

SHELL'S LAKE MARACAIBO TANKERS

BY M. H. PRYCE

At the beginning of the century, Shell obtained concessions around the oil rich Lake Maracaibo, in Venezuela, but shallow water in the forty mile long narrows joining the Gulf of Maracaibo with Lake Maracaibo prevented deep draught ships from entering. The use of small tankers to transport the oil for long distances was obviously not economic, so the solution found was to build a refinery on the island of Curacao in 1915, and transport crude oil to Curacao in shallow draught tankers. After refining at Curacao, the oil was then shipped out in larger ocean-going tankers.

Curacao, lying off the Venezuelan coast, is the largest of the Netherlands Antilles group, which consists of six islands, namely Aruba, Bonaire, Curacao, Saba, St. Maarten, and St. Eustatius. First discovered in 1499 by the Spanish navigator Alonso de Ojeda, the island remained in Spanish hands until its capture by the Dutch in 1634. In its early history, the islands prosperity depended on its participation in the slave trade, but its abolition by King William III of the Netherlands in 1863 deprived the island of much of its importance, which was not regained until the refinery was built in 1915. The oil installations were built on the shores of the Schottegat, a large irregular shaped bay entered through a narrow channel which bisects Willemstad, the islands capital. The town is joined by the "Queen Emma" floating pontoon bridge, which opens to allow shipping to pass in and out. Ships waiting to enter the harbour have to steam slowly off the entrance, as the water is too deep to permit anchoring.

Curacaosche Scheepvaart Maatschappij (C.S.M.) came into being in 1917 with two sea-going tugs and two lighters, which had a carrying capacity of 300 tons each, and the round trip, Curacao-San Lorenzo-Curacao, took seven or eight days. After the first world war, several H.M. Monitors were bought and converted into tankers in 1920, their wide beam and shallow draught making them ideal for service on the lake. The monitors M16, M18, M20, M24, M26,

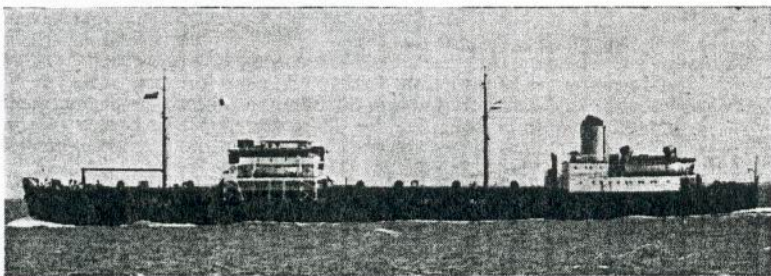
and M32 were converted, M24 and M26 becoming DOEWA and SATOR (quadruple screw motorships), whilst two of the others became DELAPAN and LIMA (twin-screw motorships). After conversion, all were of about 500 tons gross.

These and early additions to the fleet had to be sent annually either to Trinidad or Panama for drydocking and refit, and this was continued after an abortive trial of the nearer port of Puerto Cabello, on the north Venezuelan coast, where facilities were found to be inadequate.

In 1923, a start was made on building tankers designed for service on Lake Maracaibo. The tankers built between 1923 and 1928 were similar sized trunk deck ships with a small bridge midships, and twin-screw steam reciprocating engines for easy handling in the narrow channels entering the lake.

The first were the Amsterdam built JUANITA, 2042/23, JULIETA, 2746/24, and the JUSTINA, 2700/24. Next came the British built CARLOTA, 2696/24, CASANDRA, 2706/24, CONCHITA, 2702/24, and CHEPITA, 2702/24, and Dutch built MARIQUITA, 2047/23, MANUELA, 2676/24, MARSELLA, 2698/24, MARTINA, 2698/24, MARIANA, 2682/25, MARTICIA, 2679/25, MARUJA, 2681/25, MAXIMINA, 2679/25, and MATILDE, 2601/26. Two ships, FELIPA, 2683/25, and FRASCA, 2602/26, were built at Schiedam.

Between 1926-28, the Monfalcone built LUCITA, 2604/26, LEONOR, 2582/28, LETICIA, 2580/28 and LUCRECIA, 2584/28 were added, plus the Belfast built BERTA, 2611/27 and sister BRIGIDIA, 2609/27. To complete the first building programme, the ELENA, 2609/28, was built at Kiel, JOSEFINA, 2594/28, and JULIANA, 2587/28, at Amsterdam, and ACOSTA, 2634/28, ALICIA, 2694/28, and ADELA, 2696/28, at Newcastle.



GYROTOMA

Photograph by Alex Duncan

To solve the problem of sending the ships long distances for drydocking, C.S.M. obtained the 3,000 ton "Koningin Wilhemine" floating drydock in 1926, and the 4,000 ton "Juliana" floating drydock in 1929. Sited in Curacao, these docks were designed to meet all the requirements of the lake tankers, and greatly reduced the time wasted when docking was needed.

The port of San Nicolas, Aruba, had similar beginnings as Curacao. Oil produced by the Lago Petroleum Co. ("lago" means lake in Spanish) in Maracaibo needed a shipping terminal, and Aruba, eighteen miles off the Venezuelan coast, was chosen in 1925. Two small tankers were sent out from England to haul crude from Maracaibo to Aruba, and by 1927, lake-type tankers were carrying crude to San Nicolas harbour for trans-shipment to refining centres in other parts of the world. In 1927, plans were made to build a refinery on Aruba, and this came "on stream" in 1929. In 1932, the Aruba operations were bought by Standard Oil Co. (N.J.), who expanded the refinery and terminals to their present size.

Further additions to the Shell fleet came between 1935-38, when the British and Dutch built "R" class ships were completed. These were ROSA, 3145/35, RITA, 3145/35, RAMONA, 3163/36, RENATA, 3155/36, RODAS, 3176/36, ROSAURA, 3173/37, REBECA, 3176/38, RAFAELA, 3177/38, ROSALIA, 3200/38, and RUFINA, 3173/37. The "R" class were the largest tankers built yet for service in Lake Maracaibo, and had a deadweight of 4,000 tons.

Crude oil carried by the Shell ships was loaded at Cabimas, Tia Juana, Lagunillas Bachequero and San Lorenzo, on the eastern side of the lake, Boca, at the southern end, and Punta de Piedros, on the western side.

War losses of the lake fleet included JUSTINA, sunk by collision in 1944, LETICIA and LUCRECIA, torpedoed in the Atlantic whilst being transferred for service in Europe, and ROSALIA, torpedoed off Curacao in 1943. Both Aruba and Curacao played an important part in the war, supplying vast quantities of fuel and lubricants, and to help overworked shipyards elsewhere, the Beatrix graving dock was built at Curacao, able to take ships of up to 600 feet in length.

After the war, a large replacement programme was undertaken to replace outdated tonnage and ships lost during the war. Increased demand for oil also required more tankers, and between 1946-51, the British built GOULDIA, 5557/46, GALEOMMA, 5437/46, GANESSELLA, 5557/46, GEOMITRA, 5557/46, GARI, 5437/47, GENA, 5557/47, GOMPHINA, 5437/48, GASTRANA, 5437/49, GLESSULA, 5437/49, GEMMA, 5439/49, GYROTOMA, 5930/50, and GENOTA, 6300/51, joined the lake fleet. In addition, six U.S. built craft were converted into tankers in 1949, and became LEONA, 3217/43, LINDA, 3218/43, LUCIA, 3218/43, LUISA, 3217/43, LIDIA, 3217/43, and LAURA, 3217/42. When the new ships entered service, some of the older tankers were broken-up. In 1953, one was sunk at the entrance to Curacao harbour to shelter inward bound ships from the strong currents running across the entrance.

Between 1953 and 1957, extensive dredging of the channel leading into Lake Maracaibo enabled larger ships to enter the lake and ship crude oil out direct. Curacao's well established refinery made it still economical to refine oil there, but larger ships were used to carry the crude to Curacao. The remaining older ships were broken up at about this time, whilst the newer "G" class were employed elsewhere, mainly in Nigeria and the Far East. Shell's 18,000 ton dwt "H" and "K" class, together with the larger 32,000 ton dwt "V" class, were used to supply Curacao with crude, normally doing only a few trips before resuming normal trading, as operating unmodified ocean-going tankers as coasters was a tiring and unpopular duty.



SHELL NAIGUATA

Photograph by Alex Duncan

In 1960, two 32,000 ton dwt tankers were built on the Clyde for Compania Shell de Venezuela (C.S.V.), the SHELL ARAMARE and SHELL NAIGUATA, designed to supply crude to Curacao and the new refinery at Punta Cardon, Venezuela. In the same year, two 15,000 ton dwt tankers, GAZA and GLEBULA, built in 1954, were renamed SHELL CARICUAO and SHELL CHARAIMA, and two of the "G" class were renamed SHELL MANAURE and SHELL MURACHI (the GENOTA and GYROTOMA). All were owned by C.S.V. and had Venezuelan crews. In 1966, the French-flag ISSELIA, 29313/58, was also transferred and renamed SHELL MARA. Soon after, the SHELL MANAURE was disposed of, leaving the company with six ships. In accordance with Venezuelan law, each ship has its call sign painted on the bow underneath the name.

Today, tankers bound for the lake must still pass through the narrow forty mile long strait, but the channel is constantly dredged to 46 feet now. At the northern end of the strait is San Carlos island, where ships take on a local pilot to take them to the required port. Fifteen miles south of San Carlos is C.S.V.'s terminal at Puerto Miranda, where its larger ships load crude for Curacao and Cardon. Ships going to ports further south must pass under the 4½ mile long Rafael Urdaneta Bridge, spanning the strait ten miles south of Miranda. The modern city of Maracaibo lies four miles north of the bridge. Nine miles south of Maracaibo, and still in the strait, is the tanker loading platform at Bajo Grande, whilst the first ports reached actually in the lake are Cabimas and La

Salina. Cabimas has two sets of mooring buoys two miles offshore, where tankers load via a submerged pipeline. At La Salina is the Creole Loading Platform, and the Creole New Terminal, which can handle the largest tankers able to navigate the dredged channel.

The ports further south (from Maracaibo, Lagunillas-37 miles S.E., Bachaquero-50 miles S.E., and San Lorenzo-60 miles S.E.) have to be reached via a shipping channel marked by buoys, which passes due east down the centre of the lake, then east to the appropriate port, as the eastern area of the lake is crowded with oil rigs and associated structures. The southernmost port is Coloncha, 86 miles south of Maracaibo, where tankers load at buoys.

Much Venezuelan oil is refined in the country now, at two refineries on the eastern shore of the Gulf of Maracaibo, at Punta Cardon, where C.S.V. has four oil piers, and Amuay Bay, seven miles north where Esso operate a similar size terminal.

The depths in the channel are maintained by two dredgers, the maximum 28,700 ton displacement suction dredger ZULIA and the much smaller cutter dredger CHIQUINQUIRA. Plans are underway to further deepen the channel to allow fully loaded 70,000 ton dwt tankers to use Puerto Miranda.

The need for shallow draught tankers has now passed, but C.S.V.'s three large ships are still special in that they are used as coasters, and spend 50 per cent of their time in port handling cargo. As they are on short haul trips (Puerto Miranda to Cardon is 105 miles, Puerto Miranda to Curacao is 220 miles) the ships have a larger than normal pumping capacity to save time discharging.

Of the old small ship lake fleet, only one now remains, the RITA, which is still in use as a bunker ship (with the engines and stern removed) at Singapore.