



DEPARTMENT OF THE ARMY
HEADQUARTERS
U.S. ARMY MANEUVER SUPPORT CENTER AND FORT LEONARD WOOD
FORT LEONARD WOOD, MISSOURI 65473-5000

FLW Regulation
No 385-5

2 May 2007

Safety
COMPOSITE RISK MANAGEMENT

Summary. This revision provides for changes to risk management as established by FM 5-19, Composite Risk Management, dated August 2006. It broadens the emphasis on risk management to include management of risks associated with all hazards that have the potential to injure or kill personnel, damage or destroy equipment, or otherwise impact mission effectiveness, whether these risks occur on or off duty. It also includes changes needed to clarify procedures and responsibilities and a revised FLW Form 661, Risk Management Worksheet, now known as the Fort Leonard Wood Composite Risk Management Worksheet.

Applicability. This regulation is applicable to all military units and personnel on Fort Leonard Wood, to include all Active Duty Army and Reserves, National Guard, Reserve Officer Training Corps (ROTC), and Junior Reserve Officer Training Corps (JROTC). It applies to sister services (Navy, Air Force, Marines, and Coast Guard) when involved in training or other activities controlled by Army units and in regard to POV risk assessments. This regulation also applies to DoD civilian organizations and personnel on Fort Leonard Wood when performing potentially hazardous operations.

Supplementation. Supplementation of this regulation is prohibited unless specifically approved by Headquarters, United States Army Maneuver Support Center and Fort Leonard Wood (MANSCEN).

Suggested Improvements. The proponent agency of this regulation is the MANSCEN Safety Office. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to MANSCEN Safety Office, 261 19th Street, Building 1000, Fort Leonard Wood, MO 65473.

FOR THE COMMANDER:



DANIEL G. GREY
Colonel, GS
Chief of Staff

JESSE J. FRENCH
Director, Military
Personnel

DISTRIBUTION:

A
Plus 100 – IMNW-LNW-HRM
3 – IMNW-LNW-HRMS

Contents

Paragraph	Contents	Page
1	Purpose	1
2	References	1
3	Explanation of Acronyms, Abbreviations, and Definitions	1
4	General	1
5	The Process	1
6	Risk Management Basic Principles	2
7	Responsibilities within the Risk Management Process	2
8	Execution	8
9	Levels of Risk Management/Risk Assessment	11
10	Types of Risk Management/Risk Assessment	11
11	Risk Approval Authorities	12
12	Instructions for Completion of a Deliberate Risk Management Analysis	12
13	Instructions for Completion of the Daily Risk Management Review	13
14	Risk Management for Range Operations	14
15	Risk Management for Training Area Operations	16
16	POV Risk Assessment	17
17	Exceptions	17
18	Risk Management Training Programs	17
19	Risk Management Integration into Troop Leading Procedures and the Military Decision Making Process (MDMP)	18
20	Risk Management in the Training Development Process	18
21	Risk Management for Garrison Operations	19
22	Risk Management for Off-duty Operations	20
23	Other Risk Management Considerations	21
Appendix A	References And Forms	22
Appendix B	Fort Leonard Wood Composite Risk Management Worksheet (FLW Form 661)	23
Appendix C	Risk Assessment Levels of Probability and Levels of Severity	26
Appendix D	Risk Management Code Matrix and Risk Level Definitions	27
Appendix E	Example Completed CRM Worksheets	28
Appendix F	Example Daily Risk Management Reviews	38
Appendix G	Next Accident Assessment for Leaders	43
Appendix H	Next Accident Assessment for Individuals	51
Appendix I	POV Risk Assessment Checklist	56
Appendix J	Environmental Risk Management Overview	58
Appendix K	Risk Management Integration Into Troop Leading Procedures	62
Appendix L	Risk Management Integration Into the Military Decision Making Process	63
Appendix M	Generic Classroom Training Risk Assessment	64
Glossary		67

1. Purpose. To provide policy and guidance on the use of Composite Risk Management.

2. References. See Appendix A.

3. Explanation of Acronyms, Abbreviations, and Definitions. The acronyms, abbreviations, and special terms used in this regulation are explained in the glossary. The terms “he” and “his” are used in this regulation in the generic sense, to refer to either males or females.

4. General. Composite Risk Management (CRM) is the Army’s primary decision-making process for identifying hazards and controlling risks across the full spectrum of Army missions, functions, operations, and activities. It is used to mitigate risks associated with all hazards that have the potential to injure or kill personnel, damage or destroy equipment, or otherwise impact mission effectiveness.

a. Most personnel associated with the Army are familiar with the concept of risk management and how it applies to on-duty missions and operations, for the prevention of injuries and property damage caused by accidents or an enemy force. CRM takes risk management a step farther, applying the principles and process to the prevention of losses (injuries, property damage, or mission impairment) caused by all hazards. The primary premise is that it does not matter where or how a loss occurs; the result is still the same – decreased combat power or mission effectiveness. The loss may occur on duty or off duty, may be caused by the enemy during wartime, by a terrorist attack, a criminal incident, an accident, an illness, a suicide, or other factors.

b. Risk management has historically been applied well to military training and combat operations but has been applied only sporadically to garrison operations and tasks, often performed by civilian employees. It is important that it be applied well to garrison operations as well. See paragraph 21.

c. Although the CRM principles and process will apply most often to on-duty operations, it also can and should be applied to off-duty operations, as well. See paragraph 22.

5. The process. CRM is a five-step process

that begins in the planning phase of a mission and continues throughout mission execution and the after action review process.

a. The five steps, which are discussed in paragraph 8, Execution, are:

(1) Step 1 – Identify hazards.

(2) Step 2 – Assess hazards to determine risk.

(3) Step 3 – Develop controls and make risk decisions.

(4) Step 4 – Implement controls.

(5) Step 5 – Supervise and evaluate.

b. The process is often erroneously referred to as “risk assessment.” Actually, the first two steps are the risk assessment process, while steps 3 through 5 are management steps. The overall process is correctly known as “risk management.” Composite Risk Management is simply a broader application of the process than what has previously been used. See Figure 1.

c. Risk management is a cyclic process and should not stop at Step 5 but should be used to continuously identify and assess hazards, develop and implement controls, and evaluate outcomes.

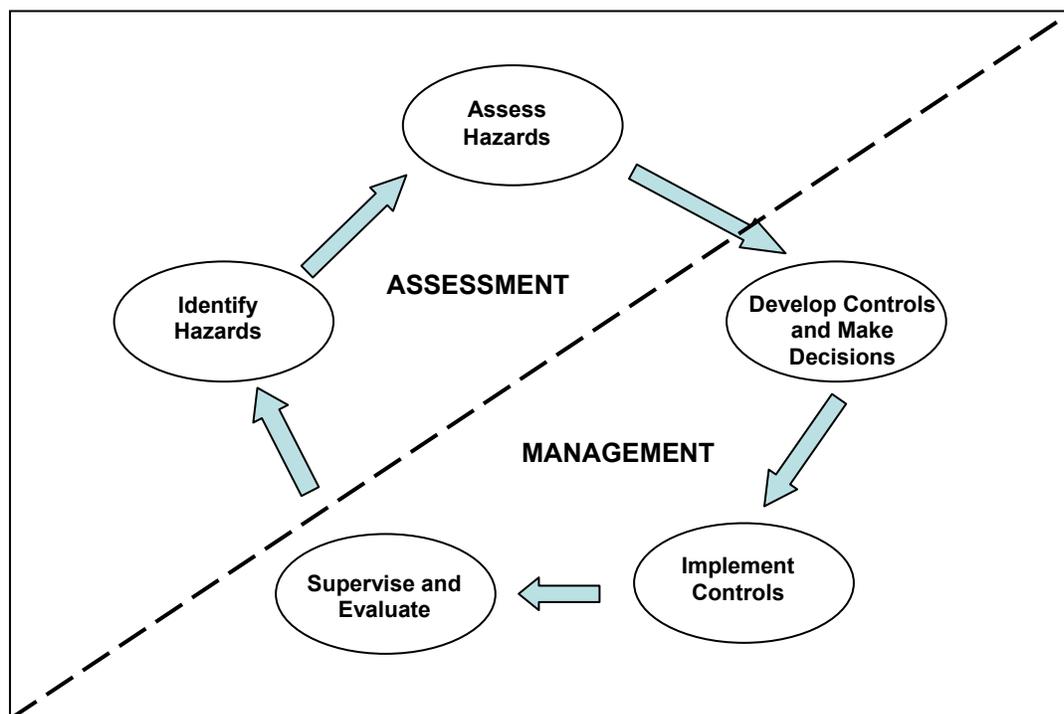


Figure 1. CRM Process

6. Risk Management Basic Principles.

The five-step process is governed by five basic principles:

- a. Principle 1. Integrate CRM into all phases of missions and operations - planning, preparation, execution, and recovery. Risks are more easily assessed and managed in the planning stages of an operation. The later changes are made in the process of planning and executing an operation, the more expensive and time-consuming they will usually be.
- b. Principle 2. Make risk decisions at the proper level in the chain of command. This depends upon the level of risk involved.
- c. Principle 3. Accept no unnecessary risks. An unnecessary risk is one that will not contribute meaningfully to the accomplishment of the mission.
- d. Principle 4. Accept risks only if the benefits outweigh the costs. The potential gain or benefit must outweigh the potential loss in terms of accidents. Otherwise, the risk should not be accepted.

- e. Principle 5. Apply the process cyclically and continuously. It does not stop at step 5. It must be used to continuously identify and assess hazards, develop and implement controls, and evaluate results.

7. Responsibilities within the Risk Management Process.

- a. MANSCEN Commanding General –
 - (1) Is the approval authority for all EXTREMELY HIGH risk assessments for installation units and organizations.
 - (2) Is the approval authority for MEDIUM risk System Safety Risk Assessments (SSRA), part III, Recommendations by Combat Developers, IAW AR 385-16 and TRADOC Regulation 385-2.
- b. Commandants of USAES, USACMLS, and USAMPS –
 - (1) Will ensure risk management is integrated into all activities and training and doctrinal publications of the U.S. Army Chemical, Engineer, and Military Police Schools.

(2) Will be approval authority for EXTREMELY HIGH risk assessments for temporary missions when designated in writing as the acting installation commander and for the term of the appointment orders.

(3) Will ensure that all training products are staffed through the MANSCEN Safety Office (MSO) for evaluation of the integration of safety and composite risk management. Ensure that a risk assessment for the training is provided along with the training product. See paragraph 20.

(4) Ensure that all lesson plans and outlines that have an EXTREMELY HIGH risk level are forwarded through the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(5) Will ensure that all training developers and doctrine developers complete risk management training provided by MSO or as required by the Army or TRADOC.

(6) Will ensure that risk management instruction is included in each leader development course.

(7) Will ensure that all personnel complete required CRM training.

(8) Ensure that all personnel are encouraged to practice CRM as a way of life, on and off duty.

(9) Ensure that POV Risk Assessments are completed as required in paragraph 16.

(10) Include CRM as an inspectable item during Organizational Inspection Program inspections (OIPs) of subordinate units.

c. Safety Director will -

(1) Develop and distribute policy and procedures for application of risk management within MANSCEN.

(2) Ensure that all Safety Specialists, Safety Engineers, and Safety Technicians within the MANSCEN Safety Office have received adequate CRM training to be able to perform

their required duties within the CRM program (e.g., to be able to conduct CRM training for others, as assigned).

(3) Provide CRM training to all newly appointed Collateral Duty Safety Officers and Safety Noncommissioned Officers (NCOs) as well as civilian supervisors and safety representatives or ensure that these personnel receive adequate CRM training provided by the Army, TRADOC, or IMCOM.

(4) Teach CRM to students in Officer Basic Courses, Captains Career Courses, and Basic Officer Leader Courses for the Engineer, Chemical, and Military Police Schools through the Directorate of Common Leader Training and the three individual schools, or ensure that these personnel receive adequate CRM training provided by the Army or TRADOC.

(5) Teach Composite Risk Management for Training Developers classes to all training developers in the Engineer, Chemical, and Military Police Schools; to Quality Assurance Office personnel; and to other personnel as appropriate, or ensure that these personnel receive adequate CRM training from the Army or TRADOC to be able to effectively integrate CRM into training products.

(6) Teach CRM to all doctrine developers in the Engineer, Chemical, and Military Police Schools and to other personnel as appropriate, or ensure that these personnel receive adequate CRM training from the Army or TRADOC to be able to effectively integrate CRM into doctrinal.

(7) Teach other Risk Management classes, as requested and as available. See paragraph 18.

(8) Review and analyze risk management for all EXTREMELY HIGH risk operations and training and make recommendations to Commanding General about approval or disapproval of the risk assessment.

(9) Review and analyze risk management for all HIGH or EXTREMELY HIGH risk operations and training and make recommendations to the appropriate approval authority about approval or disapproval of the risk assessment.

(10) Coordinate all EXTREMELY HIGH risk

operations resulting from environmental-related risk with the Directorate of Public Works; Environmental, Energy, and Natural Resources Division.

(11) Review all lesson plans, training support packages, and other training products developed by the USAES, USACMLS, or USAMPS, to evaluate adequacy of safety and CRM integration. This includes an evaluation of the risk assessment provided with the training product.

(a) Evaluate for both safety in training (safety integrated into the training product – warnings, cautions, etc.) and safe training (training that is designed in such a way that it is safe).

(b) For training products that are classroom instruction only, using no unusual equipment, and for which the training developer has completed a risk assessment that is LOW risk, see paragraph 20.

(12) Provide oversight of the conduct of the risk management program through inspections and evaluations, to include spot checks, providing feedback to commanders and leaders. Include CRM as an inspectable item during Organizational Inspection Program inspections (OIPs) of units and organizations.

(13) Provide advice and guidance on risk management to all organizations and units, as needed.

(14) Review deviations to range and training area SOPs, POIs, or other approved documents as discussed in paragraphs 14 and 15.

d. Director of Common Leader Training will -

(1) Ensure risk management instruction is included in each leader development course.

(2) Staff all training products through the MANSCEN Safety Office for review, for evaluation of the integration of safety and composite risk management. Ensure that a risk assessment for the training is provided along with the training product. See paragraph 20.

(3) Forward lesson plans and outlines that have an EXTREMELY HIGH risk level through

the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(4) Ensure that all training developers and doctrine developers complete risk management training provided by MSO or as required by the Army or TRADOC.

e. Director of Capabilities, Development and Integration Directorate -

(1) Is delegated signature authority for TRADOC positions on LOW risks System Safety Risk Assessments (SSRAs) for all materiel systems, excluding training devices.

(2) Will develop positions for materiel developer's SSRA for proponent materiel systems, excluding training devices.

(3) Will ensure system safety and environmental issues are integrated into the Combat Development process, IAW TRADOC Pam 71-9.

(4) Will forward lesson plans and outlines that have an EXTREMELY HIGH risk level through the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

f. Garrison Commander will -

(1) Serve as approval authority for HIGH risk assessments completed by the Operating Unit (TSB range cadre) for all range operations. See paragraph 14 for guidance on how the range risk management process works.

(2) Serve as approval authority for other HIGH risk assessments for operations within Garrison Command organizations and units.

(3) Ensure that all risk assessments that have an EXTREMELY HIGH risk level are forwarded through the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(4) Ensure that all risk assessments that

have a HIGH risk level are forwarded to the MANSCEN Safety Office, for review and comment, prior to the mission being executed.

(5) Through the Training Support Battalion (TSB), ensure that risk management is effectively used in the operation of all ranges.

(6) Review any significant deviations to range SOPs, POIs, or other documents that control range operations or deviations to such documents that could affect safety or health, prior to their being implemented, IAW paragraph 14d(4) of this regulation.

(7) Ensure that all Garrison Command personnel complete required CRM training.

(8) Include CRM as an inspectable item during Organizational Inspection Program inspections (OIPs) of subordinate units and organizations.

(9) Ensure that all personnel are encouraged to practice CRM as a way of life, on and off duty.

(10) Ensure that POV Risk Assessments are completed as required in paragraph 16.

g. Commander, Training Support Battalion will -

(1) Ensure that risk management is effectively used in the operation of all ranges.

(2) Ensure that the procedures in paragraph 14 are followed for risk management for range operations.

(3) Ensure that Site-specific Risk Assessments are completed for all range operations, by the cadre personnel operating the range (Operating Unit), and that these personnel complete Daily Risk Management Reviews of these risk assessments each day on which the training is conducted, prior to the day's training.

(4) Forward all risk assessments that have an EXTREMELY HIGH risk level through the Garrison Commander and MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(5) Ensure that all risk assessments that have a HIGH risk level are forwarded through the Garrison Commander, to the MANSCEN Safety Office, for review and comment, prior to executing the mission.

(6) Serve as approval authority for LOW and MODERATE risk assessments completed by the Operating Unit for all range operations.

(7) Review any significant deviations to range SOPs, POIs, or other documents that control range operations or deviations to such documents that could affect safety or health, prior to their being implemented, IAW paragraph 14d(4) of this regulation. Forward these deviations to Garrison Command (routed through DPTM and MSO), for review and approval.

h. Director, Plans, Training, and Mobilization will -

(1) Review any significant deviations to range SOPs, POIs, or other documents that control range operations or deviations to such documents that could affect safety or health, prior to their being implemented, IAW paragraph 14d(4) of this regulation.

(2) Ensure composite risk management is integrated into all operations and plans.

i. Brigade commanders will -

(1) Forward that all risk assessments that have an EXTREMELY HIGH risk level through the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(2) Forward all risk assessments that have a HIGH risk level to the MANSCEN Safety Office, for review and comment, prior to executing the mission.

(3) Serve as approval authority for all HIGH risk assessments within their brigade.

(4) Review any significant deviations to training area SOPs, POIs, or other documents that control training area operations or deviations to such documents that could affect safety or health, prior to their being implemented, IAW paragraph 15c of this

regulation. Forward these deviations to DPTM (routed through MSO), for review. The approval authority will be within the training unit's chain of command (e.g., CO CDR, BN CDR, BDE CDR, or CG).

j. Battalion commanders will –

(1) Provide detailed oversight for the battalion risk management programs.

(2) Ensure that risk assessments completed by their personnel are properly completed and reviewed.

(3) Enforce guidance in this regulation.

(4) Forward all risk assessments that have an EXTREMELY HIGH risk level to the unit's brigade, to be forwarded through the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(5) Forward all risk assessments that have a HIGH risk level to the unit's brigade, to be forwarded through the MANSCEN Safety Office, for review and comment, prior to executing the mission.

(6) Review any significant deviations to training area SOPs, POIs, or other documents that control training area operations or deviations to such documents that could affect safety or health, prior to their being implemented, IAW paragraph 15c of this regulation. Forward these deviations to the brigade, which will route them through MSO and DPTM, for review. The approval authority will be within the training unit's chain of command (e.g., CO CDR, BN CDR, BDE CDR, or CG).

(7) Ensure that all personnel complete required CRM training.

(8) Ensure that all personnel are encouraged to practice CRM as a way of life, on and off duty.

(9) Ensure that personnel make effective use of the Next Accident Assessment for Leaders and the Next Accident Assessment for Individuals (see paragraph 10 and Appendixes G and H).

(10) Ensure that POV Risk Assessments are completed as required in paragraph 16.

(11) Include CRM as an inspectable item during Organizational Inspection Program inspections (OIPs) of subordinate units.

k. All commanders and directors will -

(1) Provide risk management guidance to lower levels.

(2) Enforce guidance in this regulation.

(3) Ensure integration of composite risk management into plans and execution of all operations.

(4) Make risk decisions at the appropriate level IAW paragraph 11 of this regulation.

(5) Select and enforce control measures for the hazards identified on the Fort Leonard Wood Composite Risk Management Worksheet.

(6) Determine effectiveness of control measures and make necessary changes to guidance and controls. Ensure these changes are fed back to subordinates as guidance for future missions and standing operating procedures (SOPs).

(7) Forward that all risk assessments that have an EXTREMELY HIGH risk level through the MANSCEN Safety Office, to the Commanding General, for approval. Clearly identify what makes the risk EXTREMELY HIGH and actions that are being taken to reduce or eliminate risk.

(8) Forward all risk assessments that have a HIGH risk level to the MANSCEN Safety Office, for review and comment, prior to executing the mission.

(9) Ensure that a Daily Risk Management Review of the Site-specific Risk Assessment is conducted prior to the start of each iteration of training or operations, to ensure conditions have not changed. This is discussed in paragraphs 13 and 14 of this regulation.

(10) Ensure that a Daily Risk Management Review is conducted for any Daily Risk Assessments that are used for more than one day's training.

(11) Include risk information in job

descriptions as appropriate.

(12) Establish procedures to monitor and check risk assessments performed by subordinate units.

(13) Ensure both the training unit (Using Unit) and cadre (Operating Unit) have conducted risk management for each training event. For detailed guidance, see paragraph 14.

(14) Ensure that the Using Unit reviews the Operating Unit's Site-Specific Risk Assessment when arriving at a range, prior to conducting operations at the range. See paragraph 14.

(15) Ensure that all risk assessments for operations they control are signed by the new approving authority within 30 days of the departure of the previous approving authority.

(16) Ensure that all personnel complete required CRM training.

(17) Ensure that all officers, NCOs, directors, managers, and supervisors under their command receive risk management training at least annually.

(18) Ensure that all personnel are encouraged to practice CRM as a way of life, on and off duty.

(19) Ensure that personnel make effective use of the Next Accident Assessment for Leaders and the Next Accident Assessment for Individuals (see paragraph 10 and Appendixes G and H).

(20) Ensure that POV Risk Assessments are completed as required in paragraph 16.

(21) Include CRM as an inspectable item during Organizational Inspection Program inspections (OIPs) of subordinate units.

I. Unit S3s will -

(1) Develop input for commander's risk management policy and guidance.

(2) Coordinate risk management for each course of action in the decision-making process and provide these to subordinate units as necessary.

(3) Ensure composite risk management is

integrated into all operations and plans.

(4) Include risk management in the military decision making process (MDMP).

m. Unit Additional Duty Safety Officer/NCO and civilian Collateral Duty Safety Personnel will-

(1) Assist unit personnel in the conduct of risk management.

(2) Conduct training in the practice of risk management.

(3) Review risk management applications for lessons learned and improvements.

n. Service Detachments will ensure -

(1) Joint training is conducted IAW this regulation.

(2) That for service-specific training or operations, the detachment commander allows use of the service program, except for training in the Chemical Defense Training Facility (CDTF).

(3) That POV risk assessments are completed IAW paragraph 16, POV Risk Assessment, of this regulation.

o. The Director, CDTF is responsible for implementation of the System Safety Engineering and Management Plan for the CDTF, which establishes management policies, objectives and responsibilities for execution of the risk management program at the facility.

p. All Staff Sections will -

(1) Ensure procedures and standards are clear and practical for each specified and implied task.

(2) Apply risk management to the MDMP. Develop and implement controls for the commander that support the mission and protect the force from unnecessary risks and loss of combat power.

q. Leaders/Supervisors will -

(1) Enforce performance to standard.

(2) Execute and enforce control measures

selected by the commander.

(3) Provide feedback on the effectiveness of controls.

(4) Ensure that risk management is conducted for all hazardous operations or missions under their control. Conduct risk management for civilian operations as well as military operations. A good example is a motor pool, where risk must be identified and controlled.

(5) Maintain the risk assessment for an operation at the location where the mission or activity will be performed. Ensure that personnel are familiar with the hazards, control measures, and other aspects of the risk assessments for operations or missions they will be performing.

(6) Integrate risk management into the development of all SOPs.

(7) Discuss composite risk management with subordinate personnel, to ensure that they consider risks involved in off-duty activities and know how to use appropriate control measures to mitigate risks. This is especially important prior to long weekends and periods of leave, TDY, or PCS and especially important for those personnel who will be traveling.

(8) Seek to develop a culture of risk management within their organizations and to instill in their personnel an attitude of acceptance of responsibility for managing personal risks away from work. Encourage all personnel to practice CRM as a way of life, on and off duty.

(9) Complete POV Risk Assessments with personnel, as required in paragraph 16.

r. Unit Environmental Compliance Officers (ECOs) will -

(1) Conduct training on environmental risk.

(2) Assist unit safety officer and personnel in the conduct of environmental related risk management.

s. Individuals will -

(1) Understand and implement risk management control measures as directed by

the chain of command.

(2) Report the effectiveness of control measures during after action reviews.

(3) Follow the guidance in this regulation.

(4) Complete CRM training as required.

(5) Complete POV risk assessments as required by this regulation, the Army, or other applicable guidance.

(6) Practice CRM as a way of life, on and off duty, for all potentially hazardous activities.

8. Execution. When performing risk management, the following five steps will be completed and documented on FLW Form 661, *Fort Leonard Wood Composite Risk Management Worksheet*:

a. Step 1 - Identify hazards. This should begin during the earliest planning phases of an operation. Determine the mission essential tasks required to accomplish the mission and list the subtasks required to perform the mission on FLW Form 661, in column 5. Identify the hazards associated with each subtask and list the hazards that have been identified on FLW Form 661, in column 6. Note: Subtasks and hazards may be continued on the back of the form, if necessary. If still more space is needed, use another Form 661 as a continuation sheet or, when entering the information in a version of the form on a computer, simply add additional rows, as shown in the third example at Appendix E (Organizational Day at LORA sample risk assessment).

(1) The areas of mission, enemy, terrain and weather, troops and equipment, time available, and civilian considerations (METT-TC) should be considered. For garrison and off-duty activities, the factors to consider are different. See paragraphs 21 and 22. Other good tools for identification of hazards include publications (e.g., Technical Manuals, SOPs, and regulations), experienced personnel, experts, and accident data.

(2) Identify hazards to personnel, property and equipment, and to the accomplishment of the mission. Attempt to identify all hazards that may present significant risks to the mission. Identify those hazards most likely to result in

loss of combat power. Consider not just tactical and accident hazards but also those hazards from weather or environmental conditions, health, sanitation, behavior, and/or material or equipment.

b. Step 2 - Assess Hazards. Determine risk by identifying the level of risk involved with each hazard. Assess the probability that the hazard will result in an accident and the severity of the result if the accident does occur.

(1) The probability selected should be a realistic assessment, and the severity should be the most reasonable severity, not necessarily the worst-case severity. For example, for the hazard of a crack in the sidewalk, it is possible that someone would be killed by tripping over it. But this is not the most reasonable severity, which would be that the person would suffer a sprained ankle or wrist or a fractured arm or some other such injury.

(2) Assessment of probability and severity are subjective determinations, based more upon intuitive analysis, judgment, and experience than upon any objective criteria.

(3) Use the definitions in Appendix C to determine the level of probability and the level of severity that apply for the hazard.

(4) Use the Risk Management Code Matrix at Appendix D to determine the initial risk level for each hazard. Annotate the risk level for each hazard on FLW Form 661, in column 7.

c. Step 3 - Develop Controls & Make Risk Decisions.

(1) Develop one or more controls for each hazard identified. Controls should either eliminate or mitigate the hazard. They should either decrease the probability that the hazard will cause an accident or the severity of the accident if one occurs or decrease both the probability and the severity. The goal is to reduce the level of risk to an acceptable level.

(2) Controls generally fall into three categories:

(a) Educational controls. These controls are based on the knowledge and skills of units, organizations, or individuals. It includes their awareness of the hazard and control. They

include training, rehearsals, briefings, SOPs, and other means of increasing knowledge and awareness – for example, the briefing given to IET Soldiers prior to firing on a rifle range.

(b) Physical controls. These take the form of barriers and guards or signs to warn individuals, units, or organizations that a hazard exists. Special controller or oversight personnel also fall into this category. These controls include such things as the net under a high-climb obstacle on a confidence course, iced sheets for hot weather injury mitigation, ear plugs to mitigate noise hazards, a highway sign warning that a sharp curve is ahead, ground guides for vehicle movement, Night Vision Devices for better night vision, and so on.

(c) Avoidance controls. This refers to taking positive action to avoid contact with the hazard, or the total elimination of the hazard. Examples are going around a minefield rather than traversing it and use of a non-hazardous chemical in place of a hazardous chemical.

(3) The primary focus should be on developing controls for the most serious hazards, the ones most likely to cause serious accidents. However, controls should be developed for all hazards listed on the Composite Risk Management Worksheet.

(4) To be effective, controls must be:

(a) Suitable. The control must remove the hazard or mitigate the residual risk to an acceptable level.

(b) Feasible. The unit must have the capability to implement the control.

(c) Acceptable. The benefit gained by implementing the control must justify the cost in resources and time.

(5) When developing controls, specify who (to whom they apply), what (a brief description of the control), when (at what point in the mission they will be used), where (at what location they will be used), and how (in what way the control will be used).

(6) List the controls on FLW Form 661, in column 8.

(7) Now, reassess each hazard, for probability and severity, with control measures in place, again using the matrix in Appendix D. There is no restriction that prohibits lowering the risk level more than one level. The level may be reduced as far as is practicable, based upon an unbiased assessment of probability and severity. For example, an Extremely High risk may be mitigated all the way to a Low risk. It is also possible to reduce either probability or severity and still have the same risk level for the hazard as you had before adding the controls. For example, an Extremely High risk from Frequent/Catastrophic can be reduced to Likely/Catastrophic and still be Extremely High. However, this does mean that you have reduced the probability of the accident from occurring.

(8) The new risk level, with controls in place, is the Residual Risk. Annotate the residual risk level for each hazard on FLW Form 661, in column 9.

(9) Once you have determined the residual risk level for each hazard, determine the overall residual risk level for the mission. This will be equal to or higher than the highest individual residual risk level of any hazard. For example, if you have 10 hazards, with 1 being High risk, 2 being Moderate risk, and 7 being Low risk, the overall level of risk is High, because of the one High risk. Consideration must also be given to the number and types of hazards present. In some cases, the commander or other decision maker may determine that the overall risk level is higher than the highest individual residual risk level, if the lower risks, in combination, present a greater hazard. For example, if there are 10 hazards, with 4 being Moderate risk and 6 being Low Risk, the commander may determine that these risks, in combination, add up to a High level of risk. Indicate the overall residual risk level on FLW Form 661, in block 13.

(10) Now, the risk assessment must be presented to the person at the appropriate level in the chain of command, for a decision regarding the risk. The level at which the decision must be made is determined by the overall residual risk level. Risk acceptance approval levels are discussed in paragraph 11. If the approval authority approves the risk assessment, he will sign and date in block 13.

d. Step 4 - Implement Controls.

(1) Specify the means by which the control will be implemented. This will be done by integrating the controls into SOPs, OPORDs, policy letters, verbal orders, mission briefings, training, and other means. List how the controls will be implemented on FLW Form 661, in column 10.

(2) For controls to be effective, they must be implemented well. They must be clearly stated and understood by the persons responsible for executing them.

(3) Indicate how the implementation of each control will be supervised, to ensure that it is properly implemented (who will supervise the implementation), on FLW Form 661, in column 11. Mitigation of risk must be assigned to specific individuals or leadership positions, for example, 2nd Plt SGT, 1SG, SGT Smith, etc. This will help ensure that the responsible individual knows that he is responsible and can be held accountable for mitigation of risk.

e. Step 5 - Supervise and Evaluate.

(1) Supervise the performance of the mission, to ensure that subordinates understand how, when, and where controls are implemented. Continuously monitor controls, to ensure that they are implemented, executed properly, adjusted as necessary, and remain in place. Ensure that personnel do not deviate from standards or risk controls. Continually anticipate, identify, and assess new hazards, so that appropriate controls can be developed and implemented. Monitor factors such as fatigue, equipment serviceability/availability, and the weather and environment, to be able to mitigate any hazards they present.

(2) The evaluation process occurs during all phases of the operation and as part of the after action review (AAR) and assessment following completion of the operation or activity. Evaluate whether all hazards were identified, and identify new ones that evolved during the operation. Evaluate whether the hazards were assessed properly, including the level of residual risk. Evaluate the adequacy of control measures and whether they were understood, properly communicated, properly implemented and executed, and enforced. Assess the effectiveness of the controls in supporting operational goals and objectives, whether they positively or negatively impacted training or

mission accomplishment, and whether they supported existing doctrine, techniques, tactics and procedures. For each hazard, indicate whether controls were effective, on FLW Form 661, in column 12.

f. Follow-on steps. Risk management does not end at Step 5. When the evaluation process has revealed that hazards surfaced during the mission that had not been identified previously, these hazards must be assessed, control measures developed, the residual risk levels assessed, and so on. The process is cyclic, and leaders should be continually striving to improve the process and, thereby, better protect their personnel, equipment, and mission.

9. Levels of Risk Management/Risk

Assessment. There are three basic levels of risk management and the associated risk assessments:

a. Hasty Risk Management. This is risk management that is completed when a unit does not have time to use the deliberate process. It may be performed mentally and transmitted verbally. For example, a unit in Iraq is informed that it must conduct an operation two hours later and must hurriedly assess the risks involved. This type of risk assessment is not used for range or training area operations on Fort Leonard Wood. The definition is given here only to further clarify what a deliberate risk assessment is. When possible, FLW Form 661 should be used for documentation of a hasty risk assessment.

b. Deliberate Risk Management. This refers to risk management that is completed through a deliberate process, usually well in advance of the conduct of the covered operation. The unit completing it has time to consider the hazards in a deliberate and detailed manner. It should be used beginning early in the planning stages of a mission. It is continually reviewed and changed as the mission planning evolves. This type of risk management should be used for almost all training activities on Fort Leonard Wood, because these activities normally should be planned well in advance of the training. Completion of FLW Form 661 is required for the documentation of the risk assessment. Completed examples are at Appendix E.

c. In-depth Risk Management. This refers to use of the deliberate risk management process

but with more detail and conducted through use of advanced tools. Such tools include fault tree analysis; hazard and operability studies (HAZOP); Failure Mode and Effects Analysis (FMEA); Failure Modes, Effects and Criticality Analysis (FMECA); and other such tools. This level of risk management is not included in the scope of this regulation. The definition is given here only for general understanding.

10. Types of Risk Management/Risk

Assessment. In addition to the three levels of risk management, there are several types of risk management and the risk assessments associated with them. The types are Site-specific Risk Assessment, Daily Risk Assessment, Daily Risk Management Review, the Next Accident Assessment for Leaders, the Next Accident Assessment for Individuals, and the POV Risk Assessment.

a. Site-specific Risk Assessment. This is a risk assessment (Composite Risk Management Worksheet) completed for an operation or mission usually performed at a specific site. For example, a risk assessment for operation of an M16 firing range is a site-specific risk assessment. The specific site could be a range, a training area, a bivouac site, a unit area, a physical training field, a river crossing site, or some other location. These operations are usually conducted on a regular or somewhat regular basis and usually at the same location. These risk assessments are deliberate risk assessments.

b. Daily Risk Assessment. For the purpose of this regulation, this is a risk assessment (Composite Risk Management Worksheet) completed for a unit's operations/missions to typically be conducted over the course of one day. It is used to manage the hazards associated with any operation/mission of the unit that is not covered by a Site-specific Risk Assessment. For example, an IET company will be conducting M16 qualification firing on Range 21. The Daily Risk Assessment will cover the hazards for all activities that day prior to and after the range operations. The range operations hazards will be managed using the Site-specific Risk Assessment for Range 21. It is advisable that the IET company also address hazards associated with the range operations in the Daily Risk Assessment, but this is not essential. It is possible that the day's activities will be addressed using more than one Daily

Risk Assessment. For example, there could be one risk assessment for each major activity of the day (PT, marching to the range, etc.) These risk assessments are deliberate risk assessments.

c. Daily Risk Management Review. This is a periodic review of the deliberate risk management/Deliberate Risk Assessment for an operation or mission. The Risk Management process and FLW Form 661 must be reviewed and updated periodically. This review and update is done to identify for the user any changes in the hazards, risk level, or control measures associated with the operation. This review is normally done before each day's iteration of the training or other operation, which is why this is called a Daily Risk Management Review. This review is done for Site-specific and Daily Risk Assessments, prior to each iteration of the training or other operation covered. Paragraph 13 discusses how to perform a Daily Risk Management Review, and Appendix F has examples of how to use the FLW Form 661 for a daily review.

d. At Appendix G is the Next Accident Assessment for Leaders, including instructions and a reproducible blank form. This is a risk management worksheet that can help leaders identify risk factors that can be an accurate predictor of accident probability. This assessment can also be found at the USACRC web site, <https://crc.army.mil/home/>.

d. At Appendix H is the Next Accident Assessment for Individuals, including instructions and a reproducible blank form. This is used to help individuals figure out what their chances are of being the next accident statistic. Individuals rate themselves by answering each question honestly and totaling the points to learn where they can reduce their personal risk level. This assessment can also be found at the USACRC web site, <https://crc.army.mil/home/>.

e. Paragraph 16 discusses the online ASMIS-2/TRiPS POV Risk Assessment, used to help personnel who will be driving long distances prevent POV accidents. Appendix I has the paper version of a POV Risk Assessment Checklist.

f. Appendix J has procedures for integrating environmental related risk into the risk management process. More specific guidance

can be found in FM 3-100.4, Environmental Considerations in Military Operations, Chapter 2.

11. Risk Approval Authorities.

a. Unit staff assists the Commander through the presentation of possible control measures to reduce or eliminate risks.

b. Once the residual risks have been determined through the application of control measures; the risk decision must be presented at the proper level of command for the final risk decision on mission execution. The mission should be conducted IAW the approved FLW Form 661. The following are risk approval authorities for Fort Leonard Wood:

(1) Extremely High-risk – MANSCEN Commanding General.

(2) High-risk – Commanders and directors in the grade of O-6 and GS15.

(3) Moderate Risk – Battalion Commanders and Directors in the grade of O-5, GS-13 and GS-14, and the Commandant of the MANSCEN NCO Academy.

(4) Low Risk – Any commissioned officer, GS-11 and GS-12, and E-8 and E-9.

c. When the approval authority for a risk assessment departs the position, the new approval authority (new person occupying the position) will review and approve the risk assessment within 30 days of occupying the position. It will be assumed that the risk approval is current through the first 30 days. After 30 days, risk assessments not signed by the current approval authority will be considered invalid. When the person with approval authority for a HIGH or EXTREMELY HIGH risk assessments departs the position, the unit initiating the risk assessment will forward it to the new approving authority, using normal review procedures (for example, routing it through the MANSCEN Safety Office), for the approval of the new approval authority. This process will be completed within 30 days of the departure of the previous approval authority.

12. Instructions for Completion of a Deliberate Risk Management Analysis.

a. These instructions apply to both a Site-

specific Risk Assessment and a Daily Risk Assessment.

b. Use the FLW Composite Risk Management Worksheet, FLW Form 661. A blank form is at Appendix B.

c. Example completed forms are at Appendix E.

d. Blocks 1 through 4 are self-explanatory.

e. The remaining steps are discussed in paragraph 8, Execution.

13. Instructions for Completion of the Daily Risk Management Review.

a. These instructions apply to both a Site-specific Risk Assessment and a Daily Risk Assessment.

b. Examples of completed Daily Risk Management Reviews are at Appendix F.

c. Go through the entire FLW Form 661 for the Site-specific Risk Assessment or the Daily Risk Assessment, and identify any changes in tasks, hazards, risk levels, or control measures, how to implement control measures, or how to supervise.

d. If significant changes are needed, or if numerous changes are needed, you will need to complete a new FLW Form 661.

e. If only minor changes are needed, write them on the form in pen.

f. Write the date of the review in column 14.

g. Print the name and rank of the person conducting the review in column 15.

h. Determine the new overall residual risk level. Write it in column 16.

g. If the overall risk level has not changed or has been reduced from the level of the original assessment (see block 13 of the form), simply write your initials, as the reviewer, in column 17, and leave column 18 blank.

h. If the overall risk level has increased from the level of the original assessment:

(1) Immediately contact the chain of command, to inform them that the risk level has increased.

(2) Tell the chain of command that the risk level has changed and why.

(3) Do not conduct the operation until the higher risk level has been approved at the appropriate level of the chain of command.

(4) The approval authority for the revised risk level will print his or her name and rank in column 17 and will sign in column 18. This constitutes approval for the higher level of risk.

i. Note that there are seven rows in each of columns 14 through 18. Unless significant or numerous changes require completion of a new worksheet, the Composite Risk Management worksheet may be used for up to 7 reviews of the Site-specific or Daily Risk Assessment.

14. Risk Management for Range Operations.

a. For range operations, the Operating Unit will complete a Site-specific Risk Assessment. The Using Unit will complete a Daily Risk Assessment, for activities that the unit will complete prior to arriving at the range and after leaving the range. Both units will complete a Daily Risk Management Review of their risk assessment, prior to each day's performance of the mission covered by that risk assessment.

b. The Operating Unit's Site-specific Risk Assessment. This risk assessment covers hazards associated with the operation of the range. These hazards should include those associated with the operations to be conducted on that range (for example, night infiltration operations, weapons qualification firing, or other operations) and, also, any hazards associated with the facilities of the range (for example, firing limits pole missing, steps to tower need repair, or other hazards). This risk assessment should also address weather hazards (heat, cold, lightning, etc.), where appropriate. This is a Deliberate Risk Assessment and should be completed well in advance of operation of the range.

(1) The Site-specific Risk Assessment must be approved by the appropriate person in the Operating Unit's chain of command. For all ranges, whether operated by TSB or otherwise, all Deliberate Risk Assessments must be

approved by the Garrison Command/TSB chain of command. All High-Risk Deliberate Risk Assessments for ranges must be approved by the Garrison Commander.

(2) The Operating Unit must conduct a Daily Risk Management Review of the Site-specific Risk Assessment before each day's use of the range (see paragraph 13). This review should look for any conditions that have changed that could affect the hazards listed on the Site-specific Risk Assessment. For example, this Daily Review should include any changes to weather or changes to range facilities that might require additional or increased control measures.

(a) If the risk level for the Daily Risk Management Review is the same as or lower than the risk level already approved for the Site-specific Risk Assessment, there is no need to obtain approval from higher authority. The person conducting the Daily Risk Management Review should complete columns 14 through 17, to show that he has completed the review. He should indicate on the form any changes that he made (pen and ink is acceptable). Note: In actual practice, the overall risk level should not be lowered during the Daily RM Review process. If the unit identifies changes that would lower the risk level, they should annotate those changes on the risk assessment and later complete a new Site-specific Risk Assessment to include those changed conditions.

(b) If the risk level for the Daily RM Review is now higher than for the original Site-specific Risk Assessment, the reviewing person must obtain approval from the appropriate person in the Garrison Command/TSB chain of command, before conducting the range operations. For example, if the risk level for the Site-specific Risk Assessment was High, and the Daily Review increases the risk to Extremely High, the Commanding General must now approve the operation, before it can be conducted.

c. The Using Unit's Daily Risk Assessment. The Using Unit must complete a Daily Risk Assessment for its own activities, covering anything it will do prior to arrival at the range and anything it will do after leaving the range. For example, this risk assessment should address hazards associated with movement to and from the range, PT prior to going to the range, and anything else the Using Unit will be doing that

day. This is a Deliberate Risk Assessment. Note: It is possible that there will be more than one risk assessment for these activities. They do not all have to be addressed in one risk assessment.

(1) The Using Unit should also include in this Daily Risk Assessment any hazards associated with its operations on the range. The Using Unit could identify hazards associated with the range activities that the Operating Unit did not identify or would not have known about (for example, Using Unit's Soldiers have been in the heat a lot during the past two days and need additional rest breaks during the range operations).

(2) This Using Unit's Daily Risk Assessment should not be confused with the Operating Unit's Daily Risk Management Review of its Site-specific Risk Assessment.

(3) The Daily Risk Assessment must be approved by the appropriate person in the Using Unit's chain of command.

(4) The Using Unit must conduct a Daily Risk Management Review of the Daily Risk Assessment before each day's performance of the activities covered by the Daily Risk Assessment (see paragraph 13). This review should look for any conditions that have changed that could affect the hazards listed on the Daily Risk Assessment. For example, this Daily Risk Management Review should include any changes to weather that might require additional or increased control measures.

(a) If the risk level for the Daily Risk Management Review is the same as or lower than the risk level already approved for the Daily Risk Assessment, there is no need to obtain approval from higher authority. The person conducting the Daily Risk Management Review should complete columns 14 through 17, to show that he has completed the review. He should indicate on the form any changes that he made (pen and ink is acceptable). Note: In actual practice, the overall risk level should not be lowered during the Daily RM Review process. If the unit identifies changes that would lower the risk level, they should annotate those changes on the risk assessment and later complete a new Daily Risk Assessment to include those changed conditions.

(b) If the risk level for the Daily RM Review is now higher than for the original Daily Risk Assessment, the reviewing person must obtain approval from the appropriate person in the Using Unit's chain of command, before conducting the covered operations. For example, if the risk level for the Daily Risk Assessment was High, and the Daily RM Review increases the risk to Extremely High, the Commanding General must now approve the operation, before it can be conducted.

d. Range Operations.

(1) The training to be conducted on a range is established in a POI, SOP, or other approved document. Any significant changes to this training must be coordinated and agreed upon in advance. This should be completed at least 90 days prior to the planned training.

(2) At least 72 hours prior to conducting the training, the Using Unit must coordinate with the Operating Unit, to verify that the Using Unit is ready to occupy the range and conduct training. This includes a review of the Range SOP, the Site-specific Risk Assessment, and other aspects of the range operations and the training to be conducted.

(3) Upon arrival at the range, the Using Unit must coordinate with the Operating Unit, to review the Site-specific Risk Assessment for the range operations. The Using Unit must operate under the conditions of the Operating Unit's Site-specific Risk Assessment. If the two units disagree on any hazards or control measures or what the risk level should be, they must resolve these differences prior to conducting the range operations. This joint review should be annotated in some manner.

(a) If the two units agree, the range operations may be conducted.

(b) If there is a disagreement between the Using Unit and Operating Unit, and the two cannot resolve the disagreement, there are two options:

1. The Using Unit may choose to not conduct operations on the range, upon approval of this decision by the appropriate person in the Using Unit's chain of command. For example, if

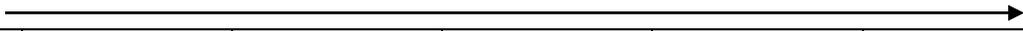
the Using Unit believes that the risks associated with the operation are too high, the Using Unit may choose to not train on that range at that time. The Using Unit is responsible for protecting its Soldiers.

2. The Using Unit may conduct operations on the range IAW the Operating Unit's Site-specific Risk Assessment for the range.

(4) The Operating Unit is always responsible for operation of the range, including safe operation, and is always the unit with the final authority regarding operation of that range. The SOP, POI, or other approved document that specifies how the range operations will be conducted must be followed. Even minor deviations must be approved by both the chain of command of the Operating Unit and the chain of command of the Using Unit. In addition, if the deviations are significant or could affect safety or health, they must be reviewed by the CTC, Range Control Officer, MANSCEN Safety Office, DPTM, and Garrison Command, prior to their implementation. Such deviations must be noted on the range Site-specific Risk Assessment, and the appropriate risk assessment approval authority (depending upon the level of risk) must approve such changes, prior to their implementation. This approval authority will be within the TSB/Garrison Command chain (TSB Commander, Garrison Commander, or CG).

(5) The Using Unit also has a responsibility for safety on the range. The Using Unit is authorized to make minor unilateral modifications to its training on the range, as long as they do not deviate from the SOP or other governing document. For example, the Using Unit may choose to have its Soldiers take additional water breaks or may provide an additional safety briefing to the Soldiers.

e. Figure 2 illustrates the risk management process for a range.

TIMELINE 					
Well in advance of day of range operations	At least 72 hours prior to Day of Range Ops	Day of Range Ops, prior to Range Ops	Day of Range Ops, just prior to Range Ops	Day of Range Ops – Range Ops	Day of Range Ops, after Range Ops
Using Unit completes Daily RA, for activities to be completed on Range Ops Day.	Coordination Meeting: Using Unit and Operating Unit review POI, SOP, range RA, and other aspects of the range ops and the training to be conducted.	Using Unit conducts Daily RM Review of their Daily RA. If risk level has increased, must obtain approval. Using Unit completes its activities prior to Range Ops, using Daily RA.	Using Unit arrives at range and coordinates with Operating Unit, to review the Site-specific RA. This review is annotated.	Using Unit completes Range Ops, using Site-specific RA.	Using Unit completes its activities after Range Ops, using Daily RA.
Operating Unit completes Site-specific RA for the range ops.		Operating Unit conducts Daily RM Review of Site-specific RA. If risk level has increased, must obtain approval.			

RA = Risk Assessment RM = Risk Management

Figure 2. Range Operations

15. Risk Management for Training Area Operations.

a. A Site-specific Risk Assessment is also required for training conducted on a training area (TA). Usually, there is no Operating Unit, per se, for a TA. The Using Unit also serves as the Operating Unit. Therefore, this unit must complete the Site-specific Risk Assessment for the training. This Site-specific Risk Assessment must be approved by the appropriate person in that unit’s chain of command.

b. The training unit must also conduct a Daily Review of this Site-specific Risk Assessment, if it covers training conducted over more than a one-day period.

(1) If the risk level for the Daily Review is the same as or lower than the risk level already approved for the Site-specific Risk Assessment, there is no need to obtain approval from higher authority. The person conducting the Daily Review should sign and date the Site-specific

Risk Assessment, to show that he has completed the review. He should indicate on the form any changes that he made (pen and ink is acceptable).

(2) If the risk level for the Daily Review is now higher than for the original Site-specific Risk Assessment, the reviewing person must obtain approval from the appropriate person in the unit’s chain of command, before conducting the training.

c. Training on a TA must be conducted IAW the SOP, POI, or other governing document. Deviations must be approved by the unit’s chain of command. In addition, if the deviations are significant or could affect safety or health, they must be reviewed by the MANSCEN Safety Office and DPTM, prior to their implementation. Such deviations must be noted on the risk assessment, and the appropriate risk assessment approval authority (depending upon the level of risk) must approve such changes, prior to their implementation. The approval

authority will be within the training unit's chain of command (e.g., CO CDR, BN CDR, BDE CDR, or CG).

16. POV Risk Assessment.

a. First-line supervisors will use the Travel Risk Planning System (TRiPS) POV Risk Assessment with any Service Member who is either under 26 years of age or considered to be an "at risk" driver, prior to the Service Member traveling by motor vehicle out of the local commuting area (greater than 100 miles). This risk assessment is found online, at the U.S. Army Combat Readiness Center's website: <https://crc.army.mil/home/>. If the Service Member or supervisor cannot access the CRC website or cannot log onto TRiPS, they can use the POV Risk Assessment Checklist located in Appendix I of this regulation, in place of TRiPS. Note: TRiPS is the system formerly known as the Army Safety Management Information System (ASMIS-2).

b. Civilian employees should be encouraged to also complete this risk assessment, prior to driving long distances.

17. Exceptions.

a. Policy and matrix for systems safety risk assessment (SSRA) are in accordance with AR 385-16, System Safety Engineering and Management, TRADOC Regulation 385-2, TRADOC Safety Program, and MIL-STD 882C.

b. Risk Assessment Codes for work orders submitted to the Director of Public Works (assigned by the MANSCEN Safety Office) will be in accordance with AR 385-10, The Army Safety Program.

18. Risk Management Training Programs.

a. The MANSCEN Safety Office will provide instruction to specific courses within the three military schools under MANSCEN through the Directorate of Common Leader Training and/or through the individual schools for all officer and warrant officer courses.

b. The Pre-Command Course Composite Risk Management training will be a one-hour class directed at selected battalion and brigade commanders and will include a scenario review.

c. Officer Basic and Advanced Courses Risk Management training will be a two-hour class with a hands-on exercise conducted in the second hour of instruction with follow-on training conducted by cadre during actual field training exercises.

d. A student of the course using an approved training support package will teach Composite Risk Management to the Noncommissioned Officer Basic and Advanced Courses and the Drill Sergeant School. This is recommended to be a two-hour course with the second hour being a hands-on exercise with follow-on training conducted by cadre or students during actual field training exercises or events.

e. A student of the course using an approved training support package will teach the Composite Risk Management class for the primary Leadership Development Course. This is recommended to be a two-hour course with the second hour being a hands-on exercise with follow-on training conducted by cadre or students during actual field training exercises or events.

f. MSO will conduct Composite Risk Management Training for Training Developers for all training developers on the installation. This training will include instruction on the CRM process and, also, an explanation of how CRM must be integrated into the training being developed.

g. Composite Risk Management will be used in all field training.

h. All Soldiers and civilian employees must complete the Basic CRM course (DL), found at the U.S. Army Combat Readiness Center website, <https://crc.army.mil/home/>. Current personnel must complete this training NLT 31 March 2007. Now personnel must complete it within 60 days of assignment.

i. Note: At this time, the Army and TRADOC are developing new and revised CRM training courses for military and civilian personnel to complete at various stages of their careers, from Basic Combat Training through Senior Service College and from individual civilian employees through civilian managers. These courses will replace some of the ones listed above and will add others and will become mandatory when directed by the Army or TRADOC.

19. Risk Management Integration into Troop Leading Procedures and the Military Decision Making Process (MDMP).

a. Risk Management will be integrated into Troop Leading Procedures, as outlined in Appendix K.

b. Risk Management will be integrated into the MDMP, as outlined in Appendix L.

20. Risk Management in the Training Development Process.

a. Composite Risk Management must be integrated into all military training programs developed by the USAES, USACMLS, or USAMPS. Training developers will ensure that the training they develop adheres to both the concept of safe training and the concept of safety in training.

(1) The safe training concept means that the training, as it will be conducted, will be safe. In other words, risks will be adequately controlled for both the person(s) conducting the training and the person(s) being trained. For example, a training program that includes actual use of hazardous chemicals must include control measures (e.g., use of chemical splash goggles, rubber gloves, and so on) to protect the trainer(s) and students for the hazards associated with the chemicals.

(2) The safety-in-training concept means that the instruction taught in the training will be the safe way to complete the task(s) being taught. For example, a classroom-only training program on how to operate a lawn mower must include appropriate safety precautions integrated into the instruction (e.g., it must remind the students that eye protection must be worn when operating the mower). Even though a block of instruction is taught entirely in a classroom and has no significant risks associated with the training, it is essential that the students be taught the safe way to perform the task(s).

b. The training developer will:

(1) Identify realistic hazards that may be present during the training.

(2) Include appropriate safety, risk, and protection statements, cautions, notes, and

warnings in the training product.

(3) Include controls necessary to eliminate or minimize the hazards identified.

c. The training developer will develop a Composite Risk Assessment for the training, using FLW Form 661, addressing the risks associated with the training. This Composite Risk Assessment will be approved at the appropriate level within the training developer's chain of command.

d. For classroom-only training, using no hazardous equipment, chemicals, etc., the training developer may use the generic Classroom Training Risk Assessment, at Appendix M, adapting it, as necessary, for the specific training and classroom environment.

e. These training programs, along with the risk assessments, must be submitted to MSO for review, prior to implementation.

(1) If the training developer has determined that the training will be conducted entirely in a classroom, using no hazardous equipment, and that the risk assessment level is Low, the training developer may submit to MSO a statement (memorandum or email) stating the title of the training, that the training is classroom only, that the risk assessment level is Low, and including a brief synopsis of the training. MSO will decide whether they should review this training. MSO reviews training for both safe training and safety in training. The synopsis of training will help MSO determine whether there are any safety-in-training aspects that need to be reviewed. For example, a classroom training class on map reading, with no field practical exercise, would likely have a Low risk level (no hazards associated with the conduct of the training in the classroom) and also no safety-in-training issues (no need to ensure that the safe way to conduct the task is being taught, because classroom map reading has no inherent hazards). If MSO agrees that the training will be LOW risk and sees no need to review the training itself for safety and risk management integration, MSO will approve the training product without further reviewing it.

(2) If MSO disagrees with the LOW risk assessment for the training or believes that there could be safety implications to the training itself, MSO will notify the training developer, and the training developer will staff the training

product and risk assessment through MSO.

21. Risk Management for Garrison Operations.

a. The CRM process is not intended for use only for mission type operations, such as tactical training, physical training activities, and combat operations. It is also important that the process be used for garrison type operations, both those conducted by military personnel and those performed by civilian employees. The process for CRM for garrison activities is the same as when used for military operations (see paragraph 8), with the variations discussed here.

b. When identifying hazards for garrison operations, the METT-TC factors will usually not apply. Instead, use the factors here (see Figure 3):

(1) Instead of Mission, use Activity – The activity that will be engaged in. Examples are repairing a building’s electrical wiring, spray painting an item in a paint booth, climbing a ladder to change a light bulb, use of a solvent tank to clean parts, and countless other activities performed in a garrison environment. Some activities are inherently more dangerous than others. You should identify the specific hazards of the activity to be performed.

(2) Instead of Enemy, use Disrupters – These are outside influences that may affect or impact a planned event or activity. Examples could include delivery of nonstandard parts needed to perform a task (resulting in an increased accident risk), floor scrubbing machine that quit working (requiring employees to scrub the floor by hand), and many others.

(3) The factor of Terrain and Weather is used for garrison activities as well as military activities. Examples of terrain and weather issues that should be considered are a warehouse storage bin 10 feet above ground level, uneven terrain where public works personnel are mowing grass, outdoor work in cold weather performed by civilian law enforcement personnel, tripping hazards in a vehicle maintenance building, uneven road surfaces that postal delivery personnel have to drive on, and slippery floors in a dining facility

kitchen.

(4) Instead of Troops, use People. “People” is used to include Soldiers, their dependents, civilian employees, and other people, whether connected to the activity or not. Examples of hazards associated with this area in a garrison environment include employees not properly trained in lifting techniques, inadequate staffing levels, sexual assault, stress, substance abuse, and other behavioral or medical conditions.

(5) The factor of Time is used for garrison as well as military activities. This factor could present hazards related to performance of garrison activities due to having insufficient time to plan the activity, prepare for the activity, or perform the activity. For example, having a limited time available to repair an item of equipment could possibly result in an accident from hurrying too much.

(6) Instead of Civilian, use Legal Considerations. The term “legal” is used to address those legal, regulatory, or policy considerations that may impact a desired activity or limit a leader’s or individual’s course of action. Examples include failure to have a policy on use of PPE and a regulatory requirement that prohibits an easier method of conducting an operation and forces use of a more difficult method.

c. The steps for Assessing Hazards, Developing Controls and Making Risk Decisions, Implementing Controls, and Supervising and Evaluating are the same as for risk management for mission activities. See paragraph 8.

d. Use the same form, FLW Form 661, as is used for CRM for mission operations.

e. The risk assessment completed for a garrison operation will normally be the same as a Site-specific Risk Assessment used for mission operations. The organization or unit performing the operation must periodically review the risk assessment, to ensure that nothing has changed that will affect the hazards, assessment of the hazards, control measures for the hazards, or other aspects of the risk assessment.

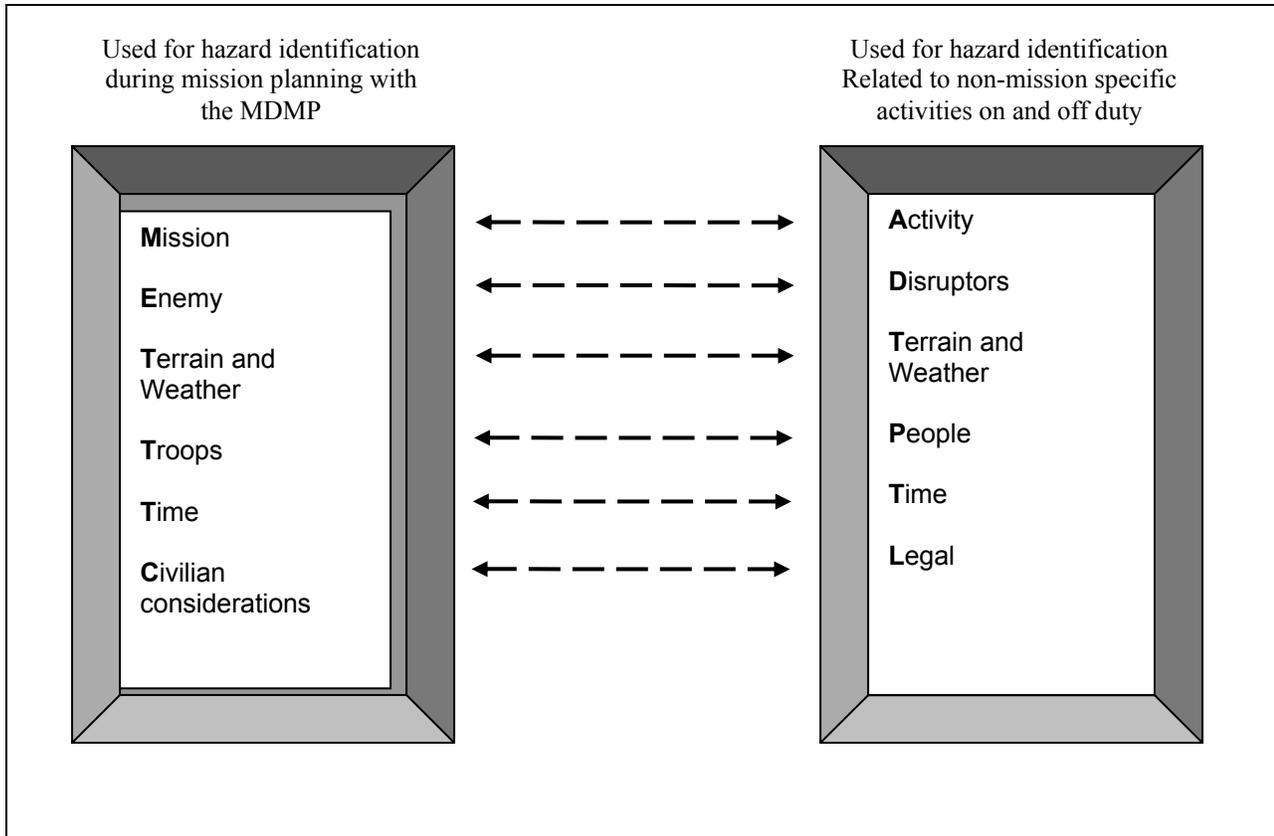


Figure 3. Assessment factors

22. Risk Management for Off-duty Operations.

a. It is very important that the CRM process be applied to off-duty activities. Most Fort Leonard Wood fatalities occur during off-duty activities, with POV operations being the most common activity in which fatalities occur. Both Soldiers and civilian employees must be trained on CRM and encouraged to apply the principles of CRM to off-duty activities. It is the responsibility of leaders to influence Soldiers and civilian employees to perform off-duty activities in a safe manner, using the principles of CRM. Leaders should strive to motivate personnel to practice CRM as a way of life, both on and off duty. The principles of off-duty CRM are the same as for garrison and mission operations.

b. When assessing risks for off-duty operations, the METT-TC factors will not apply. Instead, use the same factors as are used for

garrison activities:

(1) Instead of Mission, use Activity – The activity that will be engaged in. Examples are driving a POV to a concert in St. Louis, a barbecue, a boating activity, a sporting event, turkey hunting, etc. A good example is a risk assessment performed in preparation of a long holiday weekend or for travel. It could also be performed for a recreational or sporting event or for travel associated with leave, pass, or TDY. Junior leaders play a particularly important role in making assessments that address the behavior traits of individual Soldiers. Events where there is alcohol present or the potential for substance abuse require special focus.

(2) Instead of Enemy, use Disruptors – These are outside influences that may affect or impact a planned event or activity.

(3) The factor of Terrain and Weather is used for off-duty activities as well as on-duty

activities. This can be a particularly important area to consider for hazards, because many off-duty activities are completed outdoors (e.g., driving, boating, hunting, swimming, and running), where weather and terrain could present additional or increased hazards.

(4) Instead of Troops, use People.

Examples of hazards associated with this area in an off-duty environment include a Soldier who is drowsy when driving a long distance because of an inadequate amount of sleep, a person attempting to make electrical repairs who has not been trained in this activity, sexual assault, stress, substance abuse, and other behavioral or medical conditions.

(5) The factor of Time is used for off-duty activities as well as for on-duty activities. This factor could easily result in additional or increased hazards, such as attempting to travel a long distance in too short of a time period, hurrying to complete roof repairs so you will not miss the start of a football game, and so on.

(6) Instead of Civilian, use Legal Considerations.

c. The steps for Assessing Hazards, Developing Controls and Making Risk Decisions, Implementing Controls, and Supervising and Evaluating are the same as for risk management for mission activities. See paragraph 8.

d. Use the same form, FLW Form 661, as is used for CRM for mission operations.

e. The risk assessment completed for an off-duty operation will normally not be recorded on a form, except for the POV Risk Assessment completed using ASMIS-II/TRiPS. However, even though the Soldier or civilian employee will not write out the risk assessment, he should use the same process, mentally, as is used for CRM for an on-duty activity. Risk management must become a way of life for personnel, both on and off duty. It should become second nature to mentally identify the hazards associated with off-duty activities, assess the seriousness of those hazards, and decide upon control measures to eliminate or mitigate those hazards. The individual should normally be his own approval authority, using good judgment to decide whether the risks of completing the task or operation outweigh the potential costs.

a. A risk assessment must be maintained at the location where the mission or activity will be performed. Leaders must ensure that personnel are familiar with the hazards, control measures, and other aspects of the risk assessments for operations or missions they will be performing.

b. Leaders must ensure that the risk assessment for an activity is followed by personnel performing the activity. This includes enforcement of control measures included in the risk assessment.

c. The risk management process will be integrated into the development of all SOPs and the development process for all policies that address issues of behavior, health, and criminal activity.

23. Other Risk Management Considerations.

Appendix A

References and Forms

a. Required references.

- (1) AR 385-10, The Army Safety Program, 29 February 2000. Cited in paragraph 17b.
- (2) AR 385-16, System Safety Engineering and Management, 02 November 2001. Cited in paragraphs 7a(2) and 17a.
- (3) TRADOC Regulation 385-2, TRADOC Safety Program, 27 January 2000, with Change 1, 10 October 2000. Cited in paragraphs 7a(2) and 17a.
- (4) TRADOC Pam 71-9, Requirements Determination, 5 November 1997. Cited in paragraph f(3).
- (5) FM 5-19, Composite Risk Management, 21 August 2006. Cited in Summary.
- (6) FM 3-100.4, Environmental Considerations In Military Operations, 15 June 2000. Cited in paragraph 10f.
- (7) MIL-STD 882C, System Safety Program Requirements, 19 January 1993. Cited in paragraph 17a.

b. Related references.

- (1) TRADOC Reg 350-70, Systems Approach to Training Management, Processes, and Products, 09 March 1999.
- (2) FM 3-0, Operations, 14 June 2001.
- (3) FM 7-0, Training the Force, 22 October 2002.
- (4) FLW Regulation 210-14, Ranges and Training Areas, 16 June 2003.

c. Prescribed form. FLW Form 661, Fort Leonard Wood Composite Risk Management Worksheet (FLW CRM Worksheet). Prescribed in paragraph 8. This form is available on the MANSCEN Safety Office's webpage. A reproducible copy is at Appendix B. For MANSCEN operations, this form meets the requirements for DA Form 7566, Composite Risk Management Worksheet, discussed in FM 5-19.

d. Referenced Form. DA Form 7566, Composite Risk Management Worksheet.

Appendix B

Fort Leonard Wood Composite Risk Management Worksheet (FLW Form 661)

The following two pages contain a blank FLW Form 661, Fort Leonard Wood Composite Risk Management Worksheet.

5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?

DAILY REVIEW OF RISK MANAGEMENT

14. Date	15. Reviewed By (Rank/Name)	16. Overall Risk Level	17. Approval (Rank/Name)*	18. Approval (signature)*

Approval levels are shown on the front of this form. *Approval is needed only if review has higher level of risk than original risk.

Appendix C

Risk Assessment Levels Of Probability And Levels Of Severity

1. Levels of Probability

- (a) FREQUENT - Occurs often, continuously experienced.
- (b) LIKELY - Occurs several times.
- (c) OCCASIONAL - Occurs sporadically.
- (d) SELDOM - Remotely possible; could occur at some time.
- (e) UNLIKELY - Can assume it will not occur.

2. Levels of Severity

- (a) CATASTROPHIC - Loss of ability to accomplish the mission or mission failure. Death or permanent total disability, loss of mission critical system or equipment. Major property damage.
- (b) CRITICAL - Significantly degraded mission capability or unit readiness. Permanent partial disability, temporary total disability in excess of three months. Extensive damage to equipment or systems. Significant damage to property or the environment.
- (c) MARGINAL - Degraded mission capability or unit readiness. Minor damage to equipment or systems, property, or the environment. Lost day due to injury or illness not exceeding three months.
- (d) NEGLIGIBLE - Little or no adverse impact on mission capability. First aid or minor medical treatment. Slight equipment or system damage, but functional and serviceable. Little or no property or environmental damage.

Appendix D

Risk Management Code Matrix and Risk Level Definitions

Directions:

Determine the Probability that the hazard will result in an accident, using the definitions in Appendix C.
 Determine the realistic Severity of the accident, if it should occur, using the definitions in Appendix C.
 Read across the table to find the Probability and down to find the Severity. Where the two intersect is the risk level for that hazard.

RISK ASSESSMENT MATRIX

E = EXTREMELY HIGH RISK H = HIGH RISK M = MODERATE RISK L = LOW RISK		PROBABILITY				
		FREQUENT	LIKELY	OCCASIONAL	SELDOM	UNLIKELY
S E V E R I T Y	CATASTROPHIC	E	E	H	H	M
	CRITICAL	E	H	H	M	L
	MARGINAL	H	M	M	L	L
	NEGLIGIBLE	M	L	L	L	L

Standard definitions for risk levels:

EXTREMELY HIGH RISK – Loss of ability to accomplish the mission if hazards occur during the mission.

HIGH RISK – Significant degradation of mission capabilities in terms of the required mission standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if hazards occur during the mission.

MODERATE RISK – Expected degraded mission capabilities in terms of the required mission standard and will result in reduced mission capability if hazards occur during the mission.

LOW RISK – Expected losses have little or no impact on accomplishing the mission.

Appendix E

Example Completed Composite Risk Management Worksheets

The following pages contain examples of completed Composite Risk Management Worksheets for four types of scenarios:

- . An on-duty mission type (military) operation, a Tactical Road March.
- Example 2. An on-duty garrison type operation, Storing Material in a Warehouse.
- Example 3. A recreational operation, a DOL Organizational Day at LORA.
- Example 4. A typical off-duty operation, a POV Trip to St. Louis.

Note: The third example here, Organizational Day at LORA sample risk assessment, shows how the worksheet may be used if all of the information will not fit on pages 1 and 2. This method is demonstrated using a copy of the worksheet, in Microsoft Word format, completed on a computer.

1. Simply add additional rows, until all of the Hazards, Control Measures, and other information has been entered onto the worksheet. This will cause the second page to be moved down, making it the third or later page.
2. Add a page break at the start of the original second page, so that it will be on a page by itself. This will make it easier to use the Daily Review section of the form.
3. Section 13 of the form (Overall residual risk level and Approval), the authorized approval levels, and the form number will all become the last part of the form on the page prior to the last page. These sections will only have to be shown on the form this one time. In other words, only the next to last page will have the overall risk level and the signature of the approval authority.
4. At the bottom of each page, write in "Page of ," and include the page number and total number of pages.
5. What was originally page 2 will remain as the last page of the form, making it easy to use for the Daily Review of the risk assessment.

Example 1

FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FLW Reg 385-5.

1. Mission or Task CONDUCT A TACTICAL ROAD MARCH		2a. DTG Begin 151400FEB2006		2b. DTG End 160300FEB2006		3. Date Prepared (YYYYMMDD) 20060215	
4. Prepared By							
a. Last Name Smith		b. Rank 2LT		c. Position PLT LDR			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?
Road march	Rain/Cold	M	Ensure all personnel have proper weather gear, clean dry socks and gloves	L	PCI/Rehearsal	PLT LDR/SFC	
	Operations under limited visibility (night)	H	Reduce convoy speeds Build in additional breaks to maintain convoy integrity	M	PCI/Rehearsal	PLT LDR/SFC	
	Surface traction capability	H	Reduce convoy speeds Build in additional breaks to maintain convoy integrity	M	PCI/Rehearsal	PLT LDR/SFC	
	Road width	M	Have MPs check choke points	L	PCI/Rehearsal	PLT LDR/SFC	
	Land mine potential	H	Brief personnel on the threat Move mine clearing teams to the front of the convoy serials	M	SOP/Rehearsal	PLT LDR/SFC	
	Inexperienced personnel	M	Brief personnel on the threat Move mine clearing teams to the front of the convoy serials	L	Battle roster	PLT LDR/SFC	
Personnel recovery	Personnel become separated from unit	M	Personnel recovery plan	L	FM 3-50.1, Army Personnel Recovery	Commander	
13. Overall risk level after controls are implemented (circle one):				APPROVAL: <u>LTC James Conrou</u>		DATE: <u>15 Feb 06</u>	
Low: Approval by any commissioned officer* Moderate: Approval by O-5 Battalion Commander ** High: Approval by O-6 Commander*** Extremely High: Approval by MANSCEN Commanding General * Low may also be approved by GS-11 or GS-12 or by E-8 or E-9 ** Moderate may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA *** High may also be approved by Directors in the grade of GS-15							
FLW Form 661						Page 1 of 1	

Example worksheet for tactical road march scenario

Note: Only the front side is shown in this example

FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FLW Reg 385-5.

Example 2

1. Mission or Task STORING MATERIAL IN A WAREHOUSE			2a. DTG Begin 221000FEB2006		2b. DTG End Unknown		3. Date Prepared (YYYYMMDD) 20060222	
4. Prepared By								
a. Last Name Andrews			b. Rank WG-5		c. Position Warehouse work leader			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?	
	Untrained forklift operators	H	Train operators	L	Training policy SOP	Check training, observe performance (Supervisor)		
	No approved SOP	H	Develop SOP	L	Publish SOP	Check records (Supv)		
	No training in proper lifting techniques	M	Provide training	L	SOP, training policy	Check records, spot check (Supv)		
	No PPE policy	M	Develop and publish PPE policy Enforce policy	L	SOP Publish policy	Spot check (Supv)		
	PPE not provided	M	Develop PPE SOP Ensure PPE is provided	L	Purchase and provide PPE as required	Spot check (Supv)		
	No back belt policy	M	Develop and publish back belt policy	L	Publish and enforce policy	Check records, spot check (Supv)		
	No training program for warehousemen	M	Develop and implement training program	L	Provide training	Check records, observe performance (Supv)		
	No approved ladder or other device for overhead bin storage	M	Provide approved ladder or support device	L	Purchase approved equipment	Spot check (Supv)		
13. Overall risk level after controls are implemented (circle one):					APPROVAL: <u>Phillip Johnson, GS-12</u> DATE: <u>22 Feb 06</u>			
<i>Low:</i> Approval by any commissioned officer* <i>Moderate:</i> Approval by O-5 Battalion Commander ** <i>High:</i> Approval by O-6 Commander*** <i>Extremely High:</i> Approval by MANSCEN Commanding General * <i>Low</i> may also be approved by GS-11 or GS-12 or by E-8 or E-9 ** <i>Moderate</i> may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA *** <i>High</i> may also be approved by Directors in the grade of GS-15								
FLW Form 661 (DATE)							Page 1 of 1	

Example worksheet for storing material in a warehouse

Note: Only the front side is shown in this example

Example 3

FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET

1. Mission or Task DOL Organizational Day at LORA		2a. DTG Begin 200800JUN2006		2b. DTG End 201700JUN2006		3. Date Prepared (YYYYMMDD) 18 JUN 2006	
4. Prepared By							
a. Last Name Baxter		b. Rank GS-11		c. Position DOL Safety Officer			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?
Drive to LORA	Steep hills and sharp curves on route to LORA - Individuals injured in car accident	M	Conduct safety briefing on the last duty day to cover all known driving hazards. Ensure all participants operating vehicles are properly licensed and know accident procedures.	L	Safety Officer conduct briefing and check licenses.	Section supervisors enforce for their personnel.	
Activities at LORA	Boating hazards - Personnel injured	M	Include safe boating in safety briefing. Instruct all water craft owners to abide by all Missouri water safety rules.	L	Safety Officer conduct briefing.	Supervisors enforce adherence.	
	Rental water craft hazards - Inexperienced boaters injured while operating craft	M	Require all personnel renting water craft to attend safety briefing and water craft safe operators class taught by LORA dock staff.	L	Supervisors direct personnel to attend briefing and class.	Supervisors enforce adherence.	
	Participant is injured by fishhook while fishing.	M	Ensure participants are aware of proper procedures for removing fishhook embedded in skin as well as proper treatment for the wound.	L	Safety Officer include in briefing.	Supervisors enforce adherence.	
	Participant injured in fall from boat while fishing	M	Ensure there are at least 2 personnel in each water craft and that proper PFDs are worn and that proper signaling devices are onboard each water craft.	L	Safety Officer include in briefing.	Supervisors enforce adherence.	
	Participant drowns while swimming	H	Instruct all participants that they are to swim only in areas where there is a certified lifeguard on duty. Brief everyone on the dangers of drinking alcohol and swimming. Direct all participants to use the buddy system.	L	Safety Officer include in briefing.	Supervisors enforce adherence.	

	Sunburn hazard - Individuals receive severe sunburn from exposure to direct sun rays	M	Stress the importance of using sunscreen to prevent sunburn. Explain how burns are more easily acquired in and around water.	L	Safety Officer include in briefing.	Supervisors enforce adherence.	
	Snakes - Participant is bitten while walking in woods or playing in or near brush	L	Brief all participants on the various snakes common to this region, and explain how to recognize them in their environment. Brief what actions to take if one is encountered. Ensure that a plan is in place for first-aid treatment of a victim and evacuation if necessary.	L	Safety Officer include in briefing. Include photos of snakes in briefing. Safety Officer develop plan.	Deputy Director ensure plan is in place.	
	Bees - Persons with high sensitivity to bee stings is stung while at LORA	L	Identify all persons allergic to bee stings and advise them to carry their bee sting kits with them. Contact LORA to ensure they have bee sting kits available in their First Aid supplies.	L	Supervisors identify their allergic employees. Safety Officer contact LORA.	Deputy Director ensure all persons have been checked and that LORA was contacted.	
	Individual is burned while cooking on barbeque grill	M	Identify all individuals who will be cooking on grills. Brief them on the importance of restricting small children from coming near heat sources involved with grilling. Ensure persons cooking are wearing the appropriate clothing. Ensure water bottles/fire extinguishers are at the grill site for fire control. Have only experienced persons work with fires or supervise all persons who have little or no experience with grills.	L	Supervisors identify their personnel who will be grilling. Safety Officer include in briefing. Safety Officer ensure water/extinguishers are at the site.	Supervisors enforce adherence.	
	Small child is injured while playing on extremely high stairs within park or falls from playground equipment	M	Instruct all parents to maintain close supervision of small children when around steps and playground equipment. Never leave small children unattended at any time.	L	Safety officer include in briefing.	Supervisors enforce adherence.	
	Individuals become ill from	L	All food will be properly containerized and kept chilled	L	Safety Officer include in briefing.	Supervisors enforce	

	eating spoiled/contaminated foods		until mealtime. Everyone handling food will ensure their hands are cleaned.			adherence.	
Return drive home	Individual causes fatal or near-fatal accident while attempting to drive home under the influence of alcohol	H	Anyone known to have consumed alcohol will be observed upon leaving the site to ensure they have a designated sober driver at the wheel.	L	Supervisors observe for signs of intoxication.	Supervisors enforce use of designated drivers.	

13. Overall risk level after controls are implemented (circle one):

APPROVAL: Michael Franklin, GS-14, Dir Dt 10 June 06

Low: Approval by any commissioned officer* **Moderate:** Approval by O-5 Battalion Commander ** **High:** Approval by O-6 Commander*** **Extremely High:** Approval by MANSCEM Commanding General

* Low may also be approved by GS-11 or GS-12 or by E-8 or E-9

** Moderate may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA

*** High may also be approved by Directors in the grade of GS-15

Example worksheet for a recreational operation

Note that the approval authority may be higher than the level required.

The last page of this risk assessment is on the next page. This example shows how the first page can be extended, with the Daily Review section showing on the last page of the risk assessment. This makes it easy to go to the last page for each Daily Review that is performed.

5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?

DAILY REVIEW OF RISK MANAGEMENT

14. Date	15. Reviewed By (Rank/Name)	16. Overall Risk Level	17. Approval (Rank/Name)*	18. Approval (signature)*

Approval levels are shown on the front of this form. *Approval is needed only if review has higher level of risk than original risk.

Example 4

FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FLW Reg 385-5.

1. Mission or Task POV Trip to ST Louis - Attend concert		2a. DTG Begin 191600DEC06		2b. DTG End 200200DEC06		3. Date Prepared (YYYYMMDD) 20061219	
4. Prepared By							
a. Last Name Person		b. Rank SGT		c. Position Squad Leader			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?
Drive to St Louis	Vehicle hazards (bad tires, brakes, etc.)	M	Inspect vehicle 1 week prior to concert. Get deficiencies repaired prior to departure.	L	Driver's decision	Passengers verify with driver	
	Poor visibility due to rain/fog/darkness	M	Ensure windshield wipers and lights work well. Adjust speed – drive more slowly. Reduce noise (radio, conversations, etc.), to improve concentration.	L	Driver's decision Driver's decision Driver's decision	Passengers	
	Slick roads due to ice	H	Check weather forecast ahead of time; cancel trip if ice is expected. Ensure seat belts are worn.	L	Driver's decision Driver checks	Group	
	Slick roads due to rain	M	Ensure windshield wipers and lights work well. Adjust speed – drive more slowly. Reduce noise (radio, conversations, etc.), to improve concentration. Ensure seat belts are worn.	L	Driver's decision	Passengers	
	Traffic congestion in city	M	Drive more slowly. Maintain high level of awareness.	L	Driver's decision	Passengers	
	Driver inattention	M	Keep noise level in vehicle down. Avoid distracting driver.	L	Driver's decision Group decision	Group	
Attending concert	Fights/rowdiness of crowd	M	Keep group together. Avoid persons who seem drunk or out of control.	L	Group appoints designated driver to oversee	Group	
	Tripping hazards due to dark location	L	Maintain high level of awareness.	L	Group decision	Group	

			Walk carefully.				
	Injuries caused by crowds	L	Try to stay in less crowded areas.	L	Group appoints designated driver to oversee	Group	
	Fires caused by smokers or stage pyrotechnics	M	Observe location of fire exits. Avoid areas near pyrotechnics displays.	L	Group decision	Driver	
Return drive	Driver drowsiness	M	Use driver who had a lot of rest the night before. Passengers stay awake and ensure driver is awake and alert. Use alternate drivers.	L	Group decision	Group	
	Intoxicated driver	H	Use designated driver. Ensure designated driver does not drink.	L	Group decision Group monitors	Group	
	Wildlife in secondary roads near home	M	Maintain high level of alertness. Drive slowly on these roads.	L	Driver's decision	Passengers	

13. Overall risk level after controls are implemented (circle one):

APPROVAL: *SQT Person*

DATE: *19 Dec 2006*

Low: Approval by any commissioned officer* **Moderate:** Approval by O-5 Battalion Commander ** **High:** Approval by O-6 Commander*** **Extremely High:** Approval by MANSCEM Commanding General

* *Low* may also be approved by GS-11 or GS-12 or by E-8 or E-9

** *Moderate* may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA

*** *High* may also be approved by Directors in the grade of GS-15

Example worksheet for a typical off-duty activity

Note: The last page of this risk assessment is on the next page. It is blank, because it was not used for the risk assessment.

5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?

DAILY REVIEW OF RISK MANAGEMENT

14. Date	15. Reviewed By (Rank/Name)	16. Overall Risk Level	17. Approval (Rank/Name)*	18. Approval (signature)*

Approval levels are shown on the front of this form. *Approval is needed only if review has higher level of risk than original risk.

Appendix F

Example Daily Risk Management Reviews

Instructions for completion of a Daily Risk Management Review are in paragraph 13. The following two examples show how to complete such a review, on FLW Form 661.

Example 1 shows how to do so when the risk level has stayed the same or has been reduced. In this case, the risk level for one hazard has been reduced, but the overall risk level has stayed the same, Moderate. Blocks 17 and 18 are left blank, because new approval is not needed.

Example 2, on the third and fourth pages, shows how to do so when the risk level has increased. In this case, the residual risk level for one hazard has increased, causing the overall risk level to increase to High. New approval is needed in Blocks 17 and 18.

See the following four pages.

Example 1

FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FLW Reg 385-5.

1. Mission or Task CONDUCT A TACTICAL ROAD MARCH		2a. DTG Begin 151400FEB2006		2b. DTG End 160300FEB2006		3. Date Prepared (YYYYMMDD) 20060215	
4. Prepared By							
a. Last Name Smith		b. Rank 2LT		c. Position PLT LDR			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?
Road march	Rain/Cold	M	Ensure all personnel have proper weather gear, clean dry socks and gloves	L	PCI/Rehearsal	PLT LDR/SFC	
	Operations under limited visibility (night) Daytime operation	H L	Reduce convoy speeds Build in additional breaks to maintain convoy integrity	M L	PCI/Rehearsal	PLT LDR/SFC	
	Surface traction capability	H	Reduce convoy speeds Build in additional breaks to maintain convoy integrity	M	PCI/Rehearsal	PLT LDR/SFC	
	Road width	M	Have MPs check choke points	L	PCI/Rehearsal	PLT LDR/SFC	
	Land mine potential	H	Brief personnel on the threat Move mine clearing teams to the front of the convoy serials	M	SOP/Rehearsal	PLT LDR/SFC	
	Inexperienced personnel	M	Brief personnel on the threat Move mine clearing teams to the front of the convoy serials	L	Battle roster	PLT LDR/SFC	
Personnel recovery	Personnel become separated from unit	M	Personnel recovery plan	L	FM 3-50.1, Army Personnel Recovery	Commander	
13. Overall risk level after controls are implemented (circle one):							
				APPROVAL: <u>LTC James Conroy</u>		DATE: <u>15 Feb 06</u>	
Low: Approval by any commissioned officer* Moderate: Approval by O-5 Battalion Commander ** High: Approval by O-6 Commander*** Extremely High: Approval by MANSCEN Commanding General * Low may also be approved by GS-11 or GS-12 or by E-8 or E-9 ** Moderate may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA *** High may also be approved by Directors in the grade of GS-15							
FLW Form 661						Page 1 of 2	

Sample worksheet showing Daily Risk Management Review for tactical road march scenario, overall risk level has decreased or remained the same, page 1

5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?

DAILY REVIEW OF RISK MANAGEMENT

14. Date	15. Reviewed By (Rank/Name)	16. Overall Risk Level	17. Approval (Rank/Name)*	18. Approval (signature)*
17 Feb 06	SFC Walters	M		

Approval levels are shown on the front of this form. *Approval is needed only if review has higher level of risk than original risk.

Sample worksheet showing Daily Risk Management Review for tactical road march scenario, overall risk level has decreased or remained the same, page

FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FLW Reg 385-5.

Example 2

1. Mission or Task CONDUCT A TACTICAL ROAD MARCH			2a. DTG Begin 151400JUL2006		2b. DTG End 160300JUL2006		3. Date Prepared (YYYYMMDD) 20060715	
4. Prepared By								
a. Last Name Smith			b. Rank 2LT		c. Position PLT LDR			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?	
Road march	Heat Heat CAT 5 expected	M E	Ensure all personnel have proper clothing Build in frequent water/rest breaks Frequent checks of Soldiers Enforce hydration <i>Medics in trail vehicle</i>	L H	PCI/Rehearsal SOP Verbal order Verbal order <i>verbal order</i>	PLT LDR/SFC		
	Operations under limited visibility (night)	H	Reduce convoy speeds Build in additional breaks to maintain convoy integrity	M	PCI/Rehearsal	PLT LDR/SFC		
	Surface traction capability	H	Reduce convoy speeds Build in additional breaks to maintain convoy integrity	M	PCI/Rehearsal	PLT LDR/SFC		
	Road width	M	Have MPs check choke points	L	PCI/Rehearsal	PLT LDR/SFC		
	Land mine potential	H	Brief personnel on the threat Move mine clearing teams to the front of the convoy serials	M	SOP/Rehearsal	PLT LDR/SFC		
	Inexperienced personnel	M	Brief personnel on the threat Move mine clearing teams to the front of the convoy serials	L	Battle roster	PLT LDR/SFC		
Personnel recovery	Personnel become separated from unit	M	Personnel recovery plan	L	FM 3-50.1, Army Personnel Recovery	Commander		
13. Overall risk level after controls are implemented (circle one):								
				APPROVAL: <u>LTC James Conroy</u>		DATE: <u>15 July 06</u>		
Low: Approval by any commissioned officer* Moderate: Approval by O-5 Battalion Commander ** High: Approval by O-6 Commander*** Extremely High: Approval by MANSCEN Commanding General * Low may also be approved by GS-11 or GS-12 or by E-8 or E-9 ** Moderate may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA *** High may also be approved by Directors in the grade of GS-15								
FLW Form 661							Page 1 of 2	

Sample worksheet showing Daily Risk Management Review for tactical road march scenario, overall risk level has increased, page 1

5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?

DAILY REVIEW OF RISK MANAGEMENT

14. Date	15. Reviewed By (Rank/Name)	16. Overall Risk Level	17. Approval (Rank/Name)*	18. Approval (signature)*
17 July 06	SFC Walters	H	COL David W. Davidson	<i>COL David W. Davidson</i>

Approval levels are shown on the front of this form. *Approval is needed only if review has higher level of risk than original risk.

Sample worksheet showing Daily Risk Management Review for tactical road march scenario, overall risk level has increased, page 2

Appendix G

Next Accident Assessment for Leaders

Instructions

ACCIDENT RISK ASSESSMENT OF PERSONNEL RATED BY LEADERS

- o Example of completed assessment form is on page 2.
- o Complete the assessment form on page 10 by doing the following:
 - List name of each person you now rate. (You are their first-line supervisor. Do not include personnel for whom you are intermediate or senior rater). If more than 10 names, continue on additional form (pg 11).
 - Answer questions on Next Accident Assessment for each person you rate. Assign points to each person as indicated.
 - Add up each person's points and enter at bottom of page.
 - Determine accident risk of each person:

<u>Points</u>	<u>Risk</u>
0 - 20	LOW (L)
21 - 30	MODERATE (M)
31 - 40	HIGH (H)
41+	EXTREMELY HIGH (EH)

Enter each person's risk (L/M/H/EH) at bottom of page.

RISK CONTROL ACTIONS

- O Initiate actions to correct/control risk factors you identified. First priorities are:
 - Any person having high/extremely high accident risk.
 - Any risk factor identified for 1/3 or more of personnel you rate.
- O Safety/force protection is a shared responsibility. Responsibility for initiating control/corrective actions should also be shared. Therefore, actions should be identified to be taken by the individual, you and the chain of command.
- O Keep the assessment form and actions initiated for your records (e.g., in Leader Book). Update at least quarterly. This information will also be useful for evaluation report requirements (OER and NCOER).

ACCIDENT RISK ASSESSMENT OF PERSONNEL RATED BY LEADERS

NAMES OF RATED PERSONNEL

- EXAMPLE -

**RISK FACTORS
(FROM NEXT ACCIDENT ASSESSMENT)**

POINTS

		ABBOT,PATRICIA	BECKER,BRUCE	CAPPS,JOHN	DURDEN,ED	EVANS,TOM	FLOYD,ADAM	GREEN,STEVE	HATCHER,JOE	IVEY,BERT	JACOBS,MIKE	
N	1. Self discipline (dependability)											
	a. Counseled for poor performance/conduct	8			8	8						
	b. Had at fault accidents/citations	8				8						
	c. Abused alcohol/drugs	8			8							
	d. Had judicial/non-judicial punishment	8			8							
	e. GT score of 90 or less	8				8						
	f. Males under age 25	8	8	8	8	8		8		8	8	
	2. Leadership (enforcement of standards)											
	a. Insufficient knowledge/experience	6	6									
	b. Tolerates below-standard performance	12	12									
	3. Training (job skills and knowledge)											
	a. Not proficient in tasks within job series or MOS	9					9					
	b. Not proficient in assigned tasks outside MOS	9		9								
	4. Standards (task-cond-std/procedure) do not exist or are not clear/practical	8		8								
	5. Support (insuff amount/type/condition)											
	a. Personnel	2		2								
	b. Equipment	2		2								
	c. Supplies	2		2								
	d. Services/facilities	2										
	EACH PERSON'S		O	26	31	32	32	9	8	0	8	8
		L	M	H	H	H	L	L	L	L	L	

Leaders:**Will one of your personnel cause the next accident?**

Human error is responsible for 80 percent of all Army ground and aviation accidents. These accident-causing mistakes happen for a number of reasons. Sometimes the individual who makes the mistake is at fault, and sometimes it is the individual's unit or higher command that is at fault.

The following assessment covers the five reasons for human error accidents in ground and aviation operations over the last 10 years. Answer the questions for each person you now rate. See what their risk is of causing the next accident, what the reasons will be, and what you can do to reduce the risk. It might save a life; it might make you a more effective Commander/Leader.

o If your unit/organization is combat, combat support, combat service support or any other unit that conducts cyclical training:

- When you answer questions 2 through 5, answer them with respect to the individual/collective tasks you anticipate your unit/organization will perform during the next training cycle.

o All other units/organizations:

- When you answer questions 2 through 5, answer them with respect to the individual/collective tasks routinely performed by your unit/organization.

o Military Commanders and Leaders

**- Squad Leader/
Team Leader** **Omit question #2. Answer all other questions for soldiers in your squad/team.**

**- Platoon Leader/
Platoon Sergeant** **Answer all questions for your leaders and other sergeants.**

**- Company
Commander** **Answer all questions for your platoon leaders and platoon sergeants.**

**- Battalion
Commander** **Answer all questions for your company commanders and battalion staff.**

o Civilian Supervisors

- **First Level** **Omit question #2. Answer all other questions for personnel under your direct supervision.**
- **Second Level** **Answer all questions for supervisors and staff personnel under your direct supervision.**

1. Self-discipline. Individual knows the standard for performing the job tasks, has been trained to perform those tasks to standard, but frequently chooses not to because of his/her attitude. This is a lack of self-discipline. The six indicators listed below are a profile of the undisciplined individual.

a. Been formally or informally counseled for poor performance or conduct on or off duty. (8 points) Examples:

- o Electing not to follow instructions, procedures, or laws.**
- o Unnecessary risk taking.**
- o Inappropriate personal conduct or irresponsibility. (example - bad checks)**
- o Not finishing assigned work (dependability).**
- o Lateness.**
- o Not being a team player.**
- o Making inappropriate decisions for age, grade or rank, or experience.**

On the answer sheet, enter 8 points for each person you now rate who has been counseled 3 times for any combination of the above reasons in the last 12 months, or more than 4 times in the last 24 months.

b. Had at-fault reportable accidents (vehicle or nonvehicle, on or off duty) or traffic citations (on or off duty).

NOTE: "At-fault" is defined as knowingly and willfully doing something wrong that caused the accident/citation (examples: speeding, DUI, inattention, not following

procedures). A reportable accident/citation is one resulting in a police report, accident report, or insurance claim.

On the answer sheet, enter 8 points for each person you now rate who has had 2-4 at-fault accidents or citations in the last 12 months, or 5 or more in the last 24 months.

c. Abused alcohol or drugs. Examples:

- o Missed all or part of a workday because of alcohol or illegal drug use 2 times in any month over last 12 months.**
- o Been on duty while under the influence of alcohol or illegal drugs any day during the past 12 months.**
- o Referred to Community Mental Health or other agency for alcohol/drug abuse evaluation during past 24 months.**

On the answer sheet, enter 8 points for each person you now rate who fits any of the above examples.

d. Received judicial or nonjudicial punishment. Examples:

- o Desertion**
- o AWOL**
- o Crimes against property**
- o Crimes of violence**

On the answer sheet, enter 8 points for each person you now rate who received punishment for any of the above in the last 24 months.

e. GT Score of 90 or less (for enlisted personnel only).

On the answer sheet, enter 8 points for each person you now rate who has a GT score that is 90 or less.

f. Sex and age.

On the answer sheet, enter 8 points for each person you now rate who is a male under the age of 25.

2. Leadership. Leader/supervisor who is not ready, willing, or able to supervise subordinates' work and enforce performance to standard. Examples:

- o Leader/supervisor does not have sufficient technical knowledge or experience or leadership ability to properly supervise.**

On the answer sheet, enter 6 points for each subordinate leader/supervisor you now rate who fits this example.

- o Leader/supervisor tolerates below-standard performance, rarely makes on-the-spot corrections, does not emphasize by-the-book operations, or is reluctant to take disciplinary action.**

On the answer sheet, enter 12 points for each subordinate leader/supervisor you now rate who fits this example.

3. Training. Person who has not received the training needed to perform current job tasks to standard. This means insufficient, incorrect, or no task training that should have been provided by schools, unit, or OJT experience. Examples:

- o Not proficient in tasks within job series or MOS.**

On the answer sheet, enter 9 points for each person you now rate who fits this example.

- o Not proficient in tasks outside job series or MOS (other duties assigned) but required in current job.**

On the answer sheet, enter 9 points for each person you now rate who fits this example.

4. **Standards.** Person who frequently performs job tasks for which task-conditions-standards or procedures: a) do not exist; b) are not clear; or c) are not practical.

Examples:

- o While conducting vehicle performance tests, two M1 tank drivers, traveling in opposite directions on test track, collided head on. No procedures had been established to control movement on the test track.
- o Driver attempted to make U-turn in M817 Dump truck but turn radius of vehicle was too wide to complete the turn. Drivers' PAM did not contain clear and concise guidance on proper procedure for making U-turns in large vehicles.
- o Soldier, removing a 195-lb rear wheel assembly from an M35A2 2 1/2-ton cargo truck, injured his back. He did not seek assistance in performing this task because the procedure in TM 9-2320-209-10-4 is not practical, i.e., it indicates that one person can safely lift the wheel assembly unaided.

On the answer sheet, enter 8 points for each person you now rate who fits the above description.

5. **Support.** Person who, through no fault of his/her own, does not receive the support needed to perform job tasks to standard. Shortcomings include type, capability, and amount or condition of support needed. Examples:

- o Personnel (not full crew, wrong MOS, not trained to standard, etc.) (2 points)
- o Equipment (TA-50, weapons, transportation, safety, etc.) (2 points)
- o Supplies (ammo, fuel, food, water, parts, clothing, publications, etc.) (2 points)
- o Services/facilities (maintenance, medical, personal services, storage, etc.) (2 points)

On the answer sheet, enter 2 points for each of the above examples that fits any person you now rate.

ACCIDENT RISK ASSESSMENT OF PERSONNEL RATED BY LEADERS

NAMES OF RATED PERSONNEL

	POINTS										
RISK FACTORS (FROM NEXT ACCIDENT ASSESSMENT)											
1. Self discipline (dependability)											
a. Counseled for poor performance/conduct	8										
b. Had at fault accidents/citations	8										
c. Abused alcohol/drugs	8										
d. Had judicial/non-judicial punishment	8										
e. GT score of 90 or less	8										
f. Males under age 25	8										
2. Leadership (enforcement of standards)											
a. Insufficient knowledge/experience	6										
b. Tolerates below-standard performance	12										
3. Training (job skills and knowledge)											
a. Not proficient in tasks within job series or MOS	9										
b. Not proficient in assigned tasks outside MOS	9										
4. Standards (task-cond-std/procedure) do not exist or are not clear/practical	8										
5. Support (insuff amount/type/condition)											
a. Personnel	2										
b. Equipment	2										
c. Supplies	2										
d. Services/facilities	2										
* KEEP FOR YOUR RECORDS*											
EACH PERSON'S	POINTS										
	RISK										

Appendix H

Next Accident Assessment for Individuals

Instructions

ACCIDENT RISK ASSESSMENT FOR INDIVIDUALS

- o The Individual Assessment is a self awareness tool designed for individuals at all levels within the Army. It should be completed by you for your awareness only. Do not give the results to anyone else. Complete the assessment form by doing the following:
 - Answer questions on the Next Accident Assessment about yourself. Assign points as directed for each question.
 - Add up your points for all questions and enter at the bottom of page 5.
 - Determine your accident risk:

<u>Points</u>	<u>Risk</u>
0 - 20	LOW
21 - 30	MODERATE
31 - 40	HIGH
41+	EXTREMELY HIGH

RISK CONTROL ACTIONS

- o Safety/force protection is a shared responsibility. Responsibility for initiating control actions should also be shared.....
 - By completing this assessment, you now know some factors responsible for your accident risk. You can control/fix some of these factors and for some you will need chain-of-command help.
 - On page 7, identify at least one action you will take to reduce your accident risk. Also, identify at least one action you need the chain-of-command to take to reduce your accident risk. This is the only information you need to share with your chain of command.

Will you cause the next accident?

Human error is responsible for 80 percent of all Army ground and aviation accidents. These mistakes that cause accidents happen for a number of reasons. Sometimes the individual who makes the mistake is at fault, and sometimes it is the individual's unit or higher command that is at fault.

The following assessment is based on the five reasons for human error accidents in ground

and aviation operations over the last 10 years. Complete the assessment. See what your risk is of causing the next accident, what the reasons will be, and what you can do to reduce the risk. It might change your life; it might save your life.

1. **Self-discipline.** You know the standard for performing your job tasks. You have been trained to perform those tasks to standard, but you frequently choose not to because of your attitude. This is a lack of self-discipline. Following are eight indicators of an undisciplined individual. Give yourself points for indiscipline if you have:

a. **Been formally or informally counseled for poor performance or conduct on or off duty. Examples:**

- o Electing not to follow instructions, procedures, or laws.
- o Unnecessary risk taking.
- o Inappropriate personal conduct or irresponsibility (e.g., bad checks)
- o Not finishing assigned work (dependability).
- o Lateness.
- o Not being a team player.
- o Making inappropriate decisions for age, grade or rank, or experience.

points (Give yourself 8 points if you have been counseled 3 times for any combination of the above (or similar) reasons in the last 12 months, or more than 4 times in the last 24 months.)

b. **Had at-fault reportable accidents (vehicle or nonvehicle, on or off duty) or traffic citations on or off duty.**

NOTE: "At fault" is defined as knowingly and willfully doing something wrong that caused the accident. A "reportable" accident is one requiring a police report, accident report, or insurance claim.

points (Give yourself 8 points if you have had 2-4 at-fault accidents or citations in the last 12 months, or 5 or more in the last 24 months.)

c. **Abused alcohol or drugs. Examples:**

- o Missed all or part of a workday because of alcohol or illegal drug use 2 times in any month over last 12 months.
- o Been on duty while under the influence of alcohol or illegal drugs any day during the past 12 months.
- o Referred to Community Mental Health or other agency for alcohol/drug abuse evaluation during past 24 months.

points (Give yourself 8 points if any of the above examples apply to you.)

d. **Received judicial or nonjudicial punishment. Examples:**

- o Desertion
- o AWOL
- o Crimes against property
- o Crimes of violence

points (Give yourself 8 points if you received punishment for any of the above in the last 24 months.)

e. **GT Score of 90 or less (enlisted personnel only).**

points (Give yourself 8 points if your score is 90 or less.)

f. **Sex and age.**

points (Give yourself 8 points if you are a male under age of 25.)

2. **Leadership.** Your immediate supervisor is not ready, willing, or able to supervise subordinates' work and enforce performance to standard. Examples:

- o Supervisor does not have sufficient technical knowledge or experience or management ability to properly supervise.
- o Supervisor tolerates below-standard performance, rarely makes on-the-spot corrections, does not emphasize by-the-book operations, or is reluctant to take disciplinary action.

points (Give yourself 18 points if your supervisor fits either example.)

3. **Training.** You have not received the training needed to perform your current job tasks to standard . This means insufficient, incorrect, or no task training that should have been provided by schools, unit, or OJT experience. Examples:

- o Not proficient in tasks within your job series or MOS.
- o Not proficient in tasks outside your job series or MOS (other duties assigned) but required in current job.

points (Give yourself 18 points if either example applies to you.)

4. **Standards.** In your current job, you frequently perform tasks for which task-conditions-standards or procedures: a) do not exist; b) are not clear; or c) are not practical. Examples:

- o Tasks in your MOS (common and MOS tasks) or job series have no or unclear/impractical tasks-conditions-standards or procedures.
- o Tasks outside your MOS or job series (other duties) assigned to you have no or unclear/impractical tasks-conditions-standards or procedures.

points (Give yourself 8 points if either example applies to you.)

5. **Support.** You frequently do not receive the support needed to perform your job tasks to standard. Shortcomings include type, capability, and amount or condition of support needed. Examples:

- o Personnel (not full crew, wrong MOS, not trained to standard, etc.)
- o Equipment (TA-50, weapons, transportation, safety, etc.)
- o Supplies (ammo, fuel, food, water, parts, clothing, publications, etc.)
- o Services/facilities (maintenance, medical, personal services, storage, etc.)

points (Give yourself 8 points if inadequate support was responsible for below-standard task performance, 2 times in any month during past 12 months.)

Total Points. Find where your score fits on the scale below to determine your risk of causing the next accident.

POINTS	0 - 20	21 - 30	31 - 40	41+
RISK	LOW	MODERATE	HIGH	EXTREMELY HIGH

You now know your risk of making a mistake that will cause the next accident and what the reasons will be. You can reduce your risk by taking action to correct or control those reasons/faults that apply to you.

Intentionally left blank

● Action(s) I will take to reduce my accident risk:

● Chain-of-command action(s) needed to reduce my accident risk:

Name _____
Last First MI

Unit _____

Date _____
Year Month Day

Appendix I

POV Risk Assessment Checklist

PRE-TRIP SAFETY CHECKLIST

This checklist is to be completed for all planned trips outside the immediate local area (greater than 100 miles) for Soldiers, if TRiPS (formerly known as ASMIS-2) is unavailable. It is to be completed when Service Members are going on trips even if not on official leave/pass. It will help Service Members, commanders, and other leaders ensure drivers and vehicles are safe prior to departure and that the trip has been sufficiently planned (time, rest stops, alternate drivers, anticipated weather conditions) to get safely to the destination and back.

INDIVIDUAL ASSESSMENT

<i>PRE-TRIP CHECKLIST FOR LEADERS</i>	Discuss Hazards, Risk, & Controls	
Use this checklist when trips are planned. Apply risk management controls if needed.		
Have you completed an accident avoidance course?	YES	NO
Will your supervisor inspect your vehicle before travel?	YES	NO
Type of Vehicle you're driving _____ Choose: two-door car; 4-door car; station wagon or van; luxury car; sports car; 2WD SUV; 4WD SUV; 2WD Pick-up truck; 4WD pick-up truck; motorcycle		
Are you planning on wearing your seatbelt?	YES	NO
Are you currently taking any over-the-counter or prescription medication?	YES	NO
Origin/Destination Addresses		
Starting Address: _____ _____		
Destination Address: _____ _____		
Point of origin to destination		
What time of day are you traveling? _____		
Type of roads traveled on? _____		
Planned rest stops/breaks _____		
How much sleep will you have in the twelve hours prior to starting the trip? _____		
Will you consume alcohol eight hours before or during your trip?	YES	NO
Anticipated Weather Conditions: _____		
Travel distance one way: _____		

Appendix J

Environmental Risk Management Overview

PURPOSE: This appendix illustrates how the risk assessment process is used to assess and reduce environmental related-risk while conducting operations. Although all risk cannot be eliminated, leaders must identify hazards that may negatively impact the environment and implement controls to reduce the overall risk. Remember, assessing environmental-related risk is only a part of the overall risk management process.

OVERVIEW

Risk decisions are commanders' business. Such decisions are normally based on the next higher commander's guidance on how much risk he is willing to accept and delegate for the mission. Risk decisions should be made at the lowest possible level, except in extreme circumstances.

Both leaders and staff manage risk. Staff members continuously look for hazards associated with their areas of expertise. They then recommend controls to reduce risks. Hazards and the resulting risks may vary as circumstances change and experience is gained. Leaders and individual soldiers become the assessors for ever-changing hazards such as those associated with the environment (weather; visibility; contaminated air, water, and soil), equipment readiness, individual and unit experience, and fatigue. Leaders should advise the chain of command on risks and risk reduction measures.

THE RISK MANAGEMENT PROCESS

Risk management is the process of identifying, assessing, and controlling risk that arises from operational factors and balancing risk with mission benefits. This description integrates risk management into the military decision-making process (MDMP). FM 5-19 outlines the risk management process and provides the framework for making risk management a routine part of planning, preparing, and executing operational missions and everyday tasks. Assessing environmental-related risks is part of the total risk management process. The five steps in the risk management process are as follows:

- Step 1. Identify environmental hazards.
- Step 2. Assess environmental hazards to determine the risk.
- Step 3. Develop controls and make risk decisions.
- Step 4. Implement the controls.
- Step 5. Supervise and evaluate.

Knowledge of environmental factors is key to planning and decision-making. With this knowledge, leaders quantify risks, detect problem areas, reduce risk of injury or death, reduce property damage, and ensure compliance with environmental laws and regulations. Leaders should conduct risk assessments using the risk management worksheet before conducting any training, operations, or logistical activities.

STEP 1. IDENTIFY ENVIRONMENTAL HAZARDS

Leaders identify environmental hazards during mission analysis. FM 5-19 defines a hazard as any actual or potential condition that can cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation. Environmental hazards include all activities that may pollute, create negative noise-related effects, degrade archeological/cultural resources, or negatively affect threatened or endangered species' habitat.

STEP 2. ASSESS ENVIRONMENTAL HAZARDS TO DETERMINE THE RISK

Risk assessment is a three-stage process used to determine the risk of potential harm to the environment. A leader considers two factors, probability and severity. Probability is how often an environmental hazard is likely to occur. Severity is the effect that a hazard will have on the environment. Probability and severity are estimates that require an individual's judgment and a working knowledge of the risk management process and its terminology.

Stage 1

A leader assesses the probability of each hazard. For each hazard he identified, he would make the following determinations:

- Based on experience he determines that a vehicle accident or breakdown causing a fuel and/or hazardous material (HM) spill would **seldom** happen.
- Based on his judgment he determines that spills during refueling stops can **occasionally** be expected.
- Based on his working knowledge he determines that maneuver damage from off-road movement could happen **frequently**.

Stage 2

A leader assesses the severity of each hazard he identified. Definitions for the degrees of severity are not absolutes; they are more conditional and are mission, enemy, terrain and weather, troops - time available, civilians (METT-TC) related. A leader must use his experience, judgment, lessons learned, and subject-matter experts to help determine the degrees of severity.

Leaders make the following determinations:

- Based on experience he determines that a vehicle accident or breakdown causing a fuel and/or HM spill could be significant and cause major damage to the environment. The severity would be **critical**.
- Based on his judgment he determines that spills during refueling stops could cause minor damage to the environment. The severity would be **marginal**.
- Based on his working knowledge he determines that maneuver damage from off-road movement would cause little or no environmental damage. The severity would be **negligible**.

A leader uses the determinations from Stage 1 with the severity caused by an occurrence in Stage 2 to determine the overall risk of each hazard.

Stage 3

First a leader determines the risk level of each hazard. Then, using the defined degrees of probability and severity from above and the risk assessment matrix he determines the overall environmental-related risk level.

For the hazards identified, a leader would make the following determinations and enter the assessments in column 7 of the composite risk management worksheet.

- Vehicle accidents and breakdowns causing fuel and/or HM spills would **seldom** happen, but if they did, the severity could be **critical**. Based on this information (severity row, critical, and probability column, seldom), he determines the overall assessment to be **moderate**.
- Spills during refueling stops will happen **occasionally**; when they do, the severity will **marginal**. Based on this information (severity row, marginal, and probability column, occasional), he determines the overall assessment to be **moderate**.
- Maneuver damage from vehicle off-road movement will happen **frequently**. The damage caused by this movement will be **negligible**. Based on this information (severity row, negligible, and probability column, frequent), he determines the overall assessment to be **moderate**.

STEP 3. DEVELOP CONTROLS AND MAKE A DECISION

Controls eliminate or reduce the probability or severity of each hazard, thereby lowering the overall risk. Many environmental risk controls are simply extensions of good management, housekeeping, operations security (OPSEC), and leadership practices. Risk-reduction controls can include conducting rehearsals, changing locations, establishing procedures, and increasing supervision. Using the information a leader fills in column 8 of the composite risk management worksheet. For examples of environmental-related controls, see Table J-1.

Once all practicable risk control measures are in place, some risk will always remain. Based on the controls that he develops, a leader reassesses the hazards. Once he determines the residual risk for each hazard, he fills in column 9 on the composite risk management worksheet. Based upon the highest residual risk determination in column 9, this becomes the overall mission/task risk and circled in block 13. The residual risk requires the commander's attention. The commander decides whether or not to accept the risk. The commander may direct his subordinates to consider additional controls or a change in the courses of actions (COA).

STEP 4. IMPLEMENT CONTROLS

Implementing the controls requires informing all subordinates of the risk control measures. To do this, a leader defines the controls by filling in column 10 of the composite risk management worksheet. He states how each control will be implemented and assigns responsibility for implementing the controls. For example, if the control measures for a fuel-spill hazard are to ensure that operators are properly trained to dispense fuel and ensure that appropriate spill equipment is available, then he must ensure that these controls are in place before an operation. See Table J-1.

A leader must anticipate environmental requirements and incorporate them as part of his long-, short-, and near-term planning. The key to success is identifying the who, what, where, when, and how aspects of each control. Enter this information on the worksheet, also in column 10.

Indicate how the implementation of each control will be supervised, to ensure that it is properly implemented (who will supervise the implementation), in column 11. Mitigation of risk must be assigned to specific individuals or leadership positions, for example, 2nd Plt SGT, 1SG, SGT Smith, etc. This will help ensure that the responsible individual knows that he is responsible and can be held accountable for mitigation of risk.

STEP 5. SUPERVISE AND EVALUATE

Leaders continuously monitor controls throughout an operation to ensure their effectiveness and to modify them as required. Leaders:

- Make on-the-spot corrections and evaluates individual and collective performances.
- Hold those in charge accountable.
- Require that all tasks be performed to applicable environmental standards.
- Ensure that the AAR process includes an evaluation of environmental-related hazards, controls, soldiers' performance, and leaders' supervision.
- Ensure that environmental lessons learned are developed for use in future operations.

SUMMARY

The ability of leaders to identify hazards is key. One reality of today's missions is that the aspect of a hazard can change rapidly. Things of little risk initially can quickly become major threats due to unforeseen natural or man-made events. Leaders should be aware of this possibility. Complacency to the fact existing controls may not continue to control hazards in rapidly changing situations should be viewed as a hazard itself.

Completing the risk assessment alone, but failing to identify effective controls, usually results in a go/no-go decision based on the initial risk. If risk assessment does not accurately identify the hazards and determine the level of residual risk, the leader is likely to make his risk decision based upon incomplete or inaccurate information. If the risk assessment places missions in routine, low risk category, the commander may not be informed of a risk decision resulting in an accepted risk level that could imperil his

or his higher commanders' intent or other organizations.

The risk management process is intended to provide reasonable controls to support mission accomplishment.

Control Type	Environmental-Related Examples
Educational	Conducting unit environmental-awareness training. Conducting an environmental briefing before deployment. Performing tasks to environmental standards. Reviewing environmental considerations in AARs. Reading unit's environmental SOPs and policies. Conducting spill-prevention training. Publishing an environmental annex/appendix to the OPORD/OPLAN.
Physical	Providing spill-prevention equipment. Establishing a field trash-collection point and procedures. Establishing a field satellite-accumulation site and procedures. Policing field locations. Practicing good field sanitation. Filling in fighting positions. Posting signs and warnings for off-limit areas.
Avoidance	Maneuvering around historical/cultural sites. Establishing refueling and maintenance areas away from wetlands and drainage areas. Crossing streams at approved sites. Preventing pollution. Limiting noise in endangered and threatened species' habitats. Avoiding refueling over water sources. Curtailing live vegetation use for camouflage.

Table J-1, Examples of Environmental-Related Controls

Appendix K

Risk Management Integration into Troop Leading Procedures

This table illustrates how the steps of risk management (RM) should be integrated into the Troop Leading Procedures (TLP). Select the step of the Troop Leading Procedures, in the left-hand column, and read across the 5 columns to the right. Where an X is placed, this indicates that this step of the RM process should be conducted concurrently with that step of the TLPs. For more information, see FM 5-19.

TROOP LEADING PROCEDURES	RISK MANAGEMENT STEPS				
	STEP 1 Identify Hazards	STEP 2 Assess Hazards	STEP 3 Develop Controls and Make Risk Decision	STEP 4 Implement Controls	STEP 5 Supervise and Evaluate
Receive Mission	X	X	X		
Issue Warning Order	X	X	X		
Make a Tentative Plan	X	X	X		
Initiate Movement	X	X	X	X	
Conduct Recon	X	X	X	X	
Complete Plan	X	X	X	X	
Issue Order			X	X	X
Supervise and Refine				X	X

Appendix L

Risk Management Integration into Military Decision-Making Process

This table illustrates how the steps of risk management (RM) should be integrated into the Military Decision-Making Process (MDMP). Select the step of the MDMP, in the left-hand column, and read across the 5 columns to the right. Where an X is placed, this indicates that this step of the RM process should be conducted concurrently with that step of the MDMP. For more information, see FM 5-19.

MILITARY DECISION- MAKING PROCESS	RISK MANAGEMENT STEPS				
	STEP 1 Identify Hazards	STEP 2 Assess Hazards	STEP 3 Develop Controls and Make Risk Decision	STEP 4 Implement Controls	STEP 5 Supervise and Evaluate
Receipt of Mission	X				
Mission Analysis	X	X			
COA Development	X	X	X		
COA Analysis	X	X	X		
COA Comparison			X		
COA Approval			X		
Orders Production				X	
Rehearsal	X	X	X	X	X
Execution/Assessment	X	X	X	X	X

Appendix M**Generic Classroom Training Risk Assessment**

The next two pages contain a generic classroom training risk assessment. It may be used for any training that is conducted entirely in a classroom and that does not involve use of any hazardous equipment or any training that otherwise would involve special hazards.

The items on this risk assessment may be added to by the unit or organization conducting the training and should be added to, if there are any hazards identified that are not included here.

This risk assessment assumes that the only equipment to be used is basic classroom type equipment, such as a computer, a projector, an overhead transparency viewer, a screen, and so on. Any other equipment could pose additional hazards, which would have to be added to the worksheet.

If the classroom training is only part of the training to be conducted, this risk assessment may be use for the classroom part and supplemented by additional items for the other parts of the training.

FLW Reg 385-5
FORT LEONARD WOOD COMPOSITE RISK MANAGEMENT WORKSHEET
 For use of this form, see FLW Reg 385-5.

1. Mission or Task Conduct training in classroom, using no hazardous equipment			2a. DTG Begin		2b. DTG End		3. Date Prepared (YYYYMMDD)	
4. Prepared By								
a. Last Name			b. Rank		c. Position			
5. Subtask	6. Hazards	7. Initial Risk Level	8. Controls	9. Residual Risk Level	10. How to Implement Controls	11. How to Supervise (Who)	12. Was Control Effective?	
	Hazards from slips or trips - Slick floors caused by tracking in water or by spills - Electrical cords in walking paths	L	Ensure that floor is dry; have wet areas mopped or wiped dry Avoid routing electrical cords through walking paths	L	Classroom SOP/Instructor checks room	Direct supervision by instructor		
	Defective chairs (causing falls)	L	Have students check chairs before using and not use broken chairs	L	Classroom SOP/ Briefing by instructor	Direct supervision by instructor		
	Horseplay	L	Instruct students to not engage in horseplay Supervise students	L	Classroom SOP/ Briefing by instructor	Direct supervision by instructor		
	Electrical hazards	M	Do not use equipment with damaged/frayed wires Do not use broken electrical outlets; report to building manager	L	Classroom SOP/Instructor checks equipment	Direct supervision by instructor		
	Fire hazard	M	Brief students on fire plan/exit routes at start of class Ensure that fire escape plan is posted If classroom is remote, ensure that proper fire extinguishers are properly located Ensure that there is a properly working phone available, for notifying Fire Department (911)	L	Classroom SOP/Briefing by instructor Instructor checks room	Direct supervision by instructor		
	Severe weather hazard	L	Ensure that a tornado plan exists Brief students on tornado procedures at start of class	L	Classroom SOP/Briefing by instructor	Direct supervision by instructor		

13. Overall risk level after controls are implemented (circle one):

APPROVAL: _____ DATE: _____

Low: Approval by any commissioned officer* **Moderate:** Approval by O-5 Battalion Commander ** **High:** Approval by O-6 Commander*** **Extremely High:** Approval by MANSCEM Commanding General

*Low may also be approved by GS-11 or GS-12 or by E-8 or E-9

** Moderate may also be approved by Directors in the grade of GS-13 or GS-14, or by Commandant of MNCOA

*** High may also be approved by Directors in the grade of GS-15

Glossary

Section I. Acronyms, Abbreviations and Brevity Codes.

AAR

after action report

AR

Army regulation

ASMIS-II

Army Safety Management Information System-II

CDTF

Chemical Defense Training Facility

COA

course of action

CRM

composite risk management

DoD

Department of Defense

DPTM

Directorate of Plans, Training, and Mobility

ECO

Environmental Compliance Officer

FLW

Fort Leonard Wood

FM

field manual

IAW

in accordance with

IET

Initial Entry Training

JROTC

Junior Reserve Officer Training Corps

MANSCEN

United States Army Maneuver Support Center

MANSCEN & FLW

United States Army Maneuver Support Center and Fort Leonard Wood

MDMP

military decision making process

METT-TC

mission, enemy, terrain and weather, troops – time available, civil considerations

MIL

military

MOS

military occupational specialty

MSO

MANSCEN Safety Office

NCO

noncommissioned officer

NCOA

Noncommissioned Officers Academy

OIP

Organizational Inspection Program

OPORD

operation order

OPSEC

operations security

Pam

pamphlet

PCS

Permanent Change of Station

POI

Program of Instruction

POV

privately owned vehicle

Reg

regulation

RM

risk management

ROTC

Reserve Officer Training Corps

SOP

standing operating procedures

SSRA

System Safety Risk Assessment

STD
standard

TA
Training Area

TDY
temporary duty

TM
technical manual

TRADOC
United States Army Training and Doctrine
Command

TRiPS
Travel Risk Planning System

TSB
Training Support Battalion

USACMLS
U.S. Army Chemical School

USAES
U.S. Army Engineer School

USAMPS
U.S. Army Military Police School

Terms

Accident probability

An assessment of the likelihood that, given exposure to a hazard, an accident will result.

ASMIS-2 POV Risk Assessment

An assessment used to help personnel who will be driving long distances prevent POV accidents by evaluating themselves in regard to various potential accident causes. See also TRiPS.

Composite Risk Management

A decision-making process used to mitigate risks associated with all hazards that have the potential to injure or kill personnel, damage or destroy equipment, or otherwise impact mission effectiveness.

Control

Action taken to eliminate hazards or reduce their risk.

Daily Risk Assessment

In this regulation, this refers to a risk assessment completed for a unit's operations/missions to typically be conducted over the course of one day. It is used to manage the hazards associated with any operation/mission of the unit that is not covered by a Site-specific Risk Assessment.

Daily Risk Management Review

A periodic review of the deliberate risk management/Deliberate Risk Assessment for an operation or mission. Done to identify for the user any changes in the hazards, risk level, or control measures associated with the operation. This review is completed for both Site-specific and Daily Risk Assessments.

Deliberate Risk Assessment

A risk assessment completed using the Deliberate Risk Management process. This term is often used to refer to the completed Composite Risk Management Worksheet on which the risk assessment is recorded.

Deliberate Risk Management

Risk management that is completed through a deliberate process, usually well in advance of the conduct of the covered operation. The unit completing it has time to consider the hazards in a deliberate and detailed manner.

Hasty Risk Management

Risk management that is completed when a unit does not have time to use the deliberate process. It may be performed mentally and transmitted verbally.

Hazard

Any actual or potential condition that can cause injury, illness, or death of personnel, damage to or loss of equipment, property, or mission degradation.

Hazard severity

An Assessment of the expected consequence, defined by degree of injury or occupational illness, property damage or effect on the mission that could occur from a hazard.

In-depth Risk Management

Use of the deliberate risk management process but with more detail and conducted through use of advanced tools. Such tools include fault tree analysis; hazard and operability studies (HAZOP); Failure Mode and Effects Analysis (FMEA); Failure Modes, Effects and Criticality Analysis (FMECA); and other such tools.

Next Accident Assessment for Individuals

A risk management worksheet used to help individuals figure out what their chances are of making a mistake that will cause the next accident and what the reasons will be, so that they can take actions to reduce their risk.

Next Accident Assessment for Leaders

A risk management worksheet that can help leaders identify risk factors that can be an accurate predictor of accident probability for members of their unit.

Operating Unit

In this regulation, this refers to the unit that controls the operations on a military range. This is the unit that provides the cadre who operate the range. This unit is responsible for completing the Site-specific Risk Assessment for operation of that range.

Probability

The likelihood that an event will occur.

Residual risk

The level of risk remaining after controls have been identified and countermeasures selected for hazards that may result in loss of combat

power.

Risk

Chance of hazard or bad consequence; The probability of exposure to chance of injury or loss from a hazard. Risk level is expressed in terms of hazard probability and severity.

Risk assessment

Steps one and two of Army's Risk Management Process, identification and assessment of potential loss in terms of hazards. An identified hazard is assessed to determine the risk (both the probability of occurrence and resulting severity) of an incident due to the presence of the hazard.

Also sometimes used to refer to a completed risk management worksheet, showing the risk management process conducted for a particular mission or operation.

Risk assessment code

An expression of the risk associated with a hazard that combines the hazard severity and accident probability into a single Arabic numeral.

Risk decision

The decision to accept or not accept the risk(s) associated with an action; made by the commander, leader, or individual responsible for performing that action.

Risk management

The process of identifying, assessing, and controlling risk arising from operational factors and making decisions that balance risk cost with mission benefits.

Risk Management Code Matrix

The matrix used to determine the level of risk for a particular hazard, using Probability and Severity to arrive at a Risk Assessment Code.

Risk management integration

The embedding of risk management principles and practices into Army operations, culture, organizations, systems, and individual behavior.

Risk management worksheet

The form used to record a deliberate risk assessment. On Fort Leonard Wood, this form is the Fort Leonard Wood Composite Risk Management Worksheet.

Site-specific Risk Assessment

In this regulation, this refers to a risk

assessment completed for the operations conducted at a specific range, training area, or other training site, by the Operating Unit

System Safety Engineering and Management Plan for the CDTF

The document that describes how risk management will be conducted for operations at the CDTF.

TRiPS

An assessment used to help personnel who will be driving long distances prevent POV accidents by evaluating themselves in regard to various potential accident causes. Formerly known as ASMIS-II.

Unit Environmental Compliance Officers (ECOs)

Persons who have a collateral duty of managing environmental compliance for their unit or workplace.

Using Unit

In this regulation, this refers to the unit whose members are using a military range for a particular day's operations (training on that range that day).