

Remote Travel Safety Issues at UAF

Interim Report	UAF Remote (Field) Travel Committee
Report to	Dr. Larry Hinzman, Vice Chancellor for Research
Report compiled by	Mr. Mike Abels, WEMT; Dr. Matthew Sturm; Ms. Frances Isgrigg, PE
With contributions from	Dr. Anna Liljedahl, Dr. Jeff Benowitz
Reporting period	September 25, 2015 to February 4, 2016

Summary/Scope of Tasking

1. Interim Vice Chancellor for Research Larry Hinzman convened a UAF Remote Travel Committee to work with Frances Isgrigg of UAF Risk Management to help craft a reasonable remote travel and field safety planning.
2. UAF is home to extensive off-campus, off-road travel and remote Alaskan or international activities by researchers, staff, faculty, and students.
3. UAF has no estimates of how many employees are “out” in the field at any one time, but at peak times in summer, it is likely to be more than a hundred, and over an annual cycle, many hundreds.
4. Currently, how these people are tracked, who is “watching their back”, how they are communicating with their watchers, how they would be extracted if injured, and their level of experience and training, is extremely varied, that directly translate into large differences in their levels of safety, and therefore the exposure of the University.
5. UAF exposure ranges from the risk of motor vehicle accidents in route to the jump off point, aviation hazards, exposure to dangerous water, bears, cold, environment exposure, risk of rock fall, and injury in a climbing/glacier accident.
6. Participants in remote travel range from researchers with large grants and the backing of a research institute, individual graduate and undergraduate students doing research on a shoestring, students in UAF classes taken into the field by their professors, and DRAW outdoor adventure classes
7. UAF remote safety plans/support range from mature policy, procedures and available equipment check-out (GI/Toolik Field Station) to individual graduate and undergraduate students with no emergency plans or emergency gear.

Activities and Progress

The Remote Travel Safety committee chaired by Ms. Frances Isgrigg and Dr. Matthew Sturm has met four times (10/29, 11/22 and 12/2/2015, 2/4/2016) and addressed the following topics:

1. A remote travel check-out form and tracking system
2. Communications devices and practices
3. Training classes and opportunities
4. Title IX issues
5. Students Field Safety Rights
6. General

Outputs, Outcomes and Deliverables

1. Remote Travel Check-out form and Tracking System

- Reviewed UAF Remote Travel Emergency Plan (RTEP) form. EHSRM and the team determined the required items (form attached). Departments are able to customize their own form with the required items
- UAF does not have a coordinated RTEP depository that would provide necessary information to UAF administrators upon major emergencies or death in the field.

The team suggests that the system be UAF-wide allowing access to group leaders, department heads, directors or UAF administration. A UAF system would provide a standard for information gathered and access to all trip information should an emergency occur.

- Efforts should be made to obtain statistics on UAF field travel.
- Committee recommends change from use of the term “Remote” to “Field” or Emergency Travel Plan¹. Field work or Field Trip to the Goldstream Valley or Steese Highway fall under this topic.

2. Communications Devices and Practices

- UAF should make available basic field safety, specifically communication gear for check out at a single location.
- The communication gear will allow real time tracking of researchers’ location.
- Cost information on SPOTs are attached.

3. Training Classes and Opportunities

- A general field safety training course is recommended to be developed and provided immediately. This course can be developed in concert with the Outdoor Adventures/DRAW and be offered on a frequent basis to faculty and students.
- UAF needs a coordinated approach for organizing field safety classes. Propose that DRAW/ Outdoor Adventures may be key to organization and providing some of the training. Many times a department can’t afford or meet the minimum participation requirements to hold the class. In addition, departments are not always aware of other applicable UAF training that has class seat openings.
- Hands on training is preferred to a classroom PowerPoint. Online or PowerPoint training for most field safety situations is not appropriate.

4. Title IX Issues and Student Safety

- Title IX contact information needs to be included in RTEP plans.
- Researchers and students need additional training on Title IX issues as they apply in the field.
- Response if a Title IX incident occurs needs to be developed and extraction policies need to be documented (who is paying from the extraction, when is it appropriate, how does a student report while In the field, the responsibilities of the researcher in charge)
- A draft of a student safety contract and card have been developed and are attached. Mae Marsh, Title IX Coordinator has reviewed and would like to place on the Title IX website.

5. General Safety

¹ This plan is used for overseas travel and non-research travel.

- UAF needs to take immediate steps to change the culture so that “near misses”, accidents, and other mishaps occurring during remote travel be publicized in ways that help people avoid similar problems in the future.
- UAF should develop a field mentor program.
- Deans and directors need to be brought into this safety conversation.

Barriers/Scope of Problem

Outside of a check-out form (draft complete), all recommendations developed by the committee are associated with substantial costs if applied across multiple units, and even implementing a check-out system that provides real safety through tracking will have real cost. We realize that these are being proposed at a time when university funds are shrinking dramatically. For example, having a pool of communication devices for check out is likely to cost more than \$50,000/year. A single Title-IX related extraction might cost \$25,000.

Evaluation/Decision Point

The committee needs guidance as to the resources that are likely to be available for improvements in remote travel safety in order to craft recommendations that are commensurate with resources. They also need guidance as to the preferred nature of the systems that are likely to be put in place (e.g. a single centralized system vs. systems developed within units). Finally, the committee needs to hold a discussion with the administration about some of the key elements of a true field safety system, one based on both mentoring and training, which not only will make UAF students and employees safer, but also could become a point of pride and a recruitment tool of the University.

Attached Draft Documents

1. Remote Travel Emergency Plan (Draft) 2016
2. Communication Device Options & Costs
3. Student Field Safety Rights (Draft) 2016
4. Field Training Recommendations

UNIVERSITY OF ALASKA FAIRBANKS REMOTE TRAVEL EMERGENCY PLAN

Before departure, complete and submit this form to the designated Department/Institute Director for review/approval and provide a copy (with the approved TA) to the supervisor and/or department contact listed in Section 4. Ensure that a completed copy is carried by the trip leader and is available with the emergency contact phone or other device. Note: These are minimum requirements. Additional emergency provisions may be added as necessary.

Campus: _____ Department _____ Date: _____

Trip Leader/PI Name: _____ Trip Leader/PI Phone: _____

Departure **Date:** _____ Return
Date: _____

Destination From: _____ To: _____

Comments: If various destinations will be part of this trip, they can be listed here:

Trip Purpose: _____

- Participants** (list here or attach list of names, addresses and emergency contact phone numbers)

Participant Name	Participant's Emergency Contact Name	Emergency Contact Phone

- Location of Field Site(s)** – consider GPS coordinates, attach maps with camp locations, etc.

3. **Communication Equipment** – list the equipment type, number/frequency or channel

Type	Numbers/Frequency/Channel

4. **Communication Schedule - Daily communication is highly recommended** for remote travel. Please identify in the table below the time of day, who will be contacted, and how communication will occur.

Date (daily; or specific dates)	Time range (i.e. 10AM-2PM)	Person to be Contacted ¹	Method of Contact Number or e-mail (cell, sat phone, email)	When to Initiate Missing Person Search ²

1. Must be a UAF employee with the following exception; if this is a collaborative agency research and the team reports to the agency, provide a copy of the agency plan and ensure that a UAF employee is contacted if a UAF employee is injured, extracted, lost, etc.
2. How many hours after being overdue will trip leader (or team) initiate a search party? **You must define what “overdue” is based on when the individual(s) was due, last seen, etc.**

If daily communication is not possible, please explain below and what your plan is to replace the ability to communicate; provide an alternative safety measure:

5. **Emergency Plan for Evacuation** - communication and travel:

In the event any individual(s) or team requires emergency evacuation for medical treatment or other emergency circumstances, contact the agency below to initiate evacuation.

UAF DISPATCH MUST BE CONTACTED AT 474-7721 IN THE EVENT OF ANY EVACUATION

Air - Contact: _____ Contact Number: _____

Ground - Contact: _____ Contact Number: _____

Water - Contact: _____ Contact Number: _____

Title IX – Contact (if Applicable): _____ Contact Number _____

Comments (list other specific procedures): _____

Submitted By: _____ Date: _____
Name Title

Reviewed By: _____ Date: _____
Department/Institute Director Title

Communication Device Options & Costs

Communication Devices:

- Two-Way locator-spot locator devices
- For 2016 (SPOT not on the market to Fall 2016)
- Delmore inreach SE Two-Way communication device
- <http://www.inreachdelorme.com/product-info/inreachse.php>

Device Cost	Subscription Cost	What ya get		Total cost
\$300 a unit	Year=\$300	40 text messages	50 cents a message after 40 reached	
	Month=\$35 and other Charges-	Way pt. tracking	50 cents a message after 40 reached	
30 devices	\$9,000	With a year \$9,000	6 months \$7,200	\$18,000/\$16,200
100 devices	\$30,000	\$30,000	6 months \$24,000	\$60,000/\$54,000
200 devices	\$60,000	\$60,000	6 months \$48,000	\$120,000/\$108,000

Track Leaders: Device log in, data saving, web-interface, etc

Contact info:

Matthew Lee heymatthewlee@gmail.com 919-260-0670 <http://trackleaders.com/>

\$3,000 to \$5,000 startup and design fee

\$25 dollars a unit per year

30 devices	\$750 a year
100 devices	\$2500 a year
200 devices	\$5,000 a year

Iridium Satellite Phone

<http://www.satellitephonesak.com/> poor website- better to go down to Aurora store

Iridium 9555 ready to go kit - spare battery, case \$1,295

Subscriptions

\$204/6 months; monthly plan \$49 a month and \$1.49 a minute 100 minutes would be \$149 + \$49- same only mainland Alaska-Canada \$198/month.

Overall these subscriptions are complicated to discern real costs, but the Iridium is the preferred phone system. The GI has a subscription that is worldwide-waiting to hear back on costs.

Student Field Safety Rights

Students have the right:

- A) To be informed about the plans, nature of work and risks involved with the remote fieldwork in which they will be participating.
- B) To express concerns about their safety and comfort, and that of the team. (e.g. Dangerous camping sites, inadequate rest or sleep, inadequate bear-safe practices, etc.).
- C) To refuse to do activities they feel are unsafe or they are not comfortable with. (e.g. Fly in bad weather, drive an ATV without training, cross a glacial stream, ascend a snow slope under avalanche conditions, etc.).
- D) To safe accommodations with whom they are comfortable. (e.g. Students should not be required to share accommodations (like a tent) with a person with whom they are not comfortable).
- E) To a social environment that would be acceptable in a classroom setting. (e.g. Jokes, language and behavior not acceptable on campus are not acceptable off campus).
- F) To reasonable attempts to provide adequate shelter, equipment and food. (e.g. Students should not be required to go without meals and sleep in leaky tents for budgetary reasons) .
- G) To not be left alone in remote field settings if not desired. (e.g. Students should not be required to spend time sampling out of line of sight of others unless the student feels comfortable doing so).
- H) To carry and use remote field safety equipment, including communication devices. (e.g. Students should be given access to bear spray, mosquito netting, etc, and – if available – satellite phones and SPOT-type trackers).
- I) To request and obtain training for field safety issues and tasks from the PI (e.g. Bear safety training, self-defense training, glacier training, scientific equipment use, etc.).
- J) To be evacuated at no cost, if the student feels a title IX *or title VII* violation has occurred and wants to return to town for safety reasons and/or to file a complaint. (e.g. Harassed because of gender, belittled because of religious background or nationality, sexual harassment, etc.).
- K) To be evacuated at no cost, if the student feels they are experiencing a medical emergency (e.g. The flu, sprained ankle, broken leg, etc.).
- L) All of these field safety rights shall be exercised without retaliation or adverse effect on the student's academic progress

N.B. Exercise of these rights will incur real costs to the University. Training costs can be considerable and evacuations can run to hundreds of thousands of dollars. These are costs that PIs cannot be expected to bear. We recommend that ICR not directed towards institutions be set aside and used to pay for training and to contribute to a fund that is available for evacuations and other costs associated with remote field work.

Students have the Field Safety right (UAF Dispatch Ph# 907-474-7721):

- A) To be informed about the plans, nature of work and the risks involved with remote fieldwork.
- B) To express any general concerns about their safety and comfort, or that of the team.
- C) To safe accommodations with whom they are comfortable.
- D) To a social environment with which they are comfortable.
- E) To reasonable attempts to provide adequate shelter, equipment and food.
- F) To not be left alone in remote field settings if not desired.
- G) To carry remote field safety equipment, including communication devices.
- H) To request and obtain training if available.
- I) To be evacuated at no cost, if the student feels a title VIII or title IX violation has occurred and wants to return to town for safety reasons and/or to file a complaint.
- J) To be evacuated at no cost, if the student feels they are experiencing a medical emergency.
- K) To refuse to do activities they feel are unsafe or they are uncomfortable with.
- L) To exercise all of the above without retaliation or adverse effect on academic progress.

FIELD SAFETY TRAINING RECOMMENDATIONS

Table 1. Recommended field safety trainings. Each hands-on training would ultimately have a beginner and senior level, ie a class targeting a person who has never taken the class before and a class that is aimed at refreshing/updating more experienced participants. Information about all classes would ultimately be made available on the UAF Health and Safety website where one could sign up and register or alternatively, find the information to sign up and register with respective organizations website.

What	Length	Recommended teacher/organization	Offered at frequency	Cost/person
Wilderness 1st Aid	2-4 days	AK Safety Ed, www.safetied.net , via Outdoor Adventure	2 times/yr (Nov and March)	\$150-\$300
Bear Safety	1/2-1day	Joe Nava, others??	Multiple times/year during fall and spring semesters, mainly during spring semester	\$50
Small aircraft	1/2-1 day	Learn To Return, www.survivaltraining.com	2 times/year (~Nov, ~March)	?
Shotgun/pistol	1/2 day	Regular training to shot	Multiple times per year	?
Wilderness survival	1-3 days	Learn To Return, www.survivaltraining.com	Once per year (~Feb/March)	\$100's
Glacier	1 day	Outdoor Adventure	1 times/yr (March/April)	\$150
Avalance	1-3day	Outdoor Adventure???	Once per year	?
ATV	1/2 - 1 day	???	Once per year (~April/May)	?
	ppt/online	1h ATV Safety Institute, https://cvt.svia.org/login/index.php	n/a	\$0-\$25
Snow machine	1/2 - 1 day	???	Once per year (Nov-Feb)	?
	ppt/online	1h Safe Riders, http://www.saferiderssafetyawareness.org/	n/a	\$0
Fall protection /Tower climbing	1-2 days	???. Used to be available through UAF instructor Jeff Beiderbeck	Once per year (~April/May)	?
Water safety	2-4 days	AK Rescue, www.alaskarescue.com	Once per year (early May)	\$500
Boat safety	1/2-3 days	AK DNR Brian Charlton	Once per year (May/June)	\$0
		1/2-2days AK Rescue, www.alaskarescue.com	Once per year (May/June)	~\$400
		2 day AMSEA, http://www.amsea.org/	Multiple times per year	\$150
	ppt/online	1h Toolik field station, Mike Abels	n/a	\$0
Marine safety		AMSEA, http://www.amsea.org/	Multiple times per year	