RISK MANAGEMENT GUIDE

for

COLD WEATHER OPERATIONS

USARAK

Northern Warfare Training Center

United States Army Alaska Pamphlet 385-4 *30 September 2009*

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY ALASKA
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United States Army Alaska Pamphlet 385-4 **30 September 2009**

Safety
Risk Management for Cold Weather Operations

Summary. Soldiers in Alaska must train to serve our nation in one of the harshest climates in the world. This pamphlet gives leaders at all levels a pocket reference for implementing the Composite Risk Management process in order to develop safe and effective cold weather training plans, exercises and operations. FM 5-19, Composite Risk Management, was used to develop this pamphlet. Soldiers who attend a United States Army Alaska (USARAK) Northern Warfare Training Center (NWTC) course will receive training on the CRM process and integrate CRM into all aspects of training. The lesson plan pertaining to this pamphlet is available on the NWTC website, www.wainwright.army.mil/nwtc/.

Applicability. This pamphlet applies to units and activities assigned or attached to USARAK. This pamphlet supersedes USARAK Pamphlet 385-4, dated 01 March 2004.

Interim Changes. Interim changes to this pamphlet are not official unless they are authenticated by the Director of Human Resources (DHR). Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. The proponent agency of this pamphlet is USARAK NWTC, Ft. Wainwright, Alaska, www.wainwright.army.mil/nwtc/. Users are invited to send comments and suggested improvements on Department of the Army (DA) Form 2028, (Recommended Changes to Publications and Blank Forms), directly to APVR-WNW.

*This pamphlet supersedes USARAK Pamphlet 385-4, dated 1 March 2004.

Distribution. This regulation is distributed through the USARAK home page at http://www.usarak.army.mil/publications/.

FOR THE COMMANDER:

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SECTION I

Composite Risk Management for Cold Weather Training and Operations

Step 1: Identify hazards:

a. METT-TC provides the framework to identify hazards. In a garrison environment or off-duty activities consider:

- **Activity (Mission)**
- **Disrupters (Enemy)**
- **Terrain and Weather**
- **People (Troops)**
- **Time**
- **Legal considerations (Civil considerations)**

b. You can also use regulations, accident data, risk assessment matrices, AARs, experience, subject matter experts, etc.

Step 2: Assess the hazards:

- **Assess the probability of the event or occurrence.**
- **Estimate the expected result or severity of an event or occurrence.**
- **Determine the specified level of risk for a given probability and severity using the standard risk assessment matrix.**

Risk Assessment Matrix						
		Probability				
Severity		Frequent A	Likely B	Occasional C	Seldom D	Unlikely E
Catastrophic		E	E	H	H	M
Critical		E	H	H	M	L
Marginal		H	M	M	L	L
Negligible		M	L	L	L	L
E –Extremely High		H – High		M – Moderate		L - Low

Step 3: Develop Controls:

a. Effective control measures address WHO, WHAT, WHEN, WHERE and HOW.
b. Reassess the risk after controls are in place to determine residual risk level.
c. Make risk decisions – Ask yourself what constitutes an acceptable level of risk for the mission or activity?
d. Involve the appropriate level of command based upon the residual risk level:

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

Step 4: Implement Controls:

a. Ensure controls are converted into clear and simple execution orders.
b. Controls must be understood by all.

Step 5: Supervise and Evaluate:

a. Implement and enforce risk controls to standard.
b. Supervise the process – this is also a control measure.
c. Evaluate and make adjustments as necessary.

NOTE: Record the CRM process on DA Form 7566 available at http://www.apd.army.mil/

Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

SECTION II

Risk Management Examples for Select Cold Weather Training Events

This section contains example CRM worksheets for some of the cold weather training conducted during courses at the Northern Warfare Training Center. They are not all inclusive and do not negate the need to apply the CRM process to training or operations in your unit.

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

1. MSN/TASK: **Conduct tent and stove drill. Bivouac in a ten man arctic tent.**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Handle Fuel	Frostbite from handling fuel	H	Minimum of 1 pair of POL handler gloves in each ahkio group. Wear POL handler gloves when handling fuel.	M	Tent and stove drill exercises using crawl, walk, run approach. Wear of POL gloves is a teaching point during the class and must be enforced during training.	Squad instructor and student squad leader Medics on site with heated SUSV	
Handle Fuel	Environmental damage from fuel	M	Fuel absorbent pads are in each ahkio group. Place fuel absorbent pads beneath fuel can and other areas where fuel can spill.	L	Tent and stove drill exercises using crawl, walk, run approach. This control measure is a teaching point during initial instruction.	Squad instructor and student squad leader Medics on site with heated SUSV	
Pitch and strike the arctic ten man tent; set-up and dismantle	Cold Weather Injuries	M	Contact gloves must be worn at a minimum while working outside; no exceptions. Students should select and wear appropriate cold weather clothing	L	These are teaching points during cold weather clothing and equipment instruction; this	Squad instructor Medics on site with heated SUSV	

the stove			and equipment for the conditions; squad instructor will check and make adjustments to student clothing based upon current conditions.		lesson is practiced and reinforced by squad instructors any time students work outdoors.		
Operate SHA; bivouac in tent with SHA operating	Tent Fire – This tent will burn to the ground in less than 2 minutes once it is on fire.	H	Operational fire extinguisher positioned in center of tent. Stove is placed on stove board to prevent stove from coming in contact with ground (**Cut a piece of plywood 3' x 2', rip it lengthwise in half, cover top side with galvanized sheet steel and re-join the two pieces with hinges. This allows you to fold it in half for storage.)** Only licensed personnel authorized to operate stove. Fire guard required when stove is in use. Fire guard must be licensed to operate the stove. When lighting the stove, all Soldiers must be awake, doors open to the outside. Ensure that flaps on stove pipe opening closure flap are tied open and do not come in contact with the stove pipe. Ensure that drip interceptor loop is in fuel supply hose to prevent fuel from running down the hose onto the tent. Tie lines from the stack cap assembly directly to the tent to allow stack to move with tent in	M	All of these control measures are teaching points during instruction. Tent and stove drill exercises using crawl, walk, run approach. Rehearse roll-out drills during instruction. Squad instructors present during bivouacs.	Squad instructor and student squad leader Medics on site	

			windy conditions. Ensure that snow flaps are positioned to the outside of tent and are not frozen to the ground to allow Soldiers to roll-out in case of fire. Tent pole is 6-8 feet in height to prevent tent from coming in contact with stove.				
Operate SHA; bivouac in tent with SHA operating	Carbon Monoxide Poisoning	M	Ensure all ventilators are open when operating stove. Use all sections of the stack assembly to allow the stove to draft properly. Ensure that the seams on the stove pipes are in-line with each other to prevent exhaust from leaking out of the stack assembly.	L	These control measures are teaching points. Tent and stove drill exercises using crawl, walk run approach Squad instructors bivouac with students.	Squad instructor and student squad leader. Medics on site	

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COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK: **Bivouac in an improvised snow shelter**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Carbon Monoxide Poisoning/Asphyxiation from improper ventilation	M	Create at least two holes in roof of shelter with ski pole for ventilation. Do not completely seal door. Do not use stoves or burn candles in shelter.	L	These control measures are teaching points for this block of instruction. Squad instructors will supervise during the construction process.	Squad instructors. Medics on site. OIC/NCOIC	
	Cold Weather Injuries	H	Students must keep boots inside sleeping bag during the rest cycle. Heated shelter available (chalet); students are briefed on location and route to heated shelter. Students will dress and move to heated shelter for cold weather injury checks at first call.	M	These control measures are teaching points during this block of instruction. Squad instructor will physically check that boots are inside sleeping bag just prior to rest cycle. A least two squad instructors will bivouac in	Squad instructors. Medics on site; Medics stay in heated shelter for rest cycle. OIC/NCOIC	

					improvised shelter so that they are aware of the conditions students are experiencing and can make adjustments as required. Squad instructors will supervise wake up and movement to chalet at first call. Medics will physically check each student for cold weather injuries before students eat and breakdown shelters.		

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COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK : **Move 5 kilometers on snowshoes**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	H	Students must dress appropriately for a high level of physical exertion. Students who overdress will become sweat soaked and are at greater risk for cold weather injuries. Students must adjust clothing during the movement and maintain a pace that does not cause them to sweat profusely. Some conditions may warrant covering all exposed flesh. This makes overheating even more likely, with the result that students will expose sweat soaked skin to ventilate and risk a cold weather injury. Once students have covered skin, they must not uncover it unless they are in a heated shelter. Keep a slow and steady pace; this event is not a race. If temperatures are below -25 degrees F, all exposed skin must be covered.	M	First control measure is a teaching point during cold weather clothing and equipment instruction. These measures are stressed throughout the course. Squad instructors will check student uniform and ruck and make adjustments prior to movement. Squad instructors lead this event. 100% CWI injury check by medic at the conclusion of exercise	OIC/NCOIC Squad instructors Medics	

			Each student carries a ruck with sleeping bag, sleeping mat, spare socks, gloves and mittens/liners. NWTC instructors and medics man three checkpoints on the course. At least 2 roving instructors/cadre on the course at all times. All cadre have working ALMR for communication.				
	Dehydration	M	Each student carries 2 quarts of water. 5 gallons of water stationed at each checkpoint.	L	Squad instructors inspect. OIC/NCOIC inspect for water as heated checkpoints.	Squad instructors	

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COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK : **Move 10 kilometers on skis or snowshoes**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	H	Students must dress appropriately for a high level of physical exertion. Students who overdress will become sweat soaked and are at greater risk for cold weather injuries. Students must adjust clothing during the movement and maintain a pace that does not cause them to sweat profusely. Some conditions may warrant covering all exposed flesh. This makes overheating even more likely, with the result that students will expose sweat soaked skin to ventilate and risk a cold weather injury. Once students have covered skin, they must not uncover it unless they are in a heated shelter. Keep a slow and steady pace; this event is not a race. If temperatures are below -25 degrees F, all exposed skin must be covered.	M	First control measure is a teaching point during cold weather clothing and equipment instruction. These measures are stressed throughout the course. Squad instructors will check student uniform and ruck and make adjustments prior to movement. 100% CWI injury check by medic at the conclusion of exercise	OIC/NCOIC Squad instructors Medics	

			Each student carries a ruck with sleeping bag, sleeping mat, spare socks, gloves and mittens/liners. NWTC instructors and medics man six checkpoints on the course. Three are heated shelters. At least 2 roving instructors/cadre on the course at all times. All cadre have working ALMR for communication.				
	Dehydration	M	Each student carries 2 quarts of water. 10 gallons of water stationed at each heated checkpoint.	L	Squad instructors inspect. OIC/NCOIC inspect for water as heated checkpoints.	Squad instructors	
	Lost Soldiers	M	Students briefed on route. Trail is well marked. Squad instructors move students on trail prior to the 10K (during cross country movements and PT) Tracking students: One instructor will be posted at chalet and record position of students as student roster numbers are called out upon reaching each checkpoint.	L	OIC or NCOIC briefs route. Tracking system is in place and each Soldier knows his/her roster number. Squad instructors move students on 10K trail during ski and snowshoe training and PT prior to this event.	Squad instructors OIC	

	Slips and falls	M	For ski movement, Soldiers have minimum of 30 hours of ski training prior to event. Proper waxing technique for conditions. Ski poles used for balance for ski or snowshoe movement.	L	Teaching points during ski/snowshoe instruction. Squad instructors assist students with waxing recommendations the night before movement.	Squad instructors	

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COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK : **Haul the scow sled (ahkio) using ski and/or snowshoes**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	H	Students must dress appropriately for a high level of physical exertion. Students who overdress will become sweat soaked and are at greater risk for cold weather injuries. Students must adjust clothing during the movement and maintain a pace that does not cause them to sweat profusely. Some conditions may warrant covering all exposed flesh. This makes overheating even more likely, with the result that students will expose sweat soaked skin to ventilate and risk a cold weather injury. Once students have covered skin, they must not uncover it unless they are in a heated shelter. During training, instructors stress the above principles. This event may be used for PT; instructor must stress the difference between hauling for PT vs. hauling during actual training/operations.	M	Squad instructors will check student uniform and ruck and make adjustments prior to movement.	OIC/NCOIC Squad instructors Medics	

			If temperatures are below -25 degrees F, all exposed skin must be covered.				
	Dehydration	M	Each student carries 2 quarts of water.	L	Squad instructors inspect.	Squad instructors	

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COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK: **Biathlon: Move 10 kilometers on skis or snowshoes. Engage targets with assigned weapon during movement.**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	H	Students must dress appropriately for a high level of physical exertion. Students who overdress will become sweat soaked and are at greater risk for cold weather injuries. Students must adjust clothing during the movement and maintain a pace that does not cause them to sweat profusely. Some conditions may warrant covering all exposed flesh. This makes overheating even more likely, with the result that students will expose sweat soaked skin to ventilate and risk a cold weather injury. Once students have covered skin, do not uncover it unless you are in a heated shelter. Keep a slow and steady pace; this event is not a race. If temperatures are below -25 degrees F, all exposed skin must be covered.	M	Squad instructors will check student uniform and ruck and make adjustments prior to movement. 100% CWI injury check by medic at the conclusion of exercise	OIC/NCOIC Squad instructors Medics	

			Each student carries a ruck with sleeping bag, sleeping mat, spare socks, gloves and mittens/liners. NWTC instructors and medics man six checkpoints on the course. Three are heated shelters. At least 2 roving instructors/cadre on the course at all times. All cadre have working ALMR for communication.				
	Dehydration	M	Each student carries 2 quarts of water. 10 gallons of water stationed at each heated checkpoint.	L	Squad instructors inspect. OIC/NCOIC inspect for water as heated checkpoints.	Squad instructors	
	Slips and falls	M	For ski movement, Soldiers have minimum of 30 hours of ski training prior to event. Proper waxing technique for conditions. Ski poles used for balance for ski or snowshoe movement.	L	Teaching points during ski/snowshoe instruction. Squad instructors assist students with waxing recommendations the night before movement.	Squad instructors	
	Lost Soldiers	M	Students briefed on route. Trail is well marked. Squad instructors move students on trail prior to the 10K (during cross country movements and PT) Tracking students: One instructor will be posted at chalet and	L	OIC or NCOIC briefs route. Tracking system is in place and each Soldier knows his/her roster number.	Squad instructors OIC	

			record position of students as student roster numbers are called out upon reaching each checkpoint.		Squad instructors move students on 10K trail during ski and snowshoe training and PT prior to this event.		
	Accidental Discharge	M	No one will move on the course with ammunition. Ammunition will be issued on the range only. After firing, all Soldiers will clear weapons, turn in magazines, and be 'rodded off' the range prior to continuing movement on the 10K course.	L	Range procedures briefed by Training Branch OIC/NCOIC prior to start of event.	Range OIC/RSO 3 Range safeties. Medic on site with warm evacuation vehicle (SUSV).	

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☐ LOW ☒ MODERATE ☐ HIGH ☐ EXTREMELY HIGH

14. RISK DECISION AUTHORITY

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

COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK : **Engage targets with assigned weapon in a snow covered environment**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	M	Contact gloves must be worn at a minimum while working outside; no exceptions. Students should select and wear appropriate cold weather clothing and equipment for the conditions; squad instructor will check and make adjustments to student clothing based upon current conditions. Do not place bare nose or cheek to charging handle or stock of weapon. Bare flesh on cold weapon can equal cold weather injury. Use neck gaiter or balaclava down to prevent contact frostbite on face.	L	These are teaching points during cold weather clothing and equipment instruction; this lesson is practiced and reinforced by squad instructors any time students work outdoors. 100% CWI injury check by medic at the conclusion of exercise	Squad instructor Medics on site with heated SUSV	
	Accidental Discharge	M	No one will move on the course with ammunition. Ammunition will be issued on the range only. After firing, all Soldiers will clear weapons, turn in magazines, and be 'rodded off' the range prior to continuing training.	L	Implement Range SOP. Range procedures briefed by Training Branch OIC/NCOIC prior to start of event.	Range OIC/RSO 3 Range safeties. Medic on site with warm evacuation vehicle (SUSV).	

	Dehydration	M	Each student carries 2 quarts of water. 10 gallons of water stationed at each heated checkpoint.	L	Squad instructors inspect. OIC/NCOIC inspect for water as heated checkpoints.	Squad instructors	

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

1. MSN/TASK: **Move safely in avalanche terrain**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	H	Students must dress appropriately for a high level of physical exertion. Students who overdress will become sweat soaked and are at greater risk for cold weather injuries. Students must adjust clothing during the movement and maintain a pace that does not cause them to sweat profusely. Some conditions may warrant covering all exposed flesh. This makes overheating even more likely, with the result that students will expose sweat soaked skin to ventilate and risk a cold weather injury. Once students have covered skin, do not uncover it unless you are in a heated shelter. Keep a slow and steady pace; this event is not a race. If temperatures are below -25 degrees F, all exposed skin must be covered. Each student carries a ruck with	M	Squad instructors will check student uniform and ruck and make adjustments prior to and during movement. 100% CWI injury check by medic at the conclusion of exercise	OIC/NCOIC Squad instructors Medics with SUSV at avalanche site.	

			sleeping bag, sleeping mat, spare socks, gloves and mittens/liners. NWTC instructors and medics man six checkpoints on the course. Three are heated shelters.. At least 2 roving instructors/cadre on the course at all times. All cadre have working ALMR for communication.				
	Dehydration	M	Each student carries 2 quarts of water. 5 gallons of water stationed at avalanche site (in SUSV).	L	Squad instructors inspect. OIC/NCOIC inspect for water.	Squad instructors	
	Avalanche	M	Safety and standards evaluates avalanche site and is in charge of site preparation, and manages site during the training event. Instructors that provide training have attended Level 1 Avalanche Training.	L	Safety and Standards oversees training and avalanche rescue scenario.	Safety and Standards Squad Instructor	

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

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

1. MSN/TASK : **Skijor**	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
	Cold Weather Injuries	H	Cover all exposed skin – no exceptions. Goggles worn for eye protection.	M	These measures are teaching points during instruction / demonstration. Squad instructors will check student uniform make adjustments prior to movement. 100% CWI injury check by medic at the conclusion of exercise	OIC/NCOIC Squad instructors Medics	
	Slips, falls, collisions	H	Students must have minimum of 40 hours of ski training and must have recommendation of squad instructor prior to skijoring; some students may not skijor if they do not possess the skills necessary to do so safely. Personnel must be spaced 10-12 feet apart on a 120-150 foot rope for SUSV. Place best/most	M	These measures are teaching points during instruction / demonstration. Squad instructors assist students with waxing recommendations the night before movement.	OIC/NCOIC Squad instructors Medics	

			experienced personnel closest to vehicle and progressively place less skilled skiers towards the back of the rope. An individual that falls must roll outside and away from the rope to avoid taking out those behind him/her. For SUSV, an observer with working headset has communication with driver to control speed and start/stop/slow vehicle as required. For snowmachines, only one individual at a time may skijor. For all vehicles, 15 mph (24kph) is maximum speed. Only licensed instructors may operate and skijor students. For all vehicles, slow on turns or near obstacles to allow skiers to negotiate the terrain in control.				

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

Appendix A: Planning Considerations for Cold Weather Training and Operations

Temperature Zone 1: 55º to 33º F			
Area of Consideration	**Special Requirements and Recommended Actions**		
Available Personal Clothing and Equipment	**Clothing Layer:**	**ECWCS Generation II**	**ECWCS Generation III**
	Base Layer	• Lightweight polypropylene top and bottom and/or • Mid-weight polypropylene top and bottom	• Lightweight cold weather undershirt and drawers and/or • Mid-weight cold weather shirt/drawers
	Insulating Layer	• Shirt, cold weather, black fleece and/or • Liner, cold weather, coat	• Green fleece jacket
	Outer Shell	• Generation II GORE-TEX® jacket and • Generation II GORE-TEX® trousers	• Wind cold weather jacket (Wind Shirt) • Extreme cold/wet weather jacket (Hard Shell) • Extreme cold/wet weather trousers (Hard Shell)
	Other: • Suspenders • Issued Wool Socks w/ synthetic liner sock • Temperate Boots; cold weather boots recommended (e.g. Belleville 795, Danner Ft. Lewis 400g Tan Military Boots)		• Balaclava and neck gaiter • Issued GORE-TEX® gloves with liners • Knife • Arctic necklace (lighter and chap-stick worn around neck)
Training	• Knowledge of cold weather environmental hazards • Knowledge of cold weather clothing capabilities and limitations • Skill to use cold weather clothing and equipment to provide protection from the elements • Skill to prevent, recognize and treat cold weather injuries		
Food and Water	• MREs • 1 hot meal daily as mission dictates • 3.5-5 quarts of water per day • Water filter (Recommend: First Need Portable Water Filter)		
Shelter and Heat	• Patrol Bag • GORE-TEX® bivouac cover • sleeping mat • poncho • poncho liner (optional)		
Additional Control Measures	• water re-supply plan • sanitation plan		

Temperature Zone 2: 32º to 14º F			
Area of Consideration	**Special Requirements and Recommended Actions**		
Available Personal Clothing and Equipment	**Clothing Layer:**	**ECWCS Generation II**	**ECWCS Generation III**
	Base Layer	• Polypropylene undershirt and drawers • Drawers cold weather, polyester, brown lightweight undershirt and drawers	• Lightweight cold weather undershirt and drawers • Mid-weight cold weather shirt/drawers
	Insulating Layer	• Shirt and overalls, cold weather, black fleece and/or • Liner, cold weather, coat and trousers	• Green fleece jacket
	Outer Shell	• Generation II GORE-TEX® jacket and • Generation II GORE-TEX® trousers	• Wind cold weather jacket (Wind Shirt) • Extreme cold/wet weather jacket (Hard Shell) • Extreme cold/wet weather trousers (Hard Shell) • Extreme cold weather parka (Puffy Jacket)
	Other: • Suspenders • Issued Wool Socks w/ synthetic liner sock • Cold Weather Boots (e.g. Belleville 795, Danner Ft. Lewis 400g Tan Military Boots) • Balaclava and neck gaiter • Contact Gloves		• Issued GORE-TEX® gloves with liners • Trigger Finger Mittens w/ extra TF liners • Knife • Arctic necklace (lighter and chap-stick worn around neck) • Ski goggles
Training	• ALIT required for all personnel		
Food and Water	• Meal, Cold Weather (MCW) 1 bag = 1 meal which provides about 1500 calories • 34 ounces of heated water are required to hydrate one MCW • 2 hot meals per day as mission dictates		• 3.5-5 quarts of water per day • 1 stove per team; Recommend MSR Whisperlite Internationale or MSR XGK-EX to heat water for rations and/or melt snow for water
Shelter and Heat	Individual: • MSS, all components • sleeping mat, poncho and poncho liner		Squad: • Ahkio Group complete IAW Appendix F • Arctic 10-man tent • Space Heater Arctic
Additional Control Measures	• Begin leader/medic checks for cold weather injuries; 2-3 times daily at minimum • water re-supply and storage plan (to prevent water from freezing) • Sanitation plan • No skin camouflage below 32 degrees F		• Contact gloves must be worn when working outdoors • POL gloves must be worn when working with fuel • Consider 4 season, 2-4 man shelters for personnel that work away from support base

Temperature Zone 3: 14º to -19º F			
Area of Consideration	**Special Requirements and Recommended Actions**		
Available Personal Clothing and Equipment	**Clothing Layer:**	**ECWCS Generation II**	**ECWCS Generation III**
	Base Layer	• Polypropylene undershirt and drawers • Drawers cold weather, polyester, brown lightweight undershirt and drawers	• Lightweight cold weather undershirt and drawers • Mid-weight cold weather shirt/drawers
	Insulating Layer	• Shirt and overalls, cold weather, black fleece and/or • Liner, cold weather, coat and trousers	• Green fleece jacket
	Outer Shell	• Generation II GORE-TEX® jacket and • Generation II GORE-TEX® trousers	• Wind cold weather jacket (Wind Shirt) • Soft shell cold weather jacket (Soft Shell) • Soft shell cold weather trousers (Soft Shell) • Extreme cold weather parka (Puffy Jacket) • Extreme cold weather trousers
	Other: • Suspenders • Issued Wool Socks w/ synthetic liner sock • Cold Weather Boots (e.g. Belleville 795, Danner Ft. Lewis 400g Tan Military Boot) for short duration outdoor work • Black or White Vapor Barrier Boots • Balaclava and neck gaiter		• Contact Gloves • Issued GORE-TEX® gloves with liners • Trigger Finger Mittens w/ extra TF liners • Arctic Mittens • Knife • Arctic necklace (lighter and chap-stick worn around neck) • Ski goggles
Training	• ALIT required for all personnel		
Food and Water	• Meal, Cold Weather (MCW) 1 bag = 1 meal which provides about 1500 calories • 34 ounces of heated water are required to hydrate one MCW • 2 hot meals per day as mission dictates		• 3.5-5 quarts of water per day • 1 stove per team; Recommend MSR Whisperlite Internationale or MSR XGK-EX to heat water for rations and/or melt snow for water
Shelter and Heat	Individual: • MSS, all components • sleeping mat, poncho and poncho liner		Squad: • Ahkio Group complete IAW Appendix F • Arctic 10-man tent • Space Heater Arctic
Additional Control Measures	Implement all control measures from Temperature Zone 2 and change/add: • Increase frequency of leader/medic checks for cold weather injuries • Rotate Soldiers in static positions frequently		• Warm tents and/or vehicles available for Soldiers • 4 season shelters for personnel that work away from support base are mandatory

Temperature Zone 4: -20º to -40º F			
Area of Consideration	**Special Requirements and Recommended Actions**		
Available Personal Clothing and Equipment	**Clothing Layer:**	**ECWCS Generation II**	**ECWCS Generation III**
	Base Layer	• Polypropylene undershirt and drawers • Drawers cold weather, polyester, brown lightweight undershirt and drawers	• Lightweight cold weather undershirt and drawers • Mid-weight cold weather shirt/drawers
	Insulating Layer	• Shirt and overalls, cold weather, black fleece and/or • Liner, cold weather, coat and trousers	• Green fleece jacket
	Outer Shell	• Generation II GORE-TEX® jacket • Generation II GORE-TEX® trousers	• Wind cold weather jacket (Wind Shirt) • Soft shell cold weather jacket (Soft Shell) • Soft shell cold weather trousers (Soft Shell) • Extreme cold weather parka (Puffy Jacket) • Extreme cold weather trousers
	Other: • Suspenders • Issued Wool Socks w/ synthetic liner sock • Cold Weather Boots (e.g. Belleville 795, Danner Ft. Lewis 400g Tan Military Boot) for short duration outdoor work • Black or White Vapor Barrier Boots in the field • Balaclava and neck gaiter		• Contact Gloves • Issued GORE-TEX® gloves with liners • Trigger Finger Mittens w/ extra TF liners • Arctic Mittens • Knife • Arctic necklace (lighter and chap-stick worn around neck) • Ski goggles
Training	• ALIT required for all personnel		
Food and Water	• Meal, Cold Weather (MCW) 1 bag = 1 meal which provides about 1500 calories • 34 ounces of heated water are required to hydrate one MCW • 2 hot meals per day as mission dictates		• 3.5-5 quarts of water per day • 1 stove per team; Recommend MSR Whisperlite Internationale or MSR XGK-EX to heat water for rations and/or melt snow for water
Shelter and Heat	Individual: • MSS, all components • sleeping mat, poncho and poncho liner		Squad: • Ahkio Group complete IAW Appendix F • Arctic 10-man tent • Space Heater Arctic
Additional Control Measures	Implement all control measures from Temperature Zone 3 and change/add: • Risk Level is high • Limit outdoor operations and training; close scrutiny of operations/training by leaders is required		• Hourly leader/medic checks for cold weather injuries • Cover all exposed skin • Static duty not recommended

Temperature Zone 5: Below -40º F			
Area of Consideration	**Special Requirements and Recommended Actions**		
Available Personal Clothing and Equipment	**Clothing Layer:**	**ECWCS Generation II**	**ECWCS Generation III**
	Base Layer	• Polypropylene undershirt and drawers • Drawers cold weather, polyester, brown lightweight undershirt and drawers	• Lightweight cold weather undershirt and drawers and/or • Mid-weight cold weather shirt/drawers
	Insulating Layer	• Shirt and overalls, cold weather, black fleece and/or • Liner, cold weather, coat and trousers	• Green fleece jacket
	Outer Shell	• Generation II GORE-TEX® jacket and • Generation II GORE-TEX® trousers	• Wind cold weather jacket (Wind Shirt) • Soft shell cold weather jacket (Soft Shell) • Soft shell cold weather trousers (Soft Shell) • Extreme cold weather parka (Puffy Jacket) • Extreme cold weather trousers
	Other: • Suspenders • Issued Wool Socks w/ synthetic liner sock • Cold Weather Boots (e.g. Belleville 795, Danner Ft. Lewis 400g Tan Military Boot) for short duration outdoor work • Black or White Vapor Barrier Boots in the field • Balaclava and neck gaiter		• Contact Gloves • Issued GORE-TEX® gloves with liners • Trigger Finger Mittens w/ extra TF liners • Arctic Mittens • Knife • Arctic necklace (lighter and chap-stick worn around neck)
Training	• ALIT required for all personnel		
Food and Water	• Meal, Cold Weather (MCW) 1 bag = 1 meal which provides about 1500 calories • 34 ounces of heated water are required to hydrate one MCW • 2 hot meals per day as mission dictates		• 3.5-5 quarts of water per day • 1 stove per team; Recommend MSR Whisperlite Internationale or MSR XGK-EX to heat water for rations and/or melt snow for water
Shelter and Heat	Individual: • MSS, all components • sleeping mat, poncho and poncho liner		Squad: • Ahkio Group complete IAW Appendix F • Arctic 10-man tent • Space Heater Arctic
Additional Control Measures	Implement all control measures from Temperature Zone 4 and change/add: • Risk level is extremely high		• Limit outdoor operations and training to critical life support tasks only • Warm tents and/or vehicles mandatory for all personnel

Appendix B: Wind Chill Chart

Wind Speed (mph) ↓	Air Temperature (°F)																	
	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95

Wind speed based on measures at 33 feet height. If wind speed measured at ground level multiply by 1.5 to obtain wind speed at 33 feet and then utilize chart.

WCT (°F) = 35.74 + 0.6215T - 35.75($V^{0.16}$) + 0.4275T($V^{0.16}$)

Where T is temperature (°F) and V is wind speed (mph)

RISK OF FROSTBITE (see times on chart below)

GREEN – LITTLE DANGER (frostbite occurs in >2 hours in dry, exposed skin)
YELLOW – INCREASED DANGER (frostbite could occur in 45 minutes or less in dry, exposed skin)
RED – GREAT DANGER (frostbite could occur in 5 minutes or less in dry, exposed skin)

Time to occurrence of frostbite in minutes or hours in the most susceptible 5% of personnel.

Wind Speed (mph) ↓	Air Temperature (°F)											
	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	>2h	>2h	>2h	>2h	31	22	17	14	12	11	9	8
10	>2h	>2h	>2h	28	19	15	12	10	9	7	7	6
15	>2h	>2h	33	20	15	12	9	8	7	6	5	4
20	>2h	>2h	23	16	12	9	8	8	6	5	4	4
25	>2h	42	19	13	10	8	7	6	5	4	4	3
30	>2h	28	16	12	9	7	6	5	4	4	3	3
35	>2h	23	14	10	8	6	5	4	4	3	3	2
40	>2h	20	13	9	7	6	5	4	3	3	2	2
45	>2h	18	12	8	7	5	4	4	3	3	2	2
50	>2h	16	11	8	6	5	4	3	3	2	2	2

WET SKIN COULD SIGNIFICANTLY DECREASE THE TIME FOR FROSTBITE TO OCCUR.

Appendix C: 9 LINE MEDEVAC REQUEST

1. Location of Pickup Site _____

2. Radio Frequency & Call Sign _____ / _____

3. # Patients by Precedence _____
(Type & Severity of Wound, _____
Injury, or Illness) _____

4. Special Equipment Required _____

5. Number of patients _____
L- Litter A- Ambulatory _____

6. Security at pick-up site _____
N – No enemy troops in area _____
P- Possible enemy troops in area (caution) _____
E- Enemy troops in area (caution) _____
X-Enemy troops in area (escort required) _____

7. Method of Marking pick-up site: _____

8. Patient nationality and status _____

9. NBC Contamination: _____
N-Nuclear B-Biological
C-Chemical

Appendix D: Ahkio Packing List

Ahkio Group: There is no standard for ahkio group contents. The following is recommended list of items for the ahkio sled group. The AHKIO sled is no longer manufactured. In all likelihood, units will not tow this sled for long distances in training or actual operations. But it is still one of the most effective methods for managing the equipment a squad sized element needs to survive in a cold weather environment. It makes accountability simple and packages everything a squad needs for easy transport. The sled is still available through surplus stores. IMF can repair the sled and fabricate the cover for the sled.

ITEM	#	NSN or ordering information
Scow-sled, 200+ lbs. capacity (ahkio)	1	8920-00-273-8211
Tent 10-man Arctic, complete with pole board	1	8340-00-262-3684
Pole Board	1	Cut a 1'x1' piece of plywood. Cut a second 5"x5" piece of plywood. Bore a hole that is slightly larger than the tent pole diameter into the center of the 5"x5" piece and glue it to the center of the 1'x1' piece.
Door Poles	2	Cut two 6 foot poles that are 2-3 inches in diameter
Space Heater Arctic (SHA)	1	4520-01-444-2375
Stove board	1	Cut a piece of plywood 3' x 2', rip it lengthwise in half, cover top side with galvanized sheet steel and re-join the two pieces with hinges. This allows you to fold it in half for storage.
Five gallon fuel can	1	7240-01-337-5268
Five gallon water can	1	7240-00-089-3827
D-handle coal shovels	2	5120-00-188-8446
Machetes (with sheath)	2	5110-08-13-1286
Squad cook sets	2	7630-00-272-2485
Squad stoves	2	NWTC uses the MSR Whisperlite Internationale OR the MSR XGK-EX (this stove can be fitted with a jet that burns JP-8) Contact MSR www.msrgear.com
Fuel bottles for squad stoves	2	Order from MSR
Bow saw	1	5110-00-340-3276
Ax	1	5110-01-416-7827
Hammers 2 lb.	2	5120-00-203-4656
50 or 60m static rope OR Army 120' Greenline	1	4020-01-526-6234 (NWTC uses Blue Water Ropes/ contact APEXX 404-551-4913 or www.apexxsales.com)
Trace, ahkio pulling, 9 ft	3	Cut from static rope (you can buy in spools and cut)
Tow Rope 27 feet	1	Cut from static rope
Harnesses, Man's, Sled (ahkio towing)	4	8465-00-255-8413
Aluminum oval carabiners (used for towing and rescue systems)	8	NWTC uses Omega Pacific Ovals / contact APEXX 404-551-4913 or www.apexxsales.com
Aluminum Locking Pear Shaped Carabiners (used for rescue systems)	2	NWTC uses Tactical Jake HMS Screw Lok / contact APEXX 404-551-4913 or www.apexxsales.com
25' 1 inch tubular nylon webbing (used for rescue systems)	1	NWTC uses climb spec webbing / contact APEXX 404-551-4913 or www.apexxsales.com
6' 7mm cordelette	2	NWTC uses Blue Water 7mm accessory cord / contact APEXX 404-551-4913 or www.apexxsales.com
Fire extinguisher	1	4210-00-165-4703
Lantern, gasoline*, with case	1	NWTC utilizes a Coleman Brand White Gas Lantern

Recommended Repair Items

ITEM	NSN
CLIP, LINER	8340-00-242-7872
CLOTH, DUCK, 5 YARDS (Ahkio Cover)	8305-00-926-6171
D-RING, ONE INCH BRASS	5390-00-260-1414
LINER, TENT	8340-00-262-3698
PEAK PLATE	8340-00-965-4432
PIN, TENT, STEEL	8340-00-823-7451
POLE, TENT	8340-00-188-8413
SLIP, TENT LINE	8340-00-205-2759
TENT LINE, 12' 6"	8340-00-262-3658
TENT LINE, 19'	8340-00-262-6911

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Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

Risk Assessment Worksheet for Cold Weather Operations

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

DA Form 7566, APR 2005
APD PE v2.02ES

ITEMS 5 THROUGH 12 CONTINUED:

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?

Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

Risk Assessment Worksheet for Cold Weather Operations

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

Risk Assessment Worksheet for Cold Weather Operations

ITEMS 5 THROUGH 12 CONTINUED:

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?

Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

Risk Assessment Worksheet for Cold Weather Operations

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

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Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

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Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

Risk Assessment Worksheet for Cold Weather Operations

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

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Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

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Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

Risk Assessment Worksheet for Cold Weather Operations

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

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Risk Assessment Matrix for Cold Weather Operations

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Mission (Planning)			SCORE:
	Preparatory Time		
Guidance	Optimum	Adequate	Minimal
FRAGO	3	4	5
OPORD	2	3	4
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Mission (Command and Control)			SCORE:
	Event		
Task Organization	Support, Non-tactical, Garrison	Day Tactical	Night Tactical
Operational Control (OPCON)	3	4	5
Attached	2	3	4
Organic	1	2	3

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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:
	Equipment Status		
Personnel Rest 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

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

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

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

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

*for snow covered, avalanche terrain, see Annex F, Avalanche Hazard Evaluation

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:
	Soldier Preparation		
Environmental Preparation	Optimum	Adequate	Minimal
Non-acclimated	3	4	5
Partially acclimated	2	3	4
Acclimated	1	2	3

Troops (Soldier Selection)				SCORE:
	Soldier Experience			
Task	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
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Troops (Rest and Maintenance)			SCORE:
	Equipment Status		
Personnel Rest 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

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:_____			

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COMPOSITE RISK MANAGEMENT WORKSHEET
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1. MSN/TASK	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	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?

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

ITEMS 5 THROUGH 12 CONTINUED:

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?

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Risk Assessment Matrix for Cold Weather Operations

Use the risk assessment matrix and the risk assessment worksheet to help you complete Step 1 and 2 of the CRM process: identify and assess hazards. This allows you to make your initial risk assessment.

Mission (Planning)			SCORE:
	Preparatory Time		
Guidance	Optimum	Adequate	Minimal
FRAGO	3	4	5
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	Equipment Status		
Personnel Rest Status	Optimum	Adequate	Minimal
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4-8 hours sleep in 24 hours	2	3	4
>8 hours sleep in 24 hours	1	2	3

Risk Assessment Worksheet for Cold Weather Operations

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:_____			

Interpreting the Score: Use the cumulative score to determine the initial risk level. CAVEAT: <u>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 level.</u>

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☐ LOW ☐ MODERATE ☐ HIGH ☐ EXTREMELY HIGH

14. RISK DECISION AUTHORITY

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ITEMS 5 THROUGH 12 CONTINUED:

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?