

Field Risk Assessment Table

Risk Assessment		Possibility of an accident or incident due to following factors-can rank as none, low, medium /low, medium, medium high, high, very high			
Place	Risk type	Likelihood of occurrence	Consequence of incident	Exposure rating	Mitigations
Greenland	Airdrop				Contact ANG for protocol and existing training
Alaska	ATV travel				Participate in ATV training Use appropriate personal protective equipment such as helmets
All	Bears				Hire Native guides (Provide clear expectations/procedure) Install bear fence. Designate a fence monitor to check daily. Carry radios to alert others to bear in area. Develop a plan for bear in or near camp Keep a clean camp Participate in bear safety training Carry bear spray Use bear containers
Alaska	Bears				Request a bear guard (Barrow) Travel in groups Install bear fence. Designate a fence monitor to check daily. Carry radios to alert others to bear in area. Develop a plan for bear in or near camp All members of team must be diligent watching for bears, be responsible for your own safety Communicate with bear guard, do not rely 100% on their eyes Keep a clean camp Participate in bear safety training - course offered in Fairbanks Carry bear spray Use bear containers Discuss firearms guidelines with your project manager
All	Boat travel (including raft, kayak, barge, hovercraft, etc.)				Participate in boat training Develop a rescue plan Carry spare parts Use appropriate PPE (Personal Protection Equipment) / Carry suitable flotation devices Carry emergency equipment
Alaska	Boat travel				Participate in small boat training offered from the local logistics office Familiarize yourself with the machine, its operation, tools and spare parts Carry and use life jackets Carry and use mustang suit (immersion suit) Carry emergency equipment Carry communication system such as marine band VHF Create travel plan

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All	Boat Motor				***Your project manager will send you an electronic copy of the boat motor manual. Please review it before you head into the field.
All	Chainsaw				Participate in chainsaw training offered from the local logistics office Use appropriate personal protection equipment
All	Cold weather				Participate in a cold weather injury training course such as Wilderness First Aid or Wilderness First Responder Wear proper clothing Travel with a partner Choose appropriate camping gear, insure sleeping bags are adequately rated Check the forecast before going out of camp/town Watch for changing weather conditions while out Stay hydrated - carry sufficient food Develop and share your travel plans Have and share an emergency plan for bad weather
All	Poor Communications				Carry the appropriate communications system (satellite phone, VHF radio, etc.) Assure your phone and/or radio is fully charged before going out and carry a spare battery. Keep radios/batteries inside coats to increase efficiency Work with your PM to establish a check-in which should include a regular check in, an overdue time that will result in a SAR being launched and making sure your contact info (who you are checking in with) is known by us so that person can be contacted if someone needs to contact you. Provide your CPS Project Manager with a non-deploying field team point of contact who has your team's travel plan and emergency contact information.
Alaska	Darkness/limited visibility				Each member should have a personal headlamp with spare batteries Be aware of obstructed views working in pressure ridges Shop flood lights provided for general work area Be organized and prepared to leave on schedule in order to maximize short daylight hours.
All	Drill/auger				Participate in drill/auger training ***Your project manager will send you an electronic copy of the drill/auger manual. Please review it before you head into the field.
All	Lack of an Emergency plan				Compile a list of emergency contacts for your field team and share it with critical participants including your home institution and CPS. Share your satellite phone number as a means for others to contact Establish a check in system with a non-deploying field team point of contact
Greenland	Explosives				Work with CH2M HILL to develop a specific plan for explosives Hire trained and licensed "blaster"
All	Undefined field team level of experience and responsibilities				Assess your field team's level of experience and provide training as appropriate Identify key positions and skill sets for field team such as first aid, leader, mechanic

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All	Firearms				<p>Participate in a gun safety training course</p> <p>Discuss gun protocol in camp situations - storage; when loaded; who has training</p> <p>Ask for input on appropriate types of firearms and ammunition</p> <p>Use procedures for safe gun storage in camp</p>
All	Remote aircraft travel (i.e. Fixed Wing)				<p>Consider attending aviation safety course</p> <p>Discuss emergency plan with pilot</p> <p>Attend a pilot briefing</p> <p>Identify hazardous materials (i.e. bear spray) to pilot</p> <p>Discuss pick up and contingency plan with pilot</p> <p>Carry survival gear on the aircraft if doing day trips, or if multiple put in flights insure people travel with survival items from camp supplies</p>
All	Foot/ski travel				<p>Carry a radio or a phone</p> <p>Have a check out policy in place</p> <p>Be aware of your environment, watch for wildlife</p>
Alaska, Canada, Russia	Forest fire				<p>Develop an exit plan for your area</p>
All	Fuel handling				<p>Request a current AHA (Activity Hazard Analysis) explaining safe fuel handling procedures</p> <p>Have a plan for fuel spills/first aid</p>
All	Gas cylinder handling				<p>Review Haz Comm</p> <p>Review MSDS (Material Safety Data Sheet)</p> <p>Use your home institutions HS&E department for safe handling procedures</p>
All	Generator				<p>Follow manufacturer's instructions for use</p> <p>Request a current AHA (Activity Hazard Analysis) explaining safe generator operations</p> <p>***Your project manager will send you an electronic copy of the generator manual. Please review it before you head into the field.</p>
All	Glacier travel				<p>Participate in glacier travel/crevasse rescue training</p> <p>Include a mountaineer on team</p> <p>Have a search and rescue plan in place</p> <p>Create a travel plan and file with a point of contact</p> <p>Carry and use equipment and gear properly</p>
All	Hazardous materials				<p>Identify hazardous materials</p> <p>Work with home institution to assure materials are properly packaged and documented for shipment</p> <p>Review MSDS (Material Safety Data Sheet)</p>
All	Heavy lifting/body strains and sprains				<p>Use proper lifting techniques</p>
All	Helicopter operations				<p>Carry loads low and level to the ground</p> <p>Wait for the pilot's signal to approach</p> <p>Approach helicopter from front only</p> <p>Follow pilot instructions for sling loads</p>

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All	High altitude				<p>Participate in high altitude training</p> <p>Have medical call in service available</p> <p>Have search and rescue plan in place</p> <p>Have oxygen available in high altitude camps</p> <p>Develop plan to acclimatize</p> <p>Consult with physician on use of medication for acclimatization</p>
All	Medical or fitness concerns for remote work.				<p>Follow NSF Physical Qualification process for Greenland outside of ANG flight period</p> <p>Discuss physical condition with physician and concerns they may have for your location. Inform others in team of concerns, medications, allergies, relevant medical history etc. Do you have a history of prior serious illness?</p> <p>Weather, flight schedules or local conditions may delay even a emergency departure from the field.</p> <p>Even if medical pre-qualification is not required, consider a doctor's check up prior to deployments.</p> <p>Be aware of necessary vaccinations. Hepatitis is very common in some remote communities.</p> <p>It is recommended to bring at least 7 extra days of medication to a remote field site.</p> <p>Know the terms and conditions of your grant, and your institutions policies on medical evacuation, liability, workman's comp insurance and so forth. Med Evac insurance is recommend for many locations.</p>
All	Poor awareness of personal responsibility				<p>Remember that though CPS and others assist, you are responsible for your own safety. Use good judgement and consider decisions and their ramifications carefully. Practice "what If" thinking and develop good habits.</p>
All	Power tools				<p>Follow manufacturer's instructions for use</p> <p>Request a current AHA (Activity Hazard Analysis) explaining safe operations</p>
All	Remoteness of camp or location				<p>Have a search and rescue plan in place</p> <p>Have a first aid kit, Rx drugs will not be issued by CPS, your project will need to provide.</p> <p>Participate in first aid training</p> <p>Be sure that someone or all field personnel have basic first aid training at a minimum</p> <p>Have a communication/ check-out/check-in plan in place</p> <p>Keep a camp roster by each radio to be used in conjunction with the check-out/check-in plan</p> <p>Develop a list of current camp member's training levels and certifications</p> <p>Maintain back-up equipment and supplies in case of emergency (comms, generators, tents, food)</p> <p>Maintain an emergency contact list, include all applicable agencies, field team members, provide camp location and description to local search and rescue groups</p> <p>Develop a plan for general camp operations including camp hygiene and handling of human waste</p> <p>Properly register and operate your PLB (Personal Locator Beacon) and know how a GPS (Global Positioning System) works.</p>
All	Sea/lake/river ice travel				<p>Participate in sea/lake/river ice training</p> <p>Have a search and rescue plan in place</p> <p>Have a communication plan in place</p> <p>Maintain proper rescue equipment and know how to use it</p> <p>Hire an ice safety expert</p>

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Alaska	Sea Ice			<p>Monitor sea ice conditions prior to deployment http://pafc.arh.noaa.gov/ice.php?img=ice</p> <p>Check with trail crews to verify sampling location</p> <p>Be flexible as sea ice dynamics will ultimately determine where you can work</p> <p>Watch for open water or thin ice</p> <p>Monitor tides and offshore wind</p> <p>Look for signs of instability/movement while traveling and working on the sea ice</p> <p>Be aware you are working on ungrounded sea ice</p> <p>Always be prepared to leave the site at a moment's notice</p>
All	Sling loads			<p>Investigate if sling load training is available.</p> <p>Discuss pilots plan and what he wants from you.</p>
All	Snowmachine travel			<p>Participate in a snowmachine training offered from the local logistics office</p> <p>Familiarize yourself with the machine, its operation, tools and spare parts</p> <p>Have a search and rescue plan in place</p> <p>Create a travel plan and file with a point of contact</p> <p>Use appropriate protective equipment such as helmets</p> <p>Carry survival gear on extended trips</p> <p>Establish a means of communication between machines</p> <p>Consider carrying a Personal Locator Beacon (PLB)</p> <p>Consider carrying a GPS (Global Positioning System) unit</p>
Alaska	Snow machines, sleds, loads, passengers			<p>Refer to separate AHA on snowmachine use</p> <p>Attend required snowmachine training</p> <p>Check fuel and oil levels prior to each use</p> <p>Check drive belt, undercarriage and suspension</p> <p>Warm up the machine, break track and suspension loose</p> <p>Have Search and Rescue plan in place</p> <p>Use Personal Protection Equipment/helmets</p> <p>Carry a Global Positioning System unit (GPS)/compass</p> <p>Check hitch connection on sled with every use</p> <p>Communicate with driver and sled passengers via coordinated hand signals. Driver must check on passenger(s) continually</p> <p>Loads must be adequately secured for travel, do it right the first time so you do not have to stop en-route.</p>
All	Structure fire			<p>Maintain appropriate fire extinguisher units for building</p> <p>Develop or review an Emergency Action Plan (EAP)</p> <p>Have an emergency plan in place for remote camps</p> <p>Maintain redundant shelters in case of loss of structure due to fire</p>
Summit	Tower climbing			<p>Participate in tower climbing training</p> <p>Use the correct tower climbing equipment at all times</p> <p>Review Tower Climbing AHA (Activity Hazard Analysis)</p>
Greenland	Trench/pit work			<p>Use appropriate PPE (Personal Protection Equipment)</p>

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All	Truck travel				Participate in truck orientation for local logistics office - review information provided Do not ride in the bed of the truck Insure the truck has spare tire and jack for extended trips Carry survival gear and warm clothes for extended trips Carry a radio for extended trips Adhere to all local laws Check for travel and road advisories Do a pre-use check of fluids and tires
All	availability, potability				Sterilize water (boil, UV, iodine, filter, etc) Carry water in

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