



MEDUSA CLIMBING EXPEDITION

EXPLORING SOUTH & EAST GREENLAND | 2022

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THE TRIP

| 14th June – 1st September 2022

This was a sailing and climbing trip, both of which felt very adventurous at times. We sailed to Greenland from Glasson Dock (UK) on the well-equipped yacht Medusa, a Vancouver 34C. After an arduous three-week Atlantic crossing we arrived into Nanortalik, a small town on the South coast of Greenland. Feeling exhausted and dishevelled we planned to do some 'warm-up' climbing in an area known as Point 72, halfway up the nearby Tasermuit Fjord. We spent about 5 days in this area, adjusting to the climate and the climbing. Once the winds dropped and clouds dispersed, we were lucky enough to repeat some of the famous route, *War and Poetry* 5.12c, on Ulamertorsuaq (1858m). Feeling a bit more human we moved our attention to one of our primary objectives, establishing a new route in Tininnertup Valley.



Photo 1: **Ulamertorsuaq in the clouds as seen from point 72.**

This is an area at the head of the Tasermiut Fjord, with some big walls and spires and yet a place that has seen very few climbing ascents. Although we planned to spend a lot longer in this area, strong winds, unsafe

anchorages and poor conditions made us alter our plans. We did however have four days there allowing us to set up an advance base camp and attempt a line on the North face of Tininnertup 4 (T4) spire. Although we found some incredible stand-alone pitches during this attempt, the route in itself was not a success as we found no way of linking up the bottom half of the route to a final crack system to the summit. We decided to call it a day at the skyline 200m from the summit. The decent was long and complicated, taking 11 hours. The whole ordeal turning into an epic 23-hour mission, tent to tent.



Photo 2: Sasha climbing the off-width corner crack on attempted line, T4 North face.

Due to sudden strong winds in the Fjord we abandoned our plans in this area and decided instead to go and scope out the possibilities of establishing a new route on an Island North of Nanortalik (the peaks of which are in fact visible from Nanortalik). The island is known as Semersoq Island and has seen few climbing expeditions in the past. We made our way to an anchorage in a sheltered bay on the North side of the island and the following day we set out early to attempt a route on the Punta Alboran formerly known as Half Dome (1060m). The approach was a little longer than we had hoped but once we arrived we were really excited to see many crack lines to get stuck into. Without too much effort we managed to establish a new direct line up the peak in 8-pitches and returned to the boat just as it was getting dark. Feeling contented we decided to begin our long journey, sailing over to the East coast and onto our next destination, Tasiilaq.



Photo 3: Ed cleaning on one of the final pitches of *'Worse Things Happen at Sea'* Punta Alboran

Our route took us through Prince Christian Sound, making a final pit stop in Aappilattoq, a very quaint little village built into a beautiful rocky harbour, way into the sound. This was to be our final fuelling and supermarket stop prior to our big sail up the remote East coast. The following day we were blown away by the sight of Saft Wall and so anchored up in a small sandy bay beneath it. We made a plan to walk in and do

the known HVS the following day and set our alarms to 4am, unfortunately the sea-fog had rolled in and the conditions seemed too damp for a good day out and so we motored on down the sound towards the abandoned Danish weather station.



Photo 4: **Travelling through Prince Christian Sound**

From here we spent 12 days sailing North to Tasiilaq spending our nights in remote and often exposed anchorages. Each day was spectacular, with incredibly wild and beautiful mountain and glacial scenery and often upwards of 20 whale sightings in a single day! Along our way we dodged a tremendous amount of ice; navigated through very narrow and shallow passages and explored yet more deserted weather stations and desolate old villages on the coastline. During this summer the sea ice had persisted until late into the season, making Prince Christian Sound impassable until a week before our passage. Later we were lucky again, as stormy weather blew the sea ice away from the area South of Tasiilaq just before our arrival. Despite our luck, the amount of ice coming from glaciers on the East coast was vast. Specifically the concentration of ice in certain places often made for hard work. Bergs would collect up into the nooks and crannies of many of

the bays and niches that formed our only planned and safe anchorages. This needed delicate planning and led to a fair few mishaps on this leg of our journey.



Photo 5: The landscape and ice of the East coast, with some of the remnants of an abandoned Danish weather station visible in the foreground.

Arriving into the much more bustling town of Tasiliaq was a little shock to the system after our wild adventure but a few home comforts were appreciated. From Tasiliaq we planned to explore a few different areas but with our main intentions being to explore the area North of Tasiliaq, surrounding Kangertigtivatsiaq Fjord, one part of which is now known as the Mythics Cirque. Unfortunately our luck hadn't persisted and there still seemed to be a lot of sea ice to the North and an attempt in our fibreglass boat seemed rather futile. Instead we decided to focus our efforts on exploring the better-known area called the Fox Jaw Cirque. This is an awesome set of gneiss towers that sit in a remote and beautiful valley at the head of Tasiliaq Fjord, one days motoring from Tasiliaq. Tim dropped Ed and myself there for 13 days where we set up an advance basecamp beneath the towers. Over the 13 days we repeated two already established routes, established two new routes of our own and had an unsuccessful attempt at climbing a previously

unclimbed tower. During our whole time at Fox Jaw we were lucky to not see another soul, polar bear or mosquito. From here our time was up and we stated preparing the boat for our voyage home via Iceland.



Photo 6: **The Fox Jaw Cirque, from Tasiilaq Fjord**

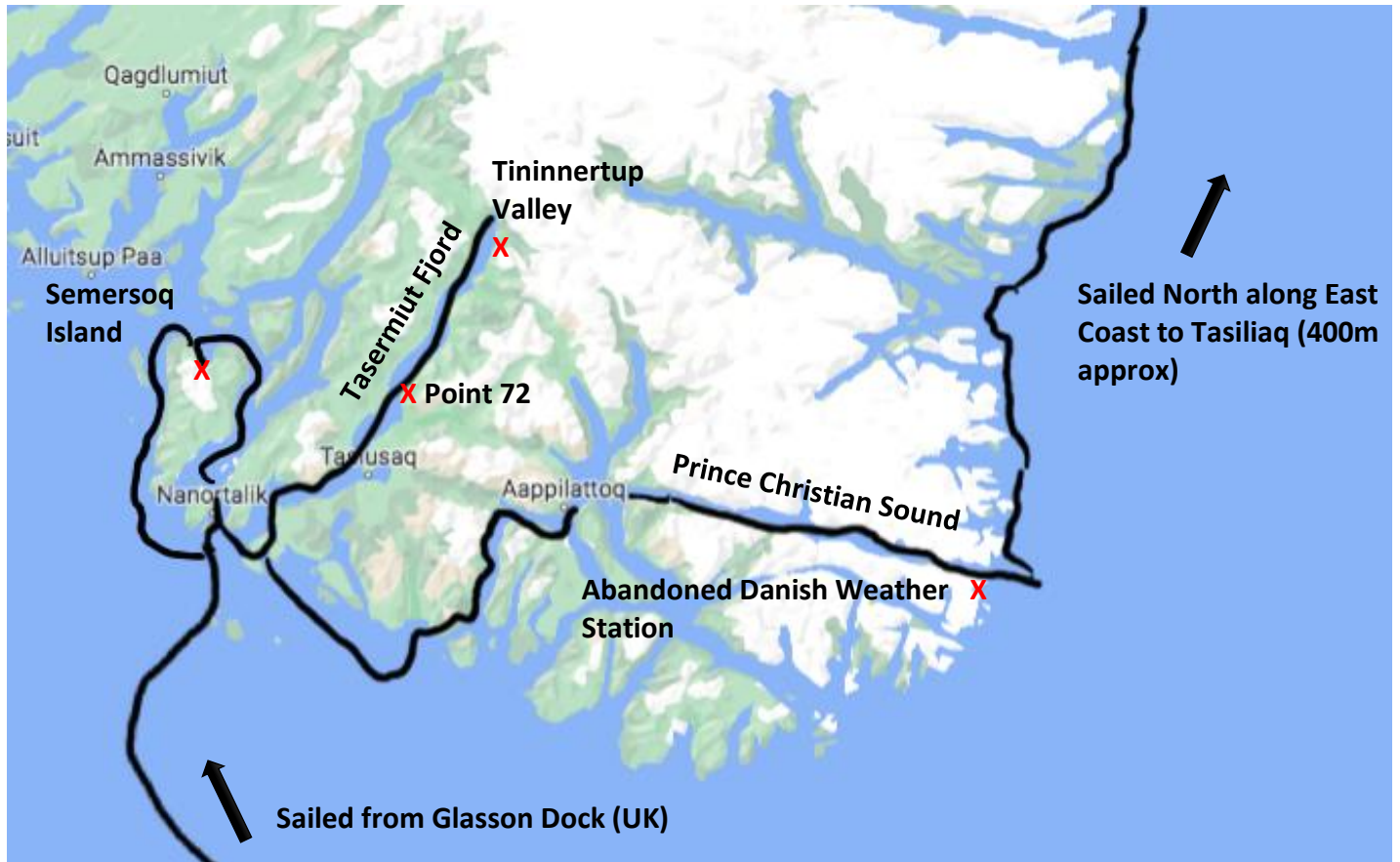
We found that there were both advantages and disadvantages of travelling around Greenland by sailing boat. It allowed us the flexibility to move on if we encountered bad weather, and so were flexible with where we could climb. However, there was clear limitations to having a sailing boat – which did impede on our success in our planned objectives . For example, there were no sheltered anchorages in Tasermiut Fjord. In winds that were comfortable for the tent, the boat would drag her anchor. The best example of this was a Force 8 on 14th July. The boat was blown, under bare poles, for 15 miles from Tininnertup to Tasiussaqa, the first place with good holding mud, for the anchor. For attempting lines of up to 1000m of length in unknown terrain, we learned you need much longer for scoping out and attempting lines around weather windows. This was good learning and as the trip progressed, we realised we needed to be more flexible, which seemed a much better strategy for our set-up - hence our successful attempt on Semersoq Island.

OUR JOURNEY MAP



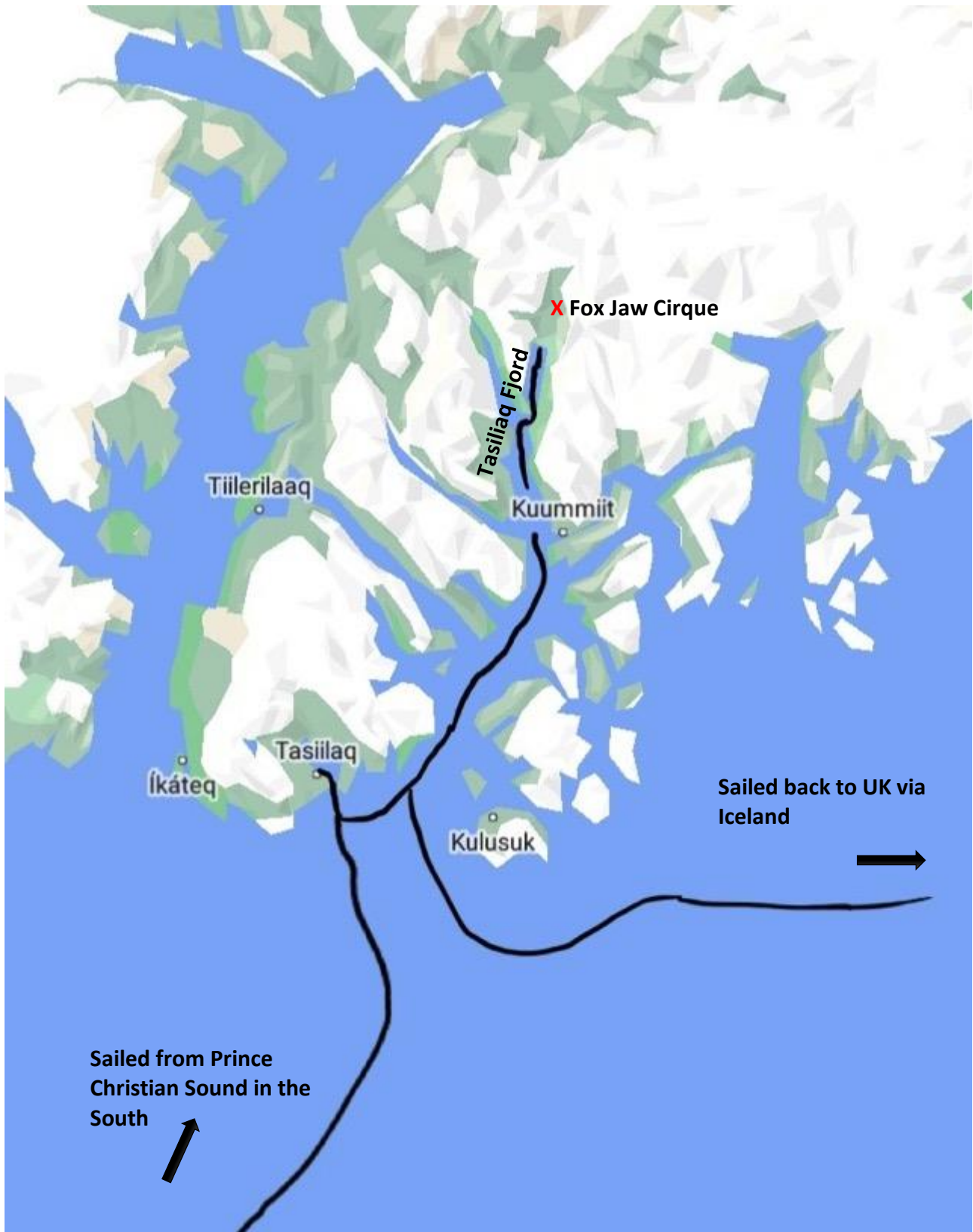
Map 1: Greenland Journey Overview

SOUTH GREENLAND ROUTE



Map 2: Detailed Route in South Greenland, with areas visited marked

EAST GREENLAND ROUTE



Map 3: Detailed route in East Greenland, with Fox Jaw Cirque marked

THE TEAM



Photo 7: **Tim Luke, The Skipper**



Photo 8: **Ed Luke**



Photo 9: **Sasha Doyle**

SOUTH GREENLAND

| Point 72



Photo 10: Tim carefully crossing the winter damaged bridge at Point 72

History

There are many ascents in this area, with the two main walls being Ulamertorsuaq and Nalumasortoq, the most famous routes being *War and Poetry* (5.12c) on Ula and *La Cura* on Nalu (7b+ A2). All of this information seems very easy to find and well documented online.

Camping

Point 72 is the well-established base camp for many teams in the Tasermit fjord for good reason. It has good landings for small boats on both sides of the river and short walk up hill with heavy food supplies will find you with many flat and sheltered camping spots. The river is readily accessible and two well established footpaths (kept open by tourism) lead up the Nalumasortoq valley (2-3hrs) and to the foot of Ulamertorsuaq (1hr). In an emergency shelter can be sought under a low roof boulder or a very damp and mouldy hunter's hut, North of the river. This location can be busy with other teams and tour operators.

Our Objective

Our objective in this area was to use the preexisting route *War and Poetry* of as a 'warm up' before heading into the Tinninertup Valley. We hoped to climb to the half height '*black heart*' ledge and bivi, before descending the following day, the route after this point is much harder and a bit above us grade wise.

Map



Map 4: Tasermuit Fjord and Point 72.

Route

(Repeat of) '*War and Poetry*' - 08/07/2022

5.12c, 1000m (We climbed up to pitch 15, black heart ledge) On-sight, lead. Ulamertorsuaq (1858m)
Tasermuit Fjord, South Greenland (Ed Luke & Sasha Doyle).

Strategy: We initially had a go at climbing the route but were stumped after five pitches due to rain. Here we decided to ditch some water bottles for our next attempt. On our next attempt we woke up at 4am but a

thick fog had enveloped on the camp. To save a walk into a wet crag, we used our drone to check the vertical extent of the cloud layer. The cloud layer was high until about 7.30am and then it began to drop and so we decided to just walk in and give it a go at the later time, which we thought was reasonable as we could abseil off at any point given the fixed belays. We climbed as light as possible with no sleeping bags just big jackets, a storm shelter and a tiny stove for the bivi, retrieving our depoted water at pitch 5.

Approach: The approach is on a fairly good path with cairns some of the way from the main camping spot at point 72. Heading South out of camp initially and then up towards Ula and through a boulderfield basin and then scree before a final steep scramble up a wet grassy slope to the foot of the wall (1.5hrs approx).

Climb: Climbed the 'Poetry' part of War and Poetry. We climbed until pitch 17, up steepening but lovely granite slabs; bivied on the 'black heart' ledge and then descended the following morning. Cloud inversions created damp rock until late morning, giving us a late start (9am), however the aspect of the wall gave sun until late evening.

Descent: Same as route via bolted belays (60m ropes required).

Photos



Photo 11: Perfect camping at Point 72 with Ulamertorsuaq rising above the clouds



Photo 12: Final grassy scramble up to the wall of Ulamertorsuaq



Photo 13: On the lower slabs of *War and Poetry*



Photo 14: Sasha on the *'Black Heart'* bivi ledge of *War and Poetry*

Future Potential

There has been a fair amount of development on Ulamertorsuaq and Nalumasortoq, but yet little seems to have been explored on Ketil, and a spire next to Ketil that could be referred to as ketil Spire. There looked to be interesting potential on these peaks.

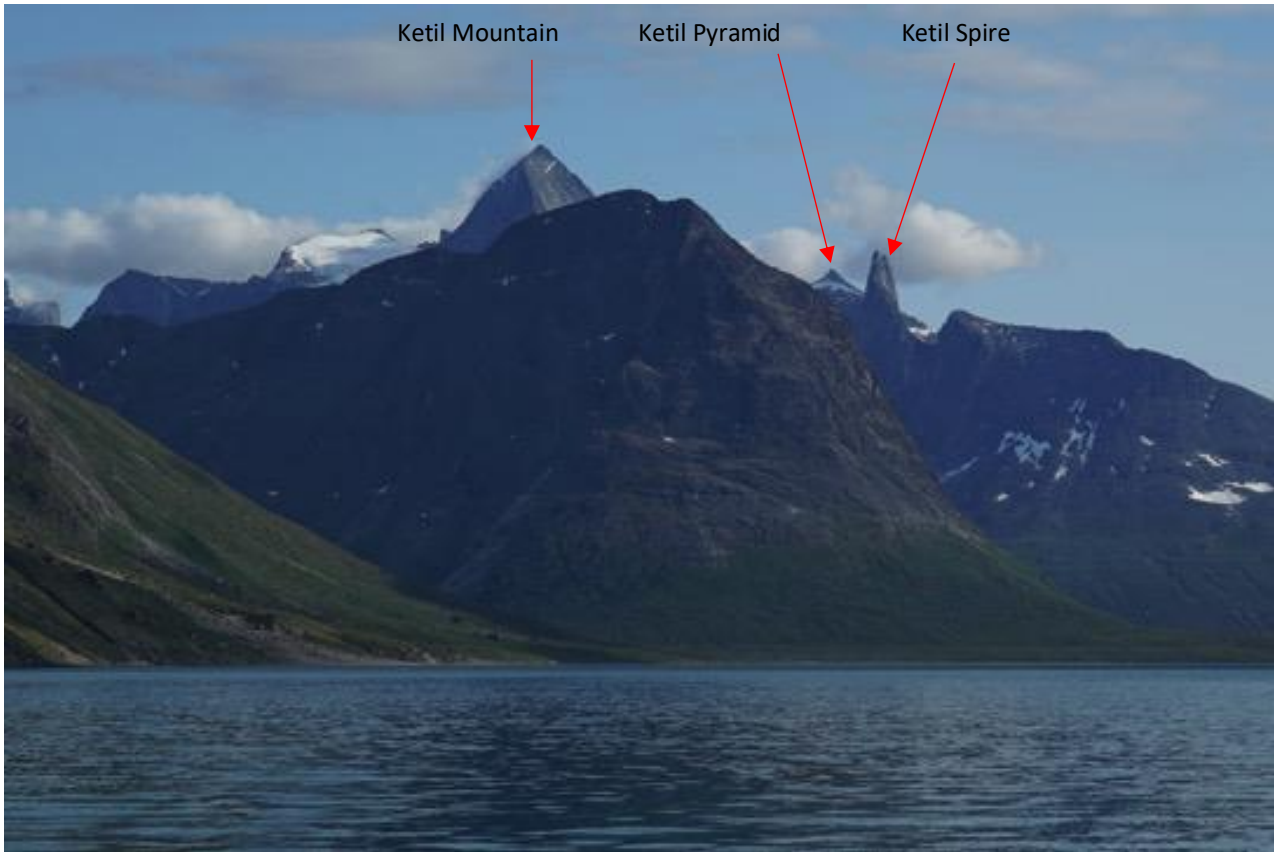


Photo 15: A view of the Ketil group looking out of Tasermuit Fjord

SOUTH GREENLAND

| Tininnertup Valley



Photo 16: Taken back by the steep imposing walls of the Tininnertup Valley

History

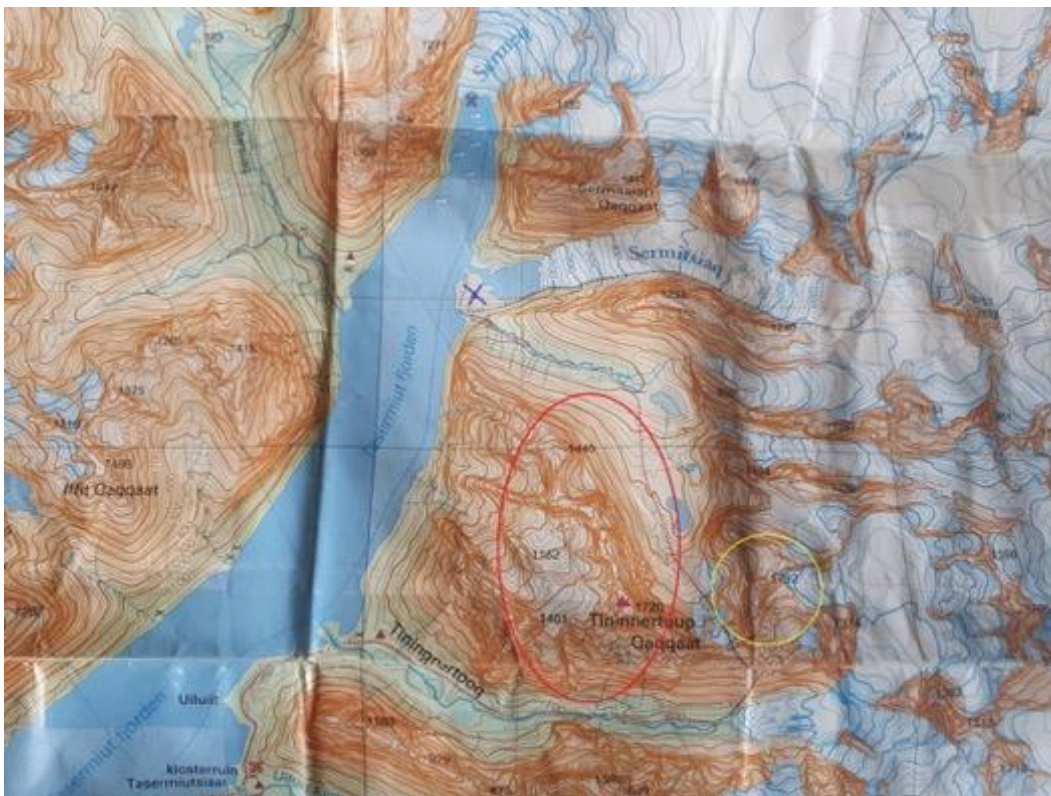
There has only really been one really successful climbing expedition to this area and that was by a British - Bavarian team in 2008. The team consisted of Es Tresidder, Tony Stone, James Vybiral, Dan McManus, Tom Spreyer and Ged Desforges and Bavarian climber, Ruben Gutzat. The team impressively established new routes on many of the spires in the valley and also a new direct route up the steep and imposing wall of The Hermelnbjerg. This link gives some information about there expedition:

https://www.ukclimbing.com/articles/features/british_tasermiut_fjord_expedition_report-1216.

Our Objectives

We hoped to establish a new direct line up the Hermelnbjerg and try to establish some new routes on Tininnertuup III. We also wanted to repeat the first ascent up the NE Ridge all the way to the main Hermelnbjerg Peak summit. However there were a few issues that presented themselves with this area. The main issue was that there was no safe and sheltered anchorage at the head of Tasermuit Fjord and strong winds led Tim to leave us and head for a more sheltered bay down at the entrance to the fjord. Forecasts then suggested we only had a short window of 4 days before some even stronger winds and bad weather was forecast and so this left us with four days to establish a camp and scope out and complete a route in the valley. Which was obviously restrictive. Also on reaching a good camping spot and shuttling are kit in, we started to look at the rock quality and realised that many of our objectives, specifically the ones on Tininnertup 3 would be a dangerous and futile project. The Hermelnbjerg seemed like a very impressive wall but due to our limited time, we decided to also abandon this objective. Instead we saw some better looking rock and possible line on the north facing wall of Tinninnertup 4 and so decided to give this a go.

Map



Map 5: Tinninnertuup Group (Red Circle) and Hermelnbjerg peak (Yellow Circle)

Camping

We found excellent camping just under the main spires of the valley in a grassy boulder field. There was water accessible from small streams, although these might not be there in drier periods.



Photo 17: **Our camp in the boulder field, with the Hermelnbjerg towering above.**

Approach

From the beach walk alongside the river on its northern side, following up the boulderfield until you reach a steep slope with small birch bushes, follow this up and over the raise and then follow the valley floor up river until a further one or two river crossings (sometimes difficult in high water). Then head uphill towards the valley under the towers and camping can be found in the boulderfield.



Photo 18: **Approach into the Tininnertup Valley, the prominent peak is the Hermelnbjerg**

Route

(Unsuccessful Attempt) of a new route on ***North Face of Tinninnertup 4*** – 11.07.2022

Difficulties up to E3 5c, (1000m) Tininnertup 4 (1720m), Tininnertup Valley, Tasermuit Fjord, South Greenland, (Sasha Doyle & Ed Luke).

Strategy: We attempted this route in alpine style, on-sight lead. We decided to take some bivi kit, in the way of big jackets, a light-weight storm shelter, a stove and de-hydrated food and were thankful for it! Despite there being some snow on the approach slopes and the snowy gully decent we decided to only take trainers to save weight. We also took some abseil tat and pegs for the descent.

Approach: We walked over boulders and scree to below the wall of T3, climbed a snow patch and started solo scrambling up a prominent groove line of T3 to reach a niche and point in the gully that allows you to climb across to the north wall of T4.

The Climb: This attempt was unsuccessful, reaching a highpoint of around (1500m), we climbed an enjoyable line with the hope of reaching a crack system near the top. We were unable to traverse into this due to bold slabs, with loose flakes and we were forced to continue up a line of weakness towards the W skyline. We decided to give up on our attempt at 8pm, due to daylight and failure to follow our intended line, and began what became a very laborious and long descent

Descent: We abseiled initially towards the col of Tininnertup 4 and 3, then headed into a snow filled gully system, this was tedious as our rope got stuck a number of times in the icy gaps between the gullies snow and the rocky edge.

Future Potential

After visiting this area I would agree that there is actually limited scope to develop further routes here due to poor rock quality on many of the spires. The lines already established are on the sections of better-quality rock, and it seems there isn't a whole lot more to go at on these walls. However for a team that has substantial time and the right equipment a new line on the Hermelnbjerg could be possible.

Photos



Photo 19: (from left to right) Tininnertup 4, 3 and 2.



Photo 20: The North Wall of Tininnertup 4, red line showing intended cracks system we were unable to reach and yellow line showing actual line of route climbed.



Photo 21: Scramble Approach starting on T3 to gain gap between T3 and T4.



Photo 22: Scramble approach with north face of T4 in the sun



Photo 23: Sasha enjoying some pleasant climbing on the initial pitches on wall of T4



Photo 24: Sasha trying to access the higher cracks system via some exposed slab pitches

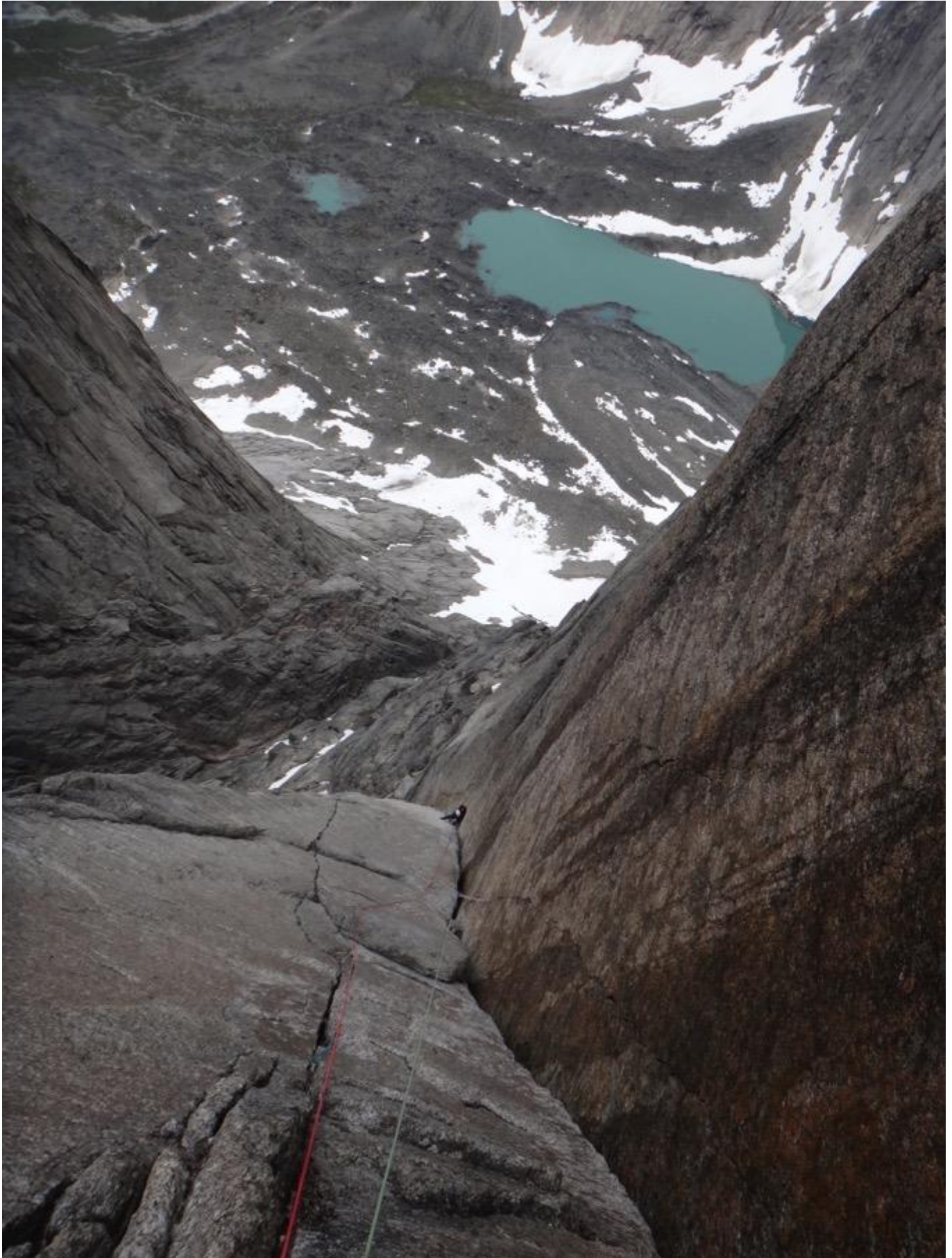


Photo 25: Sasha climbing the off width corner crack on attempted line, T4 North face.

SOUTH GREENLAND

| Semersoq Island



Photo 26: Ed and the view into the Northern bay from Semersoq Island

History

Despite its close proximity to Nanortalik and relatively easy access, Semersoq Island has seen relatively few climbing teams. However a few British teams had visited the northern end of the island, the most successful of which were in 1993 and 2003, where almost all the peaks on the island had been climbed. However, due to several thwarted attempts to climb the north ridge of the peak (1060m), no one had yet reached this summit. Despite not reaching the summit the 2003 British team named the peak Half Dome. On 17th August 2014, a Spanish-Basque team climbed a direct route on the north face of the peak naming it '*Fisuras en la Niebla*' (300, 7a), and re-named the peak Punta Alboran. An account of their trip can be found on AJJ volume 56, issue 88; page 183 and a condensed history of climbing on the Island can be found in Alpine journal AAJ 2004.

Our Objective

We hoped to establish a new route on the North face of a peak known as the Punta Alboran (formerly known as Half Dome). The peak is 1060m and sits within the highest granite peaks on the Northern end of the Island. The peak seemed relatively accessible from the bay in which we were anchored and there was only one other noted ascent of this peak by a Spanish-Basque team that had climbed a line they named '*Fisuras en la Niebla*'. Through the binoculars we could see this wall was fairly featured and hoped we could add another route to this wall.

Route

'Worse Things Happen at Sea' – 21.07.2022

E3 5c, 5.10+, 300m, 8 pitches, new route in alpine style (Ed Luke & Sasha Doyle)

Strategy: We established this new route in a single day from the boat anchored in the North Bay, climbing in alpine style, on-sight lead.

Approach: Ascend the right bank of waterfall gully, seen from the bay and walk around the glacial lake (on its East side) to reach a small slabby spur, climb these slabs and then traverse in to gain the foot of the wall.

The Climb: A direct line up the North face of the peak that starts on a blunt arête to the right of existing Spanish-Basque line '*Fisuras en la Niebla*'.

P1. Climb twin cracks until the left crack widens and steepens, using holds on a flake move up and right towards a ledge.

P2. Climb a crack directly until a slight roof and large reach to a better crack on the right. Move up this crack for 15m until a large ledge.

P3. Climb the same crack system further up easier ground, heading into a box shaped chimney, climb up the wide chimney until it ends via good cracks and holds, exit this on the right by a large flake to a small ledge back on the main wall.

P4. Climb up and leftwards up large off width cracks to a niche.

P5. Climb a groove and then twin cracks above to reach a large ledge with big blocks.

P6. From here, climb the obvious hand crack that trends out rightwards, making increasing difficult moves over up the crack until a ledge.

P7. Make hard moves up the off width crack above moving leftwards to gain a corner crack that leads to the summit.

P8. Follow the corner crack to the final few moves over a short wall to the summit.

Descent: Scramble down rock slabs to reach the snow line at the Southern side of the peak, then traverse this Easterly around the steep snow until you come to a small col, cross over this to regain the slabby spur from the approach.

TOPO



Photo 27: Red line shows the line of *Fisuras en la Niebla*, and yellow line shows the line of *Worse Things Happen at Sea* (Photo taken from AJJ 2014 and edited)

Photos



Photo 28: Ed climbing Pitch 3, through the box shaped chimney, *Worse Things Happen at Sea*.



Photo 29: Sasha cleaning the 2nd to last pitch of *Worse Things Happen at Sea*



Photo 30: Ed Climbing lower cracks on, *Worse Things Happen at Sea* on the Punta Alboran.



Photo 31: **Approaching the Punta Alboran/Half Dome (1060m)**

Future potential

There is definitely further potential to develop routes on this pleasant and featured wall. As far as the rest of the island is concerned, there did seem some potential to climb on walls on the seaward facing side of Island, although this was just from observations on our sail past.

EAST GREENLAND

| Fox Jaw Cirque



Photo 32: **Fox Jaw Cirque in the clouds**

An area of fine climbing on Gneiss towers, with good quality rock, a great basecamp and a beautiful remote valley setting.

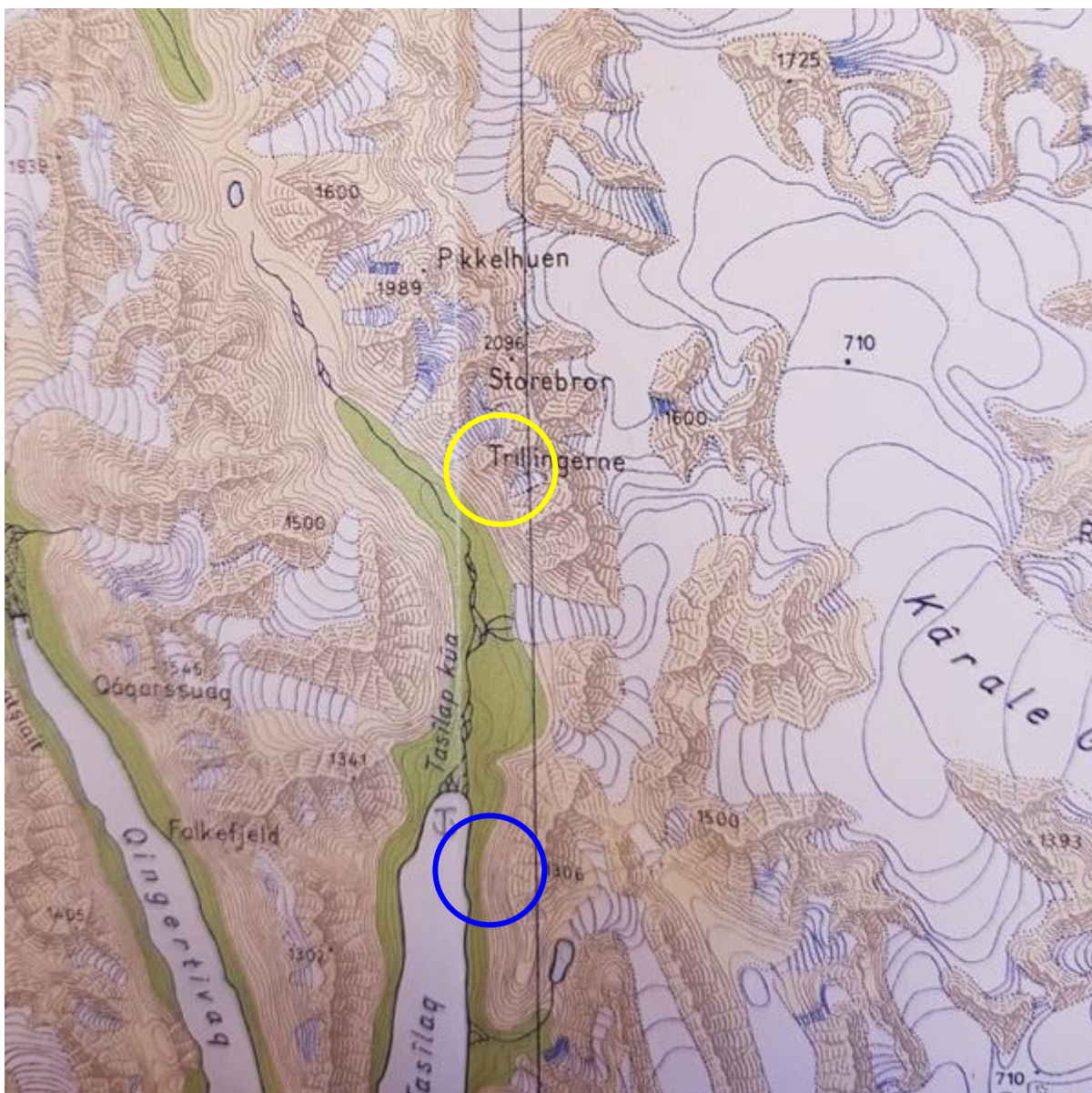
History

The Fox Jaw Cirque was named by Americans Dave Briggs and Mike Libecki, back in 1998. To Greenlandic people these spires are known as The Organ Pipes. To attempt to note all the expeditions and their routes would require a lot of head scratching and much confusion. We have photographs cover to cover of the slightly mouldy note/guidebook from the base camp boulder so get in touch and begin your own investigation.

Our Objective

As we had originally planned to climb further north in Mythics peak area, but had to change plan due to sea ice, we had no real planned objectives in this area and arrived with an open mind. We quickly became hopeful of climbing something on the Incisor (either new or repeat) as this looked the most impressive tower. but we decided to start modestly, repeating a known route on the Baby Molar, put up by a British Team, *Days of Miracle and Wonder*.

Map



Map 6: Fox Jaw Cirque (yellow circle) and drop off point on Tasilaq Fjord (blue circle)

Approach to Camp

From just before the head of the Tasiliaq Fjord as seen on the map above, a path can be found on the Eastern side. The northern tip of this Fjord is a very shallow sand bank, so stop well before the end of the Fjord if accessing by boat, we found secure holding in 30m. Follow a good path towards the spires, the path stayed close to the river all the way and is slightly vague at times. Eventually you reach a large boulder field where you can find camping. This camp was 10km from the shore depot with minimal height gain (53m) along mainly flat and easy ground. Two shallow river (glacial melt pool drainages) had to be crossed to access our base camp, however we only had to wade across one of the shallow rivers, the other can be crossed by stepping-stones.

Camping

Following the notes from the British 2014 team report we found the house size boulder used as their base camp. Under this boulder are 2 x barrels containing various ruminants of previous expeditions and a guidebook of original topos and notes for the area. For flatter ground and a light breeze to ward off the flies we set up camp further down the hill beside the main river.



Photo 33: Looking North in Tasiliaq Fjord, with the gneiss Towers of the Fox Jaw Cirque catching the sun

Approach to Climbing

From base camp we accessed the Fox Jaw Cirque by ascending the crest of the moraine ridge that leads down from the glacier beneath the towers. This was gained directly from the back of the boulder field and takes a little over 1 hour. After our first day in the cirque we opted to depot climbing gear on a level spur below Baby Molar. Baby Molar was just up from the depot, the Incisor 15 minutes directly across a scree slope. The continuation of this traverse also enabled us to gain the glacier for other objectives later in the trip.

Strategy

With such a short approach from base camp and all the weight of our climbing equipment in depot below the walls, we opted for an early start – fast and light approach to our objectives. All routes were attempted in alpine style.

Routes on Baby Molar

The Baby Molar is the first and friendliest looking tower, with a number of known routes already on superb quality gneiss. The tower is approximately 1000m tall from the valley floor and most the routes up it are around 350m long.

Descent: There is a bolted descent line off this tower located to the left side on the Tooth Fairy route, from the top of the tower, scramble down the W side for around 50m and find a block with black webbing, head down and to the left for the first ab then abseil in a more or less direct line, some of the abseils are almost a full 60m.

'Days of Miracle and Wonder' – 13th August 2022 (AM) (F.A Smith & Durrant 2014)

E2 5c, 355m, 8 pitches, repeat of route alpine style (Ed Luke & Sasha Doyle)

Descent: Via 'Tooth Fairy' bolted abseil stations (see above for details).

'Polar Bear Tea Party' - 13th August 2022 (PM)

E1 5b, 370m, 8 pitches, new route on the far East edge of the tower. After repeating the first route here we thought we still had ample day light this day to try a new line in the afternoon, evening. A nice line with defined and memorable pitches in the first half of the route. (Ed Luke & Sasha Doyle)

Descent: Via 'Tooth Fairy' bolted abseil stations (see above for details).



Photo 34: New line on Baby Molar - Polar Bear Tea Party.

***'Sila'* - 13th August 2022**

HVS 5a, 350m, 7 pitches, new route to the left of 'Days of Miracle and Wonder', we called the route Sila, a Greenlandic word for weather and also consciousness, as some advancing bad weather was on its way. A nice line following some nice cracks (Ed Luke & Sasha Doyle).

Descent: Via 'Tooth Fairy' bolted abseil stations (see above for details).



Photo 35: Nearing the top of the new line, *Sila* on Baby Molar

Route on Incisor

The Incisor is the third tower along and is very impressive, the lower half is a very modest angle and then the wall steepens and becomes less featured. The tower is about 1100m above sea level and the routes are around 600m long.

Descent: there are bolted belays on Beers in Paradise line which can be followed for an easy decent off the tower.

'Beers in Paradise' – 15th August 2022 (FA Briggs & Libeckie 1998)

5.10+ A0, 600m, 14 pitches, repeat of American line in alpine style, 8hrs of ascent. (Ed Luke & Sasha Doyle)

Descent: Same as line of route.



Photo 37: **Sasha Climbing *Beers in Paradise* on the Incisor**

Route on Unnamed Tower

Approach

(Height unknown) We accessed this via the glacier to gain foot of tower. There were a large number of crevasses to cross on the glacier, some of which had weak bridges later in the day (on decent). We hoped to

do an easier route, and move together a lot, however we ended up climbing harder pitches to avoid bad areas of choss.

***'Unnamed Tower line'* - 19th August 2022**

Unsuccessful attempt of route in alpine style, up previously unclimbed tower. Encountered a considerable amount of loose rock that became extensive at high point of attempt, after around 400m of climbing. We found difficulties of around E1 5c, but some sections were easier but looser (Ed Luke & Sasha Doyle).

Descent: Same as line of ascent.



Photo 38: **Attempted route on Unnamed tower at Fox Jaw Cirque.**

Topo

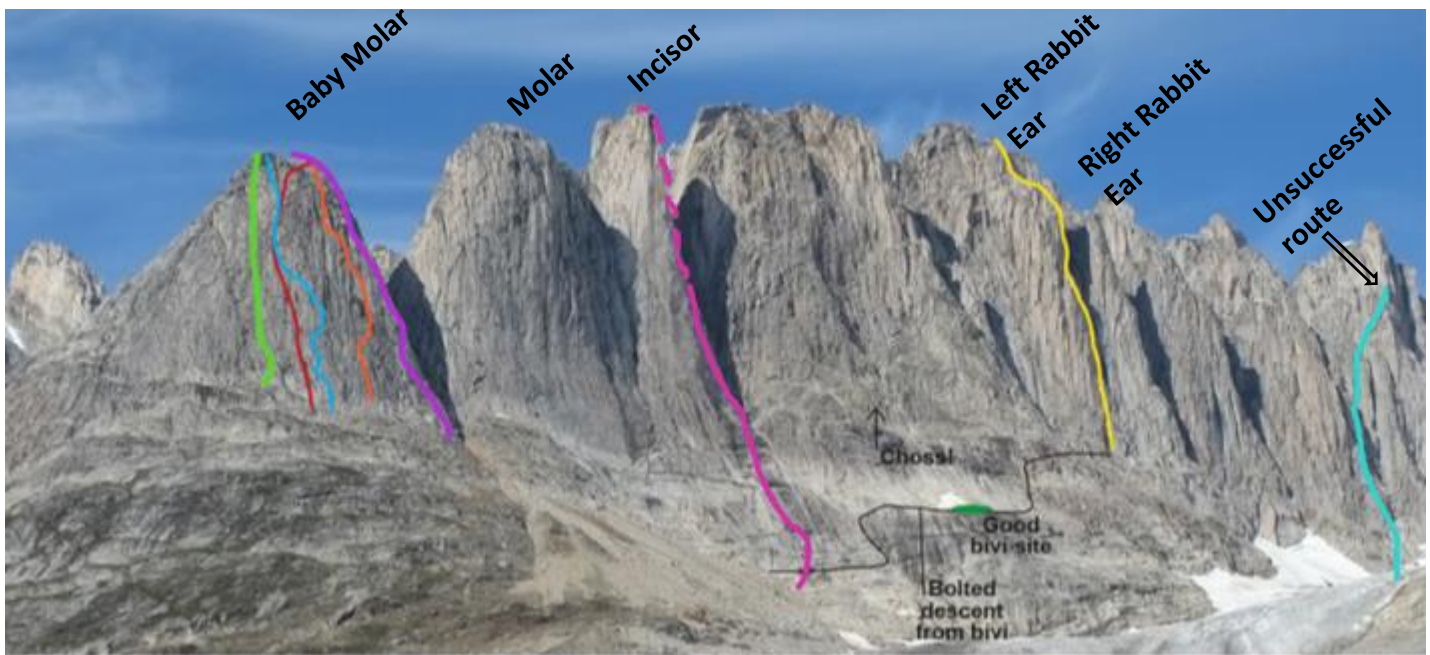


Photo 39: **Topo of Fox Jaw Cirque** taken from Wall to Wall expedition report (2014) and edited to show new lines and highlight the line of *Beers in Paradise*.

Key to Topo

Days of Miracle and Wonder	█
The Long Distance Call	█
Back Alley Dentristy	█
Rampant	█
Beers in Paradise	█
Sila	█
Polar Bear Tea Party	█
Unsuccessful route	█

- Note that there are many other established routes on these towers but due to limited topo information, we didn't want to guess there lines in this topo. See topo on next page for more info.



Photo 40: Topo found at basecamp, Fox Jaw Cirque. The topo documents lots of new routes but there seems to be some errors.

Future potential

With a strong team, plenty of time and the right condition a line up the centre / main headwall of the Incisor would be spectacular. However the Libeck line 'Tears in Paradise' goes somewhere into that terrain though details are not forthcoming (no topo) and the European route 'Emozione Polare' is also in this vicinity. There is also still plenty of potential to establish yet more lines in the easier grades on Baby Molar, as the Gneiss here is very featured.

ABOUT GREENLAND



Photo 41: **Young boys from the village of Aappilattoq, Prince Christian Sound.** Greenlandic people are unbelievably warm, friendly and welcoming.

FLORA & FAUNA

The flora of Greenland is lacking in diversity due to the isolation it gets as an island, preventing other species to invade and much of the flora is of dwarf variants. Often on the approaches we would find ourselves trapped buskwhacking in dwarf American Birch trees and Dwarf Junipers. Unusually we found there wasn't an abundance of bilberries as has been reported before and we wondered if this was due to a cold winter with long lasting sea ice. We also came across butterwrots, orchids and fire weeds.



Photo 42 & 43: **Dwarf Juniper on the approach to Nalumasortoq**

The only real land mammals we came across were Arctic Foxes and hares. The two foxes we saw were both black. We were fortunate enough not to stumble across any Polar Bears, despite being warned that it was almost certain we would on the wilder sections of the East coast. This was probably due to the clearing of the sea ice a few days prior to our journey up the coastline.



Photo 44: **Arctic Fox spotted by Tim near Tasiussaqa Bay**

MARINE WILDLIFE

Fishing was very successful during our trip, with what seemed an abundance of Char, Salmon and Trout in the Fjords, especially in Southern Greenland.

We were also lucky enough to observe probably over 50 different whales during the journey, most of which was during the wilder sections of the East coast, which is a migration route and feeding ground for many whale species. On one occasion at anchorage a humpback circled our boat, breaching in a feedy frenzy for about 30 minutes in the middle of the night. We believe to have observed, Humpbacks, Sperm Whales, Fin Whales, Sei Whales, Minke Whales, Killer Whales and possibly even Blue whales from afar, although there was some debate among our small team about identification. The most abundant of which seemed to be the Humpbacks.

We also spotted many different Seals, but due to hunting by both humans and Polar Bears these were surprisingly shy and hard to spot in comparison to those observed in Antarctica.

WEATHER PATTERNS

Once in Greenland's Fjords systems and on land we generally experienced very stable weather with low winds. The stable, warmer and drier weather is said to be regulated by the icecap. Nearer to the coast the sea would often cool down the air and create sea fog, which made a regular appearance in the morning and made travelling and climbing difficult. Generally we found the humidity and low of the early morning would burn off by late morning and then a thermic onshore breeze would usually set in early afternoon until early evening.

AMENITIES

We were able to shop for all the normal groceries and fuel we needed in both Nanortalik and Tasiliaq, both having a few big supermarkets. Even smaller settlements like Aappilattoq have well stocked supermarkets. We needed (some particular) to replace specialist electrical parts on the boat damaged during the rough voyage from UK. They were ordered from Falmouth and posted to Henrik Kleist, our local contact at Nanortalik, taking 9 days to arrive.

Gas was an issue for us throughout the whole trip, the solinoid on the gas canister corroded with salt water and also another gas cannister leaked due to a damaged thread and the UK fittings and gas bottles were not available in Greenland. It seemed difficult to source any gas but having Scandinavian type fittings and bottles would probably be a safer solution. We were glad of our Refleks heater for cooking as well as for warmth.



Photo 45: Ed cooking on the Refleks Stove onboard Medusa

We were not able to refuel the boats by pulling up to the boat fuel station in the harbour as it was too shallow for our keel, so a fair amount of shuttleing was invloved. It would be advised to have a good number of jerry cans for this job.



Photo 46: Finding solutions to the many fuel shuttles in Nanortalik

LOGISTICS

| PLANNING

We had the advantage that Ed and Tim had both been to Greenland by sailing boat before and so much of the knowledge required was already within the team. For specific sailing information we found Arctic and Northern Waters by Andrew Wiles very useful.

In terms of planning and choosing objectives we found the Mount Everest Foundation and BMC websites very useful to access and look up past expedition reports. We were also lucky that we were friends with some of the British team that visited Tininnertup Valley in 2008 and so this contact proved very helpful.

| FOOD

We managed to stock up the boat fairly well prior to departing the UK, and were surprised at how easy it was to find fresh food in Greenland. We topped up our supplies with fishing, which was very successful in the South Greenland Fjords. For the camping and climbing we mainly ate Expedition Foods, freeze dried ration meals and oatcakes, porridge and bars kindly donated to us from Nairns Foods.

| FIRST AID

Our first aid kit was a standard expedition kit with added extras specially for use in remote environments (antibiotics and strong painkillers).^[1]_[SEP]When climbing we took a smaller kit that mainly had bandages to deal with serious bleeding. There were no serious injuries during the trip, and the only minor injury I can note is having a bad skin burn from a plant following a bad bushwhacking approach, which led to blistering on the arm. We suspect this was Poisonous Oak or Poisonous Ivy, but we were never sure.

| POLAR BEAR PRECAUTIONS

We felt both unfortunate and fortunate to not have any meetings with Polar Bears, despite how insistent people were on the inevitability of it on the East coast. We were advised that we should have a shotgun, for this part of the journey, as a last resort, which we hired and trained in using. It should be noted that this wasn't as easy as people had advised us, and although you are able to buy rifles and bullets from the local supermarkets, these are small rifles only useful for shooting birds. It took a lot of hunting down to find someone that was happy to loan us an adequate shotgun and the right cartridges and so arranging this in advance of a trip would be better. We were thankful to never have to use it, and the process made us all question whether the trip would really be worth risking the life of a Polar Bear. We have since learnt that guns and ammunition can be ordered from Nuuk at Qalut Vónin A/S.

In the first instance we were told it is best to just make yourself look big and make a lot of noise, and if that doesn't work resort to flares. Most people advised using a rocket flare that you can aim at the body of the bear to scare it away, but we also carried hand flares.

| COMMUNICATION

One Garmin In-reach was used to report back to the UK daily to give an OK and also to request weather and sea ice reports. Sasha's brother, Sam Doyle was able to support in this role, providing excellent information remotely and also being on standby if we were to not report in or in case of an emergency. We also had an In-reach mini to do a similar job when climbing and also to ensure communication back to Tim on the boat.

In addition to these devices we also took radios, to communicate from boat to shore camps. These were very helpful but only really worked in direct line of sight.

There was also an EPRIB (emergency position indicating radio beacon) on the boat, in case of an emergency at sea.

| IMPACT

We aimed to have very limited impact on the places we visited, packing out any washed up rubbish we found. We disposed of our own rubbish in local towns, with the exception of gas canisters and batteries which we stored on the boat and disposed of appropriately back in the UK. All toilet roll was also carried out.

We also tried to sail as much as possible – but this can be difficult given the very stable and calm conditions of the inland Fjords.

| INSURANCE

We found it incredibly difficult to find an insurer that provide us with insurance for an independently organised remote climbing expedition. This seems to be something that has become increasingly difficult over the last few years. Eventually we found adequate insurance with CAF, Club Alpin Francais. Yacht insurance was provided by Pantaenius.

| USEFUL CONTACTS

If you find yourself with boat issues in Nanortalik, ask around for Hendrick Kleist, he is a local with great skills in fixing engines, and electrics and will be able to help find spare parts.

If you are wanting to climb in South Greenland and you don't have a boat – try to contact José Trejo, who works for South Greenland Expeditions – he has a rib and often shuttles climbers into areas like Point 72. You'll usually be able to find him in the Yellow house in Nanortalik in the summer months.

If visiting Tasiliaq contact Mr. Peroni, who owns the red house hostel. You can contact him on the Red House website, <https://the-red-house.com/en/contact.html>. He has accommodation and a restaurant, rents shotguns and knows a lot about the local area.

SKIPPERS NOTES

| CUSTOMS

- Customs were efficient and friendly. It helps to know your inventory of food stuffs when completing the form.
- Police were friendly and helpful, not available at weekends and in both 2019 and 2022 didn't see a need to inspect passports.
- Position reporting:
 - We were called during our approach for our GREENPOS report which should be provided on arrival in, and departure from, Greenlandic waters.
 - Daily reporting is another matter and hard if not impossible to comply with via VHF once deep within the fjords.
 - Complying via Satphone would be expensive and the system wasn't set up to cater for Garmin InReach notifications.
 - The tone of e mails from officials varied from extremely helpful to quite abrupt, with demands for daily compliance. On reading the small print, it turned out that (in 2022) daily reporting wasn't compulsory for small boats after arrival in Greenland. My subjective opinion is that the system is understandably set up to deal with commercial shipping and cruise ships rather than small yachts with climbers. That could have implications for small expeditions in future so well worth investigating, in detail, every year.
 - For 2022 we relied on daily Garmin InReach reporting back to UK. For emergencies we had EPIRB (reporting to Falmouth Coast Guard) as well InReach and Satphone. In the meantime, the fewer people monitoring us the better, to prevent communication misunderstandings. The boat's AIS system was only switched on when it was needed, in bad visibility.

| NANORTALIK

We arrived early at 0800 on Saturday 2nd July after an eventful night; thick fog, blood red sunrise, lots of bergs as we got closer inshore and temperatures cold enough for me to wonder whether we had arrived too early in the season.

Nanortalik has two jetties; the West is closest to the supermarket and farthest from the Hotel. The East is the main ship and ferry terminal and is closest to the Hotel / Hostel with WiFi access. There is a big tidal range so locally owned power boats, moored loosely alongside the East Jetty, can bump into your windvane steering gear. Expect sizable bergs within the harbour. We fended off substantial growlers that rocked the boat during the night.

Local support:

- For marine engineering support skippers need to know Henrick Kleist. Ask for him at the police station, shops or hotel. His friend Bruno operates from the workshop behind the harbourmaster's office. Between them they have kept us moving in both 2019 and 2022.
- For expedition support and local knowledge contact - Jose Trejo often supported by Gee Gee a local engineer and expedition logistics expert, who speaks excellent English. They work from house B694 behind the big yellow house in Nanortalik old town, running tourist expeditions to Point 72 in Tasermiut and to Uunartoq viking hot tub.

| REMOTE ANCHORAGES

Most anchorages in Greenland would be classified as "Occasional anchorages" in Scotland, meaning they are only safe in light conditions.

Fjords are deep, shelving rapidly to the shallows which can be littered with large, submerged boulders. The very few rocks marked on charts are those that have been hit and reported. Sometimes small islands don't appear on charts. Unusually for a UK skipper, maps are often more useful than nautical charts. Reading the contours of the ground by eye, to assume what goes on below the surface, whilst keeping one eye on the depth gauge is an important skill. We also found that electronic charts could be as much as 400 metres out.

The best anchorages were those at the mouths of rivers where the anchor could dig into silt deposits. With big tidal ranges, you cannot risk anchoring close in for fear of running aground at low water. This in turn makes it difficult to set lines ashore so that the anchor will dig uphill and into the mud. Good in theory, difficult to do in practice. We carried 50m or anchor chain and a further 50 metres of anchor rode rope.

Anchorage in Tasermiut:

Point 72

60 23.750N. 44.36.500W

- Fairly good holding had been enjoyed on the North side of the river in 2019 so we tried the South side this year and assumed it would be just as secure, which it was for a couple of days. An offshore, rather than the usual onshore breeze, picked up, causing the anchor to drag. No one was on board at the time so frantic rowing ensued. It was a relief to see the bows turn into the wind as the anchor caught in the silt of the next river! Back on board we reposition the boat south of the river. The wind then changed to onshore, and the anchor dragged again, needing to be reset. After this we kept someone on board in all but the lightest of breezes and always set the anchor alarm.

Tinninertup 2

60 28.697N. 044 30.358W - (*bail out recce*), river mouth.

- Anchored in 15m on West bank of the river, in silt. 65m or chain out.
- Good holding in light breeze.

Tinninertup main anchorage

60 31.191N 044 28.576W

- Used 70m or chain. Onshore breeze of 15knots, good holding.
- When the wind changed to offshore, the anchor dragged and continued to do so in increasing wind. Bailed out, bare poles for 15 miles in Force 8 wind before getting into Tasiussaq.

Tasiusaq

60 11.500N. 44 45.750W

- Anchored NW of the river (Sasoorartut Kyya) near mouth of a small stream, in mud and weed. The first really secure holding of the trip. Used 80 metres of chain in an easterly gale.

Sermeq Glacier pool

60 33.600N. 44 28.000W

- Suspect holding, presumably rock and a bit of silt. Anchored in 12 metres and put out 50 metres of chain. Only light breeze. A fabulous anchorage under the snout of the glacier with ice rumbling down the glacier and bits of ice floating past the boat.

Anchorage North-West of Nanortalik:

Kangeralua Bay, North Sermersoq

60. 21.296N. 045 14.556W

- 10 bergs strung across the entrance to the bay. Anchored on the windward side of grounded berg.
- Two days later the anchor dragged and a berg floated down towards the boat so abandoned the skipper's hill day!

Uunartoq

60 30N. 45. 20W - *viking hot tub*

- Anchored on East side of the isthmus in 7metres of water, 16 knots breeze, 50 metres of chain out.

Tunullit (Zakarias Havn)

60 29N 45 35W - after navigating Ikerasarsuk Passage.

- Anchored in 9metres in SE corner. 50 metres of chain out. Lots of weed and a good safe, beautifully remote anchorage, with good fishing.

Alluitsup Paa (Sydproven)

60 28N. 45 33W

- Jetty in the northern creek named Quarsorat by the fish processing plant.
- Nice settlement to explore with a small supermarket.
- Fuel is available from Southern harbour which has rocks near the entrance, looks shallow and too narrow to turn our boat in. It would be much safer to carry fuel containers to the fish processing plant.

Niaqornaq Bay on Sermersoq.

- Anchored on rock and dragged. To be avoided.

Anchorage between Nanortalik and Ikerasassuaq Weather Station (Hell's Corner):

Aappilattoq

60. 09N, 44. 17W

- Beautiful natural harbour with a 20 metre wide entrance at a cleft in the rock. A community of about 100 people, some of whom remembered us from 2019.
- Small supermarket and fuel available near the quay.
- Good fishing.

Hgdarssuit Havn

- Behind a sand bank offering a hint of protection from the West. Anchor dropped in 7metres, 70 metres of chain out. Hull then in 17 metres of water. Further in it gets very shallow, quickly.

- More ice than expected west of the narrows but surprisingly clear in the narrows of Prinz Christian Sud, themselves.

Puiatoq Bay

60 08N 043 36W

- Tried both sides of the bay in search of good holding. Rocky bottom only good for a lunch stop before exploring the snout of Kangerdluk Glacier.

Ikerasassuaq Weather Station

60 04N. 43 11W - referred to as Hell's Corner on the helepad!

- Famous for generously provisioning and hosting Bill Tilman's crew before returning to UK in 1970.
- The harbour wall has been extended since 2019. Arrived in fog taking great care with rocks. The leading marks are really good when visible.
- Ropes ashore to the North to hold the boat off the harbour wall.
- Improvised rifle range for weapon training before visiting the, allegedly, polar bear infested East Coast.

Anchorage on the 350 miles of uninhabited coast, south of Tasiilaq:

Kuugarmiut

60 26N. 43. 19W - Just south of the entrance to Lindenow Fjord.

- Anchorage of a life-time because of the approach and location.
- The approach via the south entrance, passing south of Dronning Louise O, and through the narrows, which appeared to be completely blocked by bergs. We threaded our way carefully through the bergs to the sound of tinkling ice. Ed was on the bows calling what lay behind each berg and around the corners.

- Clear water across the fjord to the north before entering the labyrinth of rocky passages (apparently blocked by a huge berg but leading, past several blind alleys, to the anchorage in 10 metres in front of the derelict huntsman's hut.
- A growler broke up with a loud crack just like a rifle shot, illustrating exactly why there is no point in firing warning shots near a polar bear. It's a natural and familiar sound.
- A new berg parked itself beside us during the night and other bergs were trying to block the North exit on our departure.

Qajartalik, Kangerdluluk Fjord

61 03N. 42. 44W

- The pilot suggests "The harbour can be congested with ice and unusable." It was, meaning an additional 20 miles to the next anchorage and a potentially hazardous late finish.

Qagssidlik, Avarqat Kangerdluat

61. 15N. 42. 47W

- We sailed past Captain Graah's "remarkable grotto" in daylight but approached the anchorage in darkness. There were plenty of bergs to navigate which were large enough to see. More challenging were the low lying growlers and drying rocks that were very hard to see by torch light which reflected off the evening mist.
- In addition, the GPS position, on the chart plotter, was sufficiently out to cause confusion. It was only when Ed cross referenced against the map on the hand-held Garmin InReach that we could clarify exactly where we were, in relation to the narrow entrance to the anchorage.
- The Pilot describes the entrance as having "drying rocks extending from the West entrance point. Depths are irregular, so care is needed." We had 7 metres on the way in and 4 metres on the way out next morning.
- We anchored in 10 metres of water on our third attempt at finding good holding. After an intense bit of teamwork, a round of Fireball was called for before turning in at midnight!

Outleq

61 32.613 N. 042 16.148 W - Site of an abandoned Loran station.



Photo 47: ***Outleq Anchorage, site of an abandoned Loran station.***

- There were a lot of growlers, brash and bergs as we approached from the south but only one substantial berg in the anchorage itself. 48 hours later 50% of the ice had gone.
- We anchored off the derelict boat house, with a good fresh-water stream. Anchored in 12 metres with 60 metres of chain out.
- Enjoyed a close encounter with a Minke that surfaced right beside the boat at 0300 and continuing to feed in the bay.
- Lots to explore ashore and across the island at the abandoned Loran station. Views across to the mainland and the icecap were spectacular.
- The anchor dragged on rock when the wind picked up and changed direction through 360.

Timmiarmiut on Uvtorsiutit Island

62. 32N. 42. 10W.



Photo 48: **Timmiarmiut on Uvtorsiutit Island**

- The pilot points out “This is the route taken by HW Tilman in 1965.... Best approached through a deep but narrow and tortuous channel.”

- A secure anchorage off an abandoned weather station. Polar bears have been sighted on the landing stage but not by us. We took the shot gun ashore.

Ilvertuaq

62 57.4N. 41 35.2W

- We anchored in 16 metres and it dragged in only 10 knots of breeze.
- Tried three times but only found a rocky bottom. Lovely anchorage with lots of bergs but poor holding. Not recommended.

Rans Sund

63 01.8N. 41 41.7W

- Anchored in a narrow creek at the NW end of Eberlins O. The East entrance was blocked by big bergs so we sailed around to the West entrance.
- The paper chart had the best information on the anchorage.
- After weaving between bergs we anchored in 7meters, with lines ashore both fore and aft to back up the anchor. We were in a confined space with rocks 15 meters astern so no room for error. Ed found belays on rock walls by jamming Friends into cracks.
- Growlers were drifting past our port side continually but once set up, we had a good secure anchorage.
- On departure we found a way between the bergs in the East entrance.

Vend-om channel to Sonder Skjoldungesund

63 08N. 41 27W

- The Danish translation is “Turn around channel” and for good reason. The route to it, east up Ikesdusarsuk, was intricate and atmospheric on an overcast day.
- We anchored early in a small bay at the entrance to the channel to wait for the tide to rise and to recede in the dinghy. The correct anchorage was 400 metres further on, but we might have run aground had we persisted on arrival.
- Approaching high-water we had 2 metres of clearance on entering the channel. Later on, by the moraine, the depth dropped to just 1 metre.

Skoldungen

63 13N. 41 24W.



Photo 49: Skoldungen Anchorage

- Hard to see the entrance on an overcast evening.
- The chart plotter was about 400 metres out which didn't help.
- Anchored in 5 metres but it dragged. Needed lines ashore from the bow and from the stern to a rocky island.
- An interesting, perhaps recently deserted, settlement to explore ashore. A sad and rusty mess that must have once been a thriving community.

Graahs Haven

63 22N. 41 08W.



Photo 50: **Graahs Haven**

- Where Captain Graah wintered in 1829 / 30.
- We dragged anchor in the recommended second inlet having found only a token gesture of mud, before anchoring in the first inlet with lines ashore fore and aft. A good place to sit out two days of bad weather.

| Tasiilaq



Photo 51: Tasiilaq Harbour

Tasiilaq harbour

- Can be a wind tunnel.
- The harbour wall, (where Bill Tilman's boat, Baroque, dried out, fell over and filled on a rising tide in 1976), has three large pads, 8 metres apart. They are ideal fenders for ships but a complication for small yachts. The harbour is also busy with shipping, so yachts need to vacate at short notice, as we discovered mid oil change!
- The alternative anchorage is just north of the harbour buildings but the holding is poor. Because of this, visiting Tasiilaq at the end of a long passage isn't a relaxing experience. For a secure anchorage and good nights sleep you need to go 10 miles to Kulusuk Village bay.
- A small supermarket is close to Tasiilaq harbour. Fuel is a 500 metre carry away. A significantly larger supermarket is a 15 minute walk away and located near an excellent, Stark, hardware shop. The laundry and public showers are 5 minutes walk from the harbour. The main nerve centre of tourist activity, with wifi, is The Red House mentioned earlier.

Kulusuk Village Bay

65 34.621N. 037 10.695W

- There is a jetty with only 1 metre of water at LW. Tethered to it are lots of small fishing boats and dead seals, waiting to be fed to the dogs who are tethered to the headland for their summer holiday. The bay has excellent mud for anchoring in about 8 metres. It is only a short row to the jetty which is close to the supermarket and a water tap. There is a small medical-centre, and the nurse is really good at treating canoeists with dislocated shoulder problems!
- The coaster sometimes anchors in the bay and the sound of her generator, at night, is the only thing to spoil a perfect anchorage. On 9th August there were several bergs in the bay. The previous week it had apparently been quite congested.
- Kulusuk hotel, serving good meals, is 20 minute walk from the village. The manager, Jacob is a friendly and helpful local Dane. The airport is a 30 minute walk from the village.
- Kulusuk airport jetty is only a 10 minute walk from the airport but dries out. The approach is shallow and littered with rocks.

Tasiilaq Head

66 03.230N. 037 02.403W

- Anchored nervously in 25 metres, just after high water and off the North East shore where it becomes shallow very suddenly. With 90 metres of chain out I was concerned about swinging over the shallows.
- Good holding in mud.
- Needed the outboard to repeatedly ferry kit the long distance to shore.

Marie Havn

65 51N. 37 07W

- Took three attempts to get the anchor to hold with 60 metres of chain out.
- The ideal anchorage, further in, had a permanent fishing net on floats to remain clear of.
- Good fishing from the boat.

Kuumiit

65 51N 37 00W

- A lovely little settlement. The jetty at the settlement is very shallow with rocks everywhere.
- The fish factory jetty has 4 metres of water but there's a risk of blocking fishing boats.
- A well-stocked supermarket.

Landlocked bowl 1 mile E of Qerqikajik

- Beautiful spot with a narrow and shallow entrance. We had 3 metres on the way in and only 1.2 metres on the way out after lunch. We might have taken the pilot advice "Keep close to the vertical rock," too literally!

| REGULATIONS FOR PERMITTED AREAS

The areas where no access permits are required, are clearly marked on page 130 of Andrew Wilkes' Arctic and Northern Waters Pilot. All the areas we climbed in did not require access permits.

Permits are required for the remote East Coast that we sailed along. We visited 10 anchorages along this coastline to avoid the risks of sailing amongst bergs in the dark and went ashore to replenish our drinking water. Greenland government guidelines advises that people are permitted to land along the East Coast, without a permit, for a maximum of 24 hours at any one place. Check prior to planning a trip as this seemed not common knowledge among sailors we met and due to high rescue costs government policy could be subject to change.

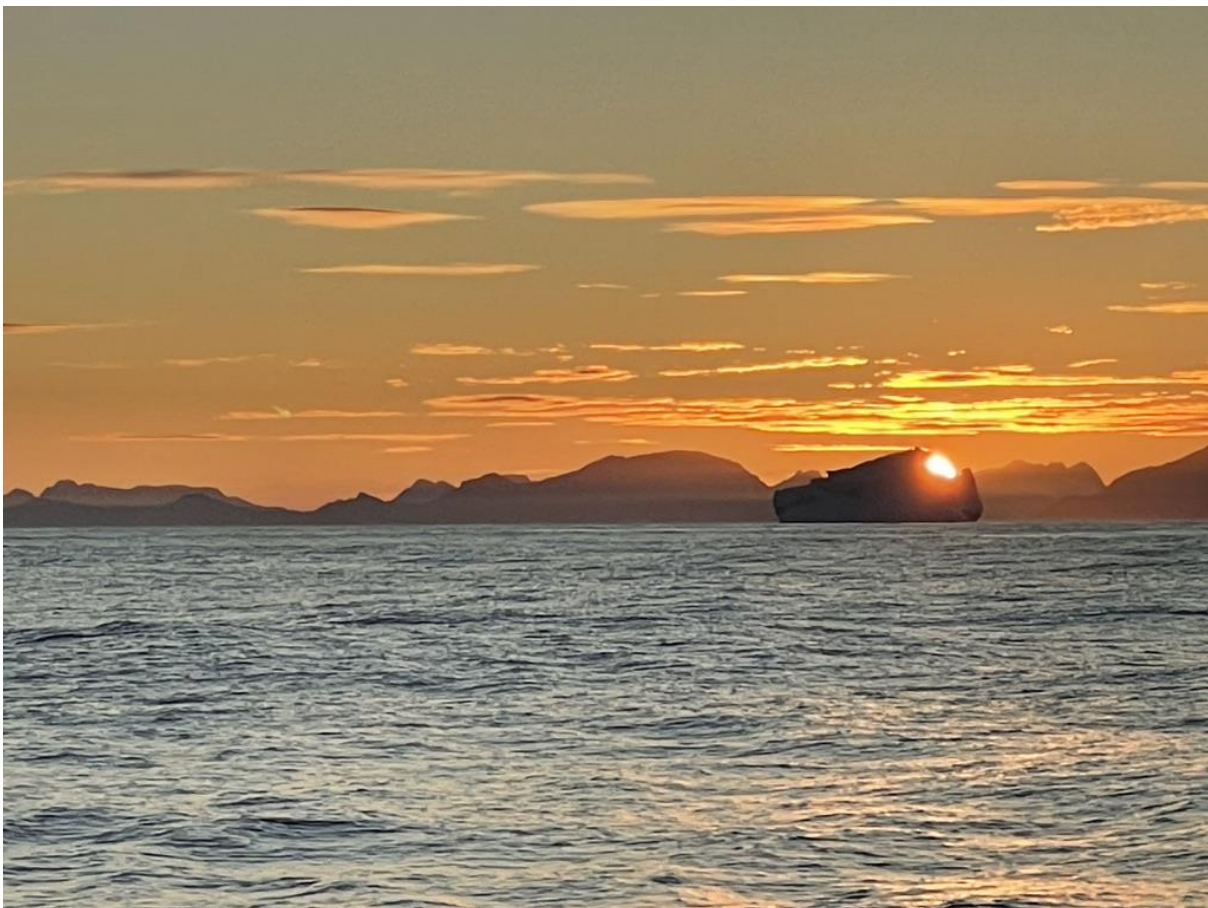


Photo 52: **Sunset on the departing journey from Greenland – Iceland.**

| ICE

There were bergs all the way with huge ones out to sea. The greatest concentrations of ice were off headlands where collections of big bergs calving, producing growlers and further down-wind, brash. Our greatest perceived danger was from growlers, some of which were only just visible above the water line. Hitting a growler could be like running into a small stationary car. Most of the time the helm could see far enough ahead, but in high density areas the helm watched the port side with a second person watching ahead and to starboard. Very occasionally we got ourselves encircled with brash which we then pushed through slowly and with the engine in neutral to avoid damaging the propeller.

We never encountered sea ice because from Graah's Havn we headed east, out to sea, and then north to Tasiilaq, avoiding the most probable area where sea ice was forecast. Once 20 miles off-shore there were no sightings of bergs and on one occasion we sailed through the night. Whilst close inshore we always aimed to be at anchor in daylight.

We arrived in Tasiilaq on 9th August and there were still a lot of bergs around. (Two weeks earlier a friend who skippers a 72', steel, Clipper yacht, was unable to reach Tasiilaq due to sea ice) Sailing north up the fjord to Fox Jaw there were bergs and growlers most of the way and we had to take great care in the thick fog which became a regular feature in the mornings. By 23rd August, when collecting Ed and Sasha from Fox Jaw, there were very few bergs in the fjord.

Conclusion of conditions:

The delay in SW Greenland, waiting for electrical parts to arrive from UK, whilst frustrating at the time, meant that the ice cleared a few days ahead of us in Prinz Christian Sund, (28th July) and had cleared by the time we reached Tasiilaq (9th August).

FINANCE

| FUNDING & SUPPORT

We are extremely grateful for all the support that we received to make this trip possible. We were lucky enough to receive support from The Gino Watkins Memorial Trust, Mount Everest Foundation & The Alison Chadwick Award and the BMC & Julie Tulis Award. We were also kindly supported by Nairns foods that provided oats, bars and oatcakes for our trip.



| COSTS

	Description	In	Out	Balance
Income	Gino Watkins Memorial Fund	£5,000		£5,000
	Mount Everest Foundation & The Alison Chadwick Award	£4750		£9,750
	BMC & The Julie Tulis Award	£800		£10,550
Costs				
Fuel	Diesel		£3,500	£7,050
Gas	(On boat)		£160	£6,890
Gas	Camping		£85	£6,805
Meths	Priming Refleks		£50	£6,755
Immersion Suite	1 x extra needed for boat		£600	£6,155
Insurance	2 x French Alpine Club - World Cover		£320	£5,835
Yacht Insurance	Insurance for sailing		£1,350	£4,485
Garmin InReach	Messaging Tariff		£180	£4,305
Iridium Phone	Tariff		£500	£3,805
MailaSail	Email service		£200	£3,605
Shotgun Hire	Two separate hires and ammunition (and postal return costs)		£475	£3,130
Flares	Hand and Rocket		£160	£2,970
Nautical Charts	Numerous		£250	£2,720
Maps	S & E Greenland		£60	£2,660
Greenland & Iceland Pilot	Sailing Guide		£42	£2,618
Food Stores	UK - Bulk		£1,950	£668
	Dehydrated foods		£980	-£312
	Nanortalik re-supplies total		£657	-£969
	Tasiilaq re-supplies		£887	-£1,856
	Iceland Resupplies		£240	-£2,096
Equipment	Ropes		£276	-£2,372
	Tat		£40	-£2,412
	Pegs		£90	-£2,502
	Showa Boat gloves x 3		£97	-£2,599
Personal Contributions	Sasha and Ed made personal contributions of £1,300 each	£2,600		0

