

THE CENTENARY OF THE NETHERLANDS HYDROGRAPHIC OFFICE

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8th July marks the day on which a century ago by ministerial decree the already existing "Hydrographic Bureau" was established as a fifth division of the Netherlands Admiralty. The division was accommodated in the Admiralty building at 7, Lange Voorhout, The Hague.

It will thus be clear that the date on which this centenary is based has in fact been rather arbitrarily chosen since it is obvious that a hydrographic bureau of some stature was already in existence within the Royal Netherlands Navy.

Consequently it seems appropriate to delve a little deeper into the past. We must go as far back as the end of the 18th century, for it was in the second half of that century that hydrography was to be practised with increasing regularity. Hydrographic Offices had, indeed, already been, or were about to be, established in several maritime states.



FIG. 1. — The seal of the Netherlands Hydrographic Office.

In a somewhat weak imitation of this initiative a committee had been formed in the Netherlands with responsibility for matters relating to the determination of longitude at sea and for the improvement of nautical charts. This committee remained in being until 1850. J. C. van der HOOP, Judge Advocate General to the Admiralty should be regarded as its "auctor intellectualis". The first naval officer on record to have surveyed by order of the Navy was Lieutenant Commander A. J. BUYSKES who in 1796 surveyed the approaches to Texel Roads.

In these early days the well known firm of van Keulen continued to be responsible for printing charts.

The first chart of the Zeeland coast and estuaries considered to be of importance is of French origin and was the result of surveys carried out by that great French surveyor BEAUTEMPS BEAUPRE between 1799 and 1811. This chart was published in two sheets by the "Dépôt des plans et cartes de la marine" in Paris.

The first fairly complete survey by order of the Department of the Navy dates back to 1825-26 when from surveys undertaken by Lieutenant Commander S. J. KEUCHENIUS a chart entitled "Hydrografische Kaart van het Brouwershavensche Zeegat, Roompot en Oosterschelde" was published in 1827.

In 1821 in the Netherlands East Indies (NEI) another committee had been formed in order to improve the charting of the East Indies. By decree of the Governor General a naval vessel was to be made permanently available for hydrographic surveying, and this was to take precedence over other naval duties. It will be clear that here is another date that is of great consequence for the future development of the Netherlands Hydrographic Service.

In 1822 and 1823 the brig *Jacoba Elizabeth* and the corvette *Courier* were the first naval vessels to be engaged exclusively in hydrographic surveying. In 1823 a chart depot was established in the Netherlands East Indies.

Unfortunately as early as 1824 the principle of maintaining one vessel continuously available for surveying duties was apparently no longer strictly observed since in point of fact until as late as 1857 the surveys in the Pacific Archipelago were carried out on an *ad hoc* basis by various different naval vessels.

In Home Waters at this period there were important survey campaigns conducted by RIJK (1813-1824), KEUCHENIUS (1825-1833) and van RHIJN (1833-1856).

In 1846 the 1787 committee had undergone a change of name and was finally dissolved by a royal decree in September 1850. In 1848 van RHIJN was officially appointed surveyor for Home Waters, and in that same year the Department of the Navy took over the sale of charts.

At this point in time things started to move. In the Far East Lieutenant P. Baron Melvill van CARNBEE, a hydrographic specialist, took charge of the Chart Depot in Batavia, and before long developed it into a Hydrographic Bureau, but unfortunately this most capable hydrographer died in 1856 at the early age of 40.

In the Netherlands Commander Jhr. G. A. TINDAL was appointed Director of the Chart Depot in 1851, whilst a few years later it is recorded that Commander A. van RHIJN was appointed "Hydrographer of the outlets to the sea in the Netherlands". Lieutenant Commander H. HUYGENS succeeded TINDAL in 1857, and Lieutenant Commander A. R. BLOMMENDAL who had taken over van RHIJN's post in 1857 was designated in 1860 "Chef der Hydrografie der Nederlandsche Zeegaten", an office he occupied until 1875. 1860 thus marks the birth of the title "Chef der Hydrografie" which remains

the official title of the Netherlands Hydrographer to the present day. It was also the year in which the Batavian chart depot took on the official status of a "Bureau Hydrografie". This then was another memorable year in the history of the R.N.I.N. Hydrographic Service.

At this point it is of interest to note that the vignette appearing on all Netherlands Hydrographic Office publications originates from that Far East Bureau.

1864 was to see the establishment of an entirely separate Department of the Navy in Batavia, with the Bureau Hydrografie as one of its divisions.

In 1869 the Netherlands Minister of the Navy, not satisfied with the results of the Batavia Bureau, and being unwilling to enlarge its staff as requested by the Naval Commander in Chief, N.E.I., decreed that the Bureau should be moved to the Netherlands where it was to remain from 1871 until 1876.

This then is the period determining the date of our centenary. Effectively, the presence in the Netherlands itself of the East Indies "Bureau Hydrografie" led to the establishment on 8 July 1874 of a fifth division (division "H") in the Department of the Navy.

By parliamentary decision, the East Indies branch returned once more to Batavia in 1876. Chart production, however, remained the task of the Bureau in The Hague.

In the meantime Commander BLOMMENDAL had been succeeded as Chef der Hydrografie by Captain P. J. BUYSKES.

There was a reorganization within the Batavia Bureau in 1882, the reproduction material for charts of the N.E. Indies being thenceforth received from the Netherlands. This change was motivated by the lesson learnt from events in India where in 1862 the original documents had been removed to London, only to be returned in 1874.

In 1885 BUYSKES was succeeded by Captain H.A. de Smit van den BROECKE who was to head the Netherlands Office until 1899. During his term of office the E. Indies branch was yet once more moved back to the Home Country this time to remain permanently amalgamated with the Netherlands branch.

Let us now turn back the pages of history and recall that in 1821 there had been the good intention to have one of His Majesty's vessels exclusively available for hydrographic duties in the Far East, but that this policy had fallen into abeyance as early as 1824.

During the period 1858-1867 H.N.I.M. Brigantine *Pylades* was deployed on survey work, whilst H.N.I.M.S. *Stavoren* was doing likewise from 1868 till 1873. 1873 was also the year in which the vessel *Hydrograaf* undertook survey duties in the E. Indies, the first ship to be specially adapted for such work.

The first survey vessels to be specifically designed for survey work were H.N.I.M. Ships *Melville van Carnbee* and *Blommendal*, two small brigantines built in 1881 and which left for the Far East in 1882/1883.

Captain de Smit van den BROECKE succeeded in getting the first survey vessel specially built for Home Waters added to the Fleet in 1888. This

vessel, H.N.I.M.S. *Buyskes* was a 180-ton paddle steamer which saw service up until 1908. De Smit van den BROECKE's tour of duty ended in June 1899 when he was succeeded by Captain P. C. DE JONG PZN. At the same time Lieutenant Commander J. M. PHAFF was appointed assistant Hydrographer.

In the Far East that year H.N.I.M.S. *Siboga* was fitted out to accommodate an oceanographic expedition (March 1899 to February 1900) to investigate the deeper basins of the eastern half of the Pacific Archipelago.

In 1899 also, a new survey vessel — H.N.I.M.S. *van Gogh* — was commissioned for the Far East, and the older *Melville van Carnbee* and *Blommendal* scrapped. A second, smaller vessel, H.N.I.M.S. *van Doorn* joined the *van Gogh* in 1904 : both were named after naval officers who had earned repute as surveyors of the waters of the Pacific Archipelago.

Surveys in the Netherlands were at that time still being conducted with the *Buyskes*; as from 1906, however, assistance was provided by two small ageing gunboats, H.N.I.M. Ships *Raaf* and *Geep*. The void created by the decommissioning of *Buyskes* in 1908 was filled when the second *Hydrograaf* was put into service in 1910. Starting with the *Buyskes* each survey vessel specifically built for Home Waters had — up until the year 1972 — been manned by a civilian crew. The naval Charge Surveyor and his party were merely aboard the vessel for the duration of the surveying season which lasted from about mid-March until the end of October.

Hydrograaf was to see very long service and on decommissioning in October 1962 finally found a new future as a base for the Sea Cadet Corps of Den Helder. Today the ship may be seen at her berth close to the Port signal tower, still proudly displaying her vertically black and white striped surveying beacon at the main masthead.

The beginning of the 20th century marked the start of "internationalization". At an international Congress on maritime matters in St. Petersburg in 1908 a resolution was passed convening an international conference one of whose aims was to be the promotion of greater uniformity in charting symbols and Sailing Directions. There was, however, no proposal that might have led up to an international bureau for hydrographic matters.

A second maritime conference held in 1912, also in St. Petersburg, failed to produce any tangible results. A few years later the First World War naturally put a brake on progress towards international cooperation in hydrography.

In the Netherlands another change took place when Captain DE JONG, after fifteen years as Hydrographer, handed over to Captain J. M. PHAFF.

During PHAFF's term of office the decision was made to build a second survey vessel, similar to the *Hydrograaf*, for service in Home Waters. Additionally, H.N.I.M.S. *Tydeman*, a 1300 ton survey vessel, was built in the East Indies where she was commissioned in 1919. The second vessel for Home Waters took longer to materialize, for the *Eilerts de Haan* was not commissioned until 1921. The ship was named after a well known surveyor who had died in 1910 of a tropical disease contracted whilst in charge of an expedition to the interior of Surinam. A monument commemorating the leader of this Corantine expedition may still be seen in Paramaribo where it was unveiled in 1912.



FIG. 2. — Vice Admiral J.M. PHAFF,
a photograph taken during his term of office as an IHB Director.

The Hydrographic Division moved out of Admiralty premises in January 1916, finding a temporary home at 5 Muzenstraat, The Hague.

24 June 1919 is the date of the opening of the historic hydrographic conference in London, when at the invitation of Britain's Hydrographer representatives of 22 Hydrographic Offices assembled to discuss cooperation. Captain P. C. COOPS and Commander J. L. H. LUYMES represented the Netherlands.

Out of this Conference — as we all know — was to emerge two years later the International Hydrographic Bureau. Captain PHAFF (fig. 2) was elected to the very first Directing Committee, and was promoted to Rear Admiral (Hon). He was promoted Vice Admiral (Hon) in 1926 on taking over the post of President when Vice Admiral Sir John Franklin PARRY died in office.

PHAFF's move to the IHB opened up the way for LUYMES (fig. 3) who took over as Hydrographer in 1920. His term in office which was to last until 1935 was marked by extensive surveying activities. During the 1920s no less than six vessels were regularly employed on surveying in the Far



FIG. 3. — Captain J.L.H. LUYMES.

East — H.N.M. Ships *van Doorn*, *Tydeman* and after 1926 *Serdang*, together with three Coast Guard vessels *Sirius*, *Orion* and *Eridanus*.

On 1 January 1924 the Netherlands Hydrographic Office moved to premises in the Badhuisweg, The Hague (fig. 4) where it remains to this day.

In 1929 H.N.M.S. *Willebrord Snellius* — the first of that name — went into service in the Far East, replacing the *van Doorn*. The new vessel's first oceanographic expedition was the historic one named after it, commanded by Lieutenant Commander F. PINKE with P.M. van RIEL as Chief Scientist. During this cruise a depth of 10 068 metres was recorded East of the Philippines, and a bottom sample collected. An earlier expedition in *Siboga* in 1899-1900 had been biologically orientated: the *Snellius*, however, was to pay more attention to physical oceanography.

The Netherlands discontinued its membership of the IHB as from 1 January 1934. The Hydrographer, LUYMES, was far from pleased with the chauvinistic attitude taken by some of the larger Hydrographic Offices, and in view of its budget cuts in the years following the Great Depression the Netherlands decision to opt out was not surprising.

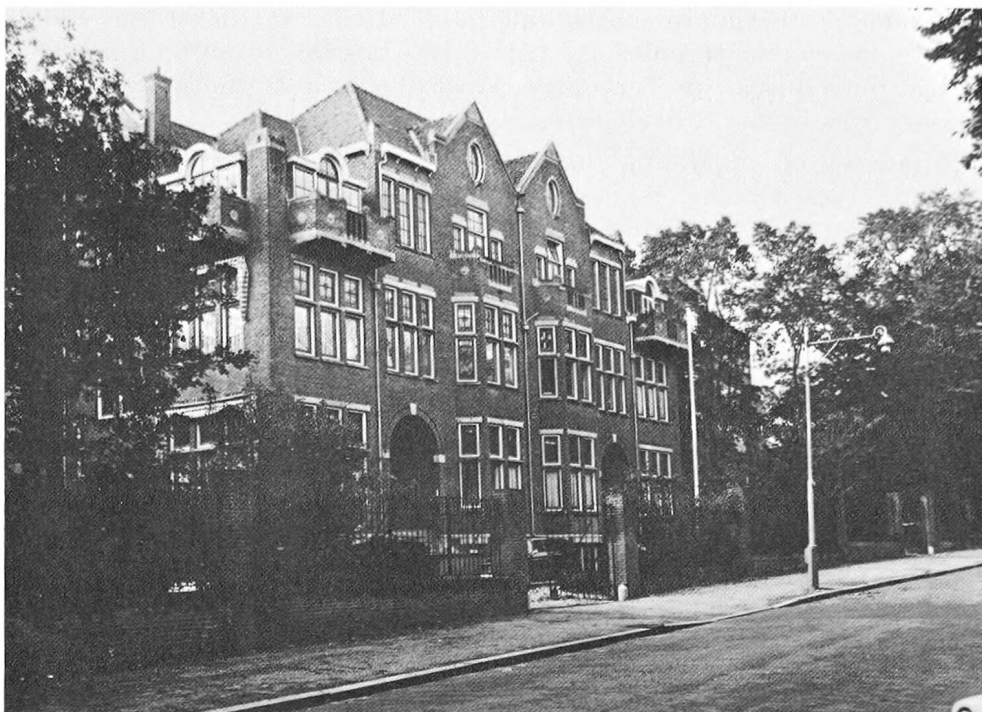


FIG. 4. — The Hydrographic Office in The Hague.

As a result of the restricted national budget *Eilerts de Haan* was decommissioned and laid up.

In 1935 J. C. F. HOOYKAAS was appointed Hydrographer. He was to remain in office until 15 July 1940, thus until just after the German invasion and consequent occupation of the Netherlands. In the immediate pre-war period the Hydrographic Service fleet had in fact been reduced to three ship — the *Snellius* in the Netherlands E. Indies, the *Hydrograaf* and the *Eilerts de Haan* (still laid up) in the Netherlands itself. *Tydeman* in the Far East had been turned over to the Coast Guard service.

The only ship to survive the war was actually the oldest: the *Hydrograaf* managed to sail to England in May 1940. The present writer well remembers that fine old ship in Falmouth Bay, where she was rendering service to the Netherlands wartime Naval College at Penryn, providing navigational and seamanship training to himself and others of the 1939 naval cadet class.

Between 1940 and 1945 there followed a period when the Netherlands Hydrographic Office passed through many vicissitudes on account of the occupation of the country.

However, surveying work was to re-start as soon as hostilities ended. Commander Th. K. Baron van ASBECK, who was a member of the Netherlands Admiralty headquarters staff operating from a wartime base in London, was given the task of preparing for the re-establishment of the service in the Netherlands so soon as the war ended. The only remaining survey vessel, the *Hydrograaf*, was once more worked up, and arrangements were

made with the British Hydrographer for the printing of a complete stock of up-dated Netherlands charts and publications, so that these could be issued in due course. In February 1945 it was possible to set up a provisional Hydrographic Bureau in Terneuzen, since the first of the many resurveys necessary was of the Scheldt estuary.

The work of replanning started in the Office in The Hague in May of that same year, being housed in an apartment building in the van Alkemadelaan. As a sidelight I might mention that I still on occasion sample the culinary attractions of a restaurant situated in this building, as no doubt my NSHC colleagues will remember.

On 5 November 1945 all the scattered units of the Hydrographic Office were able to return to their old Badhuisweg premises, and the work of getting back to normal could start in earnest. The first post-war Notices to Mariners had in fact been published two days earlier.

Designs for new survey vessels were drawn up, and in May 1946 the Minister of the Navy agreed to the construction of a small survey vessel for Home Waters, two larger vessels for duty overseas, and four wire-drag launches.

Although no longer a member of the IHB, the Netherlands was nevertheless represented at the Fifth International Hydrographic Conference in 1947 in the persons of Vice Admiral HOOYKAAS (Ret.) and the provisional Hydrographer, Captain van ASBECK. This led up to the re-admittance of the Netherlands to the IHB in 1949.

In the Far East H.N.I.M.S. *Jan van Brakel*, a frigate refitted for survey duties saw service from mid-1950 until its return to the Netherlands a little over a year later. During this period two of the new wire-drag launches had been shipped to New Guinea which had become the centre for survey activities since Indonesia became independent at the end of 1949.

Van ASBECK (fig. 5) was finally confirmed in office as Hydrographer in November 1950, and promoted to Rear Admiral in March 1951.

Since the return to The Hague the demand for Netherlands charts (which it will be remembered had been printed by the United Kingdom towards the end of the war) had been steadily rising, and thus it was that as many as 95 new editions or reprints for Far Eastern waters and 26 for Home Waters were issued from the Netherlands office in the period 1949-1952. The re-editing of Sailing Directions and other hydrographic publications was to demand a tremendous effort on the part of a relatively small staff.

Although the Netherlands Hydrographic Service no longer did surveys in waters falling under Indonesian jurisdiction, their workload did not in fact notably decrease on account of an agreement between the two countries providing for the continuation of compilation and production of nautical charts and documents in the Netherlands Hydrographic Office. The Office also planned and issued instructions for supporting hydrographic surveys to be carried out by Indonesian survey craft. Indonesia, however, held the copyright of all charts and publications for all areas under its sovereignty.

A new vessel, the *Zeefakkel*, was put into service in March 1951, and in February 1952 the new H.N.I.M.S. *Snellius* was commissioned, with the



FIG. 5. — Rear Admiral Th. K. Baron van ASBECK.

Luymes following in May of the same year. *Snellius* was detailed for surveys in the Netherlands New Guinea area, together with two launches.

The Netherlands Hydrographic Office was most honoured when in 1952 Rear Admiral van ASBECK was unanimously elected President of the Sixth International Hydrographic Conference. During the 'fifties relations between the Netherlands and Indonesia worsened on account of the dispute over New Guinea, and the post of Hydrographic Adviser in Indonesia was discontinued in July 1954.

In New Guinea waters, the Netherlands service increased its survey efforts; a third wire-drag launch was shipped out in 1955 after the introduction of a Decca survey chain the previous year.

In 1958 at Indonesia's request the reformat for 48 Indonesian charts was transferred to the Indonesian Hydrographic Office so that in future these charts might be produced locally. The reformat for the balance, numbering some 250 charts of Indonesian waters, was to follow in 1959.

By the end of 1959 Indonesian charts were no longer being sold in the Netherlands. All stocks of these charts were shipped to Indonesia which had now taken over entire responsibility for charting. Thus ended a period



FIG. 6. — Rear Admiral W. LANGERAAR

of nearly a century and a half during which many Netherlands Naval Officers (and towards the end many Coast Guard Officers) with enthusiasm backed by much dogged determination spent a considerable part of their lives going about the task of opening up this vast archipelago to navigation. It seems fitting to record that this imposing task ended as unobtrusively as it had started some 140 years earlier.

In 1961 Rear Admiral van ASBECK left the active scene for a well merited retirement after guiding the Service in the crucial years of its rebirth. He was succeeded by Captain, later Rear Admiral, Ir. W. LANGERAAR (fig. 6), a name well known to the present generation of hydrographers — not to mention the oceanographic brotherhood.

In 1962 LANGERAAR was instrumental in founding the North Sea Hydrographic Commission which was soon to prove itself a most valuable body, and I am happy to record continues to be so.

In 1963 there appeared for the first time the publication *Hydrographic Newsletter*, and in 1965 charts specially conceived for yachtsmen were first issued and have since been reprinted on an annual basis.

The fact that by the end of 1962 the Netherlands had withdrawn completely from New Guinea led to the availability of surveying potential for tasks elsewhere.

In 1964 for the first time for many years attention could once again be paid to oceanography. H.N.L.M.S. *Snellius* took part in the NAVADO Oceanographic Project in the North Atlantic which had originally been scheduled as a purely British operation, but in which *Snellius* in the event was to stand in for H.M.S. *Dalrymple*.

In the years 1965 through 1972 extensive hydrographic surveys and oceanographic research operations were carried out along the coast of Surinam and over its continental shelf, and in the Windward and Leeward Islands in the Netherlands West Indies, whilst *Luymes* brought her career to a conclusion with three years of surveying for the CICAR project in the Carribean. LANGERAAR was elected Chairman of the Intergovernmental Oceanographic Commission, a position he occupied until 1973, two years after his retirement from the Royal Netherlands Navy.

Once again a Netherlands Hydrographer was elected President of an International Hydrographic Conference. It was Admiral LANGERAAR who presided at the 1967 Conference which had the important task of drawing up a Convention for the IHB that in due course became the International Hydrographic Organization.

Automation in the Netherlands got off to a modest start in 1969. *Snellius* was equipped in 1970 with an IBM 1130 computer with disc memory, a Calcomp 502 flatbed plotter and a Haromat digitiser for semi-automatic processing. The concept of this HYDRAUT system, as it has been named, still remains the Hydrographic Office approach to automation.

Towards the close of 1970 the order could finally be placed for the construction of two new survey vessels for North Sea operations to the same hull design as the new pilot cutters already in service.

Snellius and *Luymes* had by this time seen continuous service, apart from their four-yearly refits, for close on twenty years, more than 60 % of their time having been spent in the tropics, and it was becoming increasingly difficult to obtain machinery spares for them. The *Zeefakkel* being a coastal survey vessel, was not suited to the task of surveying deep draught shipping lanes well away from the coast without nearby accessible areas for shelter.

The new surveying programme was thus based on the above two survey vessels, to be augmented by a new and larger vessel capable of undertaking oceanographic research under almost all conditions and which would take over the oceanographic work previously entrusted to *Snellius* and *Luymes*. The older vessels had in fact both been built for hydrographic work in the Far East and had only been fitted with limited oceanographic gear around 1962.

The present author (fig. 7) was appointed Netherlands Hydrographer in June 1971 in succession to Admiral LANGERAAR.

Experiences with the HYDRAUT concept led to a decision to equip the two vessels on order with the data acquisition part of the system but to install the processing equipment in the shore establishment. National budgetary considerations unfortunately precluded the construction of the proposed new large survey vessel, and the Secretary of the Navy had to postpone its building and opt for yet another four years' life for *Snellius*.

The names chosen for the two new North Sea survey vessels are *Buyskes* and *Blommendal*. In this centenary year it is fitting that one of these ships should commemorate the distinguished naval officer who in 1796 had surveyed the approaches to Texel Roads, the other this country's first official "Chef der Hydrographie".



FIG. 7. — The present Hydrographer, Rear Admiral H.H. van WEELDE, flanked by Chief Civil Hydrographic Officer G.D. RAASVELDT and Commander H. BURGER.

1972 in fact saw all three older vessels end their careers. The intended refit for *Snellius* was abandoned when experts indicated that this would not be a cost-effective solution. To fill the gap in oceanographic surveying capacity H.N.L.M.S. *Onversaagd*, an ocean minesweeper relegated to “moth-balls”, was again brought into active service after a number of modifications to adapt her to the new task.

Snellius and *Zeefakkel*, having completed their survey season were therefore decommissioned towards the end of 1972. *Snellius* however was soon given a new role — as an immobile depot ship for Royal Netherlands Navy submarines operating from Scotland. *Zeefakkel*, with its civilian crew, was added to the auxiliary vessel pool in the Den Helder naval base and is used by the Naval College there for navigational and seamanship training.

After three years of CICAR work *Luymes* returned from the West Indies just before Christmas 1972 to be decommissioned and sold for scrap.

At this point in time the Hydrographer was to find himself without even a single survey ship !

However, in February 1973 H.N.L.M.S. *Buyskes* underwent sea trials and was commissioned in March — to be followed by H.N.L.M. Ships *Onversaagd* in April and *Blommendal* in May of that same year.

The repromat already sent to Indonesia had not stood up to environmental conditions, and so at the request of our Indonesian friends a new set of documents was made ready and handed over during a memorable visit to Surabaya by two naval vessels in August 1973.

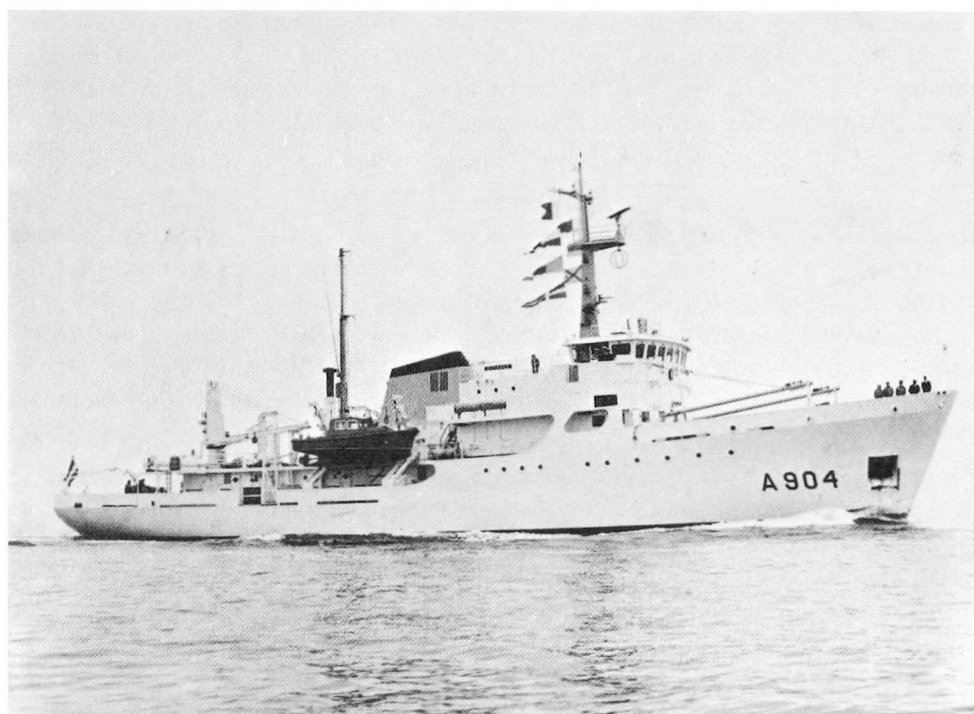
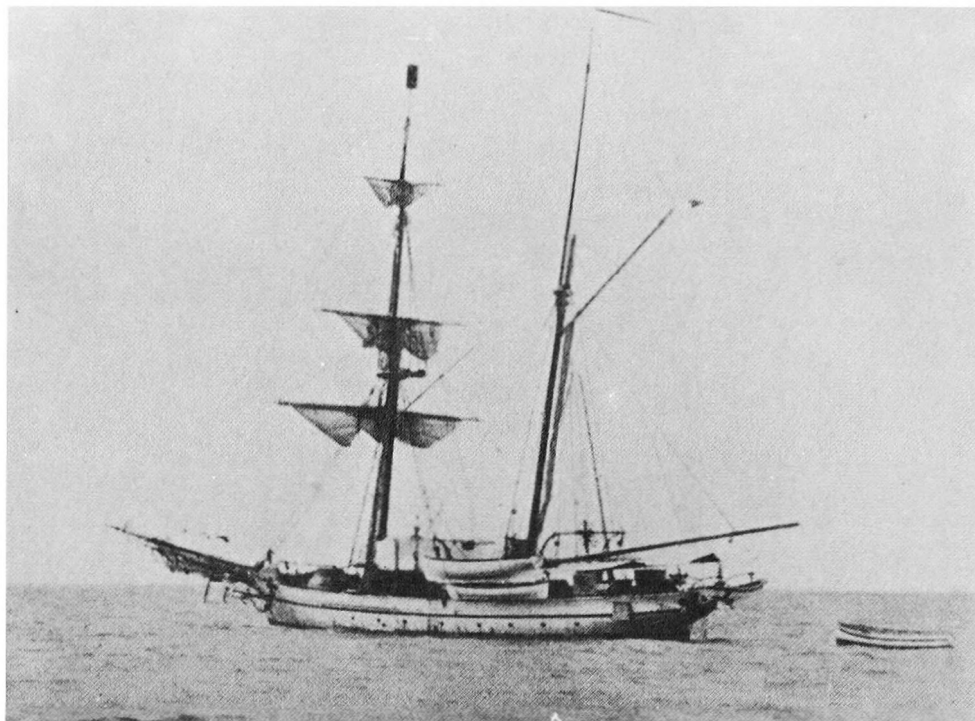


FIG. 8. — 1883-1973

Above : The early *Melvill van Carnbee*.

Below : The latest *Buyskes*.

The sister ships of these vessels are both named after BLOMMENDAL.



Fig. 9. — The new crest, recently approved.

1973 also witnessed the installation of the shore portion of the HYDRAUT system in the Hydrographic Office, and the conclusion on a promising note of the evaluation programme of *Buyskes* and *Blommendal*. In the months of September and October *Onversaagd* spent six weeks on oceanographic work as part of the Joint North Sea Data Acquisition Programme in the North Sea, and has now been assigned to participate in GATE (GARP Atmospheric Tropical Experiment) from May to September 1974.

A decision was taken in 1973 to build a new dual purpose oceanographic/hydrographic survey vessel between 1974/1976, with the Navy guaranteeing 30 % of its sailing time exclusively to civilian scientific research workers. By Cabinet decision only one such specialised vessel could be built, and this was therefore a compromise solution. The fact that the Navy would be guaranteeing sailing time to civilians does not really mean a fundamental change of policy since throughout the NAVADO, OCPS and CICAR Projects the Netherlands Navy has continued its support to oceanographic scientists.

Thus 1974 may not only be considered as the Hydrographic Office's centennial year, it can also be regarded as a year of new perspectives. Two new survey ships have completed their evaluation phase. The shore part of the HYDRAUT system is working well, and automatic production of fair survey sheets has commenced. Furthermore, studies are underway for the automation of at least some of the cartographic tasks.

Construction is finally to start on the new oceanographic/hydrographic vessel during the year. Although no firm decision has yet been taken regarding its name it is very likely that the name *Snellius* will receive serious consideration, in view of its connection with past oceanographic expeditions, although another choice might well be *Melwill van Carnbee*.

The accommodation at Hydrographic Office headquarters leaves much to be desired. Part of the staff has to be housed in an adjacent apartment

building. Gradual changes are constantly being carried out in the old building in order that space can be more economically used. With the Government's present policy of tending to reduce personnel, the time may come when once again room may be found in the main building for the entire staff.

On a concluding note, it may be asserted that we of the Hydrographic Office regard the future with confidence, even though budgetary cuts in the strength of the armed forces naturally affect our service also. It is sad that this should be so, in view of the importance of hydrography's role in contributing to the economy of the country.

Only experience will tell whether, with staff and crews reduced, but aided by the present amount of automated equipment, we shall be able to meet the challenge of the future.

(Article submitted in English by Dutch author)