

FIELD TRIP REPORT
WESTERN COASTAL JOURNEY
1954 ANARE COPY

DOVERS WESTERN COASTAL JOURNEY.

See:- Preliminary chart King Edward VIII Gulf. Records N^o 51/15
1:250000 Scale.

Hansen charts. N^o 4 Records N^{os}
56/4 (40)
5 56/5 (40-41)
6 56/6 (41)

ANTARCTIC MAPPING BRANCH
DIVISION OF NATIONAL MAPPING
497 COLLINS STREET,
MELBOURNE, VIC.

WESTERN COASTAL JOURNEY.

DAILY JOURNAL.

12TH OCTOBER 1954, Tuesday.

Weather:- Overcast cirro stratus clearing in afternoon, light variable winds. Fine at 2000 hrs. T -15.4 B 2891.

Most of the morning was spent packing and we had lunch at Mawson before leaving. We had weasel escort for the first two miles. The dogs gave little trouble but are not in good form. They answer commands badly.

We left base at 1400 hrs and arrived at Inneskjera at 1715 hrs where we made camp ~~on one~~ of the group on the eastern side. Only point of interest was an Adelie penguin rookery on the eastern side of the island, sheltered from prevailing winds as at the other Inneskjera rookeries guano deposits were very thick. We saw three seals on route midway between Flatoya and Inneskjera. Surface was fair light new drift on old sastrugi. Radio reception good from base but did not hear us, antenna 180 degrees from camp. (Reception for 30 minutes). Schwartz has small blister on toe. Dog's bloody annoying tonight squabbling continuously.

13TH OCTOBER 1954, Wednesday.

Weather:- Wind 8-10 kts SSE Overcast AsAc T -13C B28.865 (0800) 2200hrs B28.87 T -14.6C. Trace snowfall in afternoon Overcast lifted a little then Sc & Ac from plateau.

Stayed in camp at Inneskjera until the 1200 sked. Contact was made with base then. As the weather at least stable we decided to push on to Bryggeholman more in hope of getting seal for the dogs then to make distance. We left Inneskjera at 1430hrs and arrived Bryggeholman 1630hrs.

Three seals were seen towards the coast on route and there were five about Bryggeholmane. We killed one for the dogs. Six Emperors were installed at Bryggeholmane and by their droppings had been there for some time. One was killed for food. One giant petrel was seen on route. We made camp on the small island close to Bryggeholmane on the eastern side. It was hard to get the dogs up - on cursory examination it would be very difficult to put a weasel on land here.

14TH OCTOBER 1954, Thursday.

Weather :- B28.765 Falling T - 16.4C (0800) Overcast Ci Cs
Wind 15-20 Kts SE Fine.

Carried out survey observations at Byggeholmane and collected geological samples. Missed the 1200 sked with base. Left B'Hlme at 1415 carrying two days seal meat for dogs. Arrived Tonskjera 1645 hrs. Eleven seals at Tonskjera and four seen on route. Decided to camp there and go on tomorrow. Six emperors to north of island. Ice surface good for dogs but perhaps dangerous for weasels. Collected geological specimens. Garnet rich quartzite now a change of country rock. I deputed the sledgeometers at Bryggeholmane - the counters on both are out of action.

15TH OCTOBER 1954, Friday.

Weather:- Wind 35 Kts Morning to 75 Kts evening, Overcast AcAs
Drift in afternoon. 0800 - 28.41 T -16C. 2200 - B28.16 T -17C.

Decided this morning at 0630 in face of steadily falling barometer and drift to North and west not to move on. Apart from attending to the dogs (fed our last seal meat today) and a visit to a nearby iceberg for fresh water we have remained in the tent all day. It was noticeable that the emperor penguins took to the water early this morning before the weather became really bad. Only one seal remained on the surface. It is the first time I have lived in one of our pattern high entrance tents in high wind and so far it seems satisfactory. We tried the wireless at noon but heard nothing. It was quite dead.

16TH OCTOBER 1954, Saturday.

Weather:- Whole gale all day. Wind 70 to 100 kts SSE Little drift B28.04 rising at 0800 hrs Temp not taken blizzard on plateau. Drift in most directions.

We had an alert when the wind rose during the night and we nearly lost the tent. There was insufficient snow on the valances at 0200 hrs I went out and put on more snow. This jaunt cost me a blizzard mask and tropical sock blown off and away. We then settled down for the rest of the day in the tent. The tent flapped very badly but held ok. The side ropes all parted during the day. The antenna was carried away in the wind so we were unable to make radio contact. Three dogs got loose and went touring together but returned in the evening. Rations were proving satisfactory. Dogs were fed a block of type C pemmican tonight.

17TH OCTOBER 1954, Sunday.

Weather :- 0800 hrs B28.26 stationary T -6.9C Overcast AcAs Wind 30-40 kts Fine Drift in east and west on plateau.

We killed a seal this morning and dragged it to the camp with the dogs. We found that the three loose dogs killed and partly ate a new born seal pup last night. Fed the dogs on seal meat and cut up the remainder of the seal for travel onwards. There was a giant petrel and a skua at the seal carcass. Two emperors are established in the lee of the island. No radio contact was made at 1200 hrs. It is rather a pity we fed the dogs heavily today as conditions have improved enough for travel. The seal killed was apparently the mother of the one the dogs killed. Visited Longtsngen for geology. There is a small Adelie rookery at the south end of the peninsular. The rock is mainly a garnet gneiss (up to 50% garnet) with well mineralised quartz veins. Main minerals appear to be garnet and biotite. Little felspar. Dogs broke loose three times in night. Received Mawson.

18TH OCTOBER 1954, Monday. At Stedet

Weather:- 0800 - B28.55 T -8.3C Overcast AcAs Fine Vis 25 Miles
Wind light and variable.

Ice conditions. Mostly blue ice all day with drifts of soft sastrugi. Numerous large leads crossed. Dangerous for weasels. Got under way a little late both working late due to troubles with dogs late at night. Left tonsjera and headed direct for Cape Bruce arriving there at 1400 hrs. Georges had trouble with his dogs and had his sledge rolled over twice in hummocks breaking one of our two precious thermos. I went onto land at Cape Bruce

and looked for Mawson's cairn without success. Collected rock specimens for Stinear. We then pushed on to Stedet at the bottom of the bay east of Uslikker Breen. Our reason for going into the bay was we thought emperor penguins may have a rookery there. However it proved a very dead place, a few seals at holes in leads. Only one minute Adelie rookery and a few scattered snow petrels nests. No sign of any other life.

Camped the night on land at Stedet. From Cape Bruce to Stedet was wicked travelling on glassy blue ice on which the dogs were continually falling. Under today's conditions a man could not keep on his feet. There were scattered drifts of wet salty snow over this ice in which the sledges bogged and the dogs were unable to pull on the glassy ice ahead of the sledge.

We were, dogs and men, done in by the time we reached Stedet where we found a fair camp the arms of a flooded valley.

We made wireless contact tonight with Mawson. We received them strength four and they gave us strength one, but received our position.

Two female Weddells had day old pups at tonsjera. Saw about a score of seals in the days march

Change of geology at Cape Bruce and again in new rocks at Stedet
Have not yet collected about Stedet.

19TH OCTOBER 1954, Tuesday At Ufsoy.

Weather:- B28.94 Rising T -9C Wind @ $\frac{5}{8}$ ac & CiCu Clearing
Visibility 25 miles.

Left Stedet at 10 am and headed north to turn the glacier tongue of Ustikker Breen. A very difficult surface to the end of the glacier. There were drifts and Hummocks with small areas of blue ice between them. The sledges would jam in the hummocks with the dogs on the blue ice unable to pull. At the glacier tongue I swevered to avoid an open lead and signalled Georges the danger. However he missed my signal and on looking back I saw Georges and his dogs on the surface and his sledge out of sight. His dogs had pulled him into the lead where his sledge had broken through. We managed to pull the sledge out and head on to UFSOY. Surface over the last three miles was good but the sky clouded and visibility became trying. I capsised my sledge once in sastrugi which I did not see. Our last thermos was miraculously preserved. Camped at Tistelen where we killed a seal for the dogs.

Saw about six emperors between glacier tongue and UFSOY. There were three weddells with pups at the glacier tongue and in all I saw about 12 weddells in the days march. One giant petrel and one skua seen. Radio contact established with base and all traffic passed

20TH OCTOBER 1954, Wednesday.

Weather:- B28.81 T -12C 4/8 CiCs Fine Vis 50 miles.

Spent the day exploring the local area and collecting geological specimens. To do this we left the camp in position and with six dogs and an empty sledge and sleeping bags we made a trip, of nine miles round the bay. The chart is fairly reliable except for minor points. The terrain is too complex to work this trip as to survey it would take a week. I intend to do an astro fix tonight but as usual the sky remained clouded. We were back at the tent at 5 pm. There is no life in this area. We saw two skuas

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a few and wings of snow petrels but nothing else - No adelic rookeries. There was about six weddels seen all day. There are many points where a weasel could be put on land. The southern and western sides of UFSOY several small islands to the west of UFSOY and at numerous points on the rock coast. So far since leaving camp we have seen no lichens or mosses. Reception from Mawson but they got us strength one and could not read our signals. Geologically the area is complex and UFSOY is a monolith of gneiss with large phenocrysts, to the west this gives away to a granite gneiss and there is a large belt of marble at Bergness. The plateau rises fairly swiftly from the coast but there are several places of access. In general there is little blue ice on the plateau approaches. The sea ice has an average of 50 cms of snow lying varying from drifts several yards thick to bare ice. The fjord behind Bergness enters very deeply into land and the southern half is non tidal and is possibly a lake. The dogs are now improving fast. With constant work and seal meat every day their condition improves daily. The nine mile run today was just a pleasant outing for them. I do not feel I can spend another day in this area and will have to push on and trust to getting an astro fix on our way back. It seems very cold tonight in the tent but the thermometer is only registering - 13C.

21ST OCTOBER 1954, Thursday Emperors Found.

Weather :- B2867 T -14.5 Wind 10 - 15 kts SSE $\frac{7}{8}$ AcAs Clear in East Fine Vis 25 miles.

Before leaving Tistelen we deposed our geological specimens and I read a few angles with the theodolite and took a complete round of photographs. I also observed the Magnetic declination with the compass and a sun observation.

We cleared camp at 1150 hrs and were obliged to head due north to clear a field of bergs grounded among the islands - probably broken off the end of the tongue of Brehalsen. At noon we encountered numerous Emperor penguins all heading SW so we turned and followed them for three miles and discovered their rookery tucked in where East of the rock contacts the E face of Bretangen glacier. We first counted the dead chicks then the abandoned eggs, finally the living chicks. Dead chicks 103, Abandoned eggs 20 living chicks 2200. These figures should be very accurate since they were carefully counted and not estimated. This puts the rookery strength about 5000. I also took photographs with the photo theodolite camera. The rookery is situated on land in a hollow which forms a lake. The actual rookery site is on ice and snow. It is the most perfectly sheltered spot we have encountered even today (wind abt 25 - 30 kts) there was not a breath of wind. Collected about ten eggs and got under way. We would have liked to have camped the night with the emperors but as our next leg is 15 miles of exposed coast we preferred to push on to UKSOY to cut down the run as much as possible.

Arrived UKSOY at 1905 hrs and made camp on a small island to the SW. Dogs are now running very well my trained team always leading, I have very little trouble but Georges was furious with his undisciplined crew tonight. Dogs were fed seal meat and we still have one feed of the last seal in hand. So far everything is going to plan our short daily runs are forced on us by the distance

between safe camps.

We only just heard base very faintly tonight and due to interference could not read their signals. I broadcast our messages but it is almost certain they were not received.

We saw numerous seals today and two adelic penguins.

The Emperors seem to be well established and healthy colony. Their line of departure from the rookery takes them direct to water sky to north north east. Remarkable was the low chick mortality and so few abandoned eggs. Our ~~XXXX~~ count of dead chicks would be precise as it was quite easy to distinguish dead chicks of this year from those of previous years. The abandoned eggs were all concentrated in one small locality and nowhere else were any abandoned eggs found. It is possible that a sudden fall of ice from the glacier frightened a group here. Chicks are at the same stage of maturity as those at point Geologie in late October. There were about a dozen old carcasses of full grown or immatures birds about the rookery site. Two skuas were in attendance at the rookery.

22ND OCTOBER 1954, Friday.

Weather:- B 28.57 T - 11.4C Wind 30 - 3 ESE 8/8 cloud AsAc & Sc. Drift on all sides in morning clearing in afternoon. Water sky to north~~z~~.

Decided not to travel this morning as we have a long stretch between us and the next land and the weather is doubtful.

I took advantage of the enforced stay to do an astro fix from the sun for this camp. It puts the island NW of its recorded position.

We fed the dogs the last of the seal meat carried.

We made radio contact with Mawson on the 1200 Listening sked and informed them that we had located the emperor penguin rookery. They got us 1/2 but finally received all our message.

Rations are working out very well except for sugar which does not quite see the distance with Schwartz and I. In excess we have pemmican because we have been eating seal and penguin in lieu. Cocoa is in excess of our needs.

The thing I regret most is that all sledge ropes are not made of Nylon. Using anything else is a very short sighted policy - even on the expense side nylon ropes would work out cheaper in the long run. As it is we are continually snapping our sledge box ropes and having unnecessary delays.

The sledges are excellent. Tent in use is my pattern high entrance tent which is proving a highly satisfactory tent.

23RD OCTOBER 1954, Saturday.

Weather:- B 28.76 T - 10.5C Wind 5 - 8 kts ESE $\frac{7}{8}$ Sc to northeast Fine. Vis 25 miles Watersky to north.

Ice Conditions. Fair travelling surface between UKSOY and Stockholm - a bad stretch of blue ice at the glacier tongue. Very old ice floes about Stockholm.

Got away at ten am for the trip ~~XXXXXXXX~~ onward. Depoted geological specimens and emperor eggs at UKSOY. Going out from UKSOY to the west end of the glacier tongue was heavy but the rest of the way the travelling surface was mostly good. At mid distance ran into several solitary emperors and a group of five weddel seals and two emperors. Georges lost his whip today and though he ran back on his tracks he failed to find it.

UKSEN itself is no good as weasel harbour but there is a small

reef NE which would be OK.

We arrived at Stokholmane at 1700 hrs . Very heavy drift lying in the area and the ice seems several years old. Many grounded bergs. Very little life about the local islands. Whilst Georges was putting up the tent I took an empty sledge for about two miles before I found a seal which I killed and ferried back to camp.

Radio conditions were very good. Base got us strength three and we were able to pass all we wanted to.

Dogs are now beginning to run very good we shall be able to lengthen our daily runs a little each day in future.

Have decided to cut William Scoresby and Steffanson bays and head west and investigate on the return trip.

24TH OCTOBER 1954, Sunday.

Weather 0800 B28.67 steady T -12C Wind 30 kts ESE 8/8 AcAs

Vis 2 mile Light Snowfall.

Weather seemed Ok in morning - a bit doubtful though - and we had the tent packed up ready to pull down when the first snow fall hit us and visibility down to a few hundred yards. As a result we were obliged to stay put for the day. We wandered over the local island collecting geological specimens and George built a cairn in what I considered the most inconspicuous spot possible. Most of the day however we were in the tent and by evening it was drifting solidly and we were very glad we had not pushed on. No sign of life hereabouts. The one seal killed seems to be the sole inhabitant - no sign of adelic rookeries or anything else. As elsewhere no moss or lichens. George found one small dead Wilson petrel - perhaps they live hereabouts

25TH OCTOBER 1954, Monday.

Weather:- 0800 B28.79 Steady. T -11C Wind 10 kts SSE 8/8 AsAc Fine Visibility 25 miles.

Ice Conditions. Seems to be very old ice hereabouts few leads and very deep drifts up to 20 feet thick. Surface medium sastrugi with patches of new snow lying.

Did not look very promising early this morning but by time we got breakfast and packed up the tent the weather had improved out of sight. We were a little late getting underway - 11-15 am Headed direct for the north end of Foldaya, calling at Cape Wilkins where specimens were collected, no sign of any cairn left by Ellsworth & Wilkins. Whilst we were on the rocks Georges team all fell on one dog (Spot) and mauled him severely.

Left Cape Wilkins, crossed Steffanson Bay and arrived at Meskjera at 1745 hours. On the whole trip the only sign of life was one lone emperor penguin sheltering in the lee of a berg. However at Meskjera we found a rookery of six female Weddells each with few days old pup. Apart from this no life was seen. To add to our nightly worries Alison (bitch of my team) has come on heat quite out of her time and there is a continuous howling and squabbling going on outside. I am fairly pleased with our progress, we have not yet began to push the dogs as our stages each day are controlled by a safe camp each night. If pressed I am confident I can get 30 miles run out of them.

The main trouble with a two man team with sixteen dogs is the large amount of work to be done each day. We start at 6/30 am and it is

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well after nine before we finish. On the advantageous side is that our actual travel is ~~sure~~ sure and swift between points and the easiest part of the day is the actual travelling.

26TH OCTOBER 1954, Tuesday.

Weather:- B28.84 T -9.3C Wind 5 -10 SSE $\frac{7}{8}$ Ac with Cs Fine
Vis 25 Miles.

Ice Conditions. Average 1 metre snow lying with medium sastrugi with soft fresh snow in hollows (All leads completely hidden). Patches of blue ice on lee sides of big bergs big drifts to windward. Left Meskjera at 1030 and headed NW about $1\frac{1}{2}$ miles off coast. My dogs ran most of the first five miles but Georges made heavy weather of it and dropped about two miles behind. Turned inside Langsundet visiting Sundvika for geology where we also found black lichens and a green moss growing on the north aspect of the rocks watered by sun melted snow. Then visited the most southerly tip of Broka for same purpose. This done we headed on to Mule where we made camp for the night.

Saw two emperor penguins as sole life in the days run except for that at Mule there were three weddel seals - a desolate stretch of old snow covered ice. A peculiar phenoma hereabouts are large barrier or old floe bergs with only ~~one~~ about 30 feet out of the water. I wonder where they come from.

Radio contact was fair and we passed traffic to Mawson.

I did an observation for astrofix at 2000 hrs GMT 26th - an unpleasant and painful task with plateau drift blowing.

27TH OCTOBER 1954, Wednesday.

Weather:- B28.84 T -9.3C Wind 5-10 kts variable 0/8 cloud
trace cirrus in east Vis 25 Miles.

Ice Conditions. Deep snow lying in old sastrugi over a metre thick. Sastrugi hard with patches of fresh soft snow. Numerous leads all hidden by soft snow.

Spent most of morning geologising around Mule. Large quartz intiusion which was of interest. Large lode of blackish material near camp. Usual metamorphised rocks. A little black lichen no moss.

The fjord to west of Shotviktangen is almost a bergshrund between the glaciertongue and the rocks. It is quite impossible to cross the glacier tongue near Mule.

Got under way about midday and headed the glacier, then turned west. Surface not bad but sastrugi hard for the dogs. I had a number of troubles with my bitch on heat and ended up doing the only thing possible by letting her run loose ahead and directing her ~~also~~ so that the dogs followed - we really began to travel when this was done.

By 4 pm we were off Langoy, we had only seen one seal near the glacier tongue so we decided to make camp if we could find a seal. Alison was playing round my feet when we decided this. We had only made $\frac{1}{2}$ a mile more when she suddenly ignored my commands and headed south. I expected she had sensed a seal and sure enough at $\frac{1}{2}$ mile a seal hove into view. We killed it immediately and made camp on a small island nearby.

Today has been another lifeless stretch. Two seals seen for the whole day. Noticeable is the total absence of Adelie Penguins rookeries since UFSOY where we saw our last..

28TH OCTOBER 1954, Thursday.

Weather:- B28.78 T -10.3C Wind 0 at 0800 5 - 10 W during day Fine Cs forming Vis 40 miles.

Ice Conditions. Heavy going today over medium sastrugi. About 4 feet average snow thickness bare on lee sides of icebergs islands etc. Leads open and hidden by snow cover.

We left camp at 11 am and were further delayed by having to unpack sledges at the seal killed last night to load seal meat for onward.

Surface was heavy with medium sastrugi at the west side of Karm sund we encountered shelf ice which continued almost until Kvarsness. We were obliged to head north to avoid pressure and crevasses and we arrived at Kvarsness at 1700 hrs. At the edge of the shelf ice at Karm Sund there was a rookery of six female Weddel seals with pups and again at Kvarsness we found at the junction of shelf and sea ice a rookery of four female weddel seals with pups and one male. We killed the male for dog food. Two skuas added complete wild life of the area.

We are now in King Edward Gulf and from Kvarsness we can see the Gulf dropping disappearing SW. It is filled with shelf ice not sea ice and I anticipate barrier conditions from now on.

Had a fright today on the shelf ice, I passed over an eight foot wide crevasse signalled the same to Schwartz and then went on. Saw him very near the crevasse then a crest intervened - went on about a mile and looking back saw no Schwartz or team. I turned and started back but had only done about four hundred yards when he hove into sight. We will have to change our travelling technique in the sound. Up to date I get as much as two miles ahead of him on the sea ice during the day. Dogs seem a bit done up and so are we so intend taking a rest tomorrow before heading on. In hand 42 days rations for us and 14 days dog pemmican plus five days seal meat. We will erect the spare tent here and depot all excess material to lighten sledges onward. I am giving us a total of 14 days in the Sound - I cannot afford any more. Must keep reserves against our return.

We camped in the SE corner of Kvarsness in a long drifted valley between two rock spurs.

Radio contact not made today. Only just received base whr and time signal.

29TH OCTOBER 1954, Friday.

Weather:- B28.77 T -8C $\frac{3}{8}$ Cs Calm fine.

I made observations for astro fix between 0130 and 0300 29th Astro fix result camp position Lat 67 01 06" Long 57 10 48".

We slept in this morning till 1030 having been up until 0330 hrs. We then made excellent contact with base and passed all our traffic and received a telegram from Antarctic. We interrupted the sked to make a noon observation on the sun.

In the afternoon we walked over the rocks of Kvarsness. Nothing of great interest geologically, the usual metamorphic rocks similar to those between here and Mule. One feature is a number of small fresh water lakes or tarns at present all frozen through at the edge of one we found water. I could not see any sign of life in this water not even algae.

From the highest point we have good visibility across King Edward Gulf. My impression from here is that Langfjorden does not go very far inland - possible 40 - 50 miles. The blank area to the north on the Norwegian chart is a second great fjord running north west towards Magnet bay for about 30 - 40 miles.

We decided to explore first the main arm then if time permits the second. Collected geological samples for Stinear.

30TH OCTOBER 1954, saturday.

Weather:- B28.76 T -13C Wind 10-15 kts SSE $\frac{1}{8}$ Sc In east Fine
Visibility 40 miles.

Remained in the Kvarsness area allday. In the morning we took an observation for azimuth at the tent lest we lose the sun during the day. We then erected the depot tent and stowed our excess material and rations inside.

We then transferred the Astrofix by short base method to the high point of Kvarsness. This done we occupied this point as a survey station and read angles to all important points, this, a round of photographs and a sun azimuth completed the work.

We erected a cairn at Kvarsness trig. Here in the name of Queen Elizabeth we reaffirmed Australias claim to all of Kemp land to which we have traversed ie from long 57E to long 63E.

This done we returned to the camp and brought seal meat up to the camp with the dogs.

Radio contact was not made though we had good reception of base.

31ST OCTOBER 1954, ~~Saturday~~. Sunday.

Mounted barrier at 1730 hrs. Placed bamboo marker.

Magnetic bearings:- Tvillingane 22 degrees. Austnesjera 95 degs.

Tretoppen 11 degs. Vestrakhen 147 $\frac{1}{2}$ degs. Brathadden 325 $\frac{1}{2}$ degs.

Utvikgatten 65 $\frac{1}{2}$ degs. Course on 236 degs 1 $\frac{1}{2}$ hrs travel. Camped.

Met obs 2000 hrs B28.61 T -24.2C Clear sky Wind 8 - 10 kts 230

Fine visibility 40 miles.

We made a late start from Kvarsness at 1100 hrs and headed NNE to avoid pressure at the barriers edge. First event today happened when I was following the barrier edge looking for a way up and I found Schwartz's sledge had disappeared. I waited about half and hour and then began to worry. Staying on my sledge I saw a moving black dot to the NE heading for Austnesjera - I couldnt believe it was him but after a further half hour decided it must be and set off in chase. I finally overtook him only a few miles short of Klappen. He had taken Austnesjera to be the right hand rocks of langfjorden and was quite happy and convinced he would soon overtake me.

We then mounted the barrier towards Tillingane and here I dropped one of my dogs down a crevasse. He swung very nicely in his harness and apart from a rather dazed expression suffered no ill effects. None of these dogs have the least conception of a crevasse. We then headed on 240 degrees into the Langfjorden stopping and making camp at 1900 hrs. It was very cold (-24C) with a head wind all afternoon. Even the sun didnt help much.

1ST NOVEMBER 1954, Monday.

Camp 1B. Lat 66 57 57 Long 56 41 00.

Weather 0800 hrs B28.72 T -17C Clear sky at times obscured by drift. Surface drift. Wind 35-40 kts 230 degs Vis 2 mile to 10

miles (variable). 2000 hrs B28.99 rising T -12.7C 2/8 Cc $\frac{1}{8}$ Ac

2/8 Sc from SW wind 8 kts from South. Fine at obs but drift and

wind all day. The drift though only surface was quite thick and with a head wind we would have difficulty in maintaining the dogs on course - even the best of them veer away from a head wind.

Besides I needed an astro fix here. I took morning and afternoon Longitudes and a noon latitude. I observed an azimuth and also an

approximate magnetic declination (55 deg W). The astrofix and a series of magnetic bearings taken where we climbed onto the barrier agree well and give us a course and distance made good. Position

Lat 66 57 57 Long 56 41 00. Tent is getting a bit iced up due to drift in full sunshine. Excellent reception of base radio

transmission. Total reception to date 12 $\frac{1}{2}$ hrs on receiver.

2ND NOVEMBER 1954, Tuesday.

Weather:- 0800 hrs at camp 1B B29.27 Rising T -10.5C 8/8 Sc

and Ns. Vis limited in S by low cloud to five miles 20 miles in

N. Slight snowfall during night. Wind light and variable. Fine.

2000 hrs. at camp 2B. B29.01 falling T -8.4C 8/8 Ac Vis 20 miles

Wind 5 kts S Fine Strong SSW breeze till evening.

Made observations for magnetic declination and general mapping and built a cairn at camp 1 consisting of a bamboo with dural flag

JW/10

flag attached. Left at 1200 hrs and headed direct for Kjuringen all day barrier uninteresting and undulating just a series of slow descents and then chases after crests that never seem to arrive. Saw only one small crevasse enroute which dogs broke open without falling through. Made camp at 1730 hrs (4½ hrs uninterrupted march or little over 25 miles). Visibility was very trying with the clouded sky and we only saw the sun for an instant this morning. From Kvarsness we ascertained that the gulf does not extend very far westward and from today's march it appears its eastern extension is limited - however until we have better visibility it is difficult to be certain. It was cold as charity driving into a head wind today and for the first time since leaving Mawson my feet began to freeze.

Approximate position camp 2 67 12.1 56 14.7 (True not chart work)

3RD NOVEMBER 1954, Wednesday

Weather ;)- 0800 hrs at camp 2B. B28.78 falling T -7.4C 8/8 Sc & Ns. Snowfall Vis 50 yards. Wind light and variable near calm.

Lousy day snowed all night.

2000 hrs., at camp 2B B28.65 unsteady T -14.3 ½ CiCs in Se & SW. Fine. Vis 40 miles. Wind 15 kts 230 degs. Drift on plateau.

Woke this morning to find it snowing steadily with a thick cloud cover of Strato Cu. We resigned ourselves to an unproductive day in the tent. The first bright thing was when the sun broke through about 10 am and a little later I was able to make an observation for longitude. At noon for latitude and by evening it was quite clear. I made a foot reconnaissance southward and saw the end of the gulf. It only extends ten miles or so SE and about the same West. I have a good fix at this camp and angles and a surround of photographs so with a little luck tomorrow we may manage to finish our work in this end of the gulf and return to the sea ice. Neither of us have a very high opinion of this neck of the woods. A time signal at midday from base was very welcome. Good radio reception from Mawson tonight.

4TH NOVEMBER 1954, Thursday.

Weather:- 0800. B28.61 Steady. T -18.1C 0/8 cloud trace ci . Wind 8 kts 230 degs. Fine. Vis 40 miles. Course 206 degs true 264 20 Magnetic.

2000 hrs . ½ Ac in north ½ Sc southwest ½ Cs. Fine. Wind 5 - 10 kts 230 degs. Vis 40 miles. At 2130 (sorry travelling 2000 hrs) B28.80 T -14.5C.

Here we are back at camp 1 after a highly productive day. I certainly had not hoped to accomplish so much.

We broke camp early and headed south at two miles from camp 2 we arrived at the last crest between camp 2 and the end of the gulf. From here I took a round of photographs and angles as well as a latitude observation. There was no point in pressing on further as another mile or so would put us in the termination pressure. Accordingly as soon as our observations were finished the last being the magnetic declination we turned and started to run down to camp 1. At 3 hrs from camp 2 we halted on a crest and resected a position and read several angles as well as an azimuth. Took four photos with the photo theodolite covering the eastern side of the bay. Moved on to camp 1 arriving at 1945 hrs. My team eg ~~spivy~~ and Co. are now beginning to behave as a team. Georges team are an undisciplined rabble and cause continual troubles.

WJ/11

Snowy is a particularly valuable dog as he has the rather rare ability among these dogs of being able to hold a course and run down in a straight line. This was particularly noticeable today when we ran down over our outward course, we cut our old sledge tracks several times and coming over the last crest to camp 1 we had the cairn dead ahead. Distance run for the day 42 Km which considering a soft snow surface is highly satisfactory. I consider I have sufficient information to prepare an accurate chart of the extension of the gulf.

Dogs troubled a little today with snow balling between their pads - this applies particularly to the greenlanders - it must happen at a critical temperature on soft snow - I had it happen once before in Adelie Land.

Radio reception from base strength four tonight.

5TH NOVEMBER 1954, Friday.

Weather:- At camp 1 barrier. B28.76 T -9.2.C. 8/8 Overcast As (Clearing I hope) Slight snowfall. Wind 10 kts 230 degs Vis between $\frac{1}{4}$ to 1 mile.

2000. Camp 1 barrier. B28.70. T -9.2C. 8/8 overcast Ns (or As?). Vis 50 yds snowfall. Wind 5 kts 230 degs.

A poor sort of a day. In the beginning it looked as though the weather was clearing and I cooked an early breakfast and we packed up. Then the visibility closed down again. I spent the rest of the morning on calculations and roughly sketching the gulf, on my chart. Towards 1400 hrs we had a blue sky above with stratus clouds low around us and it was still snowing. Once more it seemed as though it was clearing and once more we packed up. No sooner was this done when the weather closed down again. So tonight we are still at camp 1 barrier.

On analysing the magnetic observations taken at the end of the gulf I found serious discrepancies - on checking back I realised I had not taken off my wristlet watch! Hell! Before we leave here I will have to make a second set of magnetic observations and also read several angles. A round of photographs would also be very desirable, so we will have to wait for visibility.

The last 24 hours snowfall is now beginning to assume serious proportions. We will not make any more 30 mile runs with that quantity of soft snow lying. We still have to investigate the Bay at Tretoppen before we can count our work in the area as finished. Time is now beginning to run out and we must soon begin to think seriously about a return to base.

Radio reception poor tonight. Base very weak but plenty of stations on the air including WWV. The only ones enjoying this weather are the dogs.

6TH NOVEMBER 1954, Saturday

Weather:- 0500 B28.72. T -8.2C. 8/8 Ns, Overcast. Snowing steadily Wind 5 kts 230 degs. Another overcast day with zero visibility.

2000 hrs. B28.86. T -10.5C. 6/8 cloud. $\frac{3}{8}$ Sc $\frac{3}{8}$ AcAs Clearing. Snowfall all day. Vis 5 miles.

Another day without visibility. Another day confined to tent.

The only diversion was the usual brawls among the dogs. Streaky of Georges team managed to ease our boredom daily by chewing through the mooring cable and usually a general brawl ensues. Georges minus his whip had a tough time among the ruffians. No doubt my batch of scoundrels would be the same if I had lost my symbol of authority.

WJ/12

Surface for sledging looks pretty grim there is over six inches of soft snow lying and until it blows off as blizzard or drift we cannot expect very speedy travel.

Radio reception good both 1200 and 2100 skeds.
Seven days dog rations left.

7TH NOVEMBER 1954, Sunday.

Weather:- 0500 hrs Camp 1B. B28.86. T -12.5C. 2/8 CsCi. Vis up to 20 miles when drift eases. Surface drift. Wind 25 kts 230. degs. Fine (?).

2000 hrs. B29.95. T -12.8C. 0/8 cloud but $\frac{3}{8}$ to $\frac{4}{8}$ cirrus during the day. Wind 15 - 20 kts 230 degs. Calm in late evening. Vis 40 Miles. Fine. (This obs at Kvarsness).

Off the barrier at last and back at Kvarsness after an excellent days work. Before leaving camp I took a round of 5 photographs covering important features then reread the magnetic declination this time being careful to take off my wrist watch.

We then packed for the pass onto the barrier and struck a little to the west of it. In descending I was first to find a small cliff at the bottom onto the sea ice. The descent was steep and suddenly my dogs disappeared and I was airborne. A similar experience awaited Schwartz who was following my sledge tracks. I sat back and enjoyed the spectacle - it would have made an excellent sequel in a film. We then decided to make for Tuillingane in order to map the bay about Tvetoppen. Here we ran into minor difficulties. The sea ice was under heavy pressure from the barrier with numerous open leads filled with soft snow. All our dogs took swimming lessons and on several occasions it seemed as though sledges and men would do the same thing. The area would be a positive trap for weasels - you would never get them out of it.

At Tuillingane we took angles and a round of photographs and read an azimuth on the sun. I also collected rock specimens for Stinear. About Tuillingane I counted 25 Weddel seals - the most I have seen to date in one spot. About $\frac{1}{4}$ of them were mothers with pups. One skua was seen.

Left Tuillingane at 1700 hrs and headed for Kvarsness and apart from three or four difficult lead crossings we arrived there without incident at 2000 hrs. Having the depot tent standing was a great help as we had no tent to pitch.

Surface today could ~~not~~ be described as just fair. There was a lot of soft snow lying but here and there we ran over areas of old sastrugi. It was very noticeable on arrival at Kvarsness that we escaped the catabotic wind that blows down the gulf.

A second stage of the trip is now completed. The last stage, the return is ahead of us.

Failed to contact Mawson on the 2100 sked but received their weather and time signal.

8TH NOVEMBER 1954, Monday. At Kvarsness,

Weather:- 0800 hrs B29.02. T - CLous $\frac{5}{8}$ CiCs Vis 20 miles Wind 15 kts SW. Fine.

2115 hrs (At Karna Sund) B28.74. T -5.7C. 8/8 NsAs Overcast. Wind 50 kts 090 degs Vis 2 miles light to medium drift.

Got to work late. I decided it was better to delay our departure and attempt to contact Mawson at 1200 hrs which time proved the best conditions for our little set here before. We repacked our sledges and depoted our excess on the rock outcrop

in the centre of the drifted valley. In the depot are:-
25lb dog Pemmican, 36 lb Man pemmican, 4 candles, 2 Thermos mugs,
one dehydrated cabbage tin, $\frac{1}{2}$ tin lemon powder, 12 oz egg powder,
2 Type A 45 volt cells (Mainly used).

The depot is marked with a bamboo wedged in a cairn of rocks.
For our successors we left 2 nips of rum in a bottle.

At 1200 hrs we made excellent contact with Mawson. They
received us strength four and we passed all traffic. We then
had to decide whether to press on. It was calm and hot but the
barometer was descending and overcast thickening. Decided to push
on to Karm Sund (10 miles) where there were seals seen in passing
since this would cut our next sledge stage (to Mule) to one day
instead of $1\frac{1}{2}$. The weather got steadily worse with the wind ~~ring~~
rising from the east and a little surface drift. On arrival at Karm
Sund we had to make camp in a hurry there was about 40 knot of
wind with drift. Of the seal rookery there, only two mothers with
pups remained, the rest had taken to the water with the onset of
the weather. We pitched camp in the wind with usual technique
then with the camp made attended to the dogs. Base radio - heard
no transmission.

9TH NOVEMBER 1954, Tuesday.

Weather:- 0800 hrs B28.32 (stationery or rising slightly) reached
about 28.20 at 0400 hrs. T -7.8C. Blizzard. sky not visible. Wind
60 kts 090 degs. Medium to intense drift. Visibility $3\frac{1}{2}$ yds.
2000 hrs. B28.44 (rising slightly) T -9C. Surface drift $\frac{3}{8}$ AcAs
 $\frac{4}{8}$ Sc. Blizzard in east and on plateau. Wind 35 kts 090 degs
Visibility 2 mile.

Its blowing rather outside. We will not be travelling today.
Event of yesterday to record. When we passed the weddel rookery
outward bound whilst waiting for George I amused myself by kidnapp-
ing a small seal pup and observing the reactions of the mother. Last
night near the same seal I was looking for a camp site, I must
have been at least forty yards from her with my back to her. I
was suddenly startled as a set of fangs sank into my backside and
turning rather rapidly after and even more rapid forward and
upward movement, I saw the mother weddel eyeing me with an air
of smug self satisfaction. Only my heavy clothing saved me from
a nasty bite. However so far the honours lie with the mother
weddel but what she does not know is that as soon as the weather
clears I will be looking for a seal for the dogs.

We stayed in the tent all day. It was the first gale
we have had that could be classed as blizzard in the year. I
could just, in lulls, see the handlebars of my sledge just in front
of the tent. It must have been bad because even the dogs failed
to cause us any annoyance. We played Canasta to pass the time
and slept. At 1200 hrs the wind let up and visibility improved
though there was still surface drift here and blizzard on the
plateau and in the east. We profited by the lull in harnessing up
my team and with an empty sledge went to the seal rookery a mile
away. Here we killed my friend the weddel and her pup, fed the
dogs on the spot then dragged the rest of the meat back to camp
arriving just in time to hear the end of Mawson's radio transmission
and get the time signal. Still food for the dogs was more important
than Mawson's news tonight. We ate very well too, a fry of seal
pups heart kidney and meat with potato puree. We felt rather
brutal doing in the pup but at least have the consolation that
nothing except the blubber was wasted.

The dogs were so hungry that they picked the skulls clean

WJ/14.

and ate the entrails.

10TH NOVEMBER 1954, Wednesday.

Weather:- 0800 hrs. B28.33. T -9.2C. 8/8 Cloud. 4/8 AcAs
4/8 CiCs (clearing). Wind 35 kts 110 degs. Surface drift, slight
precipitation. Visibility 1 - 10 miles.

2000 hrs. B28.41. T -5.1C. 8/8 Cloud Ns. Wind 35 - 40 kts
(rising) snowfall and drift. Visibility 1 mile. Light snowfall
and drift all afternoon.

Another doubtful day. Did not feel like risking the crossing
of the glacier tongue near Mule in this and despite a slight easing
of conditions towards midday the weather got if anything worse.

I took a wander round the Sund with the geological hammer. This
is a very definite strata here and a wide belt of mineralised
rocks running right through it. The dip is 75 degs S and the
strike 270 degrees or thereabouts. This stratified rock appears
from Karm Sund to Mule and the deposit of black mineral at Mule
is no doubt associated with this formation - collected specimens
and returned to tent. Did not feed the dogs tonight. They
all had more than a fair share last night.

I would warn the man wandering around Karm Sund to be cautious.
It is very old sea ice here about fifty feet thick and leads are
no longer little inconveniences but crevasses with a free fall of
about twenty feet generally to water with the crevasses hidden by
soft snow. It is interesting to note that the Karm Sund rocks
do not reappear at Kvarsness or Tvillingane. On the way back I
must try to locate their eastward extent.

Radio contact made at 1200 hrs but reception only at 2100 hrs.
One skua seen.

11TH NOVEMBER 1954, Thursday.

Weather:- 0800 hrs. B28.41, steady. T -4.5C. Cloud not observed
due to drift. Wind 45 - 50 kts 120 degs. Medium to intense drift.
Visibility 5 - 10 yards.

2000 hrs. B28.71, steady. T -5C. Cloud 8/8. Not very thick saw
the sun no corona or halo probably Sc. Intense drift. Wind
40 - 50 kts 120 degs. Visibility ten yards at times. Sleeping bag
weather.

Apart from the fact that I have worked out tactics to beat
Georges at Canasta there is little to report. I went outside
twice today. Once a call of nature which I can only describe as
a martyrdom and secondly to feed the dogs, get some ice for water
and check that all was well about the tent. The tent is well
buried and is firmly attached that it might blow away is no
longer a worry. Surface should be perfectly lousy after these
three days - it was nothing to write home about when we
arrived here. We were happy that we managed to kill a seal two
days ago or the dogs would be starving, apart from that we are
able to eat our fill of fresh seal meat each day ourselves.

What I dislike most about this weather is coming in from outside,
conditions outside are never as bad as they sound when inside a sleep-
ing bag but the amount of snow that one man can bring into a tent
is unbelievable. Far from considering the man who volunteers to
go outside and feed the dogs etc as a hero, he who remains in
the tent considers him a b--- nuisance. Only the amateur goes
out of the tent in this sort of weather.

Radio contact was made at both skeds. The 1200 hrs sked always

WJ/15.

seems the best for us though we nearly always get good reception of Mawsons broadcast at 2100 hrs, but they rarely hear us. Received a request from ANARE for two positions on the chart between Mawson and the gulf. Feel they would be better to wait until I return to Aust for this, surely there isnt that much hurry. The silly hounds do not seem to mind this weather. They have spent most of the day squabbling among themselves over seal bones.

Our average is not bad for dogs as out of 25 we have managed to get two teams of eight that are worth keeping. If anyone is interested in dog sledging these are my views on dogs and their upkeep.

In camp feed only once every three days. Dogs should never be sheltered - any dog that cannot cope with conditions in the open at base is of no use in the field. Everyone of these sixteen here have passed those tests and as a result we have 16 hardy animals who require nothing except food and will work in more difficult conditions than we can stand. Remember they are not pets they are working tools and there is no room for an RSPCA sledging.

12TH NOVEMBER 1954, Friday.

Weather:- 0800 hrs. B28.85. T -5.6C. 8/8 Sc. ~~Blizzards in NE~~ Wind ~~high and variable generally ESE~~ Fine ~~Vis 20 miles~~ ~~2000 hrs~~

A little break in cloud to NE. Wind 35 kts. 120 surface drift. Visibility 20 and 1 mile according to drift. Still not fine.

2000 hrs. B2901. T -4.3C. 7/8 Sc. Clear in NE. Wind light and variable generally ESE. Fine. Vis 20 miles.

Weather broke at 1300 hrs approx and we decided in view of the heavy surface to make a few miles on the way to Mule. However it was not until 1530 that we finally got clear as the tent was very much snowed in and took quite a bit of time to get clear.

We cleared Karm Sund and made line direct between Brattoy and Krokoy. After three hours non stop on snow the dogs were really tired so I decided to make camp and not push on to Mule. I visited the small island between Krotoy and Brattoyskjera where I collected geological samples (same strata as Karm sund) and we made camp on Austoya (near Krotoy) where we saw three weddel seals. These and ~~one~~ one skua are todays sole animal life seen. Radio contact excellent at midday traffic passed. Very poor at 2100 hrs could barely hear Mawson.

13TH NOVEMBER 1954, Saturday. (Austoya near Krokoy)

Weather:- 0800 hrs. B29.14. T -12.3C. Cloud nil. Wind 20 kts 120 degs. Light surface drift. Fine. Vis 25 miles.

2000 hrs at Mule. B29.13. T -8.7C. Nil cloud. ~~Nix~~ Wind. Light and variable, generally S or W. Fine Vis 40 miles.

Had a slow heavy day today heading to Mule over a surface of two feet of soft unconsolidated fresh snow. The going was very heavy indeed and the dogs pulled at a snails pace. We arrived at Mule at 1730 hrs and though we had only 13 miles made good the dogs were more tired than if they had done 25 miles.

Before leaving Austoya I collected geological samples. One was seen at Mule. Immediately on arrival at Mule we erected both tents, the SPRI tent to live in and the Dovers tent to house the theodolite during tidal observations. Once this was done

we measured a hundred foot base line on the sea ice and planted two dural flage at each end. This done I commenced tidal observations. Georges then took an empty sledge and killed a female Weddel seal and pup for dog food and brought the carcass back to camp. Georges dogs broke loose together taking their mooring line with them whilst being fed and disappeared over the horizon. George took an empty sledge and found them where he had killed the seal. We tethered them with double pitons. This was no sooner done than Denny Georges bitch, gave birth to her litter of pups - an event we had been hoping would take place here. This done things settled down to normal again and after eating I went on with tidal observations whilst Georges slept. I had bad luck in that at 0500 hours i fell asleep for 1½ hrs spoiling the series. Radio contact was not made. One snow petrel. 1 emperor penguin two skuas seen here today.

14TH NOVEMBER 1954, Sunday. At mule.

Weather:- 0800 B29.13. T -4.2C. Cloud 4/8 CiCs. Slight surface drift. Wind SSE 15 kts. Fine Vis 40 miles.

2000 hrs. B29.26. T -9.2C. $\frac{7}{8}$ Ccu Cs. Calm. Fine Vis 40 miles.

Changed photos today. First 3 cardboard cases bottom are original 1 - 33. With them is one cardboard case with paper wrapper - this plus the cardboard case lying flat on top give nos 9 - 33 inclusive series 2 and Photo 1 series 2. In addition there is one unexposed plate packed with them which got mixed up during changing.

A rather quiet and uneventful day. I have been fully occupied with tidal observations having a reading to take every half hour. Georges pottered round the dogs and the camp all day and cooked the meals. I managed to visit the high point to the northeast of the camp where there is a second outcrop of the same or similar blackish mineral as in the lode near the camp. Here there are very big lodes (large plagioclase ?) crystals mixed up with the mineral and crystals of a greenish quartzlike substance. Collected samples of both. Georges had the unpleasant job of killing Denny's pups of which there was one survivor this morning.

Several skuas were about the camp all day no doubt attracted by the seal meat. A snow petrel flew over us several times. One lone emperor walked into the camp following the tracks of the sledges from the north. Very regretfully Georges despatched him to provide fresh meat for us.

I noticed a number of yellowish lodes on the north exposure near the camp. Georges collected samples. No radio reception of Mawson but contact made on the 2100 sked. Hope to get underway again tomorrow if the weather holds.

15TH NOVEMBER 1954, Monday. At Mule

Weather:- 0800 hrs. B29.27. T -9.2. $\frac{1}{8}$ AsAc. Wind 35 - 40 kts 120 degs. Light to medium drift. Vis variable between 1 mile and 10 miles. Stop. Weather at 0500 hrs 4/8 AsCs. Wind 15 kts 120 degs Light drift. B28.25. T -12.5C.

Weather 2000 hrs. B29.07. T -4.5C. Cloud unknown. Dense drift Wind 50 - 60 kts 120 degs Blizzard Vis 10 - 40 yds.

I was on tidal observations until 0500 hrs this morning. George was camped in the SPRI tent with all the gear and I when I finished the sky had began to cloud over and the wind to increase. George woke me at 0800 with breakfast ready. The weather already begun

WJ/17

to look nasty despite the fact the barometer was high and stationary. We pulled down the Dovers pattern tent and packed the sledges but the weather deteriorated. By this time a mild blizzard was blowing so we settled down to a day in the tent. Georges has an injury to one hand. When he was dressing the seal the other day his sealing hook slipped and drove into the palm. I washed it in monacrin solution opened up the puncture a little and dusted with penicillin & sulpha powder. Today I changed the dressing and it seems quite healthy and clean. Of course the wound is on the same hand as his spæk finger.

The only sorties today from the tent have been me to get the antenna which carried away in the wind and to inspect the dogs and sledges and Georges tonight to investigate a sudden uproar among his team. Georges team have been a source of continued annoyance the whole journey, they are an undisciplined crew and continually up to mischief. The loss of his whip early on the trip was a major disaster. There seems no substitute for a whip dog driving - not that it is used much but it is the symbol of authority. Georges has been using a length of bamboo which no doubt hurts considerably more than the flick of my whip lash but my team are in general a docile as lambs whilst his verge on the stage of being uncontrollable at times.

We made excellent radio contact with Mawson and cleared all traffic and chatted on the midday sked. Tonight with the blizzard I could only just read their weather and they did not hear us at all. I am very pleased with the Gibson Girl/SCR694C receiver combination, we have so far managed to remain in radio contact the whole time.

We slept most of the day, myself because I have had only five hours sleep in the last 48 hours and Georges because he has a natural aptitude for sleeping.

16TH NOVEMBER 1954, Tuesday.

Weather:- 0800 hrs at Mule. B29.00. T -5.3C (approximate as could not get a good reading on the thermometer) Cloud unknown. Wind 50.- 60 kts, 120 degs. Dense drift. Blizzard Vis 10 - 20 yds in lulls.

2000 hrs., at Mule. B29.13. T -4.7C. 8/8 cloud Sc pr Stratus of some sort. Wind 30 - 35 120 degs. Light to medium drift. Vis ½ mile (Only just let up blowing and drifting like a b--- all day.

Another day blizzard bound in the tent. What hurts is that according to the barometer this shouldn't happen. However if there is no fresh snowfall with it it should harden up the surface a bit.

The dogs have been reasonably quiet all day for a change. This means it is really bad outside. Towards late evening it eased off a bit and got out for an hour or so to feed the dogs, check the tent, collect ice and dig out the sledges ready for tomorrow. Georges dogs had gnawed through their mooring line as usual and mine were well snowed in.

Good radio contact with base at midday but only just heard them tonight.

17TH NOVEMBER 1954, Wednesday.

Weather 0800 at Mule. B29.19. T -4.3C. 4/8 CiCs ½ Ac. Wind 10 - 15 kts 120 degs. Fine. Visibility 20 miles.

2000 hrs at Meskjer a. B29.20 falling. T -6.5C 4/8 CiCs. Wind 25 to 30 kts. 100 degs

to 30 kts, 100 degs. Fine. Visibility 25 miles.

A satisfactory day today. We were about soon after 7 am. The tent was well snowed in and there was quite a lot of work to do before we had it out and packed. Georges collected a sample of moss and lichen. I took two photographs of the lode and a line of samples in the line of dip in addition to the normal collection. Ice conditions. New snow either consolidated or blown away - present thickness of snow averaged three feet medium sastrugi occasional patches bare ice.

We got under way at 1030 and proceeded without even to Meskjera our old outward camp 28 miles away. I took rock samples at a small island at the east end of Bangsundet. It would have been a magnificent day except for a 30 kt wind dead in our faces all day. Seeing we had westerly winds in our faces outward bound we considered this unfair.

Saw a snow petrel and two skuas at Mule. Two emperor penguins en route and five emperors at Meskjera. Six snow petrels flew overhead tonight. The seal rookery here now consists of 20 seals 15 of which are females with pups.

We killed one male weddel for the dogs tonight. Took a photo of Langsundet. Radio contact made with base at 2100 hrs. Fair. Had hoped to do an astro fix here tonight but cannot stay awake. Between here and Mule there are a number of places a weasel can be put on land. Mule itself, the most easterly of Oyfjorden on the NW side, Sundvika and the east end of Havstein south side. Also here on the Trynevikmaten and Meskjera.

Anyone who has the idea dog sledging on the sea ice is a picnic should do a bit. We ~~start~~ start at six am and do not commence cooking our evening meal until 2130 hours. The dogs have the best of it they only work when actually travelling.

18TH NOVEMBER 1954, Thursday. At Meskjera.

Weather 0800 at Meskjera. B29.10. T -5.5C. Wind 10 kts 130 degs. variable.. Trace CiCs on plateau to South. Fine. Vis 40 miles. Weather 2000 hrs at Stokholmane. B29.07. T -2C. $\frac{1}{2}$ Ac to north. Light southerly to easterly puffs of wind. Fine. Vis 40 miles.

Broke camp at Meskjera but was some time leaving as I had magnetic observations to take and also we had seal meat to load. We headed for the SW corner of Foldaya where geological samples were collected then after many false starts finally wound our way among the fjords and islands and entered William Scoresby bay. (Innfjorden). The area south of Foldaya is more complicated than appears on the Hansen chart. However there are two deep fjords in the zone both of which run right back to the continental ice. Geological specimens were collected at the SE corner of Foldaya We then called at Kalven (Bertha island) where once more geological samples were taken. This done we headed on to Stokholmane making camp not very far from our outward camp. There were a large number (about twenty in all) emperors seen about the fjord south of foldaya. They were feeding in the cracks about imprisoned bergs. They seemed too numerous to be wanderers from the Bretangen rookery and I would not be surprised if there is a very small rookery at the base of one of the fjords.

Several snow petrels were seen. One wilson petrel. Skuas are now numerous, but so far we have found no nests.

At Kalvern on the north side is a very minute Adelie rookery divided into two groups one of twenty pairs and the other of

WJ/19.

fifteen. However by the depth of guano the rookery is of long-standing. This is the first Adelie group since Kvarsness and there are none in the King Edward Gulf region.

The plateau behind Steffanson Bay is only lightly crevassed and the ice cap descends gently. The best descent for weasels is to take a small nunatak at the SE corner of the bay and Descend to a cape at the coast (I have a photo of this). Snow conditions were still heavy and there is medium to high sastrugo between Bertha Island and here.

A weasel could be put on land at Kalvern and there are several similar points in the fjord area south of Foldaya but I would advise against the taking a weasel in there.

There are numerous weasel landings about this group of islands. Radio reception from base good. No transmission.

I was sick tonight - old trouble and a touch of snow blindness. Neosynchrene jelly gave a certain amount of relief.

19TH NOVEMBER 1954, Friday.

Weather:- At Stokholmane. 0800 hrs. B28.97. T -2.4C. Wind 5 kts 090 degs. $\frac{1}{8}$ Ac in East. $\frac{1}{8}$ CiCs in North. Fine Vis 40 miles. 2000 hrs at Kollukjer. B28.98. T -2.3C. Wind calm. $\frac{2}{8}$ AcAs in North Fine Vis 40 miles.

Note. strong easterly breeze 30 - 40 kts 090 during day from 1100 hrs till 1600 hrs. about $\frac{4}{8}$ AcAs overhead during day.

Broke camp at 0800 hrs and headed for Uksen where we halted for a smoke and bite to eat. Collected geological samples and headed on. We were plagued by a strong headwind all day which was particularly annoying on occasional patches of blue ice in the lee of icebergs where the dogs could not get purchase for their feet. We halted again at the end of the glacier. Here there were fifteen seals around a small reef. This reef is $\frac{1}{2}$ miles SW of the end of the glacier and is about 5 feet above sea level. We then headed on to Kollukjer arriving at 1800 hrs. It seemed a long hard day and the dogs are now getting a little tired.

Counted sixteen weddel seals at UKSOY as we passed. 11 were females with pups. At Uksen there were four weddel pups with mothers, the mothers were no doubt feeding. Two emperors seen at Uksen and 3 at Uksoy. Several skuas seen one wilson petrel 1 snow petrel at the end of the glacier tongue.

Weasels can be put on land here at Kollukjer at the reef just off Uksen and in emergency the uncharted reef at the end of the ~~reef~~ glacier is worth remembering. The plateau immediately south of Uksen descends fairly gently to a small section of shelf ice. This appears the only place a weasel descent could be made from the plateau. Elsewhere the plateau is heavily crevassed.

Snow cover averaged about 50 cms with drifts up to 2 metres high - medium sastrugi with occasional patches of blue ice.

Radio contact was made with base.

Observations for position made tonight at midnight on a Centauri for latitude at lower meridian transit.

20TH NOVEMBER 1954, Saturday.

Weather:- 0800 at Kollukjer. B28.94. T -4.4C $\frac{0}{8}$ cloud, Wind 10 kts 120 degs. Fine. Visibility 40 miles. 2000Hrs at Ins vika. B28.99 falling slightly. T -2.2C. $\frac{3}{8}$ ScAc mostly to NNE. Wind 10 kts 120 kts. Fine. Vis 40 miles ~~at~~ ~~to~~ ~~100~~ ~~magnetic~~

A flight of ten snow petrels seen at the end of the glacier t Ustiker. Occasional skuas seen all day. One giant petrel seen at Tonskjera tonight.

There does not appear to be a practicable weasel descent from the plateau anywhere in todays travel.

I took bearings at the end of Ustiker and find the glacier tongue is still as shown on the norwegian chart. This is the eastern fork. The fork to the west of Insvika is broken off a little south of the Insvika islands. What I take to be the drifted bergs of this tongue block the bay NW and SW ob Bergness.

Radio contact was a mess tonight. To begin with our antenna snapped and it was of any old length. Base heard us 1 and we ~~xxxxxx~~ started to pass our message Then they told us we were fading. We then raced outside and rigged the spare aerial. In this time base sent the weather and time signal which we missed. Then with the new antenna they failed to hear us and were just signing off. As a result nothing on either side. Pleasantest night of the trip. our old friend mount henderson dead ahead and Ustikker glacier tongue dropping away astern.

22ND NOVEMBER 1954, Monday.

Broke camp early at Tonskjera and made our run for Mawson. Departed Tonksjera 0800 hrs arrived Mawson 1300 hrs. 28 miles of magnificent surface. Called at Bryggeholmane to pick up speciamens and sledgeometer depoted there. Ice very much deteriorated and many wide leads dangerous for a weasel.

One weddel seal with pup at Bryggeholmane, adelic rookery at Bryggeholmane well occupied Adelies feeding at tide crack. No other seals seen.

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WESTERN COASTAL JOURNEY.

Personnel . . Dovers. Schwartz.

TRANSPORT. Two teams of eight dogs.

OBJECT. To penetrate to the bottom of King Edward Gulf and map the blank area of the Norwegian Map. Other objectives were, Tidal observations, reconnaissance geology of the coast, magnetic observations, a rough survey of animal and bird life along the coast, astro fixes at selected points to tie down aerial photography and a general reconnaissance of the coast.

METHOD. I decided after considering all factors that these objects could best be achieved if the sledges were lightly loaded and capable of travelling quickly and there were only two ways the drawn loads could be lightened and that was to reduce the party to two and rely on seals to feed the dogs until the Gulf was reached. The obvious personnel were Schwartz and myself both experienced dog drivers. The remaining factor forced upon us by this decision was a later start than I would prefer as we had to rely on the reappearance of seals. My estimate for the journey was six weeks and we carried an extra fourteen days man rations to cover a possible return by the plateau. In dog pemmican we carried only 15 days supply. The plan was to carry out all intermediate work between Mawson and the Gulf outward bound so that the return could be as rapid as possible.

RESULTS. By a remarkable run of good fortune all objects were achieved.

1. A survey was made in the Gulf area of the unmapped areas.
2. A hundredweight and a half of geological specimens were brought back to Mawson which Stinear considers form adequate geological reconnaissance.
3. Thirty-six hours tidal observations were carried out at the full moon as required at Mule.
4. Observations of magnetic declination were made at Tistelen, Meskjera and in King Edward Gulf.
5. Astro fixes were done at Kollskjer, Mule and Kvarsness.
6. An emperor penguin rookery was discovered at Brettangen and all observed animal life was noted. Emperor penguin eggs brought back to Mawson.
7. Weather records were kept on the basis of twelve hourly observations.
8. Specimens of lichens and mosses were collected.
9. Our teams which on departure were very ill trained returned to Mawson as very much working propositions.

Summed up it was a good workmanlike journey - nothing extraordinary except remarkable in the smoothness of events.

STATISTICS. Total distance run 550 miles. (498 miles on straight line less side exploration).

Average for the 41 days out 13.5 miles per day.

Average for travelling days 19.5 miles per day.

Best run 165 miles in 5½ consecutive days over heavy surface except for last thirty miles (average 32.5 miles per day).

Drawn loads outward bound 600 lbs per sledge = 75 lbs per dog.

Drawn loads homeward bound 400 lbs per sledge = 50 lbs per dog.

Weather. Sixteen fine days of which three were not travelled being used for observations etc. Nine days average weather but not fine - all travelled. Six days bad weather travelled. Eleven days weather too bad for travel. Total travelling days 27½ or 2 days out of 3. Three serious gales.

Surface. After Tongskjera we encountered snow lying which became increasingly heavy as we worked westward. However most of the time we were able to ride our sledges. Shelf ice surface was fair.

Crevasses. We only encountered a few minor crevasses on the shelf ice but the shear crevasses where the shelf met continental ice or glacier prevented us from working anywhere except the centre of the shelf.

Gulf.

Leads. These gave us little trouble. Most of the dogs took swimming lessons and Schwartz's sledge broke through once. However they present serious problems for weasel travel at this time of the year.

Seals for dogs. Though not very plentiful outward bound we managed to get one nearly always when required. Areas of no seals - one about Cape Bruce near Ustiker, Steffanson Bay generally and Langsudet. However consult the daily journal. Seals were plentiful on return.

Apart from the Emperor Penguin rookery at Brettangen, a minute colony of Adelies at Bertha Island and seals the coast westward is devoid of life. However the Emperors strung over a wide area from Bryggehølm to Kvarsness. Actually singly.

RADIO. We used the "Gibson Girl" transmitter and SCR694C receiver adapted to dry cells by Macey. A code was designed for weather messages from Base; Except for the period in the gulf itself when the transmitter was depoted we had intermittent radio contact with base the whole journey.

This equipment is first class and very well adapted for sledging. The "Gibson Girl" transmitter operated on crystal at 5500 Kc/s. Spare crystals were carried. Twentytwo hours of operation was made with the receiver (a months traffic and though the cells were a bandoned they gave no sign of paying out. Experiments proved a full accurately cut wave length aerial orientated either towards or away from base gave the best results. Skeds were at 0700 and 1600 GMT. At all times we received base traffic. However when conditions were good usually on 1600 GMT we were drowned by other stations. At 0700 GMT radio conditions were bad and we usually got through.

An area blacked out for the gibson set is between fifteen and forty miles, depending on conditions. At 160 miles airline we were received quite well.

Sample of the weather code. B2967 T03 W35 D13 C5ACAS P12 M02 Ice WS 340 (or OK).

This gives Barometer 2967 inches, swell recorded by tide guage 3cms mean wind 35 knots, direction 130 cloud fiveights ACAS temperatures Max plus 12 min minus two, ice conditions water sky in bearing 340 (or ice OK).

It was accepted as the rule that the field party did not necessarily maintain skeds but Mawson did. Any message from field party must be taken. The only criticism I have of the set is the low range which only gave 5Mcs for WWVH, making us dependant on retransmitted time signals from Base.

RATIONS. I am most enthusiastic about our ration. I have now used the ration as an entirely eating full rations of pemmican and butter and without pemmican this trip. In both cases quantities worked out very well. The basic sack should not be changed but the quantities of pemmican and butter can be replaced to individual tastes and additional items carried or luxuries if desired. The important thing to remember is that on both occasions this ration was used over a period everyone was well fed and had no particular craving for any item on return to base.

In general we ate very little pemmican and replaced it with frest seal or emperor meat fried in butter.

We ate two meals a day, one at 7 am and the other usually at 2130 after the radio sked. 3 oz biscuit and 2 oz chocolate gave a snack while travelling and we did not drink during the day. However we drank heavily with the evening meal.

Normal meals. Breakfast:- Oatmeal porridge, milk, sugar, black coffee, omlette from egg powder.

Lunch:- 3 oz biscuit and 2oz chocolate

Evening:- Pemmican or onion powder soup, fried seal meat, mashed potato, 1 biscuit, cocoa.

We were a little short of sugar but both are very heavy sugar users. Egg powder was always in excess but my illness prevented me from eating it. We carried 2 extra tins of Nescafe for the six weeks away. For the first five days we had a hot drink whilst travelling until both thermos were broken. This is very nice but not really

until both Thermos were broken. This is very nice but not really necessary.

We carried as luxuries, 16 oz Honey, 3 salami sausages, 3½ lbs of Ham. The salami sausage was very good and we usually ate it with a biscuit waiting for the meal to cook at night.

PRIMUS AND FUEL. Primus was SP41 primed with Meta tablets. Nothing but praise for this unit

Kerosene consumption, cooking rather liberally, 47 pints in 41 days. You require two packets of Meta tablets for a month. A 15% increase in kerosene for each additional man in my experience works out well. Use ice for water in preference to snow.

DOG FEEDING. Our daily runs particularly outward bound were ruled by availability of seals. We were forced to use dog pemmican on the sea ice twice, once the first night and once in the blizzard at Tongskjera the last night but seals were available.

Our usual practice was to kill a seal in the evening, skin and disembowel it, cut all easily removable steaks into dog rations and leave them out on the ice to freeze over night. The residue of the carcass we took up to camp and let the dogs eat as much as possible that night. This usually resulted in vomiting during travel but this is of no importance. The frozen meat was picked up next morning and carried on and fed the dogs a further two nights.

To avoid the extra weight of an axe we carried two garden spades with the side blades, not the digging face, sharpened to knife edges. These were very satisfactory. They also served for dog mooring in soft snow. Eleven Weddell seals, two weddell pups and three emperor penguins were killed on route.

DOG TRAVELLING. In Adelie Land I used to run one hour and rest five minutes each hour for 8 to 10 hours per day. This trip there was an enormous amount of work for only two men and we finished running 1½ hours on bad surface and 2 hours on good surface with a quarter hour break for three or four runs per day. A mean distance covered per hour is 6.5 kilometres on the medium surface. Thus we were actually travelling a shorter period than in Adelie Land and covering the same distance per day.

DOG HARNESS. It was my original intention to use tandem traces and these were made up. However this was based on Heard dogs training being far more advanced than it actually was so I went back to fan.

In crevassed country or crossing leads I think extended fan is the best trace. However traction is not as efficient as tandem. For crevasses and leads the advantage of fan is that each dog has ample free rope to jump individually and if one goes in he does not drag the others with him. Its main disadvantage is less efficient traction and the twisted ropes to uncoil at each halt. This Bether was not so annoying with my better trained team which was always leading. Schwartz took the less advanced team and followed, his traces were always much worse than mine.

Harness. Greenland pattern lampwick harness was made up in Australia to fit dogs held at the zoo. Either by difference in sizes or by errors in manufacture these harnesses were all too tight generally. In attempting to rectify this we stumbled on a new harness form which is the best I have used and I think superior to any other form. Ample samples are at Mawson and one will be returned to Melbourne.

Its advantage is that it is self fitting and the same size harness fits all dogs. It also has the advantage of being easy to remove or put on even when frozen. It holds a dog in a crevasse fall beautifully and even comfortable.

<u>TRACE LENGTHS</u>	<u>LEADER.</u>	<u>TEAM.</u>	<u>LAZY DOGS ROPE.</u>
<u>SELF.</u>			
<u>SCHWARTZ.</u>			

When any dogs shows signs of developing laziness he is put back on the short lazy dogs rope which is just in reach of the drivers whip. Several days and he is very happy to pull on a team rope. I think Schwartz's more tangled traces might be due to his longer traces but he does not agree.

GEAR. The norwegian sledges are excellent. Both Schwartz and I think they are the best we have used. The plastic runner faces however are not as durable or thick as they were on the heavy English sledges we had in Adelie Land.

The handlebars will have to be re designed. They work OK but the butts of the verticals hit too far off centre.

The original lashings put on at tottenham by me are still in fair condition on return. Four lashing points parted travelling. Three of these were back of runner to longitudinal where they were chafed by the drivers foot. Sledge brakes were efficient even on blue ice.

SLEDGE BOXES. These are satisfactory and the design prevents chaffing of lashings by boxes. They all needed repair on return. We had no trouble with drift entering sledge boxes.

I built two small plywood boxes to fit between the handlebars where a large box would not fit. One was designed to carry one twelve man day ration in containers for each item and the cooking utensils.

The other carried one tine of kerosene, Meta tablets, whisk brush, paper towelling, sledge repair kit, spare billy, lashing, matches in sack, and other minor items.

These two boxes were of great value. To make camp all we had to do was to enter the two boxes, sleeping bags and personal sack into the tent and there was no need to touch anything else. Once every six days the ration box was refilled from a ration,

THE TENT. We carried two tents, ^{one pyramidal of British design and well, one modified by me and one} one to my design and one as modified by SPRI. Of the two we used mine most and preferred it to the SPRI. It is roomier and higher and the high entrance funnel is a distinct advantage. The only modification I would like is a slight increase in the diameter of the entrance funnel. Three inches would be enough, but we had no trouble with the entrance. The SPRI had dural poles and the Dovers pattern bamboo - I prefer the bamboo.

The highest wind was when we were camped on blue ice and the tent held well.

Most important with the cloth aprons is that they be scrupulously brushed each morning before the tent is packed up. By doing this our tents were perfectly dry the whole journey.

PAPER TOWELLING. This is indispensable and is used for every conceivable purpose. We used two rolls in 41 days and we did not have quite enough.

INSULATING MATS. Schwartz used a pneumatic mattress and I used a sponge rubber mat. Weights are about equal and both were satisfactory.

LOAD LASHINGS AND DOG MOORINGS.LINES. These were in cotton sash cord and $1\frac{1}{2}$ cotton rope. They were continually snapping with freezing and cold. I recommend strongly that nylon be used throughout.

SNOW SHOES. These were carried in lieu of skis but were not used. However either skis or snow shoes have to be carried, for fear of a heavy fall of soft snow.

CRAMPONS. Not used except one day on blue ice by schwartz.

PITON HAMMERS. The New Zealand piton hammers are quite useless. The normal European piton hammer however is very satisfactory.

ICE AXES. Used continually. Not broken.

INSTRUMENTS. All instruments performed well, particularly the photo theodolite, chronometer and theodolite. The only trouble experienced was with the lighting set. This consisted of six 1.5 volt torch cells in a case and they lost efficiency in ten minutes at minus 18 centigrade. The only solution is two heavy 1.5 PMG Type (NO. 6) cells as I used at the Scullin Monolith.

SLEDGEOMETER. DESIGN sturdy and efficient. Rev counter quite hopeless and as result sledgeometers U/S.

CONCLUSIONS ON GEAR. In certain aspects I think our gear was better than anything I know of used on other expeditions, these points are already noted. All gear was serviceable and a party could leave similarly equipped for a similar journey without any qualms.

MEDICAL. A sledge medical set built up by Summers was carried in the sledge boxes. This served all purposes needed and seemed adequate. It is compact and well designed. Total weight seven pounds. In addition we each had a pocket set of first aid which saved us going to the main kit for minor items. See attached appendix for contents.

USES OF MEDICAL KIT.

1. Dovers - Apc for choleystitis pain at nights . Only occasionally
 2. Schwartz - Dressing with penicillin and sulphur powder a deep puncture where a sealing hool passed into the palm of his hand.
 3. Schwartz - Several minor attacks of diahorrea. Treated with Thalazole.
 4. Dovers - Snow blindness one evening. Stage moderated to intense pain - unable to see objects except as dark blurs. Treated with Neosynephrine jelly and eyes back to normal following evening. Relief of pain rapid.
- Neither of our snow glasses are good enough - the little French glacier goggles are the best. I ended up wearing one on top of the other.
5. Injury not treated. Dovers Weddel seal bite in rump.
 6. Minor disorders. Headaches, fatigue and a little sunburn.

DOG INJURIES. No dog injuries were treated. Usual batch of bites from brawls which healed nicely. The dogs were in first class form the whole trip.

DOG PEMMICAN. Only used for eight days in the Gulf. Not enough to draw any conclusions.

SLEDGE LOADS. See attached appendix.

Wylon ropes 100 ft	2
00000ooooo00000ooooo00000ooooo	
Spare carbide	1
Spare ice pions	1
Spare sledge clips	1
Spare bridge for sledge	1
Patent metal splints for repairs longitudinal	1
Sledge repair kits	1
Big harness spare	1
Lampwick valve jkt	1
Leather moccas	1

Sledge ropes large	1
Sledge ropes small	1
Sledge dural	1
Sledge bamboo	1
Electric torch	1

Flashlight Wild 12	1
Survey camera for 28	1
Plates photographs	1
Flashlight tripod	1
Compass 5" magnetic	1
Aluminum tripod for magnetic compass	1
Barometer aneroid	1
Chronometer logarithmic	1
Surveying 100ft tape	1
Medical supplies	1
etc. etc.	1

-APPENDIX "A".-

LOAD CARRIED.

Rations Men 10 twelve man day packs.
 Rations Dog 240 dog days in pemmican.
 Fuel. 8 gallons kerosene in 4 two gallon tins
 Meta Tabs. Four boxes packed in tins.
 Matches. Six dozen boxes.
 Luxuries. 10 lb incl tobacco honey salami sausage ham rum 2 tins
 Nescafe.

Primus 41SP	2	
Repair Kit for SP41	1	
Canteen sets	2	
Billy aluminium	1	
Knife fork spoon set	3	
Filling can for primus	1	
Paper towelling	2 rolls	
Paper Toilet	12 Rolls	
Candles	12	
<hr/>		
Tents	2	
Sleeping bags complete	2	
Personal sack 10lbs each	2	
Sponge rubber mat	1	
Pneumatic mattress	1	
Whisk brushes	2	
Garden spades 9"	2	Note Dont take silly little spades a good solid spade is worth every ounce of its weight.
<hr/>		
Dog Mooring lines	2	
Dog driving whips	2	
Piton hammers	2	
Pistol .38 & 96 rnds	1	
Sea ling knives	2	
Steel	1	
Sealing hooks	2	
<hr/>		
Ice Axes	2	
Crampons prs	2	
Snow shoes prs	2	
Nylon ropes 120 ft	2	
<hr/>		
Spare carabiniers	6	
Spare ice pitons	6	
Spare sledge clips	6	
Spare bridge for sledge	1	
Patent metal splints for repairs longtidunals	2	
Sledge repair kits	2	
Dog harness spare	2	
Lampwick rolls 1/2x2"	2	
Lashings hanks	2	
<hr/>		
Sledge boxes large	6	
Sledge boxes small	4	
Stakes dural	6	
Stakes bamboo	4	
Electric torch	1	
<hr/>		
Theodolite Wild T2	1	
Survey Camera for T2	1	
Plates photographic	6 doz	
Theodolite tripod	1	
Compass 6" magnetic	1	
Aluminium tripod for Magnetic compass	1	
Barometers aneroid	2	
Chronometer Longines	1	
Surveying 100ft tape	1	
Nautical Almanac	1	
Nav. Tables	1	

Computation book	1
Field books	6
Pencils	12
Rubber	1
Dividers	1
Parallel rule	1
Map case & maps	1
Aerial photographs	2
Lighting set Theodolite	1
Lighting set Tidal obs	1

Geological hammer	1
Sample bags	50

Gibson girl transmitter	1
SCR694C receiver	1
Battery box & batteries	1
Spare set batteries	1
Headphones & key case	1
Spare crystals 5400kcs	2
Spare antennas	2
Spare valves set	1
Minor spares & tools for wireless repair etc	1

Penicillin & Sulphur	
Penicillin powder	2
Penicillin vials	12
Streptomycin eyedropper	1
Calcium Salicylate	2 oz
Neomycin Jelly	1 oz
Salicylic Acid	1 oz
Eye cream	2oz
Penicillin	1oz
Titanium cream	2 oz
Eye oil	2 oz
Aspirin tabs	50
Salicylic acid tabs	48
Aspirin	2oz
Cocaine capsules	12
Fluorescing capsules	12
Chlorophyllin	6
Novocain	20

INSTRUMENTS	
Scissors	1 pr
Forceps toothed	1 pr
Forceps artery curved	1 pr
Forceps artery straight	1 pr
Vial syringe	1
Vial needles	2
Suture needles curved	6
Suture needles	6
Scalpel blades	6
Scalpel	1
Dental mirror	1
Dental hair brushes	1

SPICES	
Vanillin	20
Vanillin vials	6
Vanillin	20
Vanillin	20

APPENDIX "B"

MEDICAL EQUIPMENT.

Sledge Kit. Contained in plywood box 13½" x 8½" x 3" total weight Eight Lbs.

CONTENTS.

Bandages WOW 4"x6yds	6 .
Bandages WOW 2½"x6yds	1 .
Bandages Triangular	1 .
Bandages calico 3"	1 .
Bandages elastic 3"	1 2
Gauze swabs 9"x9"	20 .
Gauze swabs 1 yard	1 .
Adhesive plaster 3"x5yds	1 .
Silk gloves	1 pr ✓
Finger stalls	2 .
Eye shields	2 .
Bandaiás	48 .
Gypsona 6"	3 x
Cotton Wool	2oz .
Sutures Nylon fine	3 .
Sutures Nylon coarse	9 .
Sutures catgut	1 tube

DRUGS.

S'Thalazole	48 .	
S'dimidine	48 .	? A.P.C. - mentioned on P.5.
Penicillin & Sulphur		
Powder puffers	2 .	
Penicillin viules	12 x	
Terramycin eyeointment	1 .	
Ung Vita Salicrin	2 oz .	
Neosynephrine Jelly	1 Oz .	
Butesin Picrate	1 oz .	
Zinc cream	2oz .	
Lanoline	1oz .	
Titanium cream	½ oz .	
Clove oil	½ oz .	
Antacid tabs	60 .	
Salacylamide codein	48 .	
Phseptone	30 x	Replace with Pethidine tabs
Cocaine lamellae	12 .	
Flourescine lamellae	12 x	
Omnopon tubinic	6 .	
Monocrin	30 .	

INSTRUMENTS.

Scissors	1 pr .
Forcepstoothed	1 pr .
Forceps artery curvd	1 pr .
Forceps artery strait	1 pr .
Viule syringe	1 . x
Viule Needles	2 . x
Suturex Needles curved.	6 .
Scalpel handles	1 .
Scalpel blades	6 .
Safety pins	3 .
Dental burrs	2 x
Camel hair brushes	2 .

OPTIONAL.

Aureomycin	30 .
Pethidine viules	6 x
Soneryl	50 70
Zephiran	8cc .
Sheet rubber attached to bottom of case.	x polythene.

APPENDIX "B" CONTD

PERSONAL MEDICAL KITS.

Dimensions 4 1/4" x 2 1/2" x 1".

CONTENTS.

Tab someryl 1 1/2 gr	15
Tab sa licylamide et cod	15
Tab cascara	15
Tab salt	15
Tab Physeptone 5mg	15
Tab monacrin	15
Tab antacid	15
Bandaid	12
Tubinic Omnopon	1

All tablets individually enclosed between Alkathene sheets. A tube of Parasol cream was also carried.

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TAYLOR

Report on the Emperor Penguin rookery Bretangen October 1954.

The western sledging party consisting of myself (Dovers) and Schwartz with two teams of Dogs were heading for King Edward Gulf following the coast.

We encountered emperor penguins first at Bryggeholmane, a group of six sheltering in the lee of an island near an open tide crack on 13th October. A further group of six were also seen at Tonskjera also in the lee of an island near an open lead. Thereafter until we reached Bergnes we encountered single emperors wandering in no particular direction but who in each case made their way toward us as soon as they saw our sledges.

On 21st October on turning Bergnesoyane we encountered a steady stream of emperors in groups of up to twelve moving in single file either towards or away in a constant azimuth (45 degrees) from Brettangen glacier. We turned into the bay and followed the emperors line of march landwards arriving at the rookery about midday. For location see my sketch.

The rookery is situated on land or rather on ~~land~~ a snow and ice filled depression on land where the east side of Brettangen glacier joins the rock. The site is remarkable in that it is perfectly sheltered from wind yet exposed to sun. Although a 25 knot wind was blowing there was not a breath of wind at the rookery. The chicks were in the nursery stage and as far as I could judge corresponded in size to the chicks at Geologie rookery at the same time. What was noticeable was that they were all approximately the same size suggesting better food conditions here than at Pointe Geologie.

Due to a peculiarity in the layout of the rookery its whole history was spread out before us and easily read. This years dead chicks were laying among the dead chicks of previous years but were easily recognised as such. Abandoned eggs were also easily seen but of course it was impossible to tell whether they belonged to this year or not. I consider the static conditions here would offer an excellent opportunity of studying the past history of the emperor since as there is no drainage decades of emperors existence must be lying in layers in the depression. Excavation here may bring forth very interesting results.

I took several photographs with the survey camera then we counted the living chicks by shepherding them into small groups and filing them past. This done we sectored the rookery and counted the dead chicks of this year. The last task was to count the abandoned eggs.

The figures were

Living chicks	2200
Dead chicks	103
Abandoned eggs	20

From these figures I estimate the strength of the rookery to be about five thousand birds. We could not count the adults but the photographs should give an indication of their numbers. 13 abandoned eggs were brought back.

The constant presence of water sky in an azimuth 45 degrees, the line of march taken by the emperors suggested open water. On the return journey by getting wireless bearings from Mawson on this watersky and taking bearings myself at Insvika I was able to plot the position of this water. Quite independantly the Depot laying party at Mt Henderson 17th November reported suspected open water at a horizon of fifty miles in the sector NW to SE. This plotted fell on the area plotted by bearings. This supposed open water leads in towards Cape Bruce and may be the channel that Mawson used. Practically the whole year water sky has been observed here under favorable condition. The western limit is Long 61*30 south to ~~EX~~ Lat 67* 01 thence to Long 62* Lat 67* 13 and thence north east. The eastern edge was indeterminate due to a patch of clear sky but the depot report suggests that it extends far the east and would agree with the open water we entered with the ship in 1 January.

We were only at the rookery three hours, then had to push on. After leaving the following encounters were made with emperors. 2 seen together Langsundet 26th October. Recent track at Kvarsnes 30th October. 1 alone at Mule 13th November. 2 together Langsundet 17th November. 5 together Meskje 17th November. 20 feeding in tide cracks about bergs in the fjord area south of Foldoya. 2 at Uksen and 3 at Uksoy 19th November. Numerous crossing rookery route 20th November. 1 at Insvika 20th November. Thence none seen between Insvika and Mawson.

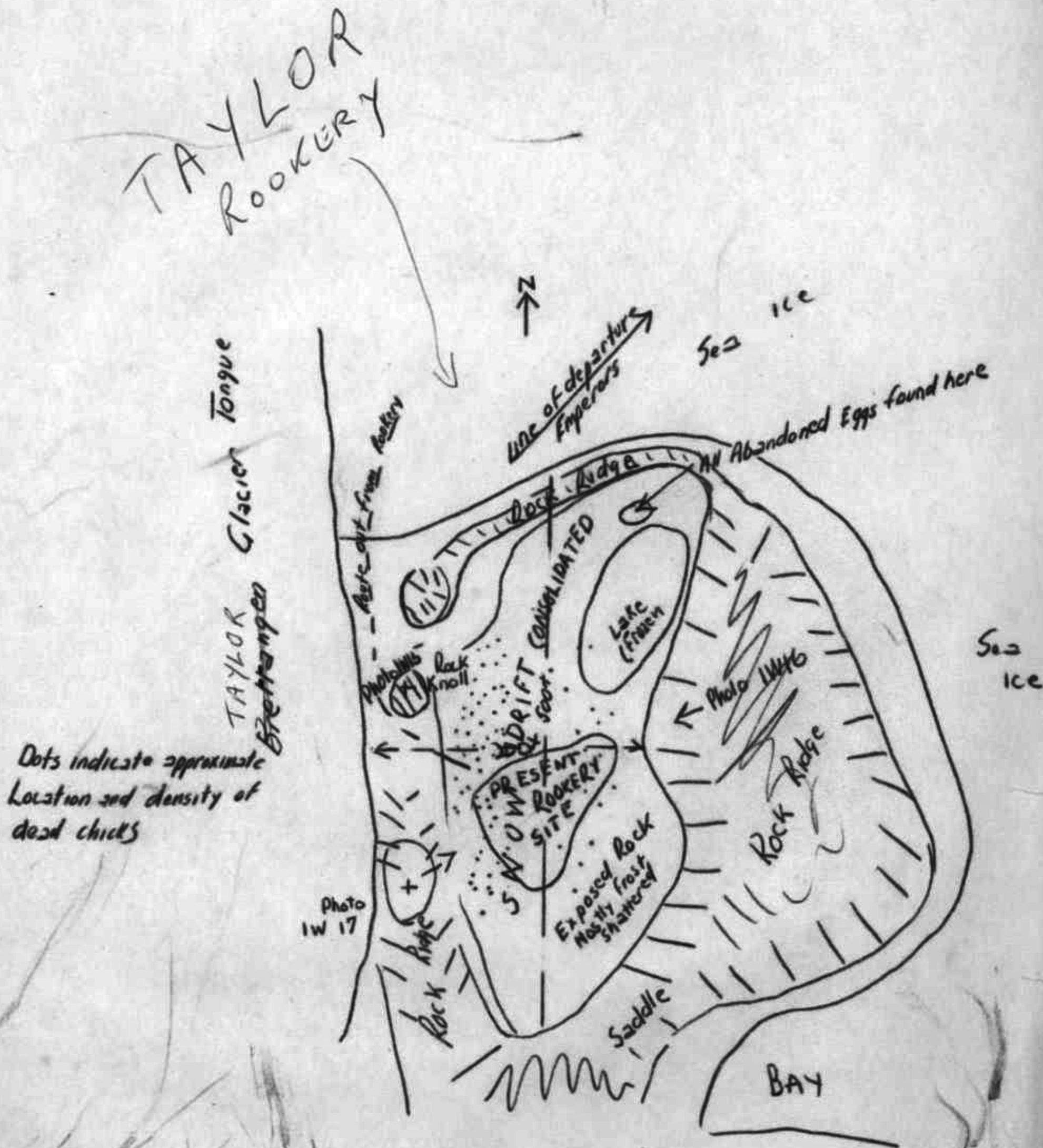
TAYLOR

Report on the Emperor Penguin rookery Brettangen October 1954

A few points of minor interest. There is a possibility that a second rookery of emperors exists in the fjord area south of Foldoya. There were a large number of birds here, some travelling southward in the deep fjords and compared with other places the number was large, suggesting that there may be a second rookery at the bottom of one of the fjords. I did not have the time to investigate closely such a complicated area.

About a dozen old carcasses of fullgrown or immature birds at the rookery site. That all the abandoned eggs were found together in a small area, suggested to me a sudden fright from a fall of ice from the glacier.

Rough Sketch of Rookery



Report on the Emperor Penguin rookery Brettangen October 1954.

The western sledging party consisting of myself (Dovers) and Schwartz with two teams of Dogs were heading for King Edward Gulf following the coast.

Gibbey I.
Tongue Rock
Byrd Head

We encountered emperor penguins first at Bryggeholmane, a group of six sheltering in the lee of an island near an open tide crack on 13th October. A further group of six were also seen at Tonskjera also in the lee of an island near an open lead. Thereafter until we reached Bergnes we encountered single emperors wandering in no particular direction but who in each case made their way toward us as soon as they saw our sledges.

Taylor Glacier

On 21st October on turning Bergnesoyane we encountered a steady stream of emperors in groups of up to twelve moving in single file either towards or away in a constant azimuth (45 degrees) from Brettangen glacier. We turned into the bay and followed the emperors line of march landwards arriving at the rookery about midday. For location see my sketch.

The rookery is situated on land or rather on a snow and ice filled depression on land where the east side of Brettangen glacier joins the rock. The site is remarkable in that it is perfectly sheltered from wind yet exposed to sun. Although a 25 knot wind was blowing there was not a breath of wind at the rookery. The chicks were in the nursery stage and as far as I could judge corresponded in size to the chicks at Geologie rookery at the same time. What was noticeable was that they were all approximately the same size suggesting better food conditions here than at Pointe Geologie.

Due to a peculiarity in the layout of the rookery its whole history was spread out before us and easily read. This years dead chicks were lying among the dead chicks of previous years but were easily recognised as such. Abandoned eggs were also easily seen but of course it was impossible to tell whether they belonged to this year or not. I consider the static conditions here would offer an excellent opportunity of studying the past history of the emperor since as there is no drainage decades of emperors existence must be lying in layers in the depression. Excavation here may bring forth very interesting results.

I took several photographs with the survey camera then we counted the living chicks by shepherding them into small groups and filing them past. This done we sectorred the rookery and counted the dead chicks of this year. The last task was to count the abandoned eggs.

The figures were :-

Living chicks	2200
Dead chicks	103
Abandoned eggs	20

From these figures I estimate the strength of the rookery to be about five thousand birds. We could not count the adults but the photographs should give an indication of their numbers. 13 abandoned eggs were brought back.

The constant presence of water sky in an azimuth 45 degrees, the line of march taken by the emperors suggested open water. On the return journey by getting wirelessly bearings from Mawson on this watersky and taking bearings myself at Innsvika I was able to plot the position of this water. Quite independantly the Depot laying party at Mt. Henderson 17th November reported suspected open water at a horizon of fifty miles in the sector NW

Report on the Emperor Penguin rookery Brettangen October 1954.

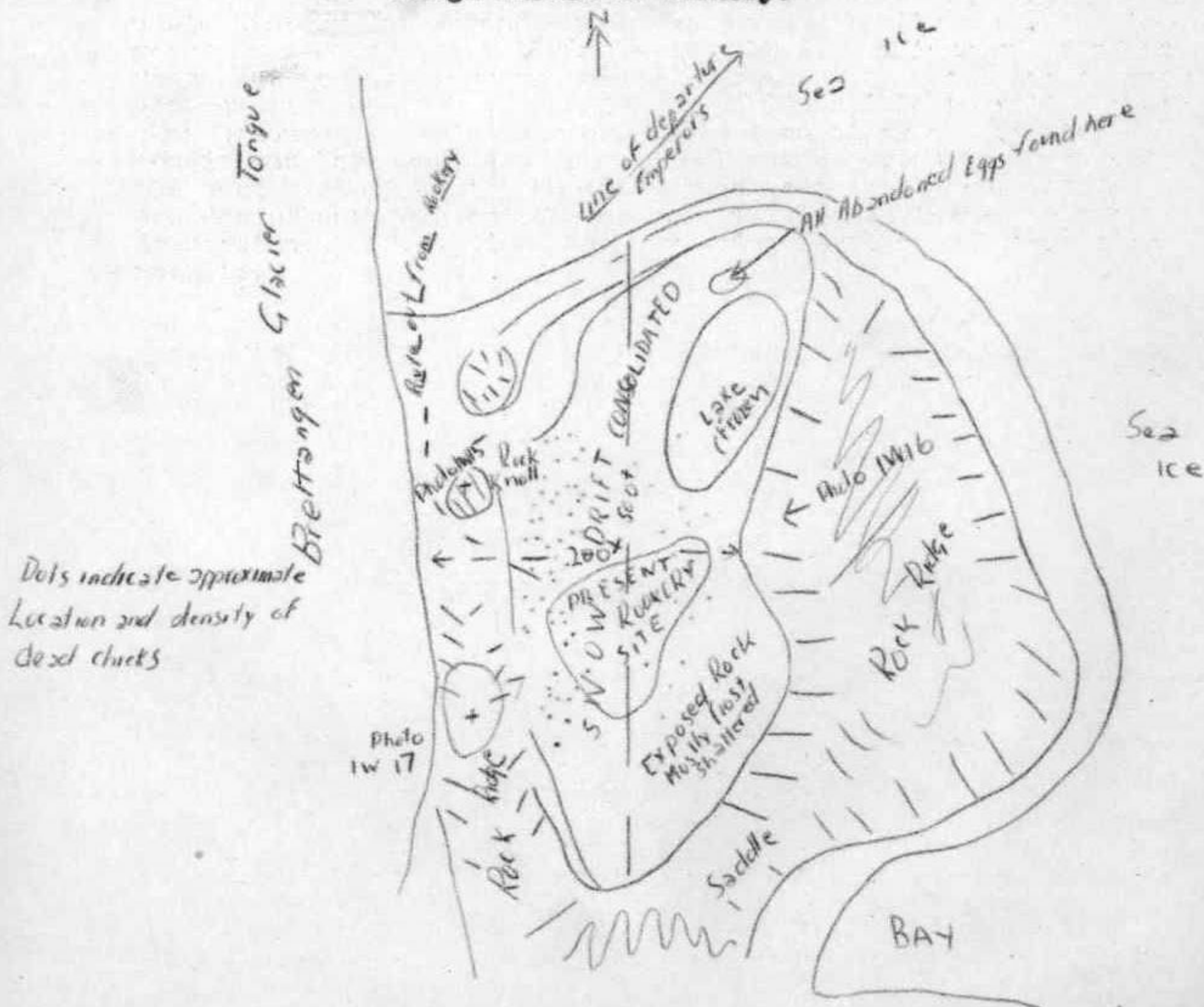
to SE. This plotted fell on the area plotted by bearings. This supposed open water leads in towards Cape Bruce and may be the channel that Mawson used. Practically the whole year water sky has been observed here under favorable conditions. The western limit is Long $61^{\circ}30$ south to Lat $67^{\circ}01$ thence to Long $62^{\circ}05$ Lat $67^{\circ}13$ and thence north east. The eastern edge was indeterminate due to a patch of clear sky but the depot report suggests that it extends far to the east and would agree with the open water we entered with the ship in late January.

We were only at the rookery three hours, then had to push on. After leaving the following encounters were made with emperors. 2 seen together at Langsundet 26th October. Recent track at Kvarsnes 30th October. 1 alone at Mule 13th November. 20 feeding in tide cracks about bergs in the fjord area south of Foldoya. 2 at Uksen and 3 at Uksoy 19th November. Numerous crossing rookery route 20th November. 1 at Insvika 20th November. Thence none seen between Insvika and Mawson.

A few points of minor interest. There is a possibility that a second rookery of emperors exists in the fjord area south of Foldoya. There were a large number of birds here, some travelling southward in the deep fjords and compared with other places the number was large, suggesting that there may be a second rookery at the bottom of one of the fjords. I did not have the time to investigate closely such a complicated area.

About a dozen old carcasses of fullgrown or immature birds at the rookery site. That all the abandoned eggs were found together in a small area, suggested to me a sudden fright from a fall of ice from the glacier.

Rough Sketch of Rookery.



FIELD TRIP REPORT.

WESTERN COASTAL JOURNEY.
METEOROLOGICAL OBSERVATIONS.

Date	GMT	LOCATION	ALT	BARO	TEMP	WIND	CLOUD WEATHER
12.10.54	1500	Inneskjera	12	28.91	-15.4	C	Light and Trace Ac and Ci to variable N Fine Vis 25m
13.10.54	0300	"	"	28.86	-13.0	8/SSE	8/8 Ac As Trace snowfall Vis 25m
13.10.54	1500	Bryggehlme	10	28.87	-14.6	0 variable	8/8 AcAs with Sc SE and N Trace snowfall Vis 25m
14.10.54	0300	"	"	28.78 falling	-16.4	8/ese	0'cast CiCs Fine Vis 25m
14.10.54	1500	Tonskjera	10	28.67	-20.4	5/SE	3/8 Ci 2/8 Cs NW Fine Vis 25m
15.10.54	0300	"	"	28.41 falling	-16.0	30/SSE	7/8 CiCs giving way to AcAs in N Fine Drift to N & W vis 25m
15.10.54	1500	"	"	28.16 falling	-7.0	70/SSE	0'cast. Light drift Vis 1/2 m
15.10.54	1900	"	"	27.95			
16.10.54	0300	"	"	28.04 Rising		85/SSE	Light drift. Sky obscured Vis 1 m
16.10.54	1500	"	"	28.17		70/SSE	8/8 AcAs Fine Drift plateau and Svartedder
17.10.54	0300	"	"	28.26 Stationary	-6.9	40/SSE	8/8 AcAs Fine Vis 15m
17.10.54	1500	"	"	28.42	-8.5	30/SSE	8/8 As & Cs Fine vis 25m
18.10.54	0300	"	"	28.55	-8.3	10/SSE	4/8 Ac.Sc in E Fine Vis 25m
18.10.54	1500	Stedet 67 34/ 61 35	5	28.77 Rising	-8.8	5/SSE	8/8 AcAs Fine Vis 25m Watersky N
19.10.54	0300	"	"	28.94	-9.0	0	5/8 CiCu and Ac clearing. Fine vis 25m
19.10.54	1500	Ufsoy	25	28.92	-9.6	0	8/8 Ac & CiCu Fine vis 50m
20.10.54	0300	"	"	28.81	-12.0	10/ESE	4/8 Ci Cs Fine vis 50 m
20.10.54	1500	"	"	28.80	-13.0	15/ESE	8/8 Ac As little Sc fine Vis 10 m
21.10.54	0300	"	"	28.67	-14.5	10/ESE	7/8 Ac Sc Clear East Fine Vis 25m
21.10.54	1500	Kollskjer near Uksoy	5	28.55	-14.0	20/ESE	8/8 Ac As Sc Fine Vis 25m Watersky N
22.10.54	0300	"	"	28.57	-11.5	35/ESE	Sky not visible. Light drift Vis 1/2 m
22.10.54	1500	"	"	28.69 Steady	-11.9	30/ESE	8/8 Ac As, Sc N Fine Vis 25m
23.10.54	0300	"	"	28.76	-10.5	8/ESE	7/8 Cs with 1/8 Sc to NNE Fine Vis 25m
23.10.54	1700	Stokholmane	60	28.70	-12.5	Light air fr E	8/8 Ac As with Sc Fine Vis 25m
24.10.54	0300	"	"	28.67 Steady	-12.0	30/ESE	8/8 Ac As Light snowfall Vis 2 m
24.10.54	1500	"	"	28.67 Steady	-11.0	40/E	8/8 Ac As Sc . Snow and drift. Vis 200 yds
25.10.54	0300	"	"	28.79 Steady	-11.8	10/SSE	8/8 As Cs clearing Solar halo. Fine Vis 25
25.10.54	1500	Meskjera	15	28.85 Steady	-12.5	7/SSE	4/8 Ci Cs Halo. Fine Vis 25 m
26.10.54	0300	"	"	28.84 Steady	-9.3	7/SSE	7/8 Ac with Cs. Clear E. Fine Vis 25m
26.10.54	1540	Mule	15	28.87	-15.3	7/W	Trace Ci Cs. Light surface drift. Fine Vis 50m
27.10.54	0300	Mule	"	28.89	-13.2	Light variable	Clear sky. Fine Vis 50m

Field trip Report.

WESTERN COASTAL JOURNEY

METEOROLOGICAL OBSERVATIONS

Date	GMT	LOCATION	ALT	BARO	TEMP	WIND	CLOUD WEATHER
27.10.54	1500	at small isle SW of Langoy	5	28.85	-12.7 c	0	Clear sky, trace Ci during day. Fine Vis 50
28.10.54	0300	"	"	28.78	-10.3	0	Clear sky Fine Vis 40 m
		67 03/57 40					
28.10.54	1500	KVARSNES	45	28.76	-19.0	Light W variable	4/8 Cs Trace Ci Fine Vis 50m
29.10.54	0530	"	"	28.77	-8.0	Calm	3/8 Cs Fine Vis 40 m
29.10.54	1700	"	"	28.81	-17.8	3/SSE	2/8 Sc in E 2/8 Ac overhead, 1/8 Cs W Fine Vis 50m
30.10.54	0300	"	"	28.74	-16.0	15/ESE	1/8 Sc in E Fine Vis 40 m
30.10.54	1500	"	"	28.76	-18.5	Light variable	1/8 Sc in E Fine Vis 40 m
31.10.54	0300	"	"	28.76	-13.0	Calm	2/8 Ac in E Fine vis 40 m
31.10.54	1500	Camp 1 K.E.Gulf 66 58/56 41		28.61	-24.2	10/230	Clear sky Fine Vis 40m
1.11.54	0300	"	"	28.72	-17.0	35/230	Clear sky. Surface drift obscuring sky Vis 2 to 10 m
1.11.54	1500	"	"	28.99	-12.7	8/180	2/8 Ci Cu 1/8 Ac
				Rising			2/8 Sc Clouded over from WSW Rapidly 0430 Fine at Obs. Drift all d
2.11.54	0300	"	"	29.27	-10.5	Light & variable	8/8 Ns and Sc. Slight snowfall Night. Fine Vis 5m S 20m N
				Rising			
2.11.54	1500	Camp 2 K.E.Gulf 67 12/56 15		29.01	-8.4	5/180	8/8 Ac Fine Vis 20m
				Falling		30/230 day	
3.11.54	0300	"	"	28.78	-7.4	Light & variable	8/8 Ns and Sc. Steady snowfall. Vis 50 yds
				Falling			
3.11.54	1500	"	"	28.65	-14.3	15/230	1/8 Ci Cs in SE & SW Fine Vis 40 Drift on plateau
				Unsteady			
4.11.54	0300	"	"	28.61	-18.1	8/230	Trace Ci. Fine Vis 40m
				Steady			
4.11.54	1500	Camp 1 K.E.Gulf 66 58/56 41		28.80	-14.5	8/230	1/8 Ac in N 1/8 Sc in SW 3/8 CiCs Fine Vis 40m
				Rising			
5.11.54	0300	"	"	28.76	-9.2	10/230	8/8 As Slight snow-fall Vis 2 to 1 m
5.11.54	1500	"	"	28.70	-9.2	5/230	8/8 Ns Heavy snowfall Vis 50 yds
6.11.54	0300	"	"	28.72	-8.2	5/230	8/8 Ns Snowing steadily. Vis 100 yds
6.11.54	1500	"	"	28.86	-10.5	5/230	3/8 Sc 3/8 Ac As Snow all day Vis 5 m 6" snow lying.
7.11.54	0300	"	"	28.86	-12.5	25/230	2/8 CiCs Strong m surface drift. Vis 20
7.11.54	1500	KVARSNESS	45	28.95	-12.8	20/230	Clear at Obs 4/8 Ci r during day. Fine Vis 40
8.11.54	0300	"	"	29.02	not noted	15/SW	5/8 CiCs Fine Vis 40 m
8.11.54	1615	SOROYA in Karm Sund	15	28.74	-5.7	50/090	8/8 As Ns Light to medium drift. Vis 0 to 2m in lulls
				falling			
9.11.54	0300	"	"	28.32	-7.8	60/090	BLIZZARD Sky obscured by med to intense drift Vis 3 yds in lulls
				Stationary			
				Baro reached 28.20 at 2300/8.11.54			
9.11.54	1500	"	"	28.44	not noted	35/090	3/8 Ac As 4/8 Sc Surface drift Vis 2m
				Rising			
10.11.54	0300	"	"	28.33	-9.2	35/110	@'cast 4/8 AcAs 4/8 Ci Cs Surface drift slight snowfall Vis 1/2 m
				Rising			

FIELD TRIP REPORT.

WESTERN COASTAL JOURNEY.
METEOROLOGICAL OBSERVATIONS.

Date	GMT	LOCATION	ALT	BARO	TEMP	WIND	CLOUD WEATHER
10.11.54	1500	SOROYA in KARM SUND	15	28.41	-5.1 C	35/090	8/8 Ns Snowfall and drift Vis 1 m
11.11.54	0300	"	"	28.41	-4.5	45/120	Sky obscured by med to intens drift. Vis 5-10 yds
11.11.54	1500	"	"	28.71	-5.0	45/120	0*cast sun showing no halo or corona Intense drift Vis 10yds
12.11.54	0300	"	"	28.85	-5.6	35/120	8/8 Sc Break in cloud to NE. Surface drift Vis 1 to 10 miles
12.11.54	1500	Austoya near KROKOY	20	29.01	-4.3	Light & variable	7/8 Sc Clear in NE Fine Vis 20 m
13.11.54	0300	"	"	29.14	-12.3	20/120	Clear sky Light surface drift Vis 25 m
13.11.54	1500	MULE	15	29.13	- 8.7	Light & variable	Clear Sky Fine Vis 40m
14.11.54	0300	"	"	29.19	- 4.2	15/SSE	4/8 Ci Cs Slight surf. drift. Fine Vis 40m
14.11.54	1500	"	"	29.26	- 9.2	Calm	7/8 Ci Cu Cs Fine Vis 40m
15.11.54	0000	"	"	29.25	-12.5	15/120	4/8 As Cs Light drift
15.11.54	0300	"	"	29.27	- 9.2	35/120	7/8 As Sc Light to medium drift. Vis 1-10m
15.11.54	1500	"	"	29.07	- 4.5	55/120	BLIZZARD. Sky obscured Vis 10-40 yds at times
16.11.54	0300	"	"	29.00	- 5.0	55/120	BLIZZARD Sky obscured Vis 10-20yds in lulls
16.11.54	1500	"	"	29.13	- 4.7	35/120	8/8 Sc. Light to med. drift. Vis 1/2 m
17.11.54	0300	"	"	29.19	- 4.3	15/120	4/8 Ci Cs 1/8 Ac. Fine vis 25 m
17.11.54	1500	MESKJERA	15	29.20	- 6.5	25/100	4/8 Ci Cs Fine Vis 25m falling Puffs of Cu travelling low & fast from E all afternoon.
18.11.54	0300	"	"	29.10	- 5.5	10/130	Trace Ci Cs on platau to S Fine Vis 40m
18.11.54	1500	STOKHOLMANE	10	29.07	- 2.0	Light S and E	1/8 Ac to N Fine Vis 40m
19.11.54	0300	"	"	28.97	- 2.4	5/090	1/8 Ac in E Fine Vis 40m
19.11.54	1500	KOLLSKJER near Uksoy	5	28.98	- 2.3	Calm	2/8 Ac in N Fine Vis 40m
20.11.54	0300	"	"	28.94	- 4.4	10/120	Clear sky. Fine Vis 40m
20.11.54	1500	INSVIKA east of UFSOY	5	28.99	- 2.2	10/120	Clear sky. Fine Vis 40m Watersky NE
21.11.54	0300	"	"	29.06	- 4.1	30/120	3/8 Ac As to NE 2/8 Ac As to W. Fine Vis 40m
21.11.54	1500	TONSKJERA	10	29.15	- 1.8	Calm	2/8 ac in E. Fine Vis 40 m

Arrived Mawson 0900 hrs 21.11.54

NOTES.

1. Pressures read on Watts Aneroid Ser. 3565 which on check at base reads 0.16 ins low against Station barometer.
2. Wind speeds by estimation and direction by Astro compass. Speeds in knots. Bearings true.
3. Place names where used are taken from the Norwegian Charts produced by the Lars Christiansen Expedition.
4. Where Astronomical positions are given they are observed values and do not correspond with the Graticule of the Norwegian map.
5. Wind on most of the trip was strong during the day and fell off about sunset, rising again at sunrise.
6. Heights are in feet, temperatures in degrees Centigrade.
7. Altitudes of the Bamps in King Edward Gulf have not been calculated but will be available. Probable value between 100 to 150 feet.

Photographic Record.

Station	photo	Exposure	Subject or Reference Object	Angle	Remarks
Bryggeholmane	1W1	1/100 16	Inneskjera T	00 00 00	
"	1W2	" "	"	45 00 00	
"	1W3	" "	"	90 00 00	
"	1W4	" "	"	135 00 00	
"	1W5	" "	"	180 00 00	
"	1W6	" "	"	315 00 00	
Tistelen	1W7	" "	Mt Henderson	00 00 20	
"	1W8	" "	"	45 00 20	
"	1W9	" "	"	90 00 20	
"	1W10	" "	"	135 00 20	
"	1W11	" "	"	180 00 20	
"	1W12	" "	"	225 00 20	
"	1W13	" "	"	270 00 20	
"	1W14	" "	"	315 00 20	
Brettangen	1W15	1/100 8	Rookery from NE on Knoll		Photographic
"	1W16	" "	" from East on ridge		record of
"	1W17	" "	" " SW on ridge		brettangen Emperor
"	1W18	" "	Close up chicks for sizes		penguin rookery
Kvarsnes T	1W19	1/100 16	Twin peaks most east	00 00	
"	1W20	" "	" " "	45 00 00	
"	1W21	" "	" " "	90 00 00	
"	1W22	" "	" " "	135 00 00	
"	1W23	" "	" " "	180 00 00	
"	1W24	" "	" " "	225 00 00	
"	1W25	" "	" " "	270 00 00	
"	1W26	" "	" " "	315 00 00	
"	1W27	" "	" " "	360 00 00	
"	1W28	" "	" " "	45 00 00	
"	1W29	" "	" " "	90 00 00	
"	1W30	" "	" " "	135 00 00	
"	1W31	" "	Schwartz at theodolite		
"	1W32	" "	Dovers at theodolite		
"	1W33	" "	The cairn at Kvarsness		
Mule	3W1	" "	The lode along strike		
"	3W2	" "	" " across strike		
Tverholmne	3W3	" "	Steffannson Bay from Tverholmne		
Tverholmen	3W4	" "	Glaciation west face Foldoya		
Kalvern	3W5	" "	William Scoresby Bay fr N tip Kalven		
Stokholmane	3W6	" "	Breaking camp Stokholmane		
Kollskjer	3W7	" "	Vestokultan	00 00 14	
"	3W8	" "	"	45 00 14	
"	3W9	" "	"	90 00 14	
"	3W10	" "	"	135 00 14	
"	3W11	" "	"	180 00 14	
"	3W12	" "	"	225 00 14	
"	3W13	" "	"	270 00 14	
"	3W14	" "	"	315 00 14	
Near Bergnes	3W15	" "	Emperor P. rookery from North East		
"	3W16	" "	Emperors and dogs off Brettangen.		

Photographic Record

Station	photo	Exposure		Reference	Object	Subject or Angle			Remarks
Camp 2B	2W1	1/100	16	Twin pks	most E	00	00	08	
"	2W2	1/100	16	"	"	45	00	08	
"	2W3	"	"	"	"	190	00	08	
"	2W4	"	"	"	"	135	00	08	
"	2W5	"	"	"	"	180	00	08	
"	2W6	"	"	"	"	225	00	08	
"	2W7	"	"	"	"	270	00	08	
"	2W8	"	"	"	"	315	00	08	
Gulf Station	2W9	"	"	"	"	00	00	14	
"	2W10	"	"	"	"	45	00	14	
"	2W11	"	"	"	"	190	00	14	
"	2W12	"	"	"	"	135	00	14	
"	2W13	"	"	"	"	180	00	14	
"	2W14	"	"	"	"	225	00	14	
"	2W15	"	"	"	"	270	00	14	
"	2W16	"	"	"	"	315	00	14	
3 hrs btwn 2B and 1b	2W17	1/50	6.3	"	"	315	00	24	
"	2W18	"	"	"	"	00	00	24	on R.O.
"	2W19	"	"	"	"	45	00	24	
"	2W20	"	"	"	"	90	00	24	
Camp 1B	2W21	1/100	16	"	"	00	00	14	
"	2W22	"	"	"	"	45	00	14	
"	2W23	"	"	"	"	190	00	14	
"	2W24	"	"	"	"	135	00	14	
"	2W25	"	"	"	"	315	00	14	
Tvillingane	2W26	"	"	Kuringen		00	00	18	
"	2W27	"	"	"		45	00	18	
"	2W28	"	"	"		90	00	18	
"	2W29	"	"	"		135	00	18	
"	2W30	"	"	"		180	00	18	
"	2W31	"	"	"		225	00	18	
"	2W32	"	"	"		270	00	18	
"	2W33	"	"	"		315	00	18	

Tidal observations at Mule Lat s 67 04 42 Long 58 17 00

METHOD. A stake on the sea ice was observed at half hourly intervals from a theodolite on land. Distance stake to theodolite 401.28 feet.

Date	GMT	v1	v2	d.sinv1	d.sinv2	swell	mean	25.00 - mean
13	1330	3 06 30	3 05 43	21.76	21.67	0.09	21.71	3.29
	1400	3 04 57	3 04 22	21.53	21.51	0.02	21.52	3.48
	1430	3 04 00	3 03 24	21.47	21.40	0.07	21.43	3.57
	1500	3 01 57	3 01 37	21.23	21.19	0.04	21.21	3.79
	1530	3 01 18	3 00 31	21.15	21.06	0.09	21.10	3.90
	1600	2 59 34	2 59 12	20.95	20.91	0.04	20.93	4.07
	1630	2 58 23	2 57 45	20.81	20.74	0.07	20.78	4.22
	1700	2 56 30	2 55 48	20.59	20.51	0.08	20.55	4.45
	1730	2 53 46	2 53 58	20.28	20.30	0.02	20.29	4.71
	1800	2 52 28	2 52 08	20.12	20.08	0.04	20.10	4.90
	1830	2 50 20	2 49 50	19.88	19.82	0.06	19.85	5.15
	1900	2 48 06	2 47 38	19.61	19.56	0.05	19.58	5.42
	1930	2 45 55	2 45 40	19.36	19.33	0.03	19.35	5.65
	2000	2 44 20	2 43 48	19.18	19.11	0.07	19.15	5.85
	2030	2 42 34	2 42 15	18.97	18.93	0.04	18.95	6.05
	2100	2 41 20	2 41 11	18.82	18.81	0.01	18.81	6.19
	2130	2 40 08	2 40 10	18.69	18.69	0.00	18.69	6.31
	2200							
	2230							
	2300	2 39 05	2 39 35	18.56	18.62	0.06	18.59	6.41
	2330	2 41 12	2 39 32	18.81	18.61	0.20	18.71	6.29
14	0000	2 40 56	2 40 50	18.78	18.77	0.01	18.77	6.23
	0030	2 43 24	2 42 58	19.07	19.01	0.06	19.04	5.96
	0100	2 46 20	2 45 46	19.41	19.34	0.07	19.38	5.62
	0130	2 47 46	2 47 26	19.58	19.54	0.04	19.56	5.44
	0200	2 49 42	2 49 27	19.80	19.77	0.03	19.78	5.22
	0230	2 52 02	2 51 37	20.07	20.02	0.05	20.04	4.96
	0300	2 54 38	2 54 04	20.38	20.31	0.07	20.34	4.66
	0330	2 57 42	2 58 06	20.73	20.78	0.05	20.75	4.25
	0400	3 00 44	3 00 22	21.09	21.04	0.05	21.06	3.94
	0430	3 02 37	3 02 20	21.31	21.27	0.04	21.29	3.71
	0500	3 04 51	3 04 25	21.57	21.52	0.05	21.54	3.46
	0530	3 06 40	3 06 52	21.78	21.80	0.02	21.79	3.21
	0600	3 07 52	3 08 07	21.92	21.95	0.03	21.93	3.07
	0630	3 08 58	3 09 10	22.05	22.07	0.02	22.06	2.94
	0700	3 09 53	3 10 13	22.15	22.19	0.04	22.17	2.83
	0730	3 11 28	3 11 15	22.34	22.31	0.03	22.32	2.68
	0800	3 11 28	3 11 18	22.34	22.32	0.02	22.33	2.67
	0830	3 11 12	3 11 38	22.31	22.36	0.05	22.33	2.67
	0900	3 10 53	3 11 30	22.27	22.34	0.07	22.30	2.70
	0930	3 10 40	3 11 10	22.24	22.30	0.06	22.27	2.73
	1000	3 11 18	3 10 20	22.32	22.21	0.11	22.26	2.74
	1030	3 11 05	3 10 18	22.29	22.20	0.09	22.24	2.76
	1100	3 09 33	3 09 52	22.11	22.15	0.04	22.13	2.87
	1130	3 09 33	3 09 22	22.12	22.09	0.03	22.10	2.90
	1200	3 09 11	3 09 33	22.07	22.11	0.04	22.09	2.91
	1230	3 08 42	3 09 02	22.02	22.06	0.04	22.04	2.96
	1300	3 08 48	3 08 30	22.03	21.99	0.04	22.01	2.99
	1330	3 08 24	3 07 58	21.98	21.93	0.05	21.95	3.05
	1400	3 08 08	3 07 57	21.95	21.93	0.02	21.94	3.06
	1430	3 07 13	3 06 40	21.84	21.78	0.06	21.81	3.19
	1500	3 06 00	3 06 20	21.70	21.74	0.04	21.72	3.28
	1530	3 05 17	3 05 35	21.62	21.65	0.03	21.63	3.37
	1600	3 04 04	3 03 55	21.47	21.46	0.01	21.46	3.54
	1630	3 02 50	3 03 04	21.33	21.36	0.03	21.35	3.65
	1700	3 01 00	3 01 25	21.12	21.17	0.05	21.14	3.86
	1730	3 00 11	3 00 56	21.02	21.11	0.09	21.06	3.94
	1800	2 58 17	2 58 39	20.83	20.87	0.04	20.85	4.15

Continuation Tidal observations at Mule lat S 67 04 42 Long E 58 17 00

Date	GMT	v1	v2	d.sinv1	d.sinv2	Swell	Mean	25 - mean
14	<u>1841</u>	2 55 51	2 55 51	20.52	20.52	0.00	20.52	4.48
	1900	2 54 38	2 54 34	20.38	20.37	0.00	20.37	4.63
	1930	2 52 55	2 52 30	20.18	20.13	0.05	20.15	4.85
	2000	2 50 50	2 51 15	19.98	20.01	0.03	19.99	5.01
	2030	2 48 16	2 47 55	19.63	19.59	0.04	19.61	5.39
	2100	2 47 02	2 46 26	19.49	19.42	0.07	19.45	5.55
	2130	2 45 20	2 45 55	19.29	19.36	0.07	19.32	5.68
	2200	2 44 10	2 44 25	19.16	19.19	0.03	19.17	5.83
	2230	2 43 05	2 43 34	19.03	19.09	0.06	19.06	5.94
	2300	2 42 57	2 42 54	19.01	19.01	0.00	19.01	5.99
	<u>2400</u>	2 43 51	2 43 17	19.12	19.05	0.07	19.08	5.92

Observer R. Dovers

Field Trip Report - Geology.

Part Western Coastal Journey.

The series of rock specimens collected from western areas during the recent sea-ice sledging journey to King Edward VII Gulf numbers in all 141. Rock samples were obtained from the following 27 localities:-

<u>Locality.</u>	<u>Lat. (S).</u>	<u>Long. (E).</u>	<u>Number.</u>
Bryggeholmen	67* 34'	62* 27'	3
Tongskjera	67* 33'	62* 07'	3
Logtangen	67* 33 $\frac{1}{2}$ '	62* 07'	7
Svartodden (C. Bruce)	67* 33'	61* 49'	3
Stedet	67* 34 $\frac{1}{2}$ '	61* 34'	6
Isvika	67* 30 $\frac{1}{2}$ '	61* 26'	2
Ufsoy - C. Bergnes	67* 30'	61* 13'	9
Kollskjer	67* 26'	60* 48'	3
Uksoy	67* 25 $\frac{1}{2}$ '	60* 47'	5
Uksen	67* 23'	60* 17'	5
Stokholmen	67* 22'	60* 01'	4
Kalven (Bertha Is.)	67* 23'	59* 46'	4
Foldoya	67* 22 $\frac{1}{2}$ '	59* 35'	2
Systerkellane	67* 18'	59* 30'	2
Tverrholmen	67* 22'	59* 23'	5
Kapp Wilkins	67* 17'	59* 22'	2
Meskjera	67* 17'	59* 09'	4
Langsundet E.	67* 12 $\frac{1}{2}$ '	59* 01'	3
Sundvika	67* 12'	58* 45'	6
Broka	67* 10 $\frac{1}{2}$ '	58* 38'	4
Mule	67* 07'	58* 17'	20
Austoya	67* 04 $\frac{1}{2}$ '	57* 54'	9
Austoya N. (Is.)	67* 03 $\frac{1}{2}$ '	57* 53'	5
Karm Sd. (Meoya)	67* 01'	57* 29'	2
Karm Sd. (Soroya)	67* 01 $\frac{1}{2}$ '	57* 28'	10
Kvarsnes	67* 06'	57* 04'	10
Tvillingane	66* 55'	56* 47'	3

The specimens had necessarily to be limited in size and number and generally reconnaissance sampling only was undertaken throughout the journey. Rather detailed sampling was carried out, however, across a mineralised zone at Mule.

A great variety of metamorphic rocks was collected and the rock types present great variation in texture, structure and mineral content.

The rock formations examined consisted generally of foliated rocks or gneisses, many rich in garnets. Mixed with the banded gneisses are bodies up to 200 feet thick of coarse to macro-crystalline rock containing large crystals of ~~greenish~~ brown feldspars. Smaller intrusions

and many coarse grained quartz-felspar dykes and pegmatites are recorded. In some areas bands occur in the country rock ranging in width from a few inches to several feet; these are dyke-like intrusions, possibly metamorphosed gabbros. Some of the rock samples approach granite in appearance but true granite bodies were not encountered. Rocks similar to those of the Charnockite Series are represented in the collection.

Foliated garnetiferous gneisses ranging from coarse to fine grained and other coarse to medium grained rocks containing abundant garnets, some very large, occur from Tongskjera to Kvarsnes. A feature of the rocks of the Stokholmen area is the presence of aggregates of garnets up to 9 inches in diameter. Strike of the foliation was generally East - West. At Stedet, foliation in the gneisses is parallel to the dyke system, which dip to the south at approximately 75 degrees, strike 300 degrees. At Stokholmen, a dip of 65 degrees south and East - West strike was observed. A prominent mineralised zone about 20 feet wide was reported from the southernmost cape of Broka. This zone was again encountered at Mule, dip 25 degrees South, strike E - W. At Soroya, Karm Sund, a similar zone occurs, dip 75 degrees South, strike E \pm W. This zone was not found further west at Kvarsnes.

The collection was examined for the presence of radioactive minerals, but no occurrence of such minerals can be reported.

Compared with the Mawson area there was a noticeable absence of morainic material and only very few scattered erratics were observed.

It was noticed that islands westwards from Foldoya to Utoy are generally ice-capped.

Magnetic Declination Camb 1 King Edward Gulf.

Position by observation Lat 66 57 57 S
Long. 56 41 00 E

OBJECT	Azimuth	Magnetic Bearing	Declination
TWIN PEAKS	247 28 39	302 22	W 54 53
KURINGEN	212 57 32	267 25	54 28
OUTCROP WEST	281 18 00	335 20	54 00
SKUTESMULLEN	354 49 14	47 45	52 56 * 55 27
Most Southerly Outcrop E	205 55 00	261 22	55 27
Outcrop 1603	165 52 00	220 50	54 58

Mean ex all readings 54° 27'

Mean all except * 54° 46'

Accept as declination W 54° 46'

* Possibility of misidentification due to bad visibility