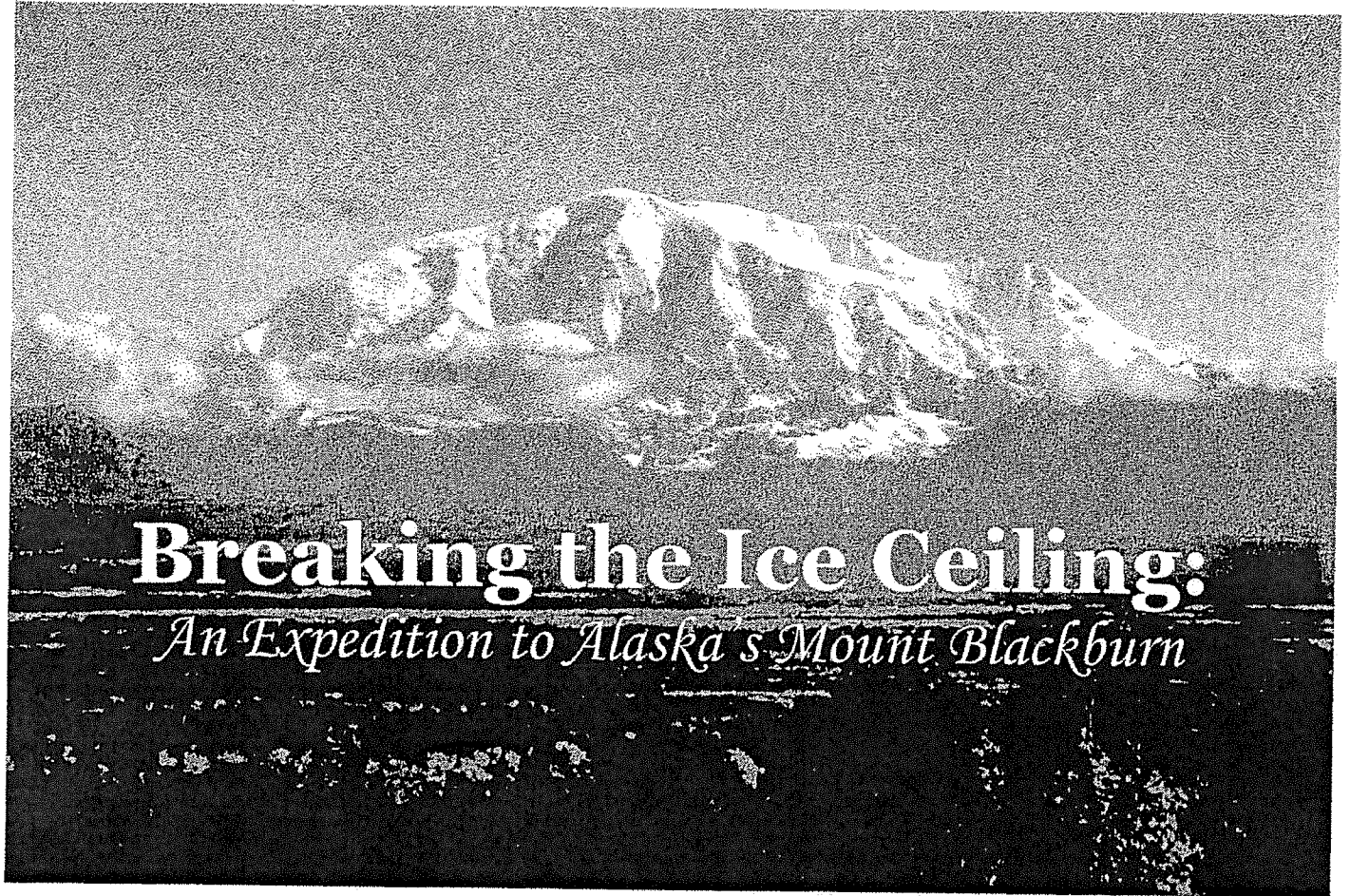


yes
\$36,000



Breaking the Ice Ceiling:

An Expedition to Alaska's Mount Blackburn

Arica Crootof, Sheldon Kerr and Carrie Sessions

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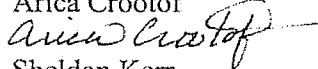
Dear Board Members,

Seeking companionship for a remote, challenging and impressive climb, the three of us decided to team up for the *Breaking the Ice Ceiling* expedition. Although we come from different backgrounds, we share a vision to safely climb Mount Blackburn's northwest ridge. Female climbers are no doubt the minority in Alaska—when we found Mount Blackburn, first climbed by a female in 1912¹, we were all immediately drawn to it. With less than fifty expeditions on Blackburn we believe we may be the first all-female team to attempt its summit. Not only would this trip be a tribute to Keen and Ritt, but, also an empowering experience for all of us.


We would sincerely like to thank the Kellogg family and the entire Ritt Kellogg Memorial Fund for this opportunity. Throughout our time at CC, we have considered this organization as one of the most unique and special opportunities available to students. We wholeheartedly support the mission of RKMF and would be honored to become a part of it.

Sincerely,

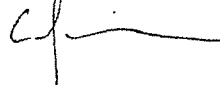
Arica Crootof



Sheldon Kerr



Carria Sessions



Expedition Goals

- Use good judgment and avoid unnecessary risk in order to have a safe expedition.
- Climb the highest peak in the Wrangell St-Elias Range, which has been climbed less than 50 times.
 - We think we may be the first all women's team!
- Gain alpine experience on a large remote mountain.
- Preserve the alpine environment by following Leave No Trace's principals.
- Enjoy spending time with good friends before going our separate ways

¹ On a cold day in 1912 Dora Keen and her partner George Handy reached what they believed to be the summit of Mount Blackburn. This first ascent began from the Kennicott Glacier and led its way to the eastern "Kennedy Peak" at 16,286ft, just shy of the true summit (16,390ft). Even though they didn't know it at the time, in 1958 Bruce Gilbert, Dick Wahlstrom, Hans Gmoser, Adolf Bitterlich, and Leon Blumer were the first ones to reach Mount Blackburn's true summit. Trekking up the Northwest ridge this team crossed the west peak (the summit) to the Mountain's eastern peak before retracing their steps. Due to the misinformation, Keen and Handy held the title of first ascent until the 1960s when more accurate USGS maps were developed www.Wikipedia.com



RITT KELLOGG FUND AGREEMENT

We have read and adhered to the Ritt Kellogg Fund criteria to the best of our ability as reflected in our proposal. We have written as concise and thorough a proposal as possible. We have enclosed all parts requested including the following:

- Application
- Medical form
- Every expedition member's outdoor resume (explain medical background and include all copies of WFR certifications - unless you still need certification)
- Statement on purpose of expedition
- Day by day itinerary (noting emergency plans as per location and phone numbers to the closest hospitals along the way)
- Emergency contact numbers for all expedition members' families
- Risk management and environmental considerations
- Detailed equipment list (specifying contents of the first aid kit)
- Detailed food list
- Itemized budget (note any cost saving efforts)
- Special training plans to prepare physically, mentally, hard skills

I understand required to sign a Participant Acknowledgment and Assumption of Risks & Release and Indemnity Agreement. I acknowledge that this form is available for viewing on the forms page of this website.

Signed: Sheldon Kern Date: 12/18/06

Signed: [Signature] Date: 1.07.07

Signed: Arian Cortez Date: 1/07/07

Signed: _____ Date: _____

Signed: _____ Date: _____

Signed: _____ Date: _____

Signed: _____ Date: _____

REMINDER: Please make 16 copies of each proposal for each Board member, for the office of Campus Security and for the on-campus archive in the Campus Activities office. Please submit all copies of your proposal to the Campus Activities office by the first day of the January half block.

Travel Itinerary:

May 24th- Depart from Denver, CO and fly to Anchorage, AK. An employee from NOLS will pick us up and drive us to the NOLS branch in Palmer, AK.

May 25th- Pack food at NOLS in Palmer, AK and spend the night.

May 26th- Ultima Thule Outfitters will pick us up in Palmer and drive us to their lodge in Chitina. There we will meet our pilot, Paul Claus and spend the night.

May 27th- Paul Claus will fly us onto the Nabesna glacier just north of the summit of Mount Blackburn.

May 27th-June 13th- On route

June 13th- Paul Claus will pick us up on the Nabesna glacier and fly us back to their lodge in Chitina, where we'll spend the night.

June 14th- Ultima Thule Outfitters will then drive us back to Anchorage, AK and we will say our goodbyes.

Route Description

Method of Travel

From Base Camp, we will be primarily on skis (all on AT set-up) until reaching our camp at 11,300ft. Here we will probably stash our skis and travel on foot. Of course, our method of travel will depend entirely on current conditions but this what we expect.

Day 1: Arrival

Camp: 7,200ft

Fly onto the Nebesna Glacier and land at 7,200ft, approximately 4.5m north of Blackburn's summit. To the west is Mountaineer's Pass. Set up base camp.

Day 2: Crevasse Rescue

Camp: 7,200ft

Practice crevasse rescue near base camp. Spend the night at base camp.

Day 3: Load Day

Mileage: 1.8 ascent, 1.8 descent, 3.6 total

Elevation: 2,500ft ascent, 2,500ft descent: total elevation gain and loss, 5,000ft

Camp: 7,200ft

Load to 9,700ft where there is a large flat saddle beneath the northwest ridge. For the first two sets of crevasses we will be traveling west around them (1.25m) and then for the last set we will snake northeast. Descend via the same route following our wands. The entire grade is moderate to low.

Day 4: Move to Camp I

Mileage: 1.8 ascent

Elevation: 2,500ft ascent

Camp: 9,700ft

Follow the route from the day before to our cache at 9,700ft. Build camp I at the cache.

Day 5: Load Day

Mileage: 0.5m ascent, 0.5 descent, 1.0m total

Elevation: 1,600ft ascent, 1,600ft descent: total elevation gain and loss, 3,200ft

Camp: 9,700ft

From camp we will travel 0.2m west to gain a slight north ridge. Once on the ridge we will continue 0.3m south ascending 1,300ft. We will cache our food at 11,300ft where the ridge begins to bend east and is a slightly lesser grade. This will be our steepest day of climbing reaching a grade of 40°. We expect loosely packed snow to our cache. Navigation will be challenging due to numerous crevasses and icefalls.

Day 6: Move to Camp II

Mileage: 0.5m ascent,

Elevation: 1,600ft ascent

Camp: 11,300ft

Follow the route from the day before to our cache at 11,300ft and build Camp II.

Breaking the Ice Ceiling

Day 7: Rest Day

Camp: 11,300ft

Day 8: Load Day

Mileage: 0.75m ascent, 0.75m decent, 1.5m total

Elevation: 2,000ft ascent, 2,000ft decent: total elevation gain and loss, 4,000ft

Camp: 11,300ft

From camp travel SSE for 0.25m gaining the prominent northwest ridge. Once on the ridge travel the remaining 0.5m south. We will leave our cache at 13,300ft where the ridge widens and slightly flattens.

Day 9: Move to Camp III

Mileage: 0.75m ascent

Elevation: 2,000ft ascent

Camp: 13,000ft

Follow the route from the day before to our cache at 13,300ft and build Camp III.

Day 10: Rest and Exercise Day

Camp: 13,000ft

Day 11: Summit Day

Mileage: 2.1m ascent, 2.1m decent, 4.2m total

Elevation: 3,090ft ascent, 3,090ft decent: total elevation gain and loss, 6,180ft

Camp: 13,000ft

Leaving camp follow the ridge south at a moderate grade. After 0.6m the ridge will significantly widen and flatten. Continue south for approximately 1.2m hugging the western side of the ridge. For the last 0.3m head southwest to the SUMMIT! Descend following our wands. Sleep at camp III, 13,300ft.

Day 12: Descend

Mileage: 0.75m decent

Elevation: 2,000ft decent

Camp: 11,300ft

Pack camp and descend to 11,300ft via our previous route marked by wands.

Day 13: Descend

Mileage: 1.8 descent

Elevation: 2,500ft descent

Camp: 7,200ft

Pack camp and descend to our base camp at 7,200ft.

Five storm days built in when needed to make it an 18 day trip.

Day 18: Departure

Pick up from base camp at 7,200ft from the Nabesna Glacier.

Risk Management

Mt. Blackburn lies in an incredibly remote area. The degree of remoteness enhances the potential severity of problems. Because rescue will be potentially days away, the decisions we make bear exorbitant weight. At all times, we will examine our surrounding and ourselves in order to make the most appropriate decision. We will leave our itinerary with both the Park Service in Chitina and our pilot.

We have chosen to do the trip in late May due to expected snow-bridge stability. As the summer extends, there will be less snow to cover crevasses, thus increasing the likelihood of a fall.

This trip involves more people than just ourselves; as respect to Colorado College, the Ritt Kellogg Fund, Ritt himself, and our friends and families, we will consistently make conservative judgment calls—this is not the trip to...?

Crevasses

Navigating crevasses on the mountain will serve to be one of our largest challenges. In anticipation of this challenge we have arranged a glacier travel and crevasse rescue refresher course through the Pikes Peak Alpine School. We have also committed to spending weekends together this winter practicing these skills together. When on the mountain, we will dedicate another day to reviewing our skills in an actual crevasse. Our first step against a crevasse fall will be prevention—we will assess snow stability and travel during times of greatest snow stability. If conditions necessitate, we will switch to a night schedule. When traveling, we will practice extensive route finding to avoid any major crevasses that we see. Further, when in times of greater risk, the first rope-team member will probe ahead to check for crevasses and snow bridge stability. When in severely crevassed areas, we will wand our route as indication for our decent.

During the entire expedition, we will stay roped when out of camp. On rope, we will space 25 to 30 meters apart. Overall, our rig will always be set up to be properly equipped for a fall. When selecting a camp site, we will look for zones of compression systematically probe the site, and visually indicate a perimeter..

Nothing in the literature that we have read indicates a challenging bergschrund — we will however, be prepared for encountering one. If this happens, we will either cautiously and appropriately navigate the bergschrund, or, if it is too large or hazardous, we will turn back.

Avalanches

Although the route we are climbing is not especially steep, it does reach an angle of 40 degrees and routinely passes under comparable avalanche-prone slopes. To manage our avalanche risk we will take note of the weather, snow pack, angles and terrain traps both on our route and the terrain around us. We will also note alpha angles when route finding and choosing campsites. Snow fall can be heavy above 9,800 feet. As such, we will take special caution after significant storms to let the snow settle for 24 hours before traveling. We will bring avalanche transceivers and asses their utility as the terrain presents itself. In preparation for assessing and negotiating avalanche terrain, we will both practice these skills in the Colorado backcountry and continue our avalanche education with Level II courses in the winter preceding our trip.

Breaking the Ice Ceiling

Due to nature of the snowpack and ridge conditions, we will anticipate cornicing and double cornicing along our route. We will stay alert to this hazard, and avoid them at all times.

Weather and Exposure

The Wrangell St-Elias National Park and Preserve contains three of the state's four climatic zones: maritime, transitional, and continental. Although the southern portion of the park is subject to maritime conditions, Mount Blackburn, more centrally located, has a continental climate. Protected from high mountains and icefields, Mount Blackburn does not see the incredibly wet and violent storms that hit the coastal mountains; however, this region does experience long and extremely cold winters. Even though the weather is completely out of our control, we can monitor and record daily temperatures, air pressures and cloud structures throughout the trip to help us make informative and precautionary decisions. Carrying books, journals, and cards, we will be prepared to wait out a storm until conditions are safe for travel. Our route has allotted five storm days.

Most nights we will be camped on Mount Blackburn's northern ridge, exposing us to cold temperatures and high winds. Appropriate apparel will be worn at all times to keep us warm and dry. In addition, we will choose and build camp sites to protect us from high winds. At all camps (even when in good weather), we will build high, double-thick windwalls that surround three sides of our tent.

Altitude

We will prevent against health risks such as Acute Mountain Sickness, High Altitude Cerebral Edema, and High Altitude Pulmonary Edema by measures of proper acclimatization. In our route, we will climb high and sleep low; we will spend a day carrying loads prior to sleeping at that elevation. We will consistently check in with ourselves and each other to monitor onset of altitude illness. Our first line of defense against this is prevention; second is descent; lastly, in case of emergency, we will carry Diamox and Decadron.

Ice Fall

Though we are not expecting to navigate an ice fall, due to annual changes in conditions, we must be prepared for this hazard. When navigating through an ice-fall, we will practice patience; we will move slowly and purposefully to mitigate hazards of crevasse fall and exposure to serac fall. In addition, we will always wear helmets in ice fall terrain. If we are presented with an ice fall that we are unable or unwilling to navigate, we will turn around and attempt to find a route around the hazard.

Human Factor

The decisions we make and actions we take will have an incredible impact on our safety. We will meticulously prepare ourselves mentally, physically and emotionally for the challenges we anticipate in order to make the most prudent choices at every juncture. We recognize that every mountain "accident" is a consequence of a chain of small poor choices that lead to disaster. We will consistently examine our daily actions to ensure that we are setting ourselves up for safety and success. Moreover, we will create an

Breaking the Ice Ceiling

environment of open communication in which we can all express concern about issues with ourselves and each other.

Accidents often occur due to the following human factors: fatigue, summit fever, time pressure, desire to please others, hunger, and over confidence. By looking for and recognizing these factors in ourselves and each other, we will be better able to examine why we're making the choices that we are.

Overall, we will not let the lure of the summit distract us from our goals of health, safety, experience and enjoyment.

Emergency Procedures

We will carry both a two-way radio and a satellite phone in case of emergency. If we do need to coordinate an evacuation, we will use our satellite phone to call one of the numbers listed below. In case of satellite failure (not entirely uncommon), we will look for planes overhead and attempt to contact them via radio. Overall in our evacuation plans, we will expect long rescue times and take steps for extended patient care.

Emergency Numbers:

911 (the NPS's first recommendation)

NPS, Gulkana Operations
(907) 822 5236

Alaska State Troopers, Glennallen
(907) 822 3263

Pilot: Paul Claus

Faith Hospital, Glennallen
(907) 822 3203

Minimum Impact Techniques

One major concern of ours is the impact that we will have on the alpine ecosystem. To minimize our “footprint” we will be following the seven principals of Leave No Trace, adapted to alpine ascents, with the hope of preserving the region’s resources for the generations to follow.

Plan Ahead and Prepare

Spending months working on the details of this trip we have familiarized ourselves with the region, climate, route, and safety considerations of our expedition. Although the logistics have been determined and costs have been calculated, travel arrangements will not be made until two months prior of the trip. Our trip itinerary will be given to both our pilot and the National Park Service. In preparation we have also itemized the necessary food and gear: 2.0lbs food / person / day and 1.0L / 3 people / 1.5 days. Since our food will be packed at the NOLS office in Palmer, AK the amount of waste will be minimal. Human waste will be disposed in photodegradable waste bags. Lastly, we will be carrying maps, compasses, altimeters, and wands to keep us on route.

Travel and Camp on Safe, Durable Surfaces

Traveling on glaciated terrain, a durable surface, we will have little effect on the alpine terrain. Wind blown and new snow will most likely cover our tracks within a week’s time.

Dispose of Waste Properly

Everything that we pack in will be packed out. Due to the alpine environment waste does not biodegrade. At base camp, human waste will be disposed of in photodegradable waste bags and packed out. When on the mountain, the waste bags will be thrown into crevasses. A pee “hole” will be made at each camp, downhill from our designated “clean snow” area. Tampons and pads will be packed out. Special attention will be paid to our gear making sure none is left behind.

Leave What You Find

We will leave the mountain just as we found it.

Minimize Campfire Impacts

All of our cooking will be using MSR stoves so we will not have any need for campfires.

Respect Wildlife

Due to the high altitude we will most likely not encounter much wildlife. If we do see wildlife, such as a snowshoe hare, we will maintain a safe and respectable distance.

Be Considerate of Other Visitors

As this mountain has only been climbed ~50 times we do not anticipate seeing another team. If our paths should cross, we will distance ourselves from them and be respectful of their trip.

Gear

Individual Equipment- Clothing

Head:

Warm hat (heavy fleece or wool w/ ear flaps)
Balaclava
Neck gaiter/face mask
Glacier Goggles
Nose protector
Ski goggles
Bandanna/sun protection

Upper body:

Sports Bra (1)
Polypros (2) One white and lightweight one dark and heavyweight
Fleece jacket/micropuff (1)
Wind/waterproof shell (1) fits over all other layers. Has a hood.
Super-duper Parka (1) 7-800-fill long, down jacket with hood. Fits over all other layers

Hands:

Liner gloves (2)
Thin fleece liner mitten (1)
Insulated Overmitts (2)
(one extra pair for the group)

Lower body:

Underwear (4)
Polypros (2) one lightweight, one heavy
Puffy pants (1) Full side-zip
Wind/waterproof shell (1) Full side zip,

Feet:

Socks (4) heavy wool/synthetic
Plastic mteering boots (1)
Mteering Gaiters (1)
Overboots/Supergaiters (1)
Down booties (1)

Individual Equipment

Individual Equipment- Technical

AT Skis and bindings (1)
Ski Poles (1)
Climbing Skins (1)
Crampons (1)
Lightweight Harness (1)
Chest Harness (webbing) (1)
Gear Sling (1)
Locking carabiners (4)
Non-lockers (6)
Small prussic loop (1)
Belay device (1)
Cordellete (20ft)
Pulley (1)
Foot prussic (1)
Ascender (1)
Ice Axe w/ leash (1)
Helmet (1)
Avalanche Beacon (1)
Probe (1)
Internal frame pack (1) (approx. 5000 cu. in)
Sled Duffel (1)
Sled (1) (with brake, gear tie-down loops, and rope attachment prussic)
Sled haul/pack leash (1)

Camp/Sleeping:

Sleeping Bag (1)
Sleeping pad (2) one ¾ length
Thermarest and one full-length closed-cell foam
Stuff Sack (1) compression sack
Trash bags (3) for lining sleeping bag sack, backpack and sled duffel
Cup/bowl/spoon (1) (extra spoons!)
Water bottle (2) wide-mouth Nalgene
Water bottle insulators (2)
Thermos (1)
Chap stick (2) with sunblock protection
Watch (1)
Hand/foot warmers (6)
Ear plugs (1)
Pee funnel (1)
Camera (1)
Book (1)
Toilet Paper (2 rolls)
Hand Sanitizer (1 little bottle)
Pee bottle (1)
Toiletries (toothbrush, toothpaste, tampons etc.)

Group Gear

4-Season Mountaineering Tent (with
parachutes for tying down)
Altimeter (1)
Compass (1)
Kitchen Mega-mid (1)
Snow Saw (1)
Spade (1)
Shovels (2)
Rope (1)
Snow Picket w/ sling (5 total)
Ice Screw (3)
Med Kit (see attached inventory)
Food (see attached budget)
Two-way radio (1)
Satellite Phone (1)
Cell phone (1)
Wands (350)
Stove (2)
Stove pad (2)
Fuel bottle (2)
Lighter (3)
Fuel (4 gallons)
Pots/Pans/Kitchen Utensils
Dromedary
Sunblock (approx. 6 oz)
Map Sets (3)
Photo-degradable Waste Bags (20)
Digital Camera (2)

Repair Kit:

Duct Tape
Extra cordolette/webbing
Lash straps
Super glue
Wire
Lighter
Stove repair kit (which includes all
necessary repair items)
Thermarest repair kit
Leatherman Pocket knife
Parachute-cord
Sewing kit
Seam-seal/nylon repair material
Jerry-rigged ski binding material (hose
clamps, wire, etc.)
3 inch tent pole splint
Crampon repair kit

First Aid Kit Contents

Medications:

Acetazolamide (Diamox): treatment/prevention of mountain sickness
Benadryl: antihistamine
Cavit: Temporary filling for teeth.
Cephalexin (Keflex); For infections of the ear, chest, skin, bones, bladder)
Colace: relief from constipation
Dexamethasone (Decadron): For High Altitude Cerebral Edema (HACE)
Diffucan: treatment of yeast infections
Ibuprofen: pain reliever and anti-inflammatory
Imodium: relief from High Altitude Flatulence Emission (HAFE)
Nifedipine(e.g. *Procardia*): for treatment of High Altitude Pulmonary Edema (HAPE)
Pepto-Bismol (chewables): upset stomach
Sudaphedren: Decongestant
Vicodin: pain reliever;
Silvadene: Burn Ointment

Prescriptions to be provided by: Carol Osborn M.D.Evolutionary Health Care
461 East 200 South Suite 100, Salt Lake City, UT 84111
(801) 971-4562

Supplies

3 rolls sterile gauze
2 rolls athletic tape
Lots of Duct Tape
Assorted Band-Aids
Tincture of benzoin compound
Wound closure strips / Steri Strips
Microthin film dressings (e.g. Opsite)
Moleskin gel wound coverings (e.g. 2nd Skin)
Soap impregnated sponges (e.g. Green Soap Sponges)
Antimicrobial wipes
Rubber gloves
Irrigation syringe
Sam Splint
Thermometer
Tweezers
Safety Pins
Patient Assessment Forms/ Soap Notes
High resistance sunscreen and lipscreen
Gold Bond

This information is from The Wilderness First Responder textbook, (Tilton, buck and burke, Tom; 1998).

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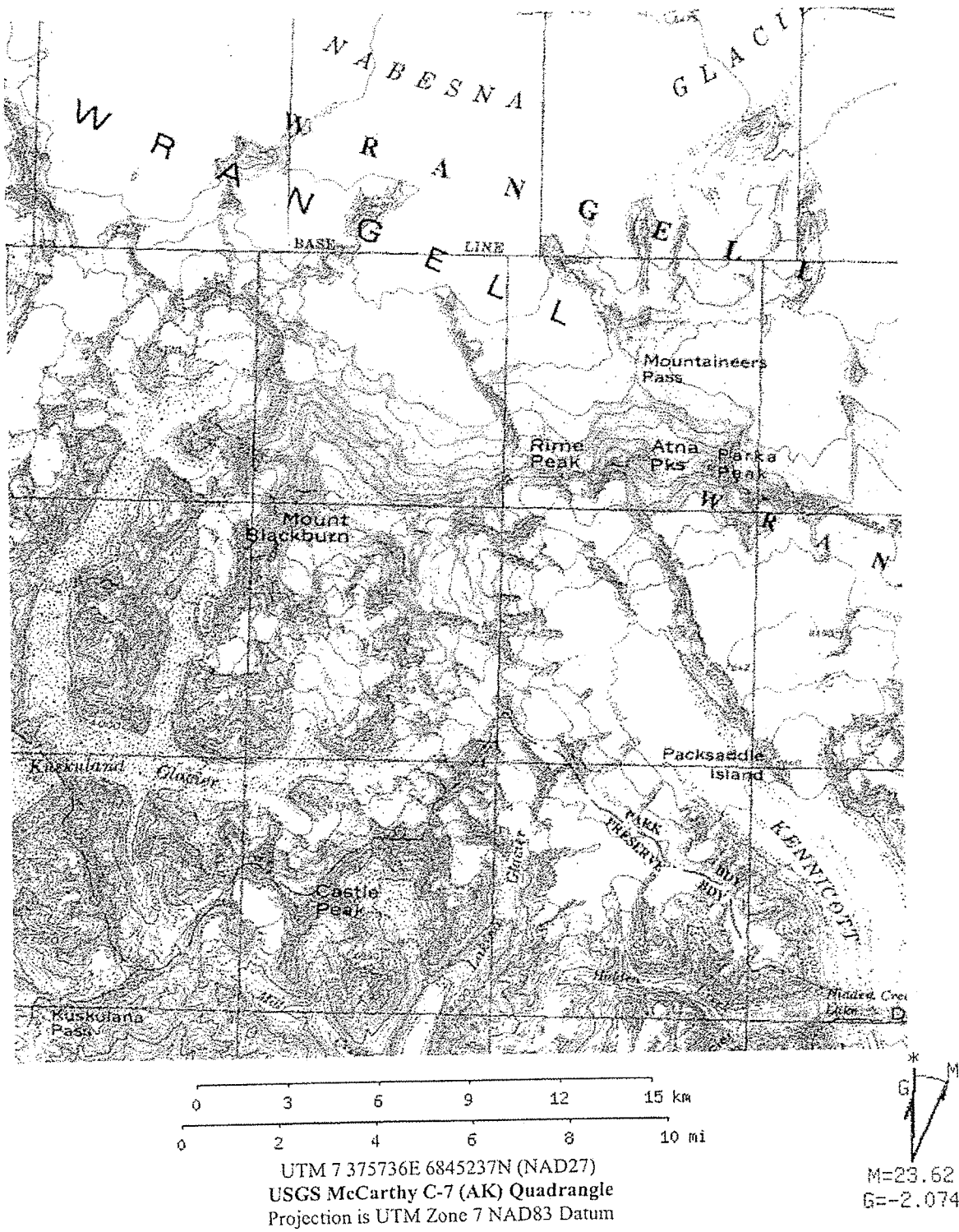
Food list

We have used a ration-planning program and spread-sheet (provided by the High Mountain Institute, CO) to determine our rations. Numbers are derived from the NOLS Cookery.

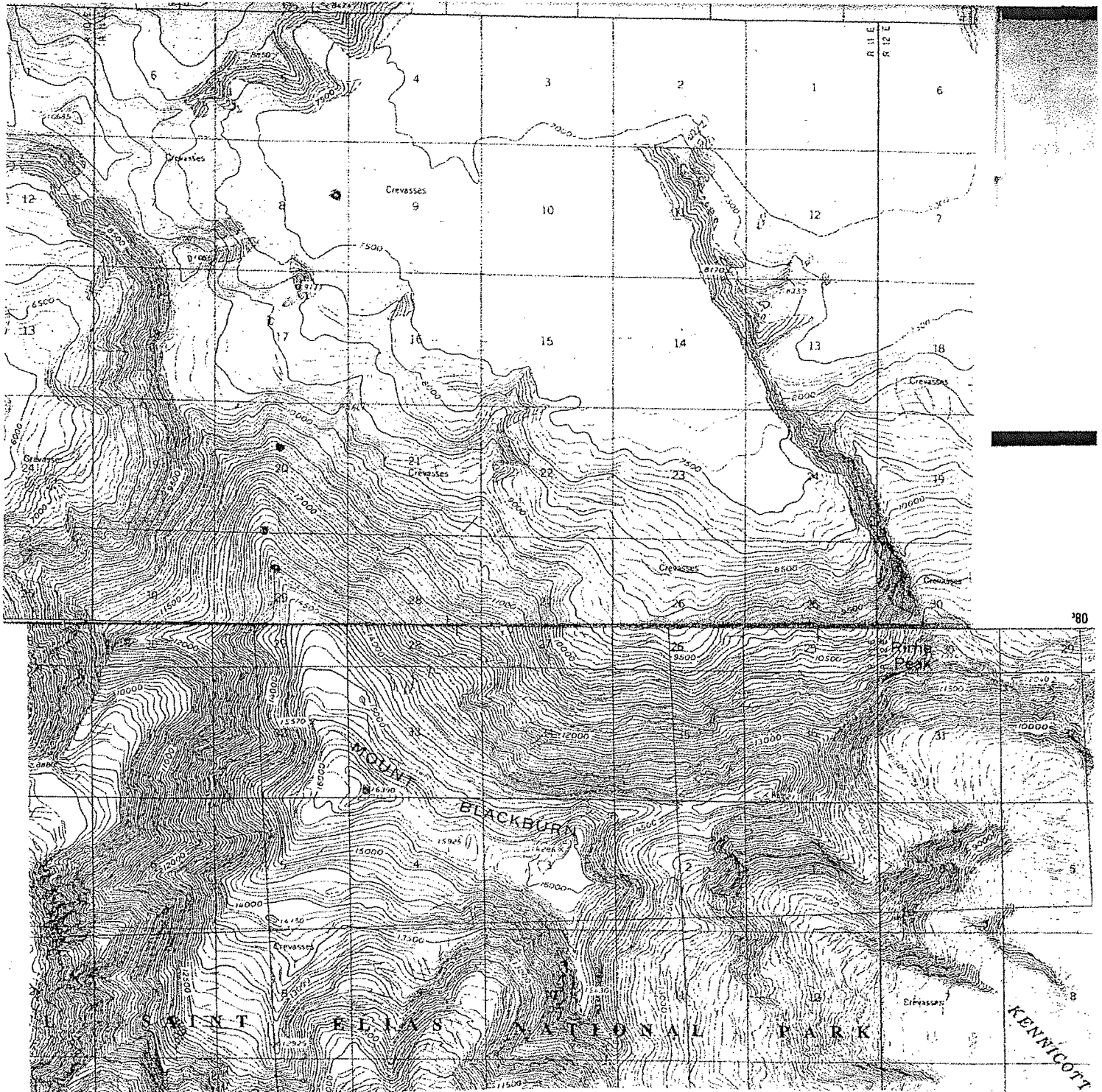
In order to save costs, we are buying our food from the NOLS branch in Alaska.

Breakfast	Pounds	Flour and Baking	Pounds
Granola	5.00	White Flour	4.00
Oatmeal	4.00	Wheat Flour	4.00
Grits	2.00	Corn Meal	2.00
Cream of Wheat	5.00	Total	10.00
Cereal	0.00		
Hashbrowns	5.00	Sugar and Fruit Drink	
Total	21.00	Brown Sugar	5.00
		Hard Candies	1.00
Dinner		Fruit Drink Mix	3.00
Rice	4.00	Total	9.00
Pasta #1	5.00		
		Soups, Bases,	
Pasta #2	5.00	Desserts	
Tortillas	1.50	Soup Mix	1.50
Potatoes Pearls	2.00	Ramen	1.50
Cous-Cous	2.00	Tomato Base	0.75
Black Beans	2.50	Vegetable Base	0.75
Total	22.00	Dried Vegetables	0.75
		Brownies	2.00
Cheese		Ginger Bread	1.00
Monterey Jack	6.50	Total	8.25
Cheddar Cheese	6.50		
Parmesan	2.00	Milk, Butter, Cocoa	
Total	15.00	Powdered Milk	4.50
		Butter	6.50
Snacks		Cocoa	6.50
Raisins	2.00	Total	17.50
Dried Apples	1.50		
Apricots	1.00		
Peanuts	2.00		
Sunflower Seeds	0.50		
Mixed Nuts	2.00		
Snack Mix	2.50		
Chocolate	2.00		
Crackers/Pilot			
Crackers	2.00		
Cookies	3.00		
Pretzels	3.50		
Peanut Butter	0.75		
Jelly	0.50		
Total	23.25		
		Total Pounds	126.00

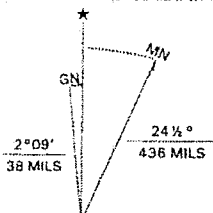
Breaking the Ice Ceiling



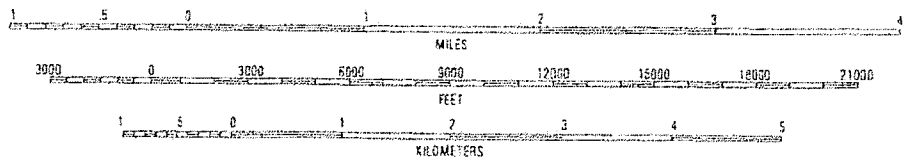
Maps: USGS McCarthy C-7, C-6, D-7, D-6



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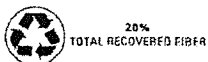


UTM GRID AND 2001 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



CONTOUR INTERVAL 100 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
TO CONVERT FEET TO METERS, MULTIPLY BY 0.3048

18



FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Expedition Budget

We have taken the following measures to help save costs:

- Using a digital camera rather than one that requires film. This completely eliminates the costs of slide film and development.
- By buying food at NOLS, we save in two ways. First, we save by buying food in bulk. Second, we will receive a discount because one team member is a field instructor.
- Renting a satellite phone and two-way radio from NOLS. Again, we will receive an Instructor discount.
- Buying white gas in gallon containers, rather than in smaller sizes.
- Traveling in a place that has no entrance or permit fee.

Item	Per Person	Total
Travel and Transportation (see following page for travel cost breakdown)	1,314	3,942
Food	5.61/day, 117.81	353.43
White Gas		20
Maps		45
Satellite Phone and Radio		75
Miscellaneous and Emergency Money	50	150
Total	\$1,481.81	\$4585.43

We realize that our decision to fly to Alaska significantly raised our costs. To compensate for this each of us has agreed to contribute at least \$200 to the trip reducing the cost to \$3985.43. Because we are really excited about this prospect, we can and will contribute slightly more money if needed.

Breakdown of Travel Costs:

Flight from Denver, CO to Anchorage, AK : \$514.00/person (as of 12/17/06)
Shuttle to and from Chitina with Ultima Thule Outfitters: \$150.00 roundtrip/person
Flight onto the glacier with Ultima Thule Outfitters: \$650 roundtrip/person

Total per person: \$1,314
Total travel cost of the trip: \$3,942

Background of Costs:

To and From Alaska

The monetary cost to drive from Colorado Springs to Alaska would be significantly cheaper; however, due to safety and logistical issues we choose to fly. By flying we save a minimum of four days of traveling, one-way. For safe snow conditions we want to begin our trip as soon as possible. Lastly, we want to be physically active and in good spirits before the start of an 18 day expedition.

To and From Chitina/McCarthy

There is no direct shuttle service between Anchorage and the Chitina or McCarthy airports. Alaska Direct, a bus service, offers one-way tickets to Glennallen for \$45.00. From here you can take a shuttle service one-way to McCarthy for \$54.50 per person. For roundtrip service this transportation would cost \$597. By using Ultima Thule Outfitters service (\$450) we are saving \$147.

To and From Blackburn

Not only did everyone recommend Paul Craus from Ultima Thule Outfitters but he was the only one that was able to fly us onto the Nabesna glacier mid-May for a reasonable price.

Thank-you for your time and effort in consideration of the grant.

Sincerely,
The *Breaking the Ice Ceiling* Team