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HIGH SPEED CRAFTS IN THE CANARY

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ABSTRACT

For the Canary Islands, the sea is a path of obligatory use and on whose dependence the economic development of the inhabitants of the Archipelago, has been based. The problems of inter-insular maritime transport has been, and continues to be, a constant and growing worry up to the present moment, given the almost zero cargo capacity of the aeroplanes that render their services in the islands.

The boats that connect the islands have changed throughout the years, and these changes have been conditioned, in great part, by the special circumstances surrounding navigation in our waters: islands situated in open sea, exposed to all types of weather; particular meteorological conditions; swell; port infrastructures, etc. These circumstances have made the islands be a true bank of trials for the main types of HSC: hydrofoils, air cushion vehicles, high-speed mono-hull crafts, SES, jet-foils and catamarans, all which have navigated and run different luck. Today, there are three companies operating high speed crafts in the islands: Fred Olsen with five big catamarans, Trasmediterránea with two jet-foils and Garajonay Express with two smaller catamarans.

Key words: HSC, Marine Navigation, Navigation Evolution.

INTRODUCTION

The maritime mentality attributed to the inhabitants of the Canary Islands, based on geographic factors and their great dependency on the transport of mer-

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chandise by sea, is not sufficiently developed to allow the exploitation of the possibilities offered by the technology of high speed crafts, as has happened for decades in the neighbouring countries of continental Europe.

Up until a few years ago, the main economic activity of the Archipelago was agriculture, directed both for internal consumption and for its commercialisation in the rest of Spain, primarily bananas, tobacco, tomatoes, wine, tropical fruits, etc. This situation, though, has now changed and 74,6% of the regional richness is produced in the tertiary sector, fundamentally by tourism or activities linked to it.

In the last eighty years, the inter-insular connections have been preferentially maritime in regards to merchandise, and by air in regards to passengers, due to the fact that the cargo capacity of the aeroplanes that fly in the Canaries is of very scarce incidence. The company Bintercanarias, which covers practically the totality of passenger traffic between islands, transported in 2003 a total of 2.243,387 passengers (Bintercanarias, 2004). With the incorporation of the HSC, the incidence of maritime transport has considerably increased, being essential for the economy of the Archipelago, since almost all of the merchandise imported or exported, do so by means of cargo boats, mooring in the main harbours.

The Canaries have proved to be a true bank of trials for the HSC in open sea navigation. There are a total of seven principal islands and various small islands, divided in two provinces, with an extension that varies between the 1,928 km² of the island of Tenerife and the 227 km² of El Hierro. The Canarian population ascends to a total of 1.894.868 inhabitants, of which 915,262 live in the western islands, while 979,606 live in the eastern ones (INE, 2004). The meteorology is characterised by the trade winds, normal regime, which can be completed with the incidences of different Atlantic weathers: winter monsoons, invasions of maritime polar air, Atlantic storms and tropical depressions. These can affect the Canarian littoral causing a strong swell, in occasions with waves of up to 8 and 10 metres high, and causing the suspension of maritime navigation, although the normal height is of 2 metres. The islands also suffer, occasionally, storms from the West and East that cause substantial material damage in the harbour infrastructures.

The sea is, unquestionably, a useful and economic communication route between the islands, but the individual conditionings appertaining to each Community and the risen awareness of its value as a source of richness, have been interpreted and taken advantage of in very different ways. Within this diagnostic, especially relevant is how the HSC cope with the economic circumstances of maritime traffic. On the one hand lie the excessive cost of the modern units and the high expenses of the harbour infrastructures, while on the other, the consumption and price of fuel, which becomes more and more important. The latter is linked to the absolute necessity of the shipowners to increase income as a solution to the rise in expenses, which conditions the implantation of new types of units.

HYDROFOILS

Following the chronological criteria, the HSC appear in the Canarian waters in 1966, when on the 5th August 1967, the hydrofoil *Corsario Negro*, (Marítima Antares Company), of the Dolphin class, designed in USA by Grumman, carried out its trial trip between the two capitals of province, Santa Cruz de Tenerife and Las Palmas de Gran Canaria, using in the stretch 53 miles, 75 minutes, at 43 knots. This boat, which would be the first to navigate in Spain, had a system of retractable foils, and laid down a bridge between the past and the modernity in communications. The first trip was fulfilled on the 22nd January 1968 and on 6th of June of the same year, the Marítima Antares decided to cancel the service. The main reasons were the bad weather, mechanical problems and the monopoly of the governamental shipping company, then in force.

The 2nd October 1970, the hydrofoil *Reina de las Olas*, Supramar PT 150 model, much larger and of more potency (Naviera Espanor, subsidiary of the John Prestus S/A of Bergen that had built the hydrofoil in the shipyard Westermoen, Mandal, Norway) was handed over to the shipowner John Presthus. It was built in Norway under the licence of Supramar, and arrived to Arrecife on November 19th 1970, sailing from Mandal, with various stopovers. It made the journey between Santa Cruz de Tenerife and Las Palmas de Gran Canaria in 90 minutes, at 36 knots. It had a capacity for 250 passengers, 34 tonnes of cargo or 8 small cars, and was the biggest hydrofoil sailing in that moment. It suffered the same problems as the *Corsario Negro*, suspending its activity a few months after it began (Rodríguez, 2004).

HOVERCRAFTS

After the last experience, the first hovercraft arrived to the Canaries: Model SR.n6 MK 1 Winchester Class, built by the Westland Aircraft Saunders Roe Division in 1965, with capacity for 38 passengers. It had navigated in Scandinavia under the name *Scanhover* and arrived to S/C de Tenerife on the 27th February 1967, but was not successful. Two more units of the last type arrived to Las Palmas on the 15th November 1968. They had been rendering their services between Naples, Capri and the island of Ischia and, after realising various technical trials around the coasts of the Islands, with numerous guests on board, they did not come into service, even though the incorporation of the bigger model BH-7 with capacity for 138 passengers, had been planned.

Deprived of these two fast units, which discouraged the renovating vocation of the population, the Canaries remained one more decade without enjoying the benefits of the high speed crafts, which circulated, without complications, in the seas allover the world.

JET-FOILS

The jet-foils were incorporated into our waters by the company Trasmediterránea, sailing between the islands of Tenerife, Gran Canaria and Fuerteventura. The first one was the Princesa Voladora, built in 1976 by Boeing Marine Systems in Seattle, USA, and which carried out its sea trials on July 27th 1980 and its first journey on the 7th August 1980. The 14th of April 1981, it was substituted by the jet foil Princesa Guayarmina, built by the same firm in 1981. It sailed 10 years for Trasmediterránea. Just as the Princesa Voladora, it was sold to the company Far West Hydrofoil Co., in November 1991, where it sailed under the name of Cacilhas (Jane's 1994-1995). Considering the obtained success, two more modern units were bought with technological improvements and a capacity of 16 more passengers. The third jetfoil, Princesa Guacimara, also built by Boeing in 1981, sailed 9 years for Trasmediterránea, later sold to the same company as the former ones, where it was baptised as Taipa (Jane's 1994-1995). The Princesa Guayarmina and Princesa Guacimara established on 16th January 1982 the first fast maritime bridge between the two Canarian capitals, (Díaz Lorenzo, 1998). They competed directly with the aeroplanes, due to their speed and as well as due to the fact that linked two Canarian capitals, traveling from one centre to the other.

On 31st July 1990, the new jet-foil *Princesa Dácil*, built by the Kawasaki Heavy Industries, in Kobe, Japan, was delivered (Trasmediterránea), and on the 30th October of the same year it fulfilled its first journey between Las Palmas de Gran Canaria and Santa Cruz de Tenerife. This unit came with improved features, especially regarding soundproofing, turbine control, deck design, incorporated black boxes, etc. On the 7th September 1991, the *Princesa Teguise* came into service, also constructed by Kawasaki in Kobe, improving preceding vessels, consolidating the maritime bridge, which they covered at 43 knots, relying on attractive advertising campaigns. Both units had a capacity for 286 passengers (Díaz Lorenzo, 1998) (Jane's 1994-1995). The scarce profitability, the price increase of fuel and the competition of the catamarans took Trasmediterránea to put them for sale beginning 2004, as announced on its web page (Trasmediterránea, 2004).

FIRST CATAMARANS

In 1980, the company Alisur S.A. bought the catamaran *Alisur Azul*, ex–*West-jet*, built in Mandal, Norway, by the shipyard Westermoen Hydrofoil A/S in 1976 (Jane's 1994-1995). It was the first catamaran of gas turbines in the world. At first, it linked the two Canarian capitals, but due to a lack of profitability, it was moved to the Arrecife – to the Puerto del Rosario route. Later, it linked Corralejo with Playa Blanca, up until 1983, when it was transferred to Lebanon, and later to Cyprus, San Carlos de la Rábida, returning to the Corralejo – to the Playa Blanca route, until it was sold in 1986.

The *Alisur Amarillo* built in 1974, 211 passengers (Jane's 1994-1995) by the same shipyard as the last one, arrived to the island of Lanzarote in 1982, to link Corralejo with Playa Blanca. In May 1982, it was moved to the route Los Cristianos - San Sebastián de la Gomera. But three months later, it ended its service due to operative and economic reasons. After fulfilling other inter-insular trips, it returned to its first route, finishing in 1986, being incorporated into the Mediterranean and, later, into the Caribbean.

These units could not compete with the jet-foils in the trips from S/C Tenerife - Las Palmas, nor with the conventional ferry *Benchijigua* between Tenerife and Gomera, since they lacked cargo capacity.

HYDROFOILS

On October the 27th of1989, the Naviera Mallorquina (subsidiary of Trasmediterránea), started a route between Lanzarote and Fuerteventura with its hydrofoil *Tiburón*, of the Kolkhida class, built in 1988 by S. Ordzhonikidze Shipyard, Poti, Georgia, 155 passengers and 34 knots. It had sailed between the Balearic Islands and linked the islands of Fuerteventura and Lanzarote, with a duration of 20 minutes. It did not have the expected results and returned to the Balearics.

Trasmediterránea received the first hydrofoil, *Pez Volador* in 1986, followed by the *Barracuda* and the *Marrajo* in 1989, and the *Tintorera* in 1990. They had been built by Rodriguez SpA, between 1988 and 1990, with a capacity for 220 passengers the first one and 204 the remaining three (Jane's 1994-1995). The *Barracuda* was the first to arrive, after sailing in the Straight of Gibraltar it was incorporated to the route Los Cristianos-San Sebastián de La Gomera on the 1st of August 1989. The *Pez Volador* and the *Marrajo* joined the same route. The duration of the trips was: Las Palmas - S/C Tenerife, 80 minutes; Las Palmas - Morro Jable, 90 minutes; Los Cristianos - S.S. de La Gomera, 45 minutes (Jane's 2000-2001). Later, the last two were sold to the Ustica Line, in Italy (Díaz Lorenzo, 2004).

SURFACE EFFECT SHIP

A SES ship, the *Bahía Express*, which arrived to Tenerife on 13th February 1994, sailing from Poole, UK, with a Norwegian flag and called *Wright King*, also sailed our waters after being purchased by Fred Olsen. It had been built in 1989 by Brodre A/S, with 35,43 metres length, 11,20 beam and 330 passengers (Rodríguez, 2004). Its first trip was on the 13th May 1994 between Corralejo, Playa Blanca, Puerto del Carmen and Arrecife, with journeys between 15 and 35 minutes with a cruise speed of 40 knots and capacity to reach 50'. This was a wager of Fred Olsen for the high speed crafts and the possibility of introducing them in the Archipelago. On the 16th of June 1996, it carried out its last trip, moored thereafter in Santa Cruz de Tenerife and sold to the Panamanian company Trans Universal Seas Co.

MONO-HULLS

It is convenient to underline the presence in the Canaries of a high speed mono-hull of the Aquastrada TMV 114 type, built in Pietra Liguria by the Rodríguez SpA of Italy in 2002: the *Volcán de Tauro*, of steel hull and 113,45 metres, 41,5 knots, 928 passengers and 200 vehicles (Jane's 2001-2002), since it was the fastest and most potent craft in the Spanish marine merchantship. It arrived to Las Palmas from Messina on 6th May 2000, coming into service on 1st June, sailing between Santa Cruz de Tenerife, Las Palmas de Gran Canaria and Morro Jable in Fuerteventura, with the shipping agency Naviera Armas. The technical problems and the increase in the price of fuel caused its withdraw from the line, returning to the builder's shipyard in September (Díaz Lorenzo, 2004). It was bought later on by Eurolíneas Marítimas Balearia on the 2nd of March 2003.

The mono-hull *Almudaina*, of the Mestral class, (Monohull Excellent Seakeeping Transport and Leisure Ship) arrived to the Canaries in the month of October 1996, to carry out a series of trials, especially between Los Cristianos and S.S. de La Gomera. It had been built in San Fernando, with a length of 95,20 metres, 37,5 knots speed for 533 passengers and 87 cars, and was acquired as a replacement of the hydrofoil that carried out that route and which suffered frequent breakdowns causing frecuent cancellations of the service. After 36 days in the Canaries, it was destined to routes in the Mediterranean between Levante and the Balearic Islands (Rodriguez, 2004).

From another perspective and beyond the events that affected this monohull, its features are noteworthy as an ideal unit for the Canaries, for its transportation of cargo and passengers, taking as a basis the data relative to various vessels that operate in the north of Europe.

Another mono-hull which navigated in our waters was the *GomeraJet*, 95 metres length and 32 knots, from the company Trasarmas (union of the Trasmediterránea and Naviera Armas), built by Mjellem & Karlsen Verft A/S, Bergen, Norway in 1995 for Starmarine Shipping A/S of Denmark. On the 28th of June 1999 it arrived to Tenerife and on the 2nd July it began to sail between Los Cristianos and San Sebastián de La Gomera in 40 minutes. The boat was scarcely profitable due to its breakdowns, manoeuvring capacity, scarce occupation and the ecologist campaign on its effects on the colony of pilot whales existing between Tenerife and Gomera. Its service was cancelled in February 2000, returning to the Straight of Gibraltar and later, to Denmark (Rodríguez, 2004).

GREAT CATAMARANS

The Fred Olsen Company placed an order in Australia, to the Incat Australia Pte Ltd., Hobart, for three catamarans to operate between Santa Cruz de Tenerife and Agaete, Gran Canaria. These were: *Bonanza Express, Bentayga Express* and *Benchijigua Express*, all 95, 47 metres and 38 knots (maximum speed 42 knots), with 755 passengers and 230 cars the first one, while the other two could take 900 and 260 (Jane's 2001-2002). The first two were built in 1998 and 1999, while the last one was built in 2000. The three have a service speed of 38 knots and maximum of 48, lightweight. Their manoeuvring facility is such that they can turn 360° in 1 minute and can go from 43 knots to 0 in 160 metres.

The Bonanza Express came into service in 1999, arrived to S/C Tenerife on the 22nd of March 1999, travelling from Tasmania by the South of Africa, being incorporated to the line between Santa Cruz de Tenerife and Agaete (Gran Canaria). Nowadays this vessel covers the line Los Cristianos (Tenerife) Valverde - (El Hierro) – San Sebastián de La Gomera. The *Bentayga Express* arrived to S/C Tenerife on the 22nd of October through the Channel of Panama. Even though it was initially foreseen for the route Tenerife-Gomera, this was not possible due to a lack of installations, so it was assigned to the route Tenerife - Agaete on the 25th of October 1999.

The *Benchijigua Express* launched on 20th December 1999 and handed over on the 6th January, sailed to San Sebastián de La Gomera through the Pacific, arriving on the 27th January. Since the 27th January 2000, it linked the ports of Los Cristianos (Tenerife) and San Sebastián de La Gomera (Gomera) and from the 1st of April 2003, in its last journey of the day it made a stopover in Santa Cruz de La Palma (La Palma) (Díaz Lorenzo, 2004). The *Benchijigua Express* and the *Bentayga Express* actually changed their names into *Bentago Express* and *Bencomo Express* and both are sailing on the route between Santa Cruz de Tenerife and Agaete.

The three catamarans in service offer a great quality and efficiency in their service, both for passengers and merchandise.

The *Bocayna Express* with a length of 66,2 metres and 32,8 knots of speed, built by Austral Ships in Perth, Australia in 2002, arrived to S/C Tenerife 2nd October 2003, through the Channel of Suez, and unites since 2003 the ports of Playa Blanca (Lanzarote) and Corralejo (Fuerteventura).

This year, Fred Olsen incorporated to its fleet the biggest phase multi-hull ferry in the world, a trimaran of Austral Ships, which s sailing between Los Cristianos – San Sebastián and Santa Cruz de la Palma since May 2nd 2005 with a cruise speed of 40 knots. Its length is of 126,7 metres, and its able to varry 1.291 passengers, 341 cars or 450 line metres of cargo plus 123 cars (Fred Olsen, 2005).

SMALL CATAMARANS

There is another company sailing between the Canary Islands with two catamarans of 40 metres length, 394 GRT, Garajonay Exprés S.L. built in Singapore in 1997 and who rendered their services in the island of Cebu, Philipines, where the low prices fixed by the Government made the line unfeasible, hence returning to Singapore. They were sold to the United Kingdom to sail in the Channel of La Mancha. Finally, with the names of *Garajonay* and *Orone*, they arrived to the Canaries to render their service between the ports of Los Cristianos, San Sebastián de La Gomera, Playa Santiago and Valle Gran Rey (the last three in La Gomera). The first of them arrived to Valle Gran Rey on 1st July 2002, while the second one did so in October of the same year. On the 6th of November they started to operate (Rodriguez, 2004) until today.

The practical orientation of the high speed crafts in the Canaries has been polarised in three very defined ways. Firstly, the super catamarans built by Incat in Tasmania and operated by the shipping agency Fred Olsen; secondly, the jet-foils built in Japan by Kawasaki under licence of the American Boeing and under the protection of the Compañía Transmediterránea; and thirdly, on the island of La Gomera two 40-metre catamarans built in Singapore by the Kvaerner Fjjelstrand for the Garajonay Exprés, S.L.

From a perspective of future, maybe the alternative that best distinguishes the prevalence of the maritime connection of the islands are the catamarans belonging to Fred Olsen as opposed to the other two existing options. These fast vessels have a clearly different structure with capacity to transport vehicles, on the one hand, and the comfort of navigation on the other, which determine their suitability for the Archipelago. The arrival of the trimaran for Fred Olsen and the announcement to sell the Trasmediterránea jet-foils' can mean the permanence of only the multi-hulls in the Canaries.

CONCLUSIONS:

1. The Canary Islands, with their special conditions for navigation, as corresponds to an extensive archipelago situated in full ocean, open to all seas, have been a true bank of trials for the high speed crafts. Six types of the most important HSC, both on a national scale and on a world scale, have sailed in its waters: Hydrofoil, hovercraft, jet-foil, SES, mono-hulls and catamarans, with unequal results.

2. The first HSC in Canarian waters were the two hydrofoils, arriving in 1960 and 1970, which remained in service few months due to operative and profitability reasons. After a brief experience with three hovercrafts, which after carrying out the trials, did not come into service, various hydrofoils arrived, belonging to different companies and which were progressively withdrawn from service, due to technical and operational problems, as well as to lacking cargo capacity. Neither the experience with an SES was satisfactory.

3. Later, three mono-hulls were incorporated and the jet foils from Trasmediterránea, these last three being the only ones to remain in service, untill June, even though there sale has been announced.

4. Finally, we would come to the actual catamarans, which link all the islands. The tendency seems to point to the fact that the catamarans, which for their cargo capacity, navigation safety and passenger comfort, will leave the interinsular transport exclusively in the hands of multi hulls in the coming future.

REFERENCES

Bintercanarias (2004) www.bintercanarias.es/espanol/nuestra_comp_historia.htm

Fred Olsen (2004) http://www.fredolsen.es/nuevas/index.htm

Fred Olsen (2005) http://www.fredolsen.es/Lineas/Flota.htm

- INE (Instituto Nacional de Estadística), 2004: www.ine.es/prodyser/pubweb/espcif/ pobl0304.pdf
- Jane's (1994) Jane's High Speed Marine Craft. 1994-1995. Jane's Information Group. Surrey, UK.
- Jane's (2000) Jane's High Speed Marine Transportation. 2000-2001. Jane's Information Group Inc. Surrey, UK.
- Díaz Lorenzo, JC (1998) Trasmediterránea. Historia de la Flota. Compañía Trasmediterránea. Madrid.
- Díaz Lorenzo, JC (2004) Al resguardo de Anaga. De los correíllos al fast ferry. Autoridad portuaria de Santa Cruz de Tenerife. 2004.
- Rodríguez, MC (2004) Evolución de las embarcaciones rápidas en el Archipiélago Canario. Departamento de CC. TT. Navegación. Universidad de La Laguna.

Trasmediterránea (2004) www.trasmediterranea.es/barcos0.htm

EMBARCACIONES DE ALTA VELOCIDAD EN LAS ISLAS CANARIAS

RESUMEN

Para las islas Canarias, el mar es un camino de uso obligado y en cuya dependencia se ha basado el desarrollo económico de los habitantes del Archipiélago. La problemática del transporte marítimo interinsular ha sido y continúa siendo una preocupación constante y creciente hasta el momento presente, dada la casi nula capacidad de carga de los aviones que prestan servicios en las islas.

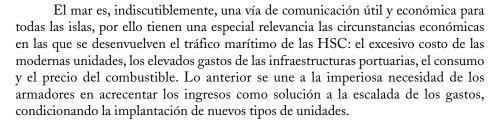
Las embarcaciones que comunican las islas han ido cambiando a través de los tiempos, y estos cambios han estado condicionados en gran manera, por las especiales circunstancias meteoro-oceánicas que rodean a la navegación en nuestras aguas. Estas circunstancias han supuesto que las islas hayan sido un verdadero banco de pruebas para los tipos principales de HSC: hidrofoils, air cushion vehicles, high-speed mono-hull crafts, SES, jetfoils and catamarans, en las que han navegado y donde han corrido distinta suerte.

INTRODUCCION

Si bien hasta hace pocos años la principal actividad económica del Archipiélago era la agricultura, dirigida tanto al consumo interno como hacia su comercialización en el resto de España, principalmente plátanos, tabaco, tomates, vinos, frutas tropicales, etc., esta situación ha cambiado y el 74,6% de la riqueza regional se produce en el sector terciario, fundamentalmente por el turismo o actividades ligadas a él.

En los últimos 80 años las comunicaciones interinsulares han sido preferentemente marítimas, en cuanto a mercancías, y aéreas en lo referente a pasajeros, ya que la capacidad de carga de los aviones que vuelan en Canarias es de muy escasa incidencia. La compañía Bintercanarias, que cubre la práctica totalidad del movimiento de pasajeros entre las islas, transportó en 2003 la cifra de 2.243.387 pasajeros.

Canarias la componen siete islas principales y varios islotes, con una extensión que varía entre los 1.928 Km² de la isla de Tenerife a los 227 del Hierro. La población canaria asciende a un total de 1.894.868 habitantes, de los cuales 915.262 viven en las islas occidentales, mientras que 979.606 lo hacen en las orientales. La meteorología viene caracterizada por la circulación de los vientos alisios, si bien puede completarse con las incidencias de los distintos tiempos atlánticos: monzónico de invierno, invasiones de aire polar marítimo, borrascas atlánticas y depresiones tropicales, que pueden afectar al litoral canario causando un fuerte oleaje, en ocasiones con olas de hasta 8 y 10 metros, que obligan a suspender la navegación marítima, si bien la altura normal suele ser de 2 metros. Ocasionalmente, se sufren temporales del E y S, que ocasionan cuantiosos daños materiales en infraestructuras portuarias.



METODOLOGÍA

En base a las experiencias personales de los autores, en relación con la navegación en HSC, se inició una fase de recopilación de datos, tanto bibliográfica como de las compañías cuyas embarcaciones navegan entre las islas, a fin de estudiar las distintas trayectorias que las HSC habían tenido en aguas canarias, particularizadas para cada uno de los seis tipos principales de las mismas, con sus prestaciones, ventajas y problemas. Finalmente, se trató de llegar a las oportunas conclusiones sobre los servicios que prestaron en Canarias, así como los motivos que llevaron a la cancelación, o no, de sus servicios.

CONCLUSIONES

1. Canarias, con sus condiciones especiales para la navegación, como corresponde a un archipiélago extenso, situado en pleno océano, abierto a todos los mares, ha sido un verdadero banco de pruebas para las embarcaciones de alta velocidad. En sus aguas han navegado los seis tipos de HSC más importantes, tanto a nivel nacional como mundial: Hidrofoil, hovercraft, jetfoil, SES, monocascos y catamaranes, con desigual resultado.

2. Los primeros HSC en aguas canarias fueron dos hidroalas, llegados en 1960 y 1970, que permanecieron en servicio escasos meses por razones operativas y de rentabilidad. Después de una breve experiencia con tres hovercraft, que realizadas las pruebas no llegaron a entrar en servicio, luego llegarían varios hidrofoils, pertenecientes a distintas compañías, que fueron progresivamente retirados del servicio, debido a problemas técnicos y operativos, así como la no disponibilidad de capacidad para carga. La experiencia con un buque SES, tampoco resultó satisfactoria.

3. Con posterioridad, se incorporaron tres monocascos y los jet-foils de la Compañía Trasmediterránea, siendo dos de estos últimos, los únicos HSC, no catamaranes, que permanecían en servicio, si bien fueron amarrados y puestos en venta en el pasado mes de junio.

4.- Finalmente se llegaría a los catamaranes actuales, que unen todas las islas. La tendencia parece apuntar a que los catamaranes, por su capacidad de carga, seguridad en la navegación y confort del pasaje, dejarán en un futuro próximo el transporte interinsular en manos exclusivamente de multicascos.