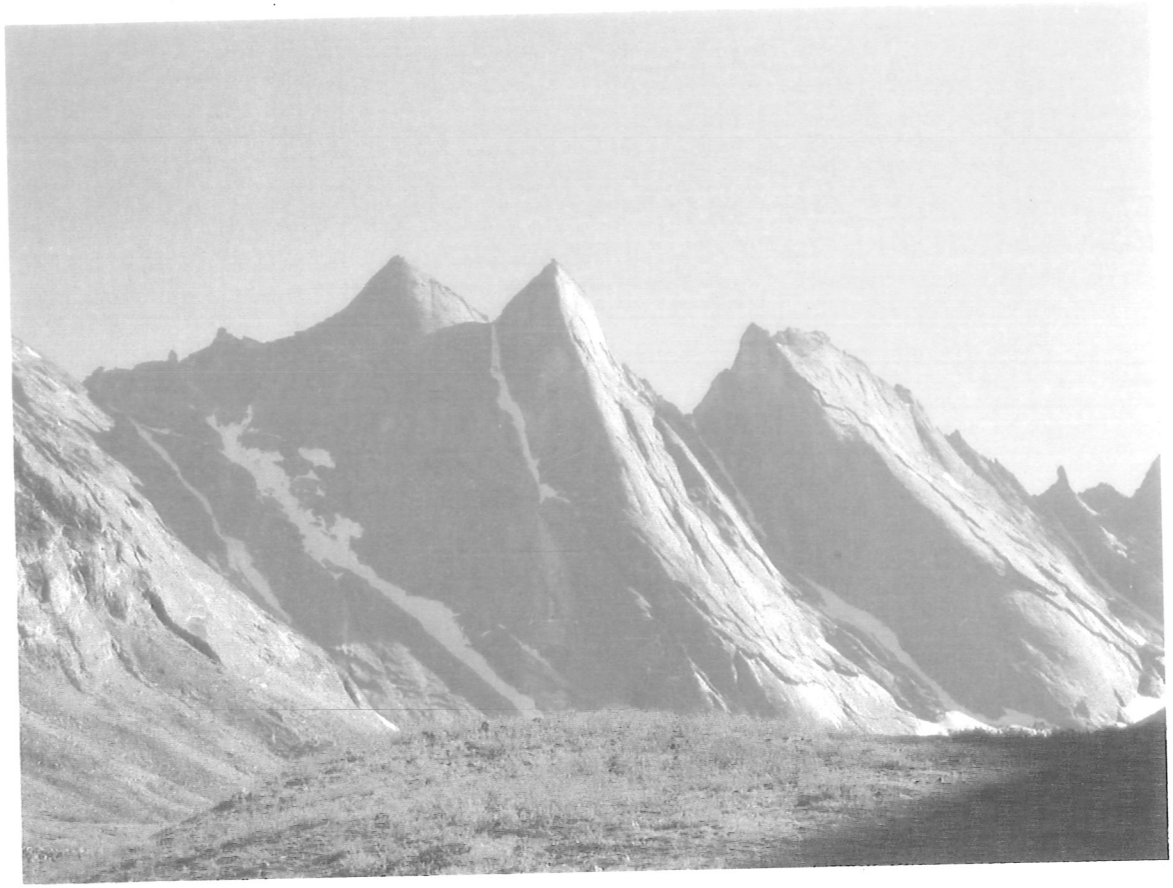
History and Route Descriptions of Rock Climbs in the Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska

Project Report
GAAR-03-001

Prepared by:
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October 6, 2003



This report is not intended as a guide book. Although many resources were used in its creation, errors are likely to exist. Climbing in the Arrigetch is exploratory in nature. Not every climb completed has been documented. For climbs that have been documented descriptions are often vague. Descriptions such as "we climbed the South face" are typical.

This report presents maps of known climbing routes. The route lines on these maps were drawn free hand at a scale of 1:63,000 and are approximations based on a variety of information. As approximations they are intended as informational aids and not for navigation.

In August 2003 the authors photographed peaks, made observations on route locations and climbed routes in the Arrigetch Valley. We were able to verify route locations for accuracy to the extent possible in a five day period. In contrast, due to poor weather and visibility in the Aiyagomahala drainage we were unable to photograph, climb, or verify climbing routes.

Although a few routes have been climbed in the Upper Kobuk Valley and the valley South of Aiyagomahala, information is vague and nothing in those two valleys has been recorded in this report.

Abstract:

The Arrigetch Peaks offer world class rock climbing and wilderness mountaineering opportunities. Access to this area is expensive and physically challenging. Climbing in the Arrigetch Peaks has been typically confined to 3 drainages: 1) Arrigetch Creek, 2) the Aquarius Valley, and 3) Aiyagomahala Valley. Other drainages in the vicinity may see more climbing activity in the future. Technical climbing in the Arrigetch Peaks began in the early 60's. Although climbing activity has increase in recent years, climbing is still not a common activity in Gates of the Arctic National Park and Preserve. From 1997 – 2000, climbers and mountaineers accounted for less than 2% of park visitors. Certain unique aspects of climbing in the Arrigetch Peaks need to be considered when evaluating the impacts of climbers on the environment and on wilderness values of the park. Among these considerations are: 1) the average length of stay in the Arrigetch Peaks area is 21 days, 2) climbing tends to be very gear intensive adding additional weight to already heavy loads, 3) some impacts, such as webbing slings left on a climbing route, may not be viewed negatively by many climbers, and 4) some impactive practices of climbing, such as bolts drilled into rock, are unlikely to become common in the Arrigetch due to a combination of prohibitive weight and remoteness. Although some of the qualities of climbing in the Arrigetch Peaks area may appear to conflict with wilderness considerations in the area, Park managers need to be sensitive to these concerns as opportunities for climbing and mountaineering were specifically mentioned in the enabling legislation for the Park. In this regard, changes in ethics of climbers over time have been positive as modern standards emphasize mobility, non-destructive climbing protection, and cleaning routes of hardware and webbing slings. Modern standards de-emphasize the construction of "base-camps", cairns and summit registers. Future management objectives targeted toward climbers in Gates of the Arctic National Park and Preserve need to balance wilderness values of the Arrigetch Peaks and the specific constraints on mountaineering in a remote location. Care needs to be taken that management activities do not inadvertently eliminate or discourage climbing as a wilderness recreational activity in the Park due to a lack of understanding of the realities of climbing and the climbing culture.

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History and Impacts of Technical Climbing in the Arrigetch

Introduction:

The Arrigetch Peaks area (37,400 acres) was designated a Natural National Landmark in 1968 for it's spectacular granite cliffs and spires. This report and accompanying maps are intended to document as well as possible the mountaineering history, show known climbing routes, and discuss environmental impact from climbers in the Arrigetch area. The area offers world class rock climbing and wilderness mountaineering. It is also expensive to access, is difficult to hike in, and often has inclement weather. Environmental hazards include wildlife, loose rock, and the potential for snow at any time of year. These circumstances, and the fact that routes here are exploratory and undocumented in nature, require a high level of expertise and self reliance on the part of the climbing party. Consequently, the number of climbers visiting the area is limited. Although the most prominent peaks in the central Arrigetch area have been climbed, there are still multitudes of new routes. There are several slightly lower but nevertheless impressive summits and a number of peaks just outside of the core area that have no known ascents.

The Nunamuit name "Arigaruitch" means fingers of a hand extended. The Arrigetch peaks are an impressive collection of granite spires surrounded by the limestone, quartzite and metamorphic rock that make up the majority of the Brooks Range. The "Arrigetch" includes three creek drainages (Fig. 1): 1) the main Arrigetch drainage, 2) its

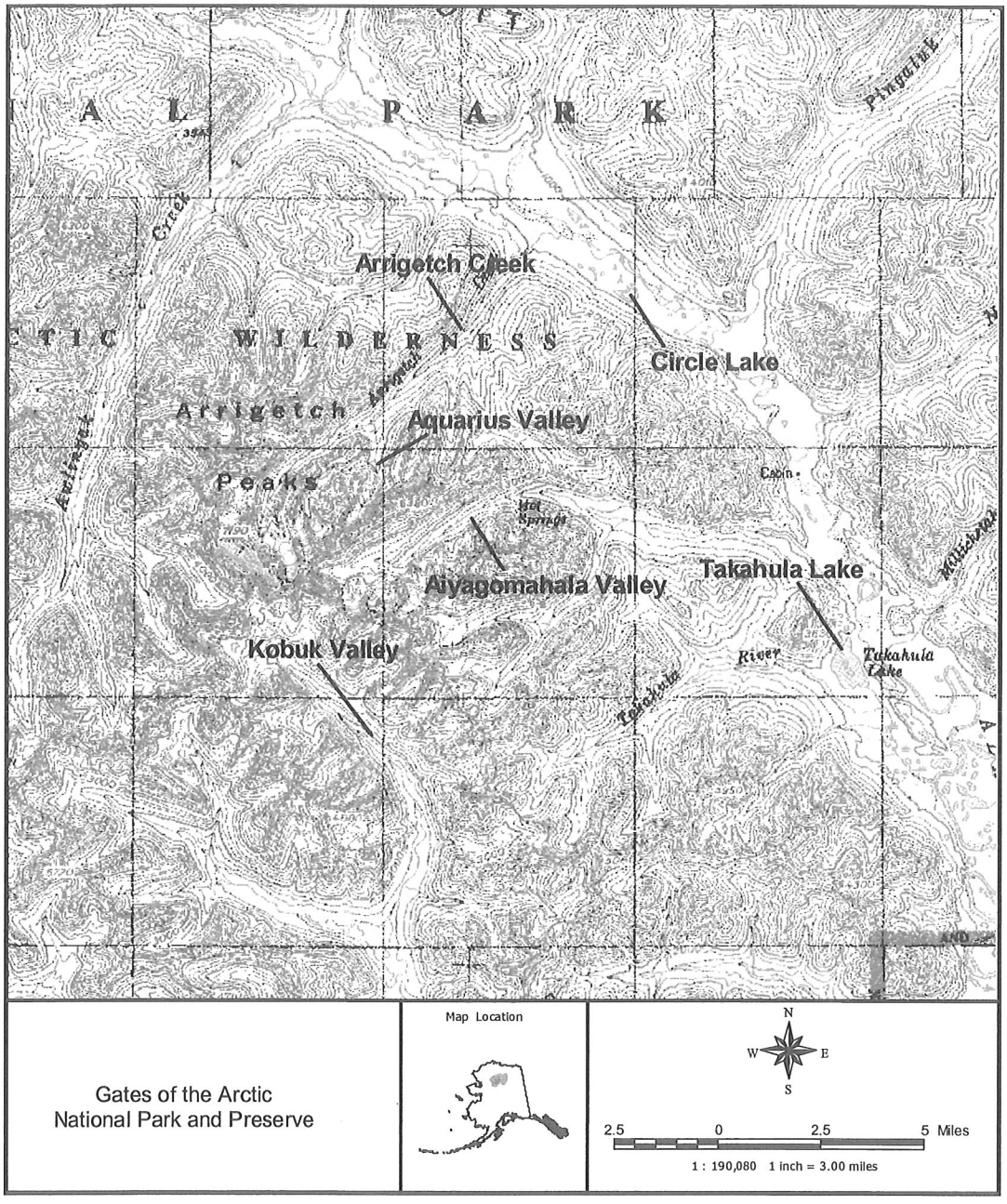


Fig. 1. General location of the Arrigetch Peaks in Gates of the Arctic National Park and Preserve, Alaska.

tributary to the south often called the Aquarius Valley, and 3) the creek valley south of these. This unnamed creek to the south was called 4662 on early United States Geological Survey maps and is sometimes referred to as Hot Springs Creek. The Nunamuit named it Aiyagomahala after a great giant man who created all the people smaller than himself. As the story goes, it was he who left his mitten at the head of the valley creating the Arrigetch peaks. While this report does not cover climbing history in the adjoining valleys, granite also extends into the headwaters of the Kobuk drainage, and into a valley just south of Aiyagomahala (Fig 1). A few climbing parties have visited these areas.

Climbing History

The area was well known to the Nunimuit people. It was explored and mapped for the first time by Phillip Smith in 1911. Robert Marshal and Ernie Johnson visited the Arrigetch in 1931 but did not climb. Technical climbing began in the Arrigetch in 1963 when an English party of five intending to climb lost their airdrop in a boulder field and were forced to abandon the expedition. They returned the following year with three other members and completed six first ascents which were recorded in the American Alpine Journal (AAJ) 1965.

In the decades since technical climbing has increased slowly from an average of less than one party a year in the 1960's and 1970's to slightly more than a party a year between the 1990's and the present (Fig. 2). In the 60's, 70's and 80's many first ascents were accomplished in the Arrigetch and documented in the AAJ. Subsequent climbs,

which in many instances were not first ascents, very likely went undocumented. There has been a significant change in climbing ethics since those early days, and many modern climbers prefer to leave no record of there passing allowing others to enjoy the sense of discovery. Therefore, this report comprises only a partial climbing history of the Arrigetch peaks.

The mountaineering history of the Arrigetch Peaks region is an important component of this National Natural Landmark. In Gates of the Arctic National Park and Preserve, Technical rock climbing is largely confined to the Arrigetch Peaks and the Mount Igikpak area. The remoteness of the peaks and the difficulty of access makes climbing in Gates of the Arctic one of the most isolated wilderness climbing areas in the country.

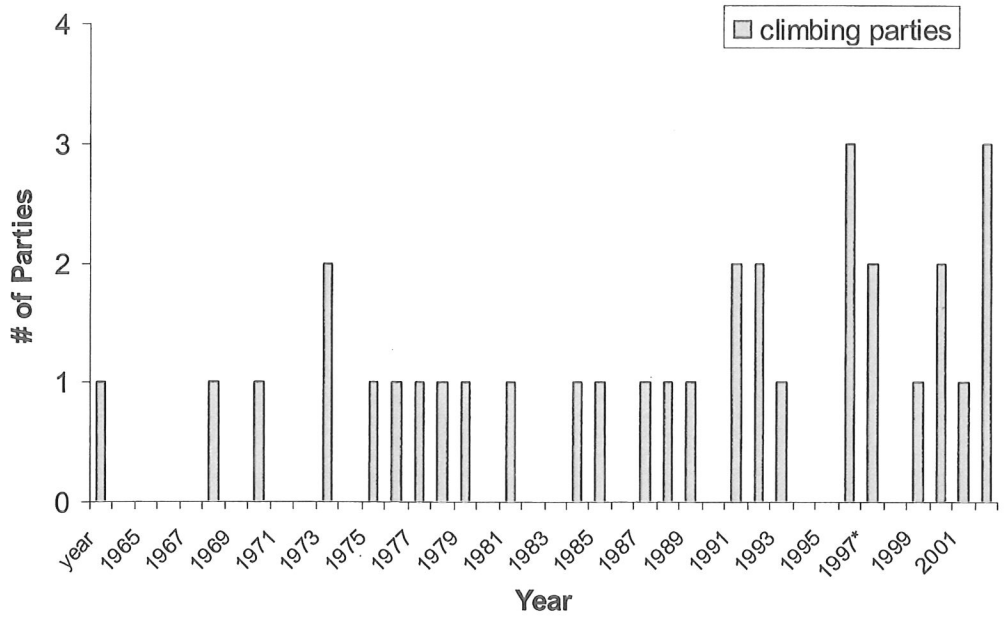


Fig. 2. Number of climbing parties visiting Arrigetch Peaks in Gates of the Arctic National Park and Preserve, Alaska, 1964-2003. Voluntary registration began in 1997. Therefore, the increase in climbing activity in recent years may be the result of increased efforts to gather human use data.

Climbing Parties Registered with Gates of the Arctic

Climbers and mountaineers accounted for less than 2% of park visitors between 1997 and 2000. In 2001, 11 parties of climbers made up 6% of total visitors. Voluntary Park registration documents for climbers in the Arrigetch from 1997 to 2003 match climbing records from other sources reasonably well, with zero to three climbing parties a year (Table 1). Group sizes ranged from one to ten, with an average of 4.2 people per group. The number of climbs per year has ranged from 1-9 climbs with an average of close to 4 climbs per party. The voluntary park registration program recorded one climbing party in the Arrigetch in 2000, three in 2001, and two in 2003. The 2002 reports showed four parties, which is twice the average, and one group who listed mountaineering in a one day trip from Circle Lake. Accomplishing any climbing in a one day trip from Circle Lake is highly improbable, suggesting an error in reporting.

Reporting on climbing in the Arrigetch peaks is completely voluntary and the types of insights that can be drawn from this data has been variable. Therefore, the information collected is incomplete. To better determine types of use in the Arrigetch a category for "technical climbing" could be added to the voluntary registration forms. This would help differentiate hikers who scramble up a peak from those using ropes. Given the records available, Circle Lake is the most popular access point (Fig 1). The West Ridge of Shot Tower is the most popular climb with over 12 ascents. Other popular peaks such as the Maidens have about 7 known ascents and many peaks only have 1 documented ascent. This report includes about fifty known climbing routes. Documented ascents are from

written sources such as American Alpine Journals, books and articles. Known ascents include personal correspondence and internet resources.

Seven parties or individuals have returned to the Arrigetch a second time and three people have been there three times. Only three known parties have climbed in the more remote upper Kobuk valley. Two parties have been known to climb in the valley immediately south of Aiyagomahala. The average stay for those who reported their trip in the Arrigetch Peaks area is 21 days. This explains the nature of mountaineering in remote locations with challenging logistics.

Table 1: Known climbing parties recorded in Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska 1964-2003.

Date	No. of Parties	No. of People	No. of Climbs	Days	Put in	Take Out	Comments	Source*
1963	1						Lost air drop	AAJ 65
Jul-64	1	6	6	~21	Takahula	Takahula	Killed Bear	AAJ 65
65								
66								
67								
68								
Aug-69	1	4	4	~17	Circle	Alatna	Met two other parties	AAJ70
70								
June-July 71 72	1	10	9	~30				AAJ72
73								
June-July 74	1 of 2	7	8	~21			Kobuk Valley	AAJ 75
Jul-74	2 of 2	4	7	?	Takahula	?	Kobuk Valley	Web site
Aug-76	1	3	7	28				AAJ 77
Jul-77	1	4	4	21	Alanta R.	Circle	Found log on W. Maiden	Personal correspondence
1978	1	5	2	?	Circle		Found log on Wichmann / air drop	AAJ79

Jul-Aug79	1	4	6	30	Circle	Takahula		AAJ 80/ personal correspondence
Jul-80	1	4	8	30	Takahula	Takahula	Air drop	AAJ81
81								
1982	1						Unknown climbers	McRoberts report
83								
84								
1985	1	2					Chris Nobel and companion	Web site
Jul-86	1	1	1				Roman Dial	Personal correspondence
87								
Aug-88	1	3	1	30	Circle	Alatna R.	Circumnavigation	Personal experience
Jun-89	1	4	4		Circle	Circle	Air drop,	AAJ 90
Aug-90	1	2	1	30	Walker Lake	Circle	Found Cairns Melting Tower	Personal experience
91								
Aug-92	1 of 2	3	1	6	Circle	Alatna R.	Stuart Parks	Personal correspondence
Aug-92	2 0f 2	5	1	6	Circle	Circle	Injured/killed bear (NPS patrol)	Ranger report
Jul-93	1 of 2	2	3		Circle	Alatna R		AAJ 95
1993	2 of 2	9					Chicago climbing club	McRoberts report
Jul-94	1	3	1		Circle	Circle	Roman Dial	Personal correspondence

Jul-95	1	3	2		Circle	Circle	StanJustice/Phil Marshal	Personal correspondence
96								
Jun-97	1 of 3	5	5	17	Takahula	Takahula	Fred Becky (age 75)	AAJ 98
Aug-97	2 of 3	2	2	17	Circle	Circle		AAJ 98/personal correspondence
1997	3 of 3						Valley S. of 4662	Stan Justice: personal correspondence
1998	1 of 2	6	1?				German Climbers	German magazine article
1998	2 of 2						Stan Justice (Valley S. of 4662)	Personal correspondence
99								
Aug-00	1	4		20	Circle	Alatna R.	Galen Rowel	Bettles ranger
Jul-01	1 of2	2	1	~30	Circle	Takahula	Mike Woods	Personal Correspondence
Aug-01	2 of 2			8	Takahula	Takahula		Visitor registration
Aug-02	1	10	6	18	Circle			E-mail, magazine article AAJ 03
Jul-03	1 of 3	2+?	4	22	Circle	Takahula		Visitor reg./web site
Jul-03	2 of 3	2		15	Circle	Circle		Visitor registration
Aug-03	3 of 3	2	2	18	Circle	Circle		Park climbing study

* AAJ = American Alpine Journal

Peak and Route Locations

The enclosed map depicts major routes in a general fashion (Fig. 3). The electronic version of this map is under construction and will allow "hotlinks" to summits for general route descriptions, number of known ascents, and first ascent information. Photographs of some of the Arrigetch Peaks are available from the National Park Service upon request.

Synopsis of 2003 Field Work

Field work was conducted in the Arrigetch Peak area by Nancy Pfeiffer and Jim Lawler (field crew) from 5-16 August 2003 to inspect known climbing routes, document human impacts, and climb in the area. Nancy Pfeiffer had participated in climbing trips to this area in 1989 and 1990 allowing some perspective on changes that have occurred in regards to visitation and impacts to this area.

The field crew flew into Circle Lake in a Beaver chartered from Bettles (Fig. 1). Rather than using the more traditional "trail" up Arrigetch Creek, loads were ferried directly up hill to a saddle between Arrigetch Creek and Aiyagomahala. The advantage in this route is quicker access to alpine terrain and more direct access for those going into Aiyagomahala Creek. Because it ascends a broad hillside rather than the more constrained route up Arrigetch Creek, a noticeable trail is less likely to form. For parties going into Arrigetch Valley this route requires a bit of bushwhacking back into Arrigetch Creek.

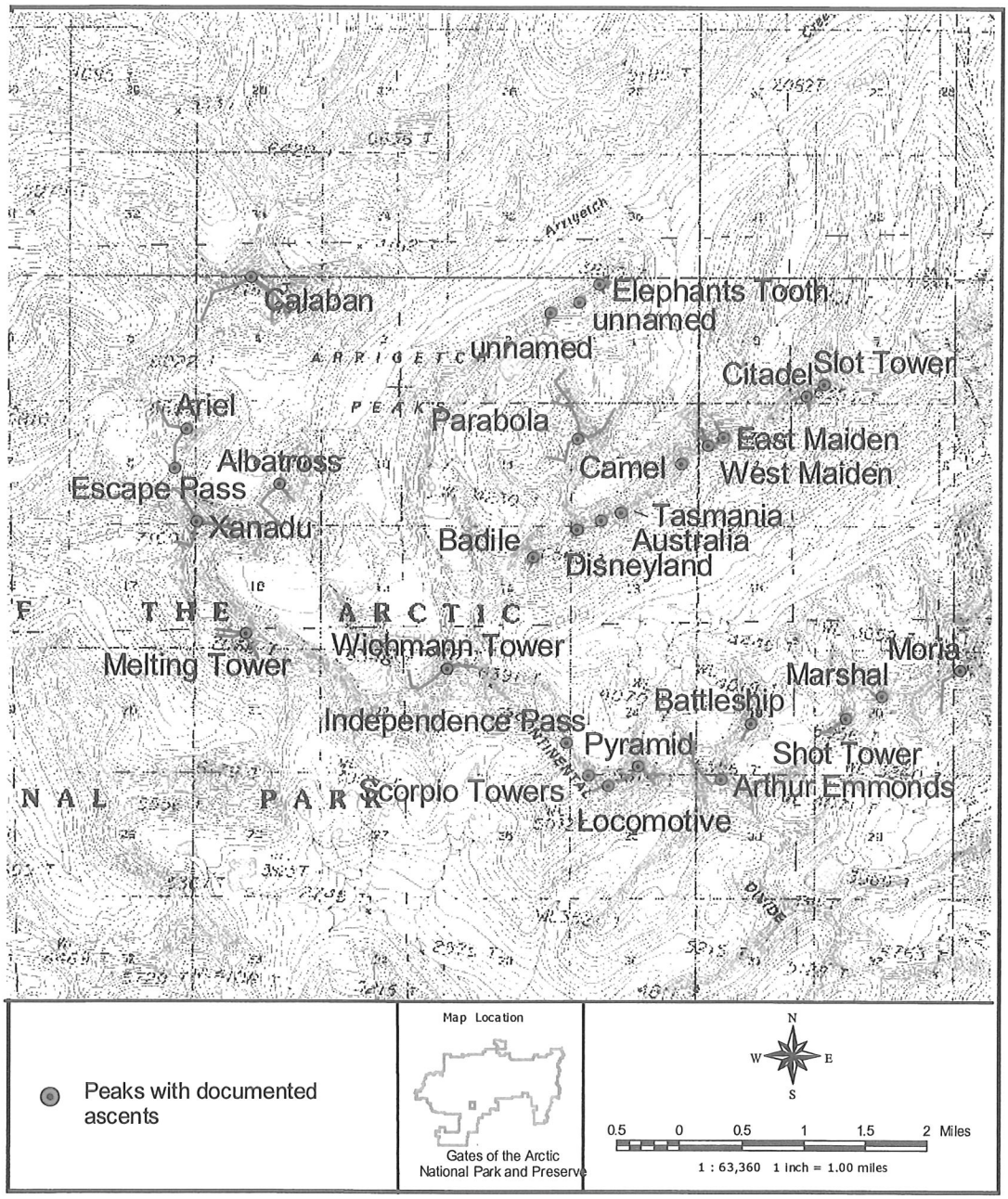


Fig. 3. Overview of major peaks and climbing routes in Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska, 1964 – 2003.

The weather was good during the first six days of field work and the field crew was able to get climbing gear into Aquarius Valley, climb the South Face of Elephants tooth, the North Northeast Ridge of Parabola, and hike into the Upper Arrigetch Valley (Fig. 3). Climbing routes were evaluated and most of the peaks in the Arrigetch and Aquarius Valleys were photographed. Three impacted campsites were documented, two of which will likely recover with no further use. Elephants Tooth had no signs of previous ascents except a rock on the summit turned lichen side down which was replaced by the field crew. Parabola had a series of rappel slings from a previous ascent which were not visible from below. The field crew was unable to locate some of the rappel slings reported to be on the descent by another party and were forced to leave two additional slings. One piece of perlon (a nylon sling) was found by the field crew in a boulder field at the base of Parabola.

Field efforts slowed considerably in the Aiyagomahala Valley due to rain and fog. A few campsites however were documented near the Hot Springs. Pfeiffer noted these sites appeared less impacted then they had 12 years before during her last visit. Field activity ended on 14 August when the field crew hiked out of Aiyagomahala Valley. The crew was shuttled out of Circle Lake on 16 August 2003.

Impacts from Climbing

Potential impacts from climbers include campsites, trails, and wildlife encounters, as well as pitons, bolts and slings left upon descent. Camping impacts from climbers are hard to differentiate from those of backpackers. During the 2003 field work, four impacted

campsites were noted and all are likely used by both hikers and climbers. The potential for camping impacts from climbers are great. Due to the time it takes to haul climbing gear and the likelihood of poor weather, climbing parties typically stay up to a month in the area. Styles regarding climbing camps however, have changed over time. In 60's and 70's it was typical to operate from one base camp for an entire trip. Current norms encourage greater mobility thereby decreasing the length of stay at any given campsite.

In addition to camping styles, regulations for food supplies have changed. Formerly, parties often had airdrops, which require low flying aircraft. Food containers often exploded on impact and on at least one occasion an entire food drop was lost. Climbers now carry their food and gear with them. Because of the weight involved this means ferrying loads on all but the shortest expeditions. This ferrying produces more trail impacts and results in unattended caches. Unattended caches places additional emphasis on the need for bear proof containers. Without ferrying loads and leaving unattended caches, or utilizing airdrops, the logistics of climbing in the Arrigetch would be extremely difficult.

Trails are evident in all three valleys (Arrigetch, Aquarius, and Aiyagomahala). Arrigetch Creek has by far the most developed trail. In the Aiyagomahala drainage trails were only obvious in meadows, while trails through the brush seemed absent or indistinguishable from game trails.

In some instances climbing parties have had impacts on wildlife in the Arrigetch area. In 1964 and again in 1992 bears were shot as a result of interactions with climbing parties. The 1992 incident involved a ranger on patrol.

The most direct evidence of impacts by climbers is on the climbing routes themselves. In the 1960's and 1970's when many routes were first done in the Arrigetch the ethic of the time included summit cairns and registers. As these practices have fallen out of favor many if not all of these have been removed. Climbing protection has also changed over the years. In the 60's and 70's pitons, steel pins that are hammered into cracks in the rock, were commonly used. Pitons were generally removed on descent except when used for rappel anchors or if removal became too difficult. With repeated use of pins a scar or chipped out area in the rock is often left. Currently, use of pitons and hammers is rare. Climbs are now typically done with easily removable camming devices for protection. Pitons are still used, in some places for aid routes, difficult routes which require directly weighting and climbing on the protection. To date, no pure aid routes have been done in the Arrigetch. Even aid routes are now often done using "clean" aid, protection that doesn't damage the rock.

Descents are by walking down an easier route or using the rope to rappel. If there is no walk off option, or if the party needs to back off mid-route due to weather or other unforeseen circumstance, rappelling is the only option. This requires leaving at minimum a piece of webbing (flat nylon rope) tied around a natural anchor such as a rock horn. Sun damages webbing. Older webbing is untrustworthy, so established rappel anchors

often involve several generations of webbing. During field work in the Arrigetch none of these rappel anchors were visible, even with binoculars, from the valley floor.

A final potential impact from climbers in the Arrigetch are drilled bolts. Putting permanent bolts directly in the rock is now common practice in many "sport" climbing areas. This allows future climbers to repeat the route without putting in and removing protection as in "traditional" climbing. Bolts have been placed in the Arrigetch, most notably on Shot Tower, to replace worn or dangerous pins from earlier climbs or to protect an otherwise unprotectable move. It should be emphasized that the nature of the rock in the Arrigetch is such that there are a multitude of natural cracks to use in placing protection, so in many places bolts are unnecessary. Many wilderness climbing areas are finding bolts incompatible with wilderness values. Bolts are difficult and time consuming to place by hand, and mechanized bolt guns or drills are not allowed under non-motorized regulations. Drills are also heavy. It is doubtful that fully bolted routes will become popular in the Arrigetch. However, the appropriateness of bolts in a wilderness setting needs to be considered. For better or worse, bolts can open up new climbing areas. The trade-offs, such as climber safety, also need to be considered.

In general, climbing impacts in the Arrigetch are not evident. While climbers have at times left rappel slings and other gear behind, these items are not visible to observers from below. Standards of behavior of climbers have changed over the years and current standards encourage minimum impacts to the environment. As part of this, many climbers today attempt to minimize the amount of gear left on climbing routes and take

pride in climbing new routes without leaving any gear behind. For safety reasons, however, this is not always possible or prudent. Promotion of these high standards of behavior in climbers will help retain the wilderness character of climbing in the Arrigetch.

Summary and Final Thoughts

While backpacking in the Arrigetch has increased substantially climbing use has increased slowly over the last 40 years. To some extent, the flow of climbers into the Arrigetch seems to be limited by the difficulties involved. In part because of the lack of published climbing information on the area the level of experience and commitment required for an expedition to the Arrigetch is high. Climbing areas can become popularized however and appropriate management of this area can best be accomplished by understanding types of use occurring. Including a category for "technical climbing" on voluntary registration forms could be a first step in this regard.

While human impacts in the form of trails and campsites are noticeable the responsibility of the impact is shared by both climbers and hikers. At this point, impacts directly related to climbing seem minimal and only visible to climbers who may consider many of them, such as webbing left as anchors, as necessary and acceptable. The use of fixed climbing anchors in the Arrigetch Peaks, which may include bolts, predates the designation of Gates of the Arctic National Park and Preserve. Safety issues as well as wilderness values need to be considered when evaluating the appropriateness of fixed anchors.

A good deal of thought should go into the availability of route descriptions and climbing information provided to visitors by the National Park Service and how this affects peoples wilderness experience. Although climbers may desire more information than hikers, this remains a personal decision and varies widely between individuals. One option is to make the climbing information available to those who ask but not to publish it widely in order to avoid "advertising" the Arrigetch. In this way information can be made available to those who are researching the area yet it leaves the option open for people who want to discover routes and peaks on their own. If the Park Service chooses to make climbing information widely available, it should be stressed (as done in the "disclaimer" in this document) that the information provided is general in nature and there is a high potential for omissions and errors in route and climbing descriptions.

The Arrigetch Peaks are a premier climbing destination in the Brooks Range and are a significant feature of the mountaineering culture in Alaska and North America. Climbing and climbing history, therefore, are significant components of Gates of the Arctic National Park and Preserve. Enabling legislation for Gates of the Arctic National Park and Preserve directs the National Park Service "to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering…."(Alaska National Interest Lands Conservation Act 1981). In light of this directive, the NPS needs to ensure that management activities do not inadvertently discourage climbing and mountaineering activity. As aerial food drops are currently not allowed in the park, some consideration needs to be given to the legitimacy and impacts of caches. The remoteness of the

Arrigetch Peaks disposes visitors to stay for long periods (average of 21 days). In addition to the weight of food and equipment for extended stays, climbers must also contend with the weight of climbing gear as climbing is an equipment intensive activity. The necessity to carry additional gear in order to participate in the activity (climbing) may indicate that climbers need to be differentiated from backpackers and campers. Prohibiting unattended caches (and aerial food/gear drops) in the Arrigetch Peaks may substantially impact the opportunities for people to climb in this area.

Aknowledgements:

This project would not have been possible without the support of the National Park Service, National Natural Landmarks Program, and Gates of the Arctic National Park and Preserve. We especially thank Jobe Chakuchin for making this project possible.

Resources:

American Alpine Journals 1965-2003

"Alaska, A Climbing Guide" by Mike Woods and Colby Coombs

www.stanford.edu/"clint/arrig

www.rockclimbing.com

National Geo. Adventure Magazine June-July 2003

Outside Magazine 1998

German Climbing Magazine July 1998

Smithsonian Magazine June 1995

Gates of the Arctic Voluntary Registration Forms

Gates of the Arctic Ranger Trip Reports

Phone and e-mail correspondence with various climbers

Climbing Route Descriptions in the Arrigetch Peaks Gates of the Arctic National Park and Preserve

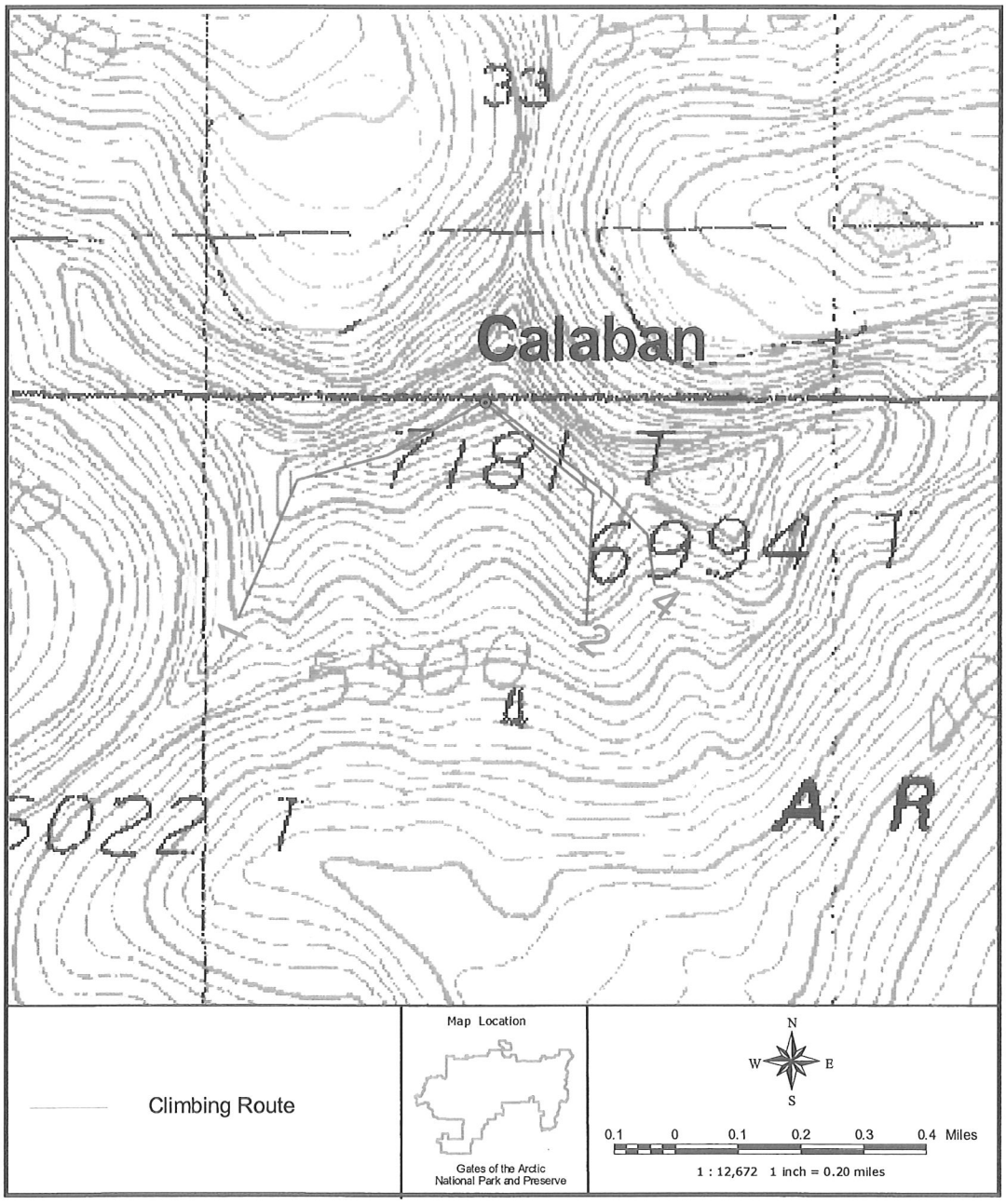


Fig. 4. Climbing routes on Calaban, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Calaban

First Ascent: David Roberts, Robert Waldrop, Arthur Bacon, George Ripley 1969
Known Ascents: 4

(1) Original Route: (unknown, possibly the West ridge)
David Roberts, Robert Waldrop, Arthur Bacon, George Ripley 1969

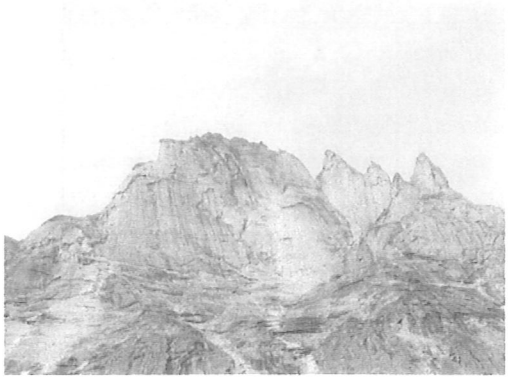
(2) South Buttress: 5.8
Bob McGregor, Yann Merrand, Gary Brill, Fred Beckey 1989

(3) East Summit: gullies/slabs 3rd and 4th class
? Lorna Corson, Norm Larson
(location unknown on map)

(4) West Summit slabs to Southeast Ridge 5.8
Jeff Pfuger, Nettie Pardue 2002
(moderate slabs and cracks)(exact location unknown)

South face attempted; retreated due to loose flakes.


Calaban from the south


Calaban from the Southeast

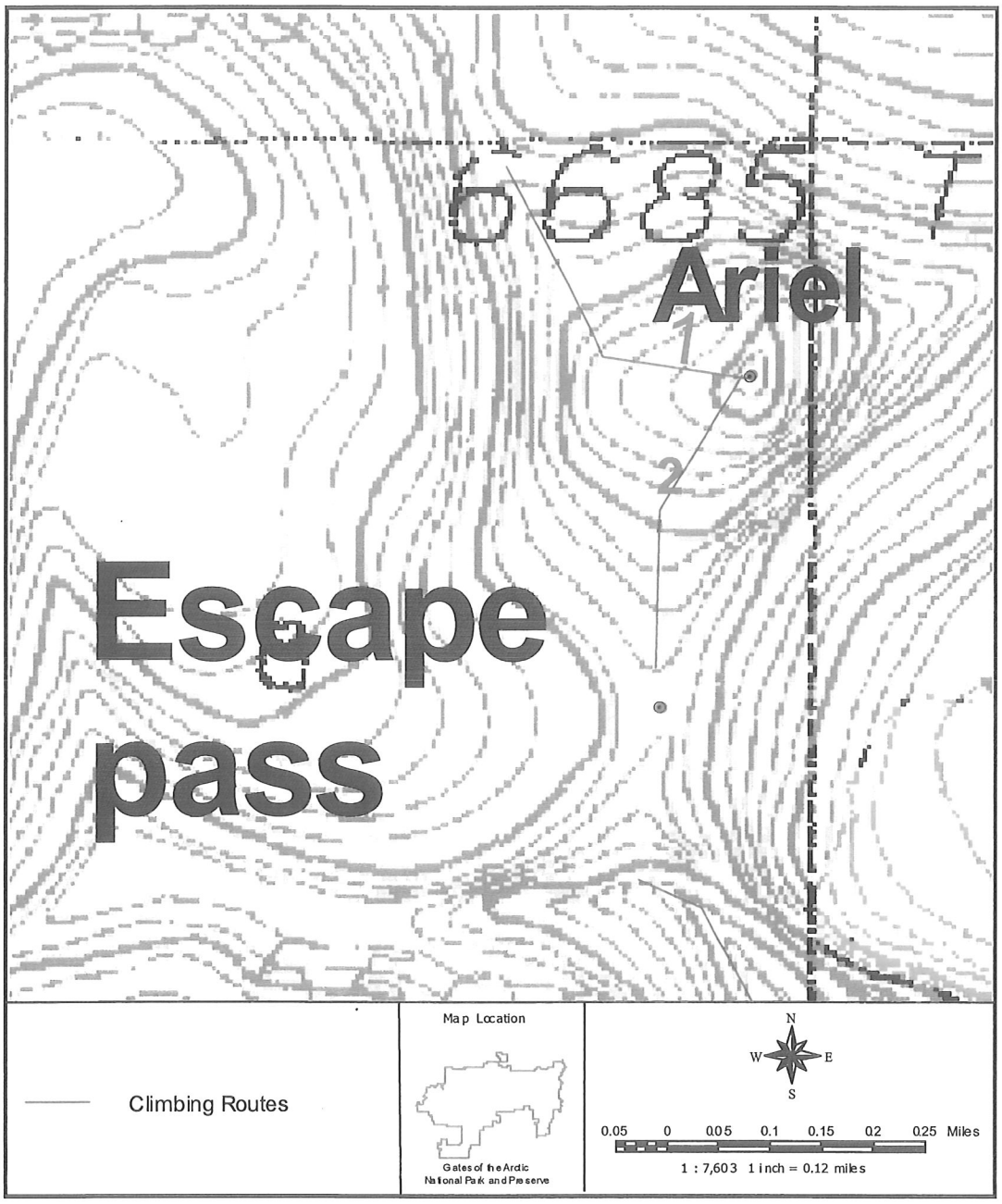


Fig. 5. Climbing routes on Ariel and Escape Pass, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

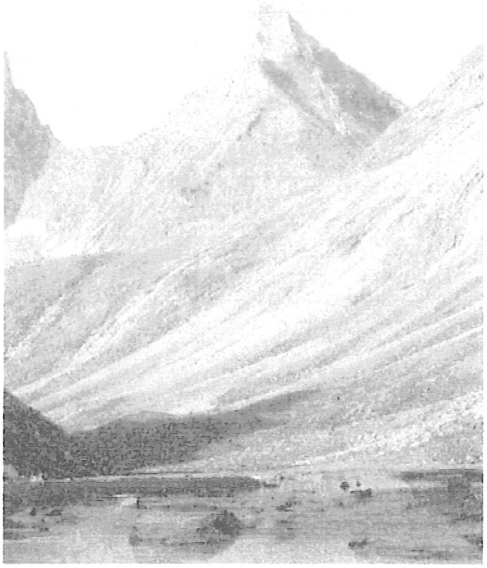
Ariel

First Ascent: Arthur Bacon, George Ripley 1969
Known Ascents: (This peak has many non-technical options and may be very popular).

(1) South Ridge: Exposed 3rd class
Arthur Bacon George Ripley 1969 (Approach from East side to Escape Pass 3rd class)

(2) North Ridge: non-technical (Access from pass between Arial and 6022).

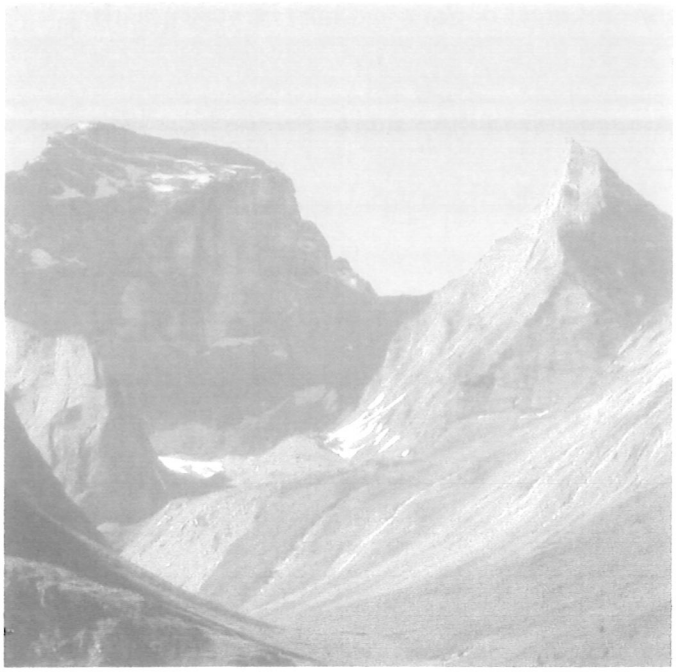
East Ridge attempted but unclimbed due to rotten rock.



Ariel from Arrigetch Valley.

Escape Pass

(Exposed 3rd class from West. Easier coming from the East.)



Escape Pass from the east Arrigetch Valley.

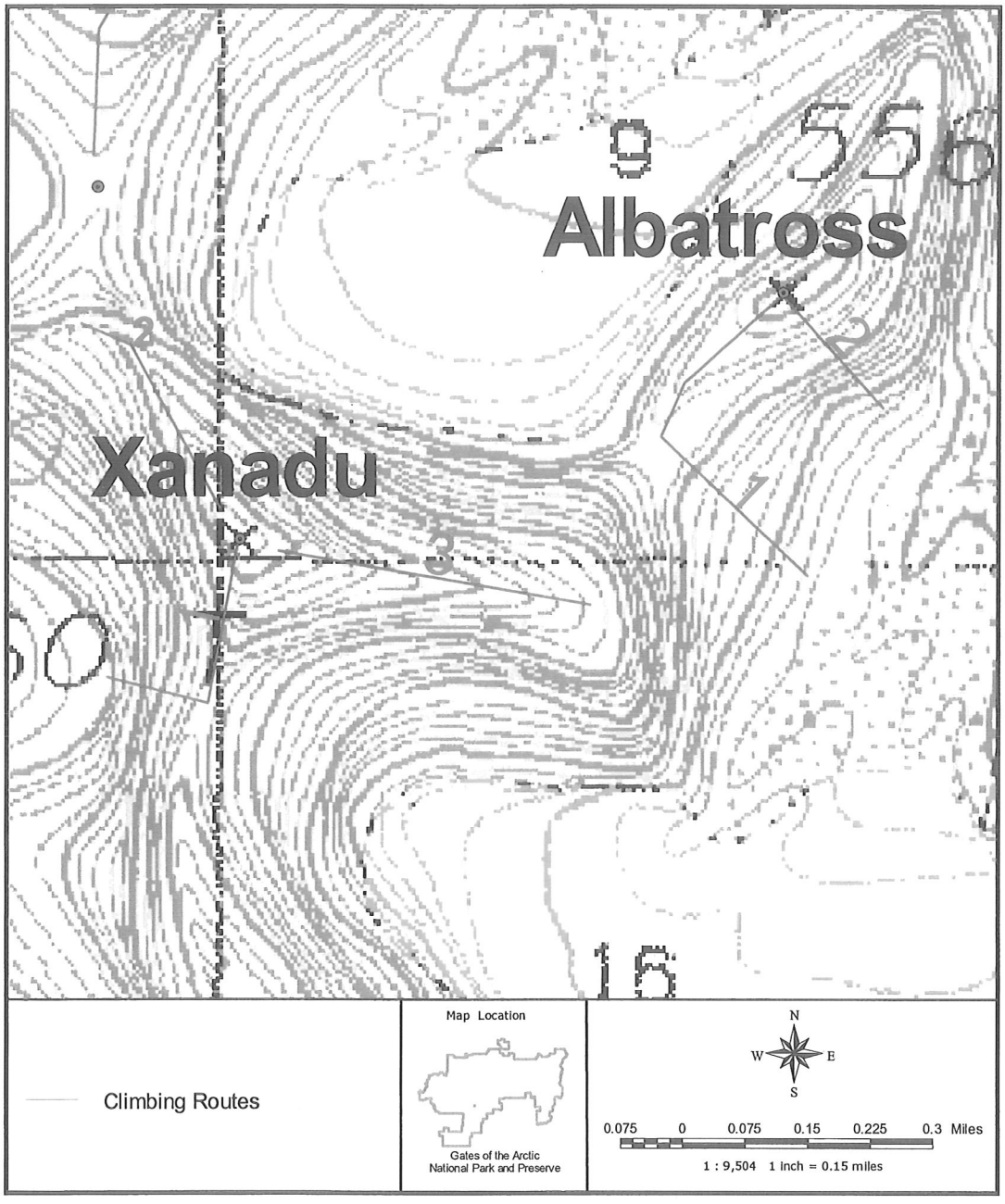


Fig. 6. Climbing routes on Albatross and Xanadu, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Xanadu

First Ascent: Jon Krakauer, Bill Bullard 1974
Known Ascents: 1 climb +4 attempts

(1) West Face to South Arête: IV 5.7-5.8
Jon Krakauer, Bill Bullard 1974
Scree to base of west face, right slanting ledge to short vertical 5.7 dihedral. Follow ridge. Two pitches to arete. Five 50 m pitches up arête to prominent roof to ledge, and a 5.7 section to summit. Descent: rappel route. Be careful of plated granite catching ropes.

(2) Northwest Ridge: Easy 5th class
Ben Reed, Mark Rademacher, Helen Apthorp, Jeff White 1974
Turned back 200' from summit due to loose blocks.

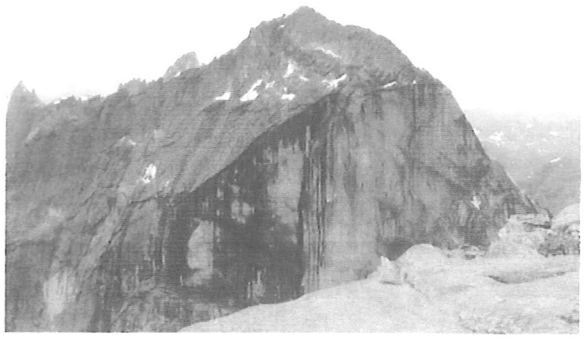
(3) South peak, East Rib: IV 5.9
Bob McGregor, Yann Merrand 1989
Turned back short of main summit due to lack of a bolt kit.

(4) North side attempted 1969.

(5) East ridge attempted 1995.



Xanadu from East. Albatross in foreground.



Xanadu from Northeast.

Albatross

First Ascent: Arthur Bacon, George Ripley 1969
Documented Ascents: 2

(1) Original route (probable S.W. Face to S.W. ridge)
Arthur Bacon, George Ripley 1969 (Hardest route of 1969 expedition).

(2) South Face, right side IV 5.9
Lorna Corson, Norm Larson 1993
Parallel cracks, descended S.W. ridge, down climb with few rappels.



Albatross from the Northeast.

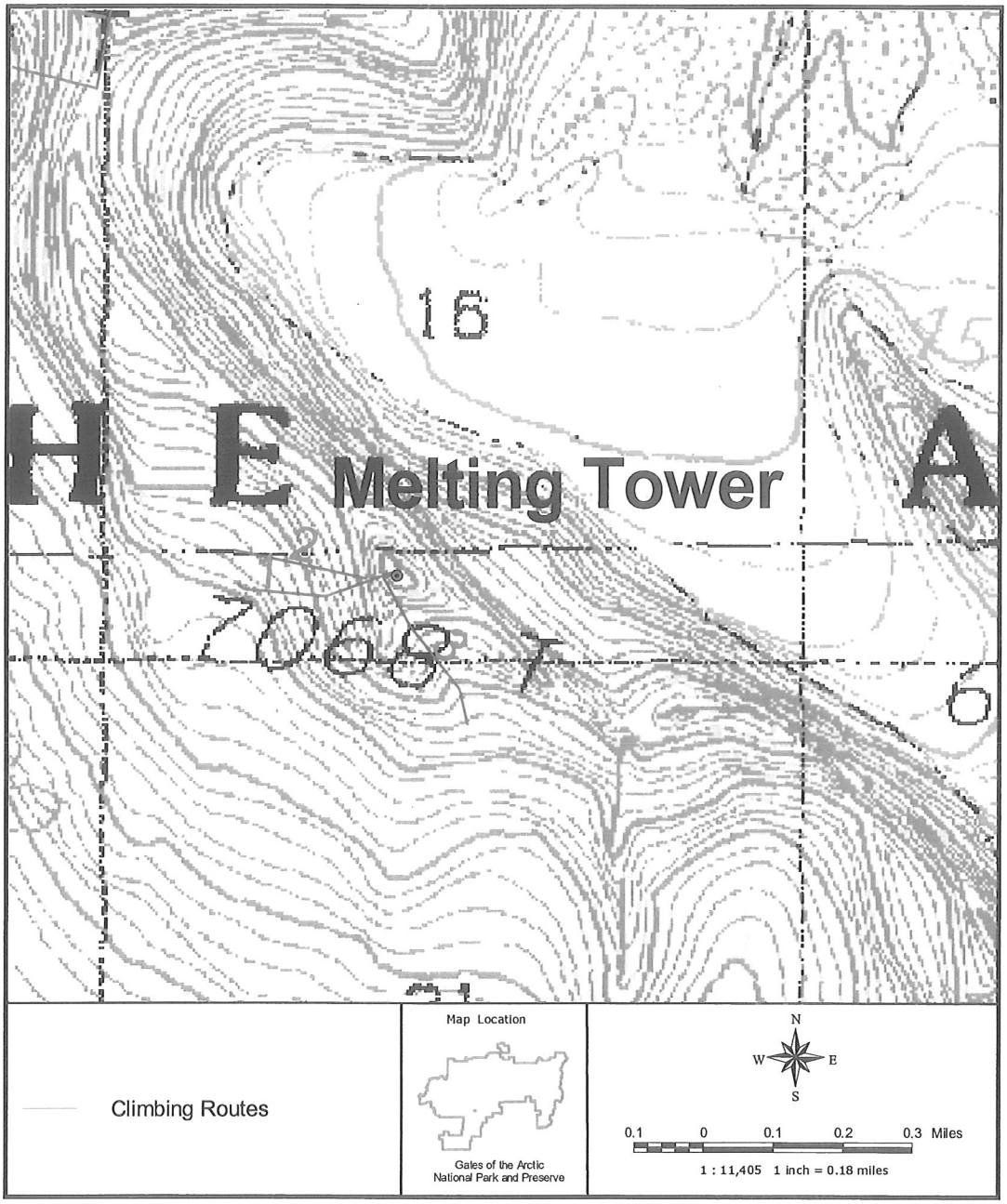


Fig. 7. Climbing routes on Melting Tower, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Melting Tower

First Ascent: Mark Rademacher, Jon Krakauer 1974
Known Ascents: 3

(1) Southwest face: 5.4
Mark Rademacher,Jon Krakauer 1974
Chimney through summit wall.

(2) Southwest face direct 5.7
Jeff White, Helen Apthorp 1974
Joined southwest face last two pitches.

(3) Southwest face to west ridge
Paul Turecki, Nancy Pfeiffer


Melting Tower from the northeast.


Melting Tower from the southwest.

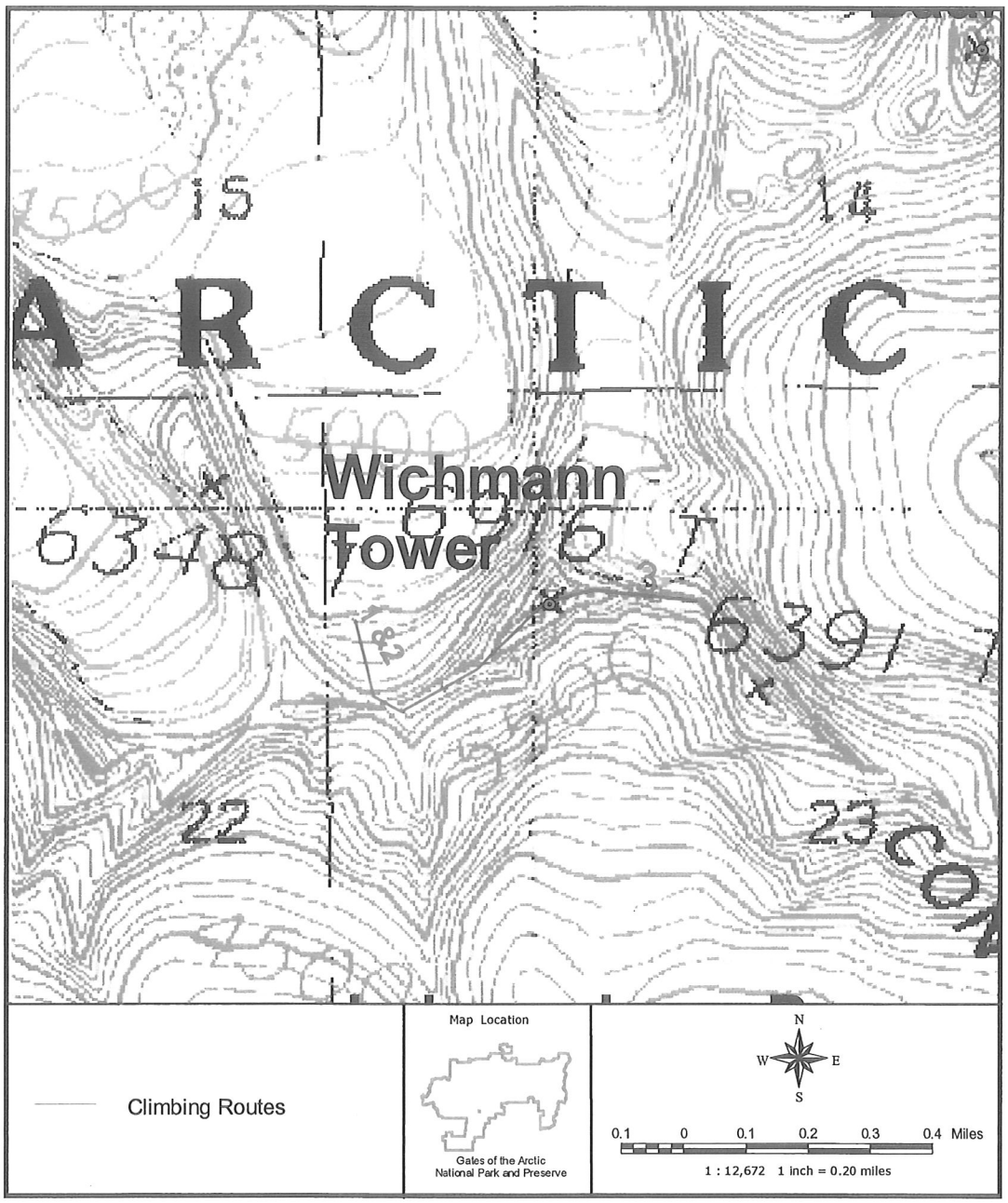


Fig. 8. Climbing routes on Wichmann Tower, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

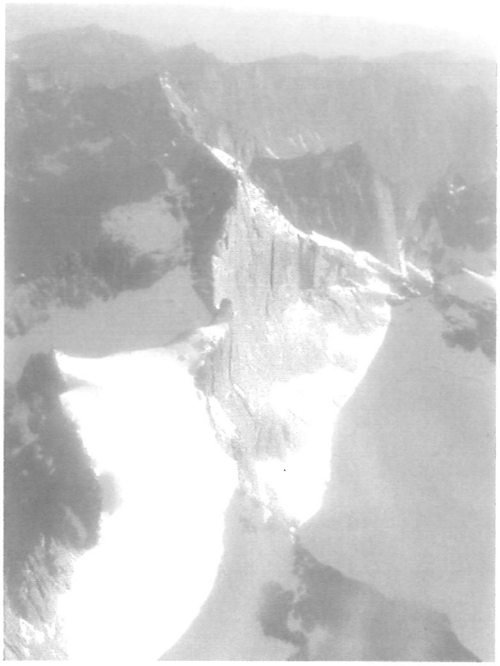
Wichmann Tower

First Ascent: Brownell Bergen, A.H. Buck Cass, Charles Loucks, Michael Westmacott 1964
Known Ascents: 5

(1) West/Southwest Ridge to North Face 5.7
Brownell Bergen, A. H. Buck Cass, Charles Loucks, Michael Westmacott 1964
F.A. approached from Aiyagomahala valley, all others from N.W. Glacier.

(2) Southwest Ridge Direct: 5.8
David Dahl, Jock Richardson, Bill Zaumen, Walt Vennum 1980

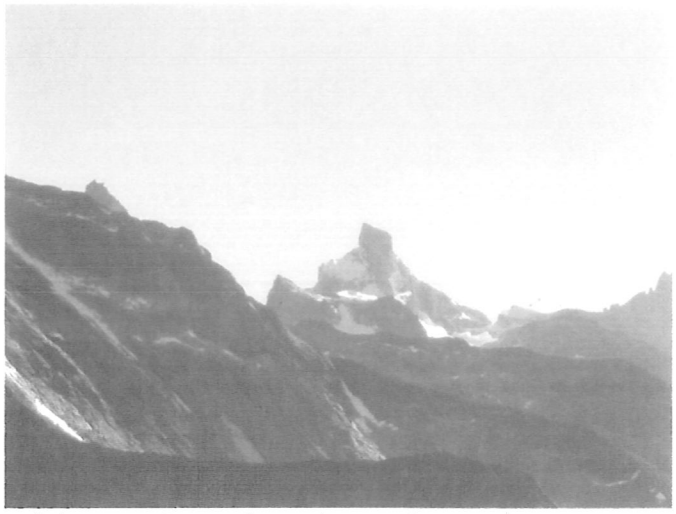
(3) Northeast Ridge to East Face: 4th class
This route descended by 1st ascent party.



Wichmann Tower from the north.



Wichmann Glacier with Wichmann Tower in distance.



Wichmann Tower from the northeast.

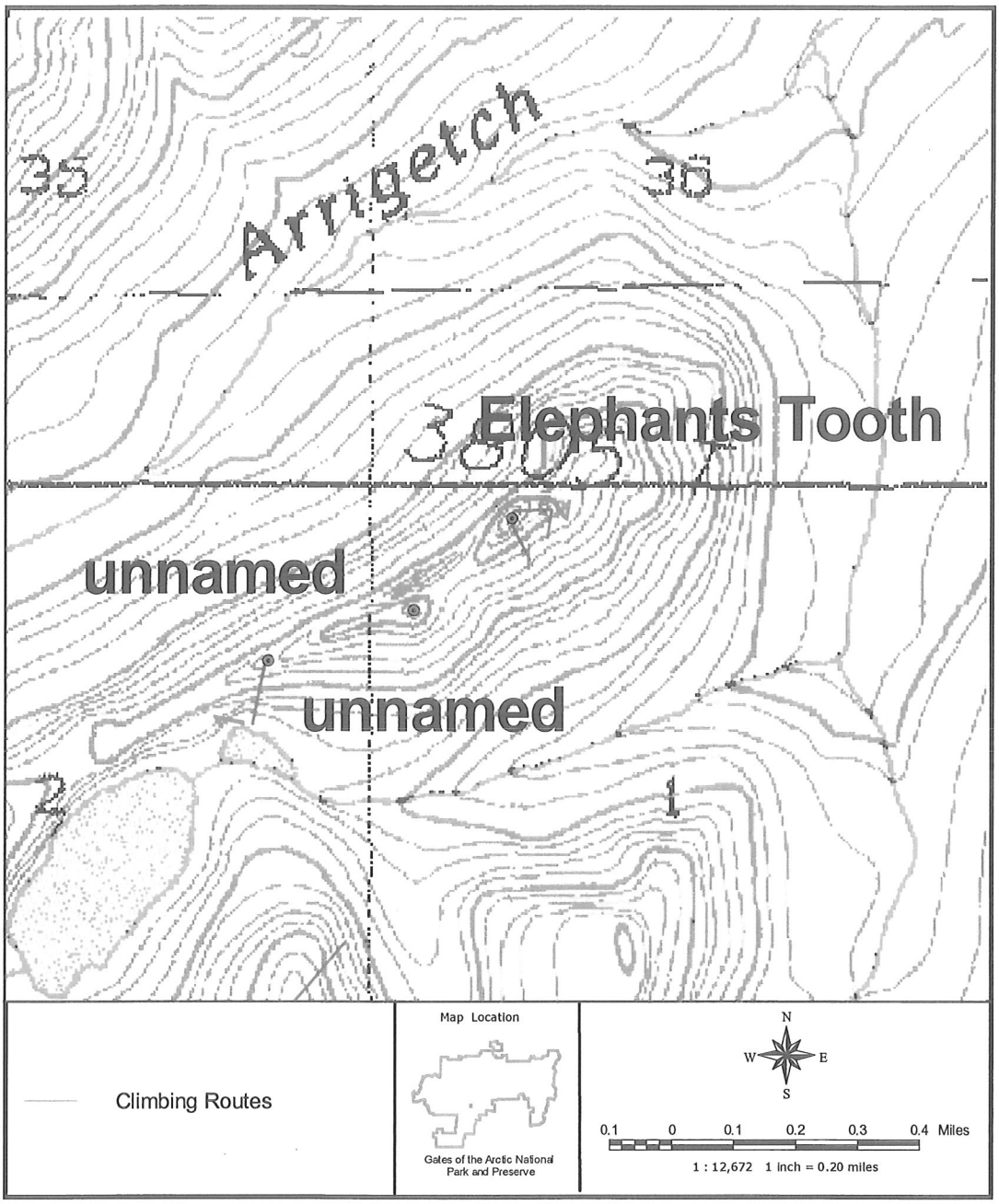


Fig. 9. Climbing routes on Elephants Tooth and 2 unnamed peaks, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Elephants Tooth

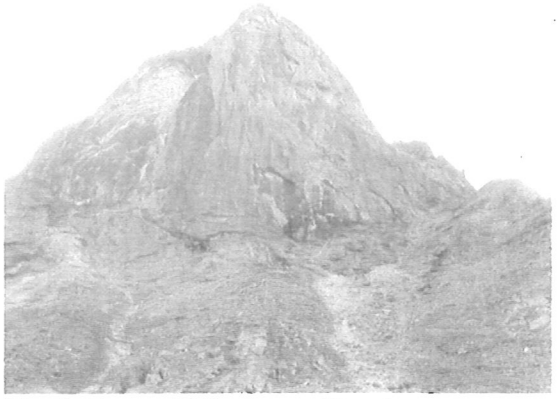
First Ascent: Arthur Bacon, George Ripley 1969
Documented Ascents: 4 (with many more likely).

(1) South Face 5.7
Arthur Bacon, George Ripley 1969
Many 5.7-5.9 variations.

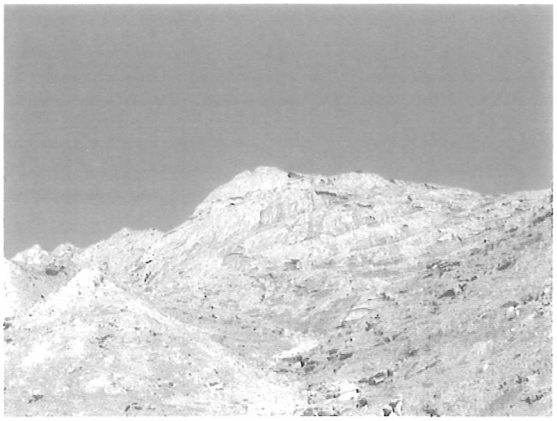
(2) East Ridge 3rd and 4th class
David Roberts, Robert Waldrop 1969



Arrigetch valley with Elephants Tooth on the left.



North Face of Elephants Tooth.

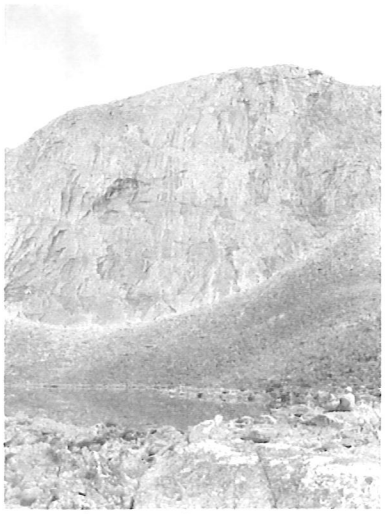

South Face of Elephants Tooth.

Unnamed Peak (first peak southwest of Elephants Tooth)
Known Ascents: 1

Roman Dial (route unknown)
NO PHOTO

Unnamed Peak (above eastern most lake in Aquarius Valley)
Known Ascents: 1

(1) Aquarius wall 5.7
Ilona Barash, Crotch Robins? 2003


Aquarius Wall

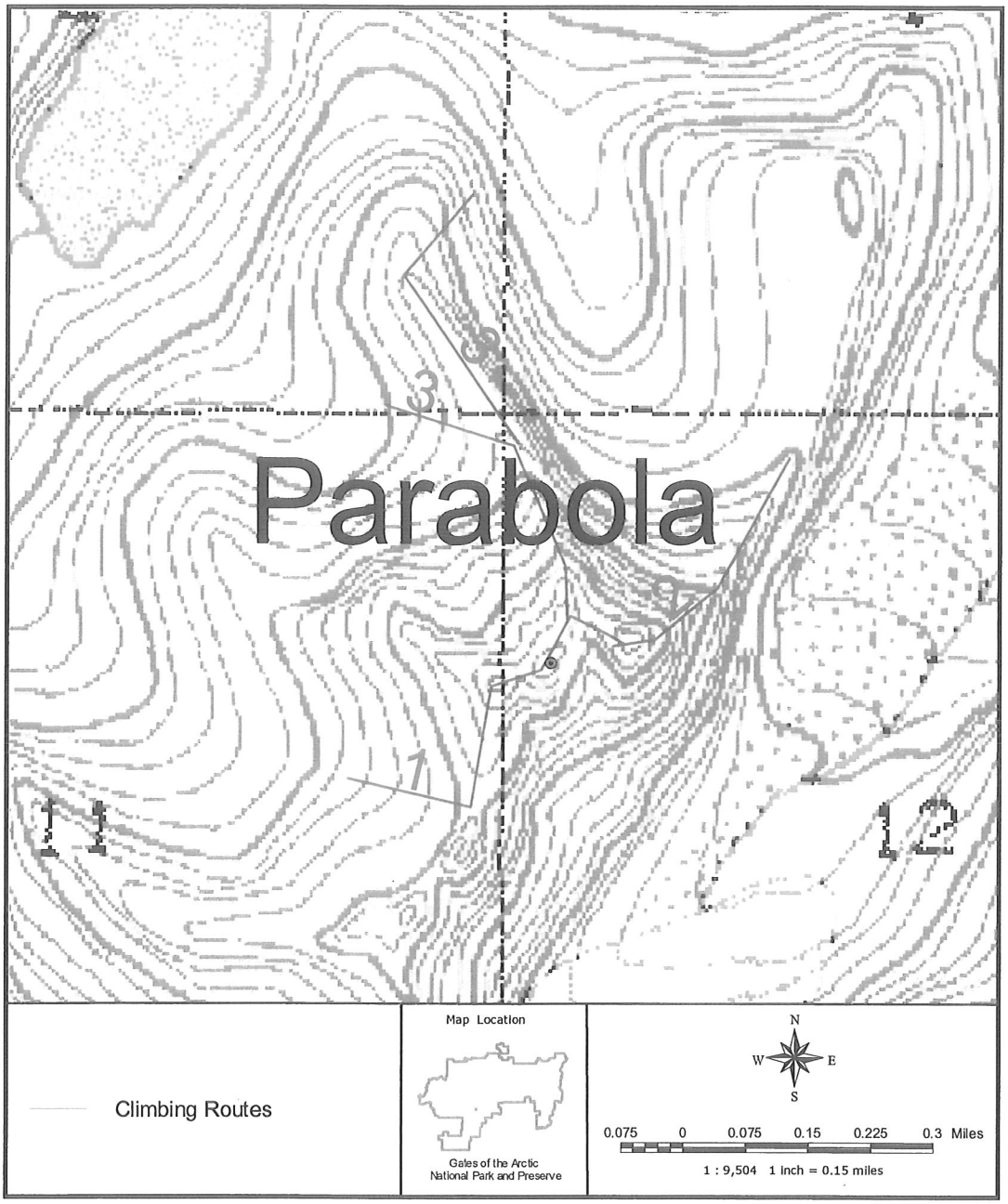


Fig. 10. Climbing routes on Parabola, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Parabola

First Ascent: Arthur Bacon, George Ripley, David Roberts, Robert Waldorp 1969
Known Ascents: 8

(1) Parabola West Summit Original Route: 3rd and 4th class
Arthur Bacon, George Ripley, David Roberts, Robert Waldorp 1969
Probable the west valley to the southwest ridge.

(2) Northeast Ridge: 5.10, A0
Joe Riechert, Lara Karena Bitenieks 1997
Descended southwest Valley, scramble and a few rappels.

(3) North Northeast Ridge: III 5.7
Jeff Pfueger, Nettie Pardue, Robert MacKinnon, Jared Coburn, Mike Morley 2002
Seven hundred feet of easy 5th to flat ridge. Six pitches to 5.7 following ridge to false summit. Descended one rappel east from the ridge to the slab gully, and 4 rappels down slabs north of the ridge. A stopper inscribed "R.W. Freed" and slings were found along the route.

2003 variation: hike up valley and join route at base of 5.7 ridge. Descent included 4 rappels with intermittent down climbing.



Parabola from the northeast.

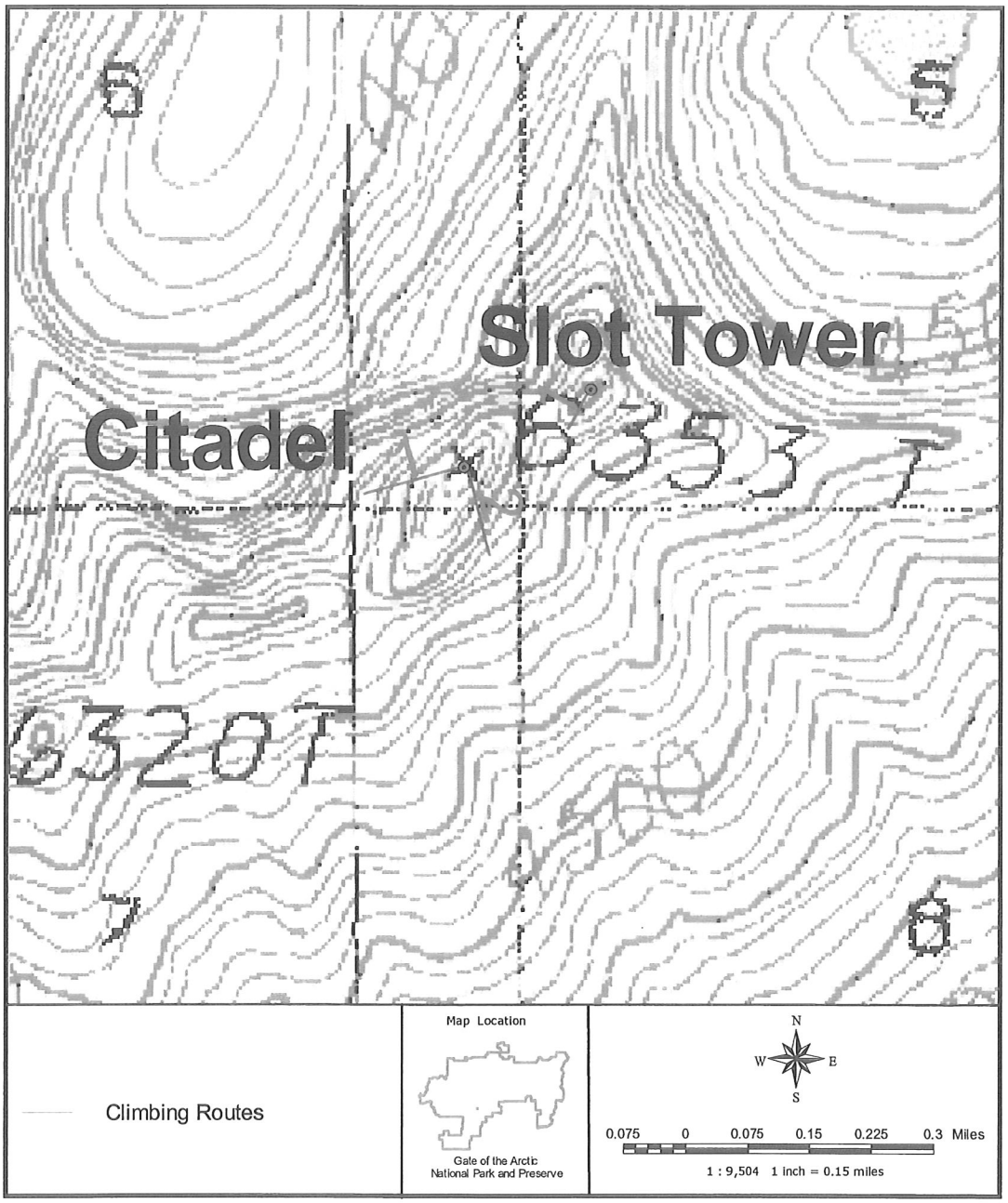


Fig. 11. Climbing routes on Citadel and Slot Tower, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Slot Tower

First Ascent: Dave Dahl, Jock Richardson, Bill Zaumen, Walt Vennum 1980
Known Ascents: 1

(1) Southwest Chimney: II 5.8
NO PHOTO

Citadel

First Ascent: Charles Loucks, Brownell Bergen, Jeanne Bergen 1964
Known Ascents: 5

(1) West Face: 3rd and 4th class
Charles Loucks, brownell Bergen, Jeanne Bergen 1964

(2) South Face: 5.9
Crotch robins &/?
Ascend the right trending groove that splits the south face for 3-4 pitches. There is a single bolt at the first belay. The final pitch is the hardest.



Photo shows the Citadel is in the foreground and the Maidens farther down the Ridge. Photo taken from the northeast.

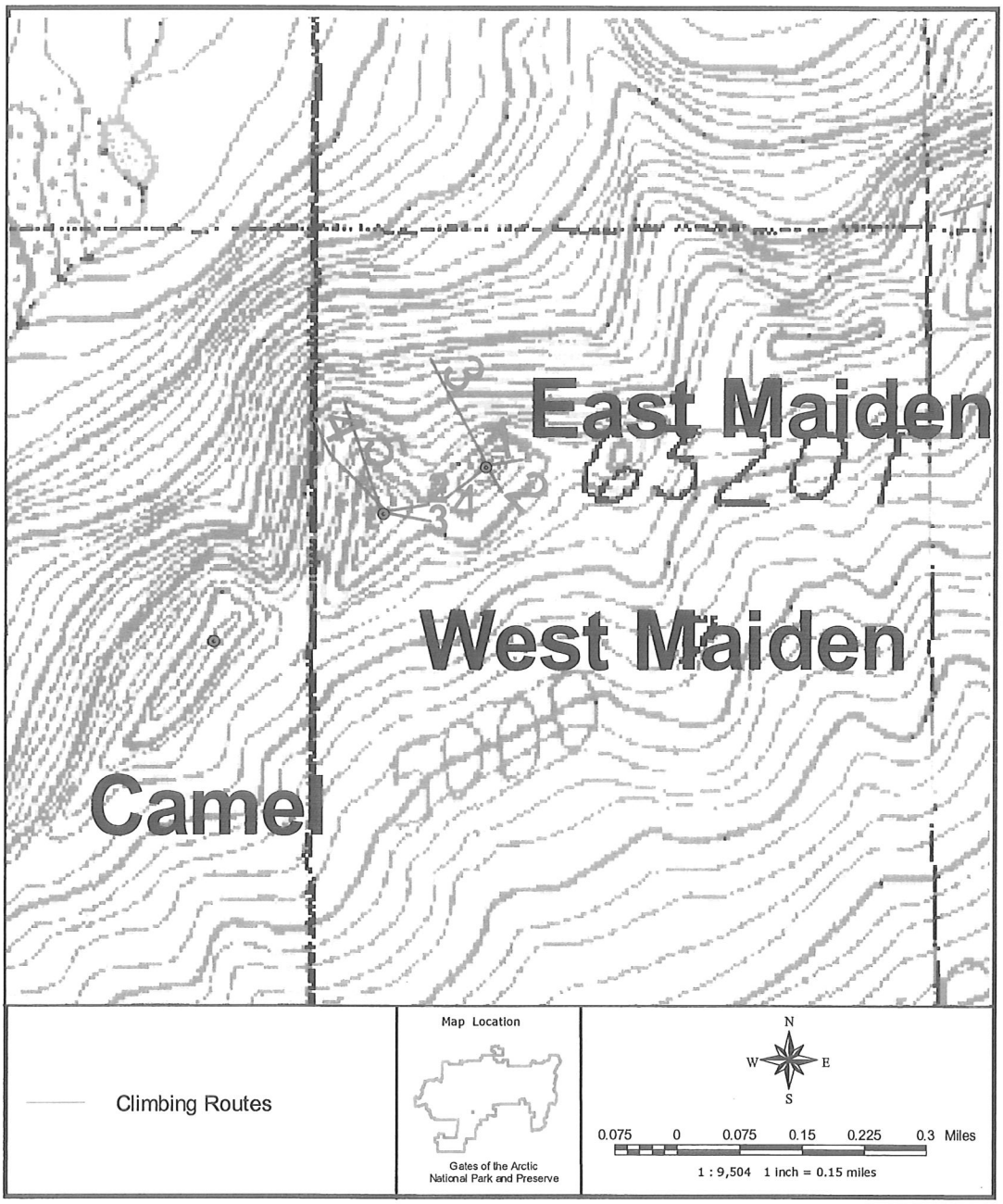


Fig. 12. Climbing routes on the East Maiden, West Maiden and the Camel, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

East Maiden

First Ascent: Jeanne Bergen, Louise Cass, Sally Westmacott, Robley Williams Jr. 1964
Known Ascents: 7

(1) Original Route: 4th class (Probably up the east face)
Jeanne Beggen, Louis Cass, Sally Westmacott, Robley williams Jr. 1964

(2) South Face to East Ridge: 5.8
Peter Lehner, Michael Lehner and Carl Lehner, 1976.

Variation: South Face Direct: 5.8
Mike Zawaski, Jeff Brislawn, 2002
Total of five pitches. Starts up flakes below a left facing dihedral in the center of the south face and then exits to slabs on the right and continues straight up to the summit.

(3) North Face
German climbers (names unknown) 1998

(4) West Ridge: 3rd and 4th class

West Maiden (some sources list this as Central Maiden)

First Ascent: Charles Loucks, Michael Westmacott, Sally Westmacott, Robley Williams Jr. 1964
Known Ascents: 7

(1) Original Route (route unknown)
Charles Loucks, Michael Westmacott, Saly Westmacott, Robley Williams Jr. 1964

(2) East Ridge (same as original route??)
Peter Lehner, Michael Lehner, Carl Lehner 1976

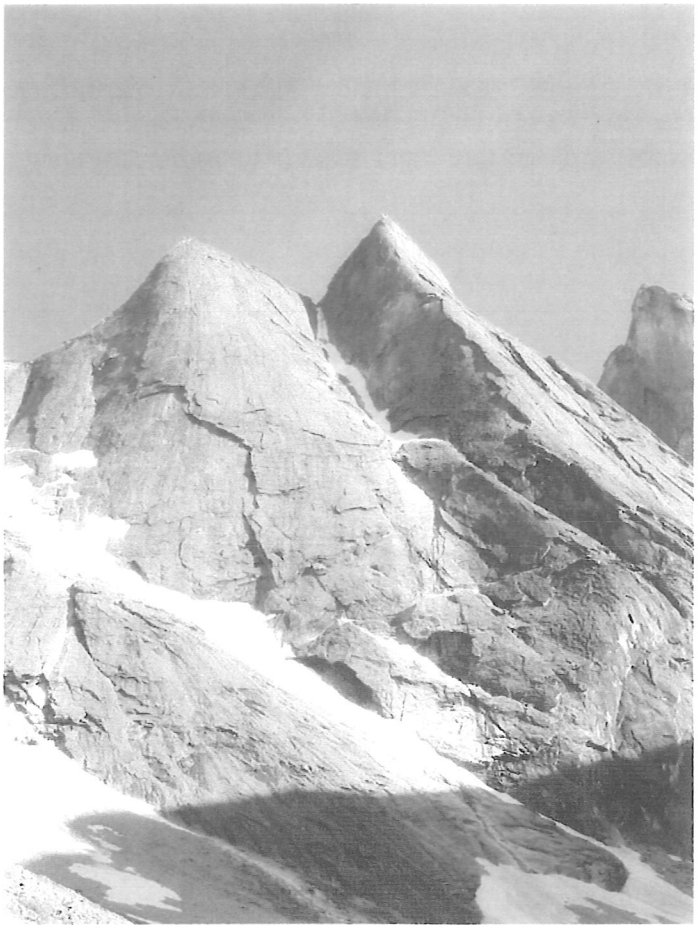
(3) East Face: 5.9
Dave Medara, Rick Clements, Kai Hirvonnen, Jonny Allen 1997
Four pitches.

(4) North Buttress Right: V 5.9
Bob Duggan, John Markel 1977
Ascended West Maiden, traversed to East Maiden and descended East Maiden.

(5) North Buttress Prow: V 5.9

Yann Merrand, Bob McGreggor, Gary Brill 1989

Starts left toward the prow via a ledge, to a vegetated chimney then to a 5.8 crack. Several pitches angle left to an exposed face climb on the prow (5.7 with little protection). This leads to ~7 pitch long dihedral on the right side of the buttress, 5.6-5.8, last pitch of perfect hand crack through roof.

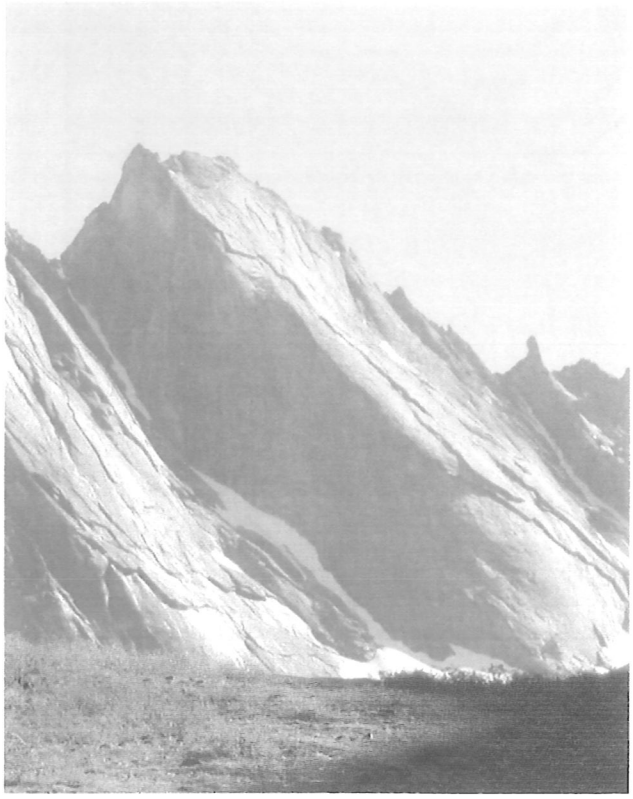


East Maiden (on left) and West Maiden (on right). Photo taken from the Aquarius Valley.

Camel

First Ascent: Charles Loucks, Michael Westmacott, Sally Westmacott, Robley Williams 1964
Documented Ascents: 1?

Original route unknown



Camel from Aquarius Valley.

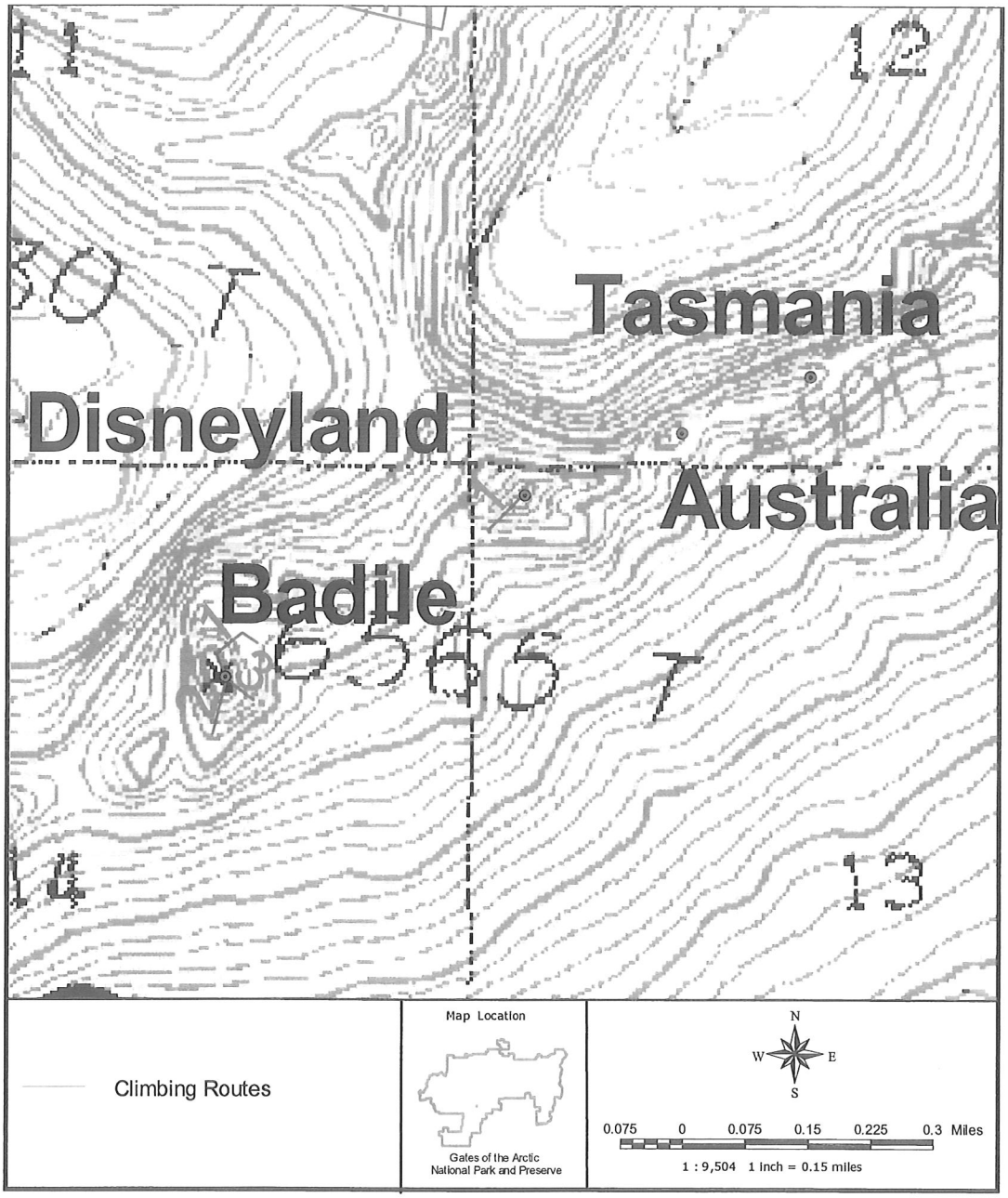


Fig. 13. Climbing routes on Disney Land and the Badile, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Tasmania

First Ascent: Edward Ward, David Roberts, Cindy Cattell 1971
Known Ascents: 2

Route unknown
NO PHOTO

Australia

Named in 1971, climbing history unknown
NO PHOTO

Disneyland

First Ascent: Edward Ward, David Roberts 1971
Documented Ascents: 1

(1) Southwest Face
Reported to be harder than Badile or Tasmania.



Disneyland from the northeast with the Badile in background.

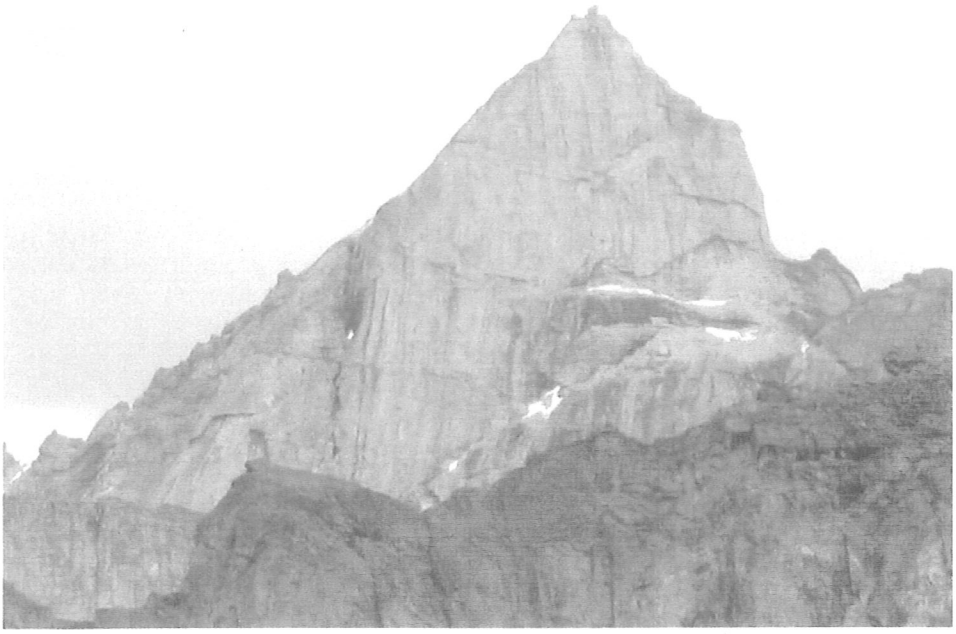
Badile

First Ascent: David Roberts, Edward Ward, 1971
Known Ascents: 7

(1) East Ridge from south with East Face variation
David Roberts, Edward Ward 1971

(2) Southwest Buttress: III, 5.10, A3
Roman Dial, Mike Biarzi 1979
Seven hundred foot crack.

(3) Southeast Buttress: 5.10+
Dave Medara, Jonny Allen 1997
Five pitches.



Badile from the northwest.

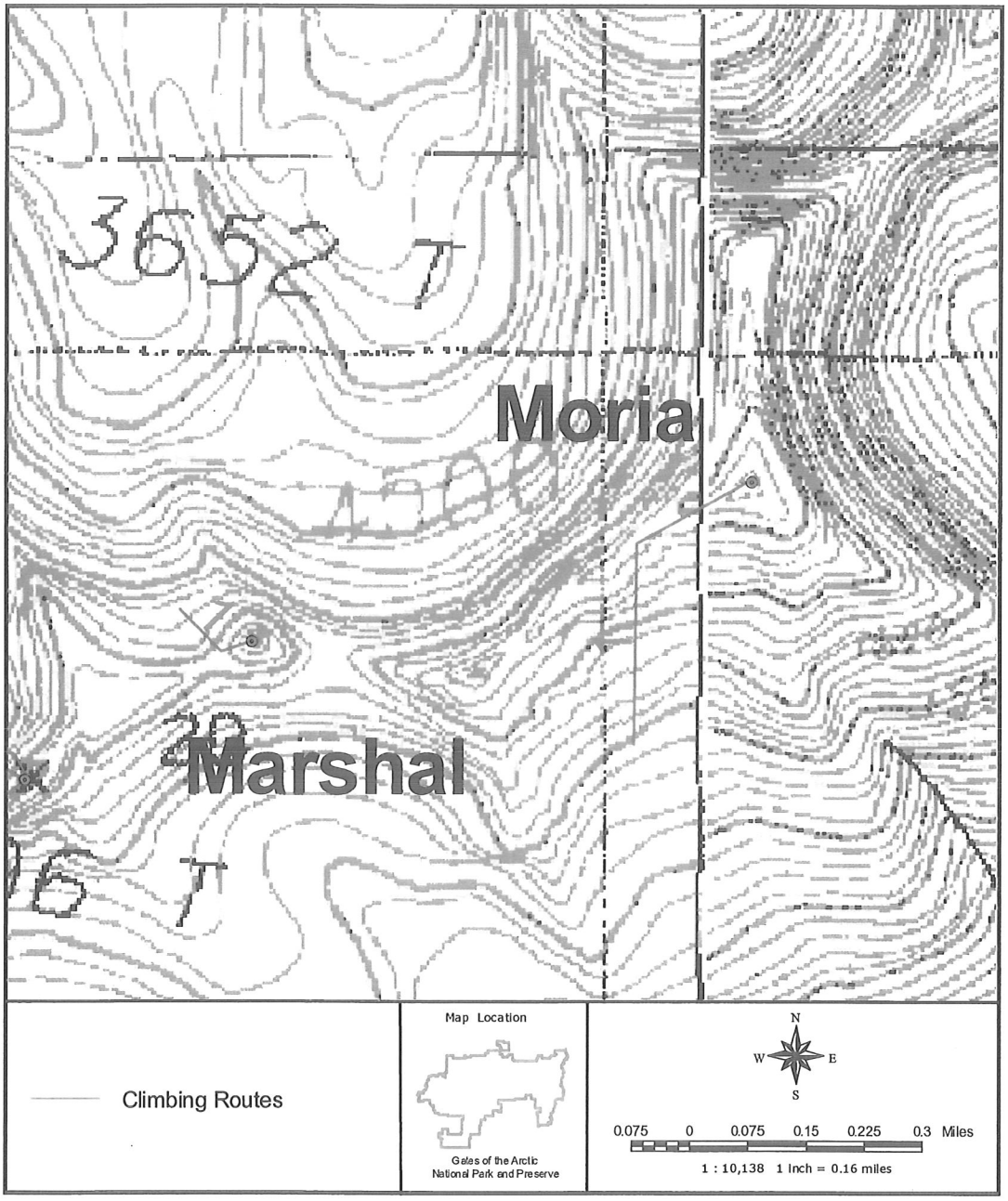


Fig. 14. Climbing routes on Marshal and Moria, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Moria (although there is some confusion in the literature between the locations of Marshal and Moria)

First Ascent: Carl Lehner 1976
Known Ascents: 1

(1) South Route: 3rd/4th class

North Ridge attempted: 16 pitches to ridge

This peak was called Sodden by the 1964 party, who attempted it twice and were rained off.

NO PHOTO

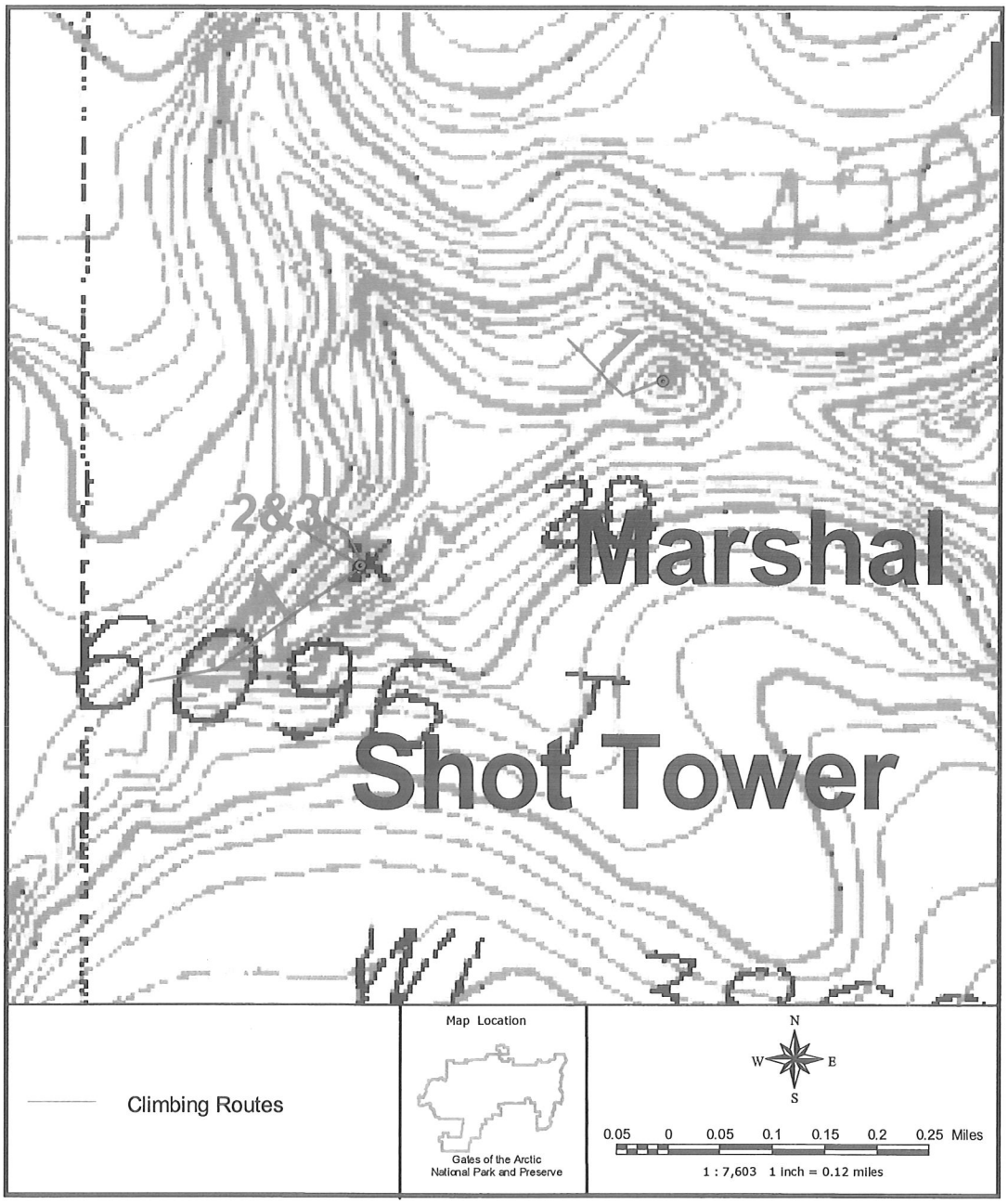


Fig. 15. Climbing routes on Shot Tower and Marshal, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Marshal

First Ascent: Peter Lehner, Michael Lehner, Carl Lehner 1976
Known Ascents: 1

(1) North Gully & Slabs: 5.5
Gully North of Shot Tower. Six pitches and then slabs to summit.

NO PHOTO

Shot Tower

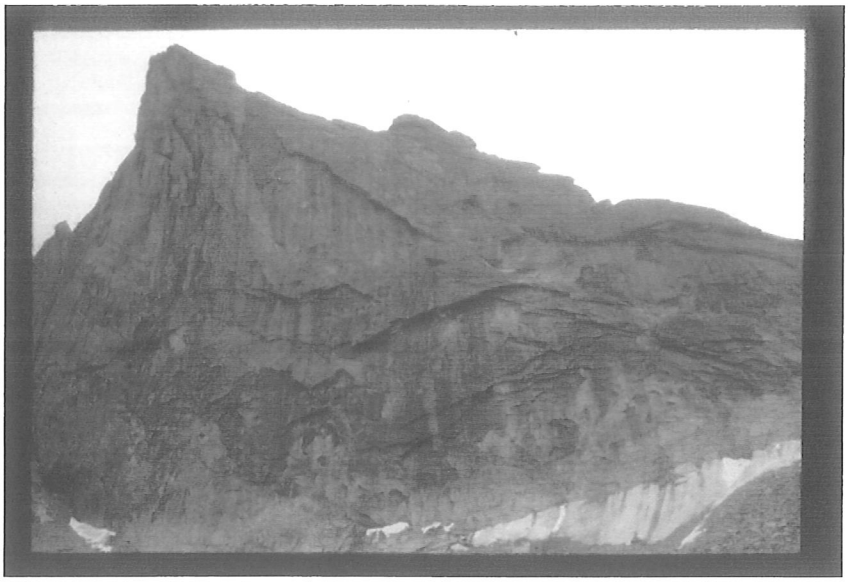
First Ascent: David Roberts, Edward Ward 1971
Known Ascents: 10+

(1) West Ridge: IV, 5.8, A2
David Roberts, Edward Ward 1971
The most popular route in the Arrigetch. Sixteen pitches of good alpine rock:

Pitches 1-3. Easy, on sharp–edged spine
Pitches 4-5. Hard. Watch rope drag. Move to small ledge.
Pitch 6. Hard and awkward move.
Pitches 7-8. Easier.
Pitch 9. Left handed crack. Harder than it looks.
Pitch 10. Traverse left under mushroom.
Pitches 11-12. Slow.
Pitch 13. Ends at deep gash across ridge.
Pitch 14. 60' Vertical headwall, single shallow crooked crack, tied off pins.
Pitches 15-16. Easy, almost walking.
Descent: rappel route, fixed pins, original party used one 180' rope.

(2) Northwest Face: V, 5.9, A3+
Mike Biarzi, Dieter Klose 1979
Thirty six hours on route. Descend West Ridge.

(3) N.W. Face, Alaska Magnum Wall: V, 5.10, A3
Dave Medara, Jonny Allen 1997
Eleven pitches, 30 hours on route, descend West Ridge.



Shot Tower from the northwest (Photo by Paul Turecki).

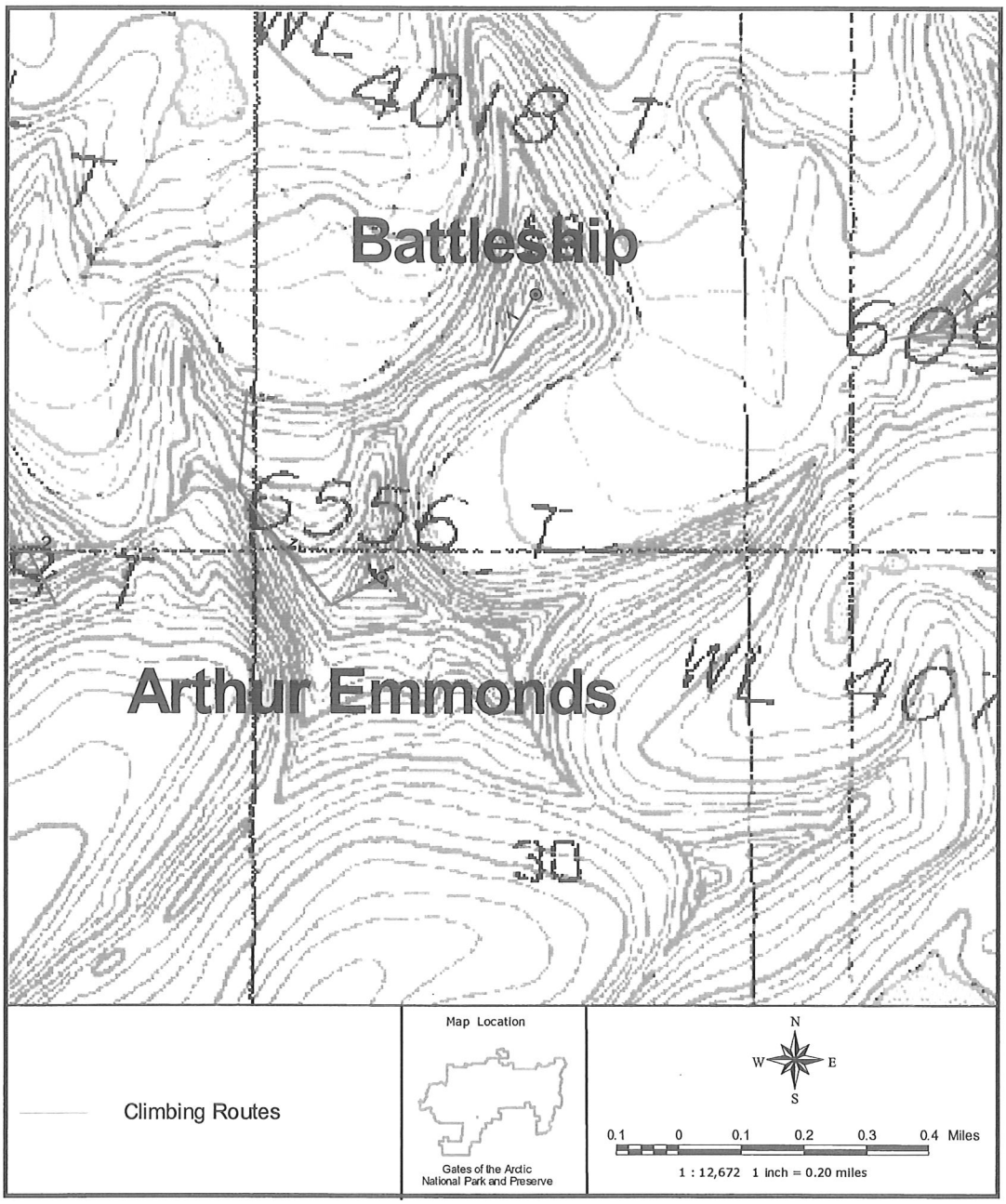


Fig. 16. Climbing routes on Arthur Emmonds and Battleship, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Battleship

First Ascent: Brownell Bergen, Jeanne Bergen, Charles Loucks, Michael Westmacott, Sally Westmacott, Robley Williams Jr. 1964
Known Ascents: 2

(1) West Ridge: 3rd/4th class



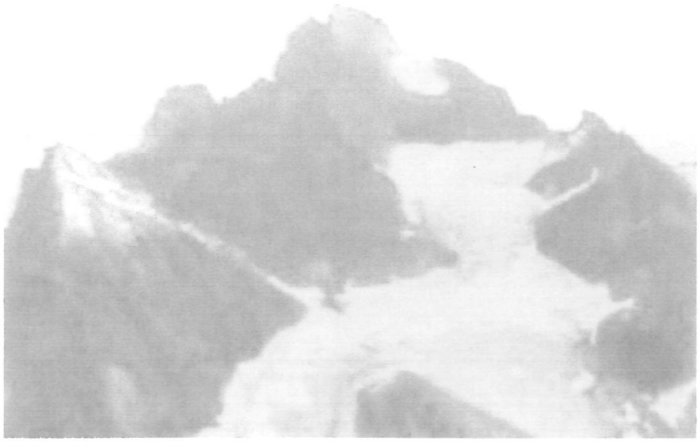
Base of Battleship from the northeast.

Arthur Emmonds

First Ascent: Jon Krakauer, Bill Bullard 1974
Known Ascents: 1

(1) Northwest Glacier to West Ridge
Jon Krakauer, Bill Bullard 1974

Named for the father of Louios Emmonds Cass of the 1963 and 1964 party. Arthur Emmonds was on the first ascent of Minya Konka, and died just prior to 1963.



Arthur Emmonds from the north.

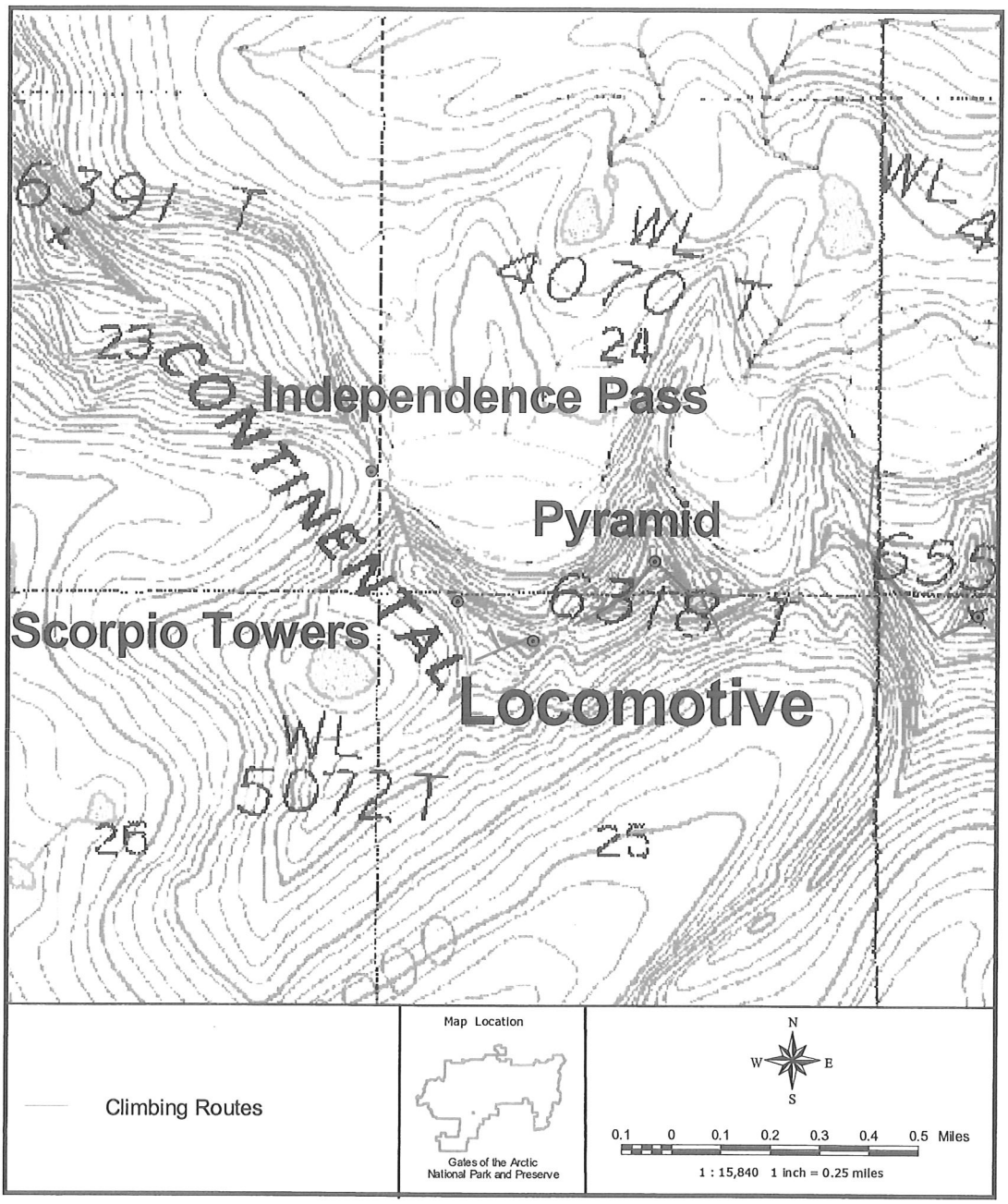


Fig. 17. Climbing routes on Scorpio Towers, Pyramid and Locomotive, Arrigetch Peaks, Gates of the Arctic National Park and Preserve, Alaska.

Pyramid

First Ascent: Brownell Bergen, Jeanne Bergen, Charles Loucks 1964
Known Ascents: 4

(1) East Southeast Face: 5.6
Brownell Bergen, Jeanne Bergen, Charles Loucks 1964
Starts in corner of the ESE Face, below and to right of the false summit on the East Ridge. Two hundred feet of high angle 5.6 includes an overhang and spectacular dihedral, reaches a large ledge. Move right on the ledge to directly below the summit, 10 pitches of easy 5th class faces and laybacks gain the summit.

(2) East Ridge: 5.4, A2
Michael Lehner, Carl Lehner 1976
One aid move on summit block.

(3) West Ridge: III, 5.8
David Dahl, Jock Richardson, Bill Zaumen, Walt Vannum 1980

(4) New Route: route unknown
Rick Clements, Kai Hirvonnen 1997



Pyramid from the north.

Locomotive

First Ascent: Ben Reed, Jeff White, Bill Bullard 1974
Known Ascents: 1

(1) West Face

NO PHOTO

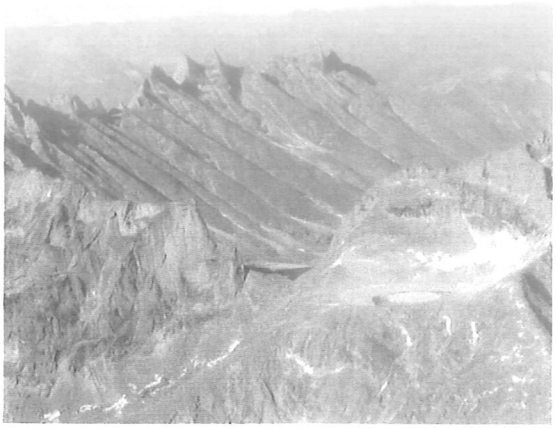
Scorpio Towers

First Ascent: Dieter Klose 1979
Known Ascents: 1

Scorpio: III, 5.7
Three spires are south of Independence pass and West of Pyramid.
From North to south; they are Scorpio, middle spire and Locomotive?

NO PHOTO

Independence Pass (non-technical but difficult when wet)



Independence Pass from the southwest.

Sources of route descriptions:

American Alpine Journals 1965-2003
Alaska, a Climbing Guide. 2002. Mike Woods and Colby Coombs. Mountaineers books.
www.stanford.edu/"clint/arrig
www.rockclimbing.com
National Geo. Adventure Magazine June-July 2003
Outside Magazine 1998
German Climbing Magazine July 1998
Smithsonian Magazine June 1995
Gates of the Arctic Voluntary Registration Forms
Gates of the Arctic Ranger Trip Reports
Personal correspondence