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AIR FORCE SPECIAL OPERATIONS
COMMAND**

**AIR FORCE SPECIAL OPERATIONS
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Special Management

**TACTICAL GROUND OPERATIONS
RISK MANAGEMENT**

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This instruction implements ATP 5-19, *Risk Management*, AFI 91-202, *The US Air Force Mishap Prevention Program*, and AFPAM 90-803, *Risk Management (RM) Guidelines*. It establishes doctrinal guidance on managing risk within the conduct of ground tactical operations. It applies to AFSOC members assigned and attached to AFSOC conducting ground tactical operations and training, to include, Tactical Vehicle driving, Close Quarter Battle (CQB), SOF Medical Exercise, Tactical Boat/Maritime training, Full Mission Profiles (FMP) involving any of the previously listed events, and parachuting. The previously mentioned list is not all encompassing. This publication applies to AFSOC gained ANG and AFRC personnel. This publication does not apply to USSF. AFSOC Commanders and staffs serving as joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the range of military operations and joint or multinational forces. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AFI 33-322, *Records Management and Information Governance Program*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the OPR listed above using the AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See DAFMAN90-161, *Publishing Processes and Procedures*, Table A10.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate waiver approval authority, through the

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Chapter 1

INTRODUCTION

1.1. Overview.

1.1.1. Risk, uncertainty, and chance are inherent in all military operations. Success during operations depends on a willingness to identify, mitigate, and accept risk to create opportunities. When considering how much risk to accept with a COA, commanders consider risk to the force and risk to the mission. Commanders need to balance tension between protecting the force and accepting risks that must be taken to accomplish their mission. They apply judgement with regard to the importance of an objective, time available, and anticipated cost.

1.1.2. Mission command requires that commanders and subordinates accept risk, exercise initiative, and act decisively, even when the outcome is uncertain. Commanders focus on creating opportunities rather than simply preventing defeat—even when preventing defeat appears safer. Reasonably estimating and intentionally accepting risk is not gambling. Gambling is when the commander risks the force without a reasonable level of information about the outcome. Therefore, commanders avoid gambles. Commanders carefully determine risks, analyze, and minimize as many hazards as possible and then accept risk to accomplish the mission.

1.1.3. Inadequate planning and preparation put forces at risk, as does delaying action while waiting for perfect intelligence and synchronization. Reasonably estimating and intentionally accepting risk is fundamental to successful operations. Experienced commanders balance audacity and imagination against risk and uncertainty to strike in a manner, place, and time unexpected by enemy forces. This is the essence of surprise. Planning should identify risks to mission accomplishment. Part of developing an operational approach includes answering the question, “What is the chance of failure or unacceptable consequences in employing the operational approach?” Risks range from resource shortfalls to an approach that alienates a population. Identified risks are communicated to higher headquarters, and risk mitigation guidance is provided in the commander’s planning guidance.

1.1.4. When commanders embrace opportunity, they accept risk. It is counterproductive to wait for perfect preparation and synchronization. The time taken to fully synchronize forces and warfighting functions in a detailed order could mean a lost opportunity. It is far better to quickly summarize the essentials, get things moving, and send the details later. Leaders optimize the use of time with WARORDs, FRAGORDs, and verbal updates.

1.1.5. Commanders exercise the art of command when deciding how much risk to accept.

1.1.6. Risk Management (RM) must be embedded in AFSOC culture. Integrating RM into how airmen think is crucial to maintaining combat power and ensuring efficient mission accomplishment. Proper use of this publication will support standardization and institutionalization of techniques, tools, and procedures that lead to sound decision-making and valid risk acceptance by leaders at all levels. A *leader* is anyone who by virtue of assumed role or assigned responsibility inspires and influences people to accomplish organizational goals. Leaders motivate people both inside and outside the chain of command to pursue actions, focus

thinking and shape decisions for the greater good of the organization. Engaged leaders are critical to successful RM.

1.1.7. AFSOC’s overarching framework for exercising mission command is the operations process—the major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation (AFDP 3-0 *Operations and Planning* and Army Publishing Directorate (ADP) 5-0 *The Operations Process*). Throughout the operations process, commanders and staffs integrate the warfighting functions to synchronize the force in accordance with the commander’s intent and concept of operations. Commanders and staffs use several integrating processes and continuing activities to do this. RM is an integrating process. Leaders first need to understand how RM generally fits into the operations process. The operations process frames understanding of how RM is integrated with the more complex decision-making processes. The five steps of RM follow a logical sequence that correlates with the operations process activities (see **Table 1.1 Risk Management in the Operations Process**). The assessment activity of the operations process is continuous. While the depiction in introductory **Table 1.1** is in a bar format, both processes are cyclical, fluid, and dynamic. Activities and steps can overlap or be revisited during any operation.

Table 1.1. Risk Management in the Operations Process.

<i>Risk management steps</i>	<i>Operations process activities</i>	
Step 1—Identify the hazards	Planning	Assessing
Step 2—Assess the hazards	Planning	
Step 3—Develop controls and make risk decisions	Planning and preparing	
Step 4—Implement controls	Planning, preparing, and executing	
Step 5—Supervise and evaluate	Planning and executing	

1.1.8. Mission command is the approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation (ADP 6-0 *Mission Command*, AFDP3-0 *Operations and Planning*). The mission command approach to command and control is based on the view that war is inherently chaotic and uncertain. No plan can account for every possibility, and most plans must change rapidly to account for changes in the situation. No single person is ever sufficiently informed to make every important decision, nor can a single person keep up with the number of decisions that need to be made during combat. Enemy forces may behave differently than expected, a route may become impassable, or units could consume supplies at unexpected rates. Friction and unforeseeable combinations of variables impose uncertainty in all operations and demand an approach that does not attempt to impose perfect order, but rather accepts uncertainty and makes allowances for unpredictability.

1.1.9. Mission command helps commanders capitalize on subordinate ingenuity, innovation, and decision making to achieve commander’s intent when conditions change, or current orders are no longer relevant. It requires subordinates who seek opportunities and commanders who accept risk for subordinates trying to meet their intent. Subordinate decision making and decentralized execution appropriate to the situation help manage uncertainty and enable

necessary tempo at echelon during operations. The mission command philosophy encompasses and supports RM. RM is an invaluable tool for commanders and staff. It provides a systematic and standardized process to identify hazards and react to changes within an operational environment.

1.1.10. All staff elements incorporate RM into their running estimates and provide recommendations for controls to mitigate risk within their areas of expertise. RM integration during the operations process activities is the primary responsibility of the unit's operations officer. The commander has overall responsibility for RM integration and is the risk acceptance authority.

1.1.11. This AFSOCI focuses on the planning phase as this is where most deliberate RM occurs. During planning, commanders, leaders, and individuals identify potential hazards and assess their likely impact. Steps 1 and 2 of RM—identifying and assessing hazards—provide a structure to enhance situational understanding and support developing sound courses of action and plans. Then, planners can state how forces will accomplish a mission within a predetermined level of risk. Making optimal use of planning time is essential for effective RM. The more thorough the planning, the more contingencies can be ready for implementation. During preparation, leaders balance the risks (such as readiness, political, economic, and environmental risks) against the costs of each course of action. At the same time, planners develop actions that mitigate risk (controls), and leaders make risk decisions to eliminate unnecessary risks. Commanders, leaders, and individuals should continually assess the risk level and effectiveness of controls throughout execution. They should supervise the risk-related activities for which they are responsible and monitor other activities directly affecting risk during operations. Any time risk levels appear to rise, or new hazards occur, commanders and leaders should be prepared to order adjustments to activities, including taking actions that mitigate risk. Leaders use continuous assessments to adjust. These cyclical processes support adjusting where and when needed. Leaders capture lessons learned to benefit current and future operations.

1.1.12. This AFSOCI focuses on the application of RM to troop leading procedures and the military decision-making process. **Chapter 1** provides the introduction for AFSOCI 90-802; **Chapter 2** outlines general RM responsibilities of AFSOC organizations, leaders, Airmen, and Air Force civilians; **Chapter 3** emphasizes principles, levels, and steps of RM applicable to both; **Chapter 4** illustrates the use of AF Form 4437, *Deliberate Risk Assessment Worksheet*. **Attachment 2** (*Application to Troop Leading Procedures*) explains RM techniques in the context of troop leading procedures. **Attachment 3** (*Application to the Military Decision-Making Process*) explains RM techniques in the context of the military decision-making process. **Note:** Unless specified otherwise, any mention of leaders refers to Air Force leaders. To avoid wordiness, the phrase RM practitioner is used to encompass all individuals and organizations that use RM. This publication uses the term operations to refer any type of military action or event, including operational, tactical, service, training, or administrative military missions.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. AFSOC Organizations.

2.1.1. AFSOC organizations at every level must understand and apply risk management (RM) during all activities. The five-step process—identify the hazards, assess the hazards, develop controls and make risk decisions, implement controls, and supervise and evaluate—is most effective when used consistently, across all echelons. Commanders, staff officers, leaders, individual Airmen, and Air Force civilians each contribute to the mission. Within any organization, an individual's responsibility for RM depends on the nature of the operation or activity.

2.1.2. Leaders at every level will require subordinates to integrate RM into operations. In operations, making risk decisions is primarily the responsibility of commanders and leaders. At squadron level and above, staffs support commanders. Staff officers must incorporate RM in their planning and assessments. Organizations and individuals operate within the acceptable level of risk established by their leadership—the risk tolerance—and provide feedback to them.

2.1.3. Leaders at every level should encourage subordinates to use RM for off-duty activities. In non-tactical or off-duty activities, individuals are responsible to make risk decisions. However, commanders still set parameters through standard operating procedures (SOPs), policy letters, and other guidance.

2.2. Commanders.

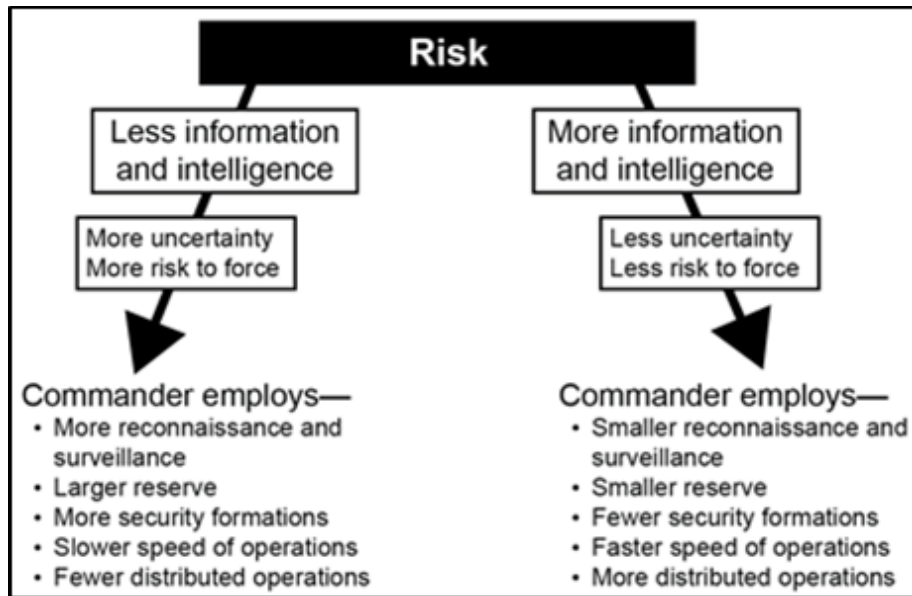
2.2.1. Choices and the cost of those choices characterize all operations. Commanders decide if they can accomplish their mission based on current intelligence of the enemy situation and an assessment of the assets available (including time) and the means to coordinate and synchronize those assets. If those assets are not available, commanders choose to take additional time to plan, resource, and prepare for an operation, or they articulate where and how they will assume risk.

2.2.2. Commanders cannot be successful without a willingness to act under conditions of uncertainty, which demands balancing risks with taking advantage of opportunities. No amount of intelligence can eliminate all uncertainties and inherent risks of tactical operations. Commanders will never have absolute situational understanding. A lack of information must not paralyze the decision-making process. The more information a commander collects concerning the mission variables, the better that commander is able to make informed decisions. Less information means that a commander has a greater risk of making a poor decision for a specific situation. Knowing when there is enough information to make a decision within the higher commander's intent and constraints is part of the art of tactics and is a critical skill for all leaders.

2.2.3. Bold decisions that are adequately informed give the best promise of success. Commanders accept risk when making decisions because there will always be a degree of uncertainty. Opportunities come with risks. The willingness to accept risk is often the key to exposing enemy weaknesses. There are times when leaders cannot find ways of addressing all of the risk and should consider if the outcome is worth the risk. Situational understanding, running estimates, and planning reduces risk.

2.2.4. While each situation is different, commanders avoid undue caution or commitment of resources to guard against every perceived threat. An unrealistic expectation of avoiding all risk is detrimental to mission accomplishment. Waiting for perfect intelligence and synchronization increases risk or closes a window of opportunity. Successful operations require commanders and subordinates to manage accepted risk, exercise disciplined initiative, and act decisively even when the outcome is uncertain. Reference **Figure 2.1, Commander's Risk Considerations**, to understand how commanders employ their personnel and resources to influence risk to force

Figure 2.1. Commander's Risk Considerations.



2.2.5. The commander's responsibilities for RM are to:

2.2.5.1. Ensure organizational elements are able to perform duties to standard and to minimize human error, materiel failure, and environmental effects.

2.2.5.2. Publish a commander's safety philosophy with realistic safety goals, objectives, and priorities.

2.2.5.3. Ensure individuals have the RM training needed for their position and responsibilities.

2.2.5.4. Ensure the staff integrates RM into the planning, preparing, executing, and assessing of all operations, and encourage RM use off-duty.

2.2.5.5. Establish the overall risk tolerance within the command.

2.2.5.6. Establish the risk tolerance for each mission—if not already set by the higher command.

2.2.5.7. Make risk decisions, normally by approving risk assessment worksheets for tasks or missions.

2.2.5.8. Select, monitor, and enforce implementation of controls for hazards likely to result in loss of combat power.

2.2.5.9. Elevate the risk decision to the higher command if the residual level of risk for a mission rises above the risk tolerance established by the higher command, or if implemented controls fail to keep the mission within the higher command's risk tolerance.

2.2.5.10. Provide appropriate guidance and ensure adherence to the risk tolerance at all levels within the command.

2.2.5.11. Ensure organizations conducting after action reviews evaluate RM integration and effectiveness.

2.2.5.12. Determine if unit performance meets force protection guidance. Determine effectiveness of controls; make necessary changes to guidance and controls. Ensure changes are fed back into the training management cycle and guidance for operations, including unit SOPs.

2.2.5.13. Residual Risk Decision / Acceptance Authority. **(T-2)**

2.2.5.13.1. Authorized G-series commanders who wish to delegate residual risk acceptance authority must do so in writing.

2.2.5.13.1.1. Extremely High Residual Risk Activities – approved by the first General Officer (or appropriately delegated authority) in the chain of command and briefed for awareness to COMAFSOC through proper reporting channels.

2.2.5.13.1.2. High Residual Risk Activities – approved by the first O-6 (or appropriately delegated authority) in the Chain of Command.

2.2.5.13.1.3. Medium Residual Risk Activities – approved by the first O-5 (or appropriately delegated authority) in the Chain of Command.

2.2.5.13.1.4. Low Residual Risk Activities – approved by the first O-4 (or appropriately delegated authority) in the Chain of Command.

2.3. Director of Operations/Operations Officers.

2.3.1. The Director of Operations (sometimes referred to as A3) integrates RM into operations. The RM responsibilities for operations officers (or their staffs) are to:

2.3.1.1. Monitor the conduct of training and operations during execution, looking for variances in the plan. Advise the commander when they detect plans that appear to be below standard.

2.3.1.2. Develop goals, objectives, and priorities for the command's force protection policy.

2.3.1.3. Develop protection measures of performance and effectiveness, related to RM and safety input for the commander's training assessment, in collaboration with the safety officer or safety manager.

2.3.1.4. Identify and assess hazards and propose controls for each course of action (COA) during planning and preparation for operations.

2.3.1.5. Assess unit RM and force protection performance during training and operations. Provide recommended changes to force protection guidance and controls.

2.3.1.6. Make residual risk determinations appropriate for their position and authority. (T-2)

2.3.1.7. Capture lessons learned from RM. Retain worksheets for use during future operations.

2.4. Staffs.

2.4.1. A *running estimate* is the continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable (ADP 5-0, JP 5-0 *Joint Planning*, AFDP 3-0). Each staff element is responsible for integrating RM into its running estimates and plans. The staff responsibilities for RM are to:

2.4.1.1. Provide RM support to meet operational requirements.

2.4.1.2. Provide clear and practical procedures and standards for each task of the mission-essential task list (METL).

2.4.1.3. Provide necessary training for task performance to standard.

2.4.1.4. Identify force protection shortcomings and develop control actions.

2.4.1.5. Apply the RM five-step process cyclically and continuously throughout operations.

2.4.1.6. Develop and implement controls selected by the commander.

2.4.1.7. Support RM tasks assigned to them by leadership.

2.4.1.8. All squadron generated ORM/CRM worksheet templates will be approved by AFSOC A3V before use to ensure standardization and best practices across the organization. (T-2)

2.5. Safety Officer/ Manager/ Tactical Safety Representative.

2.5.1. Assess effectiveness of RM controls and procedures to mitigating mishaps.

2.5.2. Investigate mishaps to determine root causes and contributing factors of mishaps. Communicate these findings to leadership and units.

2.5.3. Support operations process by conducting periodic evaluations of RM effectiveness.

2.5.4. Provide RM support to meet operational requirements.

2.6. Leaders.

2.6.1. Leaders' responsibilities for RM are to:

2.6.1.1. Enforce METL task performance to standard. Adopt an incremental (crawl-walk-run) approach in planning and executing training.

2.6.1.2. Implement and maintain the controls selected by the commander and assess their effectiveness. Notify the higher command if, after implementing controls, the leader assesses the residual risk level as above the risk tolerance. Leaders do not accept residual risk above the risk tolerance set by their command.

2.6.1.3. Apply and promote RM integration into all activities of the operations process.

2.7. Individuals.

2.7.1. The individual's primary role in RM during operations is to support commanders and leaders by rapidly identifying and communicating hazards and risks that arise and may affect the mission. This usually takes the form of providing immediate feedback to the leader as the operation progresses and hazards are encountered. During the performance of tasks, the individual becomes a primary source for actively identifying, reporting, and assessing hazards. Depending on the context, short written messages, hand and arm signals, or radio transmissions are effective means of communicating first-hand information to leaders. There will be situations, however, when individuals or small groups must exercise individual initiative or make risk decisions within the context of orders. All Airmen and Air Force civilians must understand how to use the five-step process to enhance mission accomplishment and to reduce or eliminate loss.

2.7.2. All individuals should be alert for hazards and address them promptly. Individuals may not always be responsible to prepare AF Form 4437 or use a matrix. They will rely on and implement risk guidance from their leadership to determine potential changes in the risk level. The most significant responsibility of individuals is to be observant and report hazards or changes in risk level. To do this they must know the mission and commander's intent. The responsibilities of individuals are to:

2.7.2.1. Sustain self-disciplined duty performance and personal conduct.

2.7.2.2. Maintain and observe RM controls approved by the commander and leader.

2.7.2.3. Advise leadership when uncomfortable with tactic, technique, or procedure. Use "Knock It Off" when situation is likely to get out of hand.

2.7.2.4. Request support through the chain of command to implement or maintain controls beyond personal capability.

2.7.2.5. Adhere to RM procedures established by the command.

2.7.3. In operations, individuals rely on risk parameters established by commanders and leaders. However, in off-duty situations, individuals must make their own risk decisions. All individuals should understand the five-step process as a life skill applicable to their activities. The principles of RM are as relevant in personal situations as they are in the military decision-making process or troop leading procedures.

Chapter 3

FOUNDATIONS OF RISK MANAGEMENT

3.1. Principles of Risk Management.

3.1.1. *Risk management* is the process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits (JP 3-0 *Joint Operations*). The Air Force uses risk management (RM) to help maintain combat power while ensuring mission accomplishment in current and future operations. RM applies to operations and to nonoperational activities.

3.1.2. RM is the Air Force's process for helping organizations and individuals make informed decisions to reduce or offset risk. Using this process increases operational effectiveness and the probability of mission accomplishment. It is a systematic way of identifying hazards, assessing them, and managing the associated risks. Commanders, staffs, Air Force leaders, Airmen, and Air Force civilians integrate RM into all planning, preparing, executing, and assessing of operations. The process applies to all types of operations, tasks, and activities. Commanders ensure first-line supervisors apply the process, where it has the greatest impact. Individuals should also use the process for off-duty activities.

3.1.3. RM outlines a disciplined approach to express a risk level in terms readily understood at all echelons. Except in time-constrained situations, planners complete the process in a deliberate manner—systematically applying all the steps and recording the results on the prescribed form (see [Figure 4.1](#), AF Form 4437). Organizations develop data and use charts, codes, and numbers to analyze probability and standardize the analysis of risk. They use this standardization to manage risk in a logical and controlled manner over time. However, the five-step process is compatible with intuitive and experience-based decision making. In time-constrained conditions, commanders, staffs, leaders, Airmen, and civilians use judgment to apply RM steps and principles.

3.1.4. The principles of RM are:

3.1.4.1. Integrate RM into all phases of missions and operations.

3.1.4.2. Make risk decisions at the appropriate level.

3.1.4.3. Accept no unnecessary risk.

3.1.4.4. Apply RM cyclically and continuously.

3.1.5. Integrate Risk Management into all Phases of Missions and Operations.

3.1.5.1. Airmen must integrate RM throughout planning, preparation, execution, and assessment activities. Air Force units should use RM for on and off-duty activities. Commanders must emphasize RM in planning processes; they must dedicate sufficient time and other resources to RM during planning to ensure Air Force forces manage risk effectively throughout all phases of missions and operations.

3.1.6. Make Risk Decisions at the Appropriate Level.

3.1.6.1. A *risk decision* is a commander, leader, or individual's determination to accept or not accept the risk(s) associated with an action he or she will take or will direct others to

take. RM is only effective when the specific information about hazards and risks are passed to the appropriate level of command for a risk decision. Subordinates must pass specific risk information up the chain of command. Conversely, the higher command must provide subordinates making risk decisions or implementing controls with the established *risk tolerance*—the level of risk the responsible commander is willing to accept. RM application must be inclusive; both those executing an operation and those directing it, must participate in an integrated process.

3.1.6.2. In the context of RM, a *control* is an action taken to eliminate a hazard or to reduce its risk. If a commander, leader, or any individual responsible for executing a task determines that the controls available will not reduce risk to a level within the risk tolerance, that person must elevate the risk decision to the next level in the chain of command. The approval authority should have the resources to implement the controls and the authority to make the risk decision. Commanders disseminate the policy that establishes clear approval authority for making risk decisions, whether it is based on Air Force or local regulation, a command risk policy, or another source. Commanders establish local policies and regulations if appropriate.

3.1.7. Accept No Unnecessary Risk.

3.1.7.1. An *unnecessary risk* is any risk that, if taken, will not contribute meaningfully to mission accomplishment or will needlessly endanger lives or resources. Leaders accept only a level of risk in which the potential benefit outweighs the potential loss. The process of weighing risks against opportunities and benefits helps to maximize unit capability, save lives, and preserve resources. The appropriate level of command makes prudent risk decisions after applying RM and weighing potential gain against potential loss. Commanders need **not** be risk averse. Forces may undertake even high-risk endeavors when commanders determine that the sum of the benefits exceeds the sum of the costs. Commanders establish the basis for prudent risk decisions through RM.

3.1.8. Apply Risk Management Cyclically and Continuously.

3.1.8.1. RM is a cyclical and continuous five-step process, applied across all operations (including training), individual and collective day-to-day activities and events, and base operations functions. Airmen use this cyclical process (illustrated in [Figure 3.1](#) Cyclical RM Process.) to identify and assess hazards; develop, choose, implement, and supervise controls; and evaluate outcomes as conditions change.

3.2. Application Levels of Risk Management.

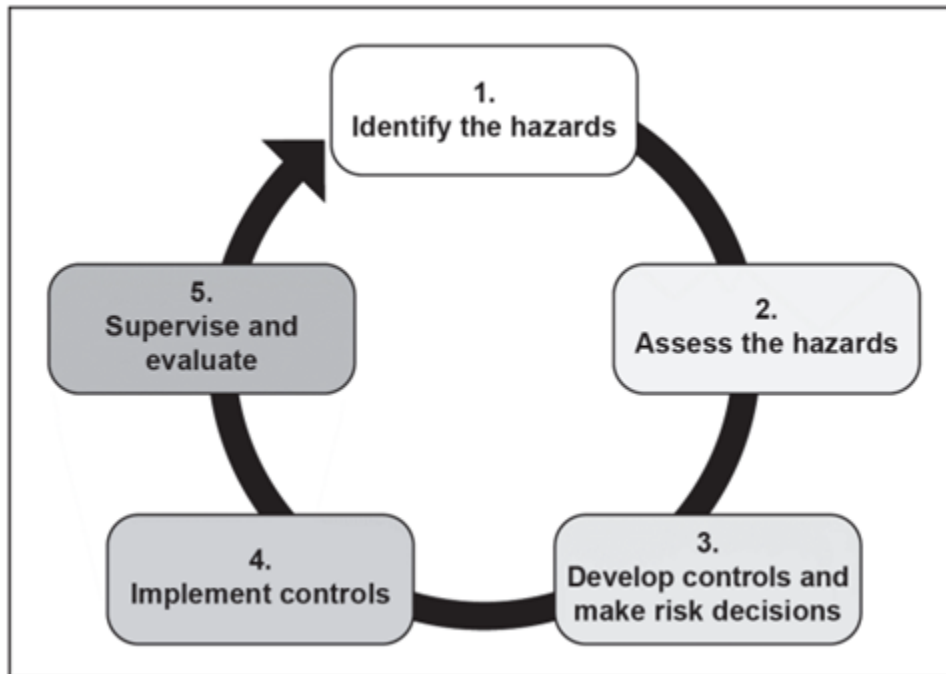
3.2.1. Leaders use judgment to manage risk based on the situation. They approach RM at the appropriate application level, using a deliberate approach or a real-time approach. The main factor that differentiates their approach is the amount of time available for planning. A deliberate approach is more analytical but takes more time; a real-time approach is more intuitive and tends to take less time. Regardless of the amount of time available, forces manage risk throughout the operations process using the five steps of RM.

3.2.2. Deliberate Risk Management.

3.2.2.1. Deliberate RM refers to situations in which ample time is available to apply the five-step process as part of detailed planning for an operation. At this level, experienced

commanders, staff, leaders, and individuals apply RM steps and principles analytically. Deliberate RM is most effective when done in a group. The joint operation planning process illustrates ways to integrate RM into planning at the deliberate application level (see JP 5-0). Other examples of deliberate RM include integrated planning of unit missions, tasks, or events; review of standard operating, maintenance, or training procedures; recreational activities; and the development of damage control and emergency response plans. The discussion in this chapter emphasizes deliberate RM.

Figure 3.1. Cyclical RM Process.



3.2.3. Real-Time Risk Management.

3.2.3.1. Forces plan for all anticipated risks, but during execution, new risks can arise unexpectedly. Real-time RM refers to immediate management of hazards as they occur, usually during execution of an operation or performance of a task. In time-constrained conditions, intuitive decision making tends to replace deliberate planning. Airmen may only have time for a quick mental or verbal assessment of the new or changing situation. Real-time RM and deliberate RM have the same foundation. Leaders must master the principles and steps of RM. They must practice applying them during planning and execution in time-constrained situations so real-time RM becomes second nature.

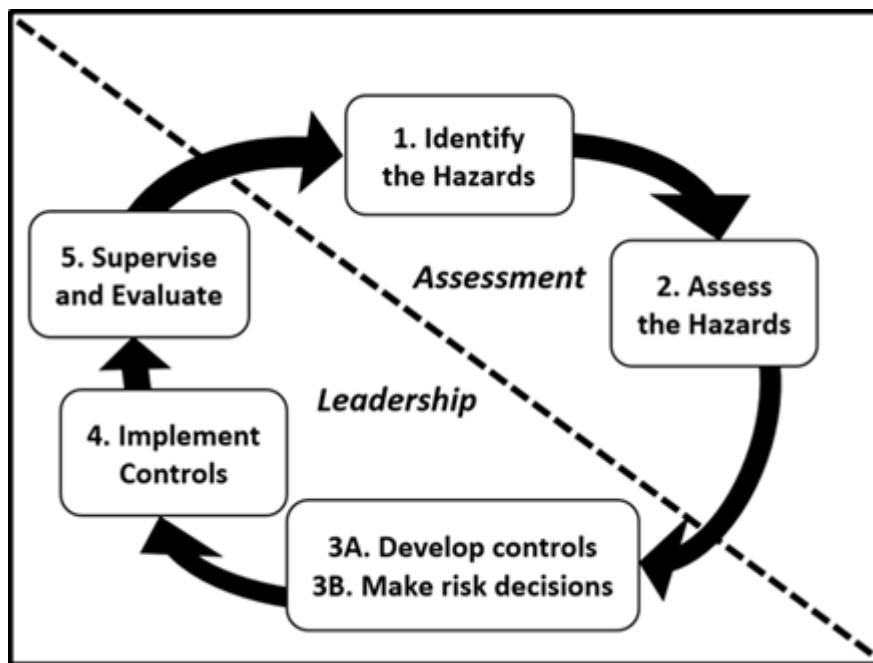
3.3. Steps of Risk Management.

3.3.1. The five steps of RM are:

- 3.3.1.1. Step 1 – Identify the hazards.
- 3.3.1.2. Step 2 – Assess the hazards.
- 3.3.1.3. Step 3 – Develop controls and make risk decisions.
- 3.3.1.4. Step 4 – Implement controls.

3.3.1.5. Step 5 – Supervise and evaluate.

Figure 3.2. Assessment and Leadership Steps.



3.4. Step 1 - Identify the Hazards.

3.4.1. A *hazard* is a condition with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation (JP 3-33 *Joint Task Force Headquarters*). Hazards create the potential for harmful events that can cause degradation of capabilities or mission failure. Hazards lead to risk whenever people interact with equipment or their environment. Hazards exist in all types of environments and activities—including combat, stability, base support, training, garrison activities, and off-duty activities. An approach to identifying a hazard is to consider how the condition can lead to a sequence of specific events or an accident-loss scenario.

3.4.2. An accident-loss scenario consists of three elements—source, mechanism, and outcome—that expand on the description of the hazard. The source or cause is a condition (such as a wet roadway) that is a prerequisite to a mishap. The mechanism, or effect, is how the source manifests itself (such as by a vehicle hydroplaning). The outcome, or undesired event, is the result of the mechanism occurring due to the source being present (such as the vehicle leaving the roadway and striking a tree). To determine original hazard (sometimes known as the root hazard or root cause), RM practitioners consider system inadequacies in areas such as support, standards, and training, or leadership and individual failures.

3.4.3. The mission variables—mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC)—serve as a standard format for identifying hazards, on- or off-duty. The factors of METT-TC are institutionalized in AFSOC. They are part of the common knowledge imparted through the respective pipelines. Some other resources and tools support the identification of hazards include:

3.4.3.1. Experience and other experts.

3.4.3.2. Regulations, manuals, standard operating procedures (SOPs), and policies.

3.4.3.3. Accident data.

3.4.3.4. War-gaming what-if scenarios.

3.4.3.5. Data from risk assessment matrixes.

3.4.3.6. Readiness assessments.

3.4.3.7. Cause and effect diagrams.

3.4.3.8. Change analysis.

3.4.3.9. Mapping techniques.

3.4.3.10. Training assessments.

3.4.3.11. After action reviews (AARs).

3.4.4. The mission variables, also called the factors of METT-TC, are used primarily as part of the military decision-making process (MDMP) or troop leading procedures (TLP) for planning operations. In addition, they provide a pattern for addressing threat-and accident-based risk for any activities, on- or off-duty.

3.4.5. Mission.

3.4.5.1. The nature of the mission may imply specific hazards and risks. Some missions are inherently more dangerous. Leaders look for hazards associated with the complexity of plans and orders from higher headquarters, such as a particularly complex scheme of maneuver. The use of a fragmentary order in lieu of a detailed operation order or operation plan may also increase risk due to the possibility of misunderstanding mission guidance. Hazardous off-duty activities may include sporting or recreational activities or various means of travel. Junior leaders have a particularly important role in making assessments that address the behavior of individuals under their supervision.

3.4.6. Enemy.

3.4.6.1. Commanders look for enemy presence or capabilities that pose hazards and risks to operations. They ask what the enemy or outside influences could do to defeat or spoil an operation. Information collection is a dynamic staff process that is critical to identifying enemy threats. Cyber should be considered when assessing enemy capabilities. Information collection supports threat-based risk assessments by identifying opportunities and any constraints the operational environment offers to both enemy and friendly forces. It also portrays a picture of enemy capabilities and vulnerabilities.

3.4.7. Terrain and Weather.

3.4.7.1. Whether planning an operation or taking leave outside of the local area, leaders should include the aspect of terrain. OKOCA may be used to remember the factors of observation and fields of fire, key and decisive terrain, obstacles, cover and concealment, avenues of approach to identify and assess terrain hazards affecting operations. Pre-trip and pre-combat inspection checklists are useful in making assessments associated with activities before executing an operation or performing a task. Common terrain hazards are elevation, altitude, road size and surfaces, curves, grades, and traffic density.

3.4.7.2. Weather can also create specific hazards and risks. Common weather factors are visibility, winds, precipitation, cloud cover, temperature/humidity, illumination (moon rise/set), sunrise/set (BMNT/EENT), and sea/ water temp when appropriate. Leaders and individuals assess these factors for activities both on- and off-duty.

3.4.8. Troops and Equipment.

3.4.8.1. When assessing risk during operations, the variable troops is used to identify hazards and risks associated with the level of training, staffing, and equipment maintenance and condition. This factor also includes hazards related to morale, availability of supplies, and services. Moreover, it includes hazards related to the physical and emotional health of each individual.

3.4.8.2. For identifying hazards during activities not part of operations, the troops variable can include Airmen, their dependents, Air Force civilians, and other people inside or outside the activity.

3.4.9. Time.

3.4.9.1. To avoid or mitigate the hazards and risks associated with limited time for planning, commanders should allow subordinate commands two-thirds of the available planning time while reserving for themselves only one third of the available planning time. Subordinate commands need adequate planning and preparation time to develop and implement controls. Insufficient time for planning or preparation may lead to accepting greater risk. (For activities not directly related to operations, insufficient planning or preparation time usually results from haste rather than availability.)

3.4.10. Civil Considerations.

3.4.10.1. The variable civil considerations expand the consideration of hazards and risks to include those that a tactical task may pose to the civilian populace and noncombatants in the operational area. It includes the critical requirement to protect civilians. The objective is to reduce collateral damage to civilians and noncombatants. In addition, the presence of a large civilian population and its day-to-day activities create hazards during operations. High civilian traffic densities may present hazards to convoys and maneuver schemes. Moreover, planners must assess such diverse elements as insurgents, riots, and criminal activity. Legal, regulatory, or policy considerations may introduce hazards that affect operations and other activities. Commanders and staffs also must weigh the importance of protecting civilians from violence during operations.

3.5. Step 2 – Assess the Hazards.

3.5.1. To assess hazards, RM practitioners consider how identified hazards (conditions) could lead to harmful events and how those events would affect operations. They envision the potential for the events and their predictable effects. When hazards are assessed and risk levels are assigned, the resulting analysis is a measurement of risk—probability and severity of loss linked to hazards (JP 5-0). Risk levels reflect a combination of the probability of occurrence and the severity of the adverse impact. Probability and severity are independent measures of hazards. In other words, estimating probability has no direct relationship to estimating severity.

3.5.2. Probability and Severity Defined.

3.5.2.1. In the context of RM, probability is the likelihood an event will occur; it is assessed as frequent, likely, occasional, seldom, or rarely. In the context of RM, severity is the expected consequences of an event in terms of injury, property damage, or other mission-impairing factors; it is assessed as catastrophic, critical, moderate, or negligible. A risk level is a type of score that assesses the odds (probability) of something going wrong and the effect (severity) of the incident when it occurs.

3.5.3. Risk Levels.

3.5.3.1. Planners assess hazards (the conditions and the events that could result)—and assign associated risk levels—during mission analysis; course of action (COA) development; COA analysis; and orders production, dissemination, and transition steps of the MDMP. Commanders and staff must consider aspects directly or indirectly related to the mission that could affect risk during operations. Planners determine the level of risk by using the risk assessment matrix illustrated in **Table 3.1** The result of this assessment is an initial estimate of a risk level for each identified hazard, expressed as:

- 3.5.3.1.1. Extremely High (EH)
- 3.5.3.1.2. High (H)
- 3.5.3.1.3. Medium (M)
- 3.5.3.1.4. Low (L)

3.5.3.2. Planners apply three sub-steps in step 2, using the risk assessment matrix (**Table 3.1 Risk Assessment Matrix**):

- 3.5.3.2.1. Estimate the probability of a harmful event or occurrence from a hazard.
- 3.5.3.2.2. Estimate the expected severity of an event or occurrence.
- 3.5.3.2.3. Determine the level of risk for the estimated probability and severity.

Table 3.1. Risk Assessment Matrix.

Risk Assessment Matrix			PROBABILITY					
			Frequency of Occurrence Over Time					
			A Frequent (Continuously experienced)	B Likely (Will occur frequently)	C Occasional (Will occur several times)	D Seldom (Unlikely; can be expected to occur)	E Rarely (Improbable, but possible to occur)	
SEVERITY	Effect of Hazard	Catastrophic (Death, Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H	H	M
		Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H	M	L
		Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M	L	L
		Negligible (Minimal Injury or Damage, Little or No Mission Capability or Unit Readiness)	IV	M	L	L	L	L
			Risk Assessment Levels					
			EH=Extremely High H=High M=Medium L=Low					

3.5.4. First Sub-step of Step 2 – Estimate the Probability of an Occurrence.

3.5.4.1. Probability is an estimate, based on the information known about the hazard and on the hazard-related occurrences experienced by others in similar situations. The RM practitioner estimates the probability levels of harmful events occurring for each hazard, considering all relevant factors— including the mission, scheme of maneuver, and frequency of similar occurrences. Probability estimates consider the current situation and previous similar situations. For the purpose of RM, the five levels of probability are:

3.5.4.1.1. Frequent (A)

3.5.4.1.2. Likely (B)

3.5.4.1.3. Occasional (C)

3.5.4.1.4. Seldom (D)

3.5.4.1.5. Rarely (E)

3.5.4.2. Frequent.

3.5.4.2.1. Probability is assessed as frequent if a harmful occurrence is known to happen continuously, regularly, or inevitably because of exposure. *Exposure* is the frequency and length of time personnel and equipment are subjected to a hazard or hazards. A probability of occurrence greater than 10%. Occurs often in a career. An example of frequent occurrence is a heat injury during a squadron physical training run, with a category 5 heat index and no acclimated Airmen.

3.5.4.3. Likely.

3.5.4.3.1. Probability is assessed as likely if a harmful occurrence is expected to happen several or numerous times—the event commonly happens because of exposure. A probability of less than 10% but greater than 1%. Occurs several times in a career. Examples include detonation of improvised explosive devices, wire strikes for aircraft, and unintentional weapons discharges.

3.5.4.4. Occasional.

3.5.4.4.1. Probability is assessed as occasional if a harmful occurrence is expected to happen sporadically or intermittently because of exposure—the event is neither common nor uncommon. A probability of occurrence less than 1% but greater than 0.1%. Will occur in a career. Examples include unexploded ordnance detonation and *fratricide*—the unintentional killing or wounding of friendly or neutral personnel by friendly firepower.

3.5.4.5. Seldom.

3.5.4.5.1. Probability is assessed as seldom when a harmful occurrence resulting from exposure is infrequent—the event is remotely possible and could occur at some time. Usually, several things must go wrong at once for the harmful event to happen. A probability of occurrence less than 0.1% but greater than .0001%. May occur in a career. Examples include heat-related death in a temperate environment or electrocution by low voltage.

3.5.4.6. Rarely.

3.5.4.6.1. Probability is assessed as rarely if a harmful occurrence resulting from exposure is possible but improbable. Planners assume it will not occur. It is so unlikely planners can assume it will not occur in the life of the system, with a probability of less than .0001%. So unlikely; it's assumed it will not occur in a career. Examples might include spontaneous detonation of containerized ammunition during transport.

3.5.5. Second Sub-step of Step 2 – Estimate the Expected Severity of an Occurrence

3.5.5.1. A severity level is a prediction of the effects of a harmful event on combat power, mission capability, or readiness. The severity level does not consider probability; severity is an estimate of the loss that would follow the envisioned event. The RM practitioner estimates the level of severity for each anticipated occurrence based on knowledge of the results of similar past occurrences. For the purpose of RM, severity is assessed at one of four levels:

3.5.5.1.1. Catastrophic (I)

3.5.5.1.2. Critical (II)

3.5.5.1.3. Moderate (III)

3.5.5.1.4. Negligible (IV)

3.5.5.2. Catastrophic.

3.5.5.2.1. Severity is estimated as catastrophic when consequences of an event, if it occurs, are expected to include death, unacceptable loss or damage, mission failure, or the loss of unit readiness.

3.5.5.3. Critical.

3.5.5.3.1. Severity is estimated as critical if the consequences of an event, if it occurs, are expected to include severe injury, illness, loss, or damage; significantly degraded unit readiness; or significantly degraded mission capability.

3.5.5.4. Moderate.

3.5.5.4.1. Severity is estimated as moderate if the consequences of an event, if it occurs, are expected to include minor injury, illness, loss, or damage; degraded unit readiness; or degraded mission capability.

3.5.5.5. Negligible.

3.5.5.5.1. Severity is estimated as negligible if the consequences of an event are expected to include minimal injury, loss, or damage; little or no impact to unit readiness; or little or no impact to mission capability. (**Table 3.2** summarizes examples of catastrophic, critical, moderate, and negligible severity.)

Table 3.2. Levels of Severity and Examples of Consequences.

Level	Sample consequences
Catastrophic (I)	<ul style="list-style-type: none"> • Complete mission failure or the loss of ability to accomplish a mission. • Death or permanent total disability. • Loss of major or mission-critical systems or equipment. • Major property or facility damage. • Unacceptable collateral damage.
Critical (II)	<ul style="list-style-type: none"> • Significantly degraded mission capability or unit readiness. • Permanent partial disability or hospitalization of at least 3 personnel. • Extensive major damage to equipment or systems. • Significant damage to property or the environment. • Significant collateral damage.
Moderate (III)	<ul style="list-style-type: none"> • Degraded mission capability or unit readiness. • Minor damage to equipment or systems, property, or the environment. • Lost days due to injury or illness.
Negligible (IV)	<ul style="list-style-type: none"> • Minimal injury or damage. • Little or no impact to mission or unit readiness. • First aid or minor medical treatment. • Little or no property or environmental damage.

3.5.6. Third Sub-step of Step 2 – Determine the Level of Risk.

3.5.6.1. After identifying and analyzing hazards, RM practitioners determine the level of risk for each hazard. Using the standard risk assessment matrix ([table 3.1](#)), practitioners assess the level of risk as Extremely High, High, Medium, or Low. To make this determination, they combine probability and severity levels estimated for each hazard. The vertical axis on the left side of the risk assessment matrix ([table 3.1](#)) shows severity, with the Roman numerals I through IV representing severity levels. The horizontal axis across the top of the matrix shows probability, with the capital letters A through E representing probability levels. Where each Roman numeral and capital letter intersects, the combination correlates with one of the four levels of risk. The level of risk is not an absolute measure of the relative danger of a given operation, activity, or event. Moreover, considerations for determining the initial level of risk include effects beyond the immediate situation. The assessment of a level of risk in step 2 is an initial assessment; practitioners will revise the level of risk when they complete step 3.

3.5.6.2. Extremely High Risk.

3.5.6.2.1. High risk refers to significant degradation of mission capabilities in terms of the necessary standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if exposure occurs during operations. A determination of high risk (sometimes recorded as H) results from five possible combinations of probability and severity. The first two combinations assessed as high risk involve envisioned events for which the severity of the consequences would be catastrophic, and probability is estimated to be occasional (IC) or seldom (ID). The next two combinations involve events for which severity would be critical, and probability is

estimated to be likely (IIB) or occasional (IIC). The final combination involves events expected to have moderately severe consequences, with a probability estimate of frequent (IIIA). An assessment of high risk implies that serious consequences will follow a hazardous event, if it occurs. Commanders carefully weigh the risk against the potential gain of the COA.

3.5.6.3. Medium Risk.

3.5.6.3.1. Medium risk refers to the expectation of degraded mission capabilities in terms of the necessary standard and reduced mission capability if exposure occurs during operations. A determination of Medium risk (sometimes recorded as M) results from five possible combinations of probability and severity. The first combination assessed as Medium risk involves a probability estimate of unlikely for an event expected to have catastrophic consequences (IE). The second is a probability estimate of seldom for an event expected to have consequences of critical severity (IID). Additional combinations assessed as Medium risk involve the expectation of moderately severe consequences for events with probability estimates of likely (IIIB) or occasional (IIIC). Finally, an event that would cause negligible loss with a probability estimate of frequent (IVA) is assessed as Medium risk.

3.5.6.4. Low Risk.

3.5.6.4.1. Low risk refers to expected losses that would have little or no impact on accomplishing the mission. A determination of low risk (sometimes recorded as L) results from seven possible combinations of probability and severity. The first combination assessed as low risk involves a probability estimate of unlikely for an event that would have consequences of critical severity (IIE). The next combinations are events expected to have consequences of moderate severity, with probability estimates of seldom (IIID) or unlikely (IIIE). Finally, events expected to have consequences of negligible severity, with probability estimates of likely or below (IVB, IVC, IVD, or IVE), are assessed as low risk. Either the event that would cause injury, damage, or illness is not expected, or losses would be minor and would have no long-term effect.

3.6. Step 3 – Develop Controls and Make Risk Decisions.

3.6.1. In step 3, RM practitioners develop and consider options for controls. During control development, they consider the mitigating effects of the proposed controls. They reassess the initial level of risk and determine a residual level of risk (risk after controls are implemented). RM practitioners continue developing control options, considering their mitigating effects, and reassessing risk until they have determined the most effective controls. The responsible commander at the appropriate echelon determines the risk tolerance for the situation. The responsible commander makes risk decisions—to accept or not accept the risk (see paragraph 1-6)—based on the residual risk level. For example, the controls, when implemented, are expected to reduce the residual risk levels from Medium to Low or from High to Medium. Commanders always must determine that the benefits of the action outweigh the potential cost.

3.6.2. First Sub-step of Step 3 – Develop Controls.

3.6.2.1. After assessing each hazard, leaders or individuals develop one or more controls that either eliminate the hazard or reduce the risk (probability and severity of loss) from a

harmful occurrence. In developing controls, leaders must consider the reason for the hazard, not just the hazard in isolation. Controls can take many forms but normally fall into one of three categories:

3.6.2.1.1. Educational controls.

3.6.2.1.2. Physical controls.

3.6.2.1.3. Hazard elimination controls.

3.6.2.2. Educational (Awareness) Controls.

3.6.2.2.1. Educational controls are based on the knowledge and skills of units, organizations, or individuals. They include awareness of the hazard and control. Effective educational controls are implemented through individual and collective training that ensures performance to standard.

3.6.2.3. Physical Controls.

3.6.2.3.1. Physical controls take the form of barriers and guards or signs to warn individuals, units, or organizations that a hazard exists. Special control or oversight personnel also fall into this category.

3.6.2.4. Hazard Elimination Controls.

3.6.2.4.1. Hazard elimination controls include positive actions to prevent exposure through substantial reduction or the total elimination of the hazard. The three methods of control implementation, in order of preference, are:

3.6.2.4.1.1. Engineering.

3.6.2.4.1.2. Administrative.

3.6.2.4.1.3. Personal protective equipment (PPE).

3.6.2.4.2. The preferred method is to control the hazard at its source, through engineering. Engineering is preferable because, unlike other controls, it generally focuses on the individual who is exposed. The concept behind engineering controls is that, to the extent feasible, engineers or Air Force units design the equipment or work environment and the task to eliminate hazards or to reduce exposure.

3.6.2.4.3. If engineering cannot eliminate the hazard, units apply administrative measures aimed at reducing exposure. Examples include additional personnel, exercise breaks, and rotation of personnel. When able, units use administrative controls in conjunction with others that more directly prevent exposure or control hazards, however, most AFSOC units do not have the luxury to simply assign more personnel so fatigue must consistently be monitored.

3.6.2.4.4. When units cannot eliminate exposure during normal operations or maintenance work through engineering, and when safe work practices and other forms of administrative controls cannot provide sufficient protection, a supplementary method of controls is the use of PPE. PPE may also be appropriate for controlling hazards while units install engineering and administrative controls. Using PPE requires hazard awareness and training on the part of the user. Individuals must be aware that the equipment does not eliminate the hazard. If the equipment fails, exposure will

occur. Individuals ensure equipment fits. They maintain equipment in a clean and serviceable condition to reduce the possibility of failure. IAW unit policy and when appropriate, proper documentation of PPE should be maintained. For example, x-raying body armor plates and physically inspecting fast ropes.

3.6.2.5. Criteria for Effective Controls.

3.6.2.5.1. Effective controls meet the eight criteria of effectiveness (see descriptions in **Table 3.3, Criteria for Effective Controls**):

3.6.2.5.1.1. Feasibility.

3.6.2.5.1.2. Acceptability.

3.6.2.5.1.3. Suitability.

3.6.2.5.1.4. Support.

3.6.2.5.1.5. Explicitness.

3.6.2.5.1.6. Standards.

3.6.2.5.1.7. Training.

3.6.2.5.1.8. Leadership.

3.6.2.5.1.9. The individual.

Table 3.3. Criteria for Effective Controls.

<i>Criteria</i>	<i>Description</i>
Feasibility	The unit has the capability to implement the control.
Acceptability	The benefit gained by implementing the control justifies the cost in resources and time. The assessment of acceptability is largely subjective. Past experience, the commander's guidance, or other external restrictions influence the assessment.
Suitability	The control removes the hazard or mitigates the risk to an acceptable level.
Support	Adequate personnel, equipment, supplies, and facilities necessary to implement the control are available.
Explicitness	The control clearly specifies who, what, where, when, why, and how each control will be used.
Standards	Guidance and procedures for implementing the control are clear, practical, and specific.
Training	Knowledge and skills of personnel are adequate to implement the control.
Leadership	Army leaders are ready, willing, and able to enforce standards necessary to implement the control.
The individual	Individual personnel are sufficiently self-disciplined and capable of implementing the control.

3.6.2.6. Sources of Controls.

3.6.2.6.1. Examples of sources of identifying potential controls include personal experience; After action reviews (AARs); accident data from safety offices; regulations; tactics, techniques, and procedures; and lessons learned from similar past operations can provide or identify possible controls for specific activities. RM worksheets from previous operations provide another source for selecting controls.

Individuals seeking these examples can visit their safety, weapons and tactics, or operations representatives for assistance.

3.6.2.7. Examples of Controls.

3.6.2.7.1. Whether conducting deliberate or hasty risk assessment, RM practitioners identify all essential aspects of controls including who, what, when, where, and how. **Table 3.4, Examples of Hazards and Controls** demonstrate preliminary documentation identifying who, what, when, where, and how for sample hazards and controls. RM practitioners completing AF Form 4437 must, at a minimum, document what, who, and how aspects on the form.

Table 3.4. Examples of Hazards and Controls.

<i>Event</i>	<i>Hazard</i>	<i>Control</i>
Small Arms Training.	Negligent Discharge	<p>Who: Range Safety Officer and Individuals</p> <p>What: Ensure proper weapons discipline and clearing procedures.</p> <p>Where: Any time weapon is being handled</p> <p>When: Weapon issue, transport, training, cleaning, weapon turn in.</p> <p>How: Treat every weapon like is loaded, finger off the trigger until prepared to fire, do not point muzzle at anything not intended to destroy, know target and what is behind it. Ensure clearing weapon before coming off line.</p>
Fast Rope Training.	Falling from a/c or tower due to improper procedures	<p>Who: Fast rope master(s), leaders, individuals.</p> <p>What: Conduct safe fast rope currency training.</p> <p>Where: On static tower and in/around aircraft.</p> <p>When: During fast rope training.</p> <p>How: Fast Rope Master brief, inspections and rehearsals, leader oversight.</p>
M-RZR (All-Terrain Vehicle) Training.	Passenger thrown from vehicle roll-over	<p>Who: Supervisors, leaders, drivers, operators.</p> <p>What: Ensure driver stays within their capabilities and safe operation of the vehicle. Wear seatbelts/helmets/gloves/eye-pro.</p> <p>Where: In the motor pool, during on/off-ramp loading, in training range.</p> <p>When: During M-RZR operations.</p>

		How: Brief rollover risk Proper OPORD brief and back-brief, leader oversight, PPE use during operations.
Small Boat Training.	Drowning	Who: Supervisors, leaders, Boat Master(s), drivers, operators. What: Wear approved flotation, ensure Diver qualification or swim qualification. Where: At the team briefing, Boat Ramp, while underway When: Before and during boating operations. How: Proper OPORD brief and back-brief, leader oversight, PPE spot inspected during operations.
Tactical Ruck March.	Dehydration/ Heat Injury	Who: Ruck March Safety Vehicle. What: Trails behind last member in formation. Where: From assembly to release point and along ruck course. When: During ruck training. How: If Safety Vehicle sees a member suffering from heat exhaustion will administer care

3.6.2.8. Residual Level of Risk.

3.6.2.8.1. After RM practitioners identify effective controls, they return to the risk assessment matrix (see **Table 3.1, Risk Assessment Matrix**) to determine the residual level of risk for each hazard and the overall residual risk for the operation. They should continue analyzing the hazards and proposing options to reduce or eliminate them until they have identified the most effective controls. The appropriate level of command must approve the mission, making a final risk decision based on the residual level of risk. Planners should sort hazards and controls under consideration either according to residual risk levels or chronologically, depending on leader's preference. This allows decision-makers at the appropriate level of command to understand and assess risks in a manner that makes the most sense for them. Decision-makers should keep in mind that the residual level of risk is valid (true) only if forces implement the controls.

3.6.2.8.2. As RM practitioners continue identifying options for controls, they continue reassessing the hazards. They may find that some proposed controls do not significantly lower the risk level of a given hazard. However, they should implement controls that provide even slight benefits if those benefits outweigh the costs.

3.6.2.8.3. The overall residual level of risk for a mission combines the residual level of risk for all identified hazards. The residual level for each hazard may differ. The

overall residual level for the mission will be equal to or higher than the highest residual level for each hazard. The responsible individual must consider the number and type of hazards present. In some cases, for example, a commander may determine that the overall residual level of risk is higher than any one hazard. The assessment could be based on a number of lower-risk hazards, if in combination they present a higher risk. For example, commanders may determine that a mission risk assessment should have Medium risk level even when all hazards have a Low residual level. Based on the complexity of required controls and the potential synergistic effect of all hazards, a commander may determine the level of risk for a mission is high when the residual level for the individual hazards' ranges from low to Medium. **Note:** While mathematics and analytical tools are helpful, Airmen always need to apply sound judgement. Technical competency, operational experience, and lessons learned weigh higher than any set of alphanumeric codes.

3.6.3. Second Sub-step of Step 3 – Make Risk Decisions.

3.6.3.1. Commanders make decisions using judgment acquired from experience, training, and study. Experience contributes to judgment by providing a basis for rapidly identifying practical courses of actions and dismissing impractical ones. Commanders use judgement to assess information, situations, or circumstances shrewdly and draw feasible conclusions. Skilled judgment helps commanders form sound opinions and make sensible decisions.

3.6.3.2. Judgement is required for selecting the critical time and place to act. Commanders act by assigning missions, prioritizing, managing risk, allocating resources, and leading. Thorough knowledge of the science of war, a strong ethical sense, and an understanding of enemy and friendly capabilities forms the basis of the judgment commanders require.

3.6.3.3. Commanders use judgement when identifying risk by deciding how much risk to accept, mitigating risk where possible, and managing the risk they must accept. They accept risk when seizing opportunities. They reduce risk with foresight and planning, while regularly examining any assumptions associated with previous risk-related decisions.

3.6.3.4. Commanders must continuously assess how risk may be accumulating over time as operations progress, both at their own echelon as well as for their subordinates. Changes in the nature of an operation, the number and types of tasks assigned, available combat power, or changes in the threat may all change the level of risk subordinates must mitigate and accept. A series of discrete decisions about seemingly unrelated issues can, over time, potentially change the level of risk in ways that are not readily apparent to a commander. However, this cumulative risk may be understood by one or more subordinates directly impacted by changing conditions or new decisions. It is therefore critical that commanders clearly communicate risk concerns to higher and lower echelons to ensure shared understanding and informed decision making.

3.6.3.5. Assumptions initially made during planning may change or compound over time, raising the level of risk. Risks that were acceptable in one context and based on one set of assumptions may be untenable when the context of the operation changes. In some instances, the situation may change to the point that a commander needs to take action to adjust the level of risk subordinate commanders are required to take when the perceived benefit no longer outweighs the likely cost. For example, after an AC-130 gunship goes Winchester with no ordnance remaining and there is no fires asset to replace this capability,

commanders may choose to not press the fight without this capability and may instead choose to not accomplish the mission because of the increased risk to force. Severe weather may hamper fires and ISR support causing the commander to delay an operation. It is as much the responsibility of the subordinate to keep higher echelons informed as it is the responsibility of the higher-level commander to seek risk analysis from the subordinate.

3.6.3.6. Inculcating risk acceptance goes hand in hand with creating an environment where subordinates are not only encouraged to take risks, but also where mistakes are tolerated. Commanders realize that subordinates may not accomplish all tasks initially and that errors may occur. Commanders train subordinates to act within the commander's intent in uncertain situations. Commanders give subordinates the latitude to make mistakes and learn.

3.6.3.7. Exercising initiative requires a command climate that promotes risk taking. Commanders inculcate the willingness to accept risk into their commands through leading by example and accepting subordinates' risk taking. They accept risk during training and operations. They assess the judgment of their subordinates' risk taking, either at the time of decisions, if time permits, or during after action reviews.

3.6.3.8. Commanders allow subordinates to accept risk. In training, commanders might allow subordinates to execute an excessively risky decision, as long as it does not endanger lives, as a teaching point. This training helps commanders gain trust in their subordinates' judgment and initiative and builds subordinates' trust in their commander.

3.6.3.9. Commanders do not underwrite subordinate mistakes when a subordinate operates outside of the commander's intent or displays poor judgement that endangers life or mission accomplishment. Nor do commanders tolerate a subordinate who repeatedly makes the same mistakes, does not learn, or violates the Air Force Core Values. Discriminating between which mistakes to underwrite as teaching points and which mistakes are unacceptable in a military leader is part of the art of command.

3.6.3.10. The purpose of RM is to provide a basis for individuals and leaders to make sound and informed risk decisions. To make those decisions, they must know the established risk tolerance and the potential gain. Ultimately, commanders are responsible for determining the risk tolerance within the command and for making risk decisions for operations, missions, or tasks. The appropriate level of command or leadership must make risk decisions about specific hazards and controls, consistent with the risk tolerance guidance. Decision makers must balance risk against expected gains. When Airmen are off duty, a risk decision may be a personal one. Individuals use RM to evaluate hazards, mitigate risks, and weigh costs versus benefits of an action both on- and off-duty. (For further guidance on the appropriate risk acceptance authority and non-operational RM integration, see USSOCOM Directive 385-1 *Safety*. In addition, Airmen should consult local regulations, SOPs, or other command policy.)

3.7. Step 4 – Implement Controls.

3.7.1. Airmen normally implement controls during the preparation activities of the operations process. Leaders establish how the controls will be implemented and who will manage them. They ensure selected controls are translated into briefings and curricula and then integrated with training. They direct trainers to develop practical training solutions. They ensure units

receive safety equipment and instructions on its use. Leaders ensure subordinates fully understand and implement the controls. They ensure the implemented controls are maintained to standard. Examples of ways to disseminate guidance and ensure implementation of controls include:

- 3.7.1.1. WARNORD and OPORD guidance.
- 3.7.1.2. Rehearsals, inspections, and battle drills.
- 3.7.1.3. Minimum force or specific task organization guidance.
- 3.7.1.4. Jump Master, Dive Supervisor, Demolition, AIE Briefs before employments
- 3.7.1.5. Specifically briefing RM controls during all back briefs
- 3.7.1.6. Accident awareness, safety briefings, and other incident discussions/forums

3.8. Step 5 – Supervise and Evaluate.

3.8.1. Primarily, step 5 involves ensuring that controls are implemented and performed to standard. RM practitioners apply this step to validate that selected controls support achieving the end state. They identify weaknesses of controls and make changes or adjustments based on performance or changing situations, conditions, or events. However, supervision and evaluation are not limited to controls. Like other steps of RM, supervision and evaluation must occur throughout all phases of any operation or activity. RM practitioners supervise and evaluate all aspects of RM continuously.

3.8.2. First Sub-step of Step 5 – Supervise.

3.8.2.1. Supervision is a primary means of regulating forces. Step 5 fully integrates supervision into RM. Higher-level leaders ensure lower-level leaders responsible for implementing controls understand their responsibilities. They ensure subordinates understand how, when, and where to implement controls. Leaders supervise and monitor controls. They verify implementation and make sure controls remain in place.

3.8.2.2. Situational understanding is a critical component of RM when identifying hazards. Situational understanding is equally important in supervision. Leaders ensure that complacency, deviation from standards, or violations of policies and controls are not allowed to threaten success. They ensure Airmen monitor factors such as fatigue, equipment serviceability and availability, and the weather and environment. If they identify more hazards during operations, they can propose controls to eliminate or mitigate them. Commanders and leaders exercise supervision to maintain situational understanding. This helps them anticipate, identify, and assess any new hazards and develop or modify controls as necessary.

3.8.2.3. An extraordinary degree of discipline is needed to avoid complacency from boredom and overconfidence when personnel are performing repetitive tasks. Individuals are inclined to neglect controls used for a prolonged period, due to overconfidence or complacency. For example, when individuals first learn to parachute or fast rope, they pay close attention to emergency procedures and the importance of rehearsals and gear inspections. However, over time and with success (no accidents or incidents) complacency may set in. When this happens, established controls may lose their effectiveness. Operationally, forces may have become used to global positioning systems and other space

assets to provide situational awareness and reduce fratricide risk during kinetic operations. Leaders should consider operating in denied or degraded environments as operators will be forced to use less practiced and rehearsed techniques and capabilities directly impacting RM.

3.8.3. Second Sub-step of Step 5 – Evaluate.

3.8.3.1. RM practitioners conduct evaluation during all phases and activities of operations, including after AARs and other assessments at the end of an operation. Evaluation supports several goals, including but not limited to:

3.8.3.1.1. Determining if risk levels changed during the operations.

3.8.3.1.2. Adapting to changes in the situation.

3.8.3.1.3. Monitoring effectiveness of controls.

3.8.3.1.4. Making corrections to control implementation.

3.8.3.1.5. Improving the application of RM principles in current and future operations.

3.8.3.2. Feedback.

3.8.3.2.1. An evaluation by itself is not enough. Organizations must establish a feedback system to ensure controls are, were, or will continue to be effective; any hazards identified during operations are analyzed; and appropriate corrective action is taken. Feedback informs all involved as to the effectiveness of controls. Organizations should collect data on RM efforts. RM practitioners can share feedback in the form of briefings, lessons learned, reports, or benchmarking. Without feedback, leaders cannot know if forecasts were accurate, contained minor errors, or were completely incorrect. Feedback should be forwarded IAW squadron, group, and/or wing policy for consideration.

3.8.3.3. Tools and Techniques.

3.8.3.3.1. Commanders, leaders, and individuals have responsibilities for supervision and evaluation of operations and activities. Techniques may include pre-combat checks or pre-combat inspections, spot-checks, situation reports, back briefs, buddy checks, and close oversight.

3.8.3.3.2. AARs provide a forum for assessing the completed mission or operation. Airmen conducting AARs should include results on the effectiveness of RM with emphasis on assessing the controls.

3.8.3.3.3. Based on evaluation and feedback on the effectiveness of RM during operations, practitioners develop and disseminate lessons learned for incorporation into future plans, operations, and activities. Lessons learned from RM, including AF Form 4437 and other RM worksheets (hasty or preliminary), should be captured and forwarded through appropriate channels for consideration.

3.8.3.4. Tracking and Documentation.

3.8.3.4.1. To maintain continuity with mission tasks and requirements, organizations should track RM in a standardized manner. They should use AF Form 4437 for all deliberate assessments. See, *Instructions for Completing an AF Form 4437* (see

examples in [figure 4.1](#)) for proper form usage. In addition to providing an AFSOC standard, continuous use of this form reinforces effective RM. It helps commanders, leaders, and all individuals integrate the five-step process into operations. Units can tailor additional tools to use RM information appropriately for a particular operation, mission, activity, or event. (Locally produced deliberate risk management formats may be approved by Wing/CC with subsequent notification to AFSOC A3V and AFSOC Safety).

Chapter 4

FORM SAMPLES AND INSTRUCTIONS.

4.1. Sample AF Form 4437 and Instructions.

4.1.1. This chapter discusses requirements for documenting deliberate risk management. It describes the overall structure of the prescribed form. It supports application of risk management techniques in tactical tasks by describing how to use the form.

4.2. Documenting Risk Management.

4.2.1. AF Form 4437 is the Air Force's standard form for deliberate risk assessment. Aviation; explosive; chemical, biological, radiological, or nuclear; and other highly technical activities may require additional specialized documentation. However, when coordination may occur across sections or commands, AF Form 4437 is the standard for the majority of AFSOC operations. It allows units to track hazards and risks in a logical manner. It may be filled out electronically or free hand. It is the standard way of capturing the information analyzed during the five steps of RM. It helps the user in thinking through the five steps and then sharing the resulting assessment. It is a living document. Pen and pencil changes on hard copies are acceptable and encouraged since changes will occur during operations. However, changes must be briefed to the executing force and accepted by the appropriate authority.

4.3. Structure of the Form.

4.3.1. AF Form 4437 is available electronically on the Air Force Portal through ePubs. AF Form 4437 consists of two or more pages (see examples in [figure 4.1](#)). The first page provides areas for identifying the operation or mission, preparer information, an area to capture information used in the five steps of RM, identification of the overall residual risk level, and approval authority information. Block 1 (Mission/Task Description) should include the date or dates of the mission, whereas Block 2 (Date) expresses the date the form was prepared. Blocks 3 through 9 may be reproduced or reduced by row through the use of the (+) and (-) buttons. New rows will be placed below all existing rows and reductions will always occur from the top. The user may reproduce these blocks as many times as needed to capture all tasks, subtasks, and identified hazards. The second page provides a standard risk assessment matrix, an area for review (used for ongoing operations), an area to capture feedback and lessons learned, and an area for additional comments or remarks. The third page provides instructions for completing each block of the form. Several blocks will expand in order to capture all input from the preparer or approval authority. Block expansion, coupled with additional blocks 4 through 9 will often result in additional form pages. Page numbers, found at the bottom of the pages, will change as needed to account for expansion. Reference [Figure 4.1](#) for step-by-step instructions alongside the AF 4437.

Figure 4.1. Instructions for Completing an AF 4437.

Steps 1-2: Fill in the blanks.

Step 3A: Break down each step or task of the mission, chronologically usually works best. Use the arrow icon buttons to add more item blocks.

Step 3B: ID the hazards associated with each step/task.

Step 3C: Assess the initial risk level (severity/probability).

Step 3D: ID Control measure.

Step 3E: How/ Who will implement the control measure.

Step 3F: ID the residual risk level (severity/probability).

Step 3G: Summarize course of action recommendation.

Step 3H: ID overall risk level for operation (highest level identified in 3F column).

Step 3I: Mission planner signs.

Step 4: Add any attachment i.e., WARNORD, OPORD, Maps, Go-No Go review.

Step 5A-F: Approval by individual at the appropriate level.

Step 6: As mission progresses over time and/or conditions change annotate review.

Step 7: Brief AAR entry post mission.

DETERMINATE RISK ASSESSMENT WORKSHEET

AGENCY DISCLOSURE NOTICE: Voluntary, however, failure to use may have a negative effect on mission effectiveness at all levels and lead to failure of personnel and equipment health and welfare.
AUTHORITY: DoDI 6031.04, AFDD 90-8 and AFI 90-802. PRINCIPAL PURPOSE: Conduct a formal risk assessment and assess the assessment is properly documented for future evaluation and reflection. ROUTINE USES: Used to develop and enhance awareness and understanding of critical activities and behavior of personnel both on and off duty. SYSTEM OF RECORDS NOTICE: Not applicable.

I. EVENT/MISSION/TASK OF RISK ASSESSMENT:

A. EVENT DESCRIPTION _____ B. EVENT DATE _____

II. PREPARED BY:

A. LAST NAME, FIRST, MI _____ B. RANK/GRADE _____ C. DUTY TITLE/POSITION _____

D. WORK EMAIL _____ E. PHONE DSN/COMM _____ F. UNIT _____

G. UIC/OCN (as required) _____ H. TRAINING SUPPORT/LESSON PLAN OR OPORD (as required) _____

Risk Assessment Matrix	Probability of Occurrence Over Time	Severity of Consequences Over Time				
		A (Low)	B (Low)	C (Medium)	D (High)	E (Very High)
1. Catastrophic (Death, Loss of Army/Military Capability or Loss of Capability)	1	Red	Red	Orange	Yellow	Green
2. Critical (Major Injury or Damage, Significant Property Damage, Significant Loss of Capability)	2	Red	Orange	Yellow	Green	Green
3. Major (Minor Injury or Damage, Minor Property Damage, Minor Loss of Capability)	3	Orange	Yellow	Green	Green	Green
4. Minor (Minor Injury or Damage, Minor Property Damage, Minor Loss of Capability)	4	Yellow	Green	Green	Green	Green

RISK MANAGEMENT

III. SUB-TASK/SUB-STEP AND RISK ASSESSMENT (Fields expand as needed. Add, Remove and Move Sub-Task/Steps with left side controls)

#	A. SUB-TASK/SUB-STEP	B. HAZARD	C. INITIAL RISK LEVEL	D. CONTROL	E. HOW TO IMPLEMENT WHO WILL IMPLEMENT	F. RESIDUAL RISK LEVEL
1						
2						

G. COURSE OF ACTION _____

H. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED I. PREPARER SIGNATURE _____

J. ATTACHMENTS (Check the prepare bar signed line can be viewed only)
 ADD ATTACHMENTS (Include reporting line and/or photos to create a complete electronic file)

K. RISK ACCEPTANCE AUTHORITY (Check the approval bar signed, the form will lock except "Risk Assessment Review" and "Feedback and Lesson Learned")

A. APPROVAL/ APPROVAL OF EVENT/MISSION _____ B. APPROVER LAST NAME, FIRST, MI _____ C. RANK/GRADE _____

D. ADDITIONAL INFORMATION-APPROVER COMMENTS _____

E. DUTY TITLE/POSITION _____ F. APPROVER SIGNATURE _____

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Prescribed by AFI 90-802

L. RISK ASSESSMENT REVIEW (To be conducted when Risk Assessment applies to on-going Operations/Activities)

A. DATE _____ B. LAST NAME, FIRST, MI _____ C. RANK/GRADE _____ D. DUTY TITLE/POSITION _____

E. REVIEWER COMMENTS _____

F. FEEDBACK AND LESSONS LEARNED _____

JOCELYN J. SCHERMERHORN, Colonel, USAF
 Director of Operations, Air Force Special
 Operations Command

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

JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*, November 2021

JP 3-0, *Joint Operations*, 17 January 2017

JP 3-33, *Joint Task Force Headquarters*, 31 January 2018

JP 5-0, *Joint Planning*, 01 December 2020

Department of Defense Law of War Manual, June 2015

DAFMAN90-161, *Publishing Processes and Procedures*, 15 April 2022

AFDP 3-0, *Operations and Planning*, 04 November 2016

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

AFI51-401, *Law of War*, 03 August 2018

AFI 90-802, *Risk Management*, 01 April 2019

AFI 91-202, *US Air Force Mishap Prevention Program*, 15 APR 2021

AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, 11 February 2013

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ADP 5-0, *The Operations Process*, 31 July 2019

ADP 6-0, *Mission Command*, 31 July 2019

ADP 6-22, *Army leadership and the profession*, 31 July 2019

AR 385-10, *The Army Safety Program*, 24 February 2017

ATP 3-21.8, *Infantry Platoon and Squad*, 12 April 2016

ATP 2-01.3, *Intelligence Preparation of the Battlefield*, 01 March 2019

ATP 5-19, *Risk Management*, 09 November 2021

FM 1-02.2, *Terms and Military Symbols*, November 2020

FM6-0, *Commander and Staff Organization and Operations*, 05 May 2014

FM6-27, *The Commander's Handbook on the Law Of Warfare*, 07 August 2019

FM 27-10, *The Law of Land Warfare*, August 2019

Prescribed Forms

None

Adopted Forms

AF Form 4437, *Deliberate Risk Assessment Worksheet*, 12 October 2018

DAF Form 847, *Recommendation For Change of Publication*, 14 April 2022

Abbreviations and Acronyms

AAR—After action review

ADP—Army doctrine publication

ADRP—Army doctrine reference publication

AFSOCI—Air Force Special Operations Command Instruction

COA—Course of action

EH—Extremely high

FM—Field manual

FRAGORD—Fragmentary order

H—High

HQ—Headquarters

IPB—Intelligence preparation of the battlefield

L—Low

JP—Joint publication

M—Medium

MDMP—Military decision-making process

METL—Mission-essential task list

METT-TC—Mission, enemy, terrain and weather, troops and support available, time available, and civil considerations

OPORD—Operation order

PMESII-PT—Political, military, economic, social, information, infrastructure, physical environment, and time

PPE—Personal protective equipment

RM—Risk management

A-3—Operations staff officer

SOP—Standard operating procedure

TLP—Troop leading procedures

WARNORD—Warning order

Office Symbols

AFSOC—Air Force Special Operations Command

AFSOC/A3VW—AFSOC Special Warfare Standardization and Evaluation Branch

USSOCOM—United States Special Operations Command

Terms

Leader—Anyone who by virtue of assumed role or assigned responsibility inspires and influences people to accomplish organizational goals. Leaders motivate people both inside and outside the chain of command to pursue actions, focus thinking and shape decisions for the greater good of the organization. (ADP 6-22, *Army leadership and the profession*)

Commander's intent—A clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned. (JP 3-0)

Control—(Army) An action taken to eliminate a hazard or to reduce its risk.

End state—The set of required conditions that defines achievement of the commander's objectives. (JP 3-0)

Exposure—The frequency and length of time personnel and equipment are subjected to a hazard or hazards.

Fratricide—The unintentional killing or wounding of friendly or neutral personnel by friendly firepower.

Hazard—A condition with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation. (JP 3-33)

Intelligence preparation of the battlefield—A systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest and for a specific mission. By applying intelligence preparation of the battlefield, commanders gain the information necessary to selectively apply and maximize operational effectiveness at critical points in time and space.

Military decision-making process—An iterative planning methodology to understand the situation and mission, develop a course of action, and produce an operation plan or order. (ADP 5-0)

Mission command—(Army) The exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations. (ADP 6-0)

Mission command warfighting function—The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions. (ADRP 3-0)

Operations process—The major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation. (ADP 5-0)

Probability—The likelihood an event will occur; it is assessed as frequent, likely, occasional, seldom, or unlikely.

Risk—Probability and severity of loss linked to hazards. (JP 5-0)

Risk assessment—The identification and assessment of hazards (first two steps of risk management process).

Risk decision—A commander, leader, or individual's determination to accept or not accept the risk(s) associated with an action he or she will take or will direct others to take.

Risk management—The process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits. (JP 3-0)

Risk tolerance—The level of risk the responsible commander is willing to accept.

Running estimate—The continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. (ADP 5-0)

Severity—The expected consequences of an event in terms of injury, property damage, or other mission-impairing factors; it is assessed as catastrophic, critical, moderate, or negligible.

Troop leading procedures—A dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation. (ADP 5-0)

Attachment 2

APPLICATION TO TROOP LEADING PROCEDURES

A2.1. Application to Troop Leading Procedures.

A2.1.1. This attachment discusses planning considerations and risk management techniques for troop leading procedures, focusing on risk management application by flight commanders and superintendents, or their subordinate leaders of elements and detachments. Then, it explains the rapid decision-making and synchronization process in relation to risk management application.

A2.2. Planning Considerations for Troop Leading Procedures.

A2.2.1. Troop leading procedures are a dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation (FM 6-0 Commander and Staff Organization and Operations, ATP 3-21.8 *Infantry Platoon and Squad* Appendix A). Troop leading procedures (TLP) provide small-unit leaders a framework for planning and preparation. AFSOC forces use risk management (RM) during all operations. RM is integral to planning and preparation. The RM principles and five-step process help leaders identify hazards, assess risk, and make sound risk decisions.

A2.2.2. The key difference between TLP and the military decision-making process (MDMP) is the time and staff resources available to perform the process. The MDMP (discussed in [Attachment 3](#) (*Application to the Military Decision-Making Process*)) normally is used at command levels where staffs and time are available to perform a thorough review and assessment. In the MDMP, commanders and staffs—usually at Squadron level and above—develop formal courses of action (COAs) and publish written orders. In contrast, unit leaders use TLP to execute the plans and orders developed through the MDMP. Leaders or commanders typically use TLP with minimal support and limited time. The eight steps of TLP are as follows Step 1—Receive the mission, Step 2—Issue a warning order (WARNORD), Step 3—Make a tentative plan, Step 4—Initiate movement, Step 5—Conduct reconnaissance, Step 6—Complete the plan, Step 7—Issue the order, and Step 8—Supervise and refine the plan.

A2.2.3. Normally, the first three steps (receive the mission, issue a WARNORD, and make a tentative plan) of TLP occur in order. However, the sequence of subsequent steps is based on the situation. The tasks involved in some steps (such as initiate movement and conduct reconnaissance) may occur several times. The last step, supervise and refine the plan, occurs throughout operations. RM occurs continuously throughout operations, with varying emphasis on different steps at different times. The supervision (during operations) and evaluation (during and after operations) must feed back into the system (see [Figure A2.1](#), TLPs Correlate with RM Steps). Through feedback, leaders ensure corrections are made during the current operation and in future operations.

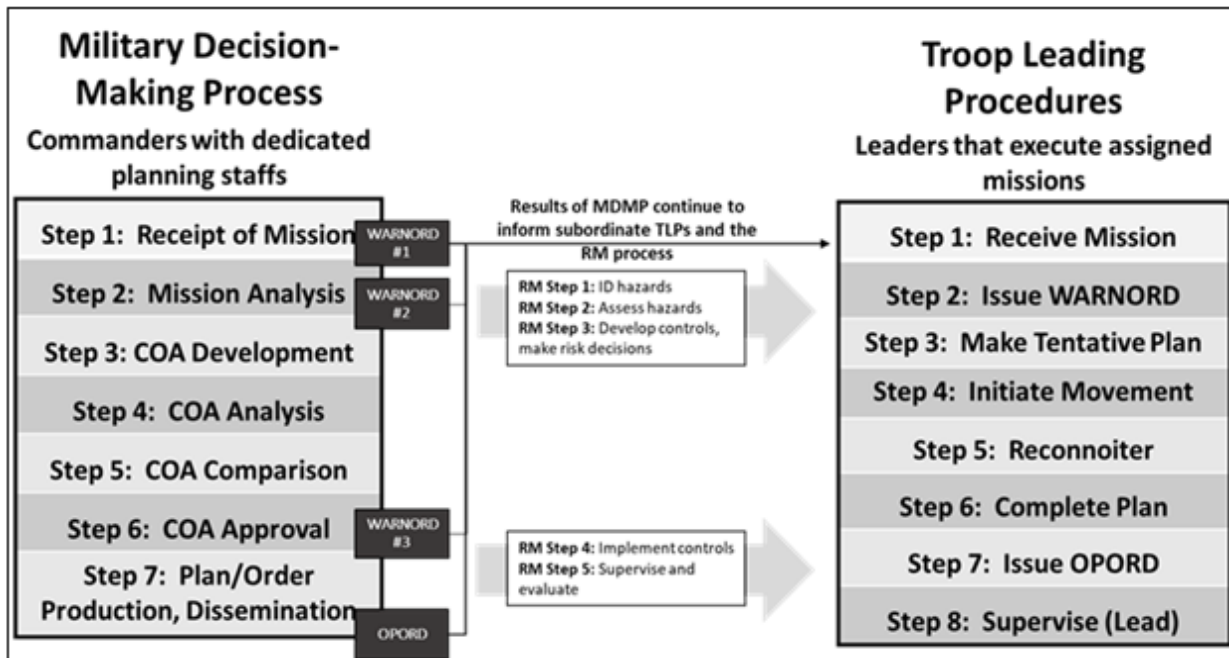
Figure A2.1. Troop Leading Procedures Correlated with Risk Management Steps.

Troop leading procedures	Risk management steps				
	Step 1 Identify the hazards	Step 2 Assess the hazards	Step 3 Develop controls and make risk decisions	Step 4 Implement controls	Step 5 Supervise and evaluate
Receive the mission	X	X			
Issue a warning order	X	X	X		
Make a tentative plan	X	X	X		
Initiate movement	X	X	X	X	
Conduct reconnaissance	X	X	X	X	
Complete the plan	X	X	X	X	
Issue the order			X	X	X
Supervise and refine				X	X

A2.2.4. The amount of time available to a commander or leader often dictates the level of detail that can go into plans. Leaders should attempt to provide lower-level units two-thirds of the planning time available. To maximize the time available, leaders often pass information in the form of WARNORDs to their subordinates. This allows their subordinates to begin parallel planning of the TLP with the MDMP. **Figure A2.2, Parallel Planning Correlated with RM Steps**, demonstrates how staffs and units conduct RM planning in parallel. The type, amount, and timeliness of RM information passed from higher to lower levels of command may have a significant effect on the level of detail used by lower unit leaders.

A2.2.5. The time between receiving the mission and initiating the WARNORD can significantly affect the time available for a subordinate unit to conduct risk assessments and implement appropriate controls. While squadron- and higher-level headquarters (HQ) have specialized staff sections conducting risk assessments, flights may have only one or two people performing assessments. Higher-level leaders should provide subordinates sufficient time and details to conduct each of the five steps of RM. Particular attention should be given to step 4 of RM (implement controls). Aligning standard operating procedures and ensuring regular use may reduce the time needed for planning at each level. Commanders and staffs act on requests for information as quickly as possible to minimize planning delays at subordinate units.

Figure A2.2. Parallel Planning Correlated with Risk Management Steps.



A2.2.6. Warning Order.

A2.2.6.1. A WARNORD is a preliminary notice that provides subordinate commanders and leaders the additional time to conduct assessments, perform parallel planning, and begin preparation in anticipation of a coming mission. Under normal conditions, a squadron HQ will issue at least three WARNORDs to its subordinate units. The first WARNORD is issued on receipt of the mission, the second on completion of the mission analysis, and the third when a specific COA has been approved. Subordinate commanders and leaders can expect to receive sufficient information in a WARNORD to initiate their preparation and assessments. [Figure A2.3](#), Information Flow in Warning Orders, depicts examples of RM considerations for each WARNORD in this series.

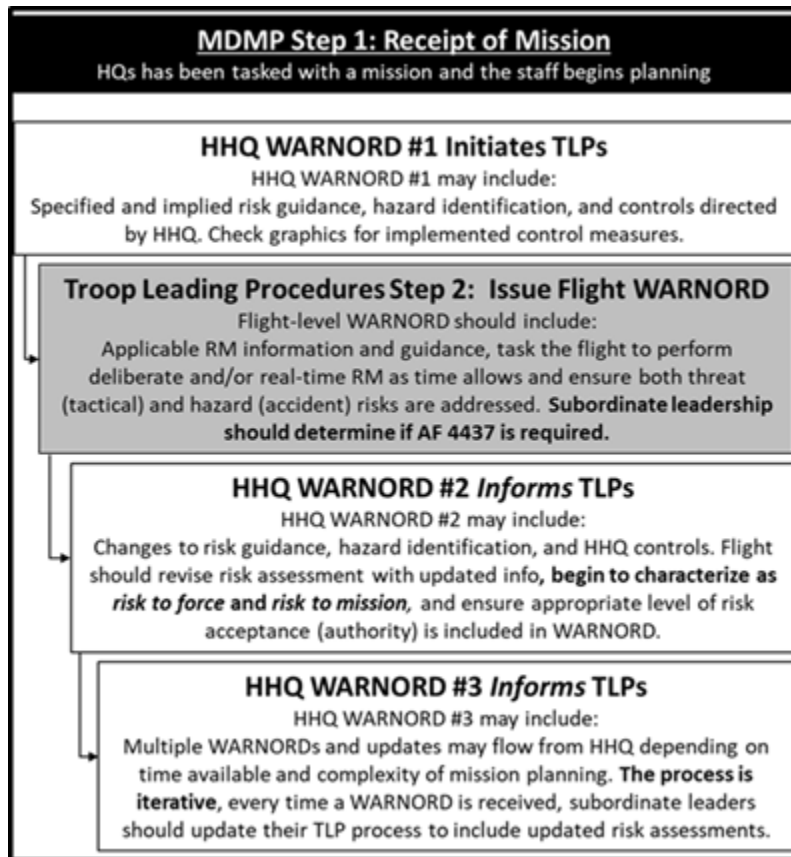
A2.2.6.2. First Warning Order.

A2.2.6.2.1. In the first WARNORD, commanders and leaders should expect broad, general information with minimal risk guidance. This WARNORD may be a base order (see doctrine on plans and orders), or it may simply take the form of a full overlay. It may consist of a map with graphic control measures depicting controls (that is, actions that eliminate hazards or reduce risk) established by the higher HQ. Leaders should be alert to any controls that will require coordination with adjacent units. The subordinate commander or leader must review this WARNORD carefully to determine specific actions or implied tasks needed to implement these controls. Initial Risk guidance can be provided in [paragraph 3](#), Execution; [paragraph 5](#), Command & Signal; or during commander or leader's comments. It may also be addressed in unit planning SOPs, but initial RM guidance should be provided.

A2.2.6.3. Second Warning Order.

A2.2.6.3.1. On completion of the mission analysis, leaders will issue the second WARNORD. Risk guidance will be more detailed in this WARNORD. It may contain the results of the initial risk assessments prepared during the mission analysis. Risk information in this order may consist of both graphic control measures and mission tasks. These should address specific hazards and controls for the entire operation. Lower-level commanders and leaders must initiate immediate action to integrate this guidance into their planning. At this time, the leader should begin to conduct a deliberate risk assessment and initiate any physical controls directed by the higher HQ. Subsequent WARNORDs may follow, depending on the time available, mission changes, and other factors.

Figure A2.3. Information Flow in Warning Orders.



A2.2.6.4. Ongoing Risk Management and Warning Orders.

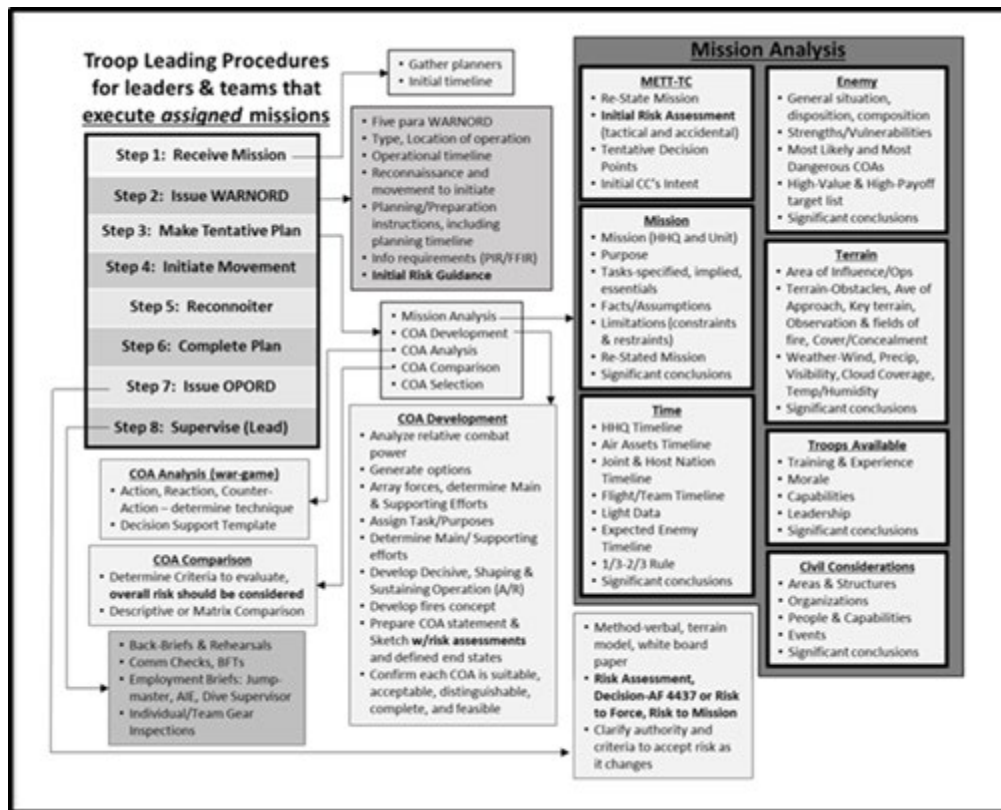
A2.2.6.4.1. RM is ongoing. It continues from the receipt of an initial WARNORD to the receipt of the final operation order (OPORD). Information and assessments are continually revised and updated to reflect the current situation. The process of receiving, distributing, revising, and updating the hazards, risks, and controls for both threat (tactical) and hazard (accident) risk continue simultaneously until the final order is issued. The key is to provide subordinates with the most current and complete information pertaining to hazards and controls for the existing situation and all foreseeable contingencies. Commanders and leaders at all levels must ensure that each successive WARNORD contains sufficient RM information to help subordinate

commanders and leaders with their planning and preparation for the operation. To be effective, commanders and leaders must remain especially alert for those controls that require coordination with adjacent and supporting units.

A2.3. Risk Management Techniques for Troop Leading Procedures.

A2.3.1. Paragraphs A2.3.2. through A2.3.9 detail some of the techniques for applying five steps of RM to the eight steps of TLP. Although RM is to be integrated into every step, the process is integrated most heavily in the first four steps. Further, the basics of RM integration remain the same throughout the steps of the TLP. Reference Figure A2.4, TLPs and RM Integration, to better understand how RM is integrated throughout the TLP.

Figure A2.4. Troop Leading Procedures and Risk Management Integration.



A2.3.2. Step 1 of TLP - Receive the Mission.

A2.3.2.1. Commanders and leaders can receive a mission in several ways. These depend on the available time, mission changes, and other factors of METT-TC—mission, enemy, terrain and weather, troops and support available, time available, and civil considerations. The WARNORD is a common vehicle used when time permits. When the unit is already planning/executing a mission and only slight modifications to the mission need to be passed, a fragmentary order (FRAGORD) may be used.

A2.3.2.2. Situations with Adequate Planning Time.

A2.3.2.2.1. Risk assessments made when adequate time exists must be deliberate and detailed using AF Form 4437. This form should accompany the completed

OPORD/CONOP/WARNORD plan etc. It may be referenced in the various staff annexes. Commanders and leaders may use the form to capture RM information from higher HQ and their own RM data. Commanders and leaders will ensure their forces follow the risk tolerance and control guidance established by higher HQ and the requirements of the approved AF Form 4437. The AF Form 4437 is a stand-alone document that identifies, explains, and clearly defines the RM aspects of the associated OPOD, WARNORD, or FRAGORD. The AF Form 4437 is normally required for all training operations and may be used during contingency operations.

A2.3.2.3. Situation with Inadequate Planning Time.

A2.3.2.3.1. Battlefield dynamics within an operational environment often produce situations where immediate decisions are required. Commanders and leaders often have little or no time to make a deliberate application of RM. In these situations, they perform real-time risk assessments. A real-time risk assessment may be performed mentally. It may be transmitted verbally or in writing via a FRAGORD. Only the essential information necessary to complement a FRAGORD and forward the risk guidance received from the squadron commander are included. During training, if real-time risk assessment exceeds stated risk tolerance than training should be halted until appropriate leadership can assess, mitigate, and decide to accept or decline residual risk.

A2.3.2.4. Conduct Initial Risk Assessment.

A2.3.2.4.1. At this point in the TLP, the commander or leader makes an initial risk assessment that compares the potential for threat (tactical) and accidental hazards against the factors of METT-TC. It is important to search actively for potential hazards that may arise during initial movement, performance, and consolidation activities. RM information and guidance from the higher HQ must be included in this assessment.

A2.3.2.5. Allocate the Available Time.

A2.3.2.5.1. During this step, commanders and leaders must estimate the available time to plan, prepare for, and execute the operation. A reverse planning process is used to identify and allocate adequate time for all of the major events of the operation. As a rule of thumb, leaders use one-third of the available time for their planning and leave two-thirds of the time for subordinates to conduct their planning and preparation. It is especially important that time estimates be realistic and as accurate as possible.

A2.3.3. Step 2 of TLP – Issue a Warning Order.

A2.3.3.1. The WARNORD sequence and RM information in the order may be addressed in terms of its applicability to the MDMP. When required, WARNORDs can be given verbally with only a few notes and a graphic overlay. **Table A2.5**, Squadron Warning Order Format, provides an example of a flight WARNORD with RM information included. The RM information in this example is general and should be expanded as subsequent guidance is received from higher HQ or as the situation changes. In this example, the leader includes an initial assessment of the potential for injury during a training event (ruck march). This could change on receipt of the final order.

Table A2.1. Squadron Warning Order Example.

CLASSIFICATION: UNCLASSIFIED			
WARNORD #1-Unit Local Training Event – Ruck March			
#####Date#####			
1. Situation. Operations Section was tasked by the commander to plan an eight-mile loop for flights to conduct ruck march training in vicinity of home garrison. All deploying personnel are required to accomplish the route in three hours or less with forty-pound rucks, assault vest with communications equipment, helmet, and assigned primary weapon.			
2. Mission. O/O, AFSOC squadron (-) conducts road march along Route SATHER for pre-deployment physical conditioning and gear familiarization.			
3. Execution. Flights will submit CONOP to operations detailing when and how they will accomplish assigned training event.			
Time Schedule:			
<ul style="list-style-type: none"> • Flight CONOP submitted by close of business today • Flight training event completed by end of week 			
Risk Guidance: Intent is to sustain this at an overall LOW. Initial risk to force hazards include heat, individual fatigue, excessive loads, traffic, and uneven terrain. Initial risk to mission includes other tasked training items impacting time available and rucking with live weapons increasing unit signature (requires WG/CC approval).			
4. Service Support. Flight leadership coordinate with medical section to ensure proper coverage, and armorer for weapon issue. Otherwise, flights will self-support with organic vehicles and equipment			
5. Command and Signal. Element leaders should train/supervise element members. When possible, flights should train together. Keep Operations Superintendent informed on progress and if any issues arise.			
[Commander's signature] [Commander's name, rank]			
Legend			
CONOP	Concept of the Operation	WARNORD	Warning Order
WG/CC	Wing Commander	O/O	On Order

A2.3.4. Step 3 of TLP – Make a Tentative Plan.

A2.3.4.1. Task Organization.

A2.3.4.1.1. From a RM perspective, commanders and leaders routinely examine higher HQ missions or orders to determine the level of risk. The leader will evaluate the abilities of the unit and may request support. If the leader has the required abilities available, that leader may task organize forces in a way that minimizes the hazards and risks while providing the proper capability at the best time and place on the battlefield.

A2.3.4.2. Command and Support Relationships.

A2.3.4.2.1. By specifying a chain of command, command relationships unify effort and enable commanders to use subordinate forces with maximum flexibility. The closer the command or support relationship, the more leaders must consider other forces not organic to their organization when identifying and assessing hazards. Other units may increase or decrease hazards on the battlefield as well as the overall risk, depending on mission and operational factors.

A2.3.4.3. Commander's Intent.

A2.3.4.3.1. The commander's intent is a clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides staff focus, and helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned. Many consider the commander's intent, along with the mission statement, to be the most important portions of an OPORD or WARNORD. It gives guideposts to planners and subordinate leaders for further planning and implementation. See [Table A2.2](#), Commander's Intent Example.

Table A2.2. Commander's Intent Example.

<p>CLASSIFICATION: UNCLASSIFIED</p> <p>Commander's Intent</p> <p>Purpose. Deploying unit members will conduct eight-mile tactical road march to demonstrate appropriate fitness required for pending contingency operations.</p> <p>Key Tasks.</p> <p>Coordinate with operations section to ensure proper deconfliction with base and off-base agencies</p> <p>Submit CONOP that includes RM by COB</p> <p>Risk (to force and mission) should not exceed LOW at any time</p> <p>Leaders should train with their assigned elements, teams, flights</p> <p>Accommodate for weather conditions, specifically mitigate impact of heat and dehydration</p> <p>Train with assigned equipment/weapons, but ensure no ammunition is issued</p> <p>Minimize training signature as required, ensure we train IAW Wing Instructions</p>
--

End State. Flights submit and execute CONOP IAW assigned timelines and requirements. All personnel complete training without injury or loss of equipment, no CCIRs, and minimal impact to garrison and surrounding communities. All personnel better prepared for pending deployment.

Legend

CONOP	Concept of the Operation	COB	Close of Business	CCIR	Commander's Critical Information Requirements
RM	Risk Management	IAW	In Accordance With		

A2.3.4.4. Concept of Operations.

A2.3.4.4.1. The Concept of Operations (CONOP) paragraph describes, in general terms, how the unit will accomplish its task or tasks from start to finish. It should identify all mission-essential tasks, the decisive points of action, and the main effort. It may also describe phasing and sequencing. It will not include risk guidance but will give generalized guidance on how the commander wants to see the operation unfold.

A2.3.4.5. Implementing Controls to Mitigate or Eliminate Risk.

A2.3.4.5.1. RM practitioners implement appropriate controls to mitigate or eliminate risk. Commanders are responsible for the implementation and maintenance of controls. Commanders expect staff and subordinate leaders to implement and maintain the controls to standard. A method to supervise and evaluate the effectiveness of controls may be as important as their implementation. Active leader participation at the lowest levels is a critical element in ensuring control implementation and maintenance. The leadership and staff should develop and employ the most effective controls for a given set of circumstances, while abandoning those found less effective. They ensure controls are correctly implemented and determine their effectiveness by tools such as the after-action review.

A2.3.5. Step 4 of TLP – Initiate Movement.

A2.3.5.1. Movement of forces may begin in stages or en masse. The rapid decision-making and synchronization process is most often used from this point on. The same five-step process for RM is applied at the real-time application level, however, due to time constraints, RM may be accomplished mentally, and controls and risk decisions transmitted verbally to subordinates. Leaders keep in mind that the depth of RM planning has a direct effect on performance under demanding conditions.

A2.3.5.2. The individual's primary role in RM is to support commanders and leaders in the rapid identification and communication of hazards and risks that arise and may affect the mission. This usually takes the form of providing immediate feedback to the leader as the operation progresses and hazards are encountered. During the execution of the operation, the individual becomes a primary source for actively identifying, reporting, and assessing hazards. Short written messages, hand and arm signals, or radio transmissions are all effective means of communicating first-hand information to leaders. However, individuals or small groups are expected to act alone when necessary, making risk decisions within the context of orders. This is why it is imperative for leaders to ensure every individual understands how to use the five-step process to enhance mission accomplishment and reduce or eliminate loss. Being skilled in a real-time application of RM, both on and off-duty, is critical at the individual and small-group level.

A2.3.6. Step 5 of TLP – Conduct Reconnaissance.

A2.3.6.1. Throughout the preparation for and execution of an operation, leaders should take every opportunity to improve their situational understanding. This requires aggressive and continuous information collection. Sources of information about threats include reconnaissance, intelligence, and experience or expertise of the leader and staff. Leaders at lower levels may need to depend on higher HQ for the majority of their information and intelligence. However, it is the lower-level leader's responsibility to apply the information gathered to this point of operation on the battlefield. Likewise, it is the leadership's responsibility to integrate that information and information about the unit's capabilities and limitations to assess risk and implement appropriate controls within the appropriate guidance. Without a staff, the leader must remain more flexible and assign information collection duties as individual and mission capabilities within the command allow. Often, direct information collection (including reconnaissance) begins early in the planning cycle and must continue through the preparation and execution. Through information collection, leaders and staffs continuously plan, task, and employ collection assets and forces to collect timely and accurate information that answers commander's critical information requirements and other information requirements. Relevant and timely requests for information must be made to higher HQ. These requests may focus directly or indirectly on risk reduction (tactical or non-tactical).

A2.3.6.2. The force as a whole is often most vulnerable to surprise and enemy attack during preparation—when forces are concentrated in assembly areas, when leaders are away from their units, and when troops are concentrated together during rehearsals. Security missions—screen, guard, cover, area security, and local security—are essential during preparation. Safety and security work in tandem. The leader must continually assess the risk and implement appropriate controls to counter the threat. Preparing for the

unexpected is also a major part of RM. Well-rehearsed pre-attack and pre-accident plans minimize the risk from unexpected events.

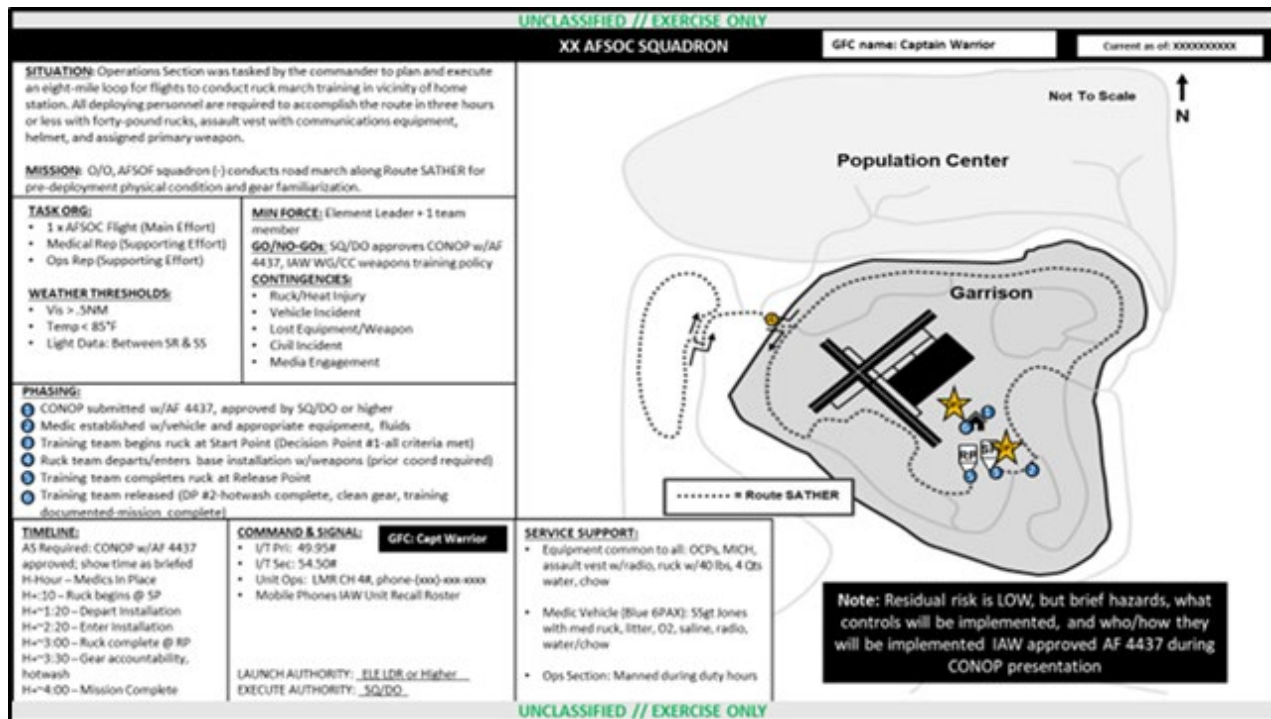
A2.3.7. Step 6 of TLP – Complete the Plan.

A2.3.7.1. During step 6 of TLP, the leader ensures all guidance is captured and made deliverable in a clear and concise format. Formats should be consistent and part of unit SOPs. The leader completes a plan based on the reconnaissance and any changes in the situation. The leader should review the mission, as received from the commander, to ensure the plan meets the requirements of the mission and stays within the framework of the commander's intent. The plan must specify identified hazards, controls to be implemented, who is responsible for implementing and maintaining them, how and when they will be implemented, and who will supervise. **Figure A2.7**, Concept of the Operations, provides an example CONOP sketch (modified 5-paragraph OPORD for local training event) and **Figure A2.6**, AF 4437 Deliberate Risk Assessment Worksheet Example depicts the AF 4437 for the illustrative ruck training event. This is submitted for training events and is part of completing the plan. The AF 4437 should be approved and presented as part of Step 7, issuing the order.

A2.3.8. Step 7 of TLP – Issue the Order.

A2.3.8.1. The order must be disseminated so that all units receive and acknowledge its receipt. An order not received is an order not given. Leaders must ensure that subordinates understand the mission, the commander's intent, the concept of operations, and their tasks. This includes the risk tolerance, controls, and limitations set. Leaders may require subordinates to repeat all or part of the order or demonstrate on the terrain model, sand table, or sketch to gauge their understanding of the operation. One-on-one or en masse back briefs may also be used to ensure understanding. RM must be integrated thoroughly into the plan, and the risk guidance plainly stated. In training, the AF Form 4437 is required and may be included as an attachment or annex to the operations order or concept of the operation. During contingency operations, risk may be characterized as Risk to Force and Risk to Mission, but the AF Form 4437 may still be used to procedurally ensure critical risk-related information is gathered and addressed to properly mitigate tactical and accidental risk during execution. Commanders and leaders should clarify their expectations on what and how RM is briefed as part of the order.

Figure A2.5. Concept of the Operation Example.



A2.3.9. Step 8 of TLP – Supervise and Refine the Plan.

A2.3.9.1. Leaders supervise the unit's preparation for combat by conducting rehearsals and inspections. Leaders will address points of conflict as well as any changes during this time. Refining the plan as changes occur is critical. Time may not allow for written changes at this point. The leader must ensure all involved thoroughly understand any changes made to the plan. From this point on, real-time RM becomes more likely, as available planning time will not be sufficient for deliberate RM.

A2.3.9.2. Leaders must ensure subordinates understand their risk tolerance and what authority they have to accept risk as the plan deviates. Regardless of their physical proximity to the operation, commanders and leaders must remember they can delegate authority but not responsibility for RM.

A2.3.9.3. Rehearsals can be an invaluable aid in ensuring mission accomplishment. During rehearsals, key personnel walk through the operation and address contingencies. The leader should conduct rehearsals on terrain that resembles the actual ground. Rehearsals include having junior leaders brief their planned actions in execution sequence to their senior leaders and their peers. This allows the senior leader to make modifications and others to visualize the operation as the leader intended. This is another opportunity for leaders to reinforce their risk tolerance and criteria to accept new risk as it emerges. Rehearsals may be conducted at several levels, beginning at the team or element level, with key players attending the next higher-level rehearsal.

Figure A2.6. AF 4437 Deliberate Risk Assessment Worksheet Example.

DELIBERATE RISK ASSESSMENT WORKSHEET									
AGENCY DISCLOSURE NOTICE: Voluntary, however, failure to use may have a negative effect on mission effectiveness at all levels and lead to failure of preserving assets and safeguarding health and welfare.									
AUTHORITY: DoDI 6055.01, AFPD 90-8 and AFI 90-803. PRINCIPAL PURPOSE: Conduct a formal risk assessment and ensure the assessment is properly documented for future evaluation and reference. ROUTINE USES: Used to develop and enhance awareness and understanding of at-risk activities and behavior of personnel both on- and off-duty. SYSTEM OF RECORDS NOTICE: Not applicable.									
1. EVENT/MISSION/TASK OF RISK ASSESSMENT:									
A. EVENT DESCRIPTION Tactical 8-Mile Ruck (training)					B. EVENT DATE				
2. PREPARED BY:									
A. LAST NAME, FIRST, MI Warrior, John			B. RANK/GRADE Capt/O-3		C. DUTY TITLE/POSITION Flight Commander				
D. WORK EMAIL John.Warrior.1@us.af.mil			E. PHONE DSN/COMM XXX-XXXX		F. UNIT AFSOF Squadron				
G. UIC/CIN (as required)			H. TRAINING SUPPORT/LESSON PLAN OR OPORD (as required) Training Support						
ALLEGIANCES	ELEM of Hazard	Risk Assessment Matrix		PROBABILITY Frequency of Occurrence Over Time					
		Disastrous (Loss of Asset, Mission Capability or Unit Readiness)	I	EH	EH	H		H	M
		Critical (Severe Injury or Damage, Significantly Degraded Mission Capability or Unit Readiness)	II	EH	H	H		M	L
		Moderate (Minor Injury or Damage, Degraded Mission Capability or Unit Readiness)	III	H	M	M		L	L
		Negligible (Minimal Injury or Damage, Little or No Mission Capability or Unit Readiness)	IV	M	L	L		L	L
Risk Assessment Levels EH-Extreme; H-High; M-Medium; L-Low									
3. SUB-TASK/SUB-STEP AND RISK ASSESSMENT (Fields expand as needed, Add, Remove and Move Sub-Task/Steps with left side controls)									
#	A. SUB-TASK/SUB-STEP	B. HAZARD	C. INITIAL RISK LEVEL	D. CONTROL	E. HOW TO IMPLEMENT WHO WILL IMPLEMENT	F. RESIDUAL RISK LEVEL			
1	Gear Preparation/Clean-up	Lifting Heavy Objects	L (IV, C)	Use proper lifting techniques	How: Brief Expectations Who: All personnel	L (IV, D)			
2	8-Mile Ruck (hump)	Fatigue/Exhaustion/Dehydration	M (III, C)	Ensure all personnel are rested and without injury. 4 Quarts of water carried, additional water avail, mandatory water breaks, medic on-scene	How: Schedule appropriate rest into training schedule. WARNORD ID water requirements. Support team and medic with additional water and medical gear. Who: Flight Sup, Medic	L (IV, C)			
3	8-Mile Ruck (traffic)	Carrying heavy load vicinity on and off-base traffic	L (IV, C)	All participants marked with reflective belt. Ruck also marked with reflective belt. Participants remain on paths, cross only at cross-walks.	How: Brief expectations Who: All personnel	L (IV, C)			
4	Media and/or civil engagements	Adverse media or civil engagement off-base while wearing full kit and rifle	M (III, C)	Coordinate with base personnel, wear proper uniform, no magazine in weapon and proper weapon discipline, respectful to all persons, refer questions to base public affairs, report any incidents immediately.	How: Brief expectations Who: Flight CC/Sup	L (IV, D)			
G. COURSE OF ACTION Reference Ruck CONOP submitted to operations for approval, dated XXXXXXXXXX									
H. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED LOW (II-E; III-D&E; IV-B to E)				I. PREPARER SIGNATURE Warrior					

A2.4. Rapid Decision-Making and Synchronization Process.

A2.4.1. Experience is the result of all learning events both good and bad. Therefore, most individuals have some experience to draw upon when responding to an event. The task for leaders and individuals is to marshal and coordinate the experience from personnel involved in a mission or a task to assist in the RM process. The Air Force’s real-time RM ABCD Model establishes a standard structure for teams and individuals to learn and effectively apply new or complex behaviors, skills, values and understanding to a situation. Using the ABCD Model in

a real-time RM application, regularly, will result in deep memory of those learned qualities. When individuals execute tasks, they have an expectation of a response consistent with their experience. Using a standard real-time RM model allows leaders and individuals to have an expectation of a response consistent with their experience. By recalling and communicating with the same standardized ABCD Model, the ability to match a previous mission or task to a new experience provides uniform and consistent responses when considering RM decisions. It is necessary to develop habits that trigger the real-time RM process to “Assess” the situation, “Balance” controls, “Communicate” to others, and “Decide” upon a course of action and ultimately “Debrief” the event. Standardizing the communication structure in a real-time RM situation reduces conflicts and errors and improves the ability to manage risk and resources.

A2.4.1.1. Referencing [Figure A2.7](#), USAF Real-Time Risk Management Model, this first step of the real-time RM/ABCD model effectively combines the first two steps of the 5-Step RM process. The second step is specifically tied to making risk control decisions (step three of the 5-Step process) to mitigate or eliminate the risks identified in assessing the hazards of an activity. After assessing the situation, personnel must consider all available controls (resources) to facilitate mission or activity success and how to manage those controls effectively. Controls/resources can vary in scope and availability from situation-to-situation, but the better prepared an individual is prior to an activity, the more likely they will have more controls/resources available to create multiple redundancies or “blocks” to effectively mitigate and deflect potential risks in real-time.

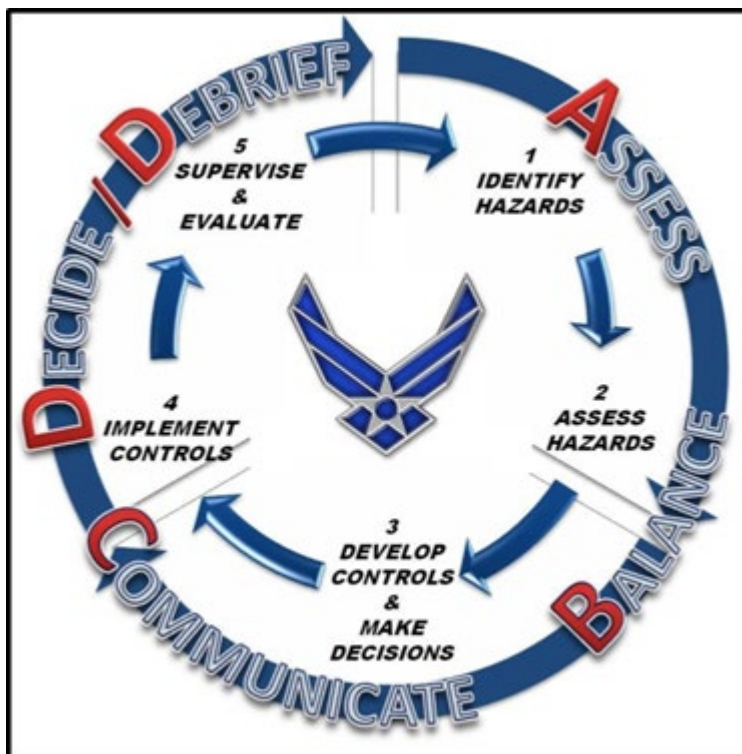
A2.4.1.2. The third step of this model is to communicate. Communication can take various forms. For instance, real-time communication with leadership to discuss problems and/or intentions, internal team communication to discuss real-time risk mitigation options, or even an individual internalizing their current situation and taking time to contemplate if they are heading down the right path. This step assumes individuals have adequately assessed the situation and considered the resources at their disposal to effectively make a risk mitigation decision. A critical part of this step is to be aware of how perception and communication change depending upon the situation and circumstances that are present in a dynamic environment. Perception and communication change as individuals become more stressed and begin to lose situational awareness. Understanding this, an individual or group can quickly identify if they or others are losing situational awareness. This awareness allows individuals to communicate with leadership and teammates more effectively in real-time situations. It enables them to identify when they or others are losing situational awareness and allows them to take a step back and reevaluate options.

A2.4.1.3. The final step of the ABCD model is to make the decision to continue, modify or abandon the mission/activity based upon Real-Time circumstances and conditions. Unlike step 4 of the 5-Step process where an implementation strategy is carefully developed and carried out through ID of the who, what, when, where and cost associated with the control prior to an activity, real-time RM relies on the individual or small group taking immediate or near immediate action to mitigate risk(s) in real-time. This aspect alone incorporates more inherent risk than deliberate RM decisions. Individuals must realize this and make every effort to deliberately weigh risk decisions before taking action to ensure they are selecting the best COA. Sometimes the original plan must be modified or changed to account for unforeseen issues in order to assure success. Although minor changes or modifications to a plan or strategy may be easily implemented, others may

require higher authority (if available) to properly weigh the risk and reward decision. Accountability under these circumstances rests solely with the individual(s) involved in the activity and it is their responsibility to fully understand the scope and limits of their Go/No-Go decision and act accordingly. As such, the acceptance of risk and associated consequences needs to be taken seriously and the decision-maker should consider the possibility of abandoning the mission or activity if the situation appears too risky or costly to continue and there are no reasonable options or strategies to change/alter the circumstances in the time remaining to conduct the mission/activity.

A2.4.1.4. As with the formal 5-Step RM Process, it is essential that both leadership and personnel involved in a mission/activity ensure that the feedback loop or “Debrief” aspect of the “D” is performed. Ensuring individuals follow through and complete the ABCD mnemonic loop by identifying what worked, what did not work, and ensuring dissemination of documented lessons learned is a vital key to this process. Debriefs will improve performance, mitigate risks in future activities, and are essential in completing the ABCD loop.

Figure A2.7. USAF Real-Time Risk Management Model.



Attachment 3

APPLICATION TO THE MILITARY DECISION-MAKING PROCESS

A3.1. Application to the Military Decision-Making Process.

A3.1.1. This chapter discusses risk management planning considerations and techniques for the military decision-making process.

A3.2. Planning Considerations for the Military Decision-Making Process.

A3.2.1. General Risk Management Emphasis During the MDMP.

A3.2.1.1. Each of the five steps of RM tends to require emphasis at different times during the MDMP (see [Table A3.1](#), Risk Management in the Military Decision-Making Process). While planning doctrine places the beginning of formal RM in mission analysis, leaders can begin identifying hazards upon receipt of the mission. The representation in [Table A3.1](#) is not intended to be prescriptive; the steps of RM are dynamic and cyclical. RM is an adaptable integrating process. Planners use RM to identify, assess, and control hazards, reducing their effect on operations and readiness.

A3.2.2. General Sequence of the MDMP and Risk Management Steps.

A3.2.2.1. Commanders and staffs normally identify hazards in each sequential step of the MDMP. They determine existing and potential hazards through the steps of mission receipt, mission analysis, and course of action (COA) development and analysis. During orders production, preparers should clearly describe significant hazards in orders so they are documented and forces can understand them precisely. Commanders and staffs assess hazards in conjunction with mission analysis, COA development, COA analysis, and orders production. Results of risk assessments (including residual levels of risk and controls selected for mitigating hazards) may be included with the orders. Commanders and staffs develop controls and make risk decisions during COA development, COA analysis, COA comparison, and COA approval. Staffs implement RM controls during the last step of the MDMP. This step includes orders production, dissemination, and transition. Leaders continuously assess the effectiveness of controls and changing or unexpected situations or events. They adjust operations as necessary to remain within the risk tolerance.

A3.3. Risk Management Techniques for the Military Decision-Making Process.

A3.3.1. [Paragraphs 5.3.2.](#) through [5.3.8](#) discuss selected techniques for applying RM during the MDMP. RM is ongoing throughout the MDMP.

Table A3.1. Risk Management in the Military Decision-Making Process.

<i>Military decision-making process</i>	<i>Risk management steps</i>				
	Identify the hazards	Assess the hazards	Develop controls and make risk decisions	Implement controls	Supervise and evaluate
Receipt of mission	X				
Mission analysis	X	X			
Course of action development	X	X	X		
Course of action analysis	X	X	X		
Course of action comparison			X		
Course of action approval			X		
Orders production, dissemination, and transition	X	X	X	X	X

A3.3.2. Step 1 of the MDMP – Receipt of Mission.

A3.3.2.1. The MDMP starts with the receipt of a mission. Missions can be provided in formal, written orders or directives, or they can be informal and communicated by more expeditious means. Commanders consider the following elements of concern to RM: Risk tolerance, Mission variables or operational variables, Controls from higher headquarters (HQ), and Coordination of controls with adjacent units.

A3.3.2.2. Each commander must ensure a thorough understanding of the mission, including the senior commander's intent and the risk tolerance. A commander receiving a mission will analyze it and assign subordinate missions. The combined risks identified for these additional missions and tasks may modify the overall residual risk for the mission, possibly to a higher level than the risk tolerance.

A3.3.2.3. Risk Tolerance in Orders.

A3.3.2.3.1. Each commander receiving a mission must know the level of command that determines the risk tolerance and eventually will make the risk decision for a mission. The staff examines the warning order from higher HQ to identify the risk tolerance (the level of risk the responsible commander determines is acceptable—see [paragraph 1.6](#)) for the mission. The commander should express the risk tolerance as a level of risk—Extremely High, High, Medium, or Low—that each subordinate commander can accept. Reference [Figure A3.1](#), Sample Warning Order and [Figure A3.2](#), WARNORD CONOP Sketch for examples of initial warning order and higher HQ's scheme of maneuver. The level of specificity will depend on the amount of information available to higher HQ when publishing the initial WARNORD.

A3.3.2.4. Mission Variables or Operational Variables

A3.3.2.4.1. Upon receipt of mission, commanders should anticipate the need for additional assets. Commanders may ask their higher HQ for asset support to mitigate risk. The higher HQ may have access to assets that subordinate elements do not. This is particularly true of intelligence, reconnaissance, and weather elements that can see specific battlefield hazards. During mission analysis, staffs will use the factors of METT-TC (mission, enemy, terrain and weather, troops and support available, time available, and civil considerations) and PMESII-PT (political, military, economic, social, information, infrastructure, physical environment, and time) as frameworks for identifying hazards and determining assets needed.

A3.3.2.5. Controls from Higher Headquarters

A3.3.2.5.1. The WARNORD and the OPOORD specify controls implemented by the higher HQ. The commander must carefully assess the impact of these controls on the mission, particularly in terms of required coordination, manpower, and equipment constraints that might detract from the primary mission. If Airmen encounter a significant problem during the execution of an operation and they believe it is related to a control, they should notify appropriate leadership.

A3.3.2.6. Coordination of Controls with Adjacent Units

A3.3.2.6.1. In some circumstances, such as passage of lines, river crossing, or screening, a unit's primary mission may be to implement a control that reduces the risk to the higher HQ's mission. This requires coordination with adjacent units to identify hazards and controls and define procedures for the tasks. It is imperative that the method and time for control implementation, as well as critical communication methods, are set between the unit implementing the control and units involved in other aspects of the mission. The supported command should coordinate all actions to support its mission.

A3.3.2.6.2. The commander's initial guidance from higher HQ should address the following considerations:

A3.3.2.6.2.1. Risk tolerance. Commanders must specify the level of risk (Extremely High, High, Medium, or Low) subordinate commanders are authorized to accept. This should be stated clearly within standing guidance, coordinating instructions or set as a separate paragraph.

A3.3.2.6.2.2. Hazards already identified and categorized by METT-TC and related controls that may affect the unit's mission.

A3.3.3. Step 2 of the MDMP – Mission Analysis.

A3.3.3.1. As commanders and staffs develop situational understanding, their application of RM is crucial. Staffs should integrate RM into the steps and products of mission analysis. As they maintain running estimates and other assessments, they should continuously integrate RM considerations. They should continue to apply RM throughout operations, during planning, preparation, and execution. Paragraphs [A3.3.3.2.1](#) through [A3.3.3.2.20](#) describe ways that staffs can apply RM during selected steps of mission analysis.

Figure A3.1. Sample Warning Order.

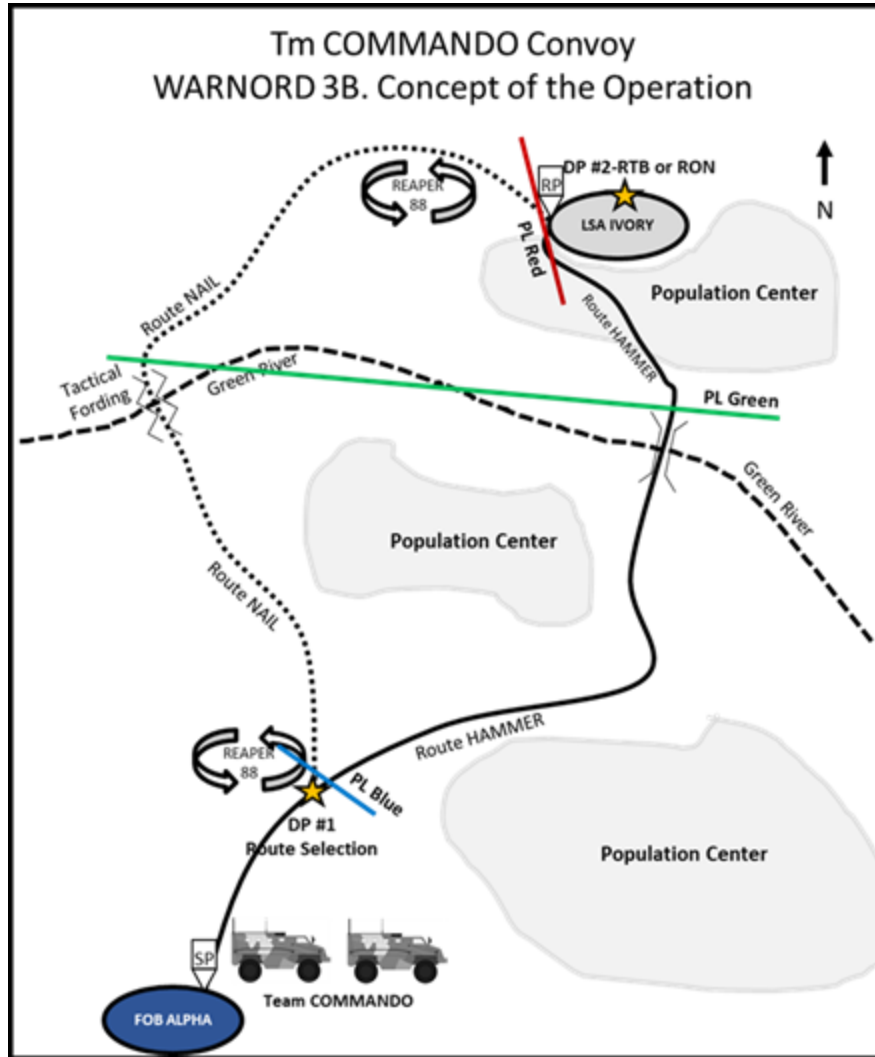
1. **(U) Situation:** AFSOC ground forces (Team Commando) operating in north Africa must convoy from FOB to Logistics Supply Area (LSA) for resupply and refit operations
- (U) Area of Interest/Operations: Per DEPORD
 - (U) Enemy Forces: Squad-size rebel forces (SMARMs and RPGs) occasionally postured on remote LOCs, increased rebel sympathy in population center east of LSA Ivory
 - (U) Friendly Forces:
 - Host Nation. 12th Royal INF providing presence patrols on major LOCs and population centers
 - CJSOTF. 2 x ODAs continue presence patrols vicinity of FOB
 - CFLCC. 1st BDE, 4 INF supports BPC ops vic FOB Alpha
 - (U) Interagency Operations. Intelligence services continue collaboration to inform force protection threats
 - (U) Civil Considerations. Friday prayers will increase afternoon activity in population centers
 - (U) Attachments & Detachments. 1 x contracted Interpreter in support
2. **(U) Mission:** NLT 081430Z August 20XX, Team Commando convoy from FOB Alpha to LSA Ivory to resupply and refit to sustain CJSOTF building host nation partner capacity to stabilize government control of rebel locations
3. **(U) Execution.**
- (U) Commander's Intent. Team COMMANDO will convoy from FOB to LSA to refit and resupply, then convoy back to FOB to sustain AFSOF support to CJSOTF building partner capacity support to HN forces.
Key Tasks.
 - Conduct IPB to mitigate enemy threat and accidental risks
 - Coordinate with battlespace owners to minimize fratricide risk
 - Conduct in-depth convoy brief, rehearse vehicle immediate action drills, conduct COMMEX before LD
 - Maintain accountability and security throughout the operation
 - Ensure LSA coordination is completed prior to execution to minimize delay
 - Minimize exposure in population areas, avoid Friday prayers or other large gatherings
 - Sustain OPSEC and passive PA posture
 - Risk (to force and mission) should not deliberately exceed MEDIUM at any time
 End State. Team COMMANDO execute refit and resupply operations without injury or equipment loss. Enemy unable to influence the operation. Team COMMANDO reset at FOB ALPHA prepared for CJSOTF taskings.
 - (U) Concept of Operations. Team Commando convoy along Route Hammer to LSA to resupply and refit. Threat dependent, Team Commando can divert to Route Nail. Team Commando will make decision to return to FOB or RON based on time and threat (reference figure 4-3 for CONOP sketch)
 - (U) Tasks to Maneuver Units.
 - Team Commando conducts convoy to LSA; resupply and refit, conducts convoy to FOB, determine primary and secondary routes
 - RPA (REAPER 88) reconnoiter routes and armed overwatch of convoy to LSA. On call to support RTB to FOB
 - (U) Coordinating Instructions
 - Timeline
NLT 081430Z, Team Commando depart FOB (C-Hour)
C+30-Decision Point #1-Route Hammer or Route Nail
C+1.5-cross Green River
C+2.5-arrive LSA, begin resupply/refit
C+4.5-Decision Point #2-RTB or RON
ON ORDER – RTB
 - Priority of Fires – REAPER 88 DS to Team Commando
 - Risk Guidance

Hazard: Enemy Threat	Control: Avoid contact, ISR & JTAC min force, rehearse vehicle IADs
Hazard: Vehicle Accident	Control: PPE, rested drivers, use speed judiciously, embedded medic
Hazard: Tactical Forging	Control: Forging limitations-Depth < 2', Current < 2Kts, wear flotation during crossing
Hazard: Fratricide	Control: Battlespace coordination, BFT use, vehicle and uniform markings

 Risk to Force: MED –avoid enemy, fires/JTAC available, river crossing, PPE use, embedded medic
 Risk to Mission: LOW – coord with CJSOTF, battlespace owners & LSA to accomplish tasks

4. (U) Sustainment: Per FRAGO XXXXXX and unit SOP.
 5. (U) Command and Signal. Per FRAGO XXXXXX.

Figure A3.2. WARNORD CONOP Sketch.



A3.3.3.2. Analyze Higher Headquarters Plan or Order.

A3.3.3.2.1. Staffs examine and analyze orders from higher HQ to identify any changes from the original WARNORD and any follow-on or implied missions. They confirm with higher HQ specific hazards categorized by the mission variables (METT-TC), and higher HQ identifies controls along with resources for implementation. Depending on the organizational level, the order may address the hazards and controls in one general risk assessment or in a risk assessment for each staff annex. If a commander decides to use operational design methodology as part of mission analysis, the commander and staff should consider RM within the analysis of the operational environment. They should review several factors before beginning to write supporting risk assessments:

A3.3.3.2.1.1. Operational timeline.

A3.3.3.2.1.2. Missions of adjacent units.

A3.3.3.2.1.3. Controls identified in the coordinating instructions of the order that are not already standardized in the unit standard operating procedure. Staffs should check these controls closely for special recognition and fratricide prevention measures. They should request further information from higher HQ, if needed.

A3.3.3.2.1.4. Running estimates. Each running estimate should contain risk guidance and risk assessments that address hazards and controls given in the order and all others that arose during development of the estimate. **Figure A3.3**, Sample Running Estimate Incorporating Risk Management Information, illustrates how RM information may be included in a sample running estimate.

A3.3.3.2.2. Perform Initial Intelligence Preparation of the Battlefield.

A3.3.3.2.2.1. Intelligence preparation of the battlefield is a systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest and for a specific mission. By applying intelligence preparation of the battlefield, commanders gain the information necessary to selectively apply and maximize operational effectiveness at critical points in time and space (FM 2-01.3). Led by the intelligence officer, the entire staff—including the safety officer or safety manager—participates in developing and sustaining an understanding of the enemy, terrain and weather, and civil considerations. Intelligence-gathering efforts help identify options available to friendly and threat forces. This step should include identifying and recommending controls for common hazards, hazards due to gaps in intelligence, and hazards from enemy intelligence-gathering.

A3.3.3.2.2.2. The risk assessment considerations for the steps of intelligence preparation of the battlefield (IPB) are:

A3.3.3.2.2.2.1. Define the operational environment. As the intelligence staff assesses areas of interest and intelligence gaps, it determines risk in the current operational environment. In addition, the staff anticipates likely changes in the operational environment and forecasts accompanying risk.

A3.3.3.2.2.2.2. Describe the environmental effects on operations. The intelligence staff performs risk assessments to help manage hazards from terrain, weather, and civil considerations. They perform risk assessments for hazards related to all operational variables simultaneously. For example, hazards may be associated with enemy and friendly avenues of approach, battle positions, and engagement areas.

A3.3.3.2.2.2.3. Evaluate the threat. The intelligence staff performs risk assessments to ascertain how the enemy's organization and combat power might adversely affect the unit's mission. Although the focus is on the potential for the enemy's actions to create hazards, the staff must also consider how such a hazard will limit or impede friendly action.

A3.3.3.2.2.2.4. Determine threat COAs. The staff performs a risk assessment to determine the level of risk associated with each enemy COA.

A3.3.3.2.3. Preparing Running Estimates.

A3.3.3.2.3.1. A running estimate is the continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable (ADP 5-0). The commander and each staff element maintain a running estimate. In their running estimates, the commander and each staff element continuously consider the effects of new information and update the following:

A3.3.3.2.3.1.1. Facts.

A3.3.3.2.3.1.2. Assumptions.

A3.3.3.2.3.1.3. Friendly force status.

A3.3.3.2.3.1.4. Enemy activities and capabilities.

A3.3.3.2.3.1.5. Civil considerations

A3.3.3.2.3.2. A comprehensive running estimate addresses all aspects of operations and contains both facts and assumptions based on the staff's experience within a specific area of expertise. Because the running estimate is a picture relative to time, facts, and assumptions, each staff element constantly updates the estimate as new information arises, as assumptions become facts or are invalidated, when the mission changes, or when the commander requires additional input.

Figure A3.3. Sample Running Estimate Incorporating Risk Management Information.

Functional Area: i.e. A1, A2, A3, A4, A6, Air Planner etc.

1. SITUATION AND CONSIDERATIONS.

a. **Area of Interest.** Identify and describe factors of the area of interest that affect functional area considerations.

b. **Characteristics of the Area of Operations.**

(1) **Terrain.** State how terrain affects a functional area's capabilities.

Risk Assessment Note: State the level of risk (extremely high, high, medium, or low) created from hazards associated with the military aspects of terrain. Include types of controls to reduce the risk to or below the level set by guidance (the risk tolerance).

(2) **Weather.** State how weather affects a functional area's capabilities.

2. Risk Assessment Note: State the level of risk (extremely high, high, medium, or low) from hazards associated with the military aspects of weather. Include types of controls to reduce the risk to or below the level set by guidance (the risk tolerance).

- (1) **Enemy Forces.** Describe enemy disposition, composition, strength, and systems within a functional area. Describe enemy capabilities and possible courses of action (COAs) and their effects on a functional area.

Risk Assessment Note: State any particular tactical risk hazards that may result from enemy disposition or capabilities.

- (2) **Friendly Forces.** List current functional area resources in terms of equipment, personnel, and systems. Identify additional resources available for the functional area located at higher, adjacent, or other units. List capabilities from other military and civilian partners that may be available to provide support within the functional area. Compare requirements to current capabilities and suggest solutions for satisfying discrepancies.

Risk Assessment Note: Be alert to any hazards that may be created by units operating forward or adjacent to friendly forces. Weapons capability and limitations must be examined closely, especially for issues such as overhead fire, no-fire zones, limits of advance, and others. Avoid making assumptions.

- (3) **Civil Considerations.** Describe civil considerations that may affect the functional area, including possible support needed by civil authorities from the functional area as well as possible interference from civil aspects.

- b. **Facts/Assumptions.** List all facts and assumptions that affect the functional area.

2. **MISSION.** Show the restated mission resulting from mission analysis.

3. COURSES OF ACTION.

- a. List Potential Friendly COAs. (Actual friendly COA development is later in MDMP)
- b. List enemy actions or COAs that were templated that affect the functional area.
- c. List the evaluation criteria identified during COA analysis. All staffs use the same criteria.

Risk Assessment Note: Ensure all accident and tactical hazards and risks are included for each COA.

4. **ANALYSIS.** Analyze each COA using the evaluation criteria from COA analysis. Review enemy actions that affect the functional area as they relate to COAs. Identify issues, risks, and deficiencies these enemy actions may create with respect to the functional area.

5. **COMPARISON.** Compare COAs. Rank order COAs for each key consideration. Use a decision matrix to aid the comparison process.

Risk Assessment Note: Ensure the decision matrix clearly shows the level of risk and the priority hazards and controls for each COA.

6. RECOMMENDATIONS AND CONCLUSIONS.

- a. Recommend the most supportable COAs from the perspective of the functional area. Prioritize and list issues, deficiencies, and risks, and make recommendations on how to mitigate them.

A3.3.3.2.4. Determine Specified, Implied, and Essential Tasks.

A3.3.3.2.4.1. A task is a clearly defined and measurable activity accomplished by individuals, units, or organizations. Staffs apply RM to the review of specified and implied tasks to understand:

A3.3.3.2.4.1.1. How specified tasks within the order are addressed and prioritized for controls are to be implemented for all operational hazards.

A3.3.3.2.4.1.2. How implied tasks are synchronized to support the specified tasks and avoid creating additional hazards.

A3.3.3.2.4.1.3. How to prepare and coordinate risk assessments to support the identified tasks.

A3.3.3.2.5. Review Available Assets and Identify Resource Shortfalls

A3.3.3.2.5.1. The staff conducts an in-depth analysis to determine if the current task organization and resources are sufficient to support mission accomplishment within the risk tolerance. Staffs consider whether insufficient manpower, skills, supplies, or positioning of units pose risks to the mission. Staffs strive to identify and overcome these shortcomings and lower the residual risk through controls.

A3.3.3.2.6. Determine Constraints.

A3.3.3.2.6.1. Constraints are restrictions placed on the mission, most often by higher HQ. Paragraphs that apply to the scheme of maneuver, concept of operations, or coordinating instructions usually contain guidance. The order from higher HQ should address hazards to the overall mission and provide specific controls in the main body or annex. Any staff risk assessments must consider these constraints.

A3.3.3.2.7. Identify Critical Facts and Develop Assumptions.

A3.3.3.2.7.1. Facts are known information about a current situation. Assumptions are beliefs based on experience that a specific reaction will result from an action. As the mission or operation develops, some assumptions may or may not become facts. Any assessment based on assumptions must be adjusted to accommodate the situation with appropriate controls. From the RM perspective, staffs should perform risk assessments to determine the likelihood that any assumption could lead to a new hazard that affects the risk level.

A3.3.3.2.8. Begin Risk Management.

A3.3.3.2.8.1. While begin risk management is a subordinate process of mission analysis, this does not mean RM is entirely limited to mission analysis or even to planning. Planners consider how to integrate RM considerations into each step of planning as well as throughout the operation. This step of mission analysis may be the staff's first formally documented risk assessment effort. The staff compiles into a preliminary worksheet all the risk assessment information acquired during;

A3.3.3.2.8.1.1. Analysis of the order.

A3.3.3.2.8.1.2. Development of the information collection plan.

A3.3.3.2.8.1.3. Determination of specified and implied tasks.

A3.3.3.2.8.1.4. Review of available assets.

A3.3.3.2.8.1.5. Determination of constraints.

A3.3.3.2.8.2. The final risk assessment must be recorded. In most cases this will be on AF Form 4437, unless a suitable substitute is approved by the Wing CC or AFSOC Staff. The AF Form 4437 provides the construct for identifying and recording hazards, the analysis, and the suggested controls from each running estimate. During planning, staffs can use a simple, preliminary assessment worksheet to summarize essential information from each staff section or for each subtask.

A3.3.3.2.8.3. Any preliminary risk assessment worksheet should include identified hazards, their assessed levels, and suggested initial controls from each running estimate. It should present them in a visual format easily joined with other staff assessments for the mission analysis brief. A consolidated matrix displays the various running estimates along with the hazards, assessment levels, and suggested controls. The matrix helps the staff see the overall direction the RM effort should take to support the mission. The matrix leads to the final AF Form 4437, which helps synchronize the overall RM effort. **Figure A3.2**, Sample Consolidated Preliminary Risk Assessment Worksheet, depicts an example of a partially completed preliminary worksheet (steps 1, 2, and part of 3 of the five-step process). The final version would consolidate the risks and proposed controls identified by each staff section.

A3.3.3.2.9. Develop Initial Commander's Critical Information Requirements and Essential Elements of Friendly Information.

A3.3.3.2.9.1. During mission analysis, the staff identifies gaps in information required for further planning and decision-making during preparation and execution. Commander's critical information requirements (known as CCIRs) include friendly force information requirements and priority intelligence requirements. An essential element of friendly information (known as EEFI) is an element of friendly force information that, if compromised, would jeopardize mission accomplishment. This information, if obtained by enemy forces, would increase the risk of the operation. During mission analysis, the staff develops information requirements based upon such importance. Staffs may nominate certain requirements to the commander to become a commander's critical information requirement or an essential element of friendly information.

A3.3.3.2.10. Develop the Initial Information Collection Plan

A3.3.3.2.10.1. A supporting risk assessment worksheet may be prepared with the information collection plan. The risk assessment information developed along with the information collection plan is used during the conduct of intelligence, surveillance, reconnaissance, and security. Gaps in the information collection plan lead to increased risk. Therefore, controls are needed to mitigate or eliminate such risk. Controls may be applied to:

A3.3.3.2.10.1.1. Surveillance and reconnaissance assets.

A3.3.3.2.10.1.2. Task organization shortfalls.

A3.3.3.2.10.1.3. Fire support coordination measures.

Figure A3.4. Sample Consolidated Preliminary Risk Assessment Worksheet.

Staff Estimates	Hazards Identified	Initial Assess	Proposed Controls
Movement & Maneuver Estimate	Route Hammer: increased traffic, signature, populated areas, channelized at bridge	High	Travel during reduced civilian activity; ISR on bridge before/during crossing
	Route Nail: unpaved, river fording	Medium	Maintain proper speed, cross at shallows
Intelligence Estimate	HN (12 Royal Inf) lacks sophisticated coord and counter-frat techniques	High	Use CJSOTF LNO to ensure proper coordination, share BFT feed with HN C2
	Unpredictable enemy movements, minimal pattern of life analysis avail	High	Use route Nail or avoid large gatherings. Consider helicopter resupply vice convoy
Fires Estimate	RPA fires in populated areas	High	JTAC and electronic tagging
	Fires contingent on favorable weather	Med	Operate during favorable weather conditions, consider RPA min force
Sustainment Estimate	Two-vehicle convoy, limited organic redundancy	Med	Add additional vehicle for support
	Need LSA reception/coord to ensure supplies avail	Med	Coordinate with LSA LNO prior to departure
	RON at LSA pre-coordinated	Low	Pre-coordinate billets
Protection Estimate	OSI threat assessment pending	Pending	Await OSI threat assessment and adjust plan if required
	Crew serve weapons increase protection but also increase signature	Medium	JTAC, travel during low visibility periods, long-range weapon instead of crew served

A3.3.3.2.11. Update Plan for the Use of Available Time

A3.3.3.2.11.1. As updated information arrives, the commander and staff examine the mission and its associated tasks within the allocated time line. Commanders should provide adequate planning time at lower echelons. From the aspect of tactical risk, the windows of opportunity may be fleeting, not always allowing for formal RM integration.

A3.3.3.2.11.2. Leaders should avoid executing certain tasks during periods when exposure will be the greatest. From a risk perspective, hazards caused by terrain and weather conditions may be equal to or greater than those posed by enemy forces.

A3.3.3.2.12. Develop Initial Themes and Messages.

A3.3.3.2.12.1. Commanders and their units coordinate what they do, say, and portray through themes and messages. A theme is a unifying or dominant idea or image that expresses the purpose for military action. Themes tie to objectives, lines of effort, and end state conditions. All of these incorporate a risk versus reward determination by the commander. Coordinating themes and messages can reduce risk and amplify possible reward.

A3.3.3.2.13. Develop a Proposed Problem Statement.

A3.3.3.2.13.1. A problem is an issue or obstacle that makes it difficult to achieve a desired goal or objective. The problem statement is the description of the primary issue or issues that may impede commanders from achieving their desired end states.

A3.3.3.2.14. Develop a Proposed Mission Statement.

A3.3.3.2.14.1. The chief of staff (or executive officer) or operations officer prepares a proposed mission statement for the unit based on the mission analysis. The commander receives and approves the unit's mission statement, normally during the mission analysis briefing.

A3.3.3.2.15. Present the Mission Analysis Briefing.

A3.3.3.2.15.1. During the mission analysis briefing, staff members present relevant information that supports accurate situational understanding. Each staff section provides relevant risk assessment information that demonstrates the hazards identified, proposed controls, and how the controls will affect mission accomplishment. In some cases, initial risk assessment information may be general. However, during COA development and analysis, staffs expand and refine the information. Any staff section can use a simple risk briefing matrix (illustrated in [Figure A3.5](#), Sample Staff Section Risk Briefing Matrix) to present initial risk assessments for the mission analysis. An in-depth assessment of hazards need not be specified separately at this time. The thorough assessment of the hazards and control implementation capability may not be possible without further staff coordination. For the mission analysis briefing, the focus is on giving the commander relevant information that includes hazards that could jeopardize the mission. This briefing should help other sections in coordinating efforts for mitigating identified hazards and developing effective controls.

Figure A3.5. Sample Staff Section Risk Briefing Matrix.

Intelligence Staff Section (A-2) Risk Assessment	Hazards Identified	Proposed Controls
Battlefield & Effects	Fires vicinity bridge and population areas could cause unacceptable collateral damage	Choose route Nail, or minimize fires in population areas and bridge crossing
	Fording deep, fast-moving river	Cross in shallows and ensure depth and speed IAW acceptable limits per CONOP
Enemy Combat Power	Difficult to locate, may mass forces quickly	ISR min force, coordinate with HN and CJSOTF on known locations/activity
Intelligence-Gathering Capabilities & Gaps	ISR weather dependent	Operate during favorable forecast
	Enemy reliant on PTT comms	BPT to monitor and/or jam enemy PTTs
Enemy Intelligence-Gathering Capability	Enemy monitoring FOB departures/activity	Coord with HN and CJSOTF to mask/screen convoy departure

A3.3.3.2.16. Develop and Issue Initial Commander's Intent.

A3.3.3.2.16.1. The commander's intent is one of the most important portions of an order. It includes the operation's purpose, key tasks, and conditions that define the desired end state. It links the mission, concept of operations, and tasks to subordinate units. A clear commander's intent facilitates a shared understanding and focuses on the overall conditions that represent mission accomplishment. During execution, the commander's intent spurs disciplined initiative within set parameters.

A3.3.3.2.16.2. The end state is the set of required conditions that defines achievement of the commander's objectives (JP 3-0). It may include unit strength and readiness. Leaders should make risk decisions with the commander's intent in mind.

A3.3.3.2.17. Develop and Issue Initial Planning Guidance.

A3.3.3.2.17.1. The commander's planning guidance may be written or oral. In either form, it is imperative that the commander clearly state and define any risk guidance. This will ensure complete understanding and avoid miscommunication. The planning guidance may include risk tolerance as well as other guidance directly related to RM.

A3.3.3.2.18. Develop Course of Action Evaluation Criteria.

A3.3.3.2.18.1. Evaluation criteria address factors that contribute to success or failure. They normally include risk criteria and support COA analysis and comparison. The commander may place much more weight on one or more criteria, depending on the intent and guidance from the higher echelon commanders.

A3.3.3.2.19. Issue a Warning Order.

A3.3.3.2.19.1. The staff places special emphasis on alerting subordinate units to any special controls that will require extensive preparation time. Some of the planning time gained by subordinate units may be used to identify hazards, develop controls, and devise the most efficient means of control implementation.

A3.3.3.2.20. Review Facts and Assumptions.

A3.3.3.2.20.1. For the remainder of the MDMP, the commander will conduct periodic review of all facts and assumptions. From the RM perspective, the commander and staff should remain alert to any changes in the mission variables that could increase or decrease the level of risk for an operation. Each staff section looks for situations that could create more hazards or change the effectiveness of existing controls.

A3.3.4. Step 3 of the MDMP – Course of Action Development.

A3.3.4.1. During the mission analysis, RM practitioners focus on identifying and assessing hazards (steps 1 and 2 of RM). In COA development, RM practitioners continue to identify and assess hazards but also begin to develop controls and make risk decisions.

A3.3.4.2. Evaluation Criteria for Course of Action.

A3.3.4.2.1. Planners evaluate COAs and their associated control options for managing risk, using the criteria outlined in FM 6-0 Commander and Staff Organization:

A3.3.4.2.1.1. Feasibility.

A3.3.4.2.1.2. Acceptability.

A3.3.4.2.1.3. Suitability.

A3.3.4.2.1.4. Distinguishability.

A3.3.4.2.2. Feasibility.

A3.3.4.2.2.1. The COAs are considered feasible if they can be completed within the parameters of the time, space, and other resources available to the operation.

A3.3.4.2.3. Acceptability.

A3.3.4.2.3.1. In the context of RM, acceptability refers to risk tolerance (defined in paragraph 1-6). AFSOC forces measure levels of risk as Extremely High, High, Medium, or Low. The levels express the probability and expected severity of a hazardous event. Commanders refer to the risk assessment matrix (**Table 3.1 Risk Assessment Matrix**) as they establish the risk tolerance for the mission. Planners refer to the risk assessment matrix to estimate the level of risk for identified hazards related to each COA. For commanders and staffs to consider a COA acceptable, the residual level of risk (the combination of probability and expected severity of a

hazardous event) should be equal to or below the risk tolerance. For example, if the commander establishes a risk tolerance of Medium, acceptable COAs must have estimated risk levels of Medium or Low. Risk levels can change as planners propose control options and reassess probability and severity.

A3.3.4.2.4. Suitability.

A3.3.4.2.4.1. COAs must be appropriate and fitting for the task or mission. Even if the level of risk for a particular COA, with its proposed controls, meets acceptability criteria, the COA may not be suitable. For example, a control that requires additional time or resources or likely will have a negative impact on future operations may not be suitable.

A3.3.4.2.5. Distinguishability.

A3.3.4.2.5.1. Each COA should differ significantly from other COAs. The use of reserves, task organization, timing, and the maneuver scheme all affect mission accomplishment and the residual risks. Planners must consider each independently in terms of the level of risk or potential benefits.

A3.3.4.2.6. Completeness.

A3.3.4.2.6.1. Each COA must be a stand-alone description of tasks necessary for success in current and subsequent operations. Although referring to previous risk assessments is sometimes appropriate, planners should analyze each situation. They should not reuse previous assessments heedlessly. Even when situations are similar, previous assessments likely will need modification.

A3.3.4.3. Subordinate Process of COA Development

A3.3.4.3.1. Assess Relative Combat Power

A3.3.4.3.1.1. Commanders conceptualize capabilities in terms of combat power. Forces generate combat power by converting potential into effective action. The elements of combat power are leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection. The goal is to continuously generate and apply combat power to accomplish the mission at minimal cost. The command uses RM to minimize loss and maintain capability for current and subsequent missions.

A3.3.4.3.1.2. To assess relative combat power, planners initially make a rough estimate of force ratios of available maneuver units. Planners then compare friendly strengths against enemy weaknesses, and vice versa, for each element of combat power. From these comparisons, they may find particular vulnerabilities an enemy could exploit; these will need protection. These weaknesses are equivalent to hazards, and planners need to apply RM to them.

A3.3.4.3.2. Generate Options.

A3.3.4.3.2.1. Based on the commander's guidance and the initial results of relative combat power assessment, the staff generates options. Options focus on enemy COAs arranged in order of their most probable adoption or on those stability tasks that are most essential to prevent the situation from deteriorating. The staff

determines sustainment and controls needed to create and maintain combat power for the decisive operation and shaping operations. The staff should coordinate to ensure optimal use of assets for risk mitigation. Optimal risk reduction measures are often found at the most fundamental levels of operational development.

A3.3.4.3.2.2. Array Forces

A3.3.4.3.2.2.1. For each option, the initial array identifies the number of units needed and possible ways to execute tasks of decisive action. If the number of units arrayed exceeds the number available, and the difference cannot be compensated for with other factors, the staff determines whether the COA is feasible. Ways to decrease identified risks during this step may include requesting additional resources, executing tasks required for the COA sequentially rather than simultaneously, or transferring the risk to an area with reduced likelihood of exposure.

A3.3.4.3.2.3. Develop a Broad Concept.

A3.3.4.3.2.3.1. The broad concept describes how arrayed forces will accomplish the mission within the commander's intent. It concisely expresses the how of the commander's visualization. It will provide the framework for the concept of operations. Larger risk controls, such as specific force alignment and general mission guidance may be contained within the broad concept. This will eliminate the requirement to implement smaller, less effective controls later in the process and at lower levels of command. This should save planning time for the commander and staff.

A3.3.4.3.2.4. Assign Headquarters.

A3.3.4.3.2.4.1. After determining the broad concept, planners create a task organization by assigning forces to HQ. They consider the types of units to be assigned to the HQ and its ability to control them. Planners consider organic staff and internal support capabilities. This ensures the commander has the assets needed. To ensure success, planners identify larger hazards and their associated risks and assign the command best able to mitigate or eliminate them.

A3.3.4.3.2.5. Develop COA Statements and Sketches.

A3.3.4.3.2.5.1. The COA statement clearly portrays how the unit will accomplish the mission. The RM focus should be on the overall risk. A paragraph titled Risk may be included as the last paragraph of each COA. Should the commander require more detailed information concerning specific hazards and controls, each staff section's risk assessments—or the overall mission risk assessment—should be ready for review and further development.

A3.3.4.3.2.6. Conduct COA Briefing.

A3.3.4.3.2.6.1. A COA briefing will include several areas. RM will be imbedded within many of these areas. A comparison chart of COA strengths and weaknesses may focus on risks and will give the commander enough information to formulate questions and make assumptions based on information already known. The COA briefing further informs the command and may lead

to further staffing and requests for information from the higher HQ. Enough time must be added into the planning cycle to act on new guidance. An overall COA risk assessment is useful for the commander to pinpoint those areas requiring additional consideration and action.

A3.3.4.3.2.7. Select or Modify COAs for Continued Analysis.

A3.3.4.3.2.7.1. After the COA briefing, the commander selects or modifies those COAs for continued analysis. This may include or be limited to adjusting the COA to better address risk. The commander also issues planning guidance to the staff, such as time limitations or a change in commander's intent. If commanders reject all COAs, the staff begins again with the commander's guidance. If the commander accepts one or more of the COAs, staff members begin COA analysis. The commander may create a new COA by incorporating elements of one or more COAs developed by the staff. The staff then prepares to war-game this new COA. The staff incorporates RM into any directed modifications and ensures all staff members understand the new or modified COA. During this period, conditions may have changed. The staff at all levels should continually manage risk.

A3.3.5. Step 4 of the MDMP – Course of Actions Analysis.

A3.3.5.1. Once COAs are developed, criteria should be developed for comparison in step 5. During COA analysis, the criteria should be considered during the war-gaming process. While there are various techniques for war-gaming, the intent is to conduct a friendly action, discuss anticipated enemy reaction, and then consider friendly counteraction(s). This is normally done chronologically, but when time constrained, war gaming may occur only during critical phases or events to help synchronize all assets as well as facilitate a proper COA analysis. The commander's decision points should be addressed during COA analysis to ensure all personnel what key decisions will be made and what information is required to inform those decisions. This information informs the commander's critical information requirements. During this step, the enemy's most likely and most dangerous COAs should also be discussed and compared against available friendly COAs. For RM, consider steps 1 (identify the hazards), 2 (assess the hazards), and 3 (develop controls and make risk decisions) during COA analysis.

A3.3.6. Step 5 of the MDMP – Course of Action Comparison.

A3.3.6.1. During COA comparison, the COAs should be compared to the commander's criteria instead of each other. The goal is to choose the COA that provides the commander the most flexibility, best limits the adversary's freedom of maneuver, and presents the greatest probability of mission success. Risk should be considered as one of the commander's priorities and step 3 (develop controls and make risk decisions) should be discussed during COA comparison.

A3.3.6.1.1. There are multiple methods for COA comparison. **Figure A3.6**, Descriptive COA Comparison and **Table A3.5**, Matrix COA Comparison illustrate two techniques to consider. For the illustrative convoy scenario, planners included a rotary-wing resupply option for the commander to consider. However, due to limited aircraft availability, the assets are not currently available as demonstrated in the comparison

charts. These techniques present the data to the commander or decision-maker and offers the opportunity for subordinates to make COA recommendations. However, the commander or decision-maker is not constrained to this data and may make COA selection informed but not totally guided by the data or staff's recommendation.

Figure A3.6. Descriptive COA Comparison.

COA	Advantages	Disadvantages
COA 1 Route Hammer	Paved Road, known route, no fording required, Fasted convoy route	> Chance of enemy contact, population center, predictable river crossing location
COA 2 Route Nail	< chance of enemy contact, easier clearance of fires	Unpaved roads, river fording required, slower route
COA 3 RW Re-Supply	Fastest re-supply method, minimizes exposure to ground force, ISR/fires asset not required	Asset not available for > one week, limits re-supply because of cargo space

Figure A3.7. Matrix COA Comparison.

CC's Criteria	COA 1 (RT Hammer)	COA 2 (RT Nail)	COA 3 (Rotary-Wing)
Speed	2	3	1
Simplicity	1	3	2
Asset Availability	1	1	3
Risk	3	2	1
Total	7	9	7

A3.3.7. Step 6 of the MDMP – Course of Action Approval.

A3.3.7.1. The commander or decision-maker may approve a COA as it is presented, make changes to the base COA, or even create their own hybrid COA based on portions of all of the COAs presented. Regardless, once the COA has been selected and approved, warning order #3 should be issued to inform subordinate units and assist them with their own troop leading procedure responsibilities. As a reminder, refer to [Figure A2.2](#), Parallel Planning Correlated with Risk Management Steps to review how the staff's warning orders informs and updates the troop leading procedure process.

A3.3.8. Step 7 of the MDMP – Orders Production, Dissemination, and Transition.

A3.3.8.1. Products made to inform the MDMP process should nest with OPORD development so there is no need to start from scratch. The previous WARNORDs can be used as the shell of the OPORD as the approved concept of the operation and all of the requisite coordination and synchronization details are added into the order. **Figure A3.8, Operations Order (OPORD) Template** represents a doctrinal format for an operations order. Commanders and leaders should not stray too far from this format to remain consistent with joint standards and because OPORDs must be shared between services and task forces to ensure proper coordination and synchronization. Doctrine does allow flexibility in how annexes are used to ensure commanders and leaders can accurately disseminate the plan to meet their force's needs. Reference **Figure A3-5, Joint Labeling of Annexes** for the joint standard of annex labeling. **Note:** Place the classification at the top and bottom of every page of the OPLAN or OPORD. Place the classification marking at the front of each paragraph and subparagraph in parentheses. Refer to issuing headquarters, place of issue, date-time group of signature and message reference number.

Figure A3.8. Operations Order (OPORD) Template (reference FM 6-0).

[CLASSIFICATION]

OPERATION PLAN/ORDER [number] [(code name)] [(classification of title)]

(U) References: List documents essential to understanding the OPLAN or OPORD. List references concerning a specific function in the appropriate attachments.

(a) List maps and charts first. Map entries include series number, country, sheet names, or numbers, edition, and scale.

(b) List other references in subparagraphs.

(U) Time Zone Used Throughout the OPLAN/OPORD: State the time zone used in the area of operations during execution. When the OPLAN or OPORD applies to units in different time zones, use Greenwich Mean (ZULU) Time.

(U) Task Organization: Describe the organization of forces available to the issuing headquarters and their command and support relationships. Refer to Annex A (Task Organization) if long or complicated.

1. (U) SITUATION. The situation paragraph describes the conditions of the operational environment that impact operations in the following subparagraphs:

a. (U) Area of Interest. Describe the area of interest.

b. (U) Area of Operations. Describe the area of operations.

(1) (U) Terrain. Describe the aspects of terrain that impact operations.

(2) (U) Weather. Describe the aspects of weather that impact operations.

c. (U) Enemy Forces. Identify enemy forces and appraise their general capabilities. Describe the enemy's composition, disposition, location, strength, and probable courses of action. Identify adversaries and known or potential terrorist threats within the area of operations.

d. (U) Friendly Forces. Briefly identify the missions of friendly forces and the objectives, goals, and missions of civilian organizations that impact the issuing headquarters in the following subparagraphs:

(1) (U) Higher Headquarters Mission and Intent. Identify and state the mission and commander's intent for headquarters two levels up and one level up from the issuing headquarters.

(2) (U) Missions of Adjacent Units. Identify and state the missions of adjacent units and other units whose actions have a significant impact on the issuing headquarters.

e. (U) Interagency, Intergovernmental, and Nongovernmental Organizations. Identify and state the objective or goals and primary tasks of those non-Department of Defense organizations that have a significant role within the area of operations.

f. (U) Civil Considerations. Describe the critical aspects of the civil situation that impact operations

g. (U) Attachments and Detachments. List units attached to or detached from the issuing headquarters. State when each attachment or detachment is effective (for example, on order, on commitment of the reserve) if different from the effective time of the OPLAN or OPORD.

h. (U) Assumptions. List assumptions used in the development of the OPLAN or OPORD.

2. (U) MISSION. State the unit's mission—a short description of the who, what (task), when, where, and why (purpose) that clearly indicates the action to be taken and the reason for doing so.

3. (U) EXECUTION. Describe how the commander intends to accomplish the mission in terms of the commander's intent, an overarching concept of operations, schemes of employment for each warfighting function, assessment, specified tasks to subordinate units, and key coordinating instructions in the subparagraphs below.

a. (U) **Commander's Intent.** Commanders develop their intent statement personally. The commander's intent is a clear, concise statement of what the force must do and conditions the force must establish with respect to the enemy, terrain, and civil considerations that represent the desired end state. It succinctly describes what constitutes the success of an operation and provides the purpose and conditions that define that desired end state. The commander's intent must be easy to remember and clearly understood two echelons down. The commander's intent includes:

Purpose—an expanded description of the operation's purpose beyond the "why" of the mission statement.

Key tasks—those significant activities the force as a whole must perform to achieve the desired end state.

End state—a description of the desired future conditions that represent success.

b. (U) **Concept of Operations.** The concept of operations is a statement that directs the manner in which subordinate units cooperate to accomplish the mission and establishes the sequence of actions the force will use to achieve the end state. It states the principal tasks required, the responsible subordinate units, and how the principal tasks complement one another. Normally, the concept of operations projects the status of the force at the end of the operation. If the mission dictates a significant change in tasks during the operation, the commander may phase the operation. The concept of operations may be a single paragraph or divided into two or more subparagraphs. If the concept of operations is phased, describe each phase in a subparagraph. Label these subparagraphs as "Phase" followed by the appropriate Roman numeral. The operation overlay and graphic depictions of lines of effort help portray the concept of operations and can be inserted here or in an Operations Annex.

c. (U) **Scheme of Movement and Maneuver.** Describe the employment of maneuver units in accordance with the concept of operations. Provide the primary tasks of maneuver units conducting the decisive operation and the purpose of each. Next, state the primary tasks of maneuver units conducting shaping operations, including security operations, and the purpose of each. For offensive tasks, identify the form of maneuver. For defensive tasks, identify the type of defense. For stability tasks, describe the role of maneuver units by primary stability tasks. If the operation is phased, identify the main effort by phase. Identify and include priorities for the reserve. Refer to the Operations Annex as required.

d. (U) **Scheme of Intelligence.** Describe how the commander envisions intelligence supporting the concept of operations. Include the priority of effort for situation development, targeting, and assessment. State the priority of intelligence support to units and areas. Create and refer to an Intelligence Annex as required.

- e. (U) Scheme of Fires. Describe how the commander intends to use fires to support the concept of operations with emphasis on the scheme of maneuver. State the fire support tasks and the purpose of each task. State the priorities for, allocation of, and restrictions on fires. Create and refer to a Fires Annex as required.
- f. (U) Scheme of Protection. Describe how the commander envisions protection supporting the concept of operations. Include the priorities of protection by unit and area. Include survivability. Address the scheme of operational area security, including security for routes, bases, and critical infrastructure. Identify tactical operating forces and other reaction forces. Use subparagraphs for protection categories (for example, air and missile defense and explosive ordnance disposal) based on the situation. Create and refer to a Protection Annex as required.
- g. (U) Cyber Electromagnetic Activities. Describe how cyber electromagnetic activities (including cyberspace operations, electronic warfare, and spectrum management operations), supports the concept of operations. Create and refer to a Cyber Electromagnetic Activities annex, or the Operations Annex as required.
- h. (U) Stability Tasks. Describe how stability tasks support the concept of operations. Describe how the commander envisions the conduct of stability tasks in coordination with other organizations. If other organizations or the host nation cannot provide for civil security, restoration of essential services, and civil control, then commanders with an assigned area of operations must do so with available resources, request additional resources, or request relief for these requirements from higher headquarters. Commanders assign specific responsibilities for stability tasks to subordinate units in paragraph 3j (Tasks to Subordinate Units) and paragraph 3k (Coordinating Instructions). Create and refer to a Civil Affairs Annex or Operations Annex as required.
- i. (U) Tasks to Subordinate Units. State the task assigned to each unit that reports directly to the headquarters issuing the order. Each task must include who (the subordinate unit assigned the task), what (the task itself), when, where, and why (purpose). Use a separate subparagraph for each unit. List units in task organization sequence. Place tasks that affect two or more units in paragraph 3k (Coordinating Instructions).
- j. (U) Coordinating Instructions. List only instructions and tasks applicable to two or more units not covered in unit SOPs.

- (1) (U) Time or condition when the OPORD becomes effective.
 - (2) (U) Commander's Critical Information Requirements. List commander's critical information requirements (CCIRs).
 - (3) (U) Essential Elements of Friendly Information. List essential elements of friendly information (EEFIs).
 - (4) (U) Fire Support Coordination Measures. List critical fire support coordination or control measures.
 - (5) (U) Airspace Coordinating Measures. List critical airspace coordinating or control measures.
 - (6) (U) Rules of Engagement. List rules of engagement. Refer to ROE Appendix or Operations Annex as required. (Note: For operations within the United States and its territories, title this paragraph "Rules for the Use of Force").
 - (7) (U) Risk Reduction Control Measures. State measures specific to this operation not included in unit SOPs. They may include mission-oriented protective posture, operational exposure guidance, troop-safety criteria, and fratricide avoidance measures. Create and refer to a Protection Annex or Operations Annex as required.
 - (8) (U) Personnel Recovery Coordination Measures. Create and refer to a Personnel Recovery Annex or Operations Annex as required.
 - (9) (U) Environmental Considerations. Create and refer to an Environmental Considerations Annex or Engineer Annex as required.
 - (10) (U) Airman and Leader Engagement. State commander's guidance for target audiences and reporting requirements.
 - (11) (U) Other Coordinating Instructions. List in subparagraphs any additional coordinating instructions and tasks that apply to two or more units, such as the operational timeline and any other critical timing or events.
- 4. (U) SUSTAINMENT (also called SERVICE SUPPORT).** Describe the concept of sustainment, including priorities of sustainment by unit or area. Include instructions for administrative movements, deployments, and transportation—or references to annexes as required. Use the following subparagraphs to provide the broad concept of support for logistics, personnel, and health service support. Provide detailed instructions for each sustainment subfunction (Logistics, Personnel, Medical Service Support) in the Sustainment Annex as required.
- a. (U) Logistics.

- b. (U) Personnel.
- c. (U) Medical Service Support.

5. (U) COMMAND and SIGNAL.

a. (U) Command.

- (1) (U) Location of Commander and Key Leaders. State where the commander and key leaders intend to be during the operation, by phase if the operation is phased.
- (2) (U) Succession of Command. State the succession of command if not covered in the unit's SOPs.
- (3) (U) Liaison Requirements. State liaison requirements not covered in the unit's SOPs.

b. (U) Control.

- (1) (U) Command Posts. Describe the employment of command posts (CPs), including the location of each CP and its time of opening and closing, as appropriate. State the primary controlling CP for specific tasks or phases of the operation.

- c. (U) Signal. Describe the concept of signal support, including location and movement of key signal nodes and critical electromagnetic spectrum considerations throughout the operation. Create and refer to the Signal Annex as required. This should include the Communications-Electronic Operations Instruction built for this operation.

ACKNOWLEDGE: Provide instructions for how the addressees acknowledge receipt of the OPLAN or OPORD. The word "acknowledge" may suffice. Refer to the message reference number if necessary. Acknowledgement of an OPLAN or OPORD means that it has been received and understood.

[Commander's last name]

[Commander's rank]

Figure A3.9. Joint Labeling of Annexes (reference FM 6-0).

ANNEXES: List annexes by letter and title. Joint OPLANs or OPORDs do not use Annexes I and O as attachments and in Army orders label these annexes "Not Used." Annexes T, X, and Y are available for use in Air Force OPLANs or OPORDs and are labeled as "Spare." When an attachment required by doctrine or an SOP is unnecessary, label it "Omitted."

Annex A—Task Organization
Annex B—Intelligence
Annex C—Operations
Annex D—Fires
Annex E—Protection
Annex F—Sustainment
Annex G—Engineer
Annex H—Signal
Annex I—Not Used
Annex J—Public Affairs
Annex K—Civil Affairs Operations
Annex L—Information Collection
Annex M—Assessment
Annex N—Space Operations
Annex O—Not Used
Annex P—Host-Nation Support
Annex Q—Knowledge Management
Annex R—Reports
Annex S—Special Technical Operations
Annex T—Spare
Annex U—Inspector General
Annex V—Interagency Coordination
Annex W—Operational Contract Support
Annex X—Spare
Annex Y—Spare
Annex Z—Distribution