

HIGH ALTITUDE TRASHMEN EXPEDITION



"Climb Hard, Climb Smart, Climb Clean"
A Ritt Kellogg Fund Proposal By
Micah Dolcort-Silver, Joe Forrester, Dave Hoven, Joel Irby

GOAL

Mountaineering is an increasingly popular sport. More and more parties attempt the big peaks each year. We have no qualms about this. In fact, we love to participate. However, we recognize the effects that humans impart on the mountains. From trash inadvertently left at campsites, to glacier recession, humans are beginning to detract from their own experiences in the mountains. Over the course of our trip to Denali National Park to climb the West Buttress, we hope to in some small way to help slow this destructive human impact.

As a group, we have always been close. With the exception of Micah (who is an honorary member), we all live in the Colorado College Mountain House—a theme house we formed to provide sanctuary for mountainous men and women. We all climbed Mt. Rainer together this summer and really enjoyed ourselves. We climb most weekends, and just enjoy each other's company, except Joe's stink.

In this application, we are asking for aid in our attempt to climb Mt. McKinley. Specifically, we are requesting funding for transportation and food. We have contacted ranger Roger Robinson at the Talkeetna Ranger station about possible service projects, and he suggested garbage collection. We have chosen to make Ranger Robinson's suggestions one of our primary goals for the trip. Not only will we climb clean ourselves, but we will also take trash off the mountain. Furthermore, we will notify the park service of particularly heavy areas of trash. We will mark down on the map areas of high trash use. This will aid them in marking areas for future clean up projects.

Our task will be hard. This will be the largest, most intimidating mountain any of us will have climbed. We will gain more and more experience everyday, building upon our base knowledge gained in Colorado, Mt. Rainer, and El Pico De Orizaba. We will climb smartly and safely, for we are on this mountain for fun and to help others, not to just to attain some summit. Finally, we will climb cleanly and set a standard of clean climbing for future mountaineers, making sure that they not only take off the waste they create, but leave the mountain even a little cleaner than before.

DATES OF EXPEDITION

June 7th, 2004-July 10th, 2004
(34 Days total = 28 days on the mountain)

ITINERARY

2-3 day window to fly into Kahiltna from Talkeetna-Stay at air taxi bunkers until flight
1 Day at basecamp, pick up white gas, prepare sleds, and stash food.

Safety Concerns: Once on the glacier, crevasses pose a potential hazard. We will remain within the confines of base camp, as well as keep careful watch for crevasses forming within the site. We will make sure to probe for crevasses. We will also practice good acclimation habits (drinking water, eating), and store a cache of fuel and food in the event our return plane is delayed.

1 day Base Camp to Camp at 7800 feet

Safety Concerns: High temperatures have been reported on the lower Kalhitna glacier. This can lead to several potential hazards. Our primary concerns will be heat fatigue and weakened snow bridges in an area known for large crevasses. As a safety measure against these potential safety concerns we will travel at night, with the goal of reaching camp by the suggested time of 10:30am.

1 or 2 days Camp 7800- Camp 9700 – we will be prepared to double carry, however, we will all have been living above 9000 feet for most of the summer so we should be relatively well acclimatized.

Safety Concerns: For the same reasons discussed above, we will travel this route at night. Due to elevation and geography, this section of the route is known for particularly poor weather with possible whiteout conditions. We will use wands to heavily mark our route of travel, and will utilize our compass techniques if faced with nighttime/whiteout travel. At camp, we will be cautious of icefall that has been reported to occur along the east flank of the glacier.

2 days Camp 9700 to 11,000- We will “1.5 Carry”* to this camp.
We will rest here one day.

Safety Concerns: Potential avalanche zones have been observed during this section of the route. Due to frequent whiteout conditions that occur while traveling around an identifiable steep hill, this area has earned the name “Land of the Ghost Wands.” Reportedly, higher ground will place us above inclement weather conditions.

Camp at Motorcycle Hill has a history of reported altitude sicknesses. We will monitor ourselves, and each other, for signs. Hidden crevasses continue to be a concern, as well as reported avalanches occurring on the western ridgeline. We will attempt to place our camp in a protected area under a vertical rock band. (*See general safety*

concerns section for information on safety measures taken in regards to whiteout conditions and avalanches).

2 days to our camp at 14,200 ft. Weather permitting, we will stash food and gear at 13,500 and move our camp up to 14,200. The following day, one team will hike down and retrieve the food and gear, while the other team spends the day fortifying our ABC at 14,200 as well as building a kitchen and an igloo in case the weather becomes very foul. Rest one Day at 14,200 camp, we will continue to fortify this camp just so we aren't too sluggish the following day.

Safety Concerns: Traversing around the Windy Corner is reportedly one of the most hazardous sections on the route. As always, weather will be a determining factor in crossing this section. Direct line-of-sight does not exist between Motorcycle Hill and Windy Corner, we will rely on weather observations of Squirrel Point—an area with reportedly similar weather conditions. The crevasse field on the eastern side of this section is reportedly the most dangerous to be encountered on this route. Running protection will be a necessity in traversing across the exposed section. Avalanche and rock fall off the buttress pose additional potential hazards.

Avalanches pose a potential safety hazard while at advanced base camp, as well as crevasses in the vicinity of the Edge of the World. Reports indicate AMS to be a common occurrence during the first twenty-four hour period at ABC.

2 days to High Camp 17,200- Optimally we will “1.5 Carry”*, however if we are feeling the effects of altitude, we will double carry this section.

One rest day at High Camp

Safety Concerns: Icefall from a bergschrund located before the Headwall has been reported. Proper safety precautions will be taken when using the fixed lines located at 15,400 ft. Using careful crampon placements will lower the risk of cutting the rope. The ridgeline from 16,200 to 17,200 is reported to have a history of strong winds, making travel excessively hazardous in poor conditions. To lower this potential risk factor, we will wait for weather conditions that are conducive to safer travel. There is also a section of exposed steep climbing on the ridge—a potential risk that can be lowered through the use of running protection.

High Camp at 17,200 poses several potential safety hazards. A definite lack of oxygen can force climbers into a lethargic state. This potential risk can be lowered by remaining at a certain level of physical activity while at camp, waiting for summit day. In more extreme circumstances, the NPS maintains a cache of rescue equipment at High Camp. Included are oxygen bottles, a litter, a gamov bag, and a static rope. Extreme weather conditions pose a potential safety concern that can be lowered by strongly fortifying our campsite.

1 day Summit Attempt, return to 17,200

Safety Concerns: Potential hazards likely to be encountered on this day can be categorized into three groups: getting off route, deteriorating weather conditions, falling off Denali Pass. All of these potential hazards are more likely to be experienced on the descent. Safety measures we will employ to lower the risk factor of weather will be to

carry with us supplies to make an emergency bivy. Wands will be used extensively to mark this section of the route, due to reports indicating visibility can rapidly diminish to zero. Observations of lenticular cloud formation atop Mt. Foraker can be used to forewarn the group of approaching inclement weather on Denali.

Low visibility is one of the primary causes of veering of route, which poses a great potential hazard. In order to lower this potential risk the group will be prepared to either A.) retreat, if possible back to High Camp or B.) locate a suitable area for an emergency bivy (a snowdrift would be preferable).

The potential risk of falling while on the descent of Denali Pass can be lowered with the use of running protection. The group will be equipped with snow pickets, flukes, and ice screws. In addition, each member of the group will carry an ice axe to be used for self-arresting.

High altitude continues to pose a potential hazard, as well as frostbite. The group will carry a first-aid kit with medications for high altitude sickness (*for a complete first-aid packing list see FIRST AID KIT CONTENTS*) as well as chemical hand/feet warmers. A thermos of warm water will also be carried by each member of the group. As discussed earlier, the NPS supply cache located at Rescue Gully will be our first option for rapidly descending someone—using the stored 300 meter static rope.

Descent-We will break this up into as many days as it takes to descend safely. We will want to get out of the 17,200 camp as soon as possible though. On the way down, we will be digging up all our caches, picking up any trash we see and putting it into our trashmen trashbags. Once we get back to Base Camp, we will give our trash journal to the base camp manager and make a copy to give to the rangers. Upon returning to school, we will try and give our journals to the Ritt fund, so that future trips might be able to learn from our weather and snow observations.

Safety Concerns: The following is a description of general safety measures we will adhere to on our descent, whichever descent route we take. Frostbite, avalanches, and crevasses still pose potential safety hazards. We will employ the same safety measures that we have on the ascent. Weather conditions will determine our progress each day. Along the way we will pick up any of our previous caches. We will do our absolute best to ignore invading thoughts of warm beds and the McDonalds dollar menu, and focus on a safe descent and return to base camp.

Specific concerns are as follows. We will exercise proper climbing etiquette at the fixed lines on the Headwall—descending on the descending line. We will smile politely and try to think nice thoughts if there are people ascending the descending line. In order to ensure gravity does not possess our sleds into trying to run us over, we will pack them so that they are not top-heavy. The last person will stack their empty sled onto a team member's sled. Each person behind a sled will provide tension so that the sleds do not hit the front person's ankle. We will attach a knotted rope underneath the sled to serve as sled brakes.

*1.5 Carry = Both groups will carry a majority of the food and supplies to the next high camp. One team will stay at the high camp and fortify it. They will build the other

teams tent platform; make a kitchen, a toilet etc. The other group will descend, spend a night at the lower camp, and then make the ascent again to the other group with significantly lighter packs. We feel that this will make the best use of our group # and will help us to accommodate group members who might need to adjust more at a certain altitude. This system should give us a lot of flexibility in our camp movement.

First Choice

Descending the West Buttress and flying out of base camp. If we choose this route, we will notify the base camp manager to request a flight out and store our gear according to their requirements. We will be prepared to pace endlessly around the runway awaiting our flight because we will have cached food at base camp upon our arrival.

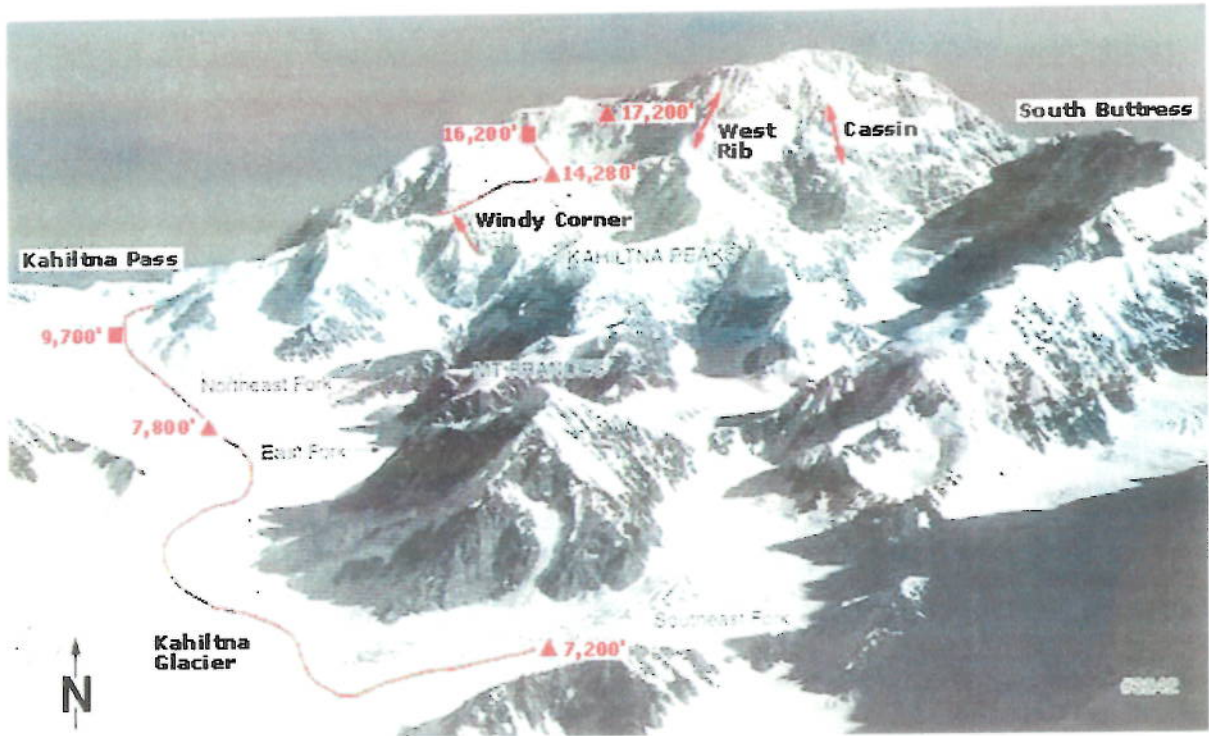
Second Choice

Descending the West Buttress and hike out to Petersville Rd. We will notify the ranger station and base camp manager of our intentions. This option will be used if we A., climb faster than we thought we would or B., are faced with the situation of planes not being able to land on the glacier. We will take precaution approaching the firm zone where it is reported that crevasses are rather unstable. We will be researching this option more in preparation for the trip. Specifically, we will be calling the ranger station again to figure out specific safety concerns for this trip.

MAPS

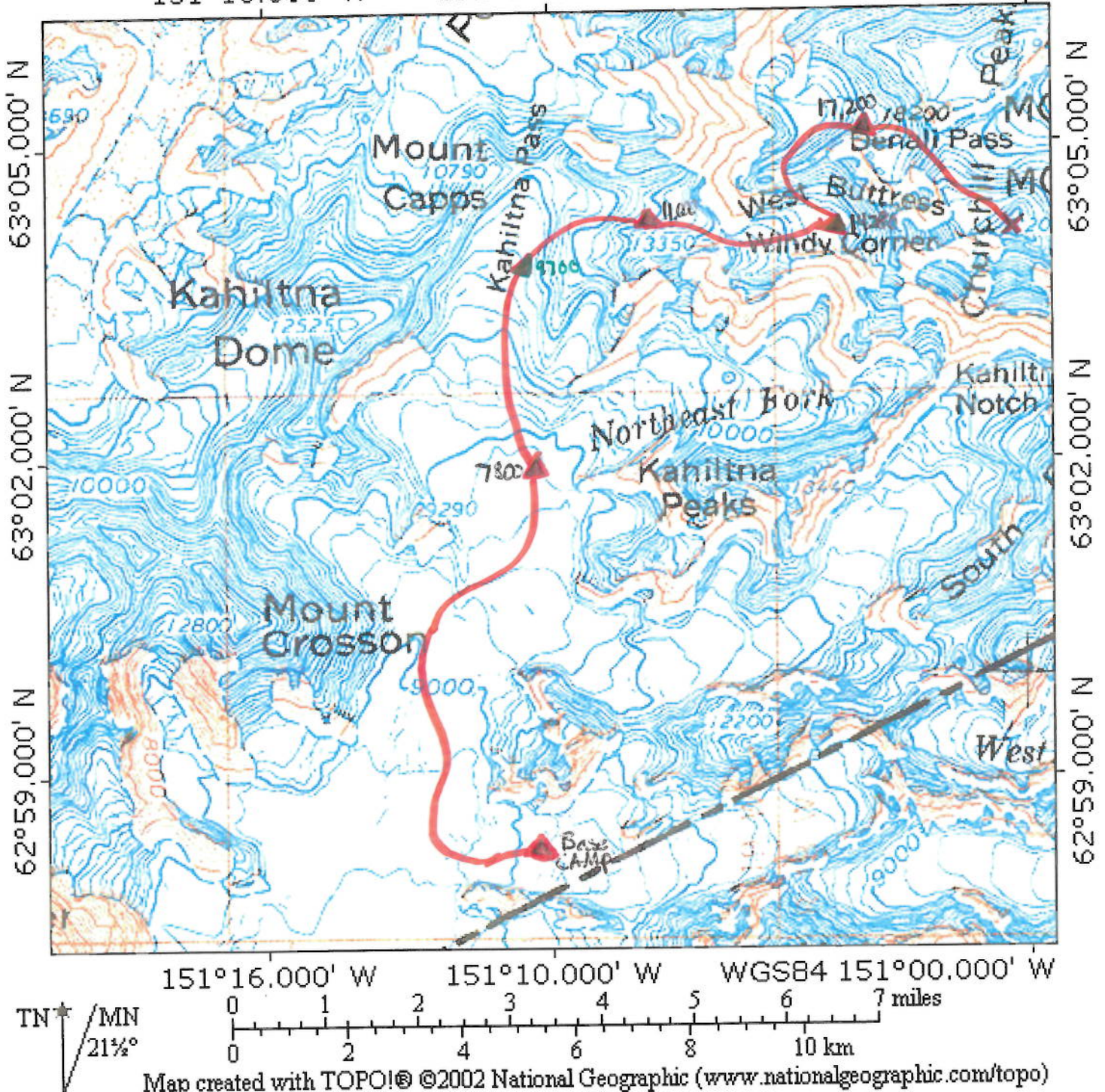
In addition to these maps, we have ordered the Talkeetna D-3 and Mt. McKinley A-3 1:63,000 USGS maps. The Petersville Descent will be on C-3,C-2, B-2, B-3 and these as well have been ordered.

Pictorial Route



from <http://classic.mountainzone.com/climbing/99/denali/map-climbingroute.html>

TOPO! map printed on 12/20/03 from "Denali NP.tpo" and "Untitled.tpg"
151°16.000' W 151°10.000' W WGS84 151°00.000' W



1:100,000

No profile exists. Choose 'Build Profile' from the pop-up options menu of a route.

SAFETY INFORMATION

Anchorage Hospital
(907)-562-2211
Talkeetna Air Service
(907) 733-2649
Talkeetna Ranger Station
(907) 733-1465

There are roving ranger patrols that frequent the West Buttress Route. We will receive the ranger CB channel as well as Lisa's (base camp managers) channel during our check in with the rangers in Talkeetna. In addition, there are ranger tents at base camp, the camp at 14,000 feet, and there is a safety stash at 17,000 ft. that has oxygen bottles, a litter, a gamov bag, and a static rope. Because our ascent route is also the easiest descent route, we would descend our intended route in case of emergency.

EQUIPMENT LIST

PERSONAL GEAR *Clothing*

- 1 -down or synthetic down jacket
- 1-down or synthetic down pants
- 1-shell bibs
- 1-shell top
- 1-down or synthetic expedition mitts
- 1-mitten shells
- 2- Glove or mitten liners
- 2-long underwear top (expedition weight)
- 2-long underwear bottom (expedition weight)
- 1-fleece top and bottom
- 1-long sleeve shirt for lower glacier travel
- 3-pairs of wool socks
- 3-pairs liner socks
- 2-pairs vapor barrier socks
- 1-pair double plastic boots
- 1-pair of over boots
- 1-balaclava
- 1-warm wool hat
- 1-baseball hat
- 1-bandana
- 1-gaiters (or just tie a string to pant bottoms that goes around boot)

PERSONAL GEAR *Non-Clothing Related*

- 1-pair snowshoes

- 1-pair trekking poles
- 1-climbing helmet
- 1-pulley
- 4-runners
- 6-carabiners
- 1-belay tube
- 2-prussiks
- 1-glacier axe with leash
- 1-ice tool with leash
- 1-pair of crampons
- 1-sleeping bag at least >-25
- 1-vapor barrier liner for sleeping bag
- 3-compression stuff sacks
- 1-full length sleeping pad
- 1-3/4 length ridged pad
- 1-spoon
- 1-bowl
- 1-mug
- 1-nalgene parka
- 1-pee bottle (well marked)
- 2-drinking nalgens
- 1-sled (from TAT)
- 1-pair glacier glasses
- 1-pair ski goggles
- 1-nose piece for goggles
- 1-bottle of sunscreen
- 2-tubes of lip balm
- 2-sets of earplugs
- 1-camera and extra batteries and a lot of film
- 5-lighters
- 15-packets of hand and feet warmers
- 1-personal toiletries
- 1-diary and pencil
- 1-novel
- 1-avalanche beacon
- 1-climbing harness
- 1-webbing chest harness
- 1-cold-weather headlamp and extra batteries

GROUP GEAR

- 2-stoves
- 1-stove stand
- 1-hanging apparatus
- 7-gallons white gas (from base camp)

- 1-container for stash of white gas
- 3-containers to carry white gas up the mountain
- 1-SAT phone
- 2-CB radios + extra batteries
- 1-small FM radio + extra batteries
- 2-sets of pots
- 3-compasses
- 2-sets of maps for the route
- 2-3 person 4 season tents
- 2-snow shovels w/ metal blades
- 2-snow saws w/ handles
- 1-altimeter
- 130- Wands marked w/ our special insigna
- 10-extra lighters, better to be safe
- 2-tubes of waterproof matches
- 1-cache bag
- 1-roll of trash bags
- 1-roll of bags for poop bags
- 1-tent repair kit
 - 2-tent pole splints
 - 2-needles
 - 1-roll of nylon thread
 - 1-package of adhesive ripstop nylon
- 1-ice tool and crampon repair kit
 - 1-wrench
 - 1-metal file
 - 1-crampon wrench
 - 8-extra screws, washers and nuts
- 1-stove repair kit
 - 1-extra nozzle
 - 1-tube of pump lube
 - 1-stove wrench
- 8-bottles of iodine tablets
- 1-small set of chess pieces
- 1-deck of cards
- 10-extra slings
- 100-ft of extra p-cord
- 2-60m 8.5mm dynamic ropes
- 1-bottle extra sunscreen
- 1-can of zinc oxide
- 14-snow pickets (7 per team)
- 1-bottle foot powder

FOOD LIST

Oatmeal, 84oz - \$6.42
Cream of Wheat, 48oz - \$6.00
Granola, 90oz - \$16.80
Mueslix, 84oz - \$18.48
Grape Nuts, 64oz - \$7.08
Pancake Mix, 88oz - \$4.34
Bagels, 30 - \$9.90
Pita Bread, 48 - \$12.48
Sunflower Seeds, 48oz - \$3.96
Gorp, 320oz - \$48.80
Dried Fruit, 300oz - \$60.00
Crackers, 90oz - 20.00
Cheese, 320oz - \$58.20
Beef Jerky, 80oz - \$7.94
Instant Rice, 126oz - \$7.50
Dried Fruit and Veggies – Joe will dry over the course of year from parents
Instant Potato, 128oz - \$7.84
Ramen Noodles, 48 - \$13.30
Dried Soup, 126oz - \$53.97
Tuna, 10 cans - \$29.92
Canned Chili, 4 cans dehydrated - \$7.50
Beef Stew, 8 cans dehydrated - \$12.00
Sardines, 4 cans - \$3.15
Smoked Oysters, 4 cans - \$6.35
Chocolate Jello, 16oz - \$3.00
Power Gu, 400 pouches - \$300.00
Snickers Bars, 100 - \$60.00
Tea, 144 bags - \$8.48
Accellerade, 4 tubs - \$80.00
Spice Kit

Total Estimated Cost of Food: \$873.41

FIRST AID KIT CONTENTS

First Aid Kit Contents

- 1-3.75 oz container Vaseline
- 1-surgical shears
- 1-forceps
- 12-band-aids
- 1-thermometer
- 2-safety pins
- 600-200mg Ibuprofen tablets
- 3-3x3 sterile gauze pads
- 2-patient assessment forms
- 1-SAM splint
- 1-rubber gloves
- 2-1/32 Oz tubes anti-bacterial ointment
- 2-3"x2' sterile gauze bandages
- 1-muslin triangular bandage
- 3-anti-septic towelettes
- 1-Opsite bandage
- 4-3"x2" moleskin pads
- 10-large rolls of athletic tape
- 1-moist burn pad
- 2-sterile applicators
- 1-Wet prep sponge
- 2-tubes tincture of benzoin
- 1-washing syringe
- 1-bottle betadiene
- 1-package steri-strips
- 1-Johnson's Baby Sanitary Wipes Can (repackaged)
- 2-5"x9" abdominal pads

Specific First Aid Supplies for our Altitude Climb

Acetazolamide(Diamox)

~3000 mg

250mg at bedtime 2-3 days before arrival at altitude

-increase to twice a day if symptoms of ACMS increase

Dexamethasone(Decadron)

~48 mg

4mg every six hours upon onset of HAPE or HACE

Serevent

4 inhalers

1-2 puffs twice daily if there is HAPE susceptibility

Levoquin:

10 tablets

500mg daily for severe diarrhea, cutaneous infection.

Imodium

Take as directed.

Benadryl:

10 tablets

50mg every 6 hours for urticaria

Epi-Pen

2

For anaphylaxis

To be provided by Joseph M. Forrester, M.D.

Critical Care and Pulmonary Consultants

DEA# BF1966982

Co Lic# 29578

BUDGET AND COST REDUCTION MEASURES

Transportation Information

Flight from DIA to Anchorage

Approximately \$550 pp

Taxi Service from Anchorage to Talkeetna

Denali Overland Transportation Co. \$100 roundtrip pp

Air Service from Talkeetna to Kalhitna Base Camp

Talkeetna Air Taxi (TAT) \$325 roundtrip pp

Lodging

Anchorage

Earth Bed and Breakfast \$37 per person per bed per night aka pppbnp

Talkeetna

Climbers Bunk House

Food-\$873.41

National Park Permit-150\$ per person(60 reservation advance required)

Sleds(Talkeetna Air Taxi)-5\$ per person

Gas- 28 days x 1 cup per person per day / 16 cups in a gallon x 6\$ a gallon=42\$(7 gal)

Total amount Ritt Kellogg fund is being asked for = 5583.41\$

(1395.85\$ per person)

Ways we will try to reduce cost

The major cost that we will be able to reduce will be the food cost. In addition to drying our own food, we will be writing to King Soopers, asking them to help us pay for food. This approach worked twice on previous expeditions, both on Rainer and on Joe's

trip to the Wind River Range. A total of 60 dollars was saved. In addition Joe will be drying with his dehydrator, any extra apples, bananas or other fruits and veggies he is able to pilfer from his parents. Micah, Joel and Dave will be trying to publicize our climb in their small towns and will try and receive discounts on food through that publicity. Publicity will include both traveling to local businesses as well as writing up our plan for a press release in the small towns.

TRAVEL PLANS-To and From Mountain

- Arrange Gear the week before
- Night before drive down to Denver and watch Lord of the Rings Series (fantasize killing orcs with ice axes)
- Fly out together from DIA* on the morning of June 7th
- Arrive in Anchorage in the afternoon of June 7th
- Hire a taxi to the Earth Bed and Breakfast and spend the night there.
- On June 8th, catch ride to Talkeetna, check in with Rangers, and go through briefing
- Spend night at air hanger of Talkeetna Air Taxi (we might end up spending more time here depending on the weather)

We are choosing to employ TAT; over several other companies we researched, for primarily two reasons. First, they claim to offer a great deal beyond merely flying us to and from base camp. Having the ability to access transportation, lodging, and gear through a centralized locale will simplify parts of the expedition. Secondly, as this is our first big expedition, we feel that having a company with a good reputation and a secure track record is a necessity. TAT offers both, or so they say.

- On June 9th, fly to glacier, weather permitting
- Reverse on the way out, except on the way back everyone will fly back home instead of back to Denver.

* We are flying out of DIA instead of the Springs because the prices are cheaper and it is closer to where we will be living.

SAFETY CONCERNS

WEATHER- Mt. McKinley is the most northerly of any of the high mountains (7 summits). It has a reputation for having terrible weather. Our primary concern with weather is to minimize our exposure to storms at the higher camps, specifically our camps at 14,000 ft and 17,200 ft. We will try and avoid being suckered into inopportune weather breaks by keeping a weather journal, in which we will record temps and weather for each day. We are trying to climb at one of the more ideal times during the climbing year. Since we will be spending a month on the mountain, we will accumulate a significant amount of weather data that will help us to plan our summit attempt in the best weather window that we can find. We have planned enough time that we will have the ability to wait for a weather window that will benefit our climb. We will also utilize the rangers extensively, asking about recent weather patterns that they have experienced.

Also, Lisa, the base camp manager, sends out daily weather reports, which we can pick up on the CB.

For our own personal weather analysis, we will use the format for weather analysis as outlined in Mountaineering, Freedom of the Hills 6th ed, pg 502. Weather will be the major instigator of our other primary safety considerations, so, by picking good weather windows, and monitoring snow conditions, we will be able to avoid interaction with the other potential safety considerations. If we are stuck in a storm, we will just stay at camp to wait out the storm. We will have plenty of food, plenty of games and books to stave off boredom, and sufficient tents and clothing to stay warm. We are all proficient at compass navigation in case of a whiteout, and we will be wandering each rope length.

Another concern with weather on Denali are low visibility conditions such as white-outs. While we will try and minimize time spent in these conditions, we will be prepared to deal with them when they occur. If the two groups are traveling together, then the leader of the second group will attach himself via his extra rope to the follower of the first group. We will have wanded our ascent well so we will be able to return to camp. In addition, we will be able to navigate with our compass and maps, and will not trust our intuition, just the cold hard facts of the map. All of the group members have dealt with low visibility conditions. For example, while doing the Sawtooth in winter, we were faced with dropping visibility after we came off the ridge. Because there were cliffs to our right it became imperative to navigate accurately. By using our compass and navigation skills, we were able to safely make our way back to the car and a hot shower.

AVALANCHES- There is a large amount of snowfall on Denali, and therefore, there is avalanche danger. We will be evaluating avalanche conditions each day and night when we dig snow quarries. This information will be recorded in our weather journals. In addition, we will be especially careful after large snowfalls to monitor potential slide slopes. Finally, we will also be wearing avi beacons, which will not be turned on all the time, but will when we are crossing potential fall lines.

CREVASSES-A large majority of the West Buttress is crevassed, and in areas where it is not, there is exposure to dangerous falls. Roping up is mandatory at all points; we do not want to take unnecessary risks. Running belays with snow pickets will be utilized on steeper sections or when crossing large crevasse bridges. In June and July, when we will be on the Denali, the snow bridges that are still present should be solid, however, we will still exercise extreme caution while crossing any potential crevasses. All members of the expedition have had experience in crevassed terrain. On Rainer, we ascended the Russell Glacier and descended via the Emmons-Winthrop glacier. On the glaciers, we had the opportunity to lower Dave into a crevasse and practice rescuing him. This was an invaluable experience because later in the trip Joe plunged up to the hip going across a bridge. This experience helped us to realize the absolute necessity of maintaining appropriate distances and rope tautness between team members. The major difference between the crevasses that we encountered on Rainer and what we will encounter on Denali, will be the size. We will increase the distance between each of our members to about 60 ft between each individual. As on Rainer, we will be going in two rope teams of

two. We feel that this allows us mobility in case of rescue, and allows each team to move at a pace that suits two members, instead of all four. In addition, because the crevasses are large in Alaska, we want to avoid having two people fall into a crevasse just because the rope is too short to have everyone adequately spaced. Also, each time we come into camp, before doing anything else, we will stop and wand a perimeter after probing for crevasses.

EXPOSURE- Denali is a very cold mountain. Potential concerns for our group include frostbite and hypothermia. We will try to avoid frostbite following two methods. First, we will stay hydrated. Second, we will protect our faces and hands from the wind and if that protection is not sufficient, then we will just go back to the tent or use our chemical heaters. We feel that no summit is worth losing body parts for. Hypothermia will be avoided similarly. We will hydrate, and be honest with one another about our conditions. We want to prevent hypothermia before it happens. Another important exposure concern is sunburn and sun blindness. On Rainer, we learned just how intense the sun is reflected of the glacier. We do not want to repeat that rather painful and humiliating experience. We will apply sunscreen copiously, and will wear our glacier goggles anytime that we are not sleeping (and maybe even then too, Dave is one ugly mug).

HIGH ALTITUDE RELATED ILLNESS- One of the biggest problems with young mountaineers is that they ascend too fast for their own good. We will not fall into this trap. We will have experienced how our bodies react to altitude on El Pico De Orizaba. We will have an understanding of our limitations, and will not exceed those limits. By keeping to our itinerary, with weather considerations, we should have a moderate ascent. This will help us to prevent altitude sickness. Our other way to combat altitude sickness will be to drink water, lots of water. There is always time for a brew break. Also, through our WFR course we have been instructed on how to respond to AMS, HAPE and HACE. Again, honesty with oneself and the other group members should help us to combat altitude sickness. If someone doesn't feel good, then we will descend to a lower camp and rest. Friendships are more important than summits. In addition, we have built enough time into our trip to allow for slow ascents and weather, so we can take as much time as necessary.

EXPERIENCE- We realize the enormity of Denali. We have recognized some of the major safety concerns that we will face. Our training on other North American mountains has helped to prepare us for this trip. On Rainer, we practiced glacier travel, crevasse rescue, and basic expedition planning. Climbing El Pico De Orizaba over half block will help us to assess our training level six months from the expedition, and see how our bodies perform at altitude. Finally, we will increase our winter camping skills in the Colorado fourteeners and backcountry. We realize that our winter camping skills are not on the same level as our technical mountaineering and climbing skills. Over the course of the second semester, we have a plan for how we will increase those skills.

As our resumes indicate, we have already spent two days just working on building snow shelters and windbreaks. Over 5th block break we will be heading to Capitol Peak, where we will camp for 4 nights and try and climb the knife-edge, which we scouted in

the summer time. Over the course of this trip, we will further increase our winter camping skills and avalanche awareness, as we will be crossing numerous avalanche paths on our way in. Realizing that the climb itself will not require 5 days, we will spend the rest of the trip practicing our rescue skills. Primarily we will focus on lowering someone down steep snow slopes, avalanche rescue, and care of injured climbers on steeper slopes.

On Denali, we realize that there will be roaming ranger patrols that we can contact with the CB. However, we also feel that climbing should be a sport where self-rescue is the first option to rescue a hurt team member. Rangers should not be relied upon as the primary option in a rescue situation. We want to be able to look after ourselves utilizing our WFR and rescue skills, and only fall back upon the rangers as a safety net.

In addition to our skill-training regime, we will be training extensively physically. All members of our group are very active, and we do the incline at least one day a week. Doing it in the winter will only help us. Also, at least two weekends during each block, we will be out doing a fourteener. The other weekend will be spent running laps on the Y-couloir or doing other routes up on Pikes Peak. We will be documenting our various climbs in our resumes. After school ends, we will all be living together up in Silverthorne, CO at Joe's cabin until the start of the trip. In addition to working, to help pay back our parents for some of the gear, we will be training together. This will further solidify our group friendship and team dynamic before the trip of a lifetime.

MINIMUM IMPACT TECHNIQUES-COMMUNITY SERVICE

The more that we are exposed to the mountains, the more we realize how necessary it is to preserve their beauty. On Rainer we participated in the "pack out your poop" system and found that it didn't diminish our experience. Unfortunately, on our descent down Emmons-Winthrop Glacier, we saw evidence of groups that did not abide by the system. On Denali, we will follow the minimum impact standard for the mountain and make our presence obvious by setting an example for others. When at camps with toilets, we will utilize these exclusively. If we are far away from such utilities, we will deposit our waste into the deepest crevasse we can find according to the mountain standard for waste disposal. We will carry all of our hard waste (candy wrappers, broken gear, etc.) off the mountain.

As mentioned in our GOALS section, we feel that we need to give back to the community. We have called the Talkeetna Ranger Station, and have arranged with Roger Robinson to help with waste assessment on the mountain. In addition to carrying out all of our own trash, we will carry out any leftover trash in campsites on our descent. We will mark in a journal where trash deposits are especially large. This record will help the park service improve their waste disposal program. We feel that this is the least we can do to help the mountain where we will have such a good time.

Bulleted List of How We Will Follow Leave No Trace Ethics

-Plan and Prepare

As our proposal indicates, we have tried as hard as possible to plan and prepare with utmost care. We will abide by Denali's waste disposal system, ie, deposit

human waste in a deep crevasse except in camps with toilettes, only use one pee hole, and carry out food waste and wrappers. Unfortunately, we will be traveling on the mountain at its peak usage time. However, we feel this is justified for two reasons. First, this will be our first time on a mountain of this magnitude. We feel that it will be safest for us to be up on Denali while there are rangers that can help us if absolutely necessary. Second, we will not only be carrying out all of our own waste, but also helping clean up the mountain by carrying off others trash. We feel that this justifies our decision to climb when we are.

-Travel and Camp on Durable Surfaces

All of our campsites will be located at very frequently used snow sites. We will utilize existing snow breaks whenever possible, fortifying them for our use so that we do not have to dig more shelter protection breaks when they are not necessary.

-Dispose of Waste Properly

As mentioned above, we will deposit all human waste into crevasses, use only one pee-hole, and pack all of our (and other parties) non-biodegradable trash off the mountain. Toilettes are present at base camp and at 14,000 ft. We will utilize these toilettes exclusively. Also, at 17,200 ft., there is a cardboard box which is the receptacle for poo. Once it becomes full, one dumps it in the nearest glacier. We will utilize this as well. All other waste will be carried off the mountain.

-Leave What we Find

We will take only pictures and trash, and leave nothing but a cleaner mountain.

-Minimize Campfire Impact

We will be using a stove on a platform, so there should be no issues with this one.

-Respect Wildlife

The biggest issue we should have with these criteria is ravens trying to pillage our food caches. We will bury these deep enough and make sure to wand them so that we can take them out when we leave.

-Be Considerate of Other Visitors

We realize that there will be many other people on the mountain. We hope to meet some interesting people during this trip, after all, what better place to meet people who love to climb mountains than on the mountain itself. That being said, we will respect other peoples privacy and campsites. We will only move into a shelter if all belongings of the other party have been moved from it, or we ask them if we can use it. Also, by taking trash off the mountain, we will be improving the mountain experience for people years from now.

WFR CERTIFICATION

Joel and Dave will be taking there WFR class from Crested Butte Outdoors from 5/17/2004 until 5/25/2004. Joe and Micah's WFR cards are below.

