

HYDROFOLS WITH RODRIQUEZ HYDROFOLS

Starting with this issue, the paper version (pdf file) of CFF will no longer include news items but focus on specific topics in one or more feature articles or photo reports. Since some time news items and up-dates can be found on the CFF homepage at www.classicfastferries.com

As in the past, the pdf magazine will appear at irregular intervals. The next issue (46) is planned for publication in the second half of November.

t was fifty years ago this past August that the first ever hydrofoil built by Cantiere Navale Leopoldo Rodriquez started a scheduled passenger service across the Straits of Messina.

Developed by Supramar in Switzerland and designated PT.20, the 72-seat Freccia del Sole entered service between Messina in Sicily and Reggio on mainland Italy with Aliscafi Società, an operating company set up by Rodriquez in collaboration with a group of local entrepreneurs.

It was not the first hydrofoil to work commercially altogether though as three years ealier, in May 1953, the Swiss-Italian lake of Lago Maggiore was the scene of the birth of the first fast ferry when a Supramar PT.10 carrying 30 passengers, Freccia d'Oro, commenced a regular passenger service between Locarno, Switzerland and Stresa, Italy.

Shortly after the inauguration of Freccia d'Oro,

Carlo Rodriquez, the son of Leopoldo Rodriquez, visited Lago Maggiore and was thrilled by what he saw. Carlo had taken command of the Rodriquez yard in Messina in 1936, which at the time was a ship repair yard and would later also take on the rebuilding of wrecked railway cars after the war, and was already familiar with and fascinated by the hydrofoil idea.

That same year, 1953, the fist plating was cut for Freccia del Sole. But it was all baby steps in the beginning, and it would be three years before the first PT.20 was up and running. Once the prototype had proved itself however, the building of hydrofoils took off - and at a somewhat quicker pace!

Thus, within the next four years 11 more PT.20s had been completed, as well as five of the larger PT.50, the first of which appeared in 1959.

When production of the PT.20 ceased in 1971,



■ OCTOBER 2006 ■ VOLUME SEVEN

CIVIL HYDROFOILS, HOVERCRAFT & CATAMARANS - THEN AND NOW

EDITOR/PUBLISHER: TIM TIMOLEON | ALL ARTICLES & GRAPHIC DESIGN, EXCEPT WHERE NOTED: TIM TIMOLEON | PUBLISHED IN PDF FORMAT | www.classicfastferries.com | EMAIL : cff@email.dk COPYRIGHT 2000/2006 CLASSIC FAST FERRIES.

COVER PHOTO: The first ever hydrofoil built by Rodriquez, PT.20 Freccia del Sole, entered service across the Straits of Messina in August 1956 / RODRIQUEZ CANTIERI NAVALI photo

only to be replaced by the upgraded RHS 70, a total of 45 units had been delivered worldwide. As for the PT.50, twenty-nine were built up to 1970. It was superseded the following year by the similar-sized but completely modernized and restyled RHS 140.

RHS and MONOHULLS

Having set up a design and reserach office of its own, Rodriquez moved away from its bonds with Supramar, and thus the PT 20 and PT 50, and teamed up with Hamilton Standard, a US based company specializing in the field of electronic systems applications, and in 1971 introduced the RHS series of hydrofoils.

These were very smart-looking vessels, ranging from the 71-seat RHS 70 to the 260-seat RHS 200 (standard configuration). In between these were the RHS 110, RHS 140, RHS 150 (including F, FL and SL versions), RHS 160 and RHS 160F. All types are still on the fleet lists of Italian companies with the exception of the RHS 110, which never entered service with an Italian operator.

The commercial interest in the hydrofoil was at its height in the 1960s and 70s and during those two decades nearly 120 passenger hydrofoils of different sizes and designs and variations came out of the production hall at Rodriquez. In comparison, during the 1980s and 90s forty-four hydrofoils were delivered. Admittedly, from 1992 onwards production was extended to include also passengerand large passenger/vehicle monohulls developed

and designed by the yard. The car-carrying monohulls are not built at the original Messina premises but at another yard in northern Italy.

The move towards monohulls was made in order to compete with Scandinavian (and later Australian) builders of catamarans, a large number of which had been introduced by operators outside of Italy from the mid-seventies and up through the 80s and which had forced the hydrofoil out in the wings.

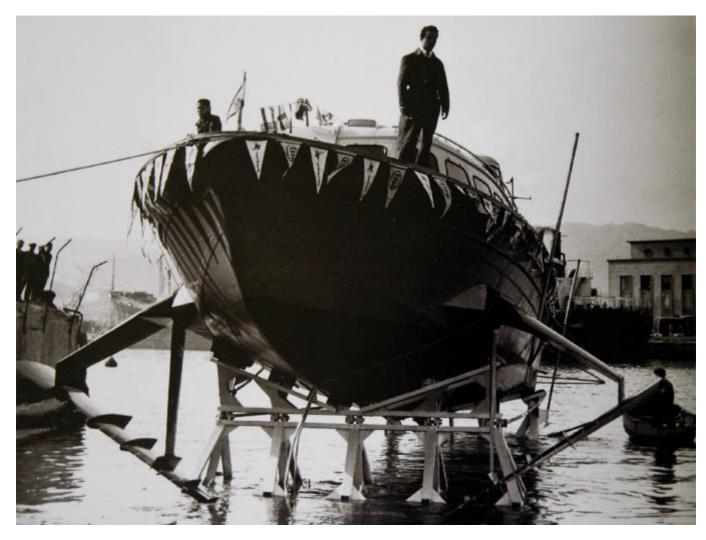
Still, a single passenger catamaran was delivered by Rodriquez in 1993. However, catamarans were reintroduced in the Rodriquez production catalog ten years later with the first units, built in Italy as well as at the company's new yard in Brazil, entering service in the Bay of Naples and Rio in 2004.

... and FOILMASTERS

As for hydrofoils, the only production type being offered at the moment is the Foilmaster, the successor to the RHS 160F of which twenty-one were built between 1984 and 1992. The first Foilmaster entered service in 1994 and to date a total of 12 have been launched, the latest of which in May this year.

All Foilmasters have been ordered by Italian customers. Caremar in Napoli and Siremar in Sicily have taken delivery of seven vessels - all but one only since February 2005 – with the remainder having entered service with Ustica Lines likewise based in Sicily. Currently under construction in Merssina is a sixth Foilmaster for Ustica Lines and the operator has an option for two more.

The first ever hydrofoil built by Rodriquez, PT.20 Freccia del Sole, being launched in Messina in 1956 / RODRIQUEZ CANTIERI NAVALI



50 YEARS RODRIQUEZ HYDROFOILS

In 2004 Rodriquez revealed details about a new hydofoil design with a fully submerged foil system. Up till now only surface piercing designs have been delivered by the yard. The fully submerged foil technique is not new to Rodriquez though as in the 1970s the yard collaborated with Boeing in the US in the building of a non-cicvil hydrofoil design for the Italian Navy and in 1992 it launched the prototype of the so-called Maximum Efficiency Craft (MEC), a new concept vessel which was to have been equipped

knew the architect who had designed it. He was Frederik Lobau, a member of a team of technicians headed by Baron Hans von Schertel who had formed an engineering company, Supramar, in Switzerland.

Shortly thereafter Rodriquez met with Lobau who introduced Carlo to the management of Supramar and an agreement was reached for the construction of the prototype PT.20 at the Messina works under the supervision of Supramar. Supramar, guaranteeing that it would resolve any engineering problems, asked for royalties and also reserved the right to grant licences to other builders. Which Rodriquez accepted, well aware that in its infancy the project could not be lifted by the yard without the know-how and assistance of Supramar.

Having decided upon using aluminum for the hull and steel for the foils and a single MTU diesel for powering, work on the prototype began in 1953. Needless to say, a number of obstacles had to be



The first PT.50 built, Flecha de Oriente, appeared in 1959. Later renamed Freccia di Messina, it ended its days in 1986 following an engine room fire / RODRIQUEZ photo

> with a fully submerged foil system. This was never implemented on the vessel, and only the prototype MEC was ever built (read more in CFF 4 May 2003).

> Nicknamed Alirivoluzionario and financed by the Italian Ministry of Research, the current fully submerged project (CFF 6 November 2004) includes the design and construction of two full-scale prototypes, each with a different propulsion system. These craft are believed to be now also under construction in Messina.

> A lot has been written about Rodriquez and the various hydrofoil designs in previous issues of CFF and elsewhere, and so this report serves merely as a summary and tribute to the shipyard which fifty years after the first PT.20 was launched is still building hydrofoils.

FRECCIA DEL SOLE

In the early 1950s Carlo Rodriquez met with Count Lora Totino, a friend from the days when both were studying in Brussels, who was then an engineer with the Italian state cablecar company. During a visit to the Eolie Islands, off Sicily, Rodriquez and Totino agreed on the need of creating some sort of fast transportation over sea on medium-distances such as that of Messina-Eolie Islands. Rodriquez mentioned an illustration of a hydrofoil boat which he had seen in a newspaper, to which Totino responded that he

overcome by the technicians and workers alike learning by doing was the order of the day.

As the PT.20 approached completion, the interest for the unique vessel grew. Among the curious was the US Navy which sent a team to Messina to inspect the hydrofoil. Trials were successfully carried out in early 1956. Soon after departure from Messina on its maiden trip later that year, laden with various VIPs, Freccia del Sole however experienced a violent wave causing not only the vessel to come off foil but also shattering some of the windows, resulting in cool salt water entering into the saloon - thus putting a premature end to the demonstration trip.

Sometimes bad things happen to good vessels. But this was not entirely bad, at least not for Rodriquez. While the interest in the Supramar design by other prospective licencees declined over night, at least for the time being, Carlo Rodriquez was determined to succeed - and did. Finishing touches were made to the foil system and crews received extra training in handling the vessel.

By the time Freccia del Sole was put into regular service across the Straits of Messina in August 1956, already there were two more PT.20s under construction at the yard. And, as they say, the rest is

With such an intriguing background it is tragic and upsetting to have to accept the fact that this first-



Hydrofoil line-up in Messina in the mid-1960s. The craft moored furthest from the camera is an H.57 hydrofoil not built by Rodriquez but by competitor Seaflight / LORENZO BONASERA photo

born PT.20, and indeed the first fast ferry as we know them, is no longer. Having seen service for 29 years and covering more than one million miles, Freccia del Sole was withdrawn from service and placed on dry land at the Rodriquez premises in 1985. Intentions were, over time, to restore the hydrofoil and put it on public display.

However, sitting in the yard with its foils removed looking pretty much as it did when retired for several years, the hydrofoil was subsequently and mercilessly scrapped in the mid-90s.

Freccia del Sole laid up at Rodriquez two years after retirement in 1987 / TIM TIMOLEON photo



50 YEARS WITH RODRIQUEZ HYDROFOILS

by Cantiere Navale Leopoldo Rodriquez and put into service



ENZO ANNUARIO photo