Table 2. Yearly mean, standard deviation, and degree of skewness of hourly means.

		$\overline{X}$	σ	*Skewness*
Site	Air	3.6	26.7	0.20
	Ground surface	4.8	29.3	0.25
I	2.5 cm.	4.1	27.0	0.26
Site	10 cm.	6.8	23.4	−0.82
II	20 cm.	6.4	22.1	−0.96

with standard deviations and degrees of skewness.

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MAXIMUM POSTGLACIAL MARINE SUBMERGENCE IN SOUTHERN MELVILLE PENINSULA, N.W.T.*

In a recent article[1] the author discussed the limit of postglacial marine submergence in the northern part of Melville Peninsula. It was suggested that the marine limit in the area, as determined by a number of observations using four different criteria, varied between 450 and 500 feet. Of these four criteria only two, the lowest altitude at which undisturbed ground moraine and perched boulders occurred, were found to be particularly useful. Similar techniques were used during the summer of 1959 to determine the limit of postglacial submergence in the southern part of the peninsula. The observations there are limited to four altitudes in the Prince Albert Hills east of Lefroy Bay and to seven altitudes on the shores of the peninsula between Haviland Bay and Gore Bay. Two additional altitudes, one obtained by Burns[2] near the mouth of Jenness River (the only observation on the east coast south of 68°N.) and the other by Mathiassen[3] between Gore and Haviland bays, comprise all the available information. The location and altitude of each observation is plotted on the map, Fig. 1.

In southern, as in northern Melville Peninsula the altitudes of the lowest undisturbed ground moraine and perched boulders were the most easily applied and most reliable indicators of the marine limit. The presence of marine shells in raised deposits was found to be of little use for determining the limit. Although shells were usually

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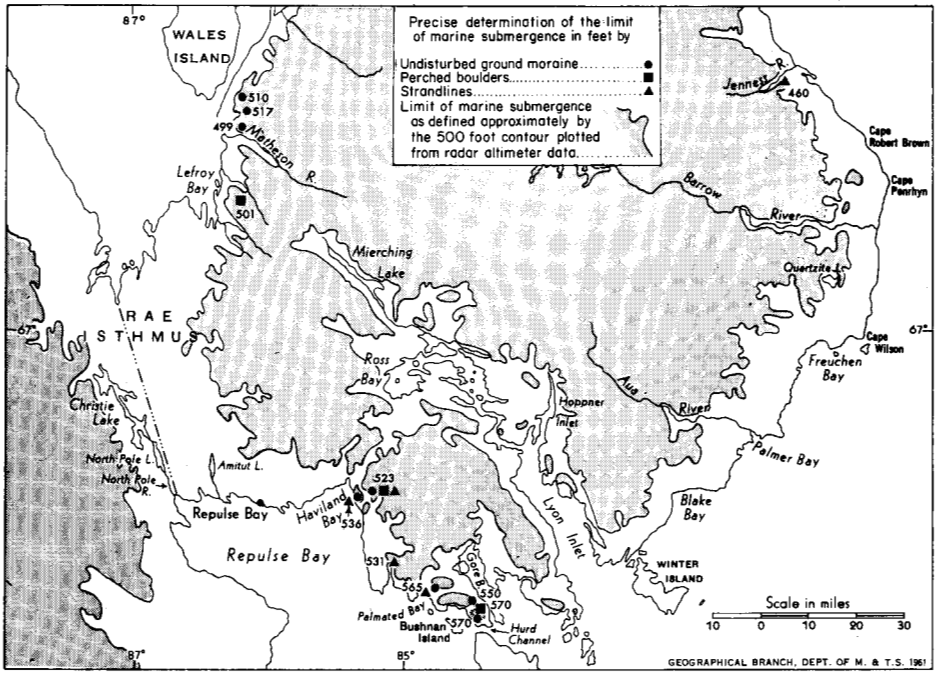

Fig. 1. Map of southern Melville Peninsula showing locations and altitudes of ground moraines, perched boulders and strandlines.

common at altitudes close to the present sea-level they are extremely rare above 250 feet. Their presence near sea-level was especially noticeable on the terrain north and northwest of Repulse Bay settlement. Around the shores of Amitut Lake shells of many of the common species mentioned in the earlier paper lie thickly strewn on the surface. They are most noticeable on the surface of frost boils on marine silts and clays in the depressions between Precambrian hills. They are much less common, even near sea-level, on the higher land that borders Hurd Channel, Gore Bay, and the east side of Haviland Bay.

Similarly, raised strandlines were found to be of limited use in determining the limit of marine submergence. True raised strandlines are not common along the coast of the peninsula east of Lefroy Bay. They are fairly numerous, however, on the east coast between Cape Wilson and Winter Island and along the north shore of Repulse Bay in the vicinity of Repulse Bay settlement. In neither area do they normally occur at altitudes near the marine limit.

Occasionally on the south coast of the peninsula features that appear to be wave-cut benches in glaciofluvial sand coincide in altitude with the lower limit of undisturbed ground moraine (Table 1). This was particularly noticeable along the east coast of Haviland Bay. In fact, only two of the determined altitudes for the marine limit are defined exclusively by raised strandlines, one is the altitude of 460 feet determined by Burns near the mouth of the Jenness River and the other is the figure of 531 feet at 66°22′N., 85°05′W., north of Palmated Bay.

Most of the altitudes for the limit of marine submergence are based on determinations of the altitude of the lower limit of undisturbed ground moraine or of perched boulders. Altitudes determined in this way are a little higher than those based on similar criteria in the northern part of the peninsula. There the marine limit, using undisturbed ground moraine and perched

Table 1. Highest observed altitudes[1] of postglacial marine submergence in southern Melville Peninsula.

Locality		*Strand-lines*	*Ground moraine*	*Perched boulders*
Lefroy Bay	67°28′N. 86°21′W.			501
Lefroy Bay	67°37′N. 86°21′W.		499	
Cape McTavish	67°40′N. 86°22′W.		517	
Cape McTavish	67°46′N. 86°18′W.		510	
Near mouth of Jenness River		460[2]		
Brooks Bluff	66°14′N. 84°29′W.		550	
Brooks Bluff	66°13′N. 84°25′W.			570
Brooks Bluff	66°12′N. 84°26′W.		555	
Palmated Bay	66°15′N. 84°45′W.	565	565	
Frozen Strait	66°22′N. 85°05′W.	531		
Haviland Bay	66°32′N. 85°21′W.	523	523	523
Haviland Bay	66°34′N. 85°24′W.	536	536	
Between Gore and Haviland bays			552[3]	

[1]All altitudes in feet above sea-level. They were obtained with a Paulin surveying altimeter. All observations by the author, unless attributed otherwise.
[2]After Burns[2].
[3]After Mathiassen[3]. No precise location given.

boulders as the limiting criteria, has a mean altitude of 460 feet. The four altitudes east of Lefroy Bay, using the same criteria, give a mean value of 507 feet, and the seven altitudes around the shores of the peninsula between Gore Bay and Haviland Bay give a mean value of 550 feet. These figures, although slightly higher than those determined for northern Melville Peninsula, are nevertheless lower than those found by Bird on Southampton Island to the south, where the limit, using undisturbed ground moraine as the criterion, approaches 600 feet[4]. The significance of this apparent rise in the marine limit from north to south is beyond the scope of this note.

In several places in southern Melville Peninsula the lower limit of undisturbed ground moraine is visible on air photographs. It can, for example, be seen as a clearly apparent ring around the hills and ridges northeast of Palmated Bay. In this area, too, the limit of submergence is visible from sea-level in Palmated Bay as a horizontal line marking the lower, slightly slumped edge of the ground moraine on a high, isolated hill that rises to an altitude of 650 feet a few miles northeast of the bay.

The approximate maximum extent of the postglacial sea is indicated on Fig. 1. The shore of the sea is defined approximately by the 500-foot contour determined from radar altimeter data. The sea overtopped the country lying west of the present east coast between Cape Robert Brown and Cape Wilson for a distance of 10 miles inland. Shells were found at the summits of many of the hills between Quartzite Lake and Barrow River, although the precise marine limit in this area was not determined. Between Cape Wilson and the entrance to Lyon Inlet a coastal belt up to 15 miles wide was submerged and the sea extended up the valleys of the Barrow and Aua rivers. Clearly defined strandlines are apparent at considerable distances from the present shore at many places along this coast.

A major sound appears to have extended along Lyon Inlet to Ross Bay and from there southward to what is now Haviland Bay. The higher parts of the peninsula between Lyon Inlet and Haviland Bay projected as islands from

the sea. An arm of the same sound extended northwestward into the Mierching Lake depression.

The west coast of the peninsula in the vicinity of Lefroy Bay differed only slightly from its present configuration. A comparatively narrow coastal belt was submerged and arms of the sea extended a few miles up the valleys of the main west-flowing rivers. Rae Isthmus and the north shore of Repulse Bay were submerged and a broad strait, 20 miles wide, connected the present Committee Bay and Repulse Bay.

Table 1 gives the precise location and criteria used in the determination of the postglacial marine limit at thirteen places in southern Melville Peninsula.

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CHUKOTSK OR CHUKCHI: SOME THOUGHTS ON THE TRANSPOSITION OF SOVIET GEOGRAPHICAL NAMES

Whether G. E. Moore, the great common-sense philosopher of our time, was right in reviving and defending the old philosophic contention that purely external relations do not exist may seem beside the point to the man of this pragmatic age, but surely every one will agree that the problems presented by relations generally admit much less of superficial blanket solutions than we are apt to believe, faced as we are with growing numbers of increasingly complicated situations in every field of endeavour. To some cartographers and gazetteer writers the transposition of Russian geographical names into English may seem a subject well suited for an arbitrary rule of thumb; but is it? Let us consider an example.

In the remote northeast corner of Asia there is a projection of land of the kind that is commonly classed as a peninsula. The co-ordinates, according to Gazetteer No. 42, United States Board of Geographical Names, are 66°00′N. and 174°00′W. In common practice, however, it would be cumbersome to refer to the homeland of the Chukchi as "Peninsula 66°00′N. and 174°00′W." no matter how exact the description or how bleak the country may be. Obviously, we must have a proper name, a designation less artificial, mathematical, and abstract than that provided by the generic name and geographical coordinates, but it must also be geographically informative and linguistically sound, i.e., etymologically correct and as far as possible short and euphonic. Obviously the generic part of the name, in this case "Peninsula", should be intelligible to the general public, without requiring consultation of a foreign language dictionary.

However, Gazetteer No. 42 and the U.S. government maps present as the "approved" version *Chukotskiy Poluostrov*. Now, a Russian-speaking person familiar with the Latin alphabet, or an English-speaking person knowing Russian, would immediately know that an expedition to Chukotskiy Poluostrov would not be an expedition to the moon, but for that matter neither would be dismayed if the original Cyrillic alphabet had been used. On the other hand, the reader who has not had the benefit of training in the Russian language is in no way enlightened by the word *Poluostrov,* nor has he any way of knowing that the jaw-breaking *Chukotskiy* is merely the Russian adjectival form of Chukchi, the name of the tribe inhabiting the region.

The reason for the current trend towards indiscriminate transliteration of Soviet geographical names is not far to