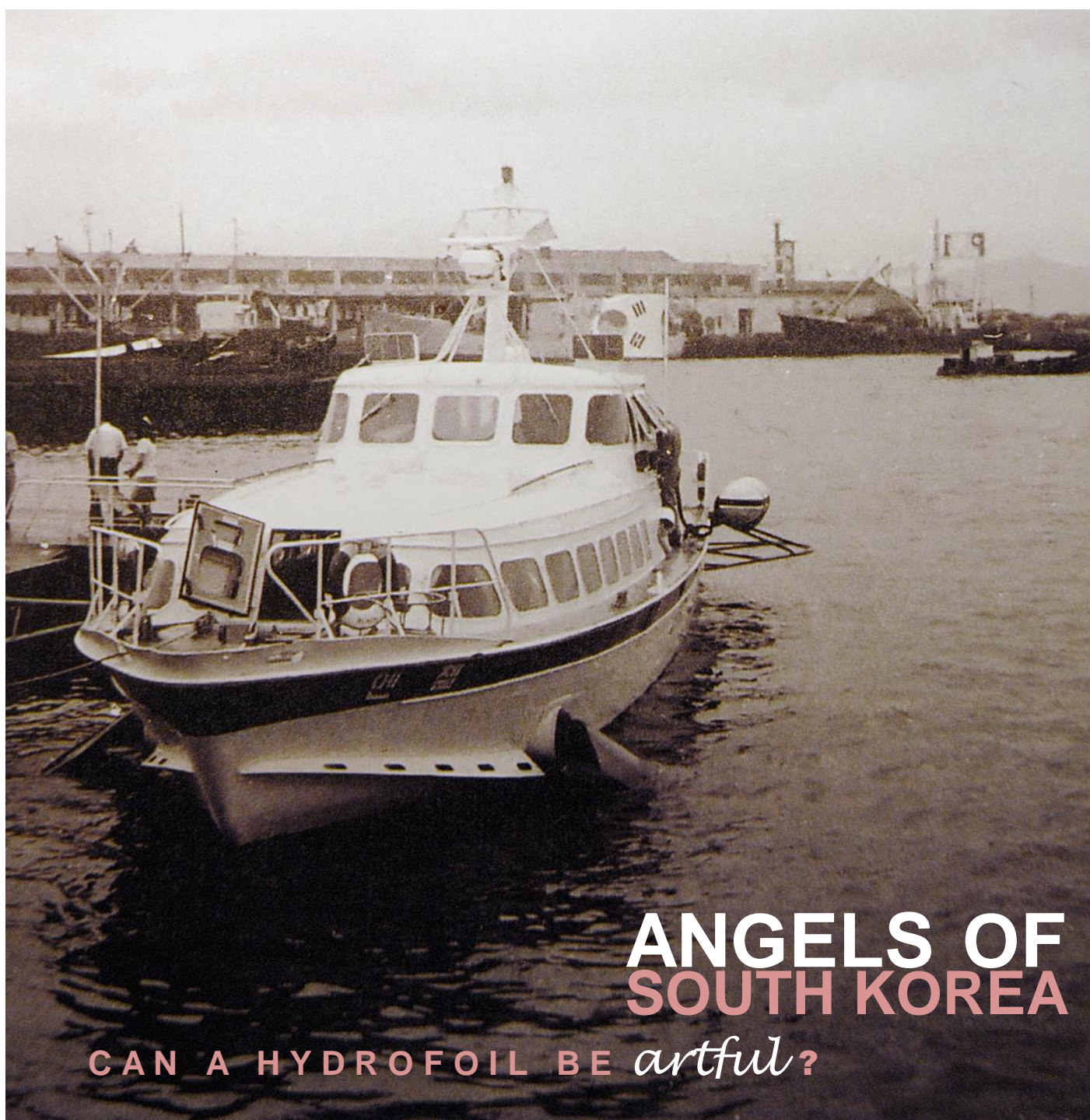


# classic fast ferries



ANGELS OF  
SOUTH KOREA

CAN A HYDROFOIL BE *artful*?



but first...



**CERTAINLY ONE OF THE LAST** remaining PT.20 hydrofoils in the world, *Manu Wai*, has been put up for sale on the internet trading place of eBay.

There may still exist one or more PT.20s in Brazil and/or tucked away in a forgotten corner of Asia or Italy, and at least one is known to have been preserved and put on public display in South Korea (*see elsewhere in this issue*). In addition there is the Norwegian PT.20B, on which we reported in October 2012.

However, to the best of our knowledge, *Manu Wai* is the only of its type afloat.

Built by Rodriquez, the vessel was delivered in 1964 to Waiheke Shipping Company and Kerridge Odeon Tourist Services and put into service between downtown Auckland and Waiheke Island and the new holiday resort of Pakatoa Island. Four years later it was sold to North Shore Ferries, which continued operating it on the Auckland–Waiheke Island run until

December 1973 when there was an industrial dispute between the owners and the Seamen's Union.

Following several years in lay-up, in 1981 *Manu Wai* was acquired by a private individual whose plan was to turn it into a hydrofoil cruiser. In 1988 the vessel was taken over by Manu Wai Holdings which had it extensively refitted and updated, inside and out. This work was completed

in early 1990 and for a couple of years *Manu Wai* was being used for charter trips around Auckland.

CONT'D ON PAGE 3

**Above :** PT.20 *Manu Wai* foiling by the spectacular Sydney Opera House in July 1997

**Below :** The hydrofoil at its current address in Berry's Bay, Sydney / MARTIN GRIMM photo, both



**classic  
fast  
ferries**

THE ORIGINAL PERIODICAL ABOUT THE HISTORY OF HYDROFOILS, HOVERCRAFT, CATAMARANS AND SURFACE EFFECT SHIPS, THEIR BUILDERS AND OPERATORS WORLDWIDE.

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**COVER :** PT.20 ANGEL AT THE BUSAN TERMINAL, SOUTH KOREA IN 1974. PHOTO: HEON C. CHEONG.

www.classicfastferries.com  
classicfastferries@gmail.com



Having changed hands once more, in 1993 it was to be relocated north to the Bay of Islands. On its positioning trip there it unfortunately hit a mud flat, resulting in severe damages to, in particular, both the bow and rear foils. The insurance company subsequently considered the vessel a write-off and it was decided to sell it by tender.

In mid-1995 *Manu Wai* saw itself being shipped from New Zealand to Australia, having been purchased by Garry Fry, who, along with a business partner, had set up Seaflight Cruises to operate the hydrofoil on sightseeing trips and charters on Sydney Harbour and surroundings. Much to the disillusionment of Fry, the demand for this sort of service

was less than anticipated and other operating areas were tried in the following years.

Garry Fry continues to be the owner of *Manu Wai* – which is located in Sydney, complete and potentially operational – and hopes a sale of the apple of his eye will rescue the PT.20 from ending up like so many before it – as scrap metal and dust.

Needless to say, we tend to agree.

A full history of *Manu Wai* will appear in an upcoming issue. **cff**

## WHEN HYDROFOIL PHOTOGRAPHY BECOMES

# Art



**MOST HYDROFOILS** are fascinating and beautiful in themselves, of course in particular when underway and experienced live. But only relatively few of the readers of **CFF** are fortunate enough to

have hydrofoils operating outside their windows or within easy reach of their home or work place in order to photograph them.

One of these fortunate people is Jacopo Memeo, who lives on Lake Como in northern Italy. He has taken hydrofoil photography to the next level and turned it into an art form. Some of his captures are so poetic they almost bring a tear to your eye.

Like the one pictured here, showing RHS 150SL *Freccia delle Valli* against a magnificent backdrop off Lenno, approx. twenty kilometres north-east of Como, in January this year.

*Freccia delle Valli* entered service with Navigazione Lago di Como in 1981. A second RHS 150SL, *Guglielmo Marconi*, however considerably different in appearance, followed two years later. In 1989 NLdC received its last hydrofoil,

RHS 150FL *Voloire*. All three are still being operated – as is the last remaining RHS 70, *Freccia dei Gerani*, which was originally delivered to Navigazione Lago di Garda in 1977. Impressive, in a wider sense.

Long live the hydrofoils on Lakes Como, Garda and Maggiore! And the photographers who preserve them with their cameras.



BY HEON CHOO CHEONG

**T**HE HISTORY OF FAST FERRIES operating in South Korean waters, which continues to this day, goes back forty-two years this month. My father, Hwan K. Cheong, was in-charge managing director of newly established Han Ryeo Development Company which placed an order with Rodriquez for a PT.20 hydrofoil. It was to be the last of nearly fifty PT.20s delivered by the Italian shipyard since 1956.

Named *Angel*, the hydrofoil entered service on April 19, 1971 along the scenic south coast between Busan and Yeosu, considerably reducing the travel time to three hours compared to the overnight conventional ferry. Back then, this was felt as a revolutionary improvement in transportation by the public.

Busan is the second largest city and biggest port of South Korea. The country faces the sea in all directions but to the north where of course we border against North Korea. The southernmost part of the country was selected for the new hydrofoil service as it was more densely populated than the east and west coasts. On its way from Busan to Yeosu *Angel* would make intermediate calls at Sungpo in the island of Geoje, Choongmu (nowadays also known as Tongyoung), Samchunpo (also known as Sachun) and Namhae.

**Below :** *Hitachi PT.20 Angel III entered service with Han Ryeo Development Company in 1978 and is seen here off Choongmu*  
/ KOREAN SHIPPING ASSOCIATION photo

# ANGELS OF SOUTH KOREA







**Above :** Angel was the first PT.20 to enter service in South Korea and the last to be built by Rodriquez, in 1971  
/ POSTCARD collection of HEON C. CHEONG

Above the waterline the vessel was painted a traditional all-white with blue trimmings and the name in big capitals on the hull sides. The foils and hull bottom were likewise blue. The 71 passenger seats were in blue covering and floor carpeting was in red.

The new hydrofoil received a lot of attention by the media and others. For instance, it featured on the 1973 album cover of 'Good bye, Angel' by Su Mi Lee, a popular female singer at the time, and was mentioned in various literature such as essays and novels.

#### **SUCCESS**

The new service was very successful but a single vessel operation is always vulnerable and a back up craft was needed. This arrived in 1974 but was a medium-speed monohull, *Venus*, carrying 150 passengers, rather than another fast ferry. At only 22 knots, the monohull was obviously no equal to the 31-knot cruising speed of *Angel*.

A few years on, in 1977, the management of Han Ryoo decided to order not one but two more PT.20s. This time to be built by Supramar's licensee in Japan, Hitachi Zosen. The Kanagawa yard had built a number of PT.20s since 1962, however, none had been delivered since 1970, and PT.50s and other Supramar designs since 1963. Moreover, Rodriquez, which was now known as Navaltecnica, did no longer build hydrofoils to Supramar designs and had replaced the PT.20 with the RHS 70, developed by the shipyard, in 1972.

The project of adding to the Han Ryoo hydrofoil fleet was headed by my father, who followed the construction of the two new vessels on location in Japan for most part of the twelve or so months this went on. The craft, *Angel II* and *Angel III*, joined the first *Angel* on the Busan-Yeosu route in June 1978. Exteriorwise all three were almost identical, the new vessels differed only slightly from the original one as far as the shape and number of windows were concerned, whereas the interior layout was the same. All to keep with the corporate identity. Now with three PT.20s available the operation went smoothly as any hiccup or down service would be covered by one of the other hydrofoils.

#### **TRAGEDY STRIKES**

But a tragic development was waiting down the line. On June 15, 1980 in dense fog *Angel* and *Angel II* collided head-on near Busan, killing five people. While neither of the vessels was running at full speed when the impact occurred, the damage inflicted on *Angel II*, reportedly including the break-out of a fire, was such that it was considered a total loss and subsequently scrapped. The other hydrofoil survived the accident.

**Right :** Han Ryoo company logo





It so happened that around this time Far East Hydrofoil in Hongkong had withdrawn its four Rodriguez RHS 110 hydrofoils, delivered 1971–73, and put them up for sale as the company was moving away from the surface-piercing hydrofoils in favour of the Boeing Jetfoil. The larger RHS 110, as compared to the PT.20, seemed ideal for the South Korean operation, and also it is probably safe to assume that the price was right, and Han Ryoo decided to purchase three of the four vessels. These, *Cacilhas*, *Praia* and *Cerco*, arrived from Hongkong in South Korea in February, March and June 1981. Renamed *Angel V*, *Angel VI* and *Angel VII*, respectively, they entered service shortly after. Incidentally, there was never an *Angel IV* as four was considered ill luck by the company.

But the new career for two of the RHS 110s would prove short nonetheless. On a foggy June 17, 1981 *Angel V* and

*Angel VI* collided in the same area as the two PT.20s the year before. Luckily, this time there were no loss of lives but both hydrofoils were extensively damaged and written off.

#### THE OTHER RHS 110

The RHS 110 which was not acquired by Han Ryoo had been purchased by another Korean company, Han Bo Development Company, already in 1980. My father had left Han Ryoo at the end of 1979 to join this company to set up a new hydrofoil operation on the south-west coast, linking Mokpo on the mainland and the islands of Bigum, Docho, Huksan and Hongdo. Again, travel time was shortened considerably, from 8 hours by conventional ferry to 2½ hours by hydrofoil, making life for those residing in the outer islands so much easier.

**Below :** PT.20s *Angel* and *Angel III* alongside at Busan. Behind one of the company's RHS 110 hydrofoils  
/ HAN RYEO photo, both







**Left :** The neatly furnished forward saloon on one of the Han Ryeo PT.20s  
/ HEON CHOO CHEONG photo

**Below :** Angel II in a choppy sea off the southernmost coast of South Korea  
/ HAN RYEO photo



Having finished most of the preparation work for this new operation, my father left Han Bo and retired in 1980.

Prior to the scheduled service taking off, the hydrofoil, delivered to Far East Hydrofoil as *Barca* in 1973 and now renamed *Hanbo*, was taken on an eight-hundred kilometre test drive from Busan to Incheon, near Seoul, for the crews to acquaint themselves with the craft. Being the first time a commercial high-speed craft would do this in the area, permission had to be applied for, and was granted, from relevant authorities. Even so, probably due to defective communication between the military controls, at a point while traveling up the western coast the hydrofoil was the target of machine guns but fortunately they missed.

The hydrofoil changed hands in 1981 having been sold to Nam Hae Express. Renamed *Nam Hae II* it continued on the

same route as before.

#### ONE LAST ANGEL

Following the loss of two of its RHS 110s, in 1984 Han Ryeo turned to domestic ship builder Hyundai Heavy Industries and placed an order with them for an RHS 70 to be built under licence from Rodriguez. This, *Angel IX* (there was never an *Angel VIII* either), entered service on the Busan–Yeosu route in January 1985, joining the company's remaining RHS 110 and two PT.20s. Identical to the RHS 70s delivered by Rodriguez to British and Italian customers, the colour scheme of *Angel IX* was the same as on the previous Angels. The last RHS 110, *Angel VII*, was withdrawn in 1989 but may have been sold on as it had been available for purchase for some time.





**Above :** A rare photo of RHS 110 *Angel V*. It collided with sister vessel *Angel VI* in June 1981, only a few months after they had entered service in South Korea  
/ HAN RYEO photo

**Below :** The last hydrofoil to join the Han Ryeo fleet was RHS 70 *Angel IX*. It was built in South Korea by Hyundai Heavy Industries and put into service in January 1985. Visible behind *Angel IX* is RHS 110 *Angel VII*  
/ HAN RYEO photo





**Angel VII was one of three RHS 110s acquired by Han Ryoo from Far East Hydrofoil in Hongkong in 1981**

/ HAN RYEO photo



That same year Semo Marine took over the three hydrofoils previously operated by Han Ryoo. Keeping their names, they continued on the same run as before until the late 1990s when hydrofoil services were cut back to operate shorter routes, such as between Busan and the Geoje Island, due to diminishing passenger traffic as a result of partly aging craft, partly improved overland transportation; better roads and an ever increasing number of private cars. A development which had been going on up through the 80s. The Choongmu–Yeosu segment was closed in September 1997 and Busan–Choongmu in October the following year. Trip time on the Busan–Geoje Island route was 75 minutes.

Semo is an interesting actor in that the company introduced a surface effect ship (SES) from Norway in 1990

and subsequently set up a production of its own of this type of ferry, the first of which was launched in 1992.

In 2001 a company called Onbada took over the routes and vessels from Semo. The production of SESs had ceased in 1996.

Two years later, on September 12, 2003 typhoon Maemi hit the southern part of the Korean Peninsula damaging *Angel IX* which at the time was moored at the Busan terminal. Then, to make things worse, as the hydrofoil was later lifted out of the water for repairs, the crane malfunctioned and dropped *Angel IX* onto the ground. Needless to say, the damage to the craft was major and Onbada did not consider it relevant to repair the now 18-year old hydrofoil. And so with this decision thirty-two years with South Korean Angels had come to an abrupt end

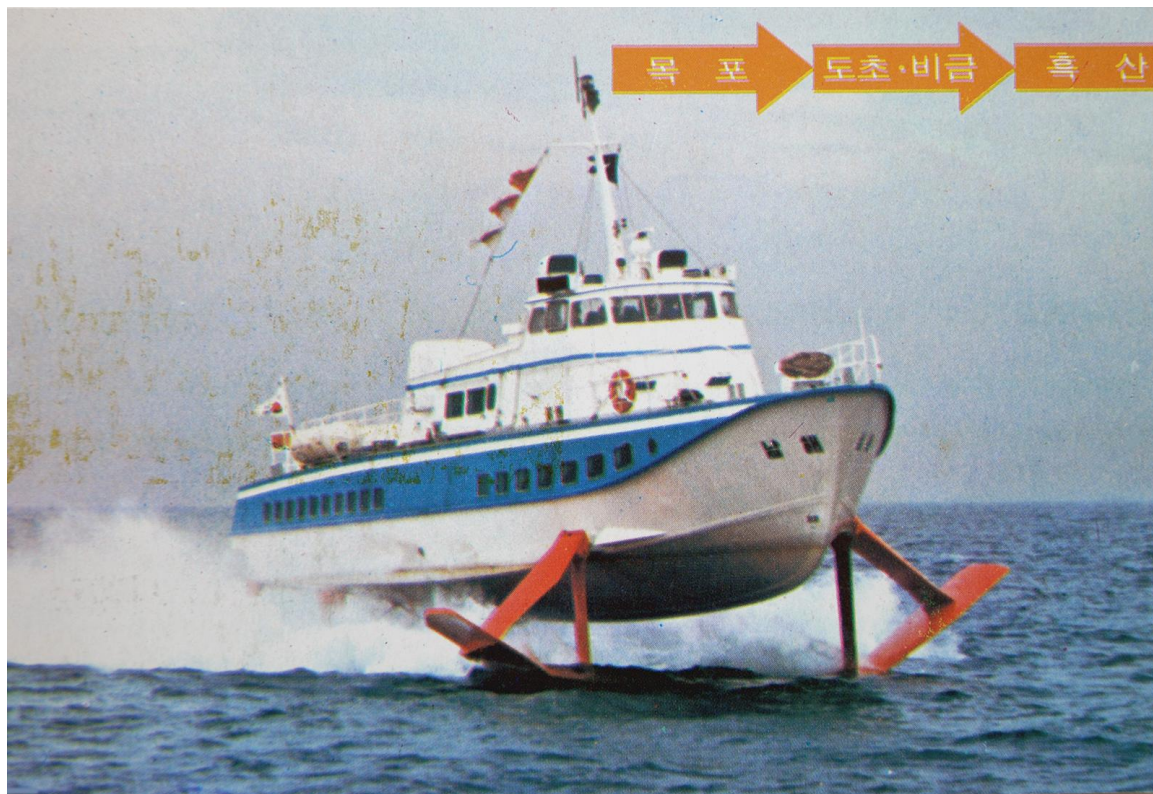


**Angel IX was last operated by Onbada in 2003**

/ ONBADA photo



**Right :** At least two Hitachi PT.50s operated in South Korea in the heyday of the hydrofoil. One of these was Nam Hae, acquired by Nam Hae Express from another operator in the late 1970s



#### PRESERVED HYDROFOILS

The again – not quite.

Two of the hydrofoils escaped the scrapyards and have been preserved. After nearly twenty years of operation, *Angel III* was withdrawn from service in March 1998 and laid up. It was later acquired by a local congressman for just under USD 10,000. Having held on to the hydrofoil for some time, he eventually donated it to the City of Tongyoung (Choongmu) in July 2004. After having some much needed refurbishing work done to it, the vessel was put on public display ashore in the island of Saryangdo, which used to be one of its stops enroute, in May 2005. The PT.20 may not have been restored correctly in every detail, whether or not deliberately, but still this is better than the alternative of no PT.20 still around.

The other preserved boat is the sole RHS 110 operated by Nam Hae Express, *Nam Hae II*. This was retired in 1991 and later donated by the company to the National Maritime Museum in Mokpo and put on display on a stretch of beach next to the museum building. The appearance of the hydrofoil is somewhat shabby in parts, but again, this certainly is better than no RHS 110 at all. One thing which is almost unforgivable though is that half of the bow foil has been cut away, just beneath the struts, and the aft foil is missing completely (see page 12–13).

#### MORE FAST FERRIES

At least two more Hitachi PT.50s have seen service in Korea. An undisclosed company took delivery of *Nankai* in 1975. This was later acquired by Daehung Enterprises and renamed *Dae Hung* operated between Mokpo and Hongdo Island. Later still it was taken over by Nam Hae Express which already had a 1974-built PT.50 acquired from another operator in 1978, *Nam Hae*. The operating area was the same.

And there have been a number of other companies operating a motley crew of fast ferries over the years, including domestically built as well as imported catamarans, monohulls and surface effect ships. In addition to these, Jetfoils have been and continue to be operating between Korea and Japan.

Indeed an interesting fast ferry corner of the world, well worth a re-visit. **cff**



**Left :** Rodriguez used to issue these credit card size laminated calendars with customers names printed on them. The vessel shown, RHS 140 Curl Curl, was not delivered to South Korea however, but to Australia

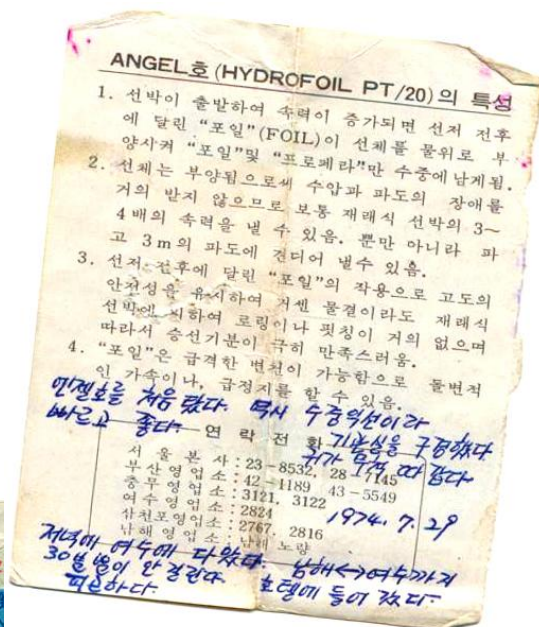


**Front and back sides of boarding tickets for the hydrofoil between Namhae and Yeosu and Yeosu and Busan in July 1974.**

**In addition to being wonderful to look at, the text on the tickets emphasizes on the advantages of traveling on the company's**

**PT.20 Angel**

HEON CHOO CHEONG photo



**PT.20 Angel III has survived in more than one sense. Built to scale 1:25, this beautiful model was manufactured in China for Heon Choo Choeng (also see under Archives January 2008 on the CFF web site). For the real thing, turn the page.**  
HEON CHOO CHEONG photo





NOT ALL ANGELS GO TO HEAVEN



One of the former Han Ryoo PT.20s, *Angel III*, was preserved and put on public display in the island of Saryangdo in 2005. The vessel has not been restored correctly in every detail, whether or not intentionally. For instance, they used red instead of blue on the stripe beneath the windows and the lettering is incorrect. Still, this is better than no preserved PT.20 at all!

/ HEON CHOO CHEONG photo, all





**RHS 110 *Nam Hae II***  
**// outside the**  
**National Maritime**  
**Museum at Mokpo.**  
**With only some ten**  
**or so hydrofoils**  
**(not counting**  
**Jetfoils) having**  
**operated in South**  
**Korea, it is almost**  
**a miracle – and**  
**indeed admirable –**  
**that two have been**  
**preserved. This is**  
**more than can be**  
**said for some.**  
 / HEON CHOO CHEONG  
 photo, all



**Left : *Nam Hae II***  
**while still in**  
**service with**  
**Name Hae**  
**Express**



## THE 54-TON RODRIQUEZ RHS 110

hydrofoil was neither small, nor large. With a length overall of 25.6 m and capacity of up to 110 passengers, it was an in-between sibling of the 22 m, 71-seat RHS 70 and 28.7 m, 125-seat RHS 140.

Exteriorwise the RHS 110 looked more like a smaller version of the RHS 140 rather than an enlarged RHS 70. However, the two saloons on belvedere deck on the RHS 110 would seat more than that on the RHS 140. On the early general arrangement plans there were 36 seats in the main upper deck saloon with a further 16 in the slightly raised compartment behind the wheelhouse. On lower deck the aft saloon seated 48 passengers and the small forward compartment another 10 in a lounge style arrangement. This also

# THE IN-BETWEEN RHS 110



**Above :** *The first RHS 110 hydrofoil, later to be named Cacilhas, on a demonstration run in the Straits of Messina in 1971*  
/ RODRIQUEZ photo

included a bar. As always, the actual lay out of the passenger areas and number and type of seats were subject to customer specifications. In the case of the aft lower saloon, on the production craft accommodation was altered and one window omitted; nine instead of ten on the first vessel.

The RHS 110 and RHS 140 first appeared in 1971 with the first RHS 70 being delivered the following year.

However, what was in fact the very first hydrofoil in the RHS series, incorporating the Hamilton Standard electronic stability augmentation system designed to provide a smoother ride in heavy seas, had been launched already in 1970. Initially built as a private cruiser, known as RHS Aliyacht or GP 40, this was later modified into an RHS 110 ferry.

## SCANDINAVIA

A total of four standard RHS 110s were delivered. Being built ahead of order, the first of these most likely would have entered service with Rodriguez's operating company Aliscafi SNAV had it not been sold in Hongkong to Far East

Hydrofoil. Named *Cacilhas* it was shipped from Messina to Hongkong in the autumn 1971.

Coinciding with this, in September of that year a Swedish shipping company, Rederi AB Nordö, announced it had placed an order with Rodriguez for three RHS 110s, a contract worth in the region of SEK 13 million. These were to be delivered in May and July 1972 and put into service between Malmö, Sweden and Copenhagen, Denmark, challenging state-owned SRÖ and DSØ which jointly had been operating hydrofoils on the cross-Oresund route since 1965. Nordö's arguments were that its new hydrofoils were faster and more comfortable than SRÖ/DSØ's fleet of four PT.50s (however, to be joined by two RHS 140s in 1972-73), and in addition it would offer cheaper tickets and more frequent departures. The greater number of seats on upper deck on the RHS 110 was particularly stressed as an improvement as there had been some discussion going on in the press about the lower deck saloons on the older hydrofoils which by some were felt as cramped with bad accessibility. The upper deck accommodation on the RHS 110



was bright and inviting thanks to the large windows, which of course also offered a better view.

But the grand scheme came off foil before it was launched. Whether this was due to the yard finding itself not being able to meet the delivery date or factors at the Swedish end is unknown.

Instead the three craft were acquired by Far East Hydrofoil and having been named *Barca*, *Praia* and *Cerco* joined *Cacilhas* on the Hongkong–Macau route in 1972–73.

Their career with FEH did not last very long, however, and by the end of the decade all four RHS 110s had been withdrawn. They were sold to two companies in South Korea in 1980 and 1981 (see separate article starting on page 4).

#### FROM YACHT TO FERRY

The fifth RHS 110, launched as an Aliyacht in 1970, was originally ordered by the president of Fiat, who never took possession of it. In 1971 the hydrofoil could be seen in the Italian motion picture *Roma Bene*.

As a hydrofoil yacht the main deck saloon was luxury furnished with a plush sofa, armchair and a coffee table in a sitting room section, plus a meal table with four chairs as well as a bar. A galley was likewise on the main deck.

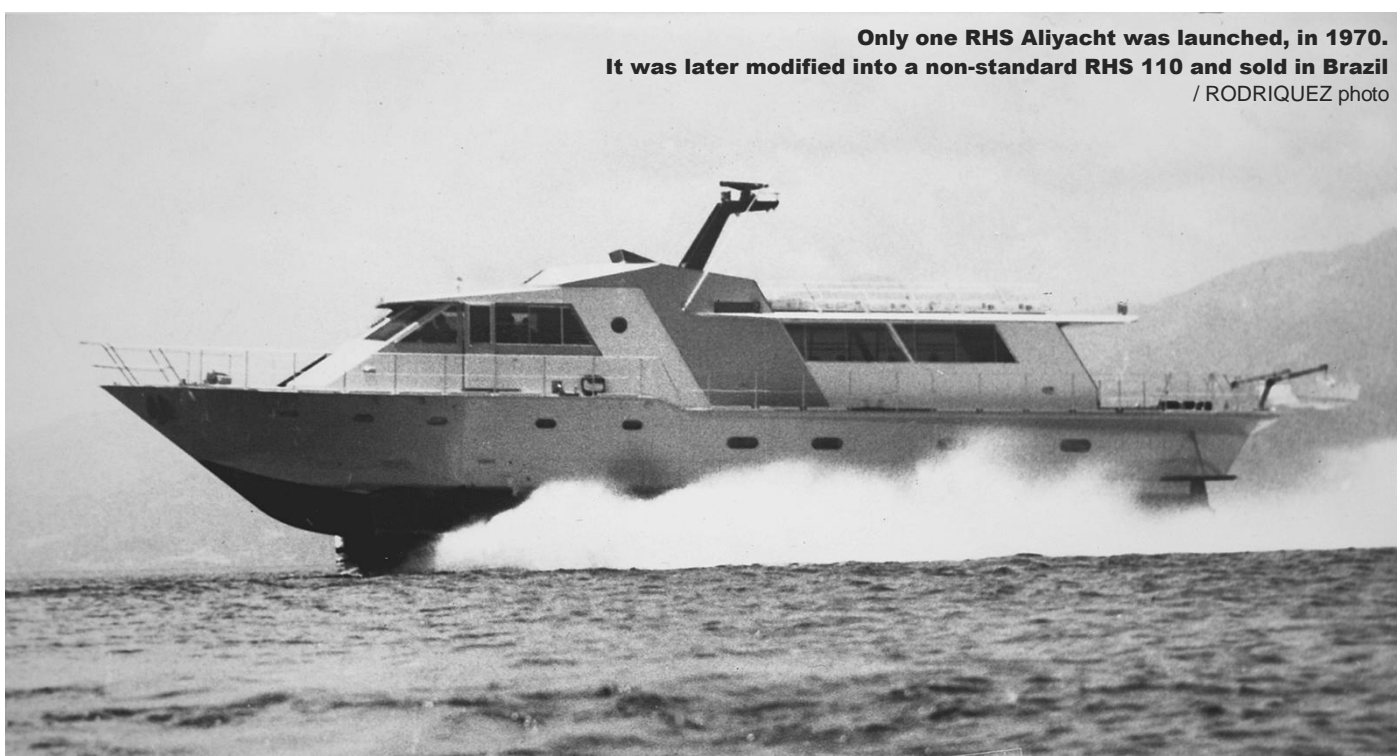
Below deck a spacious cabin for the owner, including a small drawing room and private facilities, two double cabins for guests and foremost a cabin for the captain and engineer.

<b>Length over all</b>	25.6 m
<b>Width over foils</b>	9.2 m
<b>Draught, hullborne</b>	3.3 m
<b>Draught, foilborne</b>	1.25 m
<b>Displacement fully loaded</b>	54 t
<b>Cruising speed</b>	37 knots
<b>Maximum speed</b>	40 knots
<b>Passengers, maximum.</b>	110
<b>Number built</b>	4 (+1 non-standard)
<b>Years delivered</b>	1971–73
<b>Status</b>	No longer in service One preserved

Having been modified into a non-standard RHS 110, including the extension aft of the superstructure, and named *Flecha de Angra*, the vessel entered service in 1976 with Brazilian operator Aerobarco do Brasil Transtur between Rio de Janeiro and Niterói. This busy and short commuter route – only about 3 nautical miles – across the Guanabara Bay was at the time served by a fleet of PT.20s, of which two had been delivered by Rodriguez to Transtur in 1969 and 1970 and the others acquired second hand. The decision to purchase the former Aliyacht was made as this was offered at the same price as a new RHS 70.

However, as the odd glove in an otherwise standardized fleet, the RHS 110 was only infrequently used. Its greater capacity as compared to the PT.20s was not necessarily an advantage considering the short crossing and turnaround times.

*Flecha de Angra* was withdrawn from service in the late 1980s after what appears a not too strenuous life. Prior to this Transtur had considered using the vessel on longer routes or leasing or selling the vessel for use as a crew boat between the mainland and nearby off-shore drilling platforms. Whether these plans ever came about is unknown. **cff**



**Only one RHS Aliyacht was launched, in 1970.**  
It was later modified into a non-standard RHS 110 and sold in Brazil  
/ RODRIQUEZ photo



last but not least ...

## MORE PT.20 MODELLING



/ ENZO ANNUARIO photo

**FURTHER TO** the articles on artful hydrofoils (page 3) and the scale model of the South Korean PT.20 (page 11), here is another work of art which would suit any home.

Unlike *Angel III*, which was not built by the owner himself but in collaboration between him and the Chinese manufacturer, the PT.20 pictured here was. It is another beautiful creation by the skillful model boat builder Enzo Annuario, who lives in Sicily. Enzo as well as his friend Antonio Donato are dedicated scale modellers and no strangers to *CFF* readers as we have reported on their work in the past (see *April, June*

*and December 2003 and May/June 2004 issues*). Various other model hydrofoils have likewise featured in these pages from time to time.

The full-scale *Pinturicchio* was delivered by Rodriguez in 1968 to Siremar which introduced it between Trapani in north-western Sicily and the Egadi Islands of Levanzo, Favignana and Marettimo. It would also see service on the longer and more exposed route between Palermo and Ustica.

The model shows the vessel in its initial livery. It would later carry the Siremar corporate colours of red and white.

**cff**