



Cold Weather Risk Management





Terminal Learning Objective



Action: Apply the Risk Management (RM) process and principles to cold weather operations or training

Condition: You are a small unit leader, in a training environment, given the USARAK Pamphlet 385-4, Risk Management Guide for Cold Weather Operations.

Standard: Apply the RM process to given cold weather scenarios.



Risk Management Principles



- **Integrate RM into all phases of missions and operations.**
- **Make risk decisions at the appropriate level.**
- **Accept no unnecessary risk.**
- **Apply the RM process cyclically and continuously.**
- **Do not be risk averse – identify and control hazards – then complete the mission.**



Risk Management Process



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



Overview of Risk Management Guide



Section I: The Risk Management Process

Section II: RM examples for cold weather training events.

- Not all inclusive; not meant to be “The Answer”
- Blank copies for use at the unit

Appendices:

- A. Planning Considerations for Cold Weather Training and Operations (ECWCS II/III)
- B. Planning Considerations for Cold Weather Training and Operations (FREE)



Overview of Risk Management Guide (Cont')



C. 9 Wind Chill Chart

D. USARAK MEDEVAC Request

E. Ahkio Packing List

- **NWTC recommended list**

F. Avalanche Hazard Checklist

G. Commanding General USARAK Policy Letter 14



Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4



Mission (Planning)		SCORE:		
Guidance	Preparatory Time			
	Optimum	Adequate	Minimal	
FRAGO	3	4	5	
OPORD	2	3	4	
OPLAN/MOI/POI	1	2	3	

Mission (Command and Control)		SCORE:		
Task Organization	Event			
	Support, Non-tactical, Garrison	Day Tactical	Night Tactical	
Operational Control (OPCON)	3	4	5	
Attached	2	3	4	
Organic	1	2	3	

Terrain		SCORE:		
Type of Terrain	Trafficability			
	Optimum	Adequate	Minimal	
Mountain*	3	4	5	
Hills	2	3	4	
Flat/ Rolling Terrain	1	2	3	

Weather		SCORE:			
Temperature (degrees F with wind chill)	Exposure Duration				
	< 8 hours	8-24 hours	24-72 hours	Over 72 hours	
55 to 33	1	1	2	3	
32 to 10	2	2	3	4	
9 to -19	3	4	4	5	
-20 to -40	5	6	7	8	
Below -40	6	7	8	9	
Hazardous weather conditions (blizzard, whiteout, ice fog, snowstorm)	6	7	8	9	

Troops (Soldier Endurance)		SCORE:		
Environmental Preparation	Soldier Preparation			
	Optimum	Adequate	Minimal	
Non-acclimated	3	4	5	
Partially acclimated	2	3	4	
Acclimated	1	2	3	

Troops (Soldier Selection)		SCORE:			
Task	Soldier Experience				
	Extensive cold weather experience	CWI 2 / Some CW experience	CWI 1 / No CW experience	No cold weather training or experience	
Complex	3	4	5	6	
Routine	2	3	4	5	
Simple	1	2	3	4	

Troops (Rest and Maintenance)		SCORE:		
Personnel Rest Status	Equipment Status			
	Optimum	Adequate	Minimal	
<4 hours sleep in 24 hours	3	4	5	
4-8 hours sleep in 24 hours	2	3	4	
>8 hours sleep in 24 hours	1	2	3	



Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4



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Guidance	Preparatory Time			
	Optimum	Adequate	Minimal	
FRAGO	3	4	5	
OPORD	2	3	4	
OPLAN/MOI/POI	1	2	3	



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Mission (Command and Control)		SCORE:	
Task Organization	Event		
	Support, Non-tactical, Garrison	Day Tactical	Night Tactical
Operational Control (OPCON)	3	4	5
Attached	2	3	4
Organic	1	2	3



Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4



Terrain		SCORE:		
Type of Terrain	Trafficability			
	Optimum	Adequate	Minimal	
Mountain*	3	4	5	
Hills	2	3	4	
Flat/ Rolling Terrain	1	2	3	



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Environmental Preparation	Soldier Preparation			
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Non-acclimated	3	4	5	
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Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4



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Task	Soldier Experience			
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Identify and Assess Hazards using the matrix and worksheet from USARAK Pam 385-4



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Personnel Rest Status	Equipment Status		
	Optimum	Adequate	Minimal
<4 hours sleep in 24 hours	3	4	5
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>8 hours sleep in 24 hours	1	2	3



Identify/Assess Hazards using the matrix and worksheet from USARAK Pam 385-4 (Block 4-5)



Assessment Factors	Identify and Assess Hazards	Score	Risk Level
Mission (Planning)			
Mission (Command and Control)			
Terrain			
Weather			
Troops (Soldier Endurance)			
Troops (Soldier Selection)			
Troops (Rest and Maintenance)			
Additional Considerations			
Score: _____			Total
Initial Risk Level: _____			



Determine initial risk level (Block 6)

Use the cumulative score to determine the initial risk level.

CAVEAT: If any individual area (e.g. weather) receives a high or extremely high risk, the overall initial risk level is high or extremely high even if the cumulative score indicates low or moderate risk

Individual Area	1,2	3,4	5,6	7,8,9
Risk Level	Low risk	Moderate Risk	High Risk	Extremely High Risk
Cumulative Score	7 to 12	13 to 23	24 to 35	36 to 40



Develop Controls and Make Risk Decisions (Block 7-9)



- Address WHO, WHAT, WHEN, WHERE and HOW.
- Use USARAK 385-4, Appendixes A/B.
- Use the RM worksheet examples in USARAK 385-4.
- Reassess the risk after controls are in place.
- Involve the appropriate level of command.

Risk Level	Low	Moderate	High	Extremely High
Who can approve the mission or activity?	Company Commander	Battalion Commander	Brigade Commander	Commanding General



Implement Controls, Supervise and Evaluate (Block 7-9)



- **Convert controls into execution orders.**
- **Ensure controls are understood by all personnel.**
- **Enforce risk controls to standard.**
- **Designate personnel to supervise and evaluate controls.**
- **Evaluate and make adjustments as necessary.**



Scenario



You have ten minutes to:

- **Identify and assess the hazards using the risk assessment matrix and worksheet.**
- **Determine the initial risk level, develop controls and determine residual risk for the scenario.**
- **Be prepared to brief your results.**



Scenario



You are the Platoon Leader for 1st Platoon, B Company, 1-24 IN, 1/25 SBCT. You have been tasked with conducting a 12 mile snow shoe ruck march for physical training with a 40lb ruck. The terrain is mostly flat with slightly undulating terrain during small portions of the movement. You have had 5 weeks to prepare for this mission, have received a full OPORD, and your Soldiers have conducted several shorter ruck marches to prepare. You will be starting the march at 0400 in mid January and the weather is expected to be between -30 and -40 degrees. Over half of your Platoon has never been through a winter in Alaska, but are physically fit and motivated. All of your equipment including vehicle heaters are FMC and your Squad Leaders have been through CWLC. Recent snowfall and chilling conditions has allowed snow and ice to accumulate to about 1 foot off roads or where snow is typically packed down.



Scenario 1: Initial Risk Level

Assessment Factors	Identify and Assess Hazards	Score	Risk Level
Mission (Planning)	MOI and 72 hours	1	
Mission (Command and Control)	Organic, Night tactical	3	
Terrain	Flat, Adequate with secondary roads	2	
Weather	-30 to -40° F, 8-24 hours	6	
Troops (Soldier Endurance)	Non-acclimated, Optimum	4	
Troops (Soldier Selection)	Routine, Some cold weather experience	3	
Troops (Rest and Maintenance)	About 8 hours, adequate	2	
Additional Considerations	There is a high risk of cold weather injury with the expected temperatures.		
Total Score: 21			
Initial Risk Level: HIGH			



SCENARIO POSSIBLE SOLUTION



4. SUBTASK/SUBSTEP OF MISSION/TASK	5. HAZARD	6. INITIAL RISK LEVEL	7. CONTROL	8. HOW TO IMPLEMENT/ WHO WILL IMPLEMENT	9. RESIDUAL RISK LEVEL
FOOT MARCH	COLD WEATHER INJURIES	H	CLOTHING IAW USARAK 385-4 TEMPERATURE ZONE IV HEATED SHELTER AT CHECK POINTS	How: PCC/PCI Who: SQUAD LEADER/PSG	M
			KEEP PACE REASONABLE TO DECREASE SWEATING, CHANGE BASE LAYER AT DEFENSE POSITION	How: Who:	
DEFENSE	COLD WEATHER INJURIES	H	TENT WITH SHA BEHIND POSITIONS. 1/3 IN POSITION 2/3 IN SHELTER	How: REHEARSALS Who: SQUAD LEADERS	M
			ROTATE 30 MINUTE. MEDICS CHECK HOURLY MINIMUM	How: Who:	
				How: Who:	



SCENARIO POSSIBLE SOLUTION



11. OVERALL SUPERVISION PLAN AND RECOMMENDED COURSE OF ACTION

Squad Leader will enforce all control measures. PSG will periodically make a check of each individual tent group. Buddy teams will monitor each other at all times during conduct of operations.

12. APPROVAL OR DISAPPROVAL OF MISSION OR TASK APPROVE DISAPPROVE

a. Name (*Last, First, Middle Initial*)

b. Rank/Grade

c. Duty Title/Position

d. Signature of Approval Authority

e. Additional Guidance:

Daily risk assessment conducted; adjustments made to clothing and warming shelter breaks/CWI checks based upon current conditions. Per the requirements of USARAK Regulation 420-1 a serviceable 5lb ABC fire extinguisher and a smoke detector will be present.

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Questions?



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