

Transportation Safeguards Training Site





Review, Concurrence, and Approval

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Annual Review	
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TSTS 14 INCLEMENT WEATHER POLICY

1.0 INTRODUCTION

Training is a very important aspect of the OST Federal Agent mission. The rigorous physical activities involved during Operational Readiness Training (ORT), Agent Candidate Training (ACT), and Joint Testing Exercises (JTX), as well as live-fire training and physical fitness training, require constant vigilance, concentration, and perseverance by all parties to assure accomplishment of the training mission. A vital aspect of Federal Agent training is to ensure the safety and health of all personnel involved in the training. To ensure a safe training environment, the following environmental factors must be taken into account during field training activities. If other environmental training guidelines exist for a particular site or activity, the more restrictive guidelines will be utilized.

2.0 PURPOSE

The following are guidelines for Federal Agent training during inclement weather. Many hazards exist when training is conducted during periods of extreme heat and humidity, or during periods of exceptional cold weather. Fog, dust, sleet, high winds, snowfall, or rainfall can impair a trainee's vision, footing, and ability to manipulate a weapon, or otherwise degrade the training environment so as to create potential safety hazards to both the trainee and those around him.

3.0 RESPONSIBILITIES

The Course Manager or Safety Advisor/Manager is authorized to postpone, or cancel, any performance-based training/qualification activity that he or she believes to be unsafe or exceeding the approved criteria for inclement weather.

It is the direct responsibility of the Course Manager or Safety Advisor/Manager to point out and correct all unsafe training activities, or to halt training if appropriate. The following criteria are established to assist the Course Manager and Safety Advisor/Manager in determining when the training environment is unacceptable. Course Managers and Safety Advisors must take great care in evaluating both individuals being trained and the prevailing conditions under which they are being trained prior to making a final determination.

It is the responsibility of any training staff member, support member, or participant to point out any unsafe, or potentially unsafe, condition or conditions that may impact health and welfare, as well as training safety.

4.0 CONDITIONS

The following factors will be taken into account to determine when training activities for ORT, ACT, JTX, weapon qualification/training, or physical fitness training/ qualification are to be postponed or canceled.

4.1 WET. Off road vehicular travel shall be restricted when soils are significantly wet. All training/qualification activities shall cease when precipitation is such that it adversely affects operation of firearms, interfaces with stability of footing, impairs ability to manipulate weapons

and see targets, or adversely affects road surfaces/driving tracks. Heavy rains can cause local flooding in training areas, raise water levels of streams and creeks to dangerous depths, disguise deep holes, and other underwater hazards. Training areas should be surveyed prior to initiating training events to ensure no water hazards are present. Trainees should be cautioned against attempting to ford any water barrier unless they have permission from their Controller. Hail, sleet, or ice storms are especially hazardous to outdoor training operations and training should be suspended when these conditions arise.

- **4.2 COLD.** The chill indices (Attachment 1) shall be used to determine when activities shall be suspended for live fire training and activities other than live fire training respectively. For example, at 30 degrees Fahrenheit and with a wind speed of 29 miles per hour all live fire activities will be suspended.
- 4.3 HEAT. The Wet Bulb Globe Temperature (WBGT) Index shall be used to determine when conditions are such that all outdoor training and qualification activities must be limited or terminated. The WBGT Temperature Chart and definitions on Attachment 2 shall be used in making this determination. Exercise Control Center will monitor WBGT and keep personnel updated. Since the Federal Agent Facilities are located in different areas of the country, it cannot be assumed that they are all equally acclimated to an extremely hot, humid climate such as exists at the Transportation Safeguards Training Center at Fort Chaffee, Arkansas, during summer months. Therefore, Course Managers/Safety Advisors/Managers are responsible to evaluate the level of work against the WBGT Index to determine if the activity should be limited or suspended/ terminated (see Work/Rest/Water Consumption Table).
- **4.4 OBSCURE WEATHER.** All outside activities shall cease when conditions such as blowing dust, sleet, rain, snow, hail or fog obstruct the ability of the trainees to see clearly or to traverse terrain, or handle weapons, equipment or vehicles in a safe manner.
- 4.5 LIGHTNING. All activities shall be postponed when any lightning strikes within five (5) miles of a training location. Where available, Lightning Detection Systems (LDS) shall be used to determine if outside training is to be postponed. If the LDS is not in use, or if training is being conducted in a remote location where no lightning detection exists, the Course Manager/Safety Advisor/Manager shall count seconds between the lightning discharge flash and the audible report (thunder). One can estimate five (5) seconds per mile, e.g., if the count is twenty-five (25), the lightning is considered in the immediate vicinity (5 miles) and all outdoor training will be terminated. When a weather front is no longer a factor, and when lightning is no longer in the immediate vicinity, training may be resumed. The ECC can verify that the weather front has left the training area by monitoring the National Weather Service broadcasts and/or local weather reports.

Attachment 1

CHILL INDEX												
TO BE USED TO DETERMINE WHEN TRAINING (<u>OTHER THAN LIVE FIRE</u>) ACTIVITY IS TO BE POSTPONED												
	Actu	al Tem	peratur	e in De	egrees (Fahren	heit)					
Wind	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
Speed												
MPH	Equi	valent '	Temper	ature i	n Degr	ees (Fal	renhei	it)				
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-21	-33	-46	-58	-70	-83	-95
15	36	22	9	-15	-18	-36	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
←	←											
	Activities are permissible at			No A	No Activity Permitted - Note: The Instructor is to take into							
the discretio	the discretion * of the Instructor						e condi	tions su	ch as pro	ecipitati	ion, fog	,
li					ing, etc	•						

CHILL INDEX												
TO BE USED TO DETERMINE WHEN <u>LIVE FIRE</u> ACTIVITY IS TO BE POSTPONED												
	Actu	al Tem	peratu	re in De	grees (Fahren	heit)					
Wind	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
Speed												
MPH	Equi	ivalent '	Гетре	rature i	n Degr	ees (Fal	hrenhe	it)				
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-21	-33	-46	-58	-70	-83	-95
15	36	22	9	-15	-18	-36	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
←	←											
Live fire activities are			No L	No Live Fire Activities Permitted								
permissible at				: The T	_						climate	e
the discretion * of			cond	itions su	ich as p	recipita	tion, fo	g, lightr	ning, etc	•		
the Instructo	or											

Attachment 1

HYPOTHERMIA Symptoms

Confusion, bizarre behavior, withdrawal from group interaction

May become unconscious with nearly undetectable breathing and pulse

HYPOTHERMIA First Aid

This is a Medical Emergency Evacuate to medical care facility Prevent further cold exposure Remove wet clothing Warm by covering with blankets

FROSTBITE Symptoms

Skin becomes numb, turns gray or waxy white in color. Is cold to touch and may feel stiff.

FROSTBITE First Aid

Prevent further cold exposure Remove wet clothing Warm by covering with blankets Evacuate to medical care facility

Attachment 2

			WET BULB CHART			
Category	WBGT	Index	Nonacclimated	Acclimated		
I	78	81.9	Monitor personnel and enforce water	Normal duties.		
			intake. Caution should be taken.			
II	82	84.9	Use discretion in planning intense physical	Normal duties.		
			activity. Limited intensity of work and			
			exposure to sun. Provide constant			
			supervision.			
III	85	87.9	Strenuous exercises such as physical	Use discretion in planning intense physical activity. Limit		
			training will be canceled. Outdoor classes	intensity of work and exposure to the sun. Provide constant		
		<u> </u>	in the sun will be canceled.	supervision.		
IV	88	89.9	ALL physical training, and strenuous	Strenuous outdoor activities will be minimized for all personnel		
			activities, will be canceled.	with less than 12 weeks training in hot weather. Thoroughly		
				acclimated personnel can carry on limited activity for periods not		
				exceeding 6 hours a day.		
V	90 and above		Strenuous activity and non-essential duty should be canceled for ALL personnel.			

OVER-HYDRATION

Proper fluid replacement (hydration) is one of the most essential elements in heat injury prevention. The newly revised fluid replacement chart (below) describes the amounts of fluid replacement and work/rest cycles for acclimated personnel undergoing training. Of particular note is the fact that the revised maximum hourly fluid intake should **NOT** exceed 1.5 quarts and the revised maximum daily intake should **NOT** exceed 12 quarts.

CLASSES OF ACTIVITIES

Light Activities: Classroom activity, motorized movement, administrative work, and occasional walking.

Moderate Activities: Light digging, weapons cleaning, marksmanship range activity, patrolling.

<u>Heavy Activities</u>: Running qualifications, individual movement techniques, field assaults, force-on-force.

EXAMPLES						
Easy Work	Moderate Work	Hard Work				
• Walking hard surface at 2.5 mph, <	• Walking hard surface at 3.5 mph, < 41 lb. load.	• Walking hard surface at 3.5 mph, > 41 lb. load.				
31 lb. load.	• Walking loose sand at 2.5 mph, no load.	Walking loose sand at 2.5 mph with load.				
 Weapon Maintenance 	• Calisthenics	Individual Movement Techniques				
 Manual of Arms 	Marksmanship Training	Defensive position construction				
 Drill and Ceremony 	Patrolling	Field Assaults				
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NOTE: The table that identifies examples of the three levels of work is located under Classes of Activities. Course Managers will ensure ample supplies of water and/or athletic beverages are readily available to trainees during all hot weather training to ensure replacement of their lost body fluids.

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WORK / REST / WATER CONSUMPTION TABLE								
		Easy Work		Moderate Worl	K	Hard Work		
Category	Index, F	Work/	Water	Work/	Water	Work/	Water	
		Rest	Intake,	Rest	Intake,	Rest	Intake,	
		(min)	Qt/hr	(min)	Qt/hr	(min)	Qt/hr	
1	78-81.9	NL	1/2	NL	3/4	40/20	3/4	
2	82-84.9	NL	1/2	50/10	3/4	30/30	1	
(Green)								
3	85-87.9	NL	3/4	40/20	3/4	30/30	1	
(Yellow)								
4	88-89.9	NL	3/4	30/30	3/4	20/40	1	
(Red)								
5	>90	50/10	1	20/40	1	10/50	1	
(Black)								

- The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specified heat category. Individual water needs will vary +/- qt/hr.
- NL= no limit to work time per hour.
- Rest means minimal physical activity (sitting or standing), accomplished in shade if possible.
- CAUTION: Hourly fluid intake should not exceed 1.5 quarts.
- Daily fluid intake should not exceed 12 quarts.
- Wearing body armor adds 5F to WBGT Index.
- Wearing MOPP or SRF over garment add 10F to WBGT Index.

Note: In 1998, the U.S. Army Research Institute for Environmental Medicine (USARIEM) provided revised recommendations. Comments on that document and some additional work performed at USARIEM have resulted in the table above.

BASIC HEAT INJURY PREVENTION

- 1) Consider water a tactical weapon. Drink frequently (see water consumption table).
- 2) Don't skip meals and add salt to taste.
- 3) Be aware that dark yellow colored, infrequent urination is a sign of dehydration. Increase water intake.
- 4) Perform heavy work in the cooler hours of the day, such as early morning or late evening, if possible.
- 5) Minimize heat stress by decreasing work pace and/or increasing rest periods. (See water consumption table).
- 6) Be aware that full heat acclimatization takes 1-2 weeks.
- 7) Consider that personnel undergoing treatment for acute or chronic medical conditions may be at greater risk for heat injury.

7) Consider that personner undergoing treatment for acute of enrolle medical conditions may be at greater fisk for heat injury.						
HEAT CRAMPS						
Symptoms	First Aid					
Muscle Cramps of arms, legs and/or	Move the individual to a shady area and loosen clothing.					
stomach.	Drink at least one canteen of water mixed with ¼ tsp of salt or sports drink.					
Heavy sweating (wet skin) and extreme	Watch the individual and continue to give water if they accept it. Get medical help if the cramps					
thirst may occur.	continue.					
	HEAT EXHAUSTION					
Symptoms	First Aid					
Heavy sweating with pale, moist, cool or hot	Move the individual to a shady area and loosen/remove clothing.					
skin; weakness, dizziness and/or fatigue.	Pour water on the individual and fan to permit a cooling affect.					
Heat cramps, nausea (with or without	Have the individual slowly drink at least one full canteen of water.					
vomiting/diarrhea), tunnel vision, chills (goose	Elevate the legs.					
bumps), rapid breathing, confusion, and tingling	GET MEDICAL HELP IF SYMTOMS CONTINUE (i.e. vomiting)					
of the hands and/or feet may occur.	Watch the individual until the symptoms are gone or medical aid arrives.					
	HEAT STROKE					
Symptoms	First Aid					
Hot, disorientated, delirious, or unconscious.	HEAT STROKE IS A MEDICAL EMERGENCY EVACUATE to a medical facility IMMEDIATELY.					
May have any of the symptoms of heat	Reduce body temperature.					
exhaustion.	Move the individual to a shady area and loosen/remove clothing.					
Sweating may stop (red, flushed, hot dry skin).	Start cooling the individual immediately. Immerse in water. Fan to cooling.					
	Massage extremities and skin with cool water.					
	Elevate the legs.					
	If conscious, have the individual slowly drink at least one full canteen of water.					