AERIAL WATERFOWL SURVEY, QUEEN MAUD GULF, N.W.T., JULY - AUGUST, 1971

by

E. Kuyt - Canadian Wildlife Service,
Fort Smith, N.W.T.

C.H. Schroeder - North Dakota Game and Fish Department,
Bismarck, North Dakota.

A.R. Brazda - Bureau of Sport Fisheries and Wildlife,
Lafayette, La.

Progress Report No. 1

Introduction and Objectives

The proposal of an aerial survey of the Queen Maud Gulf lowlands grew out of discussions within the Tall Grass Prairie Canada Goose Population sub-committee of the Central Flyway Council in 1968 and 1969. The Canadian Wildlife Service had been committed to provide aviation gasoline at Bathurst Inlet, Cambridge Bay, Gjoa Haven and Baker Lake and the U.S. Bureau of Sports Fisheries and Wildlife would provide a Grumman Goose and pilot. A Canadian observer and a second observer would complete the crew.

The survey area would encompass (Dzubin, pers. comm.) the Pleistocene inundated areas of Queen Maud Gulf, including:

1. Queen Maud Gulf Migratory Bird Sanctuary;
2. Kent Peninsula including Walker Bay;
3. Sherman Inlet and Lower Adelaide Peninsula;
4. Islands in Queen Maud Gulf, including Jenny Lind, Melbourne Islands and Royal Geographical Islands;
5. Western portion of King William Island;
6. Southeastern third of Victoria Island.

Objectives of the survey were as follows:

1. Delineation of summer concentrations of small Canada geese, especially adults with young, of the Tall Grass Prairie Population for possible future banding operations;

2. Determination of approximate proportions of small Canadas breeding in this area as separated from the major breeding grounds along western Hudson Bay and Southampton Island;
3. Delineation of breeding grounds and estimation of population size of white-fronted and snow-blue geese;
4. Delineating of moulting grounds and numbers of large Canada geese utilizing the area.

Methods

Although the earlier proposals suggested the use of a Grumman Goose as survey aircraft, an amphibious Beaver was substituted. Unfortunately, gasoline supplies had been deposited with the Grumman aircraft in mind, so it became necessary to move a gas cache to Perry River. Pilot A. Brazda was tied up with waterfowl production surveys in the prairie provinces and arrived in Fort Smith on July 27. We returned to Fort Smith from Perry River on August 17. Out of the 21 days spent away from Fort Smith, 12 days flying time were lost due to smoke haze, rain, snow and strong, gusty winds.

The survey was accomplished by low altitude (± 150 ft. above ground?) flights along coastlines, flights inland for 25-40 miles along major rivers and flights between drainages, particularly in the Perry River area. All flights are shown on the accompanying maps. Flights along pre-determined east-west transect lines were severely curtailed due to the lack of time, brought about by the vagaries of weather. For the same reasons, intensive coverage of blocks of habitat could not be carried out. Both observers entered their observations directly on a 1:250,000 scale map and these figures were transferred to a master map at the end of each flight. In the main, only observations of waterfowl (Family Anatidae) were recorded on the maps but in addition and when time permitted, sandhill cranes, loons and raptors were also recorded.

Our surveys were largely exploratory in nature, although good coverage was obtained for Jenny Lind and Melbourne Islands, for the southeast portion of Victoria Island and for much of the lower portions of the major rivers flowing north into Queen Maud Gulf.

Itinerary

The Beaver aircraft, piloted by A.R. Brazda, picked up C. H. Schroeder in Saskatoon on July 26, arriving in Fort McMurray later that day. The aircraft arrived at Fort Smith, N.W.T. about noon on the following day and after re-arranging the load and adding E. Kuyt to the crew, the survey team left Fort Smith about 5 p.m., arriving in Yellowknife about 7 p.m. Enroute we were plagued by heavy smoke from forest fires burning north of Fort Smith. We were delayed in Yellowknife from July 28-30 due to smoke forecast for our route, as well as unfavourable weather (fog, rain) near Cambridge Bay. Our time in Yellowknife was used to purchase additional supplies (food and maps), to inquire about gasoline caches deposited a year ago for our use, to make tentative arrangements for a gas haul from Cambridge Bay to Perry River and to discuss aspects of our proposed survey with Dr. J. P. Ryder. I also spoke with mining people in Yellowknife about exploration activities in the Queen Maud Gulf area.

Since gasoline supplies at Perry River were imperfectly known, we decided to fly to Cambridge Bay and survey parts of Victoria

Island until a known gas supply had been deposited at Perry River from Cambridge Bay. We consequently departed Yellowknife on July 31 after smoke had cleared considerably. After a 3½ hr. flight we landed at Bathurst Inlet Lodge, operated by Mr. and Mrs. G.B. Warner of Yellowknife. Here we were directed to a gas cache on their "outpost lake". After taking 45 gal. gas we departed at 3:20 p.m. and landed in Cambridge Bay about 5:30 p.m.

On August 1 a long survey was made from Cambridge Bay southeast to DeHaven Point, north to Cape Adelaide and into Padliak Inlet. A survey on August 3 planned for the Albert Edward Bay area was cut short because of deteriorating weather. We carried out a survey over Jenny Lind Island on August 5. A second flight planned for that day to survey Collinson Peninsula and the area north of Albert Edward Bay was left incomplete due to poor weather.

On August 6 a long survey was made south of Victoria Island and Melbourne Island, Fitzgerald Island, the coastline between these islands and a portion of Kent Peninsula were visited. On August 4, 7, 8 and 9 strong gusty winds and/or poor visibility forced us to remain in Cambridge Bay.

On August 10, after a gas cache had been deposited at the C.W.S. cabin near the mouth of Perry River, we changed our base of operations to that site, surveying coastal areas enroute. The only

good day's flying from Perry River was done on August 11 and sections of the coastal area from the Atkinson Point River to the Simpson River were surveyed as well as 25-40 mile sections of the Atkinson Point River, Perry River, Ekalukpik River, Pitok River, Armark River and Simpson River. August 12, 13 and 14 were lost because of high winds, snow-flurries and rain. On August 15 we closed up operations but nearing the Atkinson Point River we ran into low clouds and rain and were forced back to Perry River where we spent another night. On August 16 we departed again and managed to get to Bay Chimo but not without having to sit down for several hours on an unnamed lake because of fog. After refueling at Bay Chimo we arrived in Yellowknife at 8 p.m. The following day Kuyt was deposited at Fort Smith and the aircraft continued to Saskatoon and then to Prince Albert.

Special Problems

1. Fuel

   Minor difficulties were encountered because of uncertainty about location of gasoline caches and the amounts of fuel cached. Use of the Beaver aircraft necessitated shifting of a gas cache to Perry River. Gas caches now exist in Baker Lake, Gjoa Haven, Perry River, Bay Chimo and Cambridge Bay. The location and size of these caches has been reported earlier. Problems, such as those we had this year, are not anticipated for next year's operation.

2. Weather

Future survey crews must be prepared to face the loss of up to 50% of working days due to unfavourable weather. Added to this difficulty is the fact that weather forecasting in Cambridge Bay is not of the same quality as for example in Yellowknife. Gusty winds may be encountered in the Mount Pelly area, the only high land of importance on SE Victoria Island. A bad sudden squall - wind, rain, lightning and reduced visibility - forced us into an emergency landing on Long Lake on August 3.

3. Accommodation

Our accommodation in Cambridge Bay at the Transient Centre was quite comfortable, albeit somewhat crowded and rather expensive. Although perhaps not much additional work is required to be done out of Cambridge Bay, it would in future be advisable to make prior arrangements and attempt to rent a small building.
It was noted that one of the R.C.M.P. married quarters was vacant. With the proper approach, it may have been possible to rent this building.
The cabin at Perry River was quite comfortable, taking into consideration the cold weather we were experiencing. Some minor repairs are required on the oil heater.

4. The float landing site at the Perry River cabin is

subject to tides. That necessitated frequent moving of the aircraft tied up on shore. A buoy, some distance from shore, would be of assistance.

Results

1. Southeast Victoria Island

Those portions of southeast Victoria Island we surveyed were mostly of low relief or gently undulating. There were numerous low rocky ridges, ancient strand lines and countless ponds and lakes. The islands off Kean Point and near Stromness Bay on Victoria Island opposite Jenny Lind Island are flat and rocky and harboured only a few geese and swans. The coastal area opposite Taylor Island, south of Albert Edward Bay is desert-like sand and rock tundra without waterfowl. Taylor Island which appeared similar was not visited. Much of the coastal area south of Albert Edward Bay and along Padliak Inlet consists of open sandy beaches and shallow waters. The country inland from here may be better waterfowl habitat but we did not get the opportunity to return. West of Albert Edward Bay we encountered numerous shallow rocky ponds and lakes of only marginal importance for waterfowl.

Our surveys over Victoria Island showed low densities of waterfowl. During 1350 miles of flight we saw the following:

Canada geese	1316
white-fronted geese	212
snow- and blue geese	684
whistling swans	302
eider	926
old squaw	59
pintail	1

2. Jenny Lind Island

Jenny Lind Island, measuring about 16 miles across in any direction, is relatively flat with as its highest ground a narrow ridge in the northeast corner of the island rising to 200 ft. The island, about 158 sq.mi. in surface area, contains about six large aggregations of tundra ponds and small creeks with interconnecting wet or marshy tundra. The island contains a few areas consisting of dry tundra and there are some extensive sandy places. Jenny Lind Island was the best waterfowl area we saw north of Queen Maud Gulf.

We visited the island situated about 12 miles off the southeast tip of Victoria Island, only briefly, by searching the major waterfowl areas from a low altitude. The total mileage flown over the island was about 35 miles and we counted the following:

Canada geese	200
white-fronted geese	none
snow- and blue geese	558
whistling swans	27
unidentified flying dark geese (brant?)	27
eider	34

3. Melbourne Island, Minto Islands

Melbourne Island, situated on the west side of Queen

Maud Gulf and lying less than 10 miles off shore is a low, oval shaped island, measuring roughly 18 miles long and 10 miles wide and is about 146 sq. mi. in surface area. The island rises to 200 feet in the centre and it contains dry tundra with a few stones and relatively few lakes. Most of the larger lakes are shallow with many large boulders showing above the surface. The island contains many attractive green marshy areas but on the whole we did not see much waterfowl.

The southwest portion of the largest of the Minto Islands is low, dry tundra with boulders and the low and stony islands, judging from our superficial examination, do not constitute good waterfowl producing areas. The unnamed four mile long island between Melbourne Island and the mainland has low, stony ice-push shores and its interior is dry, rocky tundra. We saw eiders off shore but no birds on the island. Our survey in the area was cut short because of rainshowers and a threatening, low fog bank just off the east coast of Melbourne Island.

We made only a single low pass over Melbourne Island and along its 32 mile long flightpath we saw the following:

Canada geese	none	
white-fronted geese	16	
snow- and blue geese	none	
whistling swans	24	
eider	750	(all in salt water, none on island)
pintail	12	

It appears to us that Melbourne Island is not of great importance as a waterfowl producing area.

4. NE portion of Kent Peninsula, west side of Elu Inlet

Two flights (see maps) were made along the rocky east side of Kent Peninsula and its narrow isthmus. We immediately noticed the more luxurious vegetation in this area as compared with Victoria Island but we saw almost no waterfowl north of Labyrinth Bay. The high rocky country south of Gloucester Hills and Ovayor Hill and near Kongoyuar Point contains breath-taking scenery but we saw almost no waterfowl along this flightline west of the west border of the Queen Maud Gulf Sanctuary. The three long bays on the west side of Elu Inlet contained considerable numbers of waterfowl. Several large flocks of geese were observed (but not identified) from our high altitude flight from Yellowknife to Cambridge Bay on July 31. We were also able to spot several swans and gull colonies (Thayer's gull?).

The east portion of Kent Peninsula is flat or slightly rolling tundra with myriads of small shallow ponds and relatively few rocks. Our line of flight cut across Kent Peninsula just south of Mount George (see map) and we examined the marshy areas along this route. We also examined the northwest facing coast of the peninsula but we found few lakes or ponds here and almost no birds.

Our total line of flight on Kent Peninsula (excluding the two flights along the east side of the isthmus) was approximately 76 miles and we saw the following:

Canada geese	101	
white-fronted geese	97	
snow- and blue geese	none	
brant	10	
unidentified dark geese	370	(from high altitude)
whistling swans	42	
pintail	80	
eider	34	

5. Queen Maud Gulf Bird Sanctuary

After becoming accustomed to the almost monotonous nature of the frequently stony areas of the southeast portion of Victoria Island, the observer is at once struck by the lush green areas in the Queen Maud Gulf Bird Sanctuary's lowlands. These marine silt lowlands are generally flat, sloping north to the Queen Maud Gulf about 2.5 ft. per mile (Bird, 1967). Many of the larger lakes are elongated and similar to the roughly parallel northward flowing rivers are separated from each other by parallel ridges. All of the rivers are poorly navigable, exhibiting rapids and exposed rocks in the streambed in many places. Near the Queen Maud Gulf the wet, green meadows and marsh tundra are frequently interrupted by the conspicuous

rocky ridges or "whale-backs". Conspicuous also are the multitudes of circular, shallow thaw lakes (Bird, 1967), usually muddy as a result of wave action on the silt lake bottom.

Because of time and weather limitations, the 24,240 sq. mile sanctuary was only examined superficially. The lower 10 to 20 miles of the major northward flowing rivers the Atkinson Point, Perry, Ekalukpik, Pitok, Armark and Simpson river were surveyed. We also surveyed coastal portions of the Queen Maud Gulf south shore. A total of 680 miles was flown (see map) and the following waterfowl recorded:

Canada geese	2475
white-fronted geese	845
snow- and blue geese	3051
Ross' geese	3927
brant	5
unidentified dark geese	500
whistling swans	296
eider	330
old squaw	195
pintail	188
merganser	12
white-winged scoter	2

The south and west coasts of Queen Maud Gulf with their numerous bays and myriads of small islands harbour impressive numbers of waterfowl. Labyrinth, Foggy, Conolly and Ogden Bay were

outstanding in this respect. Several hundred dark geese remained unidentified in coastal areas; it is believed they may have been brant.

Notes on Individual Species

1. Canada goose

Canada geese were encountered throughout southeast Victoria Island but nowhere were they found to be in dense numbers. Broods were seen as far north as 69°58'N. A large flock, consisting of about 200 adult geese was observed along the coast of Albert Edward Bay about 10 miles northwest of Taylor Island. Another large flock of about 100 birds, some not quite having reattained their ability to fly, was seen on Jenny Lind Island. Other similarly sized flocks of moulting birds were seen south of Queen Maud Gulf near the Fitzgerald Islands.

Parmelee et. al. (1967) refer the Canada geese occurring on southeastern Victoria Island and Jenny Lind Island to Branta canadensis hutchinsii. We saw Canada geese of a larger race along the Atkinson Point River. On several occasions members of the two races were in one flock and size differences were noted.

Information on brood size and numbers of Canada geese is given in Table 1.

Table 1. Brood size, numbers and relative density index of Canada geese, Queen Maud Gulf area.

Area	Family groups			Geese w/o young	Flocks (ad + yg) not segregated	Total	Mileage flown	Relative index: geese per linear mile
	Adults	Young	Av. brood size					
SE Victoria Island	66	123	3.7	1047	80	1316	1350	0.97
Jenny Lind Island	16	31	3.9	153	--	200	35	5.71
Melbourne Island	--	--	---	---	--	---	32	0.00
Kent Peninsula	6	20	6.7	55	20	101	76	1.3
Q. Maud Gulf Sanct.	34	52	3.0	1738	651	2475	680	3.6
Total	122	226	3.7	2993	751	4092		

2. White-fronted goose

Parmelee et. al. (1967) found white-fronted geese on S.E. Victoria Island widely but not evenly distributed. Our observations corroborate these findings. One "pocket" just west of the mouth of Padliak Inlet contained 88 white-fronts. Near the head of this inlet we saw 35 white-fronts in two flocks and near Cambridge Bay we observed flocks of 40 and 15 adults as well as a few broods accompanied by adults. Other than these local concentrations we observed only few white-fronts during the 1350 miles flown on southeast Victoria Island (Table 2). We did not see the species on Jenny Lind Island but we observed two families with six young each on Melbourne Island.

Our rough index (Table 2) shows white-fronted goose densities to be considerably higher south of Queen Maud Gulf and Dease Strait than on Victoria Island. Particularly the south shore of Queen Maud Gulf (Campbell Bay and Ogden Bay) and Atkinson Point River showed good numbers of white-fronts. We also found these geese to be common on the surveyed section of Kent Peninsula between Elu Inlet and Dease Strait.

In some cases white-fronted geese were seen in small family groups and whenever possible the small groups were segregated. Fifty-six adults (presumably paired adults) with 127 goslings were

segregated (Table 2) giving an average brood size of 4.5. It was impossible to segregate large flocks composed of young and adults.

3. Snow and blue goose

We found snow and blue geese to be rare near Cambridge Bay as well as northeast of there to Collinson Peninsula. We saw four or five family groups with young as far north as 69°48'N. We found the species somewhat more common in the extreme southeast corner of Victoria Island. Snow geese were abundant on Jenny Lind Island where we saw 558 birds. Parmelee, et. al. (1967) estimated the total population for Jenny Lind in 1962 to be about 210 birds. Almost all flocks we saw on Jenny Lind Island contained both colour phases but due to the nature of our survey we were not able to segregate colour phases.

We did not see white geese on the mainland west of 106°10'W which is close to the west border of the Queen Maud Gulf Migratory Bird Sanctuary.

It is not clear why we did not see more snows and blue geese in the area south of Queen Maud Gulf. A large flock, estimated at 3000 birds was seen over the Simpson River. The flock was photographed and counted from the photograph. At first we believed the birds to be Ross' geese but close scrutiny of the photograph shows a small number of blue geese (probably immature snows) scattered throughout the flock. Barry in 1960 (unpubl.

Table 2. Brood size and relative density of white-fronted geese.

Area	Family groups			Geese w/o young	Total	Mileage flown	Relative index: geese per linear mile
	Adults	Young	Av. brood size				
SE Victoria Island	28	60	4.4	124	212	1350	0.16
Jenny Lind Island	--	--	---	---	---	35	----
Melbourne Island	4	12	6.0	---	16	32	0.50
Kent Peninsula	8	20	5.0	69	97	76	1.28
Q. Maud Gulf Sanct.	16	35	4.4	793	844	680	1.24
Total	56	127	4.5	986	1169		

Progress Report 0-2-5-1960) estimated the proportion of blue geese in this area to be between 5 and 12 percent. On our survey south of Queen Maud Gulf we saw only two small flocks of mixed snows and blues and these were seen just north of the large flock on the Simpson River. Barry saw hundreds of snow and blue geese on the major rivers in the Queen Maud Gulf area whereas we saw almost none. His counts for Ross' geese are much lower than ours so the possibility exists that the observers on our survey misidentified flocks consisting of snow geese only for Ross' geese.

The little information gathered on snow geese is summarized in Table 3.

Table 3. Distribution of snow and blue geese.

Area	Family groups			Geese w/o young	Geese (yg. + ad) not segregated	Total	Relative index: swans per linear mile of flight
	Adults	Young	Av. brood size				
SE Victoria Island	52	79	3.0	248	305	684	0.5
Jenny Lind Island	44	80	3.6	154	280	558	15.9
Melbourne Island	--	--	---	---	---	none	0
Kent Peninsula	--	--	---	---	---	none	0
Q. Maud Gulf Sanct.	--	--	---	---	3051	3051	4.5
Total	96	159	3.3	402	3636	4293	

4. Ross' goose

Table 4. Location of observed Ross' geese

Area	Total number of geese
Simpson River	1937
Armark River	302
Pitok River	201
Ekalukpik River and Ogden Bay	737
Perry River	564
River W of Perry Island	56
Atkinson Point River	280
Ten miles SW of Fitzgerald Islands	50
Total	4127

Ross' geese were observed by us only in the Queen Maud Gulf Migratory Bird Sanctuary. Location of observed birds is given in Table 4. Because of Ross' geese and snow geese habits of tightly bunching up when on the water, it is entirely possible that mixed flocks of these geese were not segregated. Absence of blue geese in flocks would generally indicate we were looking at Ross' geese and young snows are somewhat darker above than young Ross' geese.

We were only able to segregate a small number of adult and young. On the Perry and Atkinson Point rivers 12 adults and 16 young were segregated for an average brood size for this small sample of 2.7.

5. Brant

Brant were only rarely identified, partly because of the observers' unfamiliarity with these geese but perhaps more importantly our aerial survey did not often pass over coastal islands and river mouths where brant are expected to occur. We recorded several small flocks of flying dark geese on Victoria Island and 27 unidentified dark geese on Jenny Lind. These may have been brant. We saw several hundred unidentified dark geese on the west side of Elu Inlet while we were enroute at high altitude from Yellowknife to Cambridge Bay. We saw no brant on Melbourne Island but a small flock of five flying brant were seen over Labyrinth Bay and about 500 unidentified dark geese over coastal areas south and southeast of Dease Point, Fitzgerald Islands, Campbell Bay and Ogden Bay may have included brant.

6. Whistling swan

Our observations on the southeast tip of Victoria Island showed whistling swans to be widely scattered. Other than three or four small flocks, swans occurred only in thinly distributed pairs. Our surveys extended to almost 70°00' North which is probably close to the northern limit of the swans' range. The relative index (Table 5) shows that the swan population was denser on Jenny Lind and Melbourne Islands than elsewhere. Swans are easily visible from the air and it is likely that all swans were counted within ½ mile on either side of the aircraft. As our line of flight was 35 miles across the 158 sq. mi. Jenny Lind Island (including water bodies) I believe that the island contained less than 100 swans during our survey. A similar, rough estimate can be given for Melbourne Island. Parmelee, et. al. (1967) estimated that in 1962 Jenny Lind Island was occupied by about 24 pairs of swans while in 1966 at least 38 swans including cygnets were observed. The densest concentration occurred on the Fitzgerald Islands. The largest of the islands measures only 8 miles by 3 miles but we saw 46 swans there (no cygnets) along 6 miles of flight. On the opposite, west side of Conolly Bay we saw 33 swans (including 10 cygnets) along 10 miles of flight. Almost all of the long narrow lakes in this area harboured swans.

Table 5. Structure of whistling swan population - Queen Maud Gulf area, 1971*.

Area	Pairs of swans w/o brood	Pairs of swans with brood	Cygnets** No.	Cygnets** Av. brood	Single swans**	Swans in flocks	Total adults	Total number of swans	Percentage of cygnets	Relative index: swans per linear mile of flight
SE Victoria Island	25	34	66	1.9	15	103	236	302	21.8	0.22
Jenny Lind Island	3	1	2	2.0	--	17	25	27	7.4	0.77
Melbourne Island	2	3	9	3.0	--	5	15	24	37.5	0.75
Kent Peninsula	5	3	8	2.7	--	18	34	42	19.0	0.55
Q. Maud Gulf Sanct.	28	22	50**	2.1	11**	135	246	296	16.8	0.44
Total	63	63	135	2.1	26	278	556	691	19.5	

* after Hansen, et. al. (1971)

** includes 2 broods with single adult in attendance

7. Old squaw

Old squaw ducks were seen widely scattered but in small numbers on Victoria Island. On August 8 we saw a female with four young near Cambridge Bay. We did not encounter the species on Jenny Lind Island although Parmelee, et. al. (1967) found it bred there sparingly in 1962. We did not see old squaws on Melbourne Island nor on Kent Peninsula. Old squaws were considerably more common south of Queen Maud Gulf where we counted almost 200 old squaws, many of them in Labyrinth Bay and in the delta of the Armark and Simpson rivers. We saw several hundred unidentified ducks in Conolly Bay.

Parmelee, et. al. (1967) reports that female and young old squaw gradually move from breeding areas to the sea where they were inconspicuous among flocks of eiders. I believe that we overlooked some old squaws among rafts of eiders.

8. Eider

King eider and common eider occur throughout the area surveyed with the former by far the more numerous (Barry, 1960). No attempt was made to separate the two species except on a few occasions. On walks made in the vicinity of Cambridge Bay during periods of unfavourable flying weather we observed several broods of King eider. Parmelee, et. al. (1967) observed common eider

as breeding birds on Finlayson Islands and Jenny Lind. By coincidence those two locations were the two sites where we observed a few male King eider with flocks of predominantly females and young-of-the-year. Large flocks of eider were also observed west of Padliak Inlet, in the east portion of Ferguson Lake, off Melbourne Island and northwest of the Fitzgerald Islands.

9. Pintail

On August 4 while walking near Cambridge Bay, we observed two pintails with broods of 4 and 2 young. One of the young was captured and upon examination was found to have only few feathers (Class IIa). The northernmost pintail seen by us was a single bird on the large island in Ferguson Lake. These were the only pintails seen on Victoria Island. The species was considerably more common south of Dease Strait and Queen Maud Gulf. We saw a flock of 12 pintails on Melbourne Island and flocks of 30 and 50 birds on Kent Peninsula. Pintails, in flocks composed of adults, were also seen along the south coast of Queen Maud Gulf.

10. White-winged scoter

Two large ducks, probably white-winged scoters, were seen on August 6 flying over Foggy Bay on the south coast of Queen

Maud Gulf. On August 10, we saw two of these scoters only eight miles south of the earlier reported occurrence.

11. Merganser

A flock of 10 mergansers, probably red breasted mergansers, was observed on the Pitok River and two other birds were seen elsewhere in the Queen Maud Gulf Sanctuary. On July 31, two female red-breasted mergansers were observed while we were taking off after refueling on a small lake east of the former Bathurst Inlet post.

12. Sandhill crane

We only saw a few sandhill cranes on southeastern Victoria Island as did Parmelee, et. al. (1967). In contrast to Parmelee who failed to find cranes on Jenny Lind Island in 1962 and 1966 (although the habitat was deemed suitable) we saw three adult sandhill cranes just inland from the head of Jenny Lind Bay.

A family of two adult and two young sandhill cranes was observed on Melbourne Island and we also saw two birds on Kent Peninsula.

Sandhill cranes were much in evidence in the coastal area south of Queen Maud Gulf. Hundreds of cranes in family groups or

small flocks were seen almost everywhere in a 25-mile strip along the coast. Over 100 cranes were estimated in a 10-mile radius around the mouth of the Perry River. One flightless young was caught and banded near the Perry River cabin.

13. Snowy owl

This conspicuous bird was common on Victoria Island during 1971. We saw about 35 owls, including an adult on a nest (possibly brooding young) and a brood of four uneven sized young walking away from a nest when the aircraft passed overhead. We saw five owls on Jenny Lind Island, three on Kent Peninsula and one on Melbourne Island. As conspicuous as snowy owls were on Victoria Island, the absence of the species south of Queen Maud Gulf was equally noteworthy. Perhaps related to the presence of owls was the observed absence of lemmings in the latter area. We found lemmings to be common in the Cambridge Bay area. On August 3 we saw an immature snowy owl which was kept as a pet in one of the Cambridge Bay residences. The bird was kept indoors and was fed fish. Its chances for survival were rated poor.

14. Golden eagle

On August 11, two golden eagles (one of them an immature) were seen from the air about 30 miles south of the Perry River cabin and an immature golden eagle was seen on August 13 just north of the

cabin. On our flight along the Simpson River we noticed what appeared to be a golden eagle nest on the steep side of a cutbank overlooking the river. The nest was conspicuous because of its large amount of white excrement below it. A large dark bird, perhaps a young eagle, was noted a few feet away from the nest.

An adult golden eagle was observed when we were landing at Bathurst Inlet on July 31.

15. Bough-legged hawk

Rough-legs were observed over the coast of Kent Peninsula (on the west side of Elu Inlet), over the Armark River, near a sticknest at the mouth of the Simpson River and just north of the Perry River cabin where we saw three or four unused sticknests on rock outcrops.

16. Peregrine falcon

A peregrine falcon flew over the Perry River cabin on August 15 and a female peregrine was observed on August 11 in the vicinity of an occupied golden eagle nest on the Simpson River.

An occupied nest with two downy chicks on a ledge on a rock outcrop was seen from the air on August 6. The nest is

located on the mainland southwest of Melbourne Island. Other nest sites of raptorial birds were noted during our flights and several of these have been recorded on our map.

17. Ptarmigan

A few ptarmigan were seen during our aerial surveys, including a flock of 20 just northwest of Kean Point, on the extreme southeast tip of Victoria Island.

18. Other birds

Various species of gulls, loons and other birds were observed and their occurrence recorded. An unidentified jaeger, an arctic tern and a snowbunting were found dead on the Cambridge Bay airport and pilots reported near misses of other birds. Our identification of gulls (Glaucous, herring, Thayer's) must be regarded as tentative. Most isolated pairs of gulls on Victoria Island were probably Glaucous or Thayer's gulls.

Mammals

Ringed seals were observed by us from the air on several occasions. They are common in the Cambridge Bay area where Eskimos and whites engaged in hunting them.

Caribou tracks were seen on two or three occasions near Padliak Inlet on Victoria Island. We saw a few caribou south of Queen Maud Gulf and discarded antlers on Melbourne Island and Minto Island. A single wolf was seen August 16 after we had made an emergency landing due to fog about 40 miles east of Bay Chimo. The wolf had been feeding on one or more of the 75 or more caribou remains found in a 400 yard radius of an abandoned exploration camp. Many of the carcasses had hide and ribcages intact and it became evident that much of the meat had been wasted. Calf remains were also in evidence. It was assumed that the slaughter of caribou had taken place in spring 1971. The Giant Mine exploration party, according to one of the participants in Bay Chimo, had been in the area in July 1968.

We observed several arctic foxes on Victoria Island and noted their dens. A single arctic fox scavenged beside the Perry River cabin as did an ermine until it was chased off by the fox. We trapped a few brown lemmings near Cambridge Bay but saw no lemmings at the Perry River cabin. Muskoxen were observed on Lee Island

(Perry River) and elsewhere in the Queen Maud Gulf Sanctuary. A note, reporting a possible albino muskox, is being prepared for publication. We also saw muskoxen in the Bathurst Inlet area.

Arctic hare droppings were noted in a number of places and a large adult ground squirrel was seen near the Perry River cabin upon our arrival on August 10.

Literature cited

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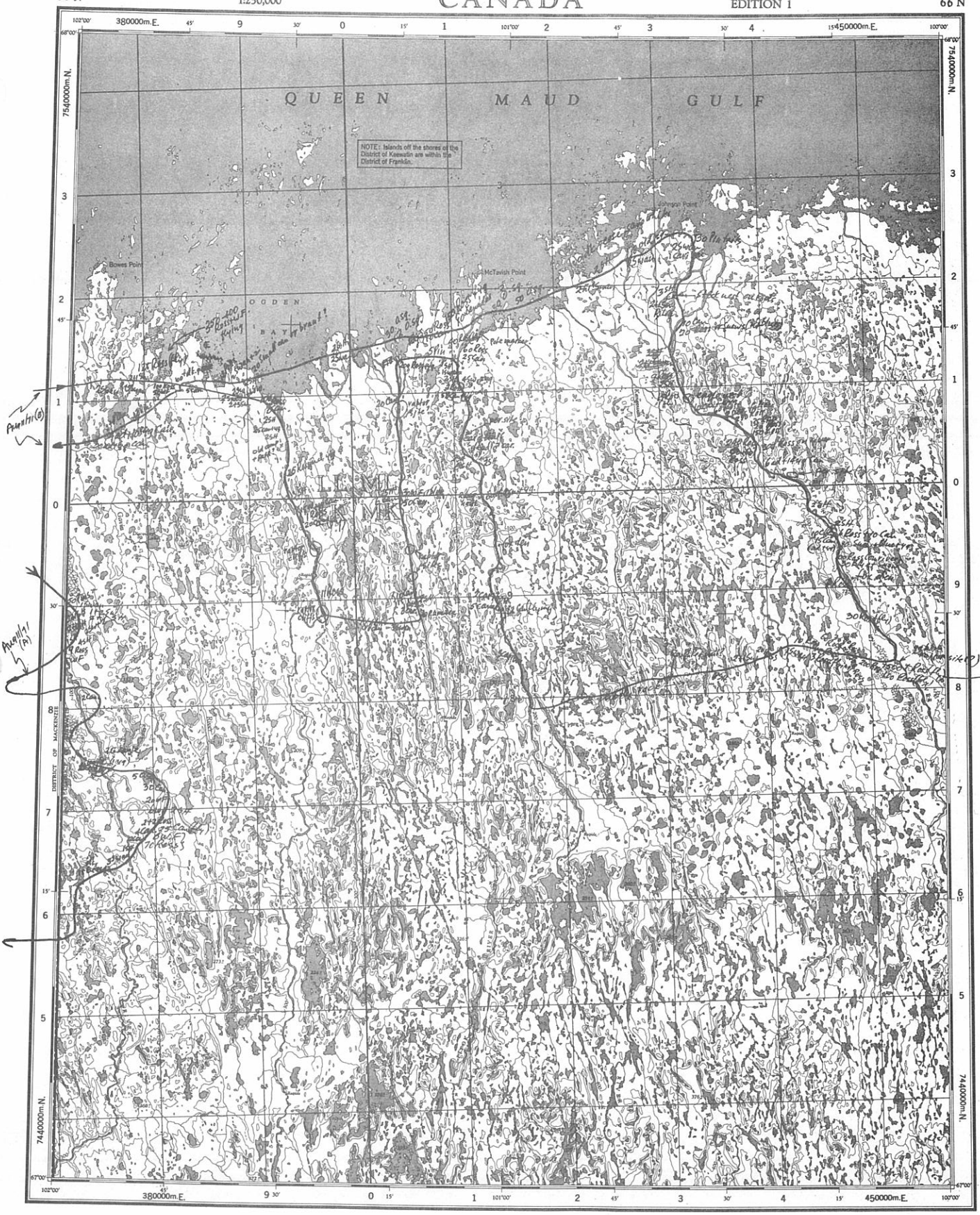
66 N 1:250,000 CANADA EDITION 1 66 N



OGDEN BAY

DISTRICT OF KEEWATIN

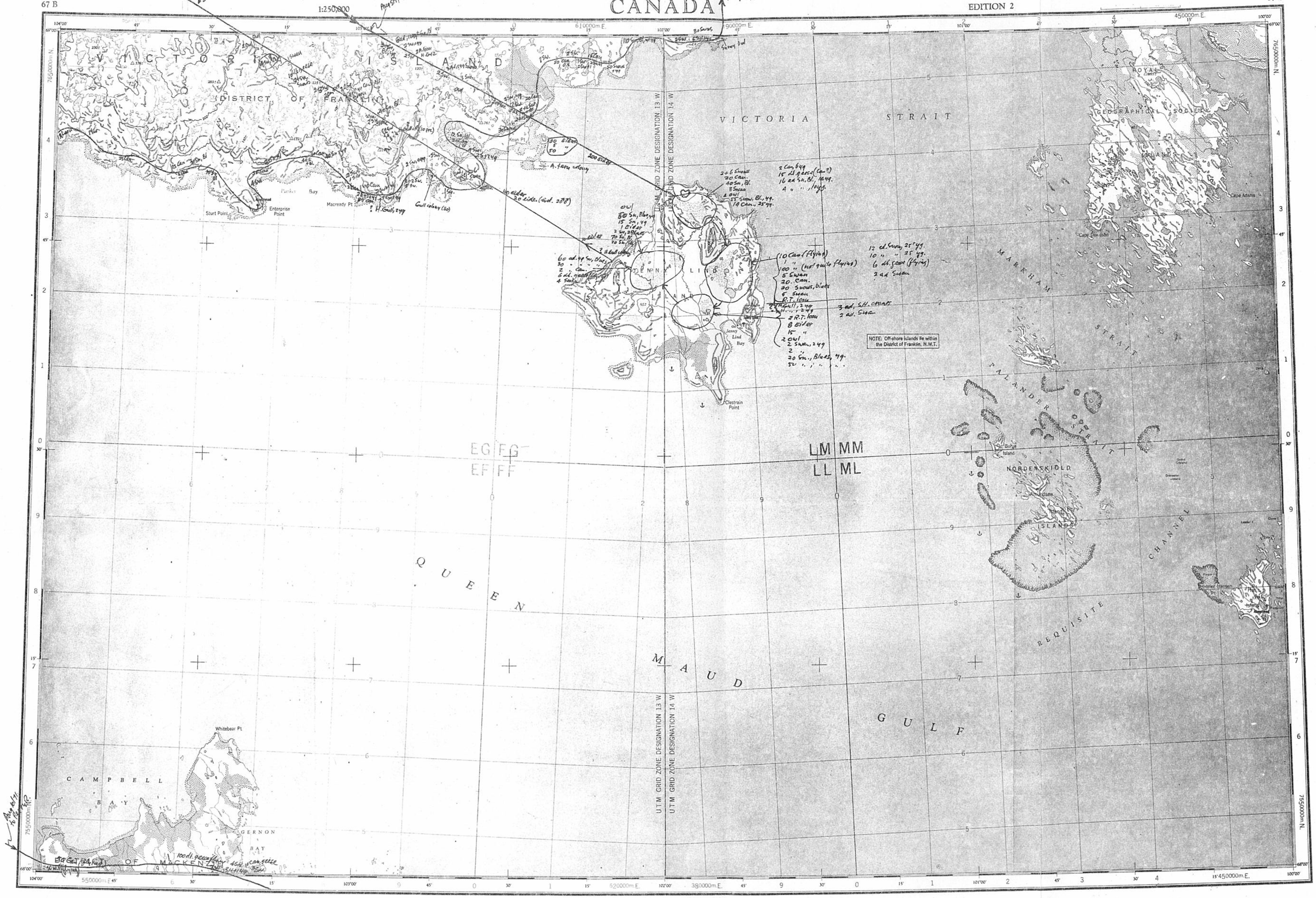
NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Milles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

67 B 1:250,000 CANADA EDITION 2 67 B


VICTORIA ISLAND
DISTRICT OF FRANKLIN
VICTORIA STRAIT
Sturt Point
Enterprise Point
Macready Pt
Parker Bay
Kean Pt
Jenny Lind Bay
Clestrain Point
NOTE: Off-shore islands lie within the District of Franklin, N.W.T.
MARKHAM STRAIT
PALANDER STRAIT
NORDENSKIÖLD ISLAND
REQUISITE CHANNEL
Cape Adams
QUEEN MAUD GULF
Whitebear Pt
CAMPBELL BAY
GERNON BAY
UTM GRID ZONE DESIGNATION 13 W
UTM GRID ZONE DESIGNATION 14 W
EG FG
EF FF
LM MM
LL ML

QUEEN MAUD GULF

NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

67 C

1:250,000

CANADA

EDITION 1

Refer to this map as: 67 C EDITION 1 ASE SERIES A 502

67 C

ADMIRALTY ISLAND

DISTRICT OF FRANKLIN

NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E.
Information depicted current as of 1963. Printed 1966.

The daily change of the North Magnetic Pole causes the magnetic compass to be very erratic in this area.

1965 Magnetic declination for this map varies from 31°20' easterly at the centre of the west edge to 8°00' easterly at the centre of the east edge.

VICTORIA ISLAND

COLLINSON PENINSULA

ALBERT EDWARD BAY

ADMIRALTY ISLAND

STRAIT

ROYAL GEOGRAPHICAL SOCIETY ISLANDS

UTM GRID ZONE DESIGNATION 14W

UTM GRID ZONE DESIGNATION 15W

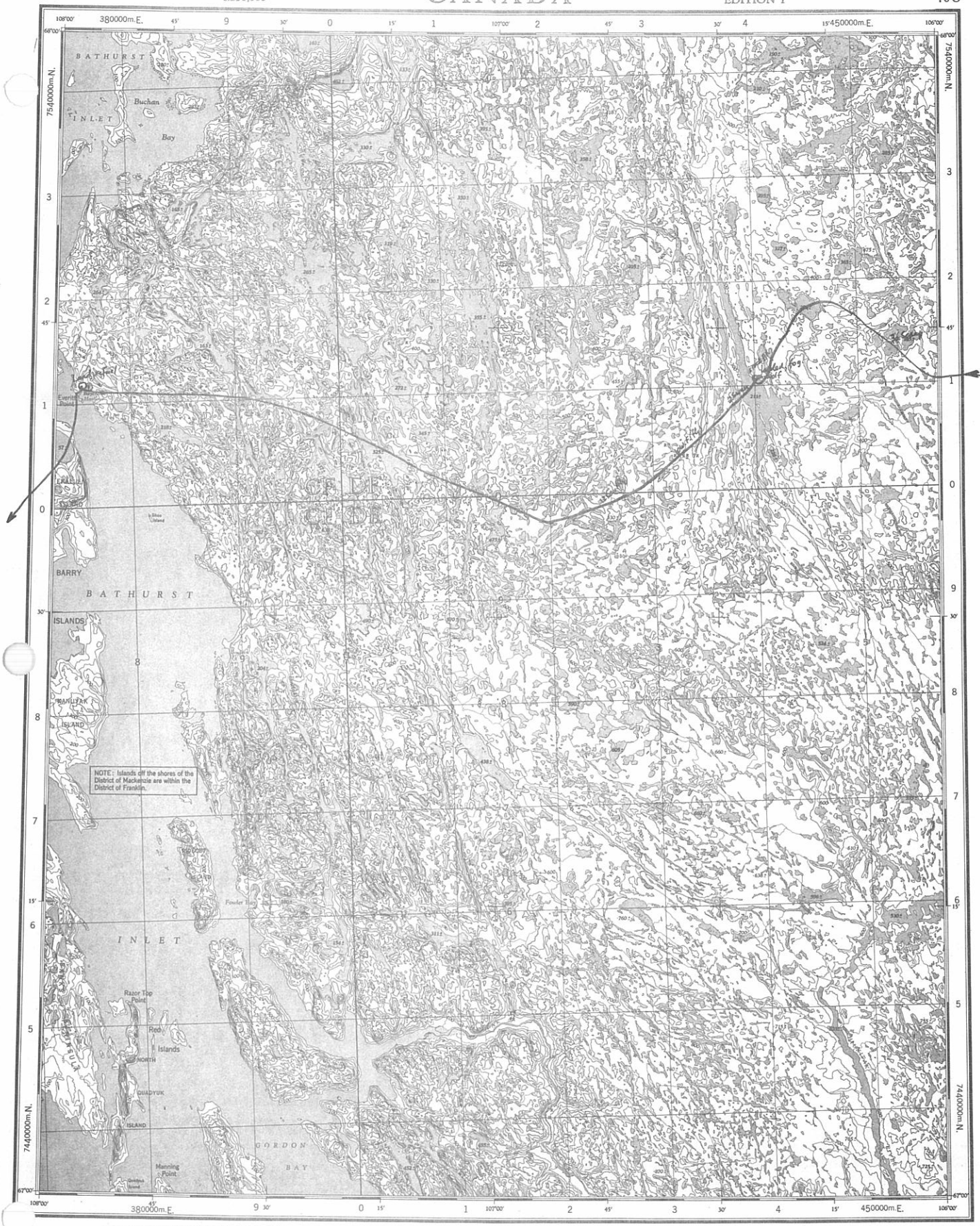
7760000m N.

610000m E.

390000m E.

450000m E.

550000m E.



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RIDEOUT ISLAND

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

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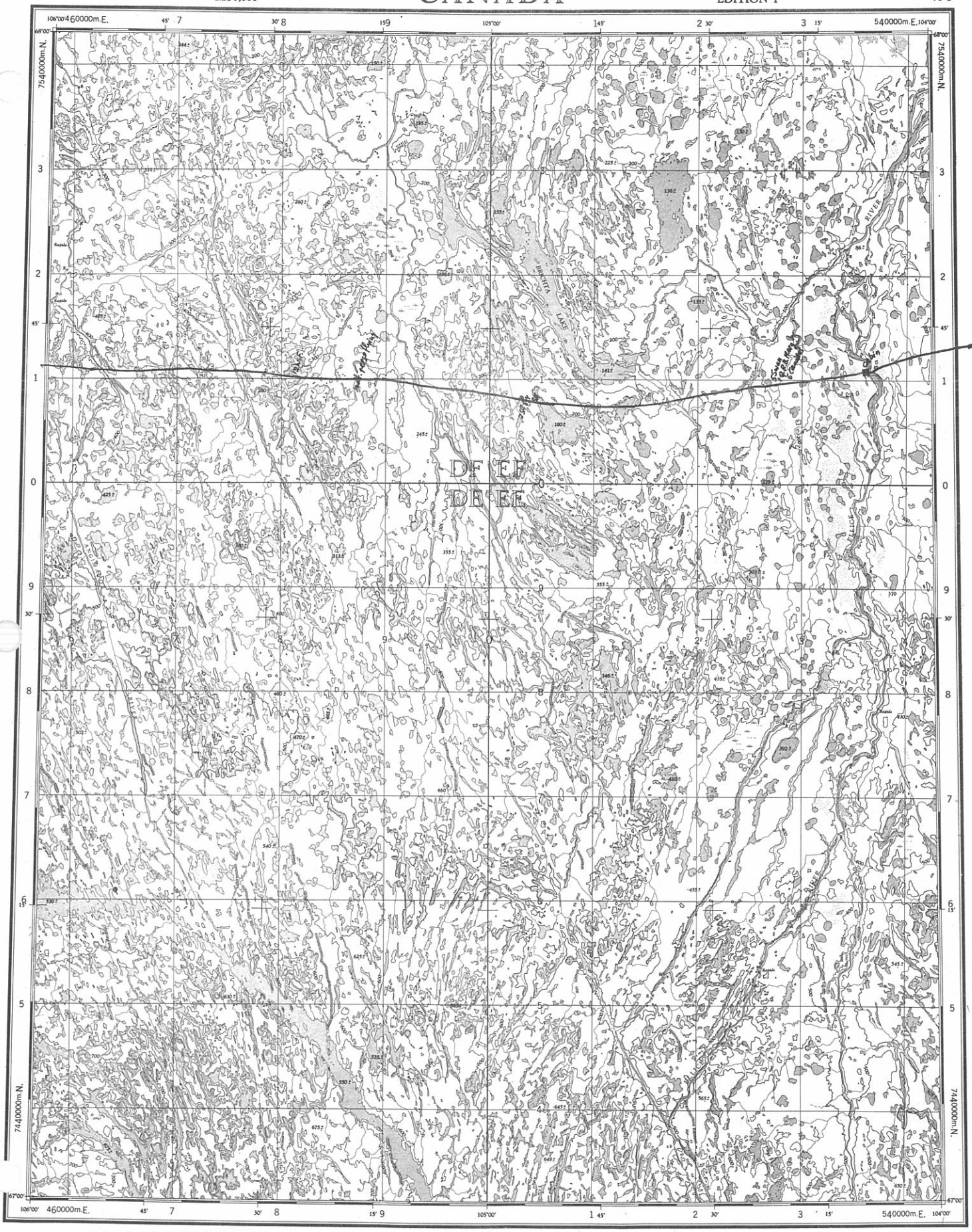

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BRICHTA LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

77 A

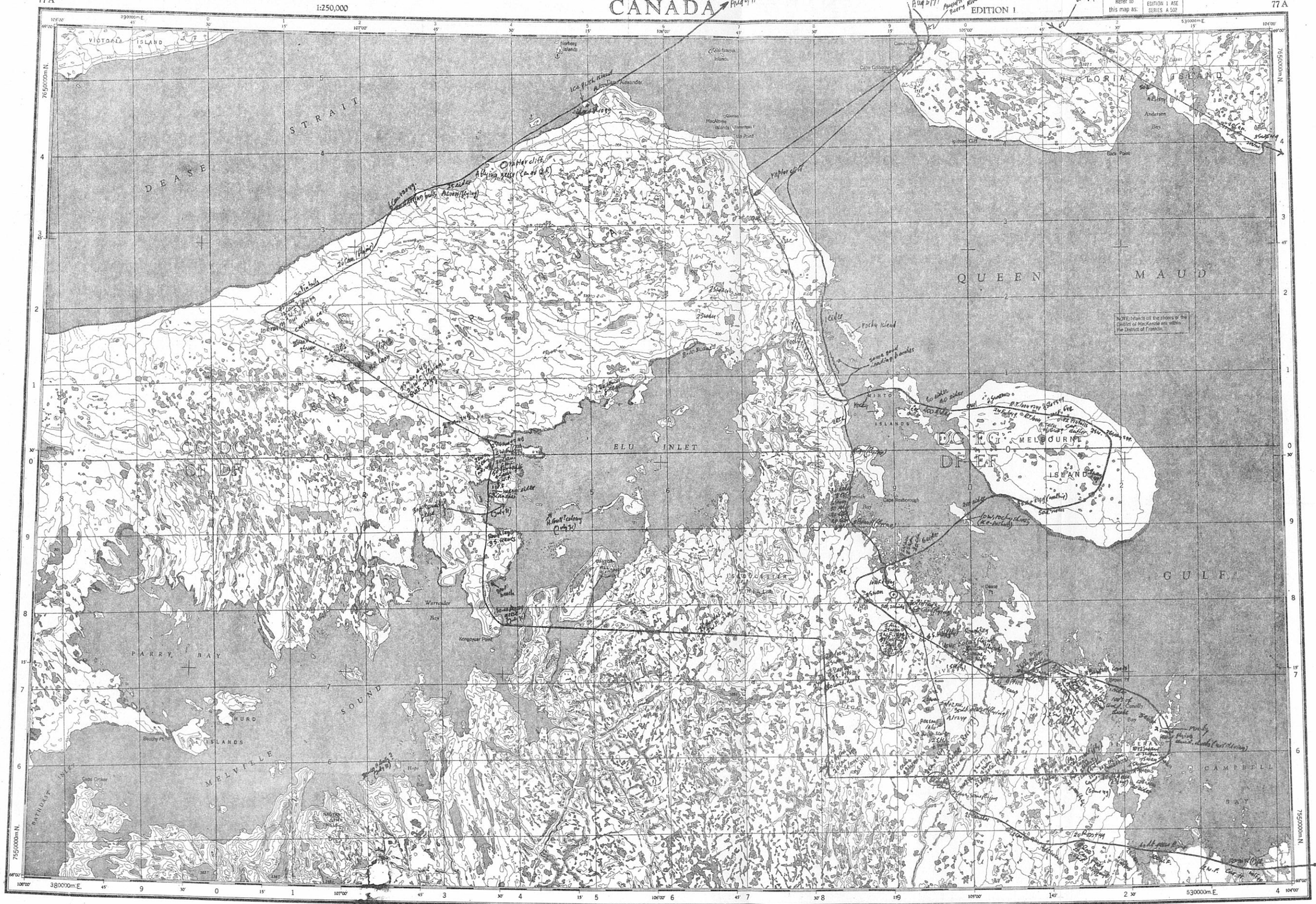
1:250,000

CANADA

EDITION 1

Refer to this map as: 77 A EDITION 1 ASE SERIES A 502

77 A



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ELU INLET

DISTRICT OF MACKENZIE

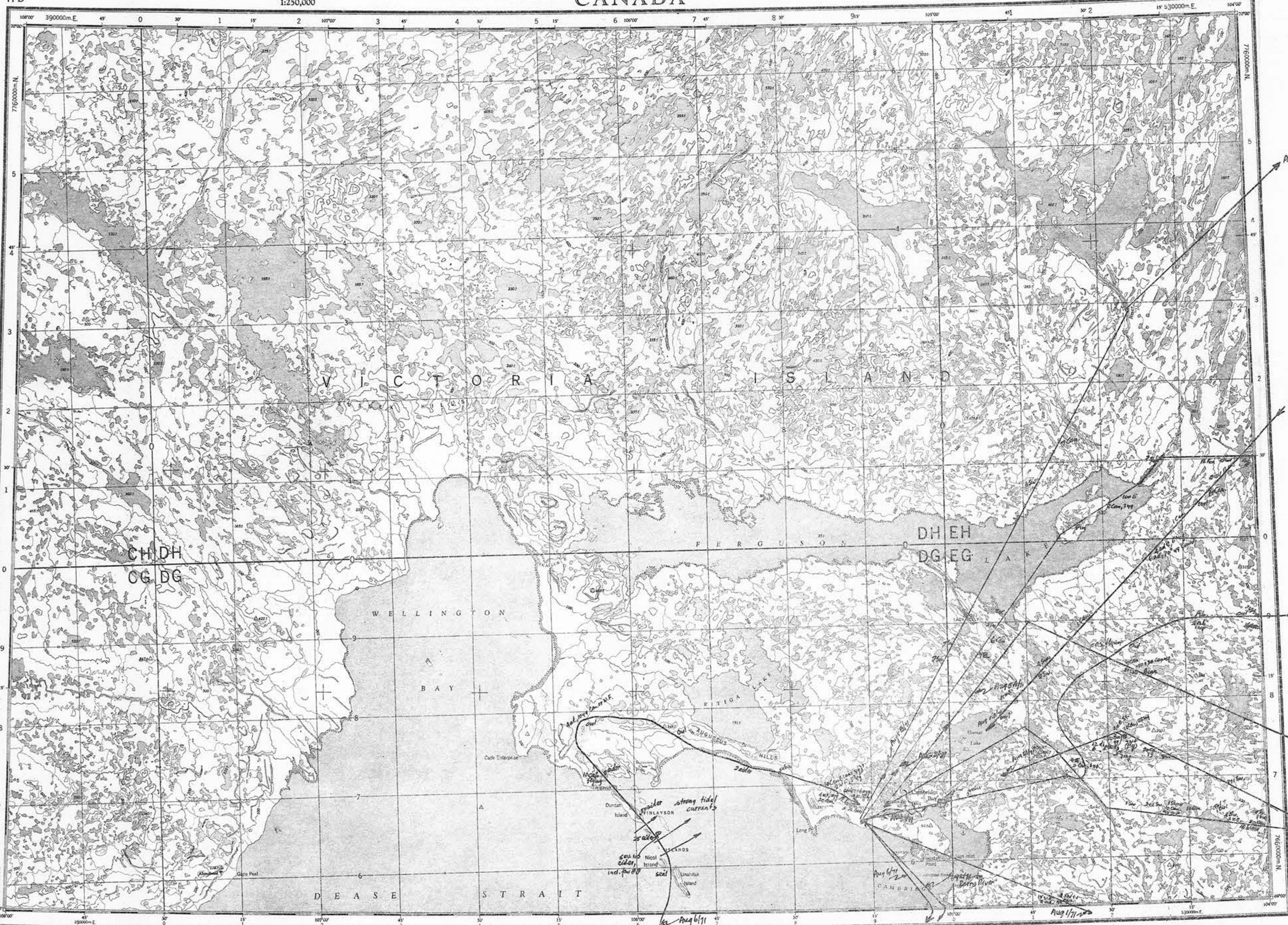
NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres

Refer to this map as: EDITION 1 ASE SERIES A 502



LEGEND

Can or C	Canada Goose
W.F.	White-fronted goose
Snow or Sn	Snow goose
Blue or Bl	Blue goose
Ross	Ross's goose
Swan or Sw	Whistling Swan
Pin	Pintail
O.S. or O.Sq.	Old Squaw
E.	Eider
W.W.Scoter	White-winged Scoter
r.b. merg.	Red-breasted merganser
S.H. or S.Hill	Sandhill crane
A.loon or A.L.	Arctic loon
Y.B. loon or Y.B.L.	Yellow billed loon
R.T.L.	Red-throated loon
Owl	Snowy owl
H. Gull	Unidentified gulls, probably Thayer's gull (see text)
R.L. or R. leg	Rough-legged hawk
Per.	Peregrine falcon
A.fox or A.F.	Arctic fox
M.O. or M. Ox	Musk ox
2 Can + 4 2 SW + 3 2 SH + 2 2 WF + 2 yg	Indicates pair of adults plus young

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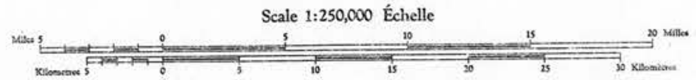
The daily change of the North Magnetic Pole renders the magnetic compass useless in this area.
1965 Magnetic declination for this map varies from 41°30′ easterly at the centre of the west edge to 31°20′ easterly at the centre of the east edge.

CAMBRIDGE BAY

DISTRICT OF FRANKLIN

NORTHWEST TERRITORIES

Scale 1:250,000 Échelle



Publiée par le SERVICE TOPOGRAPHIQUE DE L'ARMÉE, (G.R.C.) Renseignements à jour en 1963. Imprimée en 1966.

La variation diurne du pôle Nord magnétique rend le compas magnétique inutile dans cette région.
La déclinaison magnétique (1965) varie de 41°30′ vers l'est au centre de la bordure ouest de la feuille à 31°20′ vers l'est au centre de la bordure est.