



Cold Weather Risk Management





Terminal Learning Objective



Action: Apply the Composite Risk Management (CRM) 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 CRM process to given cold weather scenarios.



CRM Principles



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



Composite 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 Composite Risk Management Process

Section II: CRM examples for cold weather training events.

Appendices:

- A. Planning Considerations for Cold Weather Training and Operations
- B. Wind Chill Chart
- C. 9 Line Medical Evacuation Request
- D. Ahkio Packing List
- E. Blank Copies of Matrix, Worksheet and DA Form 7566
- F. Avalanche Hazards Worksheet



Identify/Assess Objective Hazards using 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	CWIC 2 / Some CW experience	CWIC 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/Assess Hazards using the matrix and worksheet from USARAK Pam 385-4 (Block 6)



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			
		Total Score: _____	
Initial Risk Level: _____			



Identify/Assess Subjective Hazards Using Risk Assessment Matrix



RISK ASSESSMENT MATRIX		HAZARD PROBABILITY				
		Frequent	Likely	Occasional	Seldom	Unlikely
		A	B	C	D	E
SEVERITY	Catastrophic I	Extremely High				
	Critical II		High			
	Moderate III		Moderate		Low	
	Negligible IV				Low	

Subjective Hazards: Wildlife, Tactical Considerations, CWI etc...
i.e. Mission specific risks



COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK <i>OPFOR Defense</i>	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
----------------------------------	---------------	-------------	-----------------------------

4. PREPARED BY

a. LAST NAME <i>BULLWINKLE</i>	b. RANK <i>2LT</i>	c. POSITION <i>PLATOON LEADER</i>
--------------------------------	--------------------	-----------------------------------

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
1. Individual Movement Techniques	1A. Slips / Trips / Falls	M	Ski poles for maintaining balance; fall and recovery exercises; wear snowshoes to increase traction; brush off snow from clothing and gloves	L	Ski poles issued, train on recovery drills, on the proper wear and use of MSR snowshoes, ski pole use	Cadre will inspect equipment prior to movement and during movement. Spot corrections will be made	

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
--------------	---------	------------------	--------------



Determine initial risk level (Block 7)

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



COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK <i>OPFOR Defense</i>	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
----------------------------------	---------------	-------------	-----------------------------

4. PREPARED BY

a. LAST NAME BULLWINKLE	b. RANK 2LT	c. POSITION PLATOON LEADER
-------------------------	-------------	----------------------------

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
1. Individual Movement Techniques	1A. Slips / Trips / Falls	M	Ski poles for maintaining balance; fall and recovery exercises; wear snowshoes to increase traction; brush off snow from clothing and gloves	L	Ski poles issued, train on recovery drills, on the proper wear and use of MSR snowshoes, ski pole use	Cadre will inspect equipment prior to movement and during movement. Spot corrections will be made	

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
--------------	---------	------------------	--------------



Develop Controls and Make Risk Decisions (Block 8, 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



COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK <i>OPFOR Defense</i>	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
----------------------------------	---------------	-------------	-----------------------------

4. PREPARED BY

a. LAST NAME BULLWINKLE	b. RANK 2LT	c. POSITION PLATOON LEADER
-------------------------	-------------	----------------------------

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
1. Individual Movement Techniques	1A. Slips / Trips / Falls	M	Ski poles for maintaining balance; fall and recovery exercises; wear snowshoes to increase traction; brush off snow from clothing and gloves	L	Ski poles issued, train on recovery drills, on the proper wear and use of MSR snowshoes, ski pole use	Cadre will inspect equipment prior to movement and during movement. Spot corrections will be made	

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
--------------	---------	------------------	--------------



Implement Controls, Supervise and Evaluate (Block 10, 11, 12)



- 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.



COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM 5-19; the proponent agency is TRADOC.

1. MSN/TASK <i>OPFOR Defense</i>	2a. DTG BEGIN	2b. DTG END	3. DATE PREPARED (YYYYMMDD)
----------------------------------	---------------	-------------	-----------------------------

4. PREPARED BY

a. LAST NAME BULLWINKLE	b. RANK 2LT	c. POSITION PLATOON LEADER
-------------------------	-------------	----------------------------

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
1. Individual Movement Techniques	1A. Slips / Trips / Falls	M	Ski poles for maintaining balance; fall and recovery exercises; wear snowshoes to increase traction; brush off snow from clothing and gloves	L	Ski poles issued, train on recovery drills, on the proper wear and use of MSR snowshoes, ski pole use	Cadre will inspect equipment prior to movement and during movement. Spot corrections will be made	

Additional space for entries in Items 5 through 11 is provided on Page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check one)

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH

14. RISK DECISION AUTHORITY

a. LAST NAME	b. RANK	c. DUTY POSITION	d. SIGNATURE
--------------	---------	------------------	--------------



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.



Questions?



Terminal Learning Objective



Action: Apply the CRM process and principles to cold weather operations or training

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

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