

ALFRED D. LINDLEY  
1010 Midland Bank Building  
MINNEAPOLIS

*last*  
May 7, 1946

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Mr. Frank Gavin, President  
Great Northern Railway Company  
St. Paul, Minnesota

Dear Mr. Gavin:

Subject: Report on Skiing Reconnaissance of  
Western Part of Glacier National  
Park - March 18 to 25, 1946

Enclosure A is Itinerary of Party

Enclosure B is Detailed Findings as to Skiing  
Conditions.

Enclosure C is Weather and Snowfall Data.

Enclosure D is Memorandum of National Park  
Service on Policies for Winter  
Development of National Parks.

Enclosure E is Separate Report of  
Mr. James Laughlin, Director and  
Chairman of Hut and Trail Committee  
of the National Ski Association of  
America.

We have completed the skiing trip in the Western  
Part of Glacier National Park in accordance with the  
authorization contained in your letter of January 15,  
1946 to Mr. Peavey Heffelfinger.

The party consisted of the following:

Mr. Peavey Heffelfinger  
Mr. Louis W. Hill, Jr.  
Mr. and Mrs. Alfred D. Lindley  
Mr. Erling Strom (well known Norwegian born skier  
and mountaineer, proprietor of skiing  
resorts at Stowe, Vermont, and Mt. Assiniboine  
in Alberta).

[From L.W. Hill Family Papers]

[See Alfred Lindley to C.W. Moore, May 8, 1946 - 97, Nov. Coll. of L.W. Hill Papers]

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Marquis d'Albizzi (proprietor at various times of skiing resorts in Eastern and Western Canada, former sports director at Lake Placid Club, distinguished veteran of the Italian ski troops in World War I)

Mr. James Laughlin (proprietor of the skiing resort at Alta, Utah, director of the National Ski Association, and chairman of its Hut and Trail Committee)

The party was well balanced from the point of view of skiing experience, familiarity with operation of skiing resorts, and knowledge of skiing conditions and developments generally in this country and in Europe.

The reconnaissance was limited to the McDonald Creek-Flat Top Mountain-Mineral Creek area in the western half of the Park, including one side trip to Sperry Chalet and Glacier. From previous reconnaissance and study of terrain, climate, and rangers' reports, it was evident that the best skiing area in the Park would be included in this section. For detailed itinerary, see Enclosure A.

It was found that the slopes below the Garden Wall, Granite Park Chalet and Swift Current Pass on the East side of McDonald Creek Valley and below Heaven's Peak on the West side of the same valley were most admirably suitable for downhill skiing and would furnish runs equal or superior to any presently developed in the United States. The terrain and conditions were also found to furnish very excellent ski touring, particularly a possible tour around Flat Top Mountain via Kootenai Pass and Fifty Mountain Camp. For detailed findings as to skiing possibilities, see Enclosure B.

Snow conditions and winter climate are believed, from present information and observation, to be satisfactory for winter and spring tourist skiing. For more detailed data, see Enclosure C.

Any recommendations for development of the Park for skiing must necessarily conform to present National Park Service policy, which limits use of parks to recreational skiing and prohibits erection of elaborate permanent ski lifts. For details as to present park policy, see latest memorandum issued, Enclosure D, with summary thereof attached thereto.

Keeping in mind all of the above factors pertaining to the suitability of this area for recreational skiing and considering also the probable interests of the skiing public at the present

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time and in the future, the composite recommendations of the above named party for the development of this park area for winter skiing are as follows:

1. That the Great Northern, as sole Park hotel concessionaire, erect a simple but comfortable lodge on McDonald Creek Valley floor in the vicinity of the confluence of McDonald and Mineral Creeks, at the foot of Flat Top Mountain; that this lodge have initial accommodations for fifty or sixty guests, with provision made for possible future enlargement; that the structure best suited for the purpose would be comparable to the skiing lodge presently operating at the Sugar Bowl at Donner Summit, Eastern California.

2. That initially, no request be made of the Park Service to maintain the McDonald Creek-Logan Pass highway open for normal motor traffic to the lodge during the winter months. Information was obtained from the Superintendent of the Park that the cost of surfacing this road adequately for winter use would be approximately \$500,000, and that the annual snow-clearing cost would be \$25,000 to \$30,000. It is believed that with modern snow caterpillars, such as the so-called Weasel manufactured by Studebaker for the United States Army, towing large sleighs, adequate transportation could be furnished between the railroad at Belton and the lodge without the necessity of plowing the road.

3. That a ski lift of the J Bar or T Bar type, the posts or piers of which could be concealed or removed during the summer months, be erected on the Avalanche Run of Heaven's Peak slope described in Enclosure B, to the maximum altitude of which such lifts are capable. While admittedly inferior to chair type lifts or aerial tramways, J Bar and T Bar lifts entail far less expenditure and are, in any event, the only type presently permitted by the Park Service.

4. That shelter cabins for day shelter and emergency overnight accommodations be erected at suitable spots high up on the Heaven's Peak slope on the western side of the Valley and in the neighborhood of Granite Park Chalet on the eastern side.

5. That touring cabins be erected at suitable places on the round Flat Top Mountain tour described in Enclosure B, the following locations appearing most desirable:

- (a) Near the head of Mineral Creek near Kootenai Pass.
- (b) In the neighborhood of Fifty Mountain Camp and West Flat Top Mountain
- (c) At the foot of Trapper's Peak
- (d) At the confluence of Longfellow Creek and McDonald Creek on the west side of Flat Top Mountain



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6. That the above described lodge and ski cabins, with snowmobile or caterpillar transportation and a modest ski lift be operated for at least two seasons and be given moderate publicity; that at the end of such period, public response be assessed to ascertain the desirability of further expansion of facilities or effort to persuade the Park Service to permit more elaborate developments such as a permanent ski lift and larger hotel.

7. That if it is desired to initiate any such development in the near future, a competent man with adequate skiing experience be engaged to make a detailed study of the terrain conditions in the Park, both summer and winter, to ascertain the best locations for facilities and to assess conditions generally.

As previously stated, the above conclusions represent the composite opinion of the party.

Mr. James Laughlin has furnished a very complete and detailed report as to possibilities of developing the park for touring alone. See Enclosure E. It is quite possible that Mr. Laughlin's recommendations might fall in better with the desires of the Railway than the above. The essential difference in the two proposals is that the undersigned believes a modest lift and a more elaborate base lodge would be more desirable at the present time than merely the simple base cabin proposed by Mr. Laughlin. With the proposal for future development on a more elaborate scale as outlined by Mr. Laughlin, the undersigned and the rest of the party are in complete agreement.

Any program for development would, of course, have to be cleared first with the National Park Service. It is quite possible that only the simple plan in the Laughlin report would be presently feasible. The Superintendent of the Park has intimated that the Park Service themselves might undertake development of touring cabins in the Park without the assistance of the concessionaire.

The entire party was in agreement that the area explored afforded possibilities equal to any skiing resort presently operating in the United States, and that, if developed along the lines outlined, the value of the Great Northern's concession in the Park would be materially enhanced and much advantageous publicity could be derived therefrom. Furthermore, from the point of view of skiers, one more very desirable skiing resort giving the unique features of unexcelled touring and some beautiful open running

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would be added to the present list of places in Western United States.

The entire party join the undersigned in expressing their appreciation to you for a very enjoyable though strenuous trip, and they hope that this report has justified same. All the party would be glad to assist in any way desired in further consideration of the possibilities of the development of the area.

Yours very truly,

ADL:M

(sgd.) Alfred Lindley

(5-7-1946)

ENCLOSURE A

Itinerary of Party

Arriving at Belton, Montana, on Train No. 27, at noon on Monday, March 18, 1946, the party proceeded immediately to McDonald Lake Chalet by boat and skis. The Great Northern caretaker there, Mr. Lou Biggers, took excellent care of us during the two nights that we spent with him.

On Tuesday, March 19, six of the party made the tour to Sperry Chalet and investigated the possibilities of touring skiing in that vicinity. The following day, the party moved to the Park Service cabin on Logan Creek.

On Thursday, March 21, the entire party made the climb to Granite Park Chalet, climbing by various routes, gained entrance to the Chalet, but decided not to spend the night and returned to Logan Creek cabin the same evening.

On Friday, March 22, after a day of rest, the entire party moved to Park Service cabin at Cattle Queen Creek, a tributary of Mineral Creek on the east side of FlatTop Mountain, approximately ten miles north of Logan Creek.

On Sunday, March 24, a trip was made to the summit of Kootenai Pass, overlooking Fifty Mountain Camp and Waterton Creek Valley.

On Monday, March 25, we returned to Logan Creek Cabin, but en route spent most of the day in climbing and skiing on the slopes below Heaven's Peak on the west side of McDonald Creek Valley. On Tuesday, March 26, the party proceeded on out to McDonald Lake Chalet and Belton and spent the night on Car A-30 at Whitefish.

On Wednesday, March 26, most of the party skied on the slopes of Hell Roaring Mountain above Whitefish, and the entire party attended a reception and dinner given by the Whitefish Chamber of Commerce and Lions Club. Short talks were made at this dinner by four members of the party.

That night, Car A-30 was attached to Train No. 28 Eastbound, and the party returned to Minneapolis.

The entire trip was interesting and enjoyable from a personal point of view, though strenuous, and was made without any serious incident. The Superintendent of the Park, Mr. J. W. Emmert, and all of his staff cooperated to the utmost degree in facilitating the journey, as did the Great Northern Divisional Superintendent at Whitefish, Mr. Minton.



ENCLOSURE B

Detailed Findings as to Skiing Conditions

1. The highway along McDonald Lake and McDonald Creek, until it leaves the valley and climbs to the switchback below Granite Park, was found to be smooth and undrifted and blocked by only one slide a mile and a half north of Avalanche Camp. With the exception of this one slide, which would require removal, it could be easily traveled by snowmobile or snow caterpillar during the winter months without any further plowing or clearing.
2. The skiing possibilities afforded by the natural bowl adjacent to Sperry Glacier and Sperry Chalet are not sufficient to warrant the long climb up the narrow valley to this bowl. It is a rather long tour for the average skier, and even with overnight shelter provided in Sperry Chalet, it did not appear that the skiing possibilities were sufficiently attractive to warrant its development. The area is limited in size and any runs possible would be very short. In addition, there is some, though not serious, avalanche danger in one part of the trail up the valley.
3. The slopes from McDonald Creek Valley up to Granite Park and on to Swift Current Pass afford excellent skiing possibilities. The total drop is between 2,500 and 3,000 vertical feet. Much of the slope is covered by open burned timber, but spaced sufficiently apart so that fast running is possible. A descent was made by the faster members of the party on breakable icy crust, about the most difficult conditions possible, and still it provided very enjoyable sport. It is suitable for both average and advanced skiers. Though it faces southwesterly, it should afford reasonably good snow conditions most of the winter, as there was little evidence of wind crust. The good skiing slopes extended for at least two miles on the slopes under the Garden Wall, roughly a mile on each side of Granite Park Chalet. There are some rock outcroppings on the lower slopes opposite Flat Top Mountain, but same can be descended without any undue difficulty.
4. Granite Park Chalet in its present form is not suitable for a winter chalet. There is no inside access from the main rooms to the bedrooms. Access was gained with difficulty to two of the bedrooms and the main living room, but for winter use, inside access would be required. The rooms in which the blankets and bunks were stored were heavily snowed up and access was impossible.

5. The slopes on the western side of McDonald Creek Valley, opposite Granite Park and running northerly from Heaven's Peak, afford the best skiing in the Park, consisting again of about 2,500 to 3,000 vertical feet, with steepness averaging roughly from fifteen to twenty degrees. The lower slopes are timbered, but not too heavily for skiing, and as altitude is gained, the timber thins out for excellent running. There is a wide gash down the entire slope about two miles north of Heaven's Peak which affords a really sensational open run all the way down the slope and, in the opinion of the most experienced members of the party, it was as good a run as had been enjoyed anywhere in North America. This entire slope from Heaven's Peak north, facing McDonald Valley, offers first class possibilities for downhill skiing. Snow conditions here were found to be perfect, as there had been a fresh fall of snow, but again, the absence of wind and the fact that the slope faces north would ensure as good average snow surface conditions as one could expect anywhere.

6. The trail from the confluence of McDonald and Mineral Creeks at the foot of Flat Top Mountain, leading up Mineral Creek to Cattle Queen and beyond to Kootenai Pass, is attractive and suitable for touring skiing. If overnight shelter were provided near the head of the valley below Kootenai Pass, it would be a most enjoyable tour. As it was, the ranger cabin at Cattle Queen afforded the party very adequate shelter. Kootenai Pass and the bowl below it give excellent skiing, as does the run down the northern side of the Pass. All this is in the nature of touring skiing and should be linked up with a tour around Flat Top Mountain and West Flat Top Mountain, and under Trapper's Peak on the westerly side. It would require, besides a shelter cabin on Mineral Creek, another cabin in the vicinity of Fifty Mountain Camp and probably a third cabin under Trapper's Peak, to make possible the complete tour around Flat Top Mountain. Owing to the limitations of time and the fact that most of the country could be seen from either Kootenai Pass or Heaven's Peak slope, this tour was not made.

7. Flat Top Mountain is suitable only for touring skiing. The lower slopes of the mountain in its entire circumference are precipitous and ascent and descent can be made only by certain creek beds, chiefly Flat Top Creek and Continental Creek. Elsewhere the going is very difficult. Once on top, there is fine touring country. But downhill running down these slopes is at all times dangerous because all end in practically sheer drops near the bottom.

8. There is excellent skiing to be found in the headwaters of McDonald Creek under Trapper's Peak and in Longfellow Creek, a tributary of McDonald Creek. These slopes are similar to those found under Heaven's Peak. To reach them, it is necessary to



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travel from three to five miles up on the flat of McDonald Creek, again in the nature of a tour.

9. Hell Roaring Mountain at Whitefish is suitable only for local development for skiing, and extensive development by outside capital would not be justified.

ENCLOSURE CWeather and Snowfall Data

Snowfall in the McDonald Valley area of the Park appears to be adequate for a ski season of at least five months and possibly six months. At the time of our trip, the snowfall averaged about five feet in depth on the valley floor.

A tabulation of weather conditions for the past four winter seasons, pertaining to clear and cloudy days, indicates the following figures for the winter months from December through April:

Clear Days	101
Partly Cloudy Days	104
Cloudy Days	337

This indicates a satisfactory average of clear weather for tourist skiing.

Temperatures appear to be moderate at all times, as McDonald Lake seldom freezes over. At Belton during the past season, the mean temperature from December through March was 25 deg.F., with the lowest month, December, being 22 deg.F. and the highest month being 28 deg.F. In April, the temperatures run higher.

One very advantageous feature of the climate in this area is the apparent complete absence of wind. The even snowfall, the accumulation of snow on trees and roofs, and the whole appearance of snow on the upper slopes indicated unusually calm conditions. Wind crust is one of the worst enemies of skiing, and this factor is most important in assessing future development of any area.

ENCLOSURE DSummary of Park Service Policy As  
to Winter Development of National Parks

The policies of the National Park Service with reference to the development of National Parks for winter use was discussed at length with Mr. J. W. Emmert, Superintendent of the Park, Mr. M. E. Beatty, Park Naturalist, and Mr. Elmer Fladmark, Chief Ranger, at a meeting following the conclusion of the trip. Further detailed information on that subject has been obtained from a Park Service Memorandum dated March 21, 1946 (No. PO-331), published for the Director's Office and all Field Offices. A copy of this memorandum is attached hereto, but same may be summarized as follows:

1. Future development of National Parks for winter skiing is preferred for day use only and not to include overnight accommodations. This, however, applies more to areas where there are available accommodations in nearby communities, and development of overnight accommodations within the parks is not necessarily prohibited.

2. The Park Service desires to develop a program of informal skiing and winter sports rather than competitive skiing and highly publicized events such as winter carnivals.

3. Park areas having adequate snow and reasonable winter access will be developed in two lines:

- (a) Winter use centers containing downhill practice slopes, downhill runs, small ski jumps, and such ski lifts or tows as can be removed at the end of the winter season.
- (b) Establishment of ski touring huts and trails for the encouragement of ski touring and ski mountaineering.

4. The Park Service will undertake the responsibility of keeping roads and parking areas open and supplying Ranger service patrol, and public utilities within the limitations of available funds.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
CHICAGO, 54, ILLINOIS

No.FO-331.

March 21, 1946

MEMORANDUM for the Director's Office and All Field Offices

This memorandum is a revision of, and supersedes, the memorandum of August 13, 1945 (RD-207) addressed to the Director's Office and the Regional Directors, in which the policy of the National Park Service regarding winter use of the areas administered by the Service was stated. The original memorandum has been interpreted as imposing restrictions on winter use which were not intended and which would prevent the holding of certain competitive events publicly desirable and not injurious to the natural values the Service is obligated to safeguard.

It is recognized that important recreational benefits are available during the winter months in areas of the National Park System having a heavy fall of snow and where the climate is otherwise not too severe. It is further recognized that, if made available under proper controls, the use of our areas for healthful out-of-door recreation during the winter months is a very desirable way to make the scenic and other natural values of the System available for the benefit and enjoyment of the people.

It is, therefore, the policy of the National Park Service to encourage a winter use program that will result in the maximum benefits possible to the largest number of people to an extent which will not result in impairment of those resources this Service has as its duty to conserve, preserve and protect. To accomplish these ends, the following principles shall govern:

1. Any future developments for winter accommodations in areas of heavy snowfall will be confined to those necessary for day use, and will not include overnight accommodations. Where overnight accommodations now exist in such locations, the National Park Service will require their operation during the winter only in cases in which they can be operated at reasonable rates without financial loss

to the concessioner. Limited overnight accommodations can be provided outside of the heavy snow areas in some of the parks but equally desirable or better accommodations can be provided in nearby communities. It is our desire to encourage local communities to provide this service and, in many places, it should give them substantial business returns during the period normally slack.

2. The Service desires to develop and encourage a program of informal skiing, snowshoeing, ice skating and tobogganing, in which all those who desire to do so, whether they are skilled or unskilled, may participate. Winter carnivals, competitive events and, in general any spectacles whose purpose is to attract large crowds of spectators will be avoided if they appear likely to overcrowd available accommodations and facilities, and thus act as a deterrent to family and other groups which come to enjoy the winter use of the parks; or if they are likely to cause serious traffic or other management difficulties. Decision on individual events will be made by the proper Regional Director.

3. In park areas having adequate snow and a reasonable means of winter access, the following developments will be authorized for establishment by the National Park Service as funds are made available and if the amount of use justifies the expense:

(a) Winter Use Centers. Careful study will be given to location of developments for snow use. Whenever possible, winter use facilities in any park will be provided in a single center. A winter use center may include any or all of the following: Practice slopes, downhill runs, improvised ski jumps which can be removed at the end of the winter, and ski lifts or tows, toboggan slides, and other installations which are approved by the Director. Ski lifts and tows will be limited to the types that can be removed at the end of the winter season.

It is not the intention in the development of such a center to limit the public to use of this area and to discourage the more independent type of person who, within our

our general regulations, wants to do some cross-country work or otherwise practice his own ideas of a winter day's outing.

(b) Ski Touring Huts and Trails. There are believed to be enough back-country ski huts now available to serve the experimental program which should precede any general expansion of this type of public accommodation. Should the public desire to use this type of facility to the extent that some enthusiasts assert, the Service will then be glad to consider a program of further encouragement of ski touring and ski mountaineering.

Trails will be constructed and marked only after detailed plans have been prepared and approved in advance.

4. The Service will charge, or allow charges to be made, for special facilities and services such as ski tows, skating rinks, toboggan slides, etc. These services will be provided by the park concessioner.

5. The responsibilities in keeping park roads and parking areas clear of snow, supplying ranger service, patrol, first aid and public utilities, such as water, sanitation, etc., will be accomplished within the limitation of available funds. Safety factors will be kept strictly in mind at all times.

6. The Service will endeavor at all times, through the Director and the field officials, to secure the most competent advice available on the subjects covered by this policy statement.

(signed) Newton B. Drury  
Director.



ENCLOSURE E

REPORT TO THE PRESIDENT & DIRECTORS OF THE GREAT NORTHERN RAILROAD  
ON THE POSSIBILITIES FOR A SKI DEVELOPMENT IN GLACIER NATIONAL PARK

The following report is based upon a reconnaissance made in the Park during the latter part of March, 1946, under the leadership of Alfred D. Lindley. Entering by the Belton Gateway and proceeding to the Logan Creek - Flattop mountain area, a week was spent in visiting slopes which the contours on the topographical map indicated might be suitable for skiing.

A potential ski area may be assessed from many different points of view. In applying to this problem my knowledge of the principal resort regions of the United States, middle Europe and Australasia, I have tried to put myself in the position of the Railroad directors. On this basis, the primary consideration is this: The Great Northern is in the transportation business and not the resort hotel business. Nor is the Great Northern a philanthropic agency created for the benefit of skiers.

The logical objective for the Railroad in a ski development would then be this: to secure the greatest possible additional revenue - new business from skiers - with the least possible expenditure for facilities to attract the new business.

The experience of the Union Pacific Railroad with their Sun Valley development has great bearing on this problem. The last time that I discussed the matter with Mr. W. P. Rogers, operation manager at Sun Valley, he told me that the actual Sun Valley plant - hotels and ski lifts - was doing no better than meeting costs, although operating at capacity, but that the Railroad was pleased with the project because of its enormous advertising value, and because such a great dollar volume of railroad tickets was being sold to skiers without the addition of any new trains to the railroad schedule.

I was also much interested in what Mr. Louis Hill told me about the summer operation of the Glacier Park Company: that it did not operate at a profit, but was valuable for attracting tourist business and publicity to the Railroad. I do not believe that it would prove possible to adapt the summer use buildings for winter ski use, except perhaps in the case of Granite Park Chalet, of which I shall speak later.

The second major factor bearing on our problem is the

attitude of the National Park Service toward skiing, inasmuch as any development in Glacier would have to meet the regulations of the Service. It is important to note that Sun Valley was built on private land and on lands used under permit from the National Forests.

The attitude of the Forests is entirely different from that of the Parks when it comes to skiing. The Forests encourage skiing and the Parks discourage it. This is because of the nature of the act of congressional authority under which the Park Service operates. This act specifies that the natural beauties of the Parks must be preserved absolutely intact, except for roads of access, fire prevention roads and such shelter buildings as can be landscaped into the natural scene.

Where the skier runs afoul of this provision is in his basic need for uphill conveyance - ski lifts. Without such lifts, on a large scale, no ski resort could possibly attract a large public. The failure of the ski operation at Mount Rainier is directly attributable to the refusal of the National Park Service to sanction the construction of a major lift. They will permit only such tows as can be dismantled in summer.

I have talked to many Park Service officials, both in the Parks and in Washington, many of them men personally favorable toward skiing, and they all tell the same story: Park Service policy on ski lifts will remain unchanged until pressure from skiers forces an amendment in Congress to the act under which they operate. They concede that motor roads often make worse scars in the Parks than a ski lift would, but they point out that there are ten motorists to every skier desiring access to the Parks.

I believe that in fifteen years' time there may well be enough pressure from skiers to bring about a change in policy on this point, but in the meanwhile I think the Great Northern would do well to postpone a major resort development and to concentrate on a type of skiing which the Park Service would approve, that is, ski touring.

Digressing for a moment, I would point out that when and if Park Service policy approves the construction of lifts and ski hotels, a magnificent resort could be built on the North-East slopes of Heaven's Peak Ridge. This area appears to offer terrain and conditions which might surpass those of any area now developed in the United States. I shall append to this report some ideas about this possible development, which can be filed away for future reference.

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Returning now, to the subject of ski touring, let me give a little background. In Europe high mountain ski touring has been highly developed, thanks largely to the activities of the clubs of the German Alpine Union, which built huts in the principal ranges of Austria at high altitudes. There are also chains of huts in Bavaria, Switzerland, France and Italy. In all, there must be a hundred such huts in middle Europe, and many thousands of skiers from all countries make use of them every season. I have often done so myself, and I can say that there is no phase of skiing which offers more rewarding pleasure than that of making a trip among these alpine huts. My enthusiasm for this branch of the sport has led me to the position of chairman of the Hut Committee of The National Ski Association. It is the long-range objective of our Committee to foster the development in the United States of chains of touring huts comparable to those in Europe.

To date only a small following has been built up for ski touring in the United States. It must be remembered that downhill skiing, as differentiated from jumping and cross-country racing, has only been practised in this country for about fifteen years. During this period we have seen the invention of the ski chair lift and the proliferation across the land of various types of uphill conveyance for skiers. In their enthusiasm for speed, and in their desire quickly to master technique, our young people have acquired an exaggerated interest in "downhill only" skiing. Youth wants to go fast and go hard.

But as many of our American skiers are beginning to reach their forties and their fifties we notice among them a trend toward less violent forms of skiing. Ski touring is an ideal recreation for people of middle age, and especially for people who wish to enjoy the beauty and grandeur of the mountains in winter. At my resort in Alta, Utah, we are now noting a growing interest in ski tours. The youngsters still want to ride the lifts continually, but the older people are anxious to make leisurely trips in the high country. From a business point of view it is important to consider that touring appeals to an age group much better situated financially than the younger people interested in racing.

I believe then that we are going to see in the next decade a wide growth in public interest in ski touring, and that with time there will be large numbers of skiers ready to make a long journey to reach terrain which offers the combination of good ski slopes, inspiring mountain beauty, comfortable huts and competent guides.

Glacier National Park has the first two of these requirements already; I see no reason why the other two cannot be developed



with a small outlay of capital. Let us then examine the different factors which enter into the ski touring picture.

### Snow Conditions

Our party did not study actual year-by-year snow records, but from talking with rangers and others we learned that the Logan-Flat top section of the Park usually has skiable depths of good snow from December through April. This is less than Alta, Mount Baker and Ashcroft, but more than Sugar Bowl and Sun Valley. It is entirely adequate for a touring terrain.

The great natural enemy of the skier is wind. Our studies indicated that the Chinook winds which melt the snow do not penetrate to the region in question, and that this region is well protected from winds in general. We did not find any of the customary signs of high winds: wind slab crusting the snow, bent trees, or extra-large cornices on ridge tops.

Timber is an important wind screen for skiers. The slopes in this area are heavily timbered to within 1500 or 2000 vertical feet of the ridge summits. There is, however, sufficient snowfall to cover up ground brush. This means that the skier can ski through the trees without great trouble or danger. On the slopes of Heaven's Peak and in the vicinity of Fifty Mountain Tent Camp there are pleasing timber-free open slopes most suitable for skiing.

Temperatures: we did not study past records but conversations indicated that winter temperatures are not anywhere nearly so cold as those which prevail in the ski areas of New England and Eastern Canada.

Altitude: in this respect Glacier Park is most favorably situated. The slopes which we covered ranged mostly between 4000 and 7000 feet of elevation. This means that there is a far smaller acclimatization problem than exists in most western resorts. This is an important factor.

### ACCESS

Access to the Belton Gateway of the Park is good. It will be even better when the new Great Northern fast trains go into service. Since no other lines and no airlines serve Belton all of the non-automobile business would come to the Railroad.

From Belton there are good highways as far as a point two miles past Logan Creek Cabin. These highways are not suited for winter use, however, and the expense of clearing them would be prohibitive.

It seems wiser to plan on transporting skiers and supplies from Belton to the ski areas by snow-tank, or "weasel," as the model developed for the Army Mountain Troops by Studebaker is called. I have tested one of these machines in the deep snows of Alta, and they are very useful. They have enough power to tow a sled heavily laden with people or supplies, and they will travel up to forty miles an hour on a level roadbed. When taken onto side hills they sometimes throw their tracks, and this should not be attempted.

From the point where skiers going to the Heaven's Peak area would leave the highway to Logan Pass there appears to be a summer wagon or logging road that goes to within a mile of the foot of the Heaven's Peak Ridge open slope. No work would need to be done on this road to make it ready for "weasel" traffic as it is already well graded. From the point where this trail ends it would be necessary to widen an existing horse trail to the foot of the big open slope on Heaven's Peak Ridge, which is the natural site for a base cabin. It would also be necessary to throw a log bridge over MacDonald Creek just beyond the present bridge which takes the horse trail over Mineral Creek. I do not think the expense of these operations would exceed \$3000.

If the base cabin were located as suggested, no further roads would be required for the touring project. The higher cabins could be stocked with staples by horse in summer, and the skiers would carry with them their perishable foods.

There is a snow-slide problem on the highway about half way between Logan Creek Cabin and MacDonald Lake Chalet, but it is not a very bad one. The slide, which comes down every year, is only about two hundred feet wide, and the possibility of a "weasel's" happening to be at that exact small spot at the one moment when the slide comes down is so remote as to be almost incalculable. To clear a track for a "weasel" over the slide once it had come down would be about a half-day's work for two men with shovels. The slides which cross the Logan Pass road as it climbs up under The Garden Wall would be eliminated since the route would follow the valley-floor road which branches off to the west about two miles beyond Logan Creek Cabin.

I saw no particular evidence that the open slope on Heaven's Peak Ridge was subject to sliding. A ranger told us that the timber was taken out by a forest fire, followed by lumbering, and not by rock or snow slides. However, there is a cornice on the cliffs at the top of the ridge which might break off occasionally, so that it would be well to locate any installations to one side of the open slope in the heavy timber.

A CHAIN OF HUTS

Supposing then that a base cabin were built near the foot of the open slope on Heaven's Peak Ridge, what would be the possibilities for tours from this site and to other cabins in the area?

There would be, first of all, the trips to be made on the ridge itself. There is enough variety here to provide at least three days' touring, perhaps more. Ascents could be made to different parts of the ridge, including Heaven's Peak itself, with return each evening to the base cabin.

An excellent day trip would be that of crossing the valley and climbing to Granite Park Chalet. The mountainside below Granite Park provides very good running through burned timber, while the slopes in the vicinity of the chalet itself are extremely attractive and the general scenic outlook incomparable.

Should it be possible to convert one of the small cabins at Granite Park for winter use and keep it clear of snow (these cabins were totally covered when we visited the site) this area would provide at least one and possibly two days of beautiful touring. We did not have time to climb to Swiftcurrent Pass, but it is not unlikely that there would be a good tour over the Pass and down toward Many Glacier. Another good tour from Granite Park might run south along the high shelf under The Garden Wall.

Our party spent two nights at Cattle Queen cabin, in the valley east of Flattop Mountain on Mineral Creek, and we were favorably impressed with the skiing possibilities of the terrain lying at the headwaters of this creek, and below the pass which leads to Fifty Mountain Tent camp. If a small overnight cabin were built near the point where Mineral Creek rises out of thick timber into open country it would serve as a touring base for fine slopes on both sides of the Divide in this immediate area.

We did not have time to make the circuit around the north end of Flattop Mountain from the head of Mineral Creek to the head of McDonald Creek but from visual observation from high points of vantage and from study of the topographical map it seems likely that a further overnight cabin should be located on the south side of the Divide near the head of McDonald Creek, and under Trapper Peak. This cabin would open up tours in the lightly wooded ridges around Trapper Peak.



To sum up, construction of a base cabin at the foot of the open slope on Heaven's Peak Ridge, and of overnight cabins at Granite Park and near the heads of Mineral and McDonald Creeks would provide a rough circle of huts in interesting country which would offer the touring skier a quick trip of four days if he chose to proceed rapidly from hut to hut, a leisurely trip of a week if he chose to make a side-tour from each stopping place, or an extended trip of a fortnight or longer if he chose to make several side-tours from each stopping place.

From what I know of the psychology of ski touring I believe that such a set-up would well suit the demands of the customers. Our modern city way of living has so softened us that, while we find a temporary plunge into raw nature very exhilarating, too long an exposure to "hardship" produces nerve strain and irritability. Depending on the individual, five to ten days is about the right length of time for a ski touring party to stay out in the mountains.

#### PLANNING & COST OF HUTS

I would suggest that the projected cabins be built in the simple style used for the ranger cabins which we occupied during our trip. These are built of local logs, jointed and caulked, the interiors not ceiled or lined, shingle roof, rough flooring, wide glass windows, barred to prevent animal entry, and with (an attractive feature we found at the Cattle Queen cabin) an extended overhanging front eave, which, when the snow becomes deep about the cabin, provides a semi-enclosed porch that adds living space to the unit in pleasant weather and a logical spot for storing wood and skis. Cabins should be large enough to accommodate eight to twelve skiers.

Since the parties that will go out in future are likely to be less homogeneous than was ours it would be well to provide for some segregation of the sexes and dressing privacy. This problem has been well handled in the Owl Creek Cabin at Sun Valley by the use of heavy curtains running on fixed wires which can be used to divide parts of the cabin into separate sleeping sections. Cooking and heating stoves, both burning wood, would be in order, as would a nearby simple privy. Cabins should be located close to open water, and should have a small food-cellar under the floor, where canned goods, brought in by horse in summer, could be stored without danger of freezing or animal consumption.

The base cabin at Heaven's Peak Ridge should probably be somewhat more elaborate in plan since larger numbers of skiers may be there at one time than in the outlying cabins, and since it must serve as main supply base and as winter home for the guides who will operate the project. It might even be well to consider building a central cook-house and recreation center cabin, with small living cabins grouped about it. It would also be advisable to provide a simple running water system with a kitchen sink and a community bath-tub. No doubt a pipe-line run a few hundred yards north up McDonald Creek would produce water pressure, while heating could be done with a tank and coils attached to the cook stove.

I do not have any recent figures on the cost of log cabin construction, and I realize that skilled labor of this kind has probably inflated as much as any other type, but I would venture to estimate that the overnight cabins at the headwaters of Mineral & McDonald Creeks could be built and equipped for not more than \$3500 each, that one of the small cabins at Granite Park could be fitted with vertical shaft entrance and ventilation for not more than \$500, and that the base unit at Heaven's Peak Ridge could be built and equipped for not more than \$15,000.

Total Budget: Figuring \$22,500 for cabins, as above; \$3000 for road and bridge (page 4); and perhaps \$3000 for the purchase of two "weasels"; we have a total expenditure of \$28,500 to set up the project. I believe, furthermore, that the above estimates are generous, and that an organization experienced in building as the Railroad must be, with its own construction men on regular payroll, might be able to trim them considerably.

In later years, if the project flourishes, other outlying cabins could be built to enlarge the touring circuit, and additional facilities and comforts could be added at the base camp. Should the Park Service ever change its policy and Heaven's Peak become available for a hotel and lift development the cabins which had been constructed for a touring base camp would still be useful for help accommodations.

#### HOW TO OPERATE A HUT PROJECT

As Chairman of the Hut Committee of the National Ski Association, I have already given a great deal of thought to the most effective and yet economical method of operating a chain of huts. In Europe, in the good Austrian huts, the system is this: a party going up to a hut chain will engage

will engage a guide to go up with them from one of the alpine towns. Depending on his fame and the number in the party, his fee will range between ten and twenty dollars a day. In each of the big huts there is a hutmaster in residence, usually assisted by his wife and daughters, who do the cooking and cleaning. The huts belong to the German Alpine Clubs and the rate for food and bed varies with the altitude of the hut, the most expensive being those to which supplies must be packed the greatest distance. Thus the rates range between three and seven dollars per person per day.

This system is practical and works well, but we shall not be ready to use it in this country until we have a large touring public. In the meantime we must improvise. The suggestion I would offer to the Railroad is that the managing of the cabins, and the guiding, be let out as a concession on a percentage basis to a man interested in touring who is in a position to associate with himself in the effort two or three young skiers competent to serve as guides.

At the outset I would urge that the Railroad make the financial arrangement very generous. The first few years of operation, as is always the case with a new venture, may be hard sledding. Later, when a regular patronage has been built, the terms could be readjusted so that the Railroad would begin to get a return on its investment. During the probationary years the Railroad's return on its expenditure would be the revenue from transportation to Belton. I think that the project should be set up on the basis of a flat rate per day per skier, which would include food, use of cabins, guide service, and transportation to Heaven's Peak by "weasel." During the present inflation a rate of ten dollars a day would not be out of line. When conditions return to normal a rate of not more than seven dollars should be the objective.

In choosing the right concessionaire to operate the hut project the Railroad has right now a reservoir of especially suitable talent in the veterans of the Army's Tenth Mountain Division. Over a period of years these men received a vigorous training in all the elements of ski mountaineering and living in the snow. Many of these men developed a love of skiing and of the mountains that will never leave them, and I have seen letters from them which indicate their desire to get into a type of business which will enable them to spend their winters in the snow. For such men, work in this hut project would be ideal. And they have the advantage of knowing how to drive and service "weasels," so that they could take care of the customer from the time he got off the train in Belton till he got back



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on again to leave. These men are trained in first aid, they can teach a little skiing, and they know how to cook.

I have heard that the Tenth Mountain Infantry has its own veterans' organization, a sort of alumni association of this elite fighting unit. By Application to this group it should be possible to find four or five young men who would club together to take on the Glacier Park ski touring concession. These boys would bring to the work the prestige of their division's war record, a not inconsiderable factor from the point of view of advertising.

I might suggest that a good man to head up such a project would be Sgt. Ed Long, who is now working as a Forest Ranger in the Grand Canyon. Long had a good record as a top sergeant in a company of the ski troops, and prior to the war was active in organizing skiing in Arizona, where he was a school teacher. He is an enthusiastic ski mountaineer and has the right temperament and resourcefulness to meet the problems of such a project. I have not seen Long since the war or discussed the Glacier Park trip with him by letter, but I thought of him at once as the right sort of man for this kind of work. With two or three younger boys for guides (Long is in his late thirties, and is married) and a cook at the base camp, a man like Long could run a touring set-up effectively.

#### PROMOTION

The promotion of such a hut touring project would not be an expensive proposition. A simple booklet of four or eight pages, with a few pictures, information and rates, would tell the story, and serve for circulation to ski clubs, ski resorts and travel agents. An annual advertising budget of perhaps \$500 would be enough to tell the story in Ski Annual, Ski Illustrated, Western Skiing and Ski News, the publications which are read by serious skiers. I presume that the Railroad already has ticket offices in major cities from which regular travel salesmen could call upon prospects who expressed interest in making the trip to Glacier.

In addition, I can guarantee that the project would receive the backing and support of the National Ski Association, and particularly of the Hut Committee of that organization. Members of our group would be only too glad to write articles for ski publications about the Glacier Park touring, and our secretary would distribute literature to all skiers who write in to us for information about touring localities.

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Let me say further, that I personally will be happy to place my services at the disposition of the Railroad without fee in the event that they should be requested for consultation on any phase of the project. In providing for the skiers of this country the first systematic ski touring hut project the Great Northern Railroad would be performing an outstanding public service, one which would reap rich dividends in good will and prestige, and command the respect and support of a widely-scattered and ever-growing group of sportsmen.

Respectfully submitted,

s/ James Laughlin

James Laughlin

April 15, 1946

# Supplement: A MAJOR SKI RESORT IN GLACIER PARK

Should the attitude of the National Parks Service toward skiing ever be modified so that the Great Northern Railroad could have a completely free hand in building in the Park, I believe that a major resort could be built on the open slope on Heaven's Peak Ridge which would complete(?) successfully with Sun Valley and the other US resorts.

A pre-requisite would be further data on the "snow habits" of this area, such as could be gained from the records kept by a ski touring project in the Park.

If it is established, as our party thought, that the open slope in question is not the result of a snow slide, and not subject to periodic avalanching, then this slope is without question a natural ski terrain, offering superb possibilities for resort development.

I would envisage a hard-surfaced road running from Belton to the foot of this slope, with fast bus service connecting with the Great Northern fast trains. Along the vertical rock shelf on the south side of the slope would be built an alpine cable-car, or tramway, of the type now in use at Franconia, New Hampshire, only with a 50% larger capacity.

At the center of its vertical rise would be a mid-way station where the cable cars would stop, and at this point the main hotel should be built, located in the trees to the south of the open slope. Thus skiing would be carried on both above and below the hotel on the mountainside, a feature unique in American skiing which would have great appeal on the basis of European experience.

Sheltered from the wind by the cliffs of the vertical shelf, the tramway should be able to operate continuously, affording uninterrupted transport of guests and supplies from the arrival station to the hotel. By taking advantage of the slope on which the hotel would be built a good architect (I would suggest Wurster of M.I.T.) could produce a modern building in terraced style in which every guest room could have sun, a superb view of the great valley below, and a private balcony.

Skating rink, ski school slopes and gentle slopes for beginners, served by a T-bar type lift, could be built near the base station of the tramway.



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The construction of such a plant would undoubtedly cost well on toward two million dollars, but I believe this investment would be justified by the quality of the ski slopes to be served. In addition to the main slope of the ridge there would be fine skiing on the timbered slopes on each side, areas that must be nearly a mile wide, with over 3000 vertical feet of steep, skiable elevation. Thus a variety of long runs could be served by the tramway, trails and open glades being cut through the timber.

#####

For Mr. L. W. Hill

[1947][?]

Amount spent for advertising each year for  
past 10 years

Year

1937	\$ 412,890
1938	364,167
1939	378,122
1940	388,330
1941	432,168
1942	359,089
1943	372,450
1944	405,410
1945	485,650
1946	780,690
1947 (11 mos)	738,709

Does Prince of Wales Hotel have insurance a/c damage  
from wind.

yes -

amount - 377,200

What amount of fire insurance is carried on each of the  
three hotels.

	Bldg	Contents
Glacier Park #1	\$ 599,750	171,500
Prince of Wales	377,200	106,000
Lake McDonald	141,900	39,850
Many Glacier	464,350	115,000

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## GLACIER PARK HOTEL COMPANY

## Original Construction Cost - Glacier Park Camp No. 1

	<u>Date of Construction</u>	<u>Size</u>	<u>Type</u>	<u>Original Construction</u>
Hotel	)	206' x 98'	Frame with log columns and concrete founda- tions	\$168,403.90
Annex and bridge	) 1912-1914	243' x 75'	Hotel 3 floors, annex 4 floors	176,141.11
Kitchen	)	48' x 100'	Frame	30,948.40
Chalets, dormitories, powerhouse, septic tank, archway, water supply, golf grounds, etc.				316,231.18
Equipment - House bedroom, kitchen and all other equipment				94,502.08
Total - Glacier Park Hotel				<u>\$786,226.67</u>



[1947] [?]

GLACIER PARK HOTEL COMPANY

Statement of Navajo Rugs in Hotel and Annex  
at Time of Original Construction of Hotel and Annex

Physical Inventory September 30, 1914			Market Value
<u>Hotel</u> -	Small Navajo rugs	35 @ \$ 5.00 each	\$ 175.00
	Large Navajo rugs	87 @ \$12.00 each	1,044.00
<u>Annex</u> -	Small Navajo rugs	117 @ \$ 5.00 each	585.00
	Large Navajo rugs	122 @ \$ 9.00 each	1,098.00
<u>361</u>			<u>\$2,902.00</u>

Details of Purchase Costs

Purchased direct by Glacier Park Hotel Company from Oregon City Manufacturing Company, Oregon City, Oregon

			Book Cost
May 1914 Vo. #40	Navajo rugs	21	\$178.11
July 1914 Vo. #31	" "	3 58 x 78	25.14
	" "	19 40 x 58	88.44
	Freight charges		4.48
July 1914 Vo. #81	Navajo rugs	18 58 x 78	150.82
	" "	36 40 x 58	167.58
	" "	18 58 x 78	150.82
	Freight charges		3.35
		<u>115</u> ✓	768.74

Purchased direct by Great Northern Railway Company from Oregon City Manufacturing Company under direction of Mr. L. W. Hill and then billed against the Glacier Park Hotel Company

Glacier Park Hotel Co. May 1914 Voucher No. 62

G. N. Ry. Co. April 1913 Draft Voucher No. 5089 (J.V. #868 May 1913)

Navajo rugs	40 x 58	49 )	
" "	58 x 78	30 )	
" "	58 x 90	62 )	
		<u>141</u> ✓	735.00

Glacier Park Hotel Co. May 1914 Voucher No. 190

G. N. Ry. Co. August 1912 Voucher No. 3351

Navajo rugs	18		245.00
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G. N. Ry. Co. June 1912 Voucher No. (Purchasing Agent's drafts)

Navajo rugs	14		210.00
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G. N. Ry. Co. May 1914 J. V. No. 586 $\frac{1}{2}$  - Invoice dated April 30, 1914

Navajo rugs	58 x 78	8	\$ 72.00
" "	40 x 58	25	125.00
" "	59 x 90	40	480.00
Less 5%			33.85
		<u>73</u>	<u>643.15</u>

361 rugs ✓ \$2,601.89 ✓

[1947][?]

## GLACIER PARK HOTEL COMPANY

Statement of Totem Poles at Time of Construction of Hotel and Annex  
at Glacier Park Camp No. 1

	<u>Market Value</u>
Physical inventory as of September 30, 1914 of totem poles on hand	
13 totem poles at value of \$25.00 each	<u>\$325.00</u>

## Details of purchase

The totem poles at Glacier Park Camp No. 1 were purchased by the Great Northern Railway Company from the Hudson Bay Fur Company, as follows:

	<u>Book Cost</u>
Hudson Bay Fur Co. invoice 4-2-13	
10 totem poles	\$255.00
1 totem pole 15'	52.50
Hudson Bay Fur Co. invoice 5-5-14	
21 totem poles as selected	500.00
3 totem poles delivered to other camps	71.43
Totem poles shipped from Glacier Park to Great Northern Railway Company representative at various places at request of Mr. W. R. Mill's letter of June 25, 1914	
<u>16</u> poles	<u>380.96</u>
<u>13</u> totem poles	<u>\$355.11</u>

Above totem poles were paid for by the Glacier Park Hotel Company - May 1914 Voucher No. 190, in favor of the Great Northern Railway Company.



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