been declared dead, duty status – whereabouts unknown, excused absence – whereabouts unknown, missing, ill, or injured. (JP 4-02)

casualty collection point

A location that may or may not be staffed, where casualties are assembled for evacuation to a medical treatment facility. (ATP 4-02.2)

***casualty evacuation**

The unregulated movement of casualties aboard any vehicle. Also called CASEVAC. (JP 4-02)

(Army) The movement of wounded, ill, and injured personnel aboard any nonmedical platform; also called CASEVAC.

combat power

The total means of destructive and disruptive force that a military unit/formation can apply against an enemy at a given time. (JP 3-0)

command and control warfighting function

The related tasks and a system that enable commanders to exercise authority and direction to accomplish missions. (ADP 3-0)

fires warfighting function

The related tasks and systems that create and converge effects in all domains against the threat to enable operations across the range of military operations. (ADP 3-0)

intelligence warfighting function

The related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operational environment. (ADP 3-0)

mass casualty

Any number of human casualties produced across a period of time that exceeds available medical support capabilities. Also called MASCAL. (JP 4-02)

medical evacuation

The timely and effective movement of the wounded, injured, or ill to and between medical treatment facilities on dedicated and properly marked medical platforms with en route care provided by medical personnel. Also called MEDEVAC. (ATP 4-02.2)

medical regulating

The coordination for the movement of patients to match patients with an appropriate medical treatment facility. (JP 4-02)

medical treatment facility

A facility established for the purpose of furnishing medical and/or dental care to eligible individuals. Also called MTF. (JP 4-02)

(Army) Any facility established for the purpose of providing medical treatment. This includes battalion aid stations, Role 2 facilities, dispensaries, clinics, and hospitals. (FM 4-02)

movement and maneuver warfighting function

The related tasks and systems that move and employ forces to achieve a position of relative advantage with respect to the enemy. (ADP 3-0)

patient

A sick, injured, wounded, or other person receiving medical care, dental care, or other medical treatment. (JP 4-02)

(Army) A wounded, ill, and injured person who receives medical care or treatment from medical personnel. (ATP 4-02.10)

protection warfighting function

The related tasks, systems, and methods that prevent or mitigate detection, threat effects, and hazards to preserve the force, deny the enemy freedom of action, and enable commanders to apply combat power. (ADP 3-0)

reconstitution

An operation that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources. (ATP 3-94.4)

return to duty

A patient disposition which, after medical evaluation and treatment when necessary, returns a Soldier for duty in his unit. (FM 4-02)

survivability

A quality or capability of military forces which permits them to avoid or withstand hostile actions or environmental conditions while retaining the ability to fulfill their primary mission. (ATP 3-37.34)

sustainment warfighting function

The related tasks and systems that provide support and services to enable freedom of action, extend operational reach, and prolong endurance. (ADP 3-0)

triage

The system of sorting and prioritizing casualties based on the tactical situation, mission, available resources, and medical urgency. (FM 4-02)

warfighting function

A group of tasks and systems united by a common purpose that commanders use to accomplish missions and training objectives. (ADP 3-0)

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30 May 2026

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PIN: 223459-000