



**H**ydro was prior to 1949 transporting at sea but not with its own shipping company. Earlier on, Norsk Hydro transported ammonia from Herøya to Rjukan by railway cars and railway ferries on Tinnsjøen. A/S Rjukanfoss handled this transport.

Shortly after World War II, Norsk Hydro took possession of M/T “Klor”, 285 Dead Weight Tonnes (DWT). The vessel had been built in Elmshorn, Germany in 1935 and was the first gas tanker built to carry chlorine gas but also other types of gases. At that time liquefied petroleum gas was only carried on barges. The thickness of the tanks was 33 millimetres. During W.W.II the vessel was torpedoed and sank off Tofte-Hurumlandet in Oslofjord, and the story goes that 3 people were found killed on board.

After salvaging, the vessel at first came into the government's possession as war compensation, and was later, in 1946 taken over by The Electro-metallurgic Factories (HEFA) at Herøya. Norsk Hydro Eidanger Salpeterfabriker took possession of the vessel in 1952. MT “Klor” sailed without accidents for many years.

Furthermore, together with A/S Borregaard, the company took over the tanker “Nyborg” (298 DWT) in 1949. The vessel was renamed M/T “Uniklor, and designated to carry liquid chlorine, soda solution and technical hydrochloric acid. A former able seaman and a captain in the shipping company tells about how the crew often heard mysterious thumping sounds in the engine room when the machinery was not running. This is probably the modern version of the infamous “klabautermannen”, a mythological creature which supposedly gives warning of storms.

In connection with the chlorine transport, Norsk Hydro and A/S Borregaard established a company to solely carry this cargo. This company was named A/S Klorsalg, Oslo. The maintenance work on “Uniklor” was taken care of by Eidanger Salpeterfabriker

In addition to the two vessels, several smaller vessels were chartered, such as M/T “Skaanen”, “Smart” and “Soam”. These vessels mainly sailed in the Oslofjord, Western coast of Norway to Trøndelag and also occasionally to Sweden. An interesting fact is that “Skaanen” was formerly a ship belonging to industrial company Union, and “Smart” had once belonged to Chr. Bjelland from Stavanger.

## HYDRO TANKSKIPS A/S IS FOUNDED

After World War II the demand for fertiliser to agriculture increased heavily and Eidanger Salpeterfabriker was not, by far, able to meet this demand. Agriculture interests and the Government wanted Norsk Hydro to increase its fertiliser production. Negotiations on this topic had gone on for several years. When the cost issue, which was one of the main obstacles, was resolved, a question presented itself: Where should the factory be located?

The rebuilding plan after WW II for North Norway was partly the cause for Glomfjord being chosen as site for a fertiliser plant. This plan gave Norsk Hydro the opportunity to allocate money on favourable terms for the construction of the fertiliser plant.

It was decided to build 3 almost identical vessels for the transport of liquid ammonia from Glomfjord to Herøy. Due to the nature of the cargo and the long and exposed Norwegian coastline, the vessels were designed with regard to safety and sturdiness.

In order to handle the transport there were always two vessels en-route, while one was stand-by at all times in case something went wrong with either of them.

However, it is highly unusual that a shipping company builds an additional vessel as a back-up, but the third vessel was useful when docking or any repair work was necessary.

A/S Rjukanfoss was the ship owner at the first stage. But the company soon realised that the most practical thing to do, was to establish a limited shipping company. *Hydro Tankskips A/S* (Hydrotank) held its founding meeting on 5 august 1949.

*The share capital was NOK 5,000,000, and distributed as follows:*

Hydro tankskips	4996 shares	Hroar Loss	1 share
Bj. Eriksen	1 share	C. Kielland	1 share
Meinich Olsen	1 share		

Norsk Hydro's General Assembly appointed the Hydro Tankskips Board of Directors. The above mentioned persons signed the board protocol and managing director Bjarne Eriksen was elected chairman of the board. Headquarters was at Solligt. 7 in Oslo. Hydro Tankskips was registered in September of 1949 at Oslo Business and Trade Register. The company was also enrolled in Norwegian Shipping Federation for coastal trade.

*Clause 1 of the company's articles of association, states:*

"The intention of Hydro Tankskips A/S (Hydrotank) is to operate in shipping, and be involved in any connected or related activity".

The project planning of new vessels emerged from a close collaboration between Det norske Veritas, Norsk Hydro's engineers and the executing shipyard.

# THE FIRST SHIP BUILDING CONTRACTS

Hydro decided that 3 ammonia vessels should be ordered at Marinens Hovedverft (Norwegian naval yard) in Horten. This was actually a quite bold decision, since the yard was not too experienced in constructing ships intended for civilian shipping. The book "Skipsbygging på Horten gjennom 150 år" (150 years of ship building in Horten), gives a good impression of the circumstances following World War II.

Marinens Hovedverft was not fully restored after the war. There were still ruined buildings and broken iron at the shipyard after all the war bombing. But since the yard possessed the required know-how to construct the ammonia ships, Hydro had no serious concerns about signing a contract with the yard.

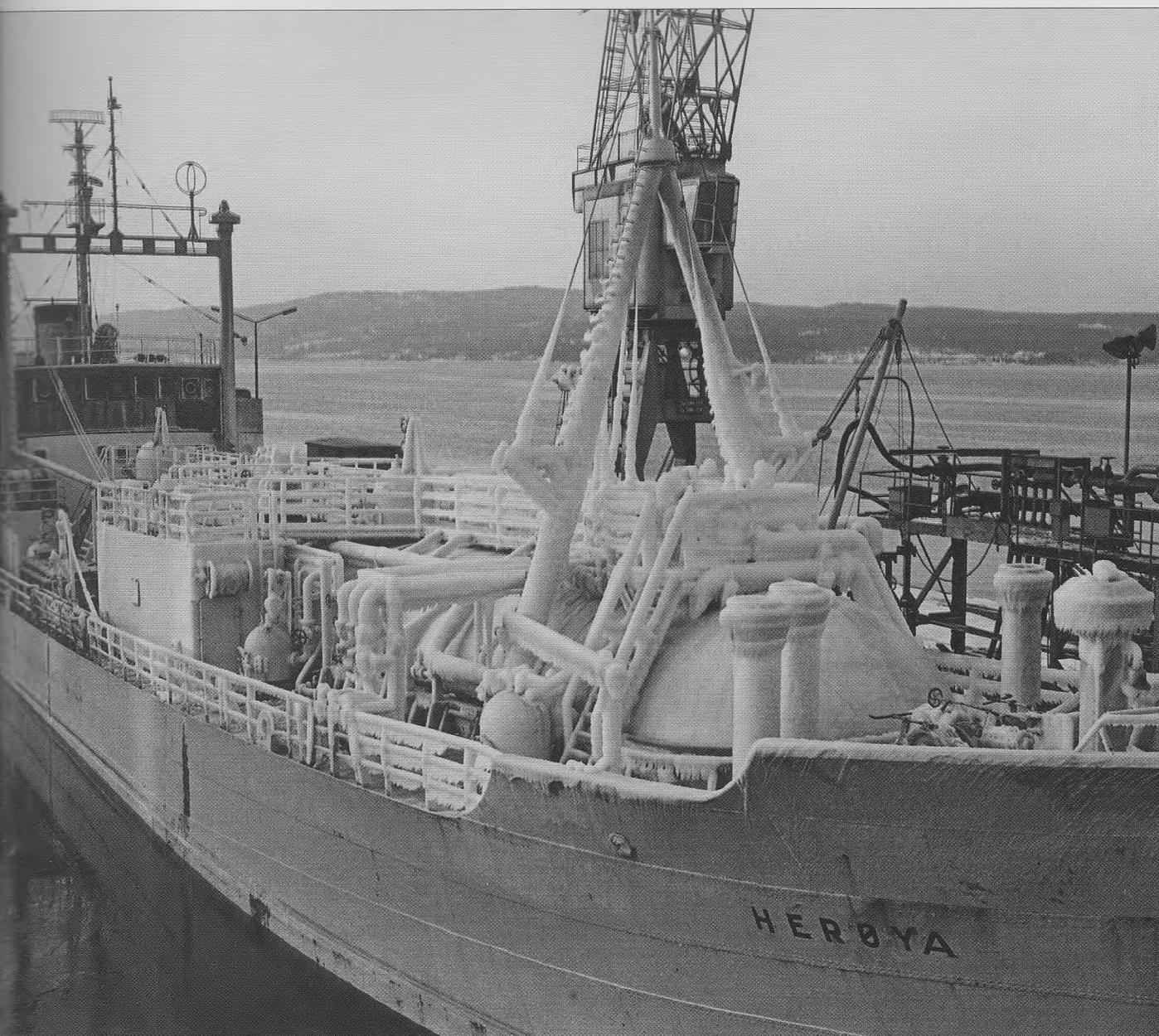
Contract negotiations had been tough, despite the present market for ship builders being excellent. However, no ship yard wanted to be involved in a new construction project without cost sliding scales for everything imaginable. Hydro wanted if possible, a fixed-price contract and succeeded in this with an exception on a sliding scale for wage increases.

This contract was probably not very profitable for the ship yard, but it had a positive psychological effect internally, as well as externally. Internally it was an encouragement in connection with the reconstruction after the War. Externally these 3 speciality vessels were excellent public relations for the yard. When the first vessel, "Herøya" commenced operation it ran like clockwork. It was so regular that in Haugesund they actually set the time by her when she sailed through Karmsundet. This sparked local ship owners' interest in the Horten yard that had been so thoroughly damaged during the war.

90 years earlier, in the exact same boat yard at Horten, the same as "Herøya" and her sister ships "Haugvik" and "Hydro", "Kong Sverre" the last genuinely grand sailing ship of any European navy had been built. The "Kong Sverre" concession to the modern times fast approaching was a steam engine but with her white sails sang their swan song.

"Herøya", "Haugvik" and "Hydro" introduced new and advanced times. These vessels were unique in the world being the first specially designed ammonia tankers. They were constructed in co-operation with Marinens Hovedverft and Norsk Hydro's technical experts. The vessels were equipped with 27 cylindrical high-pressure tanks, which held 750 tonnes ammonia. Displacement was the same as cargo vessels their size approximately 3,000 tonnes.

As mentioned before the 3 vessels were practically identical. They were equipped with a double set of radar and every other technical devise available at that time. There was also a smaller cargo compartment for general cargo on board. The main engines were first rate Nordberg Diesel and with Lister auxiliary engines.



The crew consisted of 22 men, which with automation became somewhat reduced. During the first couple of years a pilot was picked up at Kopervik on the North-South stretch of coastline. This was rather expensive and later on two pilots were hired permanently and stayed on board the whole round trip.

The vessels were equipped with passenger cabins, as well as a passenger salon on the boat deck. These cabins were primarily used during the first couple of years. Later they were utilised as pilot cabins, and after that storage for the captain's chest. The salon was turned into a TV-room.

# M A Y L U C K A N D F O R T U N E . . .

**O**n Midsummer day in 1949 the launch and naming ceremony of “Herøya” was accompanied by a grand and ceremonious celebration, and the newspapers Handels- og Sjøfartstidene and Gjengangeren both covered the event. Shortly after “Herøya”'s launching, the keel laying of the sister ship “Haugvik” began.

“Herøya” was the first vessel built by the shipping company itself but she is also a part of post-war Norwegian ship building history.

This is considered as one of the red-letter days in the history of Marinens Hovedverft. After having been severely bombed during World War II, it was of great importance to get the ship building order for three vessels from Norsk Hydro, the largest company in the country.

Norsk Hydro had explored possibilities having the new vessels built abroad but Marinens Hovedverft was brought to their attention, and Hydro gained confidence in both workers and management and ordered the vessels in Horten. The ship yard delivered first-class workmanship.

Vessel number two, “Haugvik”, was built in 219 days and did a test voyage on 8 December 1949. She was delivered 3 days later. To the satisfaction of the company, the last one of the specially built vessels, “Hydro”, was delivered 7 December 1950. By then, “Herøya” had been running for 18 months and “Haugvik” for 12 months.

Now that a separate shipping company had been established, a need for a company flag was apparent. An intercompany competition was announced in Norsk Hydro. The task was not only to suggest a suitable company flag and a funnel emblem, but also names for the three new ships.

The names which won awards were: “Glomfjord”, “Haugvik” and “Herøya”.

However in Glomfjord, they already had an inspection vessel named “Hydro”. In order to give every vessel a name with the initial “H” this inspection vessel was renamed “Hydrogutten” and the “Hydro” name could be given to the third of the new vessels. And thus every vessel got an “H” on the funnel.

The funnel received a black ring at the top, symbolising the earth, then a green ring referring to the grass, and the remaining colour yellow symbolised the crop and finished with a green letter “H” on a yellow base.



### **The Company Flag**

The Hydrotank company flag was designed a green base with a yellow letter “H” in the top left-hand corner. Until Hydro changed their logo, these were the company colours that the vessels sailed under. Since then the logo has been altered a number of times, prior to the present stylised Viking ship on blue base.

A small organisation was established in Hydro Tankships A/S to supervise the company's interests during the construction work of the 3 vessels. Captain Hans Johan Trovik, chief engineer Hans Haug and Chr. Kielland, Norsk Hydro’s Technical Director was responsible for all technical work.

Captain H.J. Trovik was a natural choice for taking the first ship, M/T “Herøya” on her maiden voyage to Glomfjord. This trip went according to plan. The second officer on board was Hans Krane who was later promoted to captain in the shipping company. Captain Bjørn Hauff took over M/T “Herøya”, and sailed from then on as the company's fleet master.

When Norsk Hydro built Glomfjord Salpeterfabriker they depended on safe and efficient transport of large quantities of ammonia, sailing 1500 km along the Norwegian coastline to Herøya. One had not only to master the explicit difficulties of carrying ammonia but also make sure that the new line of transportation was operative and prevent any halts in the production at Eidanger or Glomfjord Salpeterfabriker. This transport was breaking new ground and was adequately called the company's “lifeline”. Hydro’s vessels were the first ones in the world to carry liquid ammonia gas.

# THE COMPANY ADMINISTRATION

## The early years

During the construction period of the three first vessels, H.J. Trovik was Hydro Tank-skips inspector and located at Norsk Hydro's headquarters in Oslo. This was not a very practical solution, so he moved to Herøya where he had a small office right above the gatekeeper at Eidanger Salpeterfabriker. The Transport Department at Herøya performed the management of Hydro Tankships. However, all board meetings and important decisions were made in Oslo. Technical expertise was located at Herøya particularly in respect to the ammonia storage tanks. Likewise one had great help from the machine shop of the plant which also if necessary hired out engine room crew.

Eidanger Salpeterfabriker was also well stocked in regards to spare parts. The supply storage was right next to the quay where the ammonia ships discharged their cargo.

The company's offices were moved to the Forwarding department in 1955, and two small offices were set up there. The Forwarding department was in charge of clearing the vessels, when they started going to ports outside Norway.



*The company inspector H. J. Trovik.*



*Johs. Anth. Johannessen (the book's author).*

In 1956 Johs. Anth. Johannessen was hired in order to supervise crewing of the vessels, accounting and office management. The Hydro Tankships office was later moved to the Tool Shop building at Herøya, the so-called "hotell Aubert", where it was located for a number of years.

Herøya Payroll office was in charge of the officers and crews salaries, and the Accountant's office handled the operational accounts. The Estimate and Accounts office at Eidanger Salpeterfabriker supervised budgeting of operational accounts. On occasion Eidanger Salpeterfabriker provided extra office staff or radio officers were taken on shore for office duty.

The Seaman's office in Porsgrunn or other local seamen's offices provided officers and crew for the ships. Occasionally, when a vessel was about to depart she could be a little short of crew. The solution was to ask the Herøya Personnel office for assistance. Help was usually provided but sometimes people did not understand that a ship could not wait and that it was extremely urgent to immediately get sufficient crew on board.

Being closely connected to Eidanger Salpeterfabriker and situated on its premises, the cost of common services provided onshore were considered rather expensive. These were costs that other shipping companies would not have to deal with.

Assistant manager E. W. Smith was in 1968 elected to Hydro Tankships A/S board of directors, and given the task of being the Norsk Hydro contact man. He opted for a more efficient participation of the board and the administration in the actual management of the vessels. This was also more similar to the operation of other shipping companies concerning costs, profit and business management.

In 1969 one started to look into a possible reorganisation of the ship management. This resulted, first of all, in calling ashore chief engineer H. Haug to rationalise on board maintenance especially with a view to have better regularity.

As early as 1971 the idea of locating the shipping company away from Herøya had arisen. It was desirable that the shipping company had a more independent position and not be so closely connected to the plant at Herøya as well as needing more office space. It was then decided to move the shipping office from Herøya and a new rental agreement was signed concerning office premises at Storgt. 96 in Porsgrunn town.

## A N D W E S A I L O N . . . .

For a number of years, the three ammonia vessels sailed faithfully between Herøya and Glomfjord. The vessels became an important link between the two production sites. As mentioned earlier they were not only carrying ammonia but general cargo as well. This was important for supplies to the Glomfjord society. The cargo consisted quite often of very expensive platinum nets, heavy water and other equipment to the factories, plus fresh vegetables to the local grocer!

Mo i Rana later became a regular port of call when the coker plant was built. But prior to this a new recipient of liquid ammonia had appeared in Denmark. In the early 1950's it was discovered that injecting fertiliser straight into the ground early in spring was beneficial to plant growth. This spurred ammonia export to Denmark early in the spring and the spare ship, docked at Menstad was set into operation. This activity took place during a short period of time in the spring, and the ship went to various Danish ports, mainly Nørresundby where ammonia was discharged to storage tanks. During these busy spring months it was even necessary to charter Danish ships (particularly from GazOcean and Tholstrup) to handle some of this business.

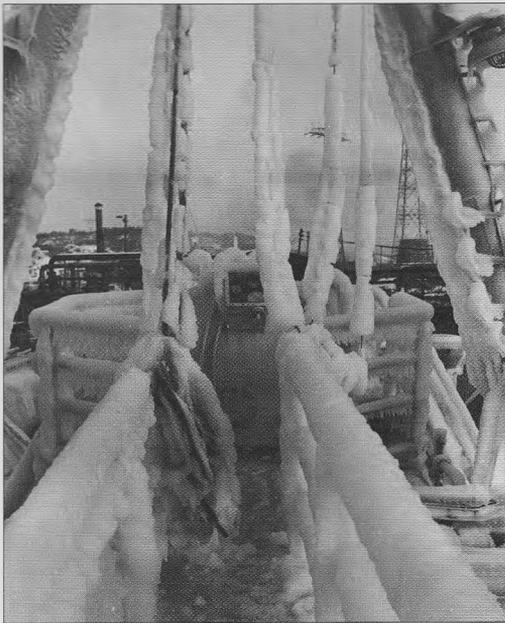
The ever increasing fertiliser production at Herøya resulted in periodical shortage of ammonia and any additional delivery had to come from Ruhr-Stickstoff, Bremerhaven in Germany. This was how the ships were introduced to international trade and resulted in new port of calls on the Continent, along with occasional trips to Reykjavik, Island; Middlesborough, England; and Landskrona in Sweden.

Continental ports of call were a new experience, and crew were tempted by access to duty-free goods. Some of them took the liberty of smuggling large quantities of cheap alcohol from Bremerhaven to Herøya. The alcohol was on one occasion signed out in the name of Norwegian cultural personalities (!) and ended up far inland with construction workers at the Tokke site. This trafficking resulted in a number of dismissals of the employees involved and some cases even went to trial. The whole business had to be addressed by the Board of Customs and Excise.

Sailing along the unsheltered Norwegian coast whether to Glomfjord, Mo i Rana or Herøya, was most satisfactory and without any major incidents. Although in some of the coldest winters with plenty of storms and extreme cold the ships sometimes approached Herøya heavily icebound and carrying several extra tonnes on the deck.

Captain B. Hauff Gundersen tells about a voyage when his ship approached Kristiansand and she was flooded by water and swept in bitter cold. Ice formed all over the ship in thick layers. These layers, which were later estimated to approximately 150 tonnes had an impact on the stability of the ship. 15 men from Eidanger Salpeterfabriker, in addition to the crew, spent an entire day removing the ice.

When it comes to more serious incidents, MT "Herøya" was once on her way from Norway to Iceland with a full cargo of ammonia. She was surprised by a storm and her wheel house was smashed in. With good assistance from a skilled crew, they managed to utilise some wood boards and tarpaulin and covered up the wheel house. This sufficed until they reached Reykjavik safely where the extensive damages were



temporarily fixed before the ship returned to Herøya and had permanent repair work done.

MT “Hydro” was chartered for a voyage to Houston, USA carrying a shipment of EDC gas. The ship was not originally designed for this purpose and the shippers almost popped their eyes when they saw her. On her way home she telegraphed the following message to the shipping office: “It is like sailing a bomb”. Fortunately, all went well.

One time MT “Herøya” also carried ammonia to Egypt. The vessel was not constructed to sail in these hot parts of the world and the cargo needed a certain temperature. All the cabins were equipped with fans.

Now, the vessels were also sailing to English and Dutch ports.

It was decided in 1963, that removing the 27 vertical loading tanks on “Herøya” and “Haugvik” would be quite practical and profitable and substituted by 6 larger horizontal tanks. This was done at Aker Mek. Verksted in Oslo.

Later one decided to automate the engine room on “Haugvik” in order to monitor it from the bridge. “Haugvik” became the very first fully automated vessel in the Norwegian merchant fleet and sailing with an EO certificate. This was a result of the co-operation between Det norske Veritas and the Instruments department at Eidanger Salpeterfabriker. Hydro Tankships was also in this respect pioneers.

With “Haugvik”’s EO certificate the crew was reduced as well. The ship was later renamed “Haug” and used for storage in Glomfjord.

MT “Hydro” was considered to be rebuilt into an ordinary tanker in 1969. However the cost for this project was regarded as too large. The vessel was in later years more and more frequently laid-up at Menstad and subsequently sold to Bergen.



## FURTHER DEVELOPMENT OF THE SHIPPING COMPANY

Inspector H.J. Trovik retired in 1972, and ships superintendent E.S Rydin was hired. The company board initiated a number of projects to explore the possibilities of being involved in other ship tonnage than ammonia ships. This work was given preference to and a co-operation with the Transport department in the Hydro Agriculture Division was instigated.

### I/S PALLEBÅTER

The Transport department in Hydro Agriculture Division had for quite some time been doing extensive development of new and effective transport systems in order to rationalise the shipping of fertiliser products, including vessels with side ports and later bulk vessels. Regarding the side port vessels loading and discharging was meant to include two forklifts in the ship's hold and two, or more forklifts on shore.



*The company inspector E. S. Rydin*

In 1969 this planning was in such progress that a new company was established. I/S Pallebåter was the name of the company and Hydro Tankships A/S had an ownership share of 50% and Seatrans in Bergen had 50%. Hydro Tankships A/S held the chairman of the board, represented by assistant manager E.W. Smith.

Two pallet vessels were ordered at A/S Båtservice in Mandal. The loading capacity had to be approximately 1000 tonnes. The first vessel was named "Knardal", and was put in operation in 1969. The second one was named "Fykan" and was operating from 1970.

These vessels sailed to southern Sweden and Denmark, but also to Glomfjord. Already six months later the company decided to build another 3 pallet vessels with larger loading capacity. This proved the efficiency of

the vessels. The last three pallet vessels were named "Klevstrand" (1971), "Ulriken" (1972) and "Livarden" (1973).



*Knardal*

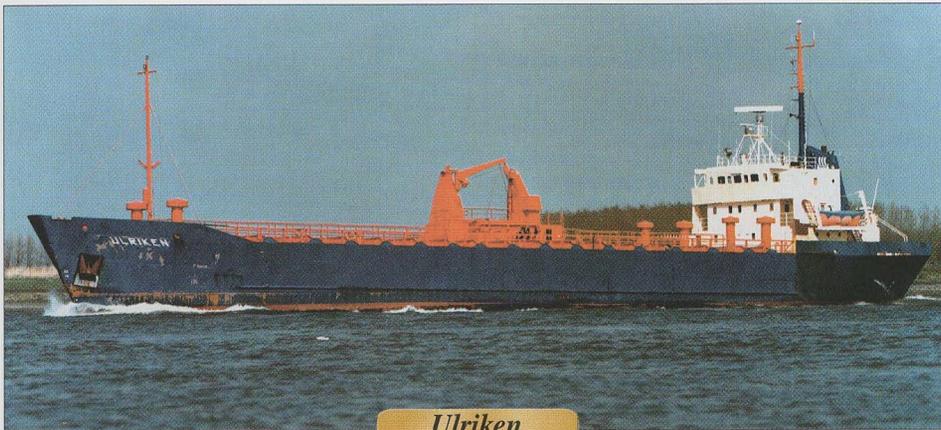
The house journal "På Herøya" wrote that after ten years of operating these five vessels, they had covered a total of 600,000 nautical miles which is equivalent to 25 trips around the world at the Equator.



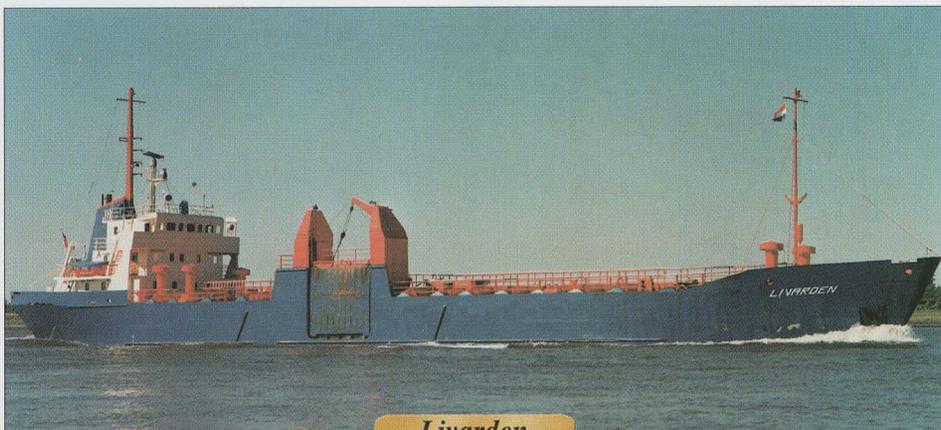
*Fykan*



*Klevstrand*



*Ulriken*



*Livarden*

The pallet vessels had with over 5000 voyages totally carried 5,000,000 tonnes of cargo. This was equivalent to three to four years production of fertiliser at Porsgrunn plant.

With the pallet vessels a new kind of effectiveness was initiated in shipping at Hydro's plants at Herøya and Glomfjord. This took place without jeopardising customer service who actually had the goods in their desired packaging, delivered at the doorstep.

In Scandinavia during the 1980'ies, fertiliser shipping turned gradually away from goods on pallets to bulk shipments. Demand for product to be shipped on the 5 pallet vessels was reduced, and it was clear that these vessels would not be profitable for Hydro Agriculture Division. It was therefore decided to sell the ships.

## NEW OFFICES FOR THE COMPANY

With a new manager of the shipping company E.S Rydin, several new areas of business were discussed. Rydin worked closely with Hydro Tankships board of directors and was granted an extended authorisation. The company policy was on several occasions discussed and revised. This resulted in the company becoming more that of a regular shipping company in practical as well as economical sense.

This again, led to expansion of the administration to include payroll, crewing, personnel, ship operation and technical management of vessels - i.e. a full ship management company.

The accounting was still being done by the Accounts department at Porsgrunn Fabrikker, and controlled by Hydro Internal Auditing. Spare parts storage was still maintained at Herøya.

The company name was changed from Hydro Tankships A/S to *Hydroship a.s.*, because this new name was more representative of the present operation due to the pallet vessels and the bulk vessels that now were a part of the company.

In 1977 it was decided that all vessels in the company should be transferred from the shipping register in Oslo to the shipping register in Porsgrunn and thus all vessels would have the name "Porsgrunn" on the stern.

In 1985 the offices at Storgt. 96 in Porsgrunn were expanded. When the joint venture with Seatrans ceased in 1987 the employees of I/S Pallebåter were transferred to the office in Porsgrunn. The only remaining pallet ships were "Livarden" and "Ulriken". These vessels had been made longer and thus had an increased loading capacity of 1000 to 1600 tonnes. The ships had also in recent years carried fertiliser in big-bags. The engine of M/V "Ulriken" had moreover been converted into running on heavy oil.

In 1985 the ferries on Tinnsjøen were exempted from carrying passengers. In order to rationalise the running of the ferries Hydroship a.s was asked to assist. This was a difficult job partly due to the special rights that the ferries had achieved through a number of business years and these rights were somewhat uncommon in regular shipping industry.

At the same time the computer age emerged and the very first PCs were utilised in the mid-1980'ies. Shortly after that accounting became computerised.

The offices at Storgt. 96 soon became too small and the possibilities for expansion were limited and expensive. The company therefore needed to look for a larger and better office. At this time Storgt. 101 was under construction and a rental agreement for the entire top floor was signed. A new and extended agreement was signed in 1988 and this lasted to March 1999.

With ever increasing activity and need for larger offices a search for new office premises in the Grenland area started in 1997. The lease agreement in Storgt. 101 would expire at the end of 1998. Several projects were evaluated and the conclusion was to enter into a lease agreement with Herøya Næringspark, right outside the factory gates at Herøya.

# S H I P C R E W S

A good crew is crucial to successful shipping. The company was already at the start in 1949 fortunate to have competent officers and crew. For seamen it was considered an advantage to be hired on the company's vessels particularly because the ships frequently called at Herøya and the crew could then visit their families more often. It was also considered quite a benefit to become a member of Norsk Hydro's pension fund. This was especially important to the officers, younger crew were not too preoccupied with the matter.

We can look upon 50 years of operation with good seamen on board our vessels with a specific responsibility for a dangerous cargo. The operation has been spared of any major accidents thanks to responsible crew members.

Hydroship was also fortunate in the early years to have opportunity to borrow seamen from the Herøya plant as temporary crew. The job situation on shore contributed to how easily the Seaman's offices could get access to necessary crew.

Drinking, out-sailing and some smuggling were the few difficulties that the company has experienced. Smuggling in particular resulted in dismissals of crew sailing on the Bremerhaven voyages. From then on everyone on board had to sign a paper stating that any violation of this kind would lead to immediate discharge.

## *On the subject of food*

*There was this crewman who was very fond of food, he really liked to eat, but hated fish! One day he asked the cook about dinner; "What are we having today?" The reply was; "Steamed cod". This was not the answer the man wanted to hear, and he got really annoyed because he didn't want to eat fish. He retreated to the engine room where he had hidden a primus stove and lit it, a rather risky activity and cooked his own dinner. Later on he met another crewman and this guy says: "To night we had a great dinner. It was so good." The fish hater asked what he had eaten. "Meatballs"; came the reply. Now the fish hater really got upset, the cook had played him a prank!*

## *The big eater*

*On one of the ship they had a crewman who was a real big eater, something his bodysize gave rather large evidence to. One day he is on the bridge when captain Krane notice that he is eating something. "What are you doing, eating?": asks the captain. "Yes, sure, I'm eating hashed lungs. You want some? I've got more in my pocket": came the reply!*

Co-operation with the various seamen's organisations and the company was good, but selling ships could lead to difficulties. At that time the problem was solved by utilising the principle of seniority or by employing surplus crew in the company on shore. However, the transition from NOR to NIS (Norwegian International Shipping Register) was somewhat difficult.

At the end of the 1980'ies it proved very hard to run a Norwegian shipping company profitably in competition with foreign companies who had low-salary crews, less overtime pay and fewer social benefits. People used to joke about how they were writing up overtime hours with a fork! Seen through the company's eyes one did not get satisfactory maintenance work performed compared to the hours of overtime paid.

The new acquisitions "Haugvik" and "Hydro" (see chapter "The vessels of the company") were transferred to NIS regulations after some negotiation with the seamen's organisations. One agreed among other things, that all former employees with membership in Norsk Hydro's pension fund would keep their rights, while new employees would follow NIS regulations.

In 1991 the company signed a contract with Havtor in Manila regarding hiring Philippine crews for the vessels.

The average operating cost was somewhat higher in Hydroship compared to other shipping companies. This was mainly due to relatively more expensive purchases in Norway, for instance food.

Several of the company's officers have received the Royal Norwegian Society for Development (Norges Vels) medal for their dedication to the company for over 25 years. Represented by:  
Captain Einar Paulsen, Captain Øystein Storhaug and Captain Magnus Mikkelsen.

The Norwegian Shipowners Association's Gold Medal has been rewarded:

Captain Einar Paulsen, Captain Øystein Storhaug, Captain L. E. Larsen and Mate S. E. Økland.



*Awarding the Norwegian Shipowners Association's Gold Medal, 6 November 1989. From the left Captain Ø. Storhaug, Managing Director D. Nilsen and Captain E. Paulsen.*



*Norwegian Shipowners Association's Gold Medal awarded 11 January 1986. From the left Captain Leif E. Larsen and Managing Director Dag Henrik Nilsen.*



It is interesting to note how several of our employees have been, and still are, true to tradition. Captain Einar Paulsen's father was for many years on board MT "Klor", one of the company's first ships. Bjarte Furevik's father, on the other hand, sailed on M/V "Skaanen".

We had extensive co-operation with the Norwegian Government Seamen's Service, particularly when ships were in international trade. Ships crew often participated in seamen's sports at international ports, and the company's crew and ships achieved a number of prizes. Rotterdam, Shellhaven and Stanford Le Hope were places where competitions were held. If other ships were in at the same time, it was possible to have soccer matches. MT "Herøya" under the supervision of Captain Krane won several prizes. Evidence of this sportsmanship is the collection of prizes at the company office at Herøya.

For Christmas our ships would carry a Christmas tree to the local Norwegian Seamen's Church in England.

## *On a bicycle ride...*

*The company crew considered going from domestic to international trade a great pleasure. Especially, going on shore in England had its advantages to the crew. There was this electrician who often went shopping on shore, sometimes venturing to London. He had a bicycle and found Englishmen to be extremely nice people. They used to wave to him whenever he came riding along on his bike.*

*The truth was that they were shaking their fists at him. He wasn't aware of the English system of left-hand driving! Especially, in traffic roundabouts this caused problems and the other road users were showing their frustration.*



# T I M E   C H A R T E R E D   V E S S E L S

Over the years, Norsk Hydro has had a number of vessels on time charter (T/C). Some of them were managed by Hydro Tankships A/S or just under the operative control of the company.

The company had since the early sixties a number of time chartered small vessels utilised for trade of bagged cargo to Denmark. These vessels were operated by the External Transport section in Oslo on behalf of Hydrotank. Examples of these were "Thurø", "Giesela Happke", "Schlesvig Holstein" and "Münsterland". The latter disappeared rather mysteriously. After leaving Herøya fully laden, the vessel sunk. The only piece found from the shipwreck right outside our own coast was the wheel house.

The T/C vessels were bunkering gas oil from the Hydro installation at Herøya. We were quite amazed to discover that the bunker consumption on one vessel in particular, was disproportionately high and not corresponding to the charter party. When looking into this matter it turned out that the vessel sold some of our gas oil to another bunkering installation.

As previously mentioned in addition to these ships the company had time chartered smaller tankers during the spring to carry ammonia to Denmark.

Among the time chartered vessels M/V "Rognes" is worth mentioning. When building the chlorine factory at Rafnes, Hydro needed a bigger vessel in order to carry larger quantities of salt from Delfzijl in Holland. M/V "Rognes" owned by the shipping company K/S Kristian Jebsen in Bergen was time chartered for a ten years period from 1977. The vessel was 6200 DWT and had to be equipped with a mobile ship crane. The total cost of the selfdischarging equipment was estimated to NOK 2.3 million. However, the selfdischarging equipment caused great problems and was taken ashore in 1979, afterwards shore cranes were utilised.

Other T/C vessels worth mentioning are the LPG (Liquid Petroleum Gas) tankers "Hemina" and "Hestia", plus "Fernwave", M/S "Langeland" and "Eken". All of them were operated by Hydrotank in co-operation with the various departments from the Hydro head office.



# THE HYDRO AGENCY GROUP (THAG)

During the first couple of years and the transition into international trade the company became dependent on agency services for Hydrotank's vessels. At first it was natural to use Eidanger Salpeterfabrikers Ekspedisjon 2 for the clearance. This was the procedure running from 1956 up to 1st of November 1970, when a separate business unit was established; the Clearance Services, later renamed Hydroship Agencies at Herøya. This unit operated as a regular port agency and competed with corresponding companies in Grenland area.

When the installation at Rafnes was ready for operation the cargo volume increased significantly and the agency at Herøya is currently handling 1300 to 1400 ship calls annually.

After some discussion the Hydroship Agencies were transferred to Hydroship in 1989. The opinion was that Hydroship was more capable than the factory at Herøya to run the agency service, because of the better understanding for shipping and greater possibility to promote this service also to external customers. The development of the agency unit was very positive and profitable.

On the basis of experiences from Herøya agency department the company discovered a possibility to initiate agency services in other ports in the Hydro system. The first choice was Brunsbüttel in Germany. After long and numerous discussions Hydroship Deutschland was established in 1994. An enterprise which has had a positive development and achieved a large market share in this field in Germany.

Further expansion was required in Antwerpen and Sluiskil. In 1995 Hydroship purchased shares in a shipping agency company owned by Nesté Finland. However the following year Nesté wanted to sell their share. Hydro took over the entire company, renamed Polaris and restructured it with the goal of more intensive marketing in order to gain more striking power in Sluiskil, which so far has been successful.

Today Polaris in Antwerpen/Sluiskil is involved in a major part of Hydro's port activity. In 1997, Hydroship established a joint venture agency in Rostock; Baltimar together with the shipping company Essberger of Hamburg.

Similar joint venture was established in Brevik in co-operation with Høyer-group, a shipping company in Porsgrunn.

Due to Hydro's increased and extensive cargo volume world-wide, Hydroship is continuously considering the possibility of expanding the agency segment. The Philippines has also been incorporated with a main office in Manila.

These agency offices's main goal is to improve Hydro's port efficiency, cut cost and time by handling ships and cargo in a professional manner, as well as provide service to external clients.

The ship agency activity is assembled under the umbrella The Hydro Agency Group (THAG).

# THE RECENT ACTIVE YEARS

## Increased activity and development and the administration

**H**ydroship a.s. has over the years gone through a number of corporate administrative changes. The question of where the shipping company belongs in the Hydro system has been discussed several times. The answers have varied, including attaching the company to the following sections: Transport, Technical, Finance, and at the beginning even Rjukanbanen (the Rjukan railway) was in the picture.

The following resolutions was made by the board in 1987:

*"Hydroship has still today its organisational adherence to one of the corporate staffs. This is no longer a natural arrangement for an active unit like Hydroship. The natural solution for Hydroship is to be linked to one of the operative units, in accordance with the present organisational structure of the corporate.*

*Hydroship provides its services to several units and divisions, and should therefore be subordinate to one of these divisions.*

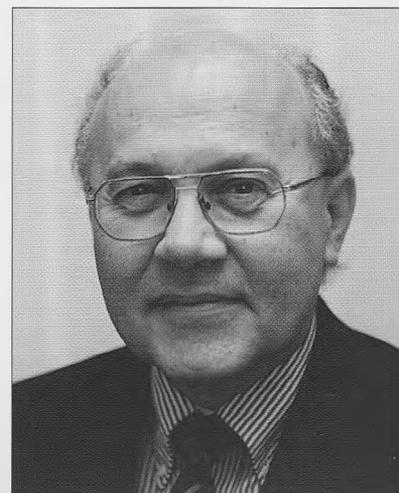
*The fact that is normally employed in these situations is "the principle of the largest user". Which means that the unit is included in the subdivision or division which is the largest user of the unit's products or services. In Hydroship's case, this is clearly the Hydro Agri Division.*

*In light of this the decision has been made that Hydroship's organisational affiliation in the future will be with the Hydro Agri Division and managing director Odd Grønlie will have the direct supervisory responsibility for Hydroship."*

When Hydroship a.s. was integrated into The Agriculture Division in 1987 Dag Henrik Nilsen from the head office was given the task of supervising and establishing a new strategy. The goal was to integrate and strengthen the maritime know-how of the shipping company. In addition the company should develop new business concepts related to shipping.

In order to achieve better control and supervision it was decided to transfer the accounting from Hydro Porsgrunn to the Hydroship's office at Storgaten in Porsgrunn. A new chart of accounts was established in order to develop a more detailed economical control of each vessel. The work on the budget was going to be more simplified and in accordance to each vessel's plan of operation.

Focus and priority was put on manning of the vessels. A number of seamen had long sea service and would in a short time be ready for retirement. To strengthen recruitment and further education of crews the maritime part of the organisation received new employees. Further training schemes were made for the seamen in preparation to run the most advanced vessels in the years to come.



*Managing Director Dag Henrik Nilsen*

In 1991 the Hydroship's fleet consisted of: MT "Hydro", LPG/C "Haugvik", M/V "Livarden", "Ulriken" and "Hydrobulk". In addition, Norsk Hydro had two LPG/C ships, "Havis" and "Viragas", under the management of Havtor, Oslo. Later on that same year, the company purchased LPG/C "Tarquin Ranger". The vessel was at that time operating in the LPG trade between Venezuela and the US Gulf. This purchase was based on the vessel's size and the fact that she had ice class in order to cover the ammonia transport in the Baltic Sea to Hydro's plants in Köping and Landskrona, Sweden. The vessel was renamed "Balina", and is still trading.

When the shipping industry was forced to reduce vessels operating costs, one had no other choice than to replace some of the subordinate crew with "low-cost" crew. This work was carried out in a professional manner, though not totally without difficulties. However, one ship with an all-Norwegian crew was kept, in order to be utilised as recruitment for training of Norwegian seamen. This way the company was able to offer young people still in school and in training the sailing time necessary to obtain certificates.

A separate training vessel proved to be important due to the lack of qualified Norwegian seamen. With such an engagement the company was capable of recruiting seamen from maritime schools. The company also supported the seamen during training. Several of the company's captains and officers have been "piloted" all the way from school to work onboard Hydroship's vessels.

During this period the company had very limited resources. With increased activity comprising more ships the increased demand for maintenance systems, quality assurance and a closer supervision of the ships, it became necessary to reinforce the technical segment of the company. In 1992 the technical department was fully developed consisting of staff and systems ready to handle 10 vessels.

Since Hydroship was an integrated part of the Agriculture Division in Hydro and the division extended their shipping engagement by obtaining LPG/ammonia and bulk dry cargo vessels, Hydroship's task was consequently extended to include full ship management of the vessels which previously had been outsourced to external ship management companies.

Hydroship was continuously maintaining a good relationship with Petrochemicals and the oil and gas Refining and Marketing divisions. The company executed the operation of time chartered vessels for these divisions. In addition Hydroship had their own six to seven ships to manage, charter and operate. Hydroship was acting as a shipping consultant to both divisions and was also supervising a product tanker built in Taiwan fixed on a five-year time charter period for the Refining and Marketing Division.

A crewing company, Norteam Shipping Services Inc. was established in Manila in 1996. The motive behind this was to secure quality and stable recruitment of Philippine seamen at competitive cost. This initiative was triggered by the ever rising problems of recruiting skilled personnel. The result was a satisfactory control of training and selection of qualified Philippine seamen who were going to be hired onboard our vessels.

## **BULK SHIPPING**

Since Hydro had a great demand to carry raw materials and finished products in bulk vessels, a shipping strategy stated an engagement in dry bulk shipping. Vessels were bought in order to hedge against an increasingly cyclic freight market. In order to achieve favourable market opportunities the vessels were participating in so-called "pools", where some shipping companies established a commercial pool arrange-

ment in order to take advantage of having several ships to operate together. Our bulk ships were joined in pools with Jebsens in Bergen, and Ugland in Grimstad.

### **AMMONIA SHIPPING OSLO**

Hydro Agri International, Ammonia Trade and Shipping decided in 1995 to order two 18,000 m<sup>3</sup> LPG/Ammonia ships at the Hitachi Zosen Shipyard in Ariake, Japan. These ships were tailor-made and optimal for the ammonia market. Hydroship was in charge of the construction, the technical supervision and also management of the vessels after delivery from the yard. The first vessel, MT "Agri Viking", was delivered in March 1997, the second vessel, MT "Euro Viking" was delivered in September the same year.

In 1996 it was decided to divide Hydroship in two businesses :

Hydroship a.s: Ship-owning company. No employees.

Hydroship Services AS: Executive part of the shipping activity, consisting of ship management (technical & crewing), chartering, ships operation and agency. Employer.

In 1998, Roald Nystad became the manager of Hydroship Services, and given the task of restructuring the organisation and implement new working methods in order to improve efficiency, reduce cost and benchmark the activity.

A number of improvements has been achieved over the past years, which has created a very positive financial result:

Joint and separate shipping conferences were implemented for both Philipinos and Scandinavians.

Active crew and officer initiatives with strong focus on competence building.

The company's own in-house journal "HSS News – bulletin" was born.

Communication between ships and the office was prioritised and improved.

It is important that the organisation on shore and the officers on board have a very close and open communication, despite the world-wide trade.

During the last decade of development, a pronounced name has been and still is; Almar Kylling, Senior Vice President Hydro Agri International. He is in charge of



*Managing Director Roald Nystad*



*From left Roald Nystad, Almar Kylling, Chairman Audun Sjørbotten, Per Svanes and Larry Carbonneau.*

Norsk Hydro's unit of global ammonia trading at sea, Ammonia Trade and Shipping. Over the years, he has been a decisive personality in the development of the shipping company.

From 1988 to 1999, the company was located at Storgt. 101 in Porsgrunn. In the spring of 1999, the year of the 50 years anniversary, the company moved to new premises at Herøya Næringspark.

The Hydroship board in 1999, consists of:

Audun Sjørbotten, Chairman  
Almar Kylling  
Larry Carbonneau  
Per Svanes  
Roald Nystad

We began this anniversary book by telling the history about the company's first vessel and the launching in Horten in 1949. It is therefore a pleasure to end the narrative with a description of the naming ceremony of "Agri Viking" in Japan, 12th of February 1997.

# VIKING LADY OF ARIAKE

*H*ydroship's first new construction in 17 years was named on 12 February 1997 at the Hitachi Zosen yard in Ariake, Japan. The vessel's sponsor was Anne Helene Myklebust and the ship was named MT "Agri Viking".

Present at the naming ceremony were representatives from the Hitachi corporation and Hydro's management and board of directors, representatives from the Norwegian Embassy and Consulate General in Japan, subcontractors for the new vessel, and Hydro's business associates in Asia.

Reporter Kari Wennerås describes "Agri Viking" this way in Hydro corporate newspaper "Profil":

"She is a beautiful sight, tied up to the quay at Ariake, awaiting the distinguished guests; her shape soft and round, painted a lovely Hydro-blue. But appearances can be deceptive, because this is one tough "lady" who can enter any Hydro port, from the Baltic to the Caribbean. And if necessary force her way through one meter thick sea-ice.

Audun Sørbotten, President of Hydro Agri International (HAI), states that, "Agri Viking" will make HAI's global ammonia and gas transport safer, more flexible and cost efficient. Larry Carbonneau, maritime manager of HAI, adds that the vessel with a capacity of 18,000 m<sup>3</sup>, can also carry LPG and petroleum gases, consumes far less fuel than similar vessels.

Compared to the vessels of competitors our fleet is of a high standard, states Almar Kylling, the manager of HAI Ammonia Trade and Shipping, which operates more than 15 gas tankers running continuously between 14 Hydro terminals and other ammonia terminals all over the world.

Harald Clausen, the captain, agrees that the vessel is very solid. He is one of three Norwegian officers on the vessel. He has been supervising the work in the shipyard for more than two months, and will join "Agri Viking" for a couple of weeks on her maiden voyage before he returns to Ariake and the completion of the sister vessel, HAI's 16th gas tanker."

"Euro Viking", the sister vessel was named at the same place with equal celebration on 2 October 1997. She was ready to sail and the guests had barely come on shore before she commenced her maiden voyage to Singapore.

With these two vessels in the fleet, Hydroship is sailing into the next millennium.



*Agri Viking*

# P O S T S C R I P T

**N**early 50 years have past between the very first new constructions at Marinens Hovedverft (the Norwegian naval yard) in Horten, and the building of “Agri Viking” and “Euro Viking” in 1997 in Japan. Many nautical miles separate the two events. Large quantities of cargo have been carried and many skilled seamen have served on Hydroship’s vessels.

In December 1998 it was decided to build a new vessel in order to replace the then 22-year old “Balina”, which had operated in the Baltic and sailed on the Swedish lake Mälaren, in order to reach Hydro’s fertiliser plant in Köping. The new vessel was ordered from Daewoo, Korea, and she is specially designed for carrying ammonia in the area of the North Sea and the Baltic Sea. The new vessel will have a capacity of 6,000m<sup>3</sup> and will be delivered September 2000.

*Large quantities of cargo have been carried and many skilled seamen have served on Hydroship’s vessels.*



As it appears in this book Hydroship has had a proactive part in the Norwegian shipping industry. The company was the first to carry large quantities of chlorine at sea.

Hydroship was also the first to carry liquid ammonia on tankers. MT “Haugvik” was apparently the first fully automated vessel of the Norwegian merchant fleet. The company was an innovator with its side port vessels for palletised cargo, and selfdischargers within the dry bulk segment. For a while the company was also a co-owner in the world’s largest ammonia tanker, the “Kristian Birkeland”. All successive tankers have held a high quality standard.

Naturally, it has been expensive to be a pioneer in these costly areas of investment. Reorganisation and development can backfire. But overall, the company has to be given credit for conducting the shipping activity in an efficient manner for the benefit of the Hydro corporation.

The shipping business is cyclic, and during the past few years, the company has experienced a downturn in the freight market, resulting in lower profits. This triggered the company into selling vessels; 2 in 1998 and 1 in 1999 in order to reduce the company’s involvement in dry cargo. In addition 1 ammonia vessels has been sold in 1999.

During the course of Hydroship's 50 years a total of 38 vessels have been in the company's possession. In the year of the anniversary the company is managing eight vessels, two bulk carriers, and six LPG/C ships. In addition, the company is operating seven ships on behalf of Hydro's Refining and Marketing Division and Petrochemical Division.

In the year 1999, the company employs 17 people ashore and close to 250 at sea.

COMPANY FLAGS AND LOGOS

