SKRIFTER OM SVALBARD OG ISHAVET

Nr. 29

GUNNAR HORN

FRANZ JOSEF LAND

NATURAL HISTORY, DISCOVERY, EXPLORATION, AND HUNTING

WITH 4 TEXT FIGURES AND 1 MAP

OSLO
I KOMMISJON HOS JACOB DYBWAD
1930
Results of the Norwegian expeditions to Svalbard 1906—1926 published in other series. (See Nr. 1 of this series.)

The results of the Prince of Monaco's expeditions (Mission Isachsen) in 1906 and 1907 were published under the title of ‘Exploration du Nord-Ouest du Spitsberg entreprise sous les auspices de S. A. S. le Prince de Monaco par la Mission Isachsen’, in Résultats des Campagnes scientifiques, Albert Ier, Prince de Monaco, Fasc. XL—XLIV, Monaco.

Isachsen, Gunnar, Première Partie. Récit de voyage. Fasc. XL. 1912. Fr. 120.00.

With map: Spitsberg (Côte Nord-Ouest). Scale 1:100,000. (2 sheets.) Charts: De la Partie Nord du Foreland à la Baie Magdalena, and Mouillages de la Côte Ouest du Spitsberg.

Isachsen, Gunnar and Adolf Hoel, Deuxième Partie. Description du champ d'opération. Fasc. XLI. 1913. Fr. 80.00.

Hoel, Adolf, Troisième Partie. Géologie. Fasc. XLI. 1914. Fr. 100.00.

Schetelig, Jakob, Quatrième Partie. Les formations primitives. Fasc. XLIII. 1912. Fr. 16.00.


A considerable part of the results of the Isachsen expeditions in 1909 and 1910 has been published in Videnskapsaelskets Skrifter. 1. Mat.-Naturv. Klasse, Kristiania (Oslo).


Graarud, Aage, Observations météorologiques. 1913, No. 1. Kr. 2.40.

Helling-Hansen, Bjørn and Fridtjof Nansen, The sea west of Spitsbergen. 1912, No. 12. Kr. 3.60.


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Isachsen, Gunnar, Travaux topographiques. 1915, No. 7. Kr. 10.00.

With map: Spitsberg (Partie Nord-Ouest). Scale 1:200,000 (2 sheets).


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Hoel, Adolf, Nouvelles observations sur le district volcanique du Spitsberg du Nord. 1914, No. 9. Kr. 2.50.

The following topographical maps and charts have been published separately: Bjørnøya (Bear Island). Oslo 1925. Scale 1:25,000. Kr. 10.00.

Bjørnøya (Bear Island). Oslo 1925. Scale 1:10,000. (In six sheets.) Kr. 30.00.

Chart of Bear Island. Oslo 1929. Scale 1:40,000. Kr. 3.00. (No. 31).

A preliminary edition of topographical maps on the scale of 1: 50,000 covering the regions around Kings Bay, Ice Fjord, and Bell Sound, together with the map of Bear Island, scale 1: 25,000, is published in:

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Norsk Polarinstituttets Bibliotek

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1 KOMMISJON HOS JACOB DYBWAD

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Preface.

On account of the considerable Norwegian interests in Franz Josef Land it has been found desirable to publish an account of the natural history, discovery, exploration, and hunting industry of the islands, the more so, as the political status of Franz Josef Land has now become a problem of immediate importance.

The islands were discovered by a sealer from Hammerfest, and hunting operations there have been carried on almost exclusively by Norwegian subjects ever since the discovery, so that the Norwegian interests in that country are predominant.

In addition to a review of all the scientific expeditions which have worked in the archipelago, an account is given of the hunting expeditions that have been there. Nothing has hitherto been written about Norwegian hunting activities in the Franz Josef Land area, apart from scanty references in papers on allied subjects. For this reason and owing to the fact that this activity goes back for more than fifty years, the necessary information has been difficult to obtain.

The account of the scientific expeditions is based upon the literature available — Norwegian and foreign. With regard to the hunting, some information about the movements of Norwegian sealers will be found in “The State of the Ice in the Arctic Seas” published by the Danish Meteorological Institute, and also in newspapers of the towns of North Norway. The main material, however, has been obtained from old log-books and from personal interviews with sealing skippers.

The present paper has been compiled and written by Dr. G. Horn of Norges Svalbard- og Ishavs-undersøkelser.

Oslo, February 1930.

Adolf Hoel.
Natural History.

Position and Topography.

Franz Josef Land is a group of islands situated in the north-eastern part of the Arctic Sea, east of Svalbard, and on the same submarine shelf as the latter archipelago. Geologically the group also bears a close relation to Svalbard, whereas it is distinctly different from Novaya Zemlya both geologically and geographically. Franz Josef Land extends from 79° 50' to 81° 50' N and from 42° to 65° E. The south coast is thus in about the same latitude as the north coast of Spitsbergen. No distinct geographical boundary can be drawn between the two groups of islands as the small Victoria Island forms a connecting link. This island is situated about midway between the two groups and the distance from White Island — the easternmost island of Svalbard — is only about 45 nautical miles.

The distance from Franz Josef to the North-East Land of the Svalbard archipelago is 140 nautical miles, to Novaya Zemlya 195 miles, and to Norway 625 miles. For comparison it may be stated that the distance from the Norwegian coast to South Cape, Spitsbergen, is 355 nautical miles.

Franz Josef Land consists of about 75 islands of the total area of about 20 000 sq.km. (Svalbard: 65 000 sq.km.). Its greatest length is 430 km. from east to west, and from north to south it extends 220 km. The islands with the sounds thus cover an area approximately equal to that of West-Spitsbergen. The appended map has been prepared by Norges Svalbard- og Ishavs-undersøkelser, chiefly from the map by Fiala (Washington 1907), which is based on surveys carried out on the Ziegler expeditions of 1901—02 and 1903—05, and on older maps (Payer, Leigh Smith, Jackson, Nansen, Wellman, and the Duke of Abruzzi).

The Franz Josef archipelago is divided by the British Channel in the west and the Austria Strait in the east into three groups of islands. The middle group is divided by the Markham Sound into a northern and southern part. West of the British Ch. are the largest islands of the archipelago, Alexandra and Prince George, each about the size of Edge Island in Spitsbergen. In the south-east of the western group is
the island of Northbrook, the west end of which is Cape Flora, where Jackson had his winter quarters, "Elmwood".

The middle group embraces most of the islands, all of a moderate size. South of Markham Sound are Hooker, McClintock, Hall, and Salm Is. At Cape Tegetthoff on Hall I. Wellman had his winter quarters in 1898—99, and on the islet of Alger north of McClintock the Baldwin-Ziegler expedition wintered in 1901—02. North of Markham Sound the islands are grouped in a triangle pointing northwards. They are separated by narrow sounds. To the north is Rudolf Island, the northern point of which is called Cape Fligely, the northern extremity of the whole group. Rudolf Island has been the starting point of several dashes to the Pole (Duke of Abruzzi, Fiala and others). On Jackson Island farther south Nansen and Johansen built their winter hut in 1895—96. Other islands are Salisbury, Payer, Ziegler and Luigi.

The section east of Austria Strait consists of two large islands, Wilczek and Graham Bell, forming the eastern limit of the group. North of Graham Bell are four smaller islands, the "Hvidtenland" of Nansen, where he and Johansen first struck Franz Josef in 1895. All the islands of the archipelago are table-shaped mountains covered with fields of ice. They seldom rise to heights of more than a few hundred metres, except in the south, where they reach 800 metres. The ice-cap covers the solid rock, and stretches down to the sea almost everywhere. As a rule only steep walls of rock, some promontories, and a few coastal plains are ice-free. However, it is reported that the ice-free areas seen in 1928 were much more extensive than they were some twenty years ago as judged from the map of Fiala. On the north side of the western islands these glacier-free plains occupy quite a considerable area. Many islands, particularly in the north-eastern part, are completely covered with ice. The thickness of the ice-sheet is not great, and the glaciers give rise to low tabular icebergs. The movement of the glaciers is very slow.

Climate.

The climate of Franz Josef Land is considerably more arctic than that of Spitsbergen. The average temperature for July is thus only 1.3° C, and for August 0.2°. January is the coldest month with —26.5°. The average for the year is —14.1°. The lowest and highest temperatures noted are —46.2° (in Feb. 1872) and 12.0° (in July 1900). The precipitation is small and fairly evenly distributed throughout the year, and varies from 300 mm. in the north to 500 mm. on the south coast. The prevalent winds are from the east, north-east, north-west and west. In winter the easterly winds, in summer the westerly winds, dominate. Southerly winds are rare.
Ice Conditions.

These conditions are much more unfavourable than at Spitsbergen. In the spring the southern limit of the ice runs approximately from Bear Island eastwards to the southern part of Novaya Zemlya. In the course of the summer the ice-edge recedes northwards, and in July—August it usually runs from the region of Hope Island to the north point of Novaya Zemlya, usually with a bight, or more or less open ice, towards the middle part of Franz Josef Land. In August, however, ice-free waters may occur right up to the islands and the southern sounds may be ice-free. The group can be reached in June, but July, and particularly August, are the best months for navigation. In some years the ice-conditions may be so bad that it is impossible for ordinary vessels to reach the islands even in August.

Geology.

Our knowledge of the geology of Franz Josef Land is chiefly due to the investigations of the Jackson-Harmsworth expedition, but Nansen and others have also furnished important data regarding the geology of the group. The islands consist of more or less horizontal sedimentary strata of Jurassic age with a capping of basaltic lavas. They were erupted in Jurassic or early Cretaceous times, and are thus contemporaneous with the basalts of King Charles Land east of Spitsbergen. Indeed, the geological structure of this group of islands is very similar to that of Franz Josefs Land with its flat-lying strata of Jurassic deposits capped by basalts.

The Jurassic sediments of Franz Josef Land are chiefly found in the southern part of the archipelago. At Cape Flora they reach an altitude of 170—200 metres and are followed by sheets of basalt. The sedimentary deposits consist of clayey shale interstratified with shale, bands of ironstone, and thin layers of lignite. At Cape Gertrude farther east more sandy beds occur, and also here with thin seams of lignite.

The oldest beds are marine and belong to Bajocian or Bathonian. Higher up we have beds representing Callovian with Macrocephalites Ishmae var. Arctica, Cadoceras Tchefkini d'Orb., Nanseni Pomp., etc. followed by plant-bearing beds with Gingko polaris Nath. However, the age of these latter beds is uncertain. Thus we have on Franz Josef Land strata from Middle Jurassic or Dogger whereas the Jurassic of King Charles Land extends far higher up, for we have here Malm (and Neocomian) as well. The Jurassic formation of Franz Josef Land is the northernmost in the world.

Above the sedimentary series follow basaltic rocks, which form so important a feature in the geology of the islands. On the south coast the basalt is first met with some two hundred metres above sea level.
Farther north the basalt appears everywhere to reach the sea, making it probable that the beds have a slight northerly dip, and that the thickness of the basalt increases towards the north. It is generally held that the eruption of the basalt flows took place towards the end of the Jurassic period (or the beginning of the Cretaceous). The age of the basalts on King Charles Land is also Jurassic and Cretaceous. At the close of the volcanic period in Jurassic times the various islands of Franz Josef Land were united and formed part of an extensive tract of land. This land was subsequently broken up by denudation, and perhaps partly by the sinking of certain areas along lines of fault.

Every visitor to Franz Josef Land mentions the occurrence of silicified wood, which is widely distributed and chiefly found on the talus-heaps, but sometimes on the plateaux. The tree-trunks are almost certainly of Jurassic age, and the process of silicification is probably connected with the eruption of the basaltic masses. Similar fossil tree-trunks are also known from King Charles Land and Spitsbergen.

The final stages in the history of the islands are represented by the raised beaches and terraces which prove recent upheaval of the land. Most of the raised beaches have been found between sea-level and 30 metres above this level, but signs of marine terraces occur at an altitude of about 100 metres, and pebbles have even been found much higher up (300 metres).

Flora.

The flora is almost confined to terraces and slopes with a southern aspect, where they give a little colouring to the dreary landscape. Only 27 flowering plants and 25 mosses have been collected in the islands. Lichens are fairly well represented. The flora includes Saxifraga oppositifolia, Cardamine bellidifolia, Draba alpina, Cerastium alpinum, Papaver nudicaule, and Cochlearia fenestrata.

Fauna.

On account of the small area of ice-free land there is little room for animal life. Polar bears, however, frequent the islands and the ice floes in considerable numbers. Foxes are not often seen. Antlers of reindeer have been found, but the animals have never been met with.

The glaucous gull, fullmar, kittiwake and arctic tern visit the islands, and the ivory gull breeds there in great numbers. Little-auawks are numerous. Ptarmigan has been found, probably blown over from Spitsbergen.

In the sea walruses are abundant and shoals of white whale are said to be common when the ice of the sounds starts to break up. Three kinds of seals occur. Most common is the bearded seal (Phoca barbata).
Discovery and Exploration.

Rønnbeck and Aidijärvi 1865.

Before 1860 the Norwegian sealers hunted almost exclusively along the west coast of Spitsbergen, but about that year they began to extend their field of operation north and eastwards. Up to this time the east and north coasts of North-East Land had been almost entirely unknown and the east coast of Spitsbergen was held to be more inaccessible than it later proved to be. In 1863 the islands were circumnavigated for the first time by Elling Carlsen of Tromsø, this being an important step forward as regards the knowledge of these regions. As the Norwegian sealers in 1864 — says Karl Pettersen in an article in the Tromsø Stiftstidende (25. IX. 64) — “ventured through the Northern Gate (the strait between the Seven Islands and North-East Land) the sea at North-East Land was found to be perfectly open, and several signs seemed to show that this had been the case for some time. Should it be confirmed that this condition is the usual one, our Spitsbergen travellers have this year paved the way for regular hunting on the east coast, where the hunting — compared with that on the North- and Westland — may be expected to become even very profitable. Moreover, it is reasonable to believe that the expeditions to Spitsbergen will now be pursued with much more vigour than in the past.” It was thus to be anticipated that the following year (1865) would show a brisk activity on the north and east coast of North-East Land to exploit these good hunting grounds. That geographical discoveries would follow was only to be expected. Thus it is narrated by Norwegian skippers that a voyage of particular interest was made in 1865.

In that year Skipper Nils Fredrik Rønnebeck and the harpooner Aidijärvi, both of Hammerfest, sailed (in the schooner Spitsbergen) on an easterly course 180 miles from Great Island near the east coast of North-East Land, and there discovered new land which they called North-East Spitsbergen (or Rønnebeck Land). This land is unquestionably identical with one of the western islands of the Franz Josef Land archipelago, viz., Alexandra, or Prince George Is. Unfortunately, nearly all the old log-books that had been preserved in Northern Norway were destroyed by fire some years ago, and for this reason it will probably be difficult to find written evidence of this Norwegian discovery. In February 1929 a Norwegian skipper, Sivert Brækmo, made a statement to the effect that a seaman he had once had in his ship, Leonard Norem of Innerøya, had been with Rønnebeck. Norem told Brækmo that he had sailed with Rønnebeck to Franz Josef Land years before the island became known through the Austrian expedition. The discovery made by this Hammerfest skipper was never generally known
and accepted. It may be that the discoverers kept their exploit a secret so as to keep their competitors away from a good hunting ground. Not many years were to elapse before the land found by Rønnebæk and Ardjärv was again sighted, without the new discoverers knowing that its western extremity had been sighted some eight years before by Norwegian sailors. The honour of rediscovering and first exploring Franz Josef Land is due to an Austro—Hungarian expedition.

**Austro-Hungarian Polar Expedition 1872—1874.**

The object of this expedition, which was made in the *Tegetthoff*, a vessel of 220 tons burden and fitted with an engine of 100 h. p., was the exploration of the seas north-east of Novaya Zemlya, and, if conditions were favourable, the North-East Passage. The expedition was composed of 24 men, with Lieutenant Carl Weyprech and Lieutenant Julius Payer in command, and included one Norwegian, viz., Elling Carlseh of Tromsø, who acted as ice pilot and harpooner. Carlseh enjoyed the distinction of being the first to circumnavigate Spitsbergen, in 1863. The expedition left Tromsø on July 14, 1872, and on July 25 the first ice was sighted in latitude 74°. On August 21 the *Tegetthoff* was hopelessly surrounded by ice on the north coast of Novaya Zemlya, and drifted during the winter to the north-east and at a later date to the north-west. The ship had to withstand heavy ice pressure, but otherwise the winter passed without any serious mishap. On August 30, 1873, at 79° 43' N and 59° 33' E the outlines of land of an alpine character were seen in the north-west. This territory was given the name of *Kaiser Franz Josef Land*, and the first landing was made on November 1 on Wilczek Is. The ship stayed throughout the winter in the vicinity of this island. Sledge journeys were made to various parts of the islands, including McClintock Is. and Hall Is., and on March 26, 1874 Lieutenant Payer with six men and three dogs set out to explore the land to the north. He proceeded up Austria Strait and reached Cape Fligely on Rudolf Is., where he found the cliffs teeming with aulks and divers, and abundant tracks of bears and foxes. The land to the west of the strait he called Zichy Land, and that to the east, Wilczek Land. Subsequent expeditions have proved that these territories really consist of many islands, and are not of the extent that Payer deemed them to be. North of Rudolf Is. he thought he saw land — King Oscar and Petermann Land — but later explorers have proved that these territories do not exist.

On May 20 it was found necessary to abandon the *Tegetthoff* and make for Novaya Zemlya in the boats. The ice edge at 77° 40' N and 61° E was reached on August 15, and land was sighted next day. They followed the coast and were eventually picked up by a Russian schooner, which landed them at Vardo in the north of Norway on September 3, 1874.
De Bruyne Expedition 1879.

In 1879 Franz Josef Land was seen by Captain A. De Bruyne of the Dutch Expedition for the Exploration of the Barents Sea in the schooner Willem Barents. The land was sighted early in September. The ship was then in open water, but as Captain De Bruyne feared that the ship might be caught in the ice he did not proceed any farther north.

Leigh Smith Expeditions in 1880 and 1881—82.

In 1880 the English explorer Benjamin Leigh Smith undertook in the Eira, a steam yacht of 360 tons burden and 50 h. p., an expedition to Franz Josef Land, where he explored the south coast. In 1881 the Eira again went north to continue the work commenced the year before. The expedition left Peterhead on June 14 and sighted Franz Josef Land on July 23. A house was erected in Eira Harbour on Bell Is. Towards the end of August the yacht was caught in the ice and crushed about a mile east of Cape Flora, with the result that it sank before anything much could be saved. All hands (25) safely reached the south side of Cape Flora, where a hut was built of turf and stones.

On June 21, 1882 Leigh Smith and his party left Cape Flora in four boats on their perilous voyage. On August 1 they came to the edge of the pack, and sighted land next day near the mouth of Matochkin Strait, where they found the Hope under the command of Sir Allen Young, who had come out in search of the missing expedition.

Jackson-Harmsworth Expedition 1894—97.

In 1893 Alfred C. Harmsworth (Lord Northcliffe) offered to provide the necessary funds for a proposed expedition to Franz Josef Land under Frederick G. Jackson. Jackson's plan was to make a thorough exploration of the country and to take scientific observations for a period of several years. An advance in a northerly direction was also included. After experiencing considerable difficulty in getting the ship of the expedition, the Windward (formerly a Scotch whaler), through the pack, Jackson and his men landed on Cape Flora, on September 7, 1894. Winter quarters were established here (Elmwood). In March 1895 a sledge expedition up Miers Channel was undertaken, and in April Jackson with two men and three ponies started on a fresh sledge journey, pushing along the east side of the British Channel to 81° 20', or a little north of Nansen's winter quarter in 1895—96. The expedition returned to Cape Flora in the beginning of May. Here the Windward had remained throughout the winter, and in July she returned
to Norway. In this month and in August boat voyages westward to Alexandra I. were undertaken.

In the spring of 1896 a party of the expedition again worked northwards — to Cape Richthofen. On June 17 the famous meeting between Nansen and Jackson took place. Nansen with his companion Johansen had wintered on an island farther north, not far from the point reached by Jackson in 1895. The Windward came to Cape Flora that summer and Nansen and Johansen returned to Norway in this ship. As Nansen's expedition had proved that the islands did not extend beyond the 82° parallel, the spring of 1897 was spent in exploring the hitherto unknown western part of Franz Josef land. In the beginning of August the Jackson expedition left Cape Flora after a stay of three years in these regions.

Nansen Expedition 1893—1896.

The Norwegian North Polar Expedition in the Fram has made important contributions to the knowledge we have of Franz Josef Land, through the travels and wintering of Nansen and Johansen in 1895—96. Nansen and his companion left the Fram on March 14, 1895 in Lat. 84° 4' N. and Long. 102° E. to make an advance towards the Pole. On April 8 they were forced to stop at Lat. 86° 14' N. and Long. 96° E. a course was then made for Cape Fligely on Franz Josef Land, and on August 6, some islands in the north-eastern part of the group were reached. The first islet was called Eva, and the little island group: “Hvidtenland”. They continued their journey, and towards the end of August they were south of Jackson Island, where they decided to winter. They started again on May 19 of the following year, and travelled southwards on the east side of the British Channel. Off Cape Flora they were fortunate enough to meet the British Jackson expedition and returned to Norway in the ship of that expedition, the Windward, which reached Vardø on August 13, 1896.

During his crossing of the Franz Josef group from north-east to south-west Nansen made important geographical and geological observations, particularly in the north-eastern part, which was entirely unknown. Nansen's hypothesis, announced in the plans of the expedition, that Franz Josef Land consisted of many islands separated by narrow sounds, was splendidly corroborated through the work of Nansen and Jackson. Very important is also the fact established by Nansen that Franz Josef Land does not extend beyond the 82° parallel.

Wellman Expedition 1898—99.

In the summer of 1898 the American journalist and explorer, Walter Wellman, set out with an expedition to Franz Josef Land in the Norwegian sealer Frithjof, Captain Johan Kjeldsen of Tromsø.
They reached the islands towards the end of July, and after having circumnavigated Wilczek and Salm Is they moved Jackson's house from Cape Flora to Cape Tegethoff on the south side of Hall Is. farther east, where Wellman wintered with three Americans and three Norwegians (Daniel Johansen, Olaf Ellefsen, and Emil Ellefse). The Frithjof returned to Norway in the beginning of August. The Norwegians, Paul Bjørvig of Tromsø, with Bernt Bentsen (late of the "Fram" expedition) wintered on Cape Heller (Fort McKinley) in charge of the depot established there. Bentsen died during the winter, and Bjørvig had to face the solitude and climatic rigours alone until the arrival of Wellman and his men.

The main purpose of the expedition was to make a dash with sledges for the Pole, but no higher latitude than about 82° was reached. The expedition has, however, made important contributions to our knowledge of the country, particularly as regards the outline and topography of the eastern islands (Graham Bell I.).

In August 1899 the expedition was brought back to Norway in the Norwegian sealer Capella.

**Duke of the Abruzzi Expedition 1899—1900.**

The Duke of the Abruzzi had also the idea of reaching the Pole by way of Franz Josef Land. With his ship, the Stella Polare (ex Jason, Norwegian whaler) he intended to force his way to the northernmost point of the islands, winter there, and in the spring make a sledge journey towards the north.

The expedition numbered 20 men: 11 Italians and 9 Norwegians. The latter were: Carl Julius Evensen, Sandefjord, skipper of the Stella Polare; Andreas Andreesen, Sandefjord, 2nd mate; Henrik Alfred Stokken, Sandefjord, 1st engineer; Anton Torgromsen, Larvik, 2nd engineer; Karl Christian Hansen, Larvik, boatswain; Ditman Olavesen, Tønsberg, carpenter; Hans Magnus Dahl, Oslo, Johan Johansen, Sandefjord, Ole Johansen, all stokers.

After having been fitted out at Larvik in Norway the Stella Polare left Oslo on June 12, called again at Larvik and proceeded then to Archangel where Sibiran dogs were taken on board. On July 13 the ship left Archangel and as early as July 20 the expedition reached Cape Flora, proceeded thence up the British Channel, and was fortunate enough to reach Rudolf Is., where winter quarters were established in Teplitz Bay (81° 47'). Owing to heavy ice pressure the ship sprang a leak; they had to leave her and winter in a hut built on the shore.

The command of the sledge expedition was given to the Duke's second-in-command, Captain Cagni, who, after an unsuccessful attempt in February, started on the main journey on March 11 with 10 men, 13 sledges, and 104 dogs. The arrangement was that, two parties of
three men each were to return so as to enable the others to start with
a full outfit. The first group, which included the Norwegian STØKKEN,
left CAGNI on March 23, and the second party left him a week later.
The members of the first group were never heard of again, and pro-
bably never reached land. On April 24 CAGNI reached 86° 34', i. e.,
20' or 37.2 km. beyond NANSEN's farthest north. On June 23 CAGNI
was back at winter quarters in Teplitz Bay. Shortage of provisions
and a strong westerly drift made the the return journey very difficult.
Petermann Land and King Oscar Land, which PAYER thought he had
seen in 1874, were found to be non-existent.

The Stella Polare was repaired and was got afloat on August 8.
On the 16th the expedition left Teplitz Bay, and reached Cape Flora
on August 31, after being stuck in the ice for a fortnight in the British
Channel. On September 6 the Stella Polare arrived at Tromsø.

Støkken Expedition 1901.

As already mentioned, one of the sledge parties of the Italian
expedition never returned. One of the missing men was a Norwegian,
H. A. STØKKEN of Sandefjord; and his father, Captain STØKKEN, was
of opinion that the missing men might still be found in the summer
of 1901. A Norwegian search expedition in the sealer Capella, and
led by STØKKEN, went out and examined Cape Flora and the whole
of the south coast, but without finding any trace of the missing party.

“Yermak” Expedition 1901.

In 1901 the Russian Admiral MAKAROV made an attempt with the
ice-breaker Yermak to circumnavigate Novaya Zemlya and then pro-
ceed to the mouth of the Yenisei. However, the ship was not able
to penetrate the pack-ice here, but she easily forced her way to Franz
Josef Land and returned via Tromsø, where the expedition arrived in
the beginning of September.

Baldwin-Ziegler Expedition 1901—1902.

As the Italian expedition returned without having reached the Pole,
an American, WILLIAM ZIEGLER, decided to send out an expedition to
reach the coveted goal, starting from Franz Josef Land. The expedition
— with both American and Norwegian members, and also a Dane — left
Norway in July with three vessels, America (ex Esquimaux, Scotch
whaler), Frithjof, Norwegian sealer, Belgica (ex Patria, Norwegian selaer),
and was led by EVELYN B. BALDWIN. MAGNUS ARNESEN of Tromsø
was ice-pilot on the America. The crew of the Frithjof was entirely
Norwegian. The expedition wintered with the America on Alger Island
(Camp Ziegler) near the south coast.
In the spring of 1902 a sledge expedition brought a supply of provisions to Rudolf Island. An advance towards the North was not attempted, and in August 1902 the expedition returned to Norway without having achieved any particular result.

**Fiala-Ziegler Expedition 1903—1905.**

Not discouraged by the unsuccessful Baldwin expedition, Mr. Ziegler resolved to send out another expedition under the leadership of Anthony Fiala, who had been with the first expedition. The *America* left Vardø on July 10, and had on board 30 ponies taken on board in Arkhangel and 218 dogs. The expedition included three Norwegians, amongst whom where Peter L. Tessem who later took part in Amundsen’s *Maud* expedition. As ice conditions were difficult the *America* did not reach Cape Flora until a month later (Aug. 12). The ship proceeded up the British Channel, which was difficult to navigate on account of heavy ice. On August 31 they reached their farthest north, the open Victoria Sea allowing them to penetrate to 82° 14', whereupon they returned to Teplitz Bay. It was decided to winter the ship here, despite the bad experience of the Italians. During the winter the *America* suffered badly from heavy ice-pressure, and sank in January. In the spring of 1904 two unsuccessful attempts to penetrate north were made, and in May Fiala went to Cape Flora to await the arrival of the relief ship, having left a party in the winter camp. On account of the extremely bad ice conditions the ship of the relief expedition, *Frithjof*, did not reach Franz Josef Land. The leader of this expedition was William S. Champ, with Johan Kjeldsen from Tromsø as skipper. As no ship arrived, Fiala returned to Rudolf Island to face another winter. Parties were left on Cape Flora and in Camp Ziegler to winter. In March 1905 Fiala made his last push northwards, but did not get beyond the 82nd parallel. He left Teplitz Bay in May to join the parties which had wintered elsewhere and then await the relief ship. The *Terra Nova* with Kjeldsen as skipper arrived towards the end of July, and on August 9 the expedition was back in Norway. It had failed in its main object, viz. to reach a high northern latitude, and, if possible, the Pole itself; but during the two years a great deal of survey work was done, and a considerable amount of scientific material collected.

**Sedov Expedition 1912—1914.**

A Russian Arctic expedition under the leadership of Lieutenant George Sedov left Arkhangel in July 1912 in the schooner *St. Foka* (ex Geysir, Norwegian sealer). Sedov intended to winter on one of the northern Islands of the archipelago, and in the spring of 1913 to make an attempt to reach the Pole. The ice conditions were very adverse in 1912, so that the *St. Foka* did not get farther than the north-west
coast of Novaya Zemlya, where the winter was passed, and it was not until the autumn of 1913 that Franz Josef Land was reached. At Hooker Island the ship was caught in the ice and the second winter was spent in the so-called Calm Bay (Tikhoia B.) on the north-west coast of the island. During the winter various scientific investigations were carried out. In the spring SEDOV with two men went north, but he did not get any farther than Rudolf Island, where he died from fatigue. The St. Foka, which had very little coal left, succeeded in reaching Cape Flora, where more fuel was obtained by pulling down the houses there. At Cape Flora they found their countrymen ALBANOV and KONDRAT, who with others had left the ship of the Brussilov expedition north of Franz Josef Land. After a futile search for the missing companions of ALBANOV the ship left for Murmansk.

In the summer of 1914 the Russians sent out an expedition to search for Lieutenant SEDOV. The vessel of the expedition, the steam-schooner Hertha (purchased the same year in Norway), Captain ISLJAMOV, passed the St. Foka in a dense fog. On arriving at Cape Flora they found the message left by ALBANOV and the SEDOV expedition, and then returned to Russia.

**Brussilov Expedition 1912—1914.**

In 1912 an expedition was sent out from Russia led by Lieutenant Brussilov, to investigate hunting possibilities in Arctic waters. In October their ship, the St. Anna (ex Sir Allen Young’s Pandora), was caught in the ice in the Kara Sea and never got out again. It drifted with the ice northward to the east of Novaya Zemlya. Attempts to get her loose in the summer of 1913 were not successful, and the drift continued the following winter east and north of Franz Josef Land. As the position seemed to be hopeless — as indeed it was — some of the crew, headed by the first mate, ALBANOV, were allowed to leave the ship and try to reach one of the islands of Franz Josef Land. On April 10, 1914, ALBANOV and his companions, in all 14 men, left the St. Anna, which was then in lat. 83° North and long. 60° East. After a ten-days-march three men returned to the ship. With the loss of one man the others reached Alexandra I. and continued along the south coast, partly on land and partly in kayaks. This was a fateful journey, for only ALBANOV and a seaman KONDRAT reached Cape Flora, where they found a good supply of provisions left by earlier expeditions. In August the St. Foka of the SEDOV expedition arrived at Cape Flora from Hooker Island, where the winter had been spent. After having searched the south coast towards Cape Grant in the hope of finding some of the missing companions of ALBANOV, the St. Foka left Franz Josef Land and arrived safely in the harbour of Rynda on the Murman coast.

The St. Anna with Lieutenant Brussilov has never been heard of, and no trace of the expedition has ever been found.
"Andromeda" Expedition 1915.

As some of the other members of the BRUSSILOV expedition might possibly be found in Franz Josef Land, the Russian Naval Ministry decided to despatch a search expedition, which also was to build a house and leave a supply of provisions. A depot had already been left on Cape Flora by the Hertha expedition. The Andromeda, Captain Pospelov, left Murmansk on July 15 and encountered ice in latitude 78°. The pack proved to be impenetrable, and the ship therefore returned via Novaya Zemlya. In the beginning of September a fresh attempt was made, when the ship was again stopped by heavy ice.

Iversen Expedition 1923.

In 1923 Thor Iversen of the Norwegian Fishery Board carried out fishery investigations in the sea east and south of Spitsbergen. With the motor-cutter Blaafjeld soundings and temperature measurements were also made along a line leading up to Alexandra Island on Franz Josef Land.

"Persej" Expeditions 1923, 1924, and 1926.

In 1923 the Scientific Maritime Institute in Moscow sent out to the Barents Sea an expedition led by Professor I. I. Meshachev. In the steamer Persej (297 gross tons, 360 h. p.) Captain P. I. Burkov, Franz Josef Land was also visited (Aug. 30). In 1924 the Institute had an expedition in the same waters, but in latitude 78° 33' farther advance was stopped by ice. In August 1926 an expedition in the Persej was again at Franz Josef Land.

Worsley-Algarsson Expedition 1925.

The British expedition led by Commander F. A. Worsley and Grettir Algarsson in the sailing schooner Island visited in 1925 the waters north of Spitsbergen. In August the expedition sailed across to Franz Josef Land and sighted Northbrook Island on the 21st. A few days later a party went ashore at Cape Barents. The ship then sailed up the British Channel, but was stopped by heavy ice off Cape Murray. Towards the end of the month the expedition left for Spitsbergen.

Samoilovich Expedition 1927.

A party of the Russian Novaya Zemlya expedition led by Professor R. Samoilovich in the motor-cutter Zarnitza (ex Elding, bought in Norway in 1925) made a hydrographic section from the Barents Islands to Northbrook Island on Franz Josef Land.

Expeditions in Quest of the "Italia" and "Latham" 1928.

Several of the expeditions which were sent out to search for the ill-fated NOBILE expedition in the airship Italia and for Roald Amundsen

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1 On its first flight in May towards the North Land the Italia also passed over the northern islands of Franz Josef Land (Cape Fligely).
and his companions in the *Latham* had their field of operation in the Franz Josef Land area. These expeditions were:

**Norwegian Expeditions.**

"*Hobby*" Expedition.

Fitted out at the expense of Miss *Louise A. Boyd* of San Francisco and led by Hj. Riiser-Larsen, Captain in the Norwegian Navy. In the middle of August the ship used by the expedition, the *Hobby*, was not far from the south coast of Franz Josef Land, but owing to difficult ice conditions it was decided first to steer west and search the area towards Victoria Island west of Franz Josef Land. From Victoria Island they steered north-east to a point north of Alexandra Island, then southward to this island and along the coast to Cape Flora (Sept. 1). The next day the hut ashore was inspected and found to be in a delapidated condition. For the benefit of shipwrecked crews, materials for a hut were brought ashore. The building of the house had, however, to be stopped, as the *Hobby* was forced to put out to sea on account of the heavy swell, and anchor in Eira Harbour. After the motor had been repaired the ship left Franz Josef Land for Spitsbergen.

"*Veslekarri*" Expedition.

*S/S Veslekarri*, Captain Wisting, Norwegian Navy, approached Cape Mary Harmsworth from SW in August, and then searched westward past Victoria Island to Spitsbergen. Some hunting was done during the expedition, the catch being 2 walruses, 18 bears, and 20 bearded seals.

**Russian Expeditions.**

"*Sedov*" Expedition.

The Russian ice-breaker *Georgii Sedov*, Captain Voronin, also operated in the Franz Josef Land area and examined the coast from Cape Flora to Cambridge Bay, and to Cape Johansen. On the western shore of Cambridge Bay a party was put ashore which examined the coast to Cape Lofley. The *Sedov* in the meantime went westward past Cape Mary Harmsworth and back to Cape Grant. Besides the crew there were several hunters on board who are reported to have shot a large number of Polar bears.

"*Krassin*" Expedition.

On the second voyage of the ice-breaker *Krassin* search was also made for the still missing members of the *Nobile* expedition towards Franz Josef Land. In the last days of September the ship sent a party ashore on Cape Neale with materials for a house. According to a press report the country was occupied in the name of the Soviet Union.
Stores and provisions, arms and clothing for 15 men for 6 months were, it is reported, left here by the expedition. From Cape Neale the *Krassin* proceeded directly to Tromsø in Norway.

**Expeditions to the Franz Josef Land Area in 1929.**

In the summer of 1929 ice conditions in the European sector of the Arctic were very adverse. Access to Franz Josef Land was rendered particularly difficult and all the ships experienced great difficulties in the close pack which blocked the south coast of the archipelago.

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**Norwegian Expeditions.**

**Consul Lars Christensen's Expedition with the S/S “Hvalrossen” and M/C “Thorsnes I”**.

The object of this expedition was to bring a wintering party of five men to some suitable place on one of the islands, where a meteorological (and wireless) station was then to be erected. Hunting was also on the programme. The expedition was planned and fitted out under the supervision of Captain Hj. Riiser-Larsen, Norwegian Navy. Dr. G. Horn of *Norges Svalbard- and Ishavs-undersøkelser* was in charge of the scientific work, and Lieutenant Joh. Breirem, Norwegian Navy, was meteorological observer and radio operator. The ships of the expedition were S/S *Hvalrossen* of Ålesund, 146 gross tons, Skipper O. Vinje, and M/C *Thorsnes I* of Sandefjord, 24.5 gross tons, Skipper Rudolf Svendsen. The latter vessel was to remain at Franz Josef
Land. The expedition left Tromsø on August 5, struck the ice edge 70 miles ENE of Bear Island on August 8, and followed the edge which ran in a north-easterly direction. The south coast of Franz Josef Land was found to be blocked by a belt of pack ice from 60 to 80 miles wide. During the period August 13 to September 13 the ships made repeated attempts to penetrate the pack, but never got to within 20 miles from land. During several periods of frost, new ice was formed, making it difficult and impossible for low-powered ships to force their way between the floes. On account of the difficult ice conditions and the advanced season, the attempts to reach Franz Josef Land had to be abandoned, and the expedition returned to Tromsø (22 September).

While in the ice the vessels secured a catch of 29 bears, including 7 live ones, and a number of bearded seals.

Iversen's Expedition.

The Norwegian Fishery Board in Bergen had also planned an expedition to Franz Josef Land to carry out hydrographic investigations. The ship of the expedition was M/C Hisø of Ålesund, Skipper BergeSEN. The leader was Thor Iversen of the Fishery Board. On board was also Einar Koefoed the zoologist. On account of the difficult ice conditions
the expedition did not get through the belt of pack ice. However, hydrographic observations in the sea south of Franz Josef Land and towards Spitsbergen were carried out.

Hunting Expeditions.

A number of Norwegian sealers also made attempts to reach Franz Josef Land, but they were all stopped by the ice. As walruses are only to be found near land the catch for all vessels was very poor, consisting only of a number of bears (also live ones) and bearded seals. The ships were: S/S Sæl, Skipper Rasmussen, M/S Gungnir, Skipper Tøkle, of Ålesund; M/C Terningen, Skipper Gustav Jensen, of Tromsø; and Norhavet, Skipper Lars Hansen, of Harstad.

Swedish Expedition.

A Swedish expedition, led by Dr. J. W. Sandström of Stockholm, in the M/C Björnøy of Tromsø, skipper Victor Korneliussen, worked along the ice edge from Greenland to Novaya Zemlya to make hydrographic investigations, particularly with regard to the Gulf Stream. The expedition found it impossible to reach Franz Josef Land on account of the adverse ice conditions.

Italian Expedition.

M/C Heimen of Tromsø, Skipper Lars Jakobsen, with the Italian Expedition led by Albertini was sent out to search for possible traces of the wrecked Italia expedition in 1928. During their cruises the Heimen was also under Franz Josef Land.

Russian “Sedov” Expedition.

In March 1929 the Government of U.S.S.R. voted the necessary means (abt. 250,000 roubles) for the establishment of a meteorological station in Franz Josef Land. The ice-breaker Sedov of 3000 tons dw. and 2,200 h.p. was chosen to carry the expedition. The leaders were Professors R. Samoilovitch, O. Schmidt, and W. Wiese.

The Sedov left Arkhangel on July 21. Ice was met with in lat. 77° 17′, long. 45°, and between 79° and 79° 40′ (a little farther east) heavy ice was encountered, which made progress difficult.

Hooker I. was reached on July 28 where the wintering party (7 men) and materials for the stations were put ashore in Calm Bay on the north-west coast of the island. In the latter half of August the Sedov made an advance up the British Channel, finding the Queen Victoria Sea on the north-west side of the archipelago ice free up to 82° 14′ (long. 52° 10′). On August 31 the Sedov left Franz Josef Land and had considerable difficulty in getting through the belt of pack ice. On September 12 the expedition was back in Arkhangel.
Hunting.

Hunting at Franz Josef Land is prosecuted in the sounds between the islands. Seals (*Phoca barbata*) occur only in small numbers, but walruses are abundant. Polar bears, which are usually plentiful, are hunted both ashore and on the ice. Polar foxes also exist, but not in large numbers. When the ice breaks in the spring white whales appear in the sounds in large shoals. In some years ice conditions prevent hunting near land to some extent.

It is known that Norwegians — mainly from Tromsø — hunted off Franz Josef Land last century from 1870 to the nineties, particularly in years of favourable ice conditions. Accurate information as to which years and the size of the catches is not available, but the following skippers are known to have hunted in those parts: Magnus Arnesen, Hemming Andreasen, A. Jensen, I. N. Isachsen, G. Larsen, O. Næssø, Hans Beck, Andr. Beck, H. C. Johannesssen, Ole Mæhle, all of Tromsø. In addition, a number of vessels from Hammerfest worked those grounds. For instance, Karl Johan Virkola was at Franz Josef Land in 1886 with the sloop Ørnen, and returned with a full cargo of walruses. In the same year David Gray, a Scottish whaler, set out for Franz Josef Land, but he was stopped by the ice.

In 1896 the sloop *Moderen* of Tromsø, Skipper Røvik, and the ketch *Duen* of Hammerfest, Skipper Olsen, hunted along the ice-edge south of Franz Josef Land. During the following years these ships were frequently hunting in the ice between Franz Josef Land and Novaya Zemlya.

In the spring and summer of 1897 the sealer *Balaena* (*ex Mjølner*, Norwegian) of Dundee in charge of Captain Thomas Robertson hunted around and in the vicinity of Franz Josef Land. This vessel was of 247 tons burden and fitted with an auxiliary engine. It was built and formerly registered at Moss in Norway. The *Balaena* left Dundee on April 8, and sailed for home on August 13. The catch comprised 600 walruses, including two live ones; 14 bears, and a Greenland whale. Besides the *Balaena*, there were two other British vessels at the same grounds, viz., the *Diana* under Captain Davidson, and the *Active* under Captain Davidson (*Finmarksposten* for August 20, 1897). Sivert Brækmo, a Norwegian skipper, hunted near Franz Josef Land for the first time in 1897.

In 1898 ice conditions were very favourable. The *Balaena* (Captain Robertson) was again in those waters and passed up the British Channel to a point off Cape Norway. In the same year a Norwegian sealing bark, the *Hertha* of Sandefjord under Capt. Jørgensen (*A's Oceana*), was at Franz Josef Land and caught between 200 and 300 walruses in the sounds and along the coast — both ashore and in the water —
and, in addition, a number of bears. In 1898 Skipper Brækmo (self-owner) with the cutter Nora was at Franz Josef Land and got a full catch of 62 walruses, and a number of bears and bearded seals in the British Channel. In the same year Skipper Virkola of Hammerfest with the cutter Venus also hunted there and got a full catch. Jens J. Olsen was in that area with the sloop Ingeborg of Tromsø, 46 tons gross, and caught a number of walruses, seals, and bears in the sounds near Cape Flora. About that year and later S/S Victoria of Tromsø (Skipper Søren Kræmer) was at Franz Josef Land.

The sloop Avance owned by Finckenhagen of Hammerfest (Captain Fredrik Grønbeck Olsen) hunted off Franz Josef Land in 1899, as did Skipper Nils Thomassen with the sloop Marie in the beginning of August. On the 7th of that month he was in lat. 79° 20’ N and long. 44° E. Another visitor to those waters in 1899 was the bark Capella (registered at Gothenburg but fitted out at Sandefjord with an exclusively Norwegian crew). This boat secured 270 walruses, and, in addition, 75 bears were shot in the sounds and along the coast. Skipper Harry Andersen with the sloop Diana of Tromsø sailed from Spitsbergen to Franz Josef Land, where he got approximately 100 walruses on the fast-ice at Cape Flora.

In 1900 Nils Thomassen was with the Marie near Cape Grant in the beginning of August and returned with a good catch including 2 live and 11 dead bears. The brig Duen of Hammerfest (Skipper Karl Olsen), hunted off Franz Josef Land from August 1 to 17 and was within 60 nautical miles of land. The brig Avance of Hammerfest (Skipper Aleksandersen) operated in the same waters from August 1 to 15, and was at times within 30 miles of land without however sighting it. Sloop Anna of Hammerfest (Skipper F. G. Olsen) was one mile off Cape Flora on August 15 and hunted along the ice-edge to the east and north-east. Skipper Virkola, too, was also at Franz Josef Land for Messrs. Feddersen & Nissen of Hammerfest with the Familien, and made the following total catch: 359 seals, 119 bearded seals, 1 white whale, 29 walruses, 3 bears, and 175 barrels of blubber; but not all of this was taken at Franz Josef Land. Skipper Harry Andersen of the brig Diana of Tromsø was off Franz Josef Land in 1900 and got 54 walruses and 20 bears. This catch was made off Cape Flora.

In 1901 the cutter Anna owned by G. Robertson of Hammerfest (Captain F. G. Olsen) visited Franz Josef Land. Captain Olsen went ashore at Cape Flora, and was also on some islets in the sound, where he asserts that he found an Austrian and a French flag flying. Olsen returned with 11 walruses, 2 bears, 73 bearded seals, and 427 seals, of the total value of about 4000 kroner. The seals were caught farther south.

Sloop Christiane owned by G. Robertson (Skipper William Jonas) also worked those grounds, but did not make a very large
catch. Skipper Virkola with the Familien for Messrs. Feddersen & Nissen brought home 714 seals, 74 bearded seals, 33 walruses, and 236 barrels of blubber. Skipper Nils Thomassen, too, was in the neighbourhood of the islands in that year. The America of the Baldwin-Ziegler expedition, piloted by Magnus Arnesen, secured a good catch during its stay at Franz Josef Land. S/S Frithjof commanded by Johan Kjeldsen acted as the America's auxiliary. They left Tromsø about the middle of August and stayed three weeks or so at Franz Josef Land, returning to Tromsø at the end of September 1901. In Gray Bay between Cape Crowther and Cape Grant, and in Bates Sound (on the south side of Bruce Is.) they caught 110 walruses, 52 bearded seals, and 52 bears. The sloop Gronland, owned by Anton Næss of Tromsø (Skipper Johannes Larsen) was hailed and reported a full catch.

In 1902 Skipper Nils Thomassen of the sloop Freya operated in the ice near Franz Josef Land. The steam sealer Frithjof (Skipper J. Kjeldsen) made attempts to reach land throughout the late summer, but was prevented by ice. On the other hand, the expedition vessel America (Baldwin-Ziegler Exp.) reached Norway from Franz Josef Land in July.

1903. Franz Josef Land was visited by Skipper Nils Thomassen with the sloop Freya and by Skipper Brækmo in the sloop Nora.

1904. Sloop Alken of Hammerfest (Skipper Jensen) and the Stairs (Skipper Thomassen) were near Franz Josef Land. The latter was there also in 1905 and 1906.

One of G. Robertson's boats, brig Presto (Skipper H. Jonas) was there too in 1906. The catch comprised 8 walruses, 68 bearded seals, 22 bears including 2 live ones, and 284 seal pelts. The total value of this catch was 5476 Kroner. In 1906 Skipper Virkola with the Venus for the firm of Feddersen & Nissen brought home 52 walruses, in addition to a quantity of seals and 325 barrels of blubber.

1907. The Autumn of Tromsø (Skipper Krammer) and the Stairs (Skipper Nils Thomassen) operated near Franz Josef Land. Skipper Brækmo with the Severn visited the Kara Sea in 1907, returning through the Kara Strait and along the west coast of Novaya Zemlya and thence across to Franz Josef Land, where he encountered ice 12 nautical miles off McClintock Is. The ice lay in a solid field to land, and there was no catch. He proceeded along the edge of the icefield to Half Moon Is. in Spitsbergen, returning to Tromsø on September 19.

In 1908 the sloop Gronland (Skipper Morten Isachsen) secured a full catch of 30—40 walruses, in addition to bears and seals. Skipper William Johansen in Robertson's motor-cutter Susan made a catch value 7334 Kroner and including 15 bears, 46 bearded seals, and
In the Alfred Edvard (owned by Finckenhagen), Nils Thomassen in the Stairs, and Sig. Kræmer in the motor-cutter Autumn were also hunting off Franz Josef Land, the catch of the last-named vessel including 32 walruses. Cutter Venus in charge of Skipper Karl Virkola (owners: Feddersen & Nissen, Hammerfest) was in those waters from July 21 to August 6. This vessel got close to land and the crew were ashore. The catch was 15 walruses, 22 bearded seals, and 7 bears, two of which were taken alive. Captain Ole Nikolai Hansen in the M/C Syvende Juni, owned by G. Robertson, Hammerfest, and Captain Sivert Brækmo in the Severn of Tromsø, were at Cape Flora and then sailed eastward to Cape Tegetthoff, Hall Is. The crew were ashore at both these points. These two vessels were working together and shared the catch. The Syvende Juni's share amounted to 13,000 Kroner, of which 9,000 Kroner represented the catch at Franz Josef Land. This catch consisted of 4 1/2 tons of walrus hides, 3 live walruses, 1 live and 15 dead bears, and 32 bearded seals. Other vessels at those grounds were the Spitsbergen of Tromsø (Skipper Morten Isachsen), and the Colibri of Tromsø (Skipper Isak Isaksen). The latter secured in the sounds a catch comprising 27 walruses, 16 bears, and a number of bearded seals. The steam-cutter Victoria of Tromsø, in charge of Skipper H. C. Johannesen, caught a quantity of walruses. This vessel was at Champ Is. on the north side of Markham Sound.

In 1909 Nils Thomassen in the Stairs was again at the islands. Skipper S. Brækmo in the M/C Severn operated in the sounds and secured 127 walruses (including 4 live ones), 60 bearded seals, and 83 bears. He erected his claim mark at Cape Flora. In August of that year the Duke of Orleans went on an hunting expedition to Franz Josef Land in the Belgica (ex Patria, Norwegian sealer) which was under the command of Captain de Gerlache. Ingv. Svendsen of Tromsø accompanied the expedition as ice pilot and hunter. The Belgica went into the sounds, and walruses, bears, and seals were killed. The Belgica stayed at the islands for about a fortnight. S/S Victoria of Tromsø (Skipper Hans Johannesen) was seen from the Belgica at Franz Josef Land.

In 1910 and 1911 Skipper Nils Thomassen in the Stairs was there again. In the latter year Skipper Isachsen was also at the islands with the sloop Tora den Blide from August 9 to 18. There was then practically open water, and Isachsen took his vessel through the sounds, but did not secure a catch. Cutter Mira was hailed on this visit. Other vessels were S/S Severn (S. Brækmo, 1910) and M/C Østerisen (Ludv. Larsen).

In 1910 S/S Lofoten, piloted by Markus Johnsen of Tromsø, was at Cape Flora and got 16 walruses and 32 bears (including 4 live ones). This was a hunting expedition with a Spanish party (Duque de
Medinaceli) and led by F. de Gisbert. In that year ice conditions were favourable, so that the ship sailed close to the western islands of the group in open water.

In 1911 Waldemar Kræmer in the sloop Sulitjelma was off Cape Flora and got 40 bearded seals, 7 walruses, and 15 bears. Kræmer reports that ice conditions were difficult from 1911 to 1913. Brækmo was there also this year.

In 1912 Skipper Jens J. Øien in the Laura was at Franz Josef Land with a party of Austrian sportsmen, and got 36 bears. In that year the sounds were hardly navigable owing to ice.

In 1913 Brækmo was again at Franz Josef Land.

In 1914 K. Haavold in the M/C Sjøormen found ice conditions so adverse that no hunting could be done.

In 1918 the M/C Severn in charge of S. Brækmo worked those grounds, but was hindered to some extent by ice along the coast.

Skipper Virkola was at Franz Josef Land in 1920 for Messrs. Feddersen & Nissen, but was not very successful. Skipper Olaf Knudsen of Hammerfest landed a big catch the same year, a large part of which had been got off Franz Josef Land and in the sounds.

In 1922 Jens J. Øien operated in the sounds with S/S Laura of Tromsø 275 tons gross, owned by Magnus K. Gjæver. On board were six American sportsmen and the catch was 42 bears, 6 walruses, and some bearded seals. In the same year Skipper Ingvart Johansen was there with M/C Forpp of Harstad, 60 tons gross, owned by Johan Hedman, Dyrohavn. They left Tromsø early in June and hunted of Cape Lofley on Alexandra Is. They afterwards went to Cambridge Bay. On the ice in this bay and at Alexandra Is. they got 130 walruses, 130 bearded seals, and a number of bears. They made a fortnight’s stay at the islands, and then continued hunting operations in the direction of Spitsbergen, returning to Tromsø in the first half of August. At Franz Josef Land they joined the Taakeheimen of Bodø, which had 90 walruses.

In 1923 Skipper Johannesen was again at Franz Josef Land with the same boat. He sailed from Tromsø early in July, was off Cape Flora on July 27, and proceeded up the British Channel, through Markham Sound, anchoring off Cape Triest on the east side of Champ Is. The catch amounted to 50 walruses, 40 bears, and about 100 bearded seals. From Champ Is. Øien returned to Cape Flora through Aberdare Sound on the west side of McClintock Is., thence westward to Spitsbergen, and was back at Tromsø on December 8. The vessel worked in company with the M/C Staalis (Skipper Viktør Arnesen) of Bodø and the Hanseat of Tromsø. The Staalis catch was 8 walruses, 50 bearded seals, and 47 bears (including 7 live ones). In 1923 Skipper Olaf Knudsen in the S/S Altenfjord also work the grounds at Franz.
Josef Land. His autumn catch was 500 seals, 23 bearded seals, and 17 bears (including two live ones). The bears and bearded seals were secured near the shore. **Anton Jensen** and **Ludv. Larsen** were also there. Skipper **Hans Holmeslett** in the M/C **Venus** (70 gross tons) of Hammerfest, owners **Feddersen & Nissen**, visited also Franz Josef Land this year. He reached Cape Flora on August 7 and secured 70 walruses in the sounds, in the British Channel and Markham Sound to Cape Triest. He then went to Cape Tegetthoff and left the islands on August 14. Besides the walruses his catch was 57 bears (including 3 live ones) and 150 bearded seals.

The following year towards the end of July he was again with the **Venus** at Franz Josef Land where he hunted between Cape Flora and Cape Tegetthoff. The **Venus** secured 20 walruses, 50 bears, and 125 bearded seals.

In 1924 **Ludv. Larsen** was in those waters in the M/C **Salangfjord**, 40 tons gross, owned by **Jens Sletten** of Salangverket. He sailed from Tromsø early in June and reached Cape Flora in the middle of August. He worked in Miers Sound and De Bruyne Sound for about a week, and got 100 walruses and a number of bears and bearded seals. Other skippers who worked south of Franz Josef Land in 1924 were **Ingv. Johannesen**, **Anton Jensen**, and **Viktor Arnesen**. Skipper **Johan Sørensen** in the M/C **Johan** of Tromsø was within 25 miles of Cape Flora, but ice blocked his further progress. The catch was 7 bears (including 2 live ones) and 60 bearded seals. In the following year the **Johan** sailed in open water from Victoria Is. to Cape Flora, and returned to Victoria Is. on account of adverse hunting conditions.

In 1925 **Ludv. Larsen** was at Victoria Is. and Franz Josef Land with M/C **Salangfjord**. The catch was 115 walruses, a number of bears and bearded seals, and he returned to Tromsø with a full catch in the latter part of August. In the same year **Viktor Arnesen** was there with the **Hein I**. Skipper **Nils Pedersen** in the M/C **Andfjord** of Tromsø got 150 walruses and about 20 bears. Skipper **Ludolf**
SCHJELDERUP in the *Quest*, owned by *Schjelderups Sælfangstrederi A S* of Skanland in Salten, was off Franz Josef Land with a hunting expedition and his catch included 38 dead and 6 live bears.

LUDV. LARSEN was there again in the *Hein* in 1926, as was also M.C. *Hobby*. According to a report of January 16, 1929 in the *Volna*, an Arkhangel journal, the ship of the “Floating Sea Institute” was off the coast of Franz Josef Land in 1926 (see page 19), and according to the same report the icebreaker *Sedov* carried on hunting operations in the same year off these islands.

In 1927 the steam-cutter *Sverre* of 105 gross tons, commanded by ANTON SALAMONSEN and owned by G. ROBERTSON of Hammerfest, hunted on Wiener Neustadt Is. and at other parts of Franz Josef Land. The catch totalled 27 seals, 38 bearded seals, 241 walruses, and 30 bears (including 3 live ones). The weight of the blubber secured was 35234 kilos., and the value of the whole cargo was 24 986 Kr.

Skipper LUDV. LARSEN in the M/C *Autumn*, 82 tons gross, owned by I. AUSTAD, left the home port of Tromsø early in July and was off Franz Josef Land on September 1. As Cape Flora was blocked by ice, he proceeded eastward and through the sound between the islands of Hall and Salm, and thence up Austria Strait. At Hayes Is. he killed 400 walruses on land, in contrast with previous years when the catch was secured on the ice. The *Autumn* returned to Tromsø at the end of September with 440 walruses, and, in addition, 30 bears and 270 bearded seals. The whole of this catch was made on Franz Josef Land in the course of three weeks. The M/C *Sleipner* of Tromsø, owned and commanded by OLAF ERIKSEN had 9 bearded seals, 17 walruses, 31 bears (5 live ones), and 2333 kilos. of blubber, the total value being 5 500 Kr. This catch was secured both at Spitsbergen and Franz Josef Land. S S *Quest* (Skipper L. SCHJELDERUP) returned from Spitsbergen and Franz Josef Land with 54 seals, 10 walruses, 29 bears (6 live ones), which yielded 5 400 kilos. of blubber. The total value of the catch was 6 800 kr.

In 1928 Skipper HAGBART KRAMER in the steam-cutter *Frithjof* of 110 gross tons, owned by G. ROBERTSON, hunted from Wilczek Island to Cape Flora at the end of July and the beginning of August. The value of the catch was 19 508 Kr. It included 37 bears, of which 8 were live ones. The *Frithjof* operated in company with M.C. *Andfjord* of Tromso, in charge of Skipper NILS PEDERSEN and owned by HANS JENSEN. This vessel secured about 40 bears (including 6 live ones) and a number of walruses and bearded seals. Skipper A. SALAMONSEN in ROBERTSON’S *Sverre* killed 20 walruses in the water at Wiener Neustad Is. and had also 32 bearded seals and 13 dead bears. SALAMONSEN’S catch was of the value of 4 815 Kr.
Skipper Hans Andersen in the motor-cutter Bjørnøy of Tromsø, sighted land at Cape Flora and went up de Bruyne Sound and between Keltie and Hooker I. to Koettlitz I. Thence through Nightingale Sound and westwards along the coast. As the sounds were ice-free and there was little hunting to be done he left Franz Josef Land and went westwards to Spitsbergen. He was back in Tromsø on October 5.

The following Ålesund and Sunnmøre vessels worked the grounds at Franz Josef Land: S/S Signalhorn (Skipper Rolf Kvien), S/S Brandal (Johan Vartdal), S/S Jopeter (Hagerup Larsen), owned by A/S Søndmøre Sælfangere of Brandal; and S/S Sæl (Skipper Hans Rasmussen), owned by Elling Aarseth & Co., Ålesund. The Sæl arrived off Franz Josef Land on August 4, and went in between the islands of Hall and Salm, thence up Austria Strait to a point a little to the north of Kuhn Is., returned southward again by way of Markham Sound and out past McClintock Is. The vessel left Franz Josef Land on August 27. The catch consisted of 20 bears (including 4 live ones), 239 walruses (including 4 live ones), and 51 bearded seals. Skipper Albert Bergeisen in M/C Hisø, owned by Edw. and Iver Larsen of Aalesund, followed the same route and made the following catch: 40 bears (of which 3 live ones), 284 walruses (including 4 live ones), and 72 bearded seals. Other Ålesund vessels operating at those grounds were: M/C Gungnir, Skipper O. M. Tokle, owned by A/S Albert Hovde; the catch was 4 live and 21 dead bears, 18 walruses, and 21 bearded seals. M/C Bratvaag, Skipper P. Eliassen, owned by A/S Bratvaag had 4 live and 24 dead bears, 2 live and 19 dead walruses, and 25 bearded seals.
In all, 8 Ålesund and Sunnmøre vessels (including the Veslekari, p. 20) with crews totalling 115 men were engaged in the Franz Josef Land area. The aggregate catch landed was 549 dead and 9 live walruses, 251 bearded seals, 150 dead and 25 live polar bears, of the total value of 76,500 Kroner.

In 1928 Skipper Ludv. Larsen in the M/C Autumn, owned by I. Austad, was again at Franz Josef Land. He arrived off Cape Flora on September 10, and continued on an eastward course, but he left the islands after a stay of only a few days, for other vessels had already been there, with the result that the previous year's grounds were exhausted.

IX. Political Status.

Franz Josef Land was discovered in 1865 by the Norwegian sealing skipper Rønnbeck and harpooner Aidijarvi. They called the country North-East Spitsbergen. No importance was attached to their discovery, which never became generally known. In 1873 the islands were found by the Austro-Hungarian Tegethoff expedition, which did the first exploring and mapping. Neither this nor any other subsequent scientific expedition appears to have laid claim to Franz Josef Land for their respective countries. Ever since its discovery Norwegian hunters have visited the country to engage in sealing and other hunting operations, and have been practically supreme in those regions. Since its discovery Franz Josef Land has been regarded as terra nullius, open to all nations. It was not until 1926 that a change came about in this respect. The Presidential Council of the Central Executive Committee of the U. S. S. R. issued a decree on April 15, 1926, whereby all lands and islands, discovered or that may be discovered in future, which are situated in the North Pole sector to the north of Russia and Siberia, shall be regarded as the Union's territory. Under this decree Franz Josef Land was also to be regarded as Russian territory. On official maps, however, e.g. of 1923, 1926, and 1928, Franz Josef Land was not coloured as Russian territory. In a communication of December 19, 1928 from the Ministry of Foreign Affairs to the minister of the Soviet Union in Oslo, Madame Kollontay, Norway has protested against the decree.

In August 1928 a notice appeared in the press (e.g. in Aftenposten, Oslo, (No. 416) Aug. 18, 1928) to the effect that Russia was planning the erection of meteorological stations on Franz Josef Land, Novaya Zemlya, and in other places. Not long after that we were again reminded of Russia's interest in Franz Josef Land. When the Krassin expedition visited the islands during its search for the Italia expedition and Roald Amundsen, a landing was made, according to some press reports, at Cape Neale and Prince George Is. Materials for the erection of a hut

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1 In 1914 a war vessel is reported to have hoisted the Russian flag at Cape Flora, apparently as a war measure.
were brought ashore, and a depot was laid, whereupon the Krassin immediately left the islands. According to the same press report (Tidens Tegn, Oslo, Sept. 27, 1928), “the flag of Soviet-Russia was hoisted and possession was taken of the country for Russia in pursuance of a resolution of the Central Executive Committee at Moscow”. It is reported, however, that no such ceremony ever took place.

Since that time the Soviet Government has resolved that Franz Josef Land shall be regarded as Russian territory under the government of Arkhangel. This resolution was confirmed in January 1929 by the Central Council of the All-Russian Executive Committee. The Executive Committee for the Arkhangel district formulated a scheme for the colonisation of Franz Josef Land, the intention being to found a small settlement there in 1929, and in July that year a party was put ashore on Hooker Island by the ice-breaker Sedov (see p. 23).

Table of Expeditions to Franz Josef Land 1865—1928.

As it has been impossible to obtain information about a number of Norwegian hunting expeditions, particularly those of older date, no pretence to completeness is made in the appended list as far as Norwegian expeditions are concerned.

A = Austrian, Am = American, B = British, D = Dutch, F = French, I = Italian, N = Norwegian, R = Russian.

<table>
<thead>
<tr>
<th>Year</th>
<th>Vessel</th>
<th>Leader (Skipper)</th>
<th>Nationality</th>
<th>Nature of Exp.</th>
<th>Remarks</th>
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Hunting and Scientific Expeditions at Franz Josef Land.

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1 Employing three vessels.
In addition to the Norwegian expeditions enumerated in the above list, many Norwegian vessels of which we have no records have undoubtedly visited the coasts of Franz Josef Land. It is thus highly probable that the total number of Norwegian expeditions will be considerably higher, around 150.

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Norwegian expeditions: 110
Foreign : 28
Literature.

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Originalkarte des Kaiser Franz Josef Landes aufgenommen von Julius Payer.
(Mean scale 1 : 1.5 mill. 20 × 28 cm. Merc. proj.)

(Mean scale 1 : 2.23 mill. 36 × 32 cm. Merc. proj.)

Skizze der um die Wilczek-Jnsel ausgeführten Triangulirung.
(18 × 20 cm.)

Discoveries along the south coast of Franz-Josef Land by Mr. B. Leigh Smith, 1880.
(Mean scale 1 : 1.55 mill. 24 × 21 cm. Merc. proj.)

Chart showing Mr. Leigh Smith’s Track to Franz Josef Land and Boat Journey to Novaya Zemlya in 1881—1882.
(Mean scale 1 : 7 mill. 25 × 20 cm. Merc. proj.)

Foredløbig kartskisse over øgruppen Franz Josef's Land. Udarbeidet på Kap Flora i juli 1896 ved sammenstilling af Payer's, Leigh Smith’s, og Jackson’s kartør, samt egne jagttagelser, Fridtjof Nansen.
(Scale 1 : 1.6 mill. 32 × 25 cm. Con. proj.)

(Scale 1 : 1 mill. 23 × 38 cm. Con. proj.)

Map of Kaiser Franz Josef Land. Reconstructed from the Original Survey of Julius Payer by Ralph Copeland, Astronomer Royal of Scotland.

(Scale 1 : 1 mill. 23 × 38 cm. Con. proj.)


Franz Josef Land. Compiled from Information to 1894.

(Scale 1 : 1.6 mill. 40 × 28 cm. Con. proj.)

Western Franz Josef Land up to September 1895 by Frederick G. Jackson.

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Western Franz Josef Land showing Explorations up to End of Spring 1896 by Frederick G. Jackson.

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(Scale 1 : 1 mill. 40 × 30 cm. Con. proj.)


Map of Franz Josef Land Archipelago, showing the New Lands discovered and explored by the Wellman Expedition.

(Scale abt. 1 : 2.8 mill. 10 × 10 cm. Con. proj.)


Archipelago dell' Imp.re Francesco Giuseppe. Secondo le più recenti esplorazioni. Payer (1872—74), Leigh Smith (1880—81), Jackson (1894—97), Nansen (1895—96), Wellman (1898—99), S. A. R. Luigi di Savoia (1899—1900).

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Tracciato della rotta seguita dal Commandante U. Cagni nella spedizione colle slitte verso il Polo.

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