The airman goes much quicker and can fly both over land and sea; he can thus envisage a more direct route; on the other hand the wind for him is a greater cause of uncertainty. So long as he mainly makes use of the compass, a frequent change of course is a hindrance; experience will disclose whether the use of a radio direction finder must predominate and whether a stereographic projection offers him advantages.

But, as far as aviation is concerned, long journeys must be considered. For a journey over 360 nautical miles, like those which Professor Immler has in view, the system of projection is of slight importance; gnomonic or conic projections would be just as good, and even Mercator's projection, if one be not in the neighbourhood of the pole. But if a crossing of the Pacific be considered, then it is no longer possible to carry out, with any precision, on a stereographic map of such size the operations indicated by Professor Immler, for the meridians would be circles in it, differing greatly from straight lines.

P. V.

### LIMITS OF OCEANS AND SEAS - U.S.S.R.

Decision of the Central Executive Committee of the U.S.S.R. concerning uniformity in the geographical denominations of the Soviet Arctic.

- I. The following denominations of the Arctic Ocean and its parts adjacent to the territory of the U.S.S.R. are obligatory for use in all scientific papers, manuals, maps, charts etc. issued in the U.S.S.R.
  - 1. Svernyi Ledovityi okean (Arctic Ocean).
- 2. Parts of the Arctic Ocean: Beloe More (White Sea); Barentsovo more (Barents Sea); Karskoe more (Kara Sea); More Laptevykh (Laptev Sea); Vostochnosibirskoe more (East Siberian Sea) and Chukotskoe more (Chuchchee Sea).
- 3. The geographical limits of the separate parts of the Arctic Ocean, adjacent to the territory of the U.S.S.R., to be as follows:

### Barentsovo more (Barents Sea)

Western limits: North Cape (Norway); Bear Island; South Cape (Spitsbergen); E coasts of Western Spitsbergen and eastern shore of North-East Land to Cape Leigh Smith.

Northern limits: Cape Leigh Smith across the islands Bolshoy ostrov (Great Island) Gillis and Victoria; Cape Mary Harmsworth (southwestern extremity of Alexandra Land) along the northern coasts of Franz-Joseph Land as far as Cape Kohlsaat.

Eastern limits: Cape Kohlsaat; Cape Zhelaniya (Desire); W. coast of Novaya Zemlya; Proliv Karskye Vorota (Kara Strait); W. coast of Vaigach Island; Yugorsky Shar (Yugor Strait).

Southern limits: the coast of the mainland from Yugor Strait to Cape Kanin Noss thence to Cape Sviatoy Noss (of Murmansk) and along the coast of the mainland to North Cape.

### Pechorskoe more (Pechora Sea)

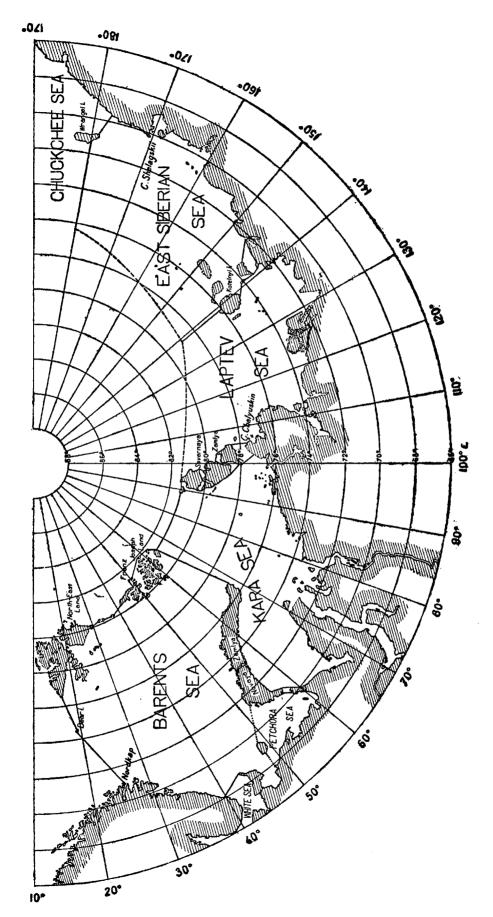
The term Pechorskoe more (*Pechora Sea*) is admitted for the south-eastern portion of the Barents Sea, though it is not to be considered an independent geographical unit.

Western limits: from Cape Chornyi (southern entrance into Kostin Shar); northern extremity of Kolguev Island; E. coast of Kolguev Island to the western end of Plosskie Koshki (Flat Cats); Bugrinskaya kossa (Bugrinsk Spit) and on to Cape Sviatoy Noss (Timan).

All other boundaries coincide with the corresponding limits of this part of the Barents Sea.

#### Beloe more (White Sea)

The basin south of the line joining Cape Sviatoy Noss (of Murmansk) to the north-western extremity of the Kanin peninsula (Kanin Noss), limited by the shores of the U.S.S.R.



### Karskoe more (Kara Sea)

Western limits: Yugor Shar; E. coast of Vaigach Island; Karskye Vorota (Kara Strait); E. coast of Novaya Zemlya; Cape Zhelaniya; Cape Kohlsaat.

Northern limits: from Cape Kohlsaat to Cape Molotov (northern extremity of Severnaya Zemlya).

Eastern limits: W. coast of Severnaya Zemlya; Boris Vilkitsky Strait.

Southern limits: the coast of the mainland from Boris Vilkitsky Strait to Yugor Strait.

# More Laptevykh (Laptev Sea)

Western limits: E. coast of Severnaya Zemlya, from Cape Molotov to Vilkitsky Strait; E. coast of Taimyr Peninsula, from Vilkitsky Strait to the head of Khatanga Bay

Northern limits: from Cape Molotov along the loxodromic line to the point of intersection of the meridian of the northern extremity of Kotelnyi Island (139° East) with the edge of the continental shelf.

Eastern limits: from the intersection of the meridian of the northern extremity of Kotelnyi Island (139° East) with the edge of the continental shelf; along this meridian to the northern extremity of Kotelnyi Island; W. coasts of the Kotelnyi and Liakhov Islands; Demetrius Laptev Strait.

Southern limits: the coast of the mainland from Laptev Strait to the head of Khatanga Bay.

#### East-Siberian Sea.

Western limits: from the intersection of the meridian of the northern extremity of Kotelnyi Island (139° East) with the edge of the Continental shelf; along this meridian to the northern extremity of Kotelnyi Island; northern, eastern and southern coasts of the Kotelnyi and Thaddeus Islands; eastern coasts of Liakhov Islands; Demetrius Laptev Strait.

Northern limits: from the intersection of the meridian of the northern extremity of Kotelnyi Island (139° East) with the Continental shelf, along the edge of the shelf to the meridian of 180°.

Eastern limits: from the intersection of the meridian of 180° with the edge of the Continental shelf; along the meridian to Wrangel Island; north-western shore of this island as far as Cape Blossom and thence to Cape Yakan on the mainland.

Southern limits: the coast of the mainland from Cape Yakan to Demetrius Laptev Strait.

#### Chuckchee Sea

Western limits: from the intersection of the meridian of 180° with the edge of the Continental shelf; along this meridian to Wrangel Island; northern coast of Wrangel Island to Cape Waring; eastern and southern coasts of Wrangel Island to Cape Blossom and thence to Cape Yakan on the mainland.

- II. The denomination Victoria Sea, the independence of which has not as yet been proved by the investigations, is not to be used.
- III. The denominations Murmansk Sea, Nordenskjöld Sea, Siberian Sea, Yukahir Sea, West-Siberian Sea, Mangazea Sea are not to be used on Soviets maps.
  - IV. The following limits are fixed:-

#### Matochkin Shar

Western limits: from Cape Stolbovoy to Cape Serebrianyi. Eastern limits: from Cape Rock to Cape Vykhodnoy.

#### Karskye Vorota (Kara Strait)

Western limits: from Cape Kussov Noss to the cape at the western entrance into Dolgaya Bay.

Eastern limits: from Cape Menshikov to Bolvansky Noss.

Yugorsky Shar (Yugor Strait)

Western limits: from Cape Belyi Noss to Cape Greben.

Eastern limits: from Cape Sokolii to Cape Belyi.

Yungsturm Strait (Severnaya Zemlya)

Western limits: from Cape Frunse to Cape Budionnyi.

Eastern limits: from the southern cape of Komsomolets Island to the eastern cape of Pioneer Island.

### Red Army Strait

Western limits: from the western cape of the Parishskaya Kommuna (Commune of Paris) peninsula to the southern extremity of Pioneer Island.

Eastern limits: from the south-eastern cape of Komsomolets Island to Cape Voroshilov.

### Shokalsky Strait

Southern limits: from Cape Sverdlov to Cape Ostryi Noss. Northern limits: from Cape Anuchin to Cape Unschlicht.

### Boris Vilkitsky Strait

Western limits: from Cape Neupokoev, through Heiberg Island to Cape Poluostrovnoy

Eastern limits: from Cape Yevgenov to Cape Pronchishchev

### Demetrius Laptev Strait

Western limits: from Cape Vaguin to Cape Sviatoy Noss.

Eastern limits: from Cape Shalaurov to the mouth of the Kondratieva River.

# Bering Strait

Northern limits: from Cape Unikan to the southern cape at the entrance into Shishmarev lagoon,

Southern limits: from Cape Krigugon to Cape York.

# UNIFICATION OF BUOYAGE.

(See: The Hydrographic Review, Vol. IX, No 1, May 1932, page 192, Vol. X, No 1, May 1933, page 184, Vol. XI, No 2, Nov. 1934, page 123)

The Advisory and Technical Committee for Communications and Transit of the League of Nations has published, in the Records of the Work of its Nineteenth Session held at Geneva from November 5th to 9th, 1935, a report on the state of progress of the work on the unification of buoyage rules. The Preparatory Committee for the study of buoyage which met in London in July 1933 had drawn up a draft agreement which had been communicated by Circular Letter to the various Governments of maritime countries. This Circular Letter asked them to forward to the Secretariat of the League of Nations any comments which they might desire to make on the subject and also whether they would be prepared to conclude an agreement on the basis of the Preparatory Committee's proposals.

Annex 3 of the Records on the Work of the Nineteenth Session gives the detail of the observations forwarded by the various Governments following the report of the Pre-

paratory Committee.

The following States have forwarded their observations to the Secretariat: Union of South Africa, Australia, United States of America, United Kingdom of Great Britain and Northern Ireland, Bulgaria, Canada, Chile, China, Denmark, Free City of Danzig, Egypt, Spain, Estonia, Finland, France, Irish Free State, Iceland, Italy, Japan, Latvia,