AGROCLIMATIC CAPABILITY ATLAS OF SOUTHERN PORTIONS OF THE YUKON TERRITORY AND MACKENZIE DISTRICT, N.W.T.

To accompany

PROJECT REPORT No. 33

METEOROLOGICAL APPLICATIONS BRANCH
ATMOSPHERIC ENVIRONMENT SERVICE
TORONTO

SEPTEMBER 1977

A 233

Agroclimatic Capability Maps of Southern Portions of the Yukon Territory and Mackenzie District, Northwest Territories

INTRODUCTION

This collection contains 45 map sheets which depict at a scale of 1:250,000 the climatic capability for agriculture for a dryland area of 28,831,476 hectares (ha) in the Yukon Territory and 20,368,121 ha in Mackenzie District, N.W.T. The location of the map sheets is indicated by Figure 1. The capability has been classified according to seven levels of quality based on criteria developed for the British Columbia land inventory (British Columbia, 1972).

The maps were prepared in February 1977 by F.J. Eley, meteorologist under contract with the Atmospheric Environment Service, Meteorological Applications Branch, Toronto as part of a climatic land capability assessment for agriculture.

The project was undertaken at the request of the Northern Natural Resources and Environment Branch of the Department of Indian and Northern Affairs. The project was co-ordinated with the A.E.S. by Dr. J.I. Sneddon, agricultural land advisor to DINA. B.F. Findlay (AES) acted as scientific advisor and collated the final report. A great number of persons assisted the project including D.W. McNichol and J.M. Masterton who computed the class areas for this series of maps.

LAND CLASSIFICATION

The British Columbia agroclimatic land capability classification, intended for reconnaissance surveys, is based on an assessment of heat, moisture and soil water deficit with respect to the cultivation of discrete ranges of crops including fruits, vegetables, grains and forages. Wilson (1977) indicates that the classification is currently being revised. This work, however, is based on the 1972 system. Class 1 represents the broadest range of crops including corn, many warm season vegetables and fruits. Class 7 depicts land which is climatically unsuitable even for the regeneration of native browse. It is emphasized that the classification pertains to the range of crops possible under a defined meteorological regime, not to the yield or variations in productivity from year to year.

The assessment of an agroclimatic capability rating is based on topoclimatic considerations of discrete regions, i.e. the role of landforms, elevation, slope morphology and aspect, water bodies, vegetation, soils and other physical factors in bringing about distinctive local climates through influence on the surface energy balance including horizontal transfers. In the Yukon and Northwest Territories the topoclimatological factors were studied with the aid of instrumented transects and statistical studies of network station data.

The quantity of heat required for the maturation of specified crops has been approximated by the growing degree-day index. This is a temperature summation procedure whereby the excess of temperature over a threshold (5°C) each day is tallied and expressed as the number of degrees of exceedence. The relationship of growing degree-days to crop development varies with the plant growth stage and the quality of the heat, i.e. whether it was accumulated when conditions were near the threshold or during a hot period. (Boughner, 1964). This is one reason why agricultural success may be less in a cool maritime climate than in a short-season, warm continental climate having similar degree-day values.

The frost-free season corresponds to the number of days between the last incidence of a minimum temperature occurring in a standard instrument shelter in spring and the first such occurrence in fall. The frost-free season does not exactly coincide with the growing season, as plant growth is governed by a certain accumulation of warm days to promote seed germination and is not often curtailed by the first mild frost.

Seasonal precipitation and soil moisture criteria may delimit local crop success. Water stress slows plant growth and can seriously retard the harvest of crops. The optimal soil water supply is termed *field capacity*, but in the absence of precipitation, soil water is evaporated to the atmosphere until what is left forms bonds under tension to the soil particles, adversely influencing the plant's ability to re-supply its tissues. The soil moisture deficit may be determined by subtracting cumulative evapotranspiration over a period from precipitation, when the soil storage capacity is known.

Table 1 outlines the British Columbia (1972) agroclimatic land capability criteria.

Table 1

BCLI CLASSIFICATION OF CLIMATIC CAPABILITY FOR AGRICULTURE

Class	Frost-Free Period (days)	GDD Greater than 5°C	Precipitation (mm) Annual	Precipitation (mm) May-Sept	Soil Moisture Deficit (mm) (250 mm Storage)
1	90 — 120	1290 to 1620	380+	230+	0 to 40
2	75 — 90	1145 to 1290	380-	200 to 250	40 to 120
3	60 — 75	1000 to 1145	330-	215-	120 to 190
4	50 — 60	1000 to 1145			190 to 265
5	30 — 50	735 to 1000			265 to 345
6	<30	500 to 735			345 to 405
7	<30	<500			

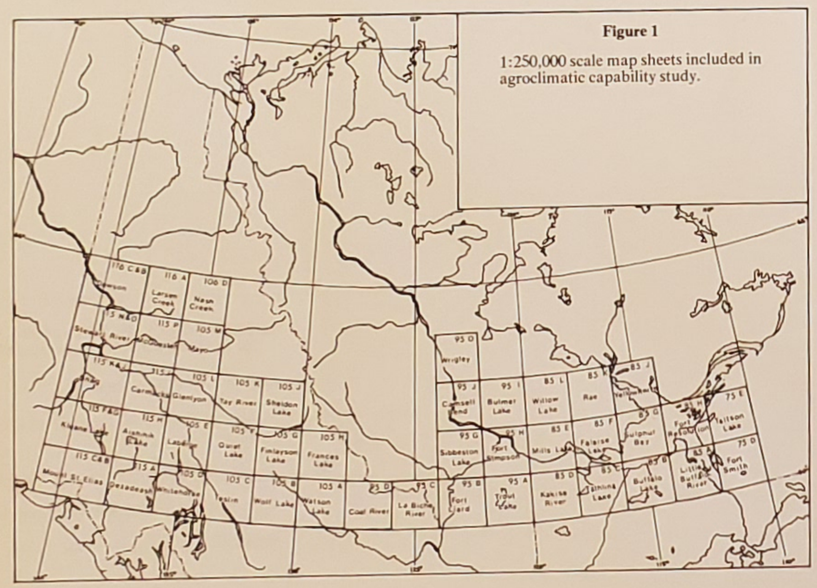


Figure 1

1:250,000 scale map sheets included in agroclimatic capability study.

Class	Agricultural Capability
1	The key crop is corn. A wide range of vegetables and fruits can be grown. A wide range of forage crops and cereal grains can be grown.
2	Vegetables and fruits are somewhat restricted, and only cool-season crops do well, such as: beets, broccoli, cabbage, strawberries. Raspberries and potatoes are considered marginal. A wide range of forage crops and cereals can be grown commercially, but there may be weather problems in harvesting cereals.
3	Only cool-loving vegetables and small fruits in favoured local sites, cabbage, cauliflower and potatoes. Forage crops are still possible in variety, but there are some which do better, such as brome grass, timothy, clover. Only commercial cereal crops are oats and barley.
4	No potatoes, but hardy varieties of cool-loving vegetables. Forage crops are possible. Barley and oats are capable of being grown periodically.
5	Only forage crops.
6	Only native browse for grazing can be utilized.
7	No capability for agriculture.

APPLICATIONS TO THE YUKON AND NORTHWEST TERRITORIES

Plant growth is affected by the heat, soil moisture and light available at a given time as well as by soil properties and other factors. While heat and moisture are tenets of the B.C. classification system, light is not considered. Light, expressed as daylength, (photoperiod) is a prime requirement of photosynthesis, but quantities affect plant growth differentially as tolerance among species varies. For example, short-day crops are not transportable to higher latitudes which have long summer days. While there is no apparent problem with respect to photoperiod in using the B.C. classification in a province that extends through eleven degrees of latitude, a lack of agreement in the Territories between climatic class levels and apparent class levels according to crop experience seems to bear some relationship with very long days.

The main discrepancies between climatological values and types of crops grown pertain principally to the accumulated heat units. Indicator crops of the B.C. classification are successfully grown under much cooler conditions than seems to be warranted. These indicators are known to favourably react to a long photoperiod, but it is not known whether the full crop range to which the indicators belong and which include plants having neutral photoperiod requirements, would do as well given the opportunity. While various forms of agriculture have been practised in the Territories since the time of settlement, systematic crop records and contingent climatological data are not plentiful, and these pertain mainly to two Dominion Experimental Farms, now closed. For a number of reasons even many of the experimental farm records are presently difficult to access. Without "hard" information on crop behaviour at many localities throughout the region the application of any classification may bring about a number of errors in judgment.

In producing the Territorial maps the seasonal heat levels of the B.C. classification were nevertheless maintained, but a guide for the interpretation of the results in terms of actual crops produced has been set up as Tables 2 and 3. For the frost-free period, class level ranges, it was found that the B.C. system yielded reasonable results.

Table 2

INTERPRETIVE GROWING DEGREE-DAY CLASSES FOR ASSESSING AGRO CAPABILITY LEVELS SHOWN ON MAPS OF THE YUKON AND NORTHWEST TERRITORIES PREPARED IN FEBRUARY 1977

Revised Class	Range of GDD >5°C	B.C. Standard Range for Indicated class (>5°C)	Corres. B.C. Class level (crop)
1	>1145	>1290	1, 2 G
2	1000 — 1145	1145 — 1290	3, 4 G
3	870 — 1000	1000 — 1145	upper 5G
4	735 — 870	1000 — 1145	lower 5G
5	615 — 735	735 — 1000	upper 6G
6	500 — 615	500 — 735	lower 6G
7	<500*	<500	7

**The cut-off level of 500 seasonal GDD is arbitrary. Some areas having less than this value may support grazing.*

Table 3

"NORTH OF 60" AGROCLIMATIC CAPABILITY CLASIFICATION GUIDE

This is a guide to assist in evaluating the B.C. agroclimatic capability classification applied in the Yukon and Northwest Territories.

It is essentially a crop listing corresponding to seven levels of climatic quality for agriculture.

Class 1 The highest class is based on a broad range of hardy, cool season vegetables, and a limited range of frost-susceptible cool season and hardy adaptable season crops. The adaptable season crops are marginal to these regions, as are a number of other crops, but can be successfully cultivated on sites having favourable micro-climates. Good soil management practices are assumed. Marginally acceptable crops are denoted by an asterisk*. Crops which are climatically suited, but are frost-susceptible are denoted by F.

Other suitable crops include a few small domestic fruits; good yields of hardy grains; wheat and rye are marginal.

The climatic conditions necessary correspond to B.C. class levels 1 and 2G (modified for soil moisture). The crops are slightly below class 1, mainly lying within Class 2.

The sources of information for compiling those lists are: Boswell and Jones (1941), British Columbia (1972), Dominion Experimental Farms, Summaries of research, Guitard et al (1965), Harris et al (1972), Williams (1974), Harris (1970), Nowosad (1970), Albright (1933).

Adaptable Season Vegetables (prefer temperatures 12 — 25°C)	Cool Season Vegetables (no prolonged temperature above 20°C)	Fruits	Forage Crops	Grains
Beans*	Beets	Apples*	Alfalfa	Barley
Celery*	Broad Beans F	Currents	Alsike clover	Oats
Corn*	Broccoli	Raspberries*	Bromegrass	Polish rapeseed*
Cucumbers*	Brussels sprouts	Saskatoon berries	Orchardgrass	Winter rye*
Green peppers*	Cabbages	Strawberries F	Reed canary grass	Winter wheat*
Muskmelons*	Carrots		Red clover	
Seed onions*	Cauliflower		Ryegrass	
Squash*	Horseradish		Sweet clover	
Tomatoes*	Kohlrabi		Timothy	
	Leaf lettuce F			
	Parsnips			
	Peas*			
	Potatoes F			
	Radishes			
	Rhubarb			
	Rutabagas (and turnips)			
	Set onions F			
	Spinach			
	Swiss Chard			

Class 2 The list corresponds to that of Class I with the exception of marginal* crops. The climate corresponds to B.C. levels 3, 4G.

Class 3 This class has a good range of hardy, cool-loving vegetables with some frost-susceptible species growing in microclimatically favourable areas (marked by asterisk* - marginal). There are no cultivated fruits. The climate corresponds to B.C. levels 4, 5G.

Cool Season Vegetables	Forage Crops	Grains
Beets*	Alfalfa	Barley
Broad beans*	Alsike clover	Oats
Brussels Sprouts	Bromegrass	
Cabbages	Red clover	
Carrots*	Ryegrass	
Cauliflower*	Sweet clover	
Kohlrabi		
Parsnips		
Potatoes*		
Radishes		
Rutabagas		
Sprouting broccoli		

Class 4 This corresponds to class 3 except for the marginal crops. The climatic rating is B.C. level 5G.

Class 5 This is based on a limited range of cool season vegetables, forage crops and hardy grains. Some sites within these are microclimatically unfavourable for marginally indicated crops. B.C. climate class 6G (upper).

Vegetables	Forages	Grains
Brussels sprouts	Alfalfa*	Barley*
Cabbages	Bromegrass	Oats*
Kohlrabi	Clovers*	
Parsnips*	Ryegrass	
Radishes	Timothy	
Spinach		
Sprouting broccoli		
Swiss chard		

Class 6 Corresponds to class 5, excluding marginal crops. All crops, however, become limited to sheltered sites and south-facing slopes. B.C. climate class 6G (lower).

Class 7 Under very favourable conditions cultivated forages may produce in some years, but generally confined to native browse (marginal) or unsuitable for any agricultural use. B.C. climate class 7G.

The seasonal precipitation and soil moisture storage values used in British Columbia are too large to correspond to the precipitation regime of the Territories. Instead of 250 mm soil storage, assumed in British Columbia, it is unlikely that precipitation in northern areas would permit more than 150 mm. Based on water balance studies of the Willowlake and Martin Rivers (two moderate-sized watersheds north of Fort Simpson), along with general terrain observations and reference to other evapotranspiration work on the Canadian Great Plains, a value of 75 mm storage was selected for this study. (Bowser 1967, Martin and Gray, 1969). The seasonal moisture deficit was computed using the Thornthwaite climatic water balance (Thornthwaite and Mather, 1957). For monthly totals or averages this method is quite adequate, but for shorter time periods, techniques such as the versatile soil moisture budget (Baier et al 1972) should be considered. Table 4 presents the revised moisture deficit class levels which were ultimately used in this study.

TABLE 4

"NORTH OF 60"
SOIL MOISTURE DEFICIT LIMITS

Class	Soil Moisture Deficit (75 mm storage)
1	0 — 100
2	100 — 180
3	180 — 250
4	250 — 300
5	300 — 350
6	350 or more
7	350 or more

INTERPRETATION

In producing the maps, class levels are assigned to areas according to heat, frost and moisture conditions. The overall class to be allocated is that of the greatest limitation and limiting factor is described by one or more of the code-letters, i.e. A - aridity, G - heat or F - frost-free season. For example, an area determined to have class 2 for heat, 3 for frost and 2 for aridity would be allocated class 3F. When an aridity limitation decides the class, the class which would prevail if irrigation were available is entered in parentheses. For example, if the heat factor for an area were class 3, frost - 2 and aridity - 4, the overall class would be written 4A (3G).

The areas of the component capability classes for each of the map sheets have been tabulated in a manner to facilitate intercomparisons. Table 5 represents the Yukon Territory while Table 6 is for the Northwest Territories (Mackenzie District). It will be noted that the areas of water bodies and swamps have not been included.

Table 5 indicates that there is very little land better than class 5 in the Yukon Territory. However, that land which is limited by low heat accumulation (99 per cent of the total area) would, with favourable soils, produce a number of crops belonging to better class levels in British Columbia. In the Mackenzie District (Table 6) land at class 4 or better represents 22 per cent of the area, and land limited by heat below class 5 (which may be more productive than indicated) encompasses 51 per cent of the total area.

Table 5

AGROCLIMATIC CLASS AREAS IN HECTARES FOR THE SOUTHERN PORTION OF THE YUKON TERRITORY

MAP		CLASS								
N.T.S. No.	Name	3A	3G	3GF	4A	5G	5GF	6G	6GF	7G
105A	Watson Lake	1,210	49,193			475,402	15,726	438,306		189,516
105B	Wolf Lake					3,306		360,120		844,273
105C	Teslin					190,322	4,032	529,434		467,741
105D	Whitehorse	7,661				212,621	7,661	318,104		610,402
105E	Lac Laberge	323			5,605	320,645	1,169	564,999		271,411
105F	Quiet Lake					32,177		212,500		920,401
105G	Finlayson Lake					14,113		343,548		804,434
105H	Frances Lake					12,097		326,814		817,256
105J	Sheldon Lake					11,694		299,999		802,418
105K	Tay River					69,113		336,290		710,966
105L	Glenlyon	10,766			3,589	343,265		378,346		383,144
105M	Mayo	6,452				195,564	7,258	328,628		538,709
106D	Nash Creek					6,089		112,258		946,046
115A	Dezadeash					96,008	2,419	306,653		760,926
115 C&B	Mount St. Elias							13,145		1,818,021
115 G&F	Kluane Lake					403		210,403		1,489,191
115H	Aishihik Lake					55,322	2,419	349,757	7,258	742,619
115I	Carmacks	48,064		403	17,137	335,120	2,823	390,846		339,153
115 K&J	Snag	8,468				86,693		818,547	20,161	677,418
115 N&O	Stewart River	14,516				228,387		664,595	2,016	720,966
115P	McQuesten	18,952				259,274	11,694	443,951	2,823	358,064
116A	Larsen Creek							93,387		972,256
116 C&B	Dawson		18,548			93,508		323,185		1,142,861
	TOTAL	116,412	67,741	403	26,331	3,041,123	55,201	8,163,815	32,258	17,328,192

Table 6

AGROCLIMATIC CLASS AREAS IN HECTARES FOR THE SOUTHERN PORTION OF THE MACKENZIE DISTRICT, N.W.T.

MAP		CLASS												
N.T.S. No.	Name	2	2A	3A	3G	3GF	4F	5G	5GF	6G	6F	6GF	7G	7GF
75D	Fort Smith					185,080		835,079	2,823					
75E	Taltson Lake					403		571,370	288,709					
85A	Little Buffalo River			8,468	31,048	653,628		372,177	152,016					
85 B	Buffalo Lake			191,129		524,313	28,992	192,338	79,724					
85 C	Tathlina Lake			85,484	23,790	268,951	34,677	273,387	235,887	89,516		71,774		
85 D	Kakisa River		2,016	2,984	89,072	2,581	2,581	552,983	342,983	65,403	23,226	162,298	847	
85 E	Mills Lake			249,556	195,040	215,242		172,419	256,451			11,694		10,484
85 F	Falaise Lake			563,709				163,306	290,725					
85 G	Sulphur Bay			12,903		33,105		196,774	1,613					
85 H	Ft. Resolution				87,379	65,564		403,386						
85 J	Yellowknife					16,048		644,676	48,589					
85 K	Rae			19,355	12,500	32,258	806	415,322	529,434			3,226		
85L	Willow Lake				19,597			7,500	566,410			162,459		267,419
95 A	Trout Lake					403		207,661	8,065	125,000	21,371	748,789	14,516	
95 B	Fort Liard	21,855			145,580	111,290	12,500	508,467	27,016	120,161	51,210	142,338	45,161	
95 C	La Biche River				47,581	16,935		150,806	8,065	424,193			517,338	
95 D	Coal River			4,435				248,427		604,031			337,419	
95 G	Sibbeston Lake		6,048		55,726	85,605	13,710	416,773	163,548	121,129		205,564	62,581	16,169
95 H	Fort Simpson		8,871		120,161	65,726		229,435	570,563	2,823		141,935	403	
95 I	Bulmer Lake				11,290	10,081		75,524	760,563	1,613		179,354		65,847
95 J	Camsell Bend				101,572			397,822	151,129			337,782		88,266
95 O	Wrigley				43,145			479,435	44,758	298,387		173,387	403	68,145
	TOTAL	21,855	16,935	1,138,023	983,481	2,287,212	93,266	7,515,067	4,528,621	1,852,256	95,807	2,340,600	978,668	516,330

Table 7

PERCENTAGE OCCURRENCE OF AGROCLIMATIC CAPABILITY CLASSES
(B.C. System modified for soil moisture)

		CLASS													
		1		2		3		4		5		6		7	
Station	Period	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%
Fort Smith, A	1945 - 75	0	0.0	2	6.5	7	22.6	9	29.0	8	25.8	5	16.1	0	0.0
Fort Simpson, A	1964 - 75	0	0.0	0	0.0	2	16.7	7	58.3	3	25.0	0	0.0	0	0.0
Hay River, A	1944 - 75	0	0.0	0	0.0	4	12.4	14	43.8	14	43.8	0	0.0	0	0.0
Haines Junction	1945 - 75	0	0.0	0	0.0	0	0.0		0.0	2	6.5	28	90.3	1	3.2
Whitehorse, A	1943 - 75	0	0.0	0	0.0	0	0.0	3	9.1	26	78.8	4	12.1	0	0.0

It must be remembered that these classes represent average conditions, for the normal climatological period of record 1941-70. Year to year variability is significant for operational planning. An indication of this inter-annual fluctuation is shown in Table 7 for five locations.

REFERENCES

Albright, W.D., 1933. "Gardens of the Mackenzie", *Geogr. Rev.* 23, 1-22.

Baier, W., D.Z. Chaput, D.A. Russello, W.R. Sharp, 1972. "Soil moisture estimator program system", Agriculture Canada, Agmet Section, *Tech. Bull.* 78, 55 p.

Boswell, V.R., H.A. Jones, 1941. "Climate and Vegetable Crops", USDA Yearbook 1941, *Climate and Man*, 373-399.

Boughner, C.C., 1964. "The distribution of growing-degree days in Canada", Canada Dept. Transport, Meteorological Br., *Canadian Meteorological Memoirs* 17, 40 p.

Bowser, W.E., 1967. "Land capability for wheat" p. 47-60 in Nielson K.F. (ed) *Proceedings of the Canadian Centennial Wheat Symposium*, Saskatoon.

British Columbia, Land Inventory 1972. "Climate capability classification for agriculture". *Climatology Report* No. 1 Second Edition. 11 p.

Canada, Dept. Agriculture:
1953: Whitehorse Experimental Farm Progress Report 1945-52.
1959: Research highlights 1957-58 Whitehorse Experimental Farm
1954: Dominion Experimental Sub-Station Fort Simpson, Progress Report 1947-53

Guitard, A.A., R.L. Taylor, J.C. Brinsmade, J.A. Gilbey, J.A. Newman, J.Y. Tsukamoto, 1965. "Growth of spring cereals in northwestern Canada and Alaska", Agriculture Canada *Publication* 1220, Ottawa 11 p.

Harris, R.E., 1970. "Gardening on permafrost", Agriculture Canada *Publication* 1408, Ottawa, 16 p.

Harris, R.E., A.C. Carder, W.L. Pringle, P.B. Hoyt, D.G. Faris, P. Pankiw, 1972. "Farming potential of the Canadian Northwest", Agriculture Canada *Publication*, 1466 Ottawa, 26 p.

Martin, J.A., D.M. Gray, 1969. "Estimating evapotranspiration on a regional scale, unpublished report prepared for the Atmospheric Environment Service by the University of Saskatchewan, Division of Hydrology 97 p & app.

Nowosad, F.S., 1970. "Handbook for northern gardeners", Agriculture Canada *Publication* 1081, Ottawa, 26 p.

Thornthwaite, C.W., J. Mather, 1957. "Instructions and tables for computing the potential evapotranspiration and the water balance", Drexel Institute of Technology, *Publications in Climatology* 10(3) 181-311, Centerton, N.J.

Williams, G.D.V., 1974. "Physical frontiers of crops: the example for growing barley to maturity in Canada" pp 79-92 in *Frontier Settlement*, Monograph No. 1, University of Alberta Studies in Geography, Edmonton.

Williams, G.D.V., J.I. Sneddon 1975 — unpublished. Mapping the agroclimatic resources of the District of Mackenzie and the Yukon Territory — typescript.

Wilson, R.G., 1977. "Climatic Classification: tools for land-use planning in British Columbia", *Proc. 6th B.C. Soil Science Workshop*, Vancouver, April 20-21, 1977.

LEGEND FOR CLIMAT STATIONS PLOTTED ON AGROCLIMATIC CAPABILITY MAPS

1. ○ Regular AES Climat Station
2. ● Agroclimat Station Operating During the 1975 and 1976 Seasons
3. ◐ Agroclimat Station Operating During the 1975 Season
4. ◑ Agroclimat Station Operating During the 1976 Season

NOTE: (MRI) — Denotes a Mechanical Weather Station


3GF
5G
(MUSKEG and HOLLOWS
5GF
OTSU LAKE
5G
3GF
5G
(Dry Areas)
3GF
3GF
(Wet Areas)
5G
FORT SMITH
Fort Smith
Pilot Lake
Tethul
Mabel Lake
Mirage Lake
Gertrude Lake
Taylor Lakes
Three Rocks Portage
Nonacho Lake
Lake Clinton-Colden
Tazin River
Taltheilei Narrows
Lake
Hanel Lake
Lake
Lake

1:250,000

CANADA

EDITION 2

75 E

5G

5G

(HOLLOWS 5GF)

5GF

(HOLLOWS 6F)

5G

3GF

Union Island

Lake

Lake

Lake

NATIONAL TOPOGRAPHIC SYSTEM 1:250,000 **CANADA** FIRST EDITION (1967) SHEET 85A

Refer to this map as: 85A EDITION 1 MCE SERIES A 502 (1967)

HOOK LAKE

(Dry Areas) 3GF

(Dry Areas) 3GF

Read, loose or stabilized surface, all weather more than 2 lanes
Power transmission line

LITTLE BUFFALO RIVER

NORTHWEST TERRITORIES

WEST OF FOURTH MERIDIAN

Scale 1:250,000

1 inch to 4 Miles Approximately

THE DECLINATION OF THE COMPASS NEEDLE was

Produced and printed by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF MINES AND TECHNICAL SURVEYS

Interim corrections 1967

REFERENCE

REFERENCE

LITTLE BUFFALO RIVER
85A
(1967)

NATIONAL TOPOGRAPHIC SYSTEM 1:250,000 CANADA (1967) SECOND EDITION SHEET 85 B

Refer to this map as: 85 B EDITION 2 MCE SERIES A 502

BUFFALO LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

WEST OF FIFTH MERIDIAN

Scale 1 : 250,000

1 Inch to 4 Miles approximately

Miles 0 5 10 15 20 Miles

Kilometres 0 5 10 15 20 25 30 Kilometres

Road: loose or stabilized surface, all weather, 2 lanes or more

Power transmission line

Copies may be obtained from The Map Distribution Office, Dept. of Mines and Technical Surveys

Surveyed by the DEPARTMENT of MINES AND TECHNICAL SURVEYS, and by the ARMY SURVEY ESTABLISHMENT, R.C.E.

Compiled, drawn, and printed by the A.S.E. 1956-59

Interim corrections 1967

DECLINATION OF THE COMPASS NEEDLE, 1956

REFERENCE

Contour Interval 200 Feet

Elevations in Feet above Mean Sea Level

Transverse Mercator Projection

North American Datum 1927

Preliminary 1963

REFERENCE

Index To Adjoining Sheets

BUFFALO LAKE SHEET 85 B

TATHLINA LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1 : 250,000

Miles

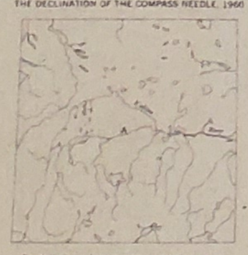
Kilometres

INDEX TO ADJOINING SHEETS

TATHLINA LAKE
85 C
EDITION 2



THE DECLINATION OF THE COMPASS NEEDLE, 1960



The declination of the compass needle at any place along a red line in the declination given on that red line. At other places the declination is between those given on the neighbouring red lines; thus at the place marked A, the declination is between

Produced by the ARMY SURVEY ESTABLISHMENT R.C.E. 1957-60
Aerial photography 1950.

Roads:
stone surface, all weather
dry weather
cart track or winter road
trail or portage
Boundaries:
provincial, with monument
district
township
park, reserve, etc
Power line; Telephone line
Horizontal control point, with elevation △ 982
Astronomical monument
Bench mark, with elevation BM 3025
Spot elevation; precise, approximate 4982 737.5
Sand or gravel pit

KAKISA RIVER

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1 : 250,000

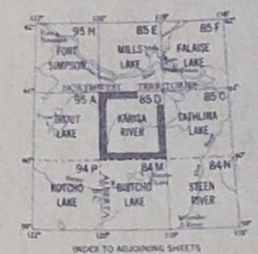
Miles 0 5 10 15 20 Miles

Kilometres 0 5 10 15 20 25 30 Kilometres

Copies may be obtained from the Map Distribution Office Dept. of Mines and Technical Surveys

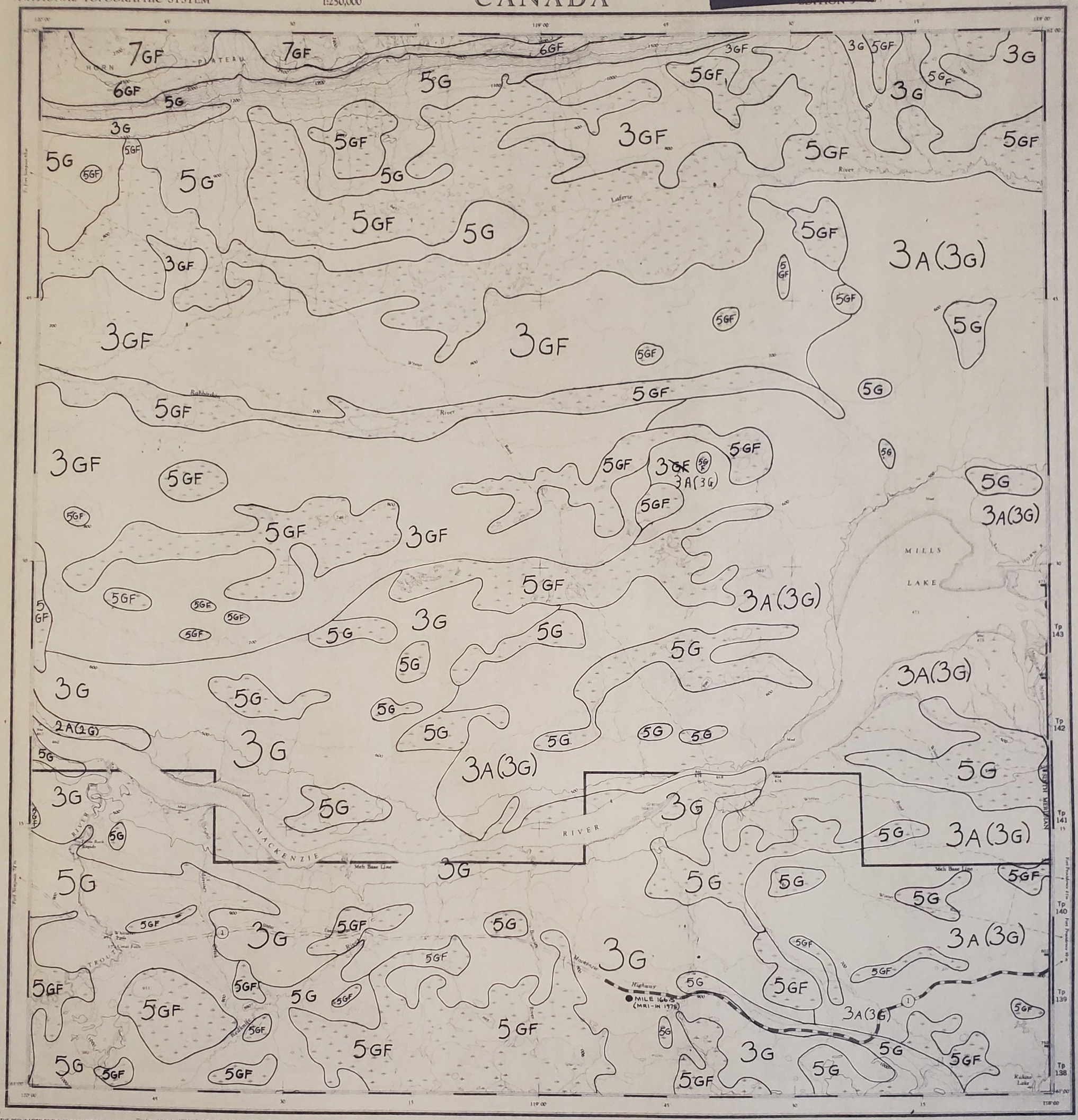
Contour Interval 100 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927
Preliminary 1962

House; Building
Post Office; School; Church
Radio Station
R.C.M.P. Detachment; Tower
Cliff or low relief
Lake; Pingo
Swamp or marsh
Intermittent lake, stream
Indefinite lake, stream
Rapids, large, small; Bridge
Icefield or Glacier
Dry river bed
Contours
elevation
depression
Wooded area

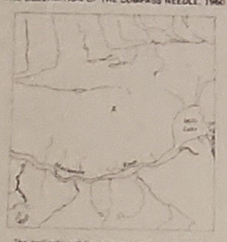


INDEX TO ADJOINING SHEETS

KAKISA RIVER
85 D
EDITION 2



THE DECLINATION OF THE COMPASS NEEDLE, 1960



The declination of the compass needle at any place along a red line is the declination given on that red line. At other places the declination is between those given on the neighbouring red lines; that at the place marked A, the declination is between 33°30' E. and 34°00' E. The declination of the compass needle is decreasing 5.1 minutes annually.

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E., 1956-61
Aerial photography 1948
Interim corrections 1967.

Roads:
loose surface, all weather
dry weather
cart track or winter road
trail or portage
Boundaries:
provincial, with monument
district
township
park, reserve, etc.
Power line, Telephone line
Horizontal control point, with elevation
Astronomical monument
Bench mark, with elevation
Spot elevation, precise, approximate
Sand or gravel pit

MILLS LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1 : 250,000

Miles 0 5 10 15 20 Miles

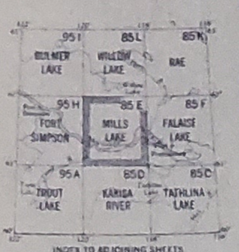
Kilometres 0 5 10 15 20 25 30 Kilometres

Road, loose or stabilized surface, all weather . . 2 lanes or more

Copies may be obtained from the
Map Distribution Office
Dept. of Mines and Technical Surveys
Ottawa

Contour Interval 100 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927
Preliminary 1952

House, Building
Post Office, School, Church
Radio Station
R.C.M.P. Detachment, Flower
Cliff or low relief
Esker, Rings
Swamp or marsh
Intermittent lake, stream
Indefinite lake, stream
Rapids, range, break, Rings
Icefield or Glacier
Dry river bed
Contours
elevation
depression
Wooded area



MILLS LAKE
85 E
EDITION 3 (1967)

Refer to this map as: 85 F EDITION 3 SERIES A

FALAISE LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1 : 250,000

Miles 0 5 10 15 20 Miles

Kilometres 0 5 10 15 20 25 30 Kilometres

Road, loose or stabilized surface, all weather — 2 lanes or more

Copies may be obtained from the Map Distribution Office Dept. of Mines and Technical Surveys Ottawa

Produced by the ARMY SURVEY ESTABLISHMENT R.C.E. 1956-6
Aerial photography 1948.
Interim corrections 1967.

THE DECLINATION OF THE COMPASS NEEDLE, 1960

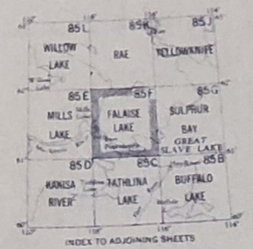


The declination of the compass needle at any place along a red line is the declination given on that red line. At other places the declination is between those given on the neighbouring red lines. Thus at the place marked A, the declination is between 33°30' E. and 34°00' E. The declination of the compass needle is decreasing 6.7 minutes annually.

Roads:
loose surface, all weather
dry weather
cart track or winter road
trail or portage
Boundaries:
provincial, with monument
district
township
park, reserve, etc.
Power line, Telephone line
Horizontal control point, with elevation
Astronomical monument
Bench mark, with elevation
Spot elevation, precise, approximate
Sand or gravel pit

Contour Interval 100 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927 (1952)

House; Building
Post Office; School; Church
Airfield or landing ground
R.C.M.P. Detachment; Tower
Cliff or low relief
Esker; Pingo
Swamp or marsh
Intermittent lake, stream
Indefinite lake, stream
Rapids, large, small; Bridge
Lake or pond, dry or (cyrtical)
Dry river bed
Contours:
elevation
depression
Wooded area

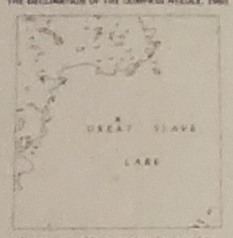


INDEX TO ADJOINING SHEETS

FALAISE LAKE
85 F
EDITION 3 (1967)



THE DECLINATION OF THE COMPASS NEEDLE, 1960



The declination of the compass needle at any place along a red line is the declination given on that red line. At other places the declination is between those given on the neighbouring red lines. Most of the plate (except A, the declination is between 62°30' E. and 63°00' E. The declination of the compass needle is decreasing 8' E. minutes annually.

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E. 1956-61
Aerial photography 1948

SULPHUR BAY

DISTRICT OF MACKENZIE

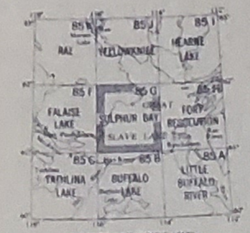
NORTHWEST TERRITORIES

Scale 1 : 250,000

Miles 0 5 10 15 20 Miles

Kilometres 0 5 10 15 20 25 30 Kilometres

Contour interval 100 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927
Preliminary 1956



INDEX TO ADJOINING SHEETS

Copies may be obtained from the
Map Distribution Office,
Dept. of Mines and Technical Surveys,
Ottawa

SULPHUR BAY
85 G
EDITION 3

NATIONAL TOPOGRAPHIC SYSTEM 1:250,000 **CANADA** THIRD EDITION (1967) SHEET 85 H

Refer to this map as: 85H EDITION 3 MCE SERIES A 1967

FORT RESOLUTION

NORTHWEST TERRITORIES

DISTRICT OF MACKENZIE

Scale 1:250,000

Produced by SURVEYS AND MAPPING BRANCH, DEPARTMENT OF MINES AND TECHNICAL SURVEYS

Interim corrections 1967

REFERENCE

Contour Interval 100 Feet (Elevations in Feet above Mean Sea Level) North American Datum 1927

REFERENCE

FORT RESOLUTION 85H

5GF

5G

5GF

5GF

5G

3GF

3GF

FRANK CHANNEL

YELLOWKNIFE, HYDRO

YELLOWKNIFE A

Yellowknife

NORTH ARM

GREAT SLAVE LAKE

YELLOWKNIFE BAY

BRAS D'OR LAKE

CHEDABUCTO LAKE

Old Fort Rae

Rae Pt

White Island

Pte du Lac

Whitebeach Point

Old Fort Island

Spruce Pt

Redrock Point

Alexander Bay

Alexander Pt

Melver Bay

Melver Pt

Baker Bay

Baker Pt

Sabourin Bay

Sabourin Pt

Foam Pt

West Mirage Islands

East Mirage Islands

Russell Lake

Stagg Lake

Aury Lake

Pine Creek

Deem Lake

Publié par le SERVICE TOPOGRAPHIQUE DE L'ARMÉE, (G.R.C.). Renseignements à jour en 1960

Ces cartes sont en vente au Bureau de distribution des cartes, ministère des Mines et des Relevés techniques, Ottawa

Produced by the ARMY SURVEY ESTABLISHMENT, R.C.E. Information depicted current as of 1960

Copies may be obtained from the Map Distribution Office Department of Mines and Technical Surveys, Ottawa

THE DECLINATION OF THE COMPASS NEEDLE ONE DECLINAISON MAGNÉTIQUE EN 1960

YELLOWKNIFE

DISTRICT OF MACKENZIE

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

Transverse Mercator Projection
North American Datum 1927
Contour interval 100 feet
Elevations in feet above Mean Sea Level

Projection transverse de Mercator
Réseau géodésique nord américain unifié 1927
Équidistance des courbes 100 pieds
Élévations en pieds au-dessus du niveau moyen de la mer

Road Route
Trail or portage Sentier ou portage
Point cote, precise, approximate Point coté, précis, approximatif
Buttes de sable
Courbes de niveau
Falaise ou talweg peu accentué
Lake Lac

Building Bâtiment
Post office Bureau de poste
Church Église
School École
Astronomical monument Repère astronomique
Horizontal control point Pointe géodésique
Landing ground Piste d'atterrissage
Seaplane base Base d'hydravions
Intermittent stream Cours d'eau intermittent
Intermittent Lake Lac intermittent
Rapids, falls Rapides, chute
Marsh or Swamp Marais ou marécage
String bogs Marais en chapelet
Icefield or Glacier Champ de glace ou glacier
Tundra polygons Sols polygonaux
Tundra ponds Étangs de toundra



Index to adjoining sheets of the National Topographic System
Tableau d'assemblage des feuilles du Système national de référence cartographique

YELLOWKNIFE
85 J
EDITION 5

CANADA

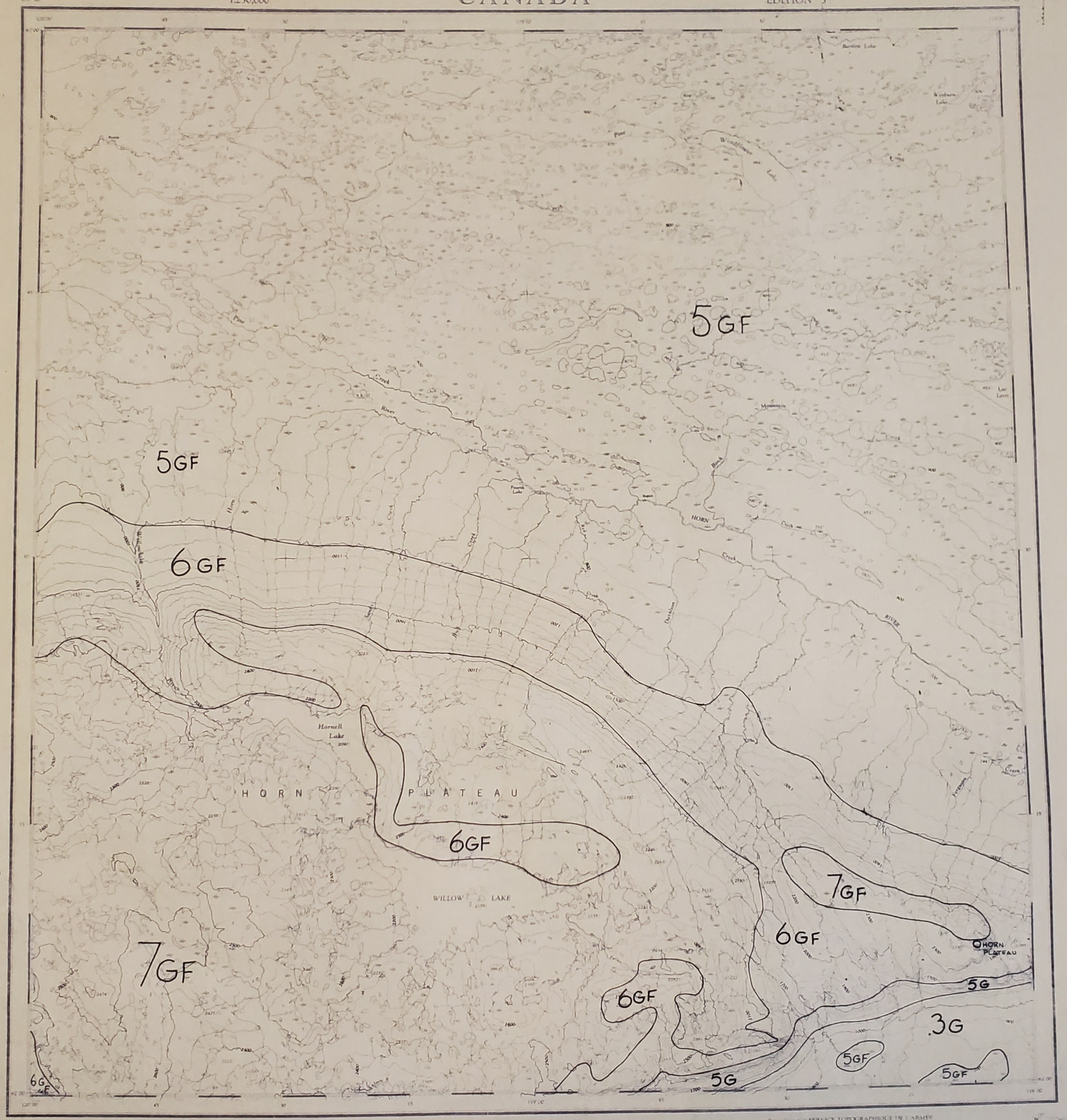
1:250,000

EDITION 2 (1967)

85 K

Refer to this map as: 85K EDITION 2 MCE SERIES A 501 (1967)

5G 5GF 5GF 5GF 5G 5G 5G 5GF 5GF 5GF 5GF 3G 5G 5GF 5GF 5GF 5GF 5GF 5GF 5GF 5G 5G 3GF 5GF 5GF 5GF 3GF 3GF 6GF 5G 3G 5GF 5GF 3A(3G) 5GF 5GF 5GF 5GF 3A(3G) 5GF 5GF 5GF 5GF 5GF 5GF 5GF 3GF 4F 5GF 5GF 5GF 5GF 5GF 5GF 5GF



WILLOW LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 0 5 10 15 20 Milles.

Kilometres 0 5 10 15 20 25 30 Kilomètres

Produced by the ARMY SURVEY ESTABLISHMENT
R.C.E. 1958 Aerial photography 1957

Copies may be obtained from the Map Distribution Office
Department of Mines and Technical Surveys, Ottawa at
25 cents each

Préparée par le SERVICE TOPOGRAPHIQUE DE L'ARMÉE
(G.R.C.) 1958 Photographies aériennes 1957

Ces cartes sont en vente au Bureau de la distribution des cartes
ministère des Mines et des Relevés techniques, Ottawa
Prix de chacune 25 cents

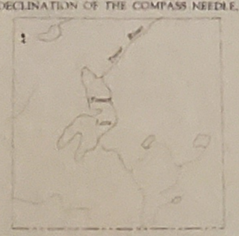
Transverse Mercator Projection
North American Datum 1927 (1958)
Common Meridian 120° W.C.
Exaggeration in true scale Meridian

Projection Transverse de Mercator
Réseau géodésique nord-américain de 1927 (1958)
Méridien commun 120° O.
Exagération sur l'échelle vraie du méridien

WILLOW LAKE
85 L
EDITION 3



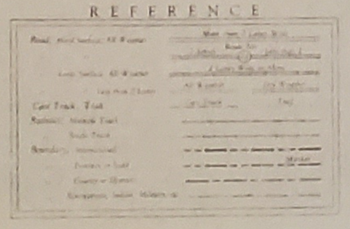
THE DECLINATION OF THE COMPASS NEEDLE, 1958



The continuous line with the figures along it indicates the declination given on that line. At other places the declination is between these lines or on the neighbouring one and, then at the place marked A the declination is between 31° 30' E. and 32° E. The figures are those of the compass needle decreasing (current annually).

Surveyed by the DEPARTMENT OF MINES AND TECHNICAL SURVEYS, and by the ARMY SURVEY ESTABLISHMENT, R.C.E. 1954-55
Aerial photographs by the R.C.A.F. 1950
Compiled, drawn and printed by the A.S.E. 1956-58

REFERENCE



TROUT LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

WEST OF THE SIXTH MERIDIAN

Scale 1 : 250,000

1 Inch to 4 Miles approximately

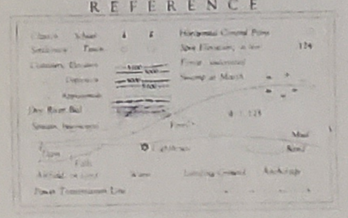
Miles 0 5 10 15 20

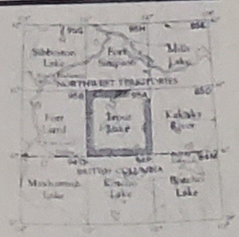
Kilometres 0 5 10 15 20 25 30

Copies may be obtained from
The Map Distribution Office
Dept. of Mines and Technical Surveys
Ottawa

Contour Interval 500 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927
Preliminary 1958

REFERENCE



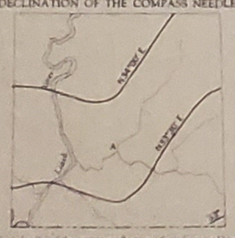


Index To Adjoining Sheets

TROUT LAKE
SHEET 95 A



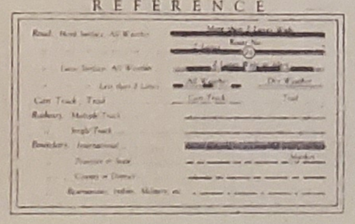
THE DECLINATION OF THE COMPASS NEEDLE, 1958



The declination of the compass needle at any place along a red line is that declination given on that red line. For other places the declination is interpolated from those given on the neighbouring red lines, that at the place marked A, the declination is between N. 23°30' E. and N. 24°30' E. The annual declinations of the compass needle are decreasing by minutes annually.

Surveyed, compiled, drawn and printed by the
ARMY SURVEY ESTABLISHMENT R.C.E., 1952-58
Aerial photography by the R.C.A.F.

REFERENCE



FORT LIARD

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES–YUKON TERRITORY

Scale 1 : 250,000

1 Inch to 4 Miles approximately

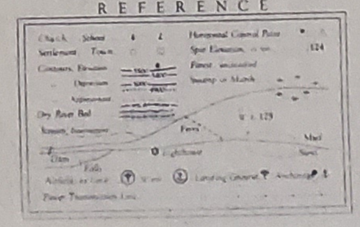
Miles 0 5 10 15 20 Miles

Kilometres 0 5 10 15 20 25 30 Kilometres

Copies may be obtained from
The Map Distribution Officer,
Dept. of Mines and Technical Surveys
Ottawa.

Contour Interval 500 Feet
Elevations in Feet above Mean Sea Level
Transverse Mercator Projection
North American Datum 1927
Preliminary Sheets 1953

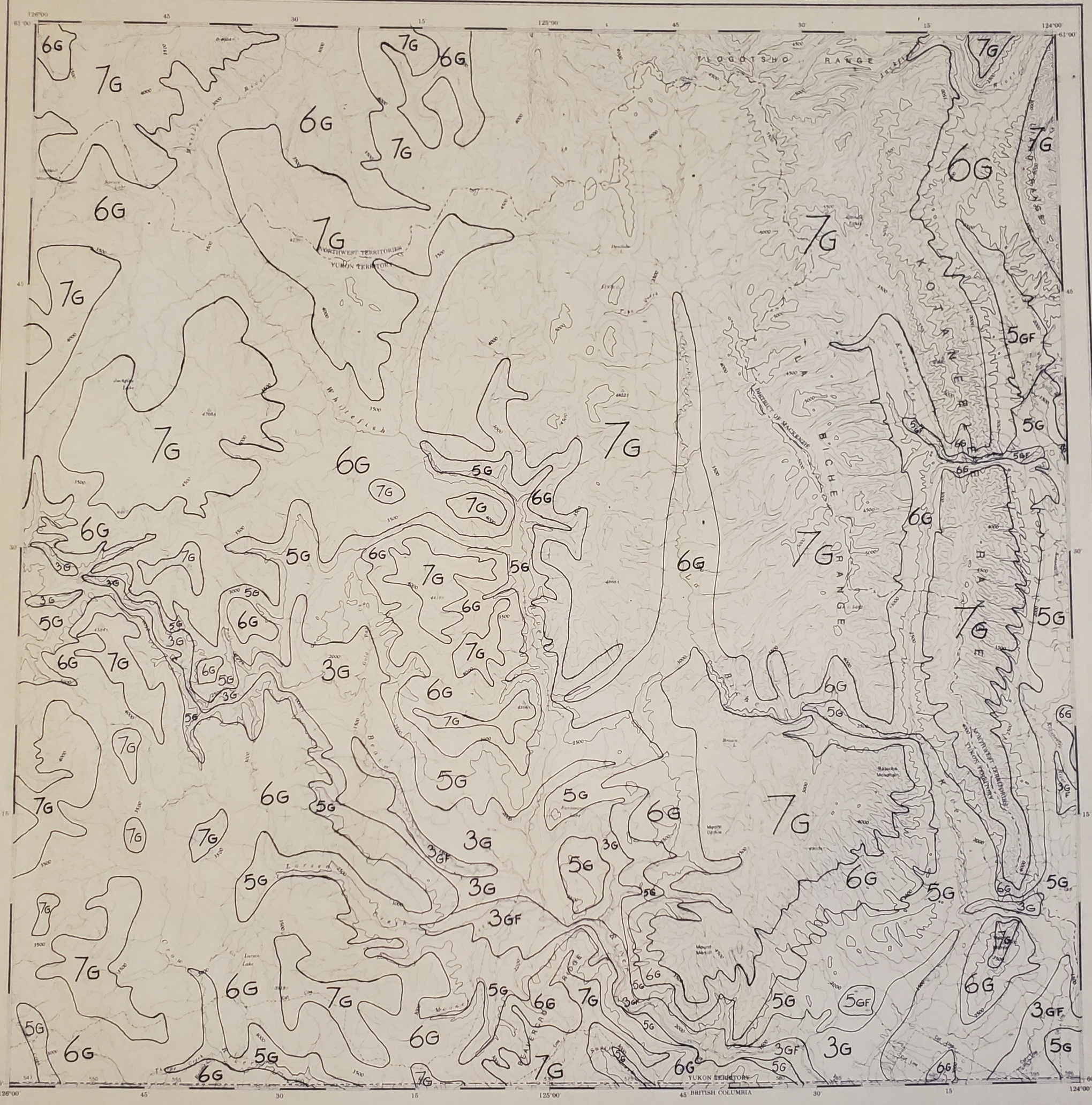
REFERENCE





Index To Adjoining Sheets

FORT LIARD
SHEET 95 B



RELIABILITY DIAGRAM CROQUIS D'EXACTITUDE

A

A - Large scale mapping, photogrammetric, 1963, 1964 and 1969

A - Cartographie à grande échelle, photogrammétrie, 1963, 1964, et 1969

Produced, 1969, by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES.
Printed 1971

Magnetic declination 1971, varies from 32°28' easterly at centre of west edge to 32°27' easterly at centre of east edge. Mean annual change 4.8' westerly

For complete reference see reverse side

Établie en 1969, par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES.
Imprimée en 1971

La déclinaison magnétique pour 1971 varie de 32°28' Est au centre de la limite Ouest à 32°27' Est au centre de la limite Est. Variation moyenne annuelle 4.8' Ouest

Pour une liste complète des visées voir au verso.

LA BICHE RIVER

YUKON TERRITORY - NORTHWEST TERRITORIES

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Milles

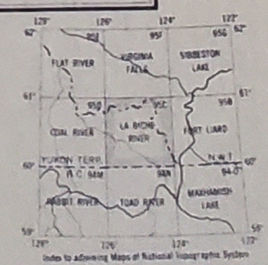
Kilometres 5 0 5 10 15 20 25 30 Kilomètres

CONTOUR INTERVAL 500 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

Copies may be obtained from the Map Distribution Office, Department of Energy, Mines and Resources, Ottawa

ÉQUIDISTANCE DES COURBES 500 PIEDS
Élévations en pieds au dessus du niveau moyen de la mer
Système de référence géodésique nord-américain, 1927
Projection transverse de Mercator

Ces cartes sont en vente au Bureau de distribution des cartes, ministère de l'Énergie, des Mines et des Ressources, Ottawa



Index to Adjoining Maps of National Topographic System

Tableau d'assemblage du Système national de référence cartographique

COAL RIVER

YUKON TERRITORY — NORTHWEST TERRITORIES

Scale 1 : 250,000

Approximately 4 Miles to 1 Inch

Miles 0 5 10 15 20 25 30 Miles

Kilometres 0 5 10 15 20 25 30 Kilometres

Contour interval 500 Feet

All Elevations in Feet above Mean Sea Level

REFERENCE

REFERENCE

NORTHWEST TERRITORIES

BRITISH COLUMBIA

LITTLE DOCTOR LAKE

NAHANNI BUTTE (FORT)

NAHANNI #1

NAHANNI VALLEY

NAHANNI (M.R.S.)

NAHANNI #2

(channels 4F)

SIBBESTON LAKE

DISTRICT OF MACKENZIE

NORTHWEST TERRITORIES

Scale 1 : 250,000

1 Inch to 4 Miles approximately

Miles

Kilometres

REFERENCE

REFERENCE

CANADA
NATIONAL TOPOGRAPHIC SERIES — DEPARTMENT OF MINES AND TECHNICAL SURVEYS — FIRST EDITION (1967) — CANADA SHEET 95 H

Refer to this map as: 95H EDITION 1 MCE SURVEYS A 502 (1967)

FORT SIMPSON

NORTHWEST TERRITORIES

DISTRICT OF MACKENZIE

Scale 1:250,000

1 Inch to 4 Miles Approximately

Interim corrections 1967

REFERENCE

FORT SIMPSO
95H



BULMER LAKE

NORTHWEST TERRITORIES

DISTRICT OF MACKENZIE


MACKENZIE RIVER
MACKENZIE RIVER
MACKENZIE RIVER

WRIGLEY

NORTHWEST TERRITORIES

DISTRICT OF MACKENZIE

Scale 1:250,000

1 Inch to 4 Miles Approximately

THE DECLINATION OF THE COMPASS NEEDLE 1957

Produced and published by the SURVEYS AND MAPPING BRANCH DEPARTMENT OF MINES AND TECHNICAL SURVEYS

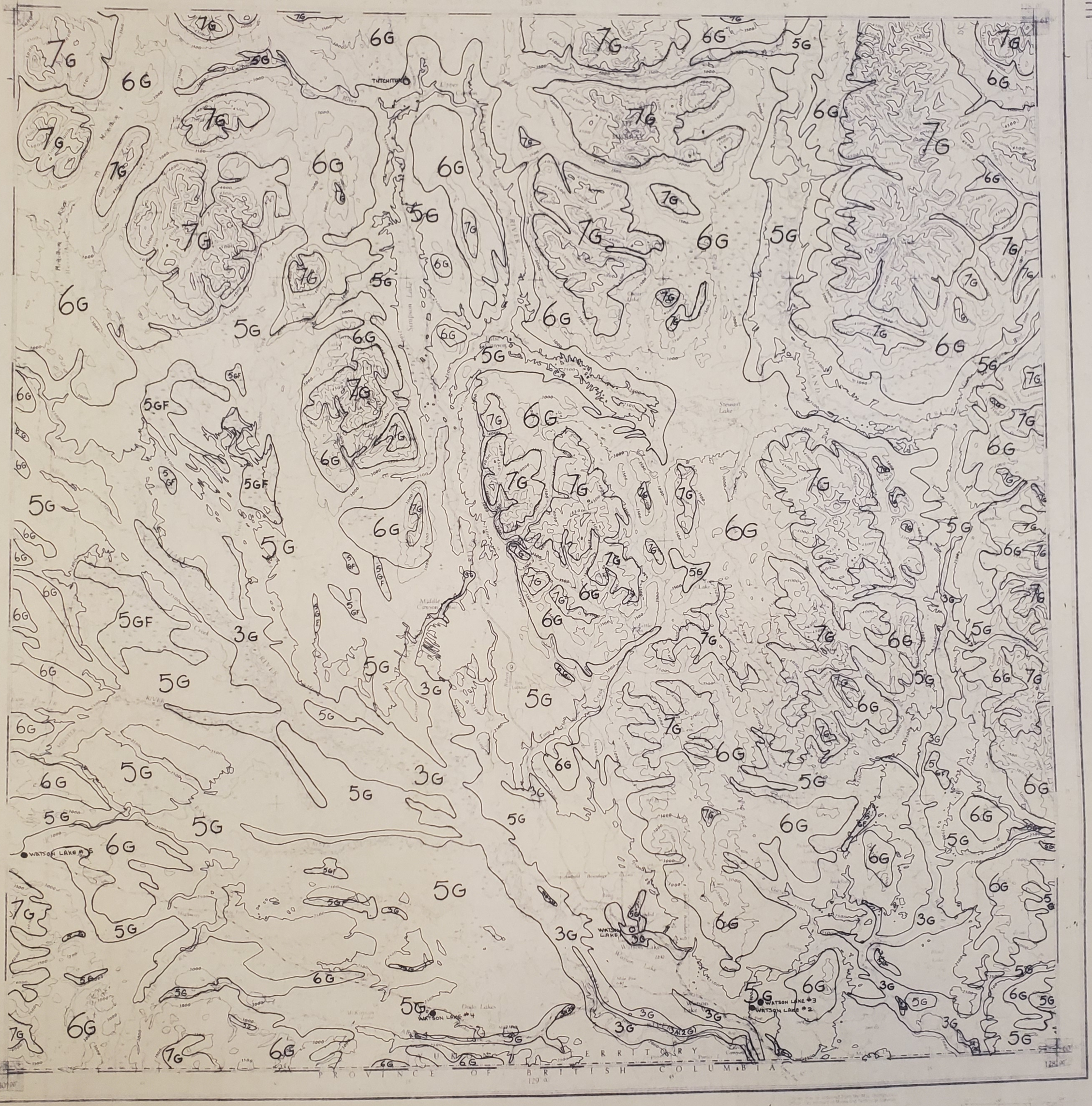
Transverse Mercator Projection

Contour Interval 100 Feet
Elevations in Feet above Mean Sea Level
North American Datum 1927

Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa

REFERENCE

REFERENCE



105 A.

WATSON LAKE

YUKON TERRITORY

Scale 1:250,000

REFERENCE

REFERENCE

WOLF LAKE

YUKON TERRITORY

Scale 1:250,000

1 Inch to 4 Miles Approximately

105 B.

THE DECLINATION OF THE COMPASS NEEDLE (W)

Surveys by the Topographical Survey in 1947. Controlled by the Topographical Survey in 1950 from air photographs taken in 1948. Lithographed and printed by the Army Survey Est. R.C.E., Dept. of National Defence, 1952

Universal Transverse Mercator Projection

Contour interval 500 Feet
All Elevations in Feet above Mean Sea Level

Copies may be obtained from the Map Distribution Office, Department of Mines and Technical Surveys, Ottawa

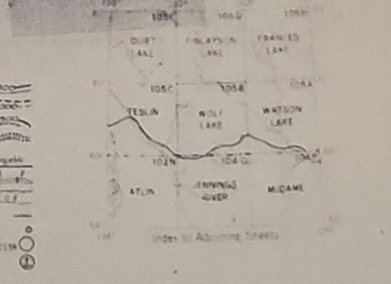
REFERENCE

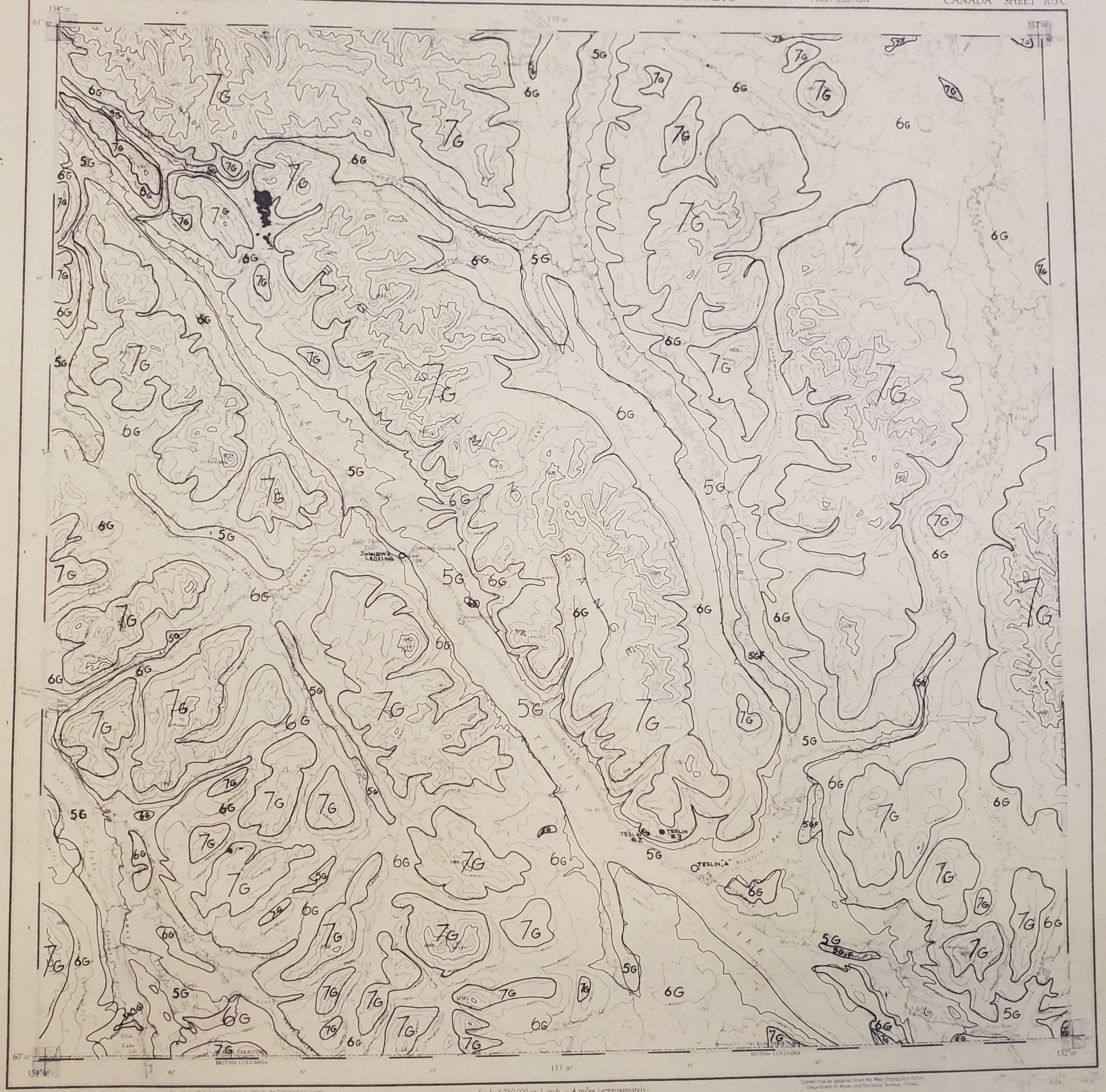
Road: Hard Surface, All Weather		Boundary: International	
Road: Loose Surface, All Weather		Boundary: Provincial	
Road: Wagon, etc.		Boundary: County or District	
Trail or Portage		Boundary: Indian Reserves, Park	
Boundary Mon.		Survey Line	
Survey Mon.		Main Electric Power Line	
Bench Mark	BM 1914	Railway: Standard Gauge	
Triangulation Sta.	△		
Spot Elevation (in feet)	4960		
Telephone, Trans. Route			

REFERENCE

Building		Fire Lookout Tower	
School		Wireless Station	
Post Office		Mine	
Church		Cairn	
Stream, Indistinct or Unsurveyed		Stream, Intermittent	
Stream, Intermittent		Stream, in Dry River Bed	
Stream, in Dry River Bed		Braided Stream	
Braided Stream		Marsh or Swamp	
Marsh or Swamp		Marsh or Swamp, in part	
Marsh or Swamp, in part		Glacier or Snowfield	
Glacier or Snowfield		Sand, Gravel or Mud	
Sand, Gravel or Mud			

Contours, Elevation		Wooded Area	
Contours, Approximate		Navigable Canal	
Contours, Depression		Rapids and Falls	
		Ferry	
Dam		Lighthouse	
Aerodrome, Elevation in feet	1150	Seaplane Anchorage	





105 C

Scale 1:250,000 or 1 inch = 4 miles (approximately)

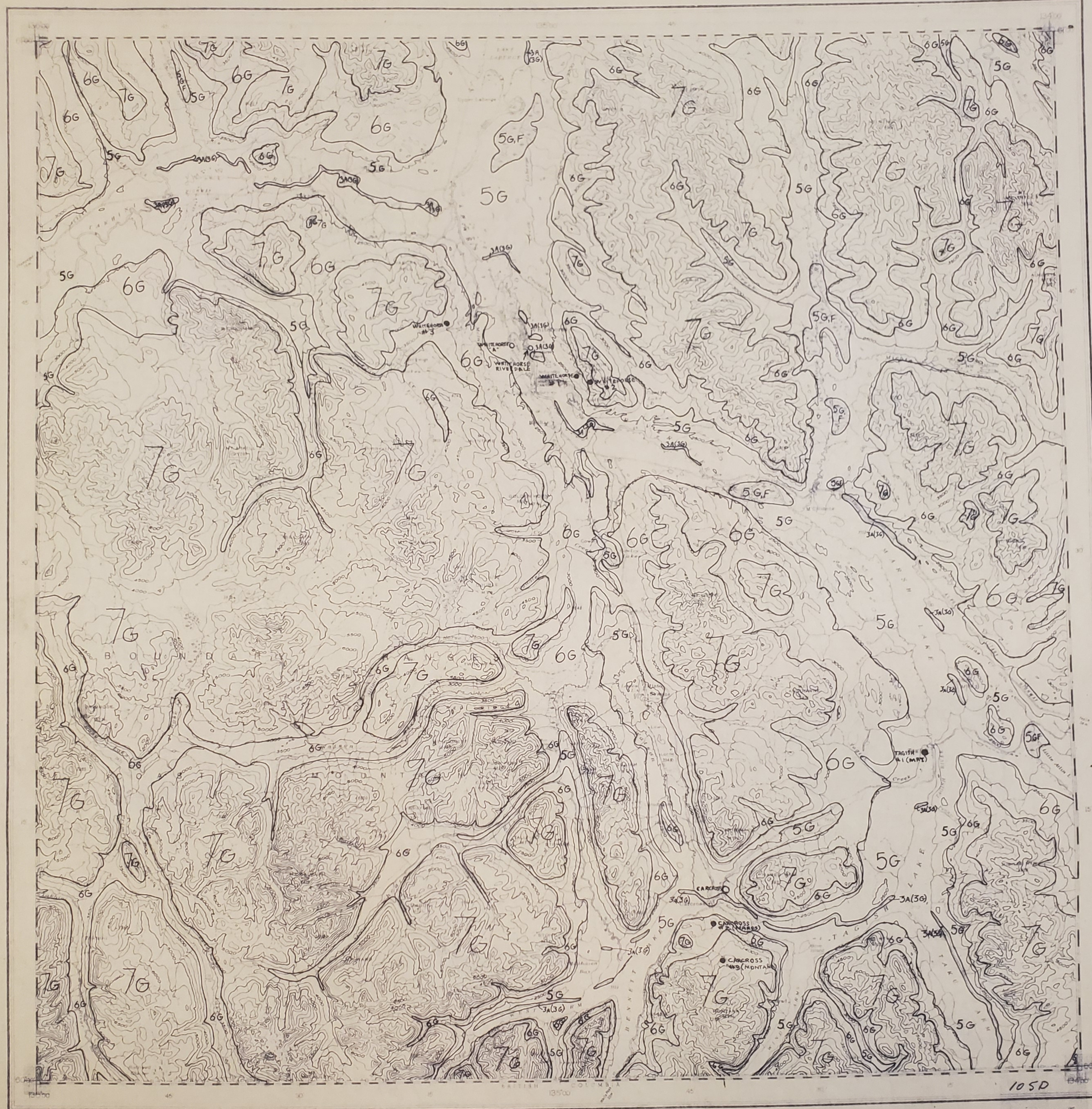
REFERENCE

REFERENCE

TESLIN
YUKON TERRITORY

SHEET 105 C
FIRST EDITION

SURVEYS AND MAPPING BUREAU
TOPOGRAPHICAL SURVEY



REFERENCE

Road, hard surface, gravel and loose surface
Other roads
Trail
Railway (narrow gauge)
Abandoned railway grade
Telephone or telegraph line
Building
School
Post Office
Provincial, boundary, and monument
Height in feet above mean sea level
Glacier
Intermittent stream
Marsh or swamp
Sand or gravel
Contours (interval 500 feet)
Contours (position approximate)
Vegetation, areas

Published 1949
Surveyed 1944 and compiled 1947 by the Topographical Survey
Lithographed and printed by the Army Survey Establishment
R.C.E., Department of National Defence, 1949
Approximate magnetic declination, 30° to East

ROADS - ROUTES
Hard surface - Gravel
Loose surface - Fine gravel

MAP 953A

WHITEHORSE

YUKON TERRITORY

(FIRST EDITION)

Scale: 1/250,000 or Approximately 4 Miles to 1 Inch

Interim Corrections 1974

Copies may be obtained from the Map Distribution Office,
Department of Energy, Mines and Resources, Ottawa.



EDITION 3



LABERGE

YUKON TERRITORY

Scale 1:250,000

1 Inch to 4 Miles Approximately

Produced and printed by the SURVEYS AND MAPPING BRANCH DEPARTMENT OF MINES AND TECHNICAL SURVEYS. Town air photographs taken in 1943 and 1957.

REFERENCE

REFERENCE

Index to Adjoining Sheets

CANADA

EDITION 2
~~FIRST EDITION~~

105 F

Military users, refer to this map as
Référence de la carte pour usage militaire

SERIES	A502	SÉRIE
MAP	105 F	CARTE
EDITION 2 MCE		ÉDITION

ROADS / ROUTES
hard surface / pavée
loose surface / de gravier
cart track / de terre
trail / sentier
Definite / Supposed / Supposées

THE DECLINATION OF THE COMPASS NEEDLE VAR

Surveys in 1948 and compilation in 1960 by the Topographical Survey from an aerial photograph taken in 1949. Lithographed and printed by the Army Survey Establishment, R.C.E., Department of National Defence, 1962

Interim Corrections 1974

REFERENCE

Road, Hard Surface, All Weather
Road, Loose Surface, All Weather
Road, Special, etc.
Boundary, International
Boundary, Provincial
Boundary, County or District
Boundary, Township, Seigniory or Parish
Boundary, Indian Reserves, Parks
Railway, Standard Gauge
Bench Mark
Triangulation Site
Spot Elevation (in feet)
Telephone, Trunk Route

QUIET LAKE

YUKON TERRITORY

Scale 1:250,000 or 1 inch = 4 miles (approximately)

Miles
Kilometres

Copies may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, or your nearest map dealer.

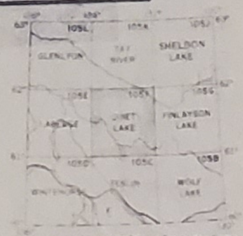
© Canada Copyrights Reserved 1973

Les cartes sont en vente au Bureau des Cartes du Canada, ministère de l'Energie, des Mines et des Ressources, Ottawa, ou chez le vendeur le plus près

© Canada 1973, tous droits réservés

REFERENCE

Building
School
Post Office
Church
Stream, Indefinite or Unsurveyed
Stream, Intermittent
Stream, in Dry River Bed
Braided Stream
Marsh or Swamp
Marsh or Swamp, in water
Glacier or Snowfield
Sand, Gravel or Mud
Fire Lookout Tower
Wireless Station
Mine
Cave
Contours, Elevation
Contours, Approximate
Contours, Depression
Escarpment, Cliff
Rapids and Falls
Ferry
Dam
Lighthouse
Aerodrome or Airstrip
Seaplane Anchorage

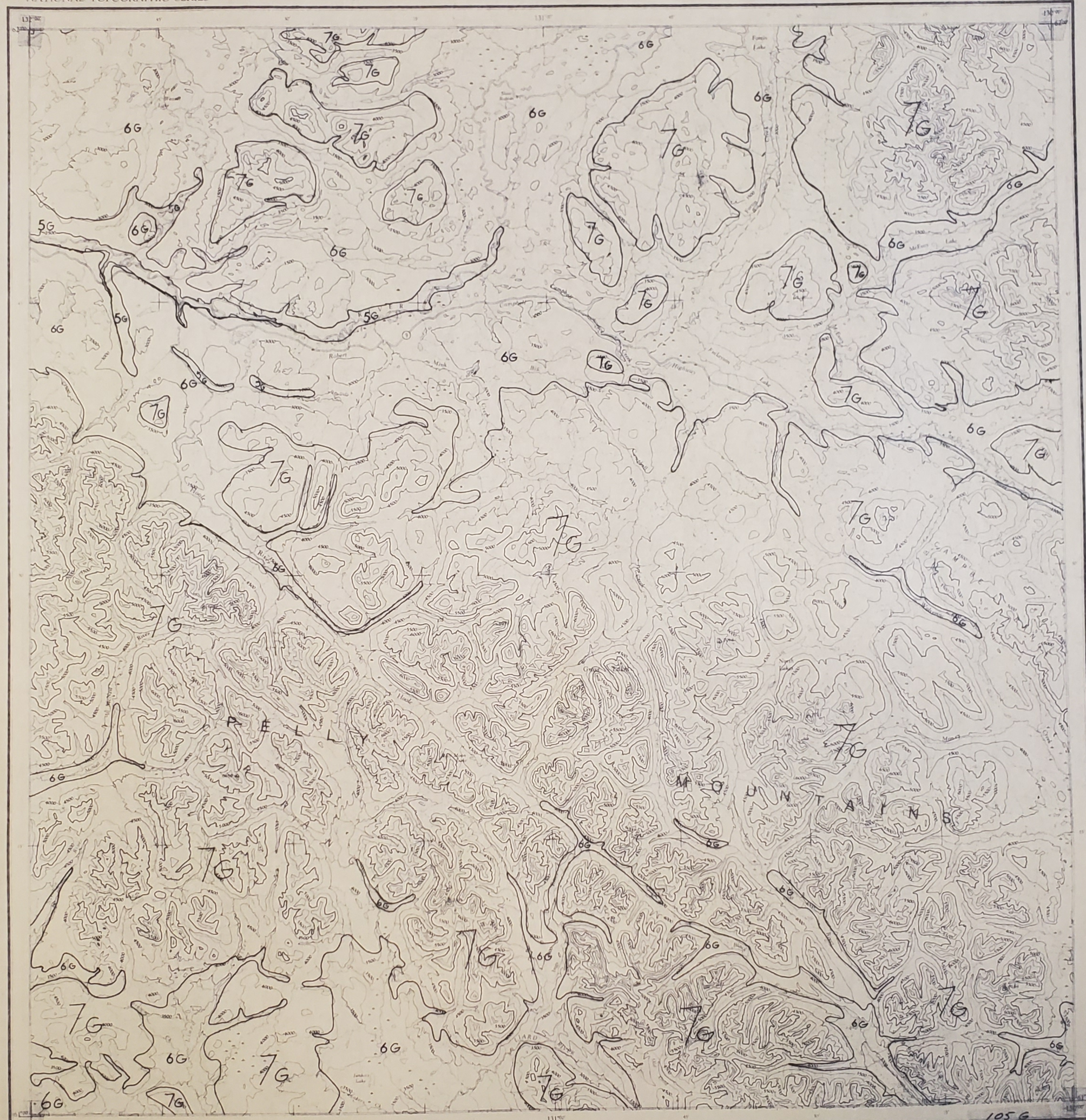


Index to adjoining sheets of the National Topographic System
Tableau d'assemblage des feuilles nationales de référence cartographique

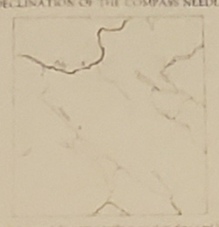
QUIET LAKE
105 F
~~FIRST EDITION~~
EDITION 2

Military users, refer to this map as: Réference de la carte pour usage militaire

SERIES A502 SÉRIE
MAP 105 G CARTE
EDITION 2 MCE EDITION



THE DECLINATION OF THE COMPASS NEEDLE 1951



Surveyed, compiled, drawn and printed by the ARMY SURVEY ESTABLISHMENT R.C.E. 1949-51
Aerial photography by the R.C.A.F. 1949
Universal Transverse Mercator Projection

Interim Corrections 1974

REFERENCE

	More than 1 Lanes	1 Lane
Road: Loose Surface, All Weather	All Weather	Dry Weather
Loose Surface, Less than 1 Lanes		
Cart Track		
Trail		
Railway: Multiple Track		
Single Track		
Boundary: International		
Provincial, Yukon		
Limits of District		
Abandoned: Railway, Milepost, Pole line		

FINLAYSON LAKE

YUKON TERRITORY

Scale 1 : 250,000

1 Inch to 4 Miles Approximately

Miles 0 5 10 15 20 30 Miles

Kilometres 0 5 10 15 20 30 Kilometres

ROADS / ROUTES

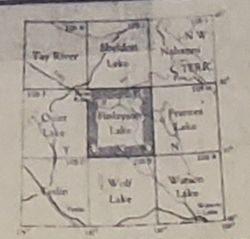
hard surface
loose surface - de gravier
cart track - de terre
trail - sentier
Dale-dots - Subdivisions

The general public may obtain copies of this map from the Map Distribution Office, Dept. of Mines and Technical Surveys, Ottawa.

Contour interval 500 Feet.
All Elevations in Feet above Mean Sea Level

REFERENCE

Triangulation Station — Spot Elevation in Feet
Contours, Elevation — Wooded Areas
Depression — Swamp or Marsh
Approximate
Church, School — W.L. 241
Stream, Intermittent — Ferry
Dam — Navigation Light
Falls — Elevation in Feet
Aerodrome or Landing Strip
Main Electric Power Line



NOTE: On the above index the sheets published are shown tinted green

FINLAYSON LAKE Y.T.
SHEET 105 G
EDITION 2

Military users, refer to this map as: Référence de la carte pour usage militaire



THE DECLINATION OF THE COMPASS NEEDLE (1951)

Surveyed, compiled, drawn and printed by the ARMY SURVEY ESTABLISHMENT R.C.E. 1949-52
Aerial photography by R.C.A.F., 1949
Edition 1 printed 1954
Transverse Mercator Projection

Scale 1 : 250,000
1 Inch to 4 Miles Approximately

Miles 0 5 10 15 20 Miles
Kilometres 0 5 10 15 20 25 Kilometres

Interim Corrections 1974

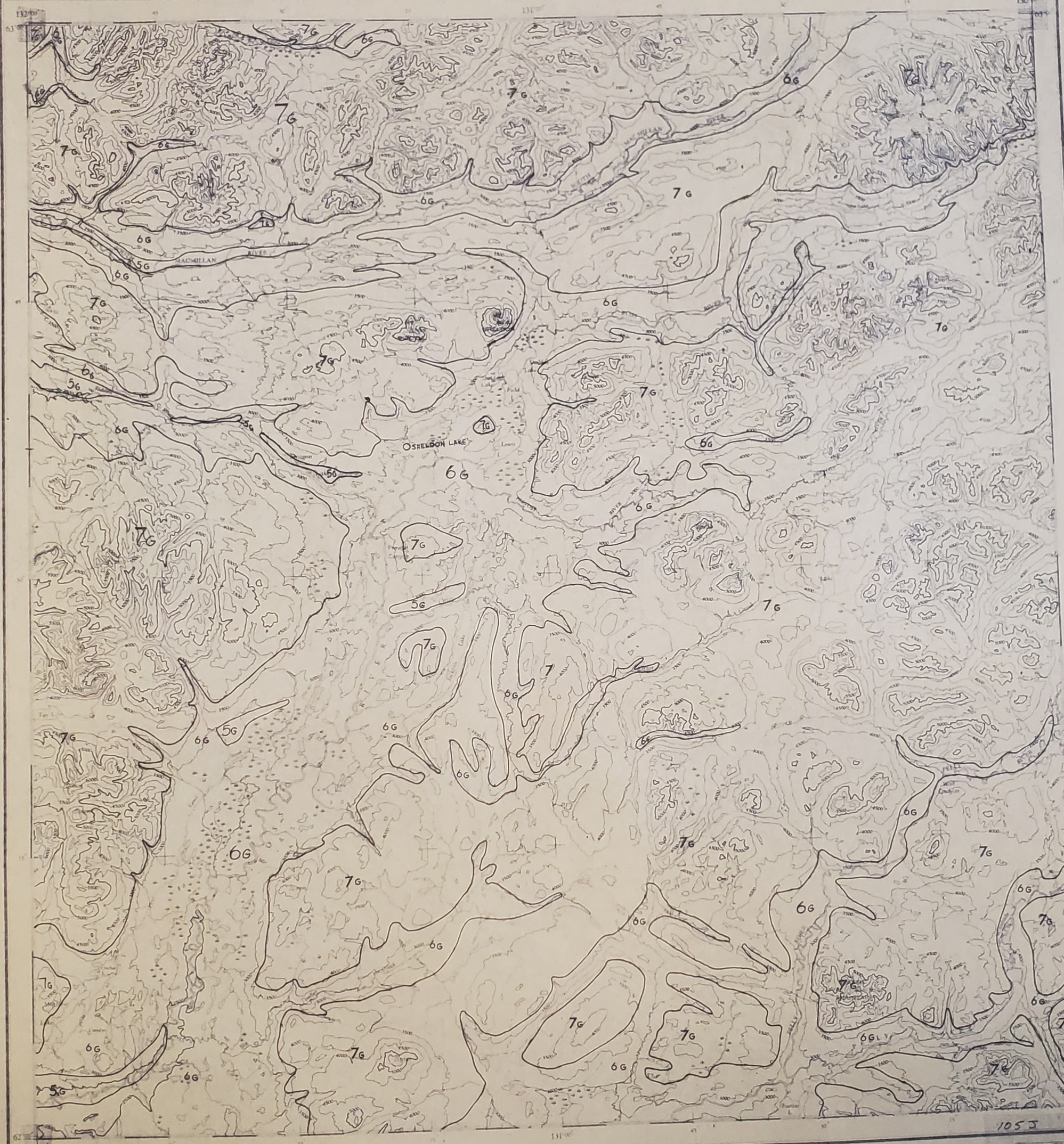
Contour interval 500 Feet
All Elevations in Feet above Mean Sea Level

North American Datum 1927

REFERENCE

105H

FRANCES LAK
YUKON TERR.—NORTHWEST T



Scale 1 : 250,000

THE DECLINATION OF THE COMPASS NEEDLE 1951

REFERENCE

REFERENCE

SHELDON LAKE
YUKON TERRITORY

NATIONAL TOPOGRAPHIC SERIES

DEPARTMENT OF NATIONAL DEFENCE

EDITION 2
~~FIRST EDITION~~

CANADA, SHEET 105 K

Military users
refer to this map as:
Référence de la carte
pour usage militaire:

SERIES A502 SERIE
MAP 105 K CARTE
EDITION 2 MCE EDITION

ANVIL

MOUNT MTS

FARO A 05

105K

Scale 1 : 250,000

Approximately 1 Inch to 4 Miles

Miles

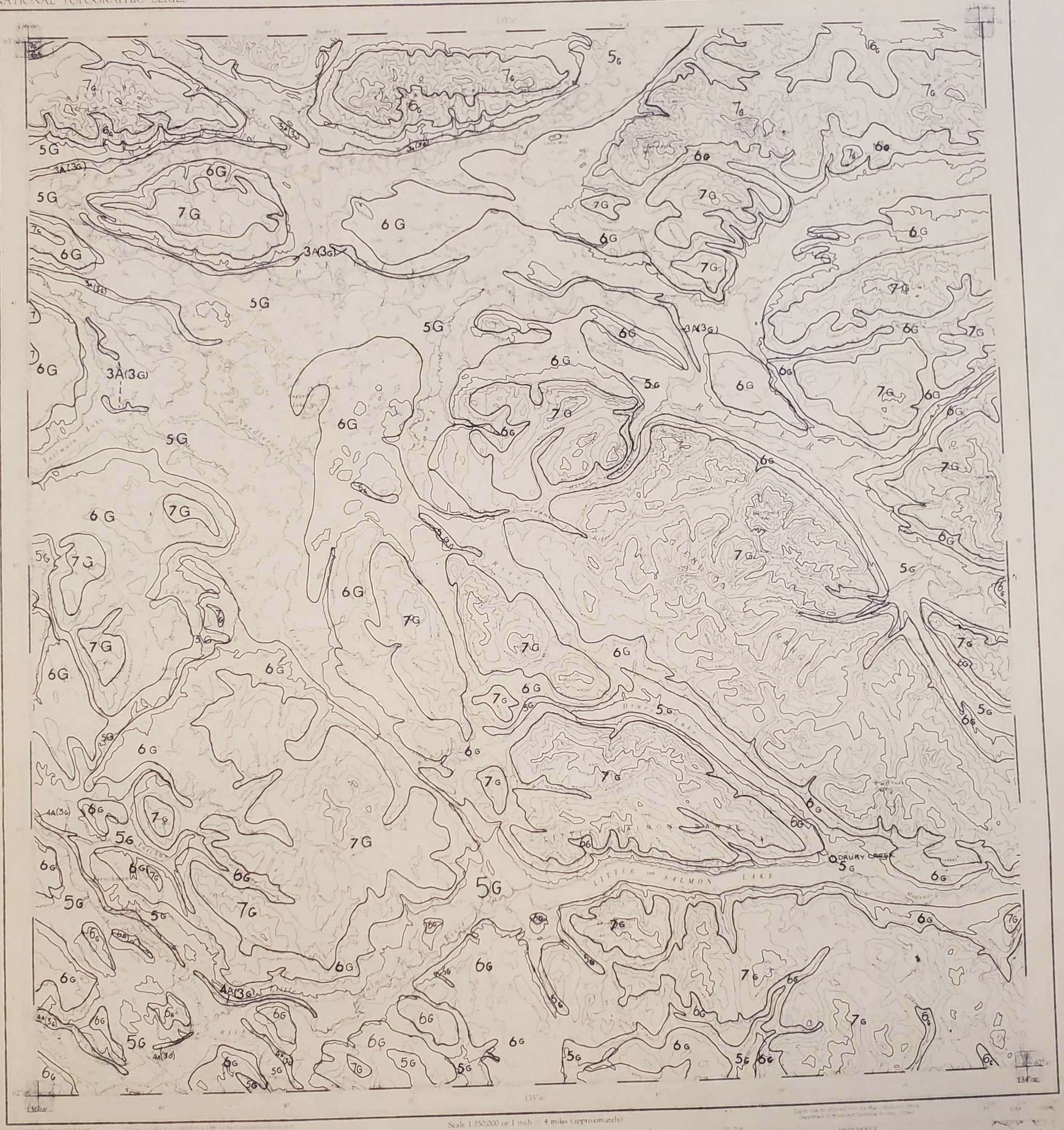
Kilometres

REFERENCE

TAY RIVER

YUKON TERRITORY

SHEET



Scale 1:250,000 or 1 inch = 4 miles (approximately)

105L

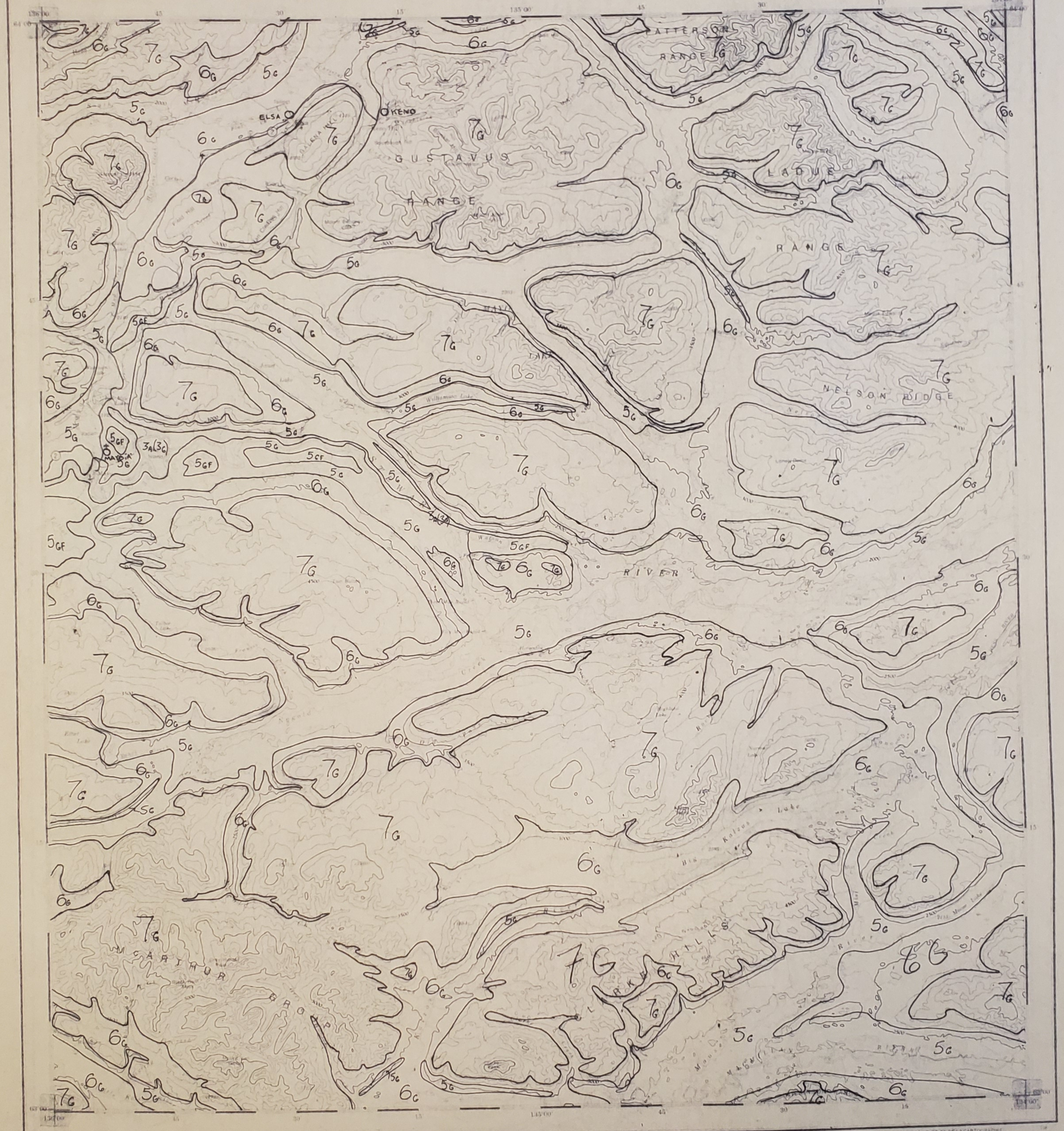
REFERENCE

REFERENCE

GLENLYON
YUKON TERRITORY

SHEET 105L
FIRST EDITION

GLENLYON



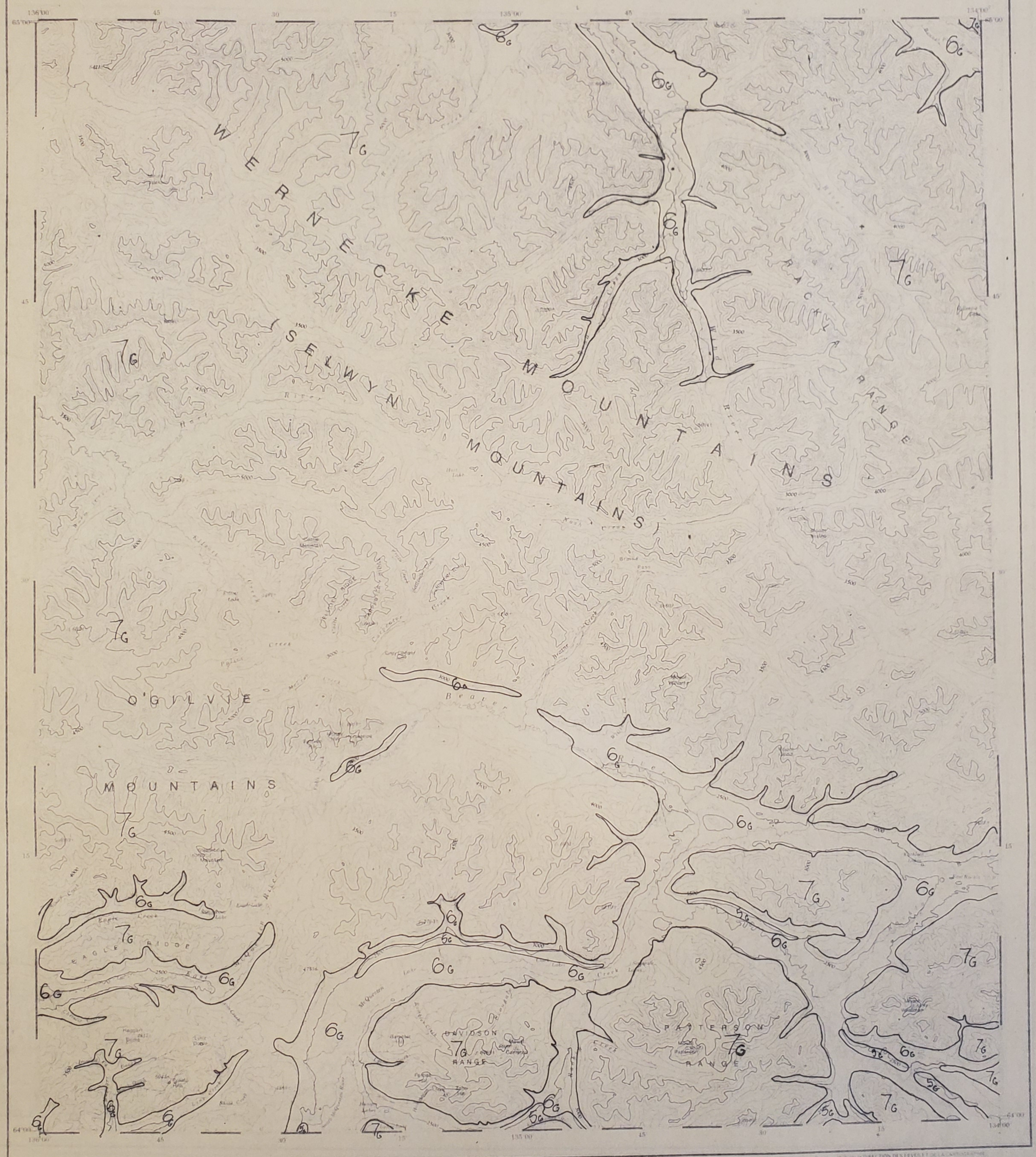
105M

MAYO
YUKON TERRITORY

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilometres



NASH CREEK

YUKON TERRITORY

Scale 1:250,000 Échelle

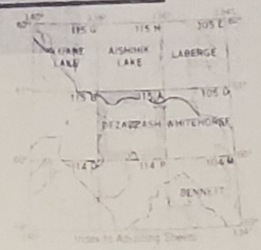
Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilometres



Scale 1:250,000 or 1 inch = 4 miles (approximately)

REFERENCE



DEZADEASH

SHEE

7G

6G

7G

6G

7G

6G

6G

7G

RELIABILITY DIAGRAM / CROQUIS D'EXACTITUDE

Surveys and Mapping Branch
Department of Energy, Mines and Resources

Edité par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

La déclinaison magnétique pour 1961 varie de 30°30' (0) au centre de la feuille (carré) à 31°15' (E) au centre de la feuille (losange) moyenne annuelle 0°45' (Est)

MOUNT ST ELIAS



KLUANE LAKE

YUKON TERRITORY

Scale 1:250,000 Echelle

AISHIHIK LAKE 04-0089 115H

115 H 1:250,000 **CANADA** EDITION 2 115 H

NISLING RANGE

RUBY RANGE

SIFTON RANGE

AISHIHIK LAKE

Aishihik

THREE GUARDSMEN

115 H

AISHIHIK LAKE

YUKON TERRITORY

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilomètres



Military users refer to this map as: Référence de la carte pour usage militaire

SERIES A502 SERIE
MAP 115 I CARTE
EDITION 3 MCE EDITION

ROADS - ROUTES
hard surface - revêtu
loose surface - de gravier
cart track - de terre
trail - sentier
Deletions - Suppressions

INDEX DIAGRAM - CROQUIS D'EXACTITUDE

A Large-scale mapping, photogrammetric, 1968. Partially updated from 1969 provincial information.

A Cartographie à grande échelle, photogrammétrie, 1968. Mise à jour partiellement d'après les informations provinciales datant de 1969.

Published, 1969, by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES. Printed 1971.

Magnetic declination 1970 values from 31°25' easterly at centre of west edge to 32°16' easterly at centre of east edge. Mean annual change 13 westerly.

Interim Corrections 1974

Road — Route
Hard surface, all weather — Revêtu, toute saison
Loose surface, all weather — De gravier, toute saison
Cart track — Chemin de terre
Trail — Sentier
Railway, normal gauge — Chemin de fer, écartement normal
Depression contours — Courbes de dépression
Spot elevation, in feet — Relèvé de niveellement en pieds
Power transmission line — Ligne de transport d'énergie

Scale 1:250,000 Échelle

Miles 5 0 5 10 15 Miles
Kilometres 5 0 5 10 15 20 Kilometres

CONTOUR INTERVAL 500 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

EQUIDISTANCE DES COURBES 500 PIEDS
Élévations en pieds au dessus du niveau moyen de la mer
Système de référence géodésique nord américain 1927
Projection transverse de Mercator

Copies may be obtained from the Map Distribution Office, Department of Energy, Mines and Resources, Ottawa.

Ces cartes sont en vente au Bureau de distribution des cartes, Ministère de l'Énergie, des Mines et des Ressources, Ottawa.

CARMACKS
YUKON TERRITORY

Établie en 1969, par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Imprimée en 1971.

La déclinaison magnétique pour 1970 varie de 31°25' Est au centre de la limite Ouest à 32°16' Est au centre de la limite Est. Variation moyenne annuelle 13' Ouest

Corrections provisoires 1974

Town — Ville
Village or Settlement — Village ou hameau
Post office — Bureau de poste
Church — Église
School — École
Boundary monument — Borne frontière
Horizontal control point — Point géodésique
Lighthouse — Phare
Airport — Aéroport
Seasonal Base — Base d'hydravions



Index to adjoining Sheets of National Topographic System
Tableau d'assemblage des feuilles voisines du référence cartographique

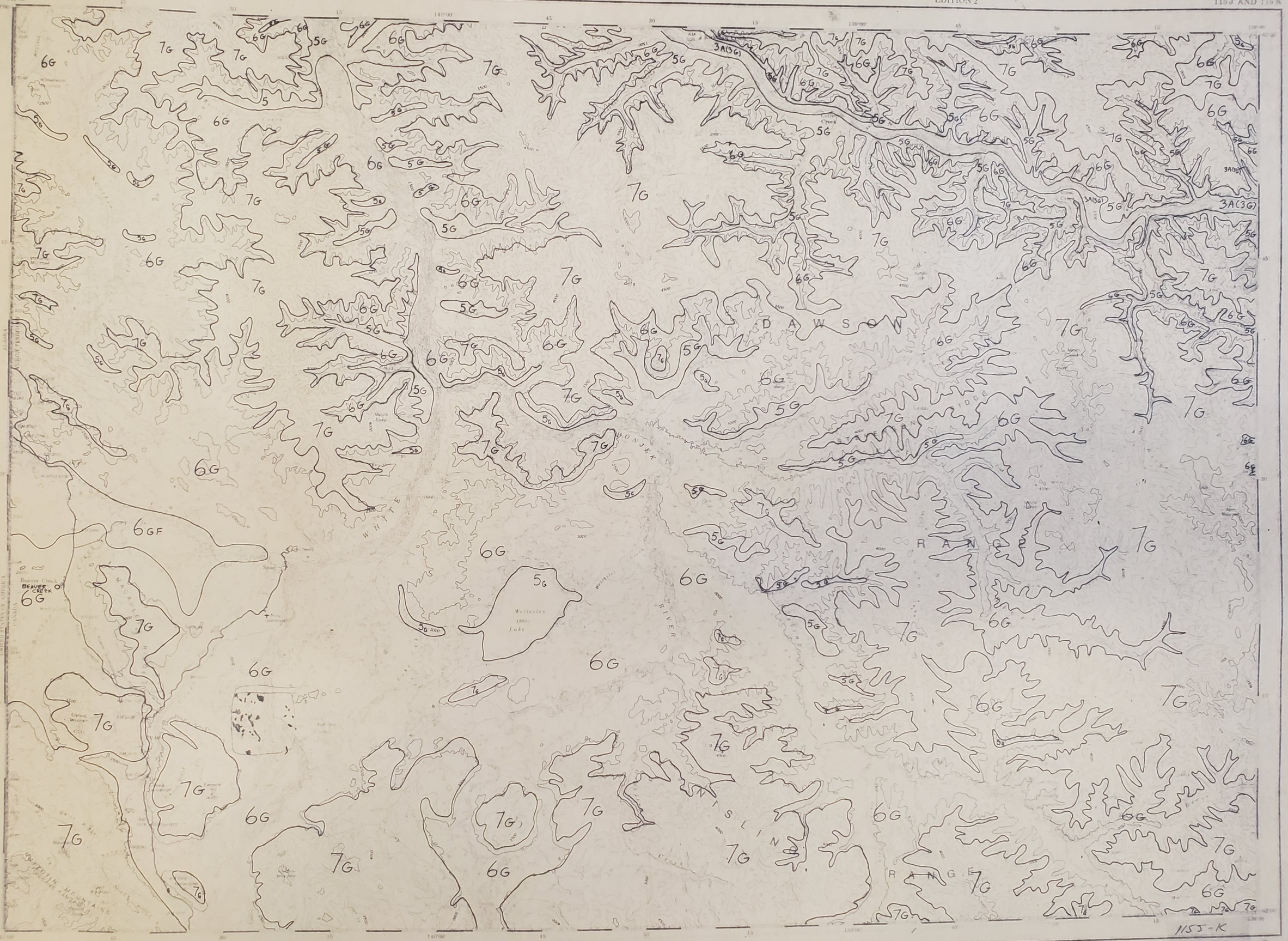
CARMACKS
115-I
EDITION 3

1:250,000

CANADA

EDITION 2

115 J AND 115 K



SNAG

YUKON TERRITORY

115-O & N E

CANADA

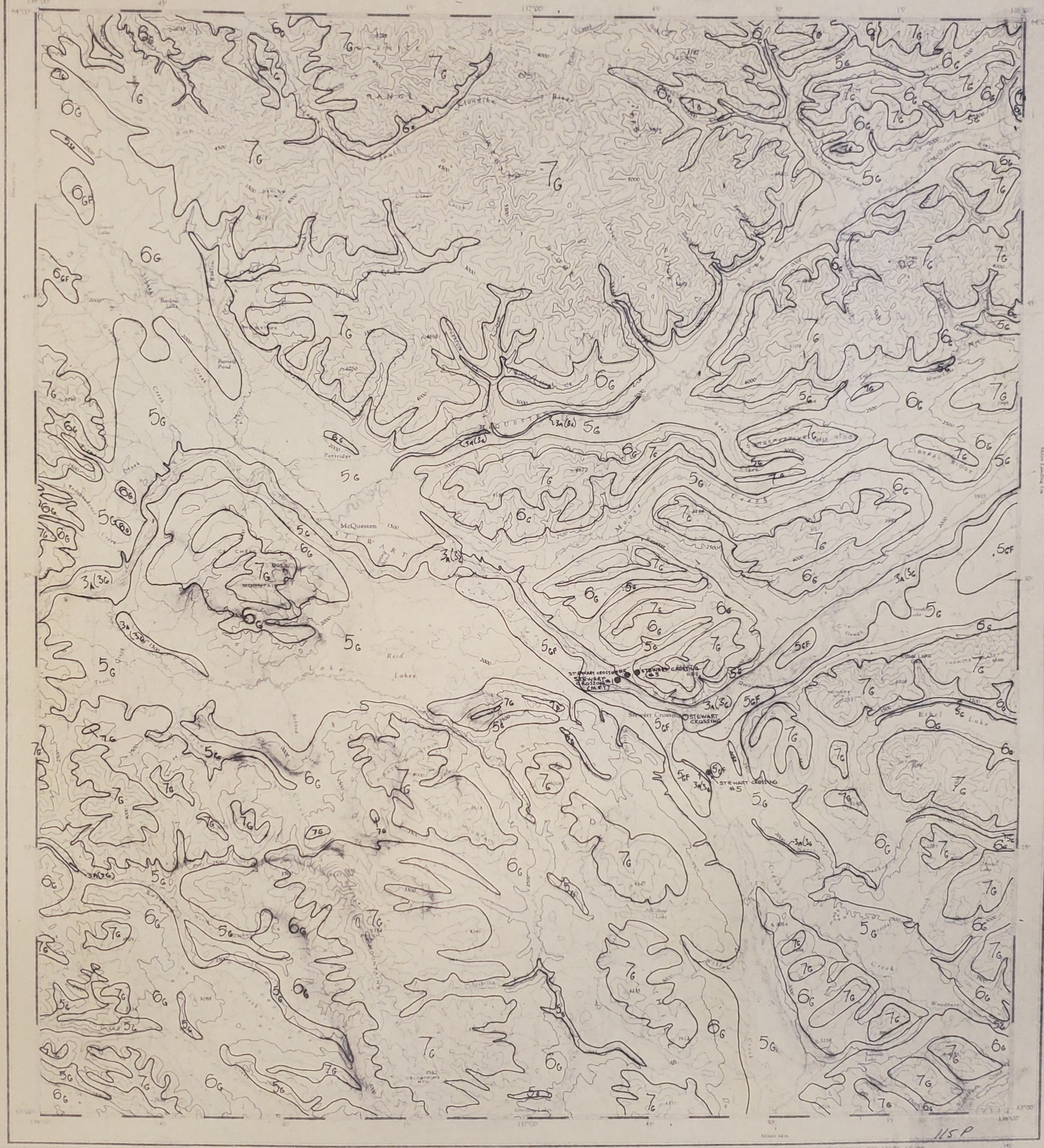
1:250,000

EDITION 1

115-O & N/E

STEWART RIVER

YUKON TERRITORY



McQUESTEN

YUKON TERRITORY

Scale 1:250,000 Echelle

DEPARTMENT OF MINES AND TECHNICAL SURVEYS
DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DES MINES ET DES RELEVÉS TECHNIQUES



LARSEN CREEK
YUKON TERRITORY

Scale 1:250,000 Échelle
0 5 10 15 20 Miles

NATIONAL TOPOGRAPHIC SYSTEM

1:250,000

CANADA

~~FIRST~~ EDITION 2

SHEETS 116 B & 116 C(E½)

Military users refer to this map as: Référence de la carte pour usage militaire

SERIES A902 SHEET 116 B & 116 C(E½) EDITION 2 MCE EDITION 2

