

FOUR/S | APRIL 2005 | VOLUME SIX

www.classicfastferries.com

CLASSIC FAST FERRIES

FAREWELL TO RHS 70
-A TRAVEL REPORT

APRIL SUPPLEMENT APRIL SUPPLEMENT APRIL SUPPLEMENT APRIL SUPPLEMENT



A LOVELY WAY TO SPEND A DAY

A TRIBUTE TO LAKE COMO AND ITS RHS 70s

*Days are numbered
for the RHS 70 hydrofoils
in Italy.
But the beauty of Lago di
Como stays on*

TRAVEL REPORT BY **ANDREA PASQUALINI**



THIS PRESENTATION IS A **SUPPLEMENT** TO THE APRIL 2005 *CLASSIC FAST FERRIES*

4/S ■ APRIL 2005 ■ VOLUME SIX

E43200504S



NEWS AND ARTICLES ABOUT CIVIL HYDROFOILS, HOVERCRAFT & CATAMARANS | EDITOR/PUBLISHER : **TIM TIMOLEON**
ALL ARTICLES, LAYOUT & ARTWORK PRODUCTION, EXCEPT WHERE NOTED : **TIM TIMOLEON** | PUBLISHED IN PDF
FORMAT | WWW.CLASSICFASTFERRIES.COM | SUBMITTALS OF MANUSCRIPTS AND PHOTOS, OLD AND NEW, AND
RELEVANT NEWS ITEMS ARE ENCOURAGED! | EMAIL TO : **CFF @ EMAIL.DK** | COPYRIGHT 2000/2005 *CLASSIC FAST FERRIES*
COVER PHOTO : THE WHEELHOUSE ON *FRECCIA DEI GERANI*, THE LAST OPERATIONAL RHS 70 HYDROFOIL IN ITALY
/ ANDREA PASQUALINI photo



When *Freccia delle Betulle*, the last RHS 70 hydrofoil originally delivered to NaviComo, was withdrawn from service last November, only one other RHS 70 is still in revenue service in Italy. This, *Freccia dei Gerani*, was originally delivered in 1977 to Lake Garda and moved to Lake Como in 1995 and is the last of the six RHS 70s that Rodriquez/Navaltecnic delivered for service on the three Lakes of Maggiore, Como and Garda in northern Italy from 1974 to 1977. It is the last hydrofoil to have joined the NaviComo fleet, at least for the time being, while the first was PT.20 *Freccia del Lario* in 1964.

Withdrawal of the surviving PT.20s and RHS 70s on the lakes was planned since 1990 as a number of new catamarans were delivered. When Lake Como got its three catamarans in 2001 and 2002, the last remaining PT.20 *Freccia delle Azalee* was retired and scrapped, soon followed by RHS 70 *Freccia delle Gardenie*.

The other two small hydrofoils, *Freccia delle Betulle* and *Freccia dei Gerani*, were kept in service as the catamarans proved to be a not altogether successful design and weren't able to keep up a regular fast ferry service along with the company's three larger RHS 150 hydrofoils.

Freccia dei Gerani was withdrawn in early 2003, but the need for a reliable fast ferry service convinced NaviComo to overhaul it and put it back in the game while the catamarans were alternately running, being maintained or upgraded. When *Freccia delle Betulle* suffered a major mechanical failure last autumn and an overhaul of the 30-year old hydrofoil was considered too expensive, NaviComo decided to withdraw it from service and moored it at a service pier in Como. It was moved in January

2005 to the maintenance yard at Dervio where it will be used as a spares resource for *Freccia dei Gerani* and then scrapped.

NaviComo expects to operate *Freccia dei Gerani* for another year at the most, or up to the next major breakdown, since the three RHS 150s and three overhauled catamarans are considered sufficient to requirements. This last statement is quite controversial, as the service speed of the catamarans is several knots below that of the hydrofoils and so the fast ferry product has become less competitive than it used to be when compared to road transportation (private cars or buses).

Moreover, a fleet of six fast ferries is the minimum to cover the demand during the tourist season, leaving NaviComo with no back-up units. It is rumoured however that one or both of the older RHS 150SL hydrofoils belonging to NaviMaggiore and NaviGarda may be moved to Lake Como, but this has yet to be officially confirmed.

Most of the towns on the Lake that are served by the fast ferries are important to the locals as well as visitors, either because they link to inland roads, railway and bus stations or because they are notorious tourist resorts, or both. For instance, Como and Lecco are the destinations of thousands of daily commuters including students attending high schools and university facilities. The east coast towns link to the national railway network to Milan and beyond, while Argegno and Menaggio, on the west shore, link to lots of inland towns and to Switzerland through a local transit network.

There is however one big problem that affect commuters. The single-track railway and the local roads, dating back to the 19th century, are

The first RHS 70 and PT.20 hydrofoils to enter service on Lake Como, Freccia delle Betulle (left) and Freccia del Lario, together at Como on a lovely summer's day. The PT.20 was delivered in 1964 and the RHS 70 ten years later / TIM TIMOLEON photo





ABOVE: The route (in red) for the NaviComo SR214/SR213 fast ferry service. Certain services will operate all the way to Colico in the north

inadequate to modern day transportation needs, especially during the tourist season. The state roads connecting Como and Lecco with the lakeshore towns are quite narrow and usually jammed by heavy traffic, obviously this is particularly true during rush hours. As an example, driving the mere 46 kilometers between Como and Menaggio takes about one hour and a half at these times.

Given these details, the importance of a reliable fast ferry service that allows commuters and tourists to efficiently reach their destination should be obvious to anyone.

FAREWELL TRIP To mark the end of an era on Lake Como, on February 6, 2005 a farewell trip on the last RHS 70 was arranged by Marcello Baldrati, who runs an interesting site on the internet about all the vessels and companies that have operated on Lake Como, from 19th century paddle steamers to present day fast ferries.



Being a regular Como–Varenna round trip service (SR214 northbound, SR213 southbound), *Freccia dei Gerani* would depart Como at 1400 and arrive at Varenna 59 minutes later, with scheduled calls at Argegno, Lezzeno, Lenno, Tremezzo, Bellagio and Menaggio – a distance of 37.5 kilometers. The return trip would leave Varenna at 1504 and arrive back in Como at 1600. Our group however decided we would get off at Bellagio in order to have about half an hour before the return trip to shoot photos of the breathtaking scenery and of course *Freccia dei Gerani* while underway (as well as some other conventional ferries) and still have enough time on the hydrofoil to enjoy the ride. The cost for this round trip is currently €18,20 adult.

The weather is at its best when I leave Milan, driving on the highway to Como. Snow-covered mountains in the background and an almost spring-time warm sun offer a wonderful scenery and feeling; only a cold breeze on arrival in Como reminds me that it is still only February. As the whole group gathers near the NaviComo ticket office, we start chatting and exchanging opinions about the past, the present and the twin-hull future of fast ferry service on our beloved lake.

Freccia dei Gerani arrives right on schedule and approaches the berth as usual. Since the port of Como is normally crowded with private and tourist boats, hydrofoils come hullborne right before the breakwater, which protects the inner port and promenade, then proceed very slowly south-west in the port area before making a u-turn in order to berth with the starboard side to one of the three piers. A deckhand prepares for the standard berthing procedure by stepping on the gangway on the side of the access door near the berthing cleats with a hawser ready in his hands. Once hooked to the pier and fastened to the cleats, the hawser (about two inches thick) will also help in the unberthing process.

The hydrofoil in all its parts, superstructure, hull and foils, appears to be in perfect shape, only needing some cleaning to the aft section. All Lake RHS 70s always got their tail dirty and blackened by exhaust smoke. A problem which is not present on the large RHS 150s, which have either long exhaust pipes down the sides to the stern or vent-like funnels on top of the superstructure.

The engine is running at idle, producing the familiar sound of all our RHS 70s, while we board together with some fifteen other passengers. Because the turnaround at Como is

LEFT: The forward saloon on *Freccia dei Gerani* looking aft. Seats are similar to those found on a city bus or tram but offer adequate comfort on the relatively short journeys that most people using the hydrofoil make

/ ANDREA PASQUALINI photo

scheduled to only five minutes, the engine is not switched off. In this situation, while berthed with the access door open, the only problem with the RHS 70 design is the penetration into the passenger saloon and wheelhouse of exhaust fumes.

Due to the aft fender and protruding forward foil and lack of visibility of the edge, especially when the hydrofoil is berthed with its starboard side to the quay and the helm being positioned on the port side, leaving the berth is quite elaborate.

First, the hydrofoil is reversed a bit, while applying helm enough to rotate the bow outward. This is made easier by the deckhand who uses the hawser as a means to 'pivot' the hull. This clears the forward foil from the quay structure. Secondly, while the deckhand quickly unfastens the hawser, a slow forward is applied, giving helm enough to put the hull in line and so clearing the aft fender. Some captains use the aft fender as a means to straighten the hydrofoil; as a passenger in the rear saloon what you will feel is a bump and a rude change of direction of the hull.

Finally, half forward is applied and the hydrofoil is ready to go, giving helm to straighten the course. Usually, while the craft accelerates

the deckhand recovers the hawser and stores it on the roof of the aft saloon and gets inside closing the access door.

The procedure is less tricky on the RHS 150s because these are equipped with fenders protecting both the forward and aft foils.

As generation of wash and waves must be kept at a minimum within the inner harbour and also to avoid any incidents with leisure boats (which can perform the stupidest manoeuvres), the hydrofoil will proceed at slow speed until it has passed the breakwater – beyond which it is *ahead at full throttle*. In twenty seconds, as the engine roars and our enthusiastic excitement increases accordingly, the vessel picks up speed with the bow rising in a spectacular wash (usually the forward saloon windows near the trailing edge of the foil are splashed), and clears off the water. Five to ten seconds after the bow is clear of the water the aft section follows and you feel the transition from hullborne to foilborne mode in an increased roll and sudden change of attitude. When fully foilborne the normal attitude leans slightly aft.

The lake is calm with little if no waves at all as we head out of the Como area. This part of the lake is quite narrow, the minimum coast-to-

*It isn't hard to fall
in love with Lago
di Como! Freccia
delle Betulle is
seen here against
but one of the
many great
backdrops –
Menaggio
/ ANDREA
PASQUALINI photo*



coast distance, off Moltrasio, being about 900 meters, and we enjoy the beautiful scenery of green hills, blue water and numerous small towns on the shore where civilization still blends with nature in perfect harmony.

Between Como and Moltrasio our hydrofoil cruises at about 30 knots (at 1,250 shp), the engine producing a moderate noise in the forward saloon. Once we've passed Moltrasio and the lake becomes wider it is time to really step on it and the speed now increases to 32–33 knots (at 1,350 shp) as we head for Argegno.

As we travel on I make notes about the interior arrangement. There are 49 seats in the forward saloon arranged as follows (starting at the bow): one row with four seats facing aft, then one row with 3 + 2, six rows with 3 + 3 and one row with 2 + 2 seats, all facing forward. Behind these to the port side there's a wall separating the saloon from the wheelhouse. On the starboard side is a locker containing life jackets and other equipment.

The seats on *Freccia dei Gerani*, very similar to those on a city bus or tram, are comfortable enough for medium-distance journeys, however the other RHS 70s as well as the PT.20s got more comfy seats. The interior is clean and well maintained with some trace of wear but, considering that the hydrofoil is 28 years old, the overall condition is quite good.

Ceiling lighting, running down the seat rows, is in the form of energy-saving round bulb lamps that are well integrated in the saloon design. There are overhead forced ventilation outlets at the window seats and heating is provided by two ceiling-mounted units. The general impression is that of a design that tries to be stylish – surely, thirty years ago it would have been fashionable – functional and economic at the same time. At any rate, it's still modern and pleasant, even when compared with more recent ferries that have joined the NaviComo fleet.

MEET WITH THE LAKE The call at Argegno, announced in advance by the deckhand through the vessel's PA system, is uneventful; five more people board the hydrofoil and in a few minutes we're off again.

Argegno is a small town. And I do mean small; it's nothing more than 700 people and walking around the entire place takes no longer than ten minutes. But it is a good access point for trekking in the mountains between Italy and Switzerland and so is visited by tourists all year.

Crossing the lake west to east, in about five minutes we reach Lezzeno and this call is even more uneventful. The hydrofoil comes hullborne and approaches the berth, but when no one prepares to get off and there is no one waiting on the quay the captain gives full throttle again (after making sure there isn't someone late). We now cross the lake once more, heading north-west for the breathtaking scenery of the Cape of Bolvedro and Lenno.

Capo Bolvedro is a peninsula that extends from the west coast for about one kilometer, there's about another kilometer between the tip of the peninsula and the opposite shore. What is most interesting here is Villa Arconati, a 17th century mansion that, other than having been the set for some shots in the motion picture *Star Wars – Episode II*, has been included in the U.N. registry of Humanity Heritages for its panoramic location, its unique history and the fact that it hosted one of Italy's poets, Giuseppe Parini, who linked the Neoclassicism to the Romanticism.

Nowadays there is no shortage of feeling either. When passing Capo Bolvedro and looking at this mansion which, unique today, can only be accessed by the lake via a small wooden pier and a stepway, I feel those glorious days as if they were still alive. I think there are few places in the world where a fast ferry trip can give you all these emotions, and a technically-oriented report about a hydrofoil such as this won't be complete without blending in also nature, scenery and Italian history.

Having foiled past Capo Bolvedro, ahead is Lenno. A hard turn to port while the next stop is announced and the engine is cut off and we slowly approach the quay. Boarding and unboarding a few people is a matter of one minute or so, and soon we're again underway heading for Tremezzo, another popular spot with tourists and only about a five minute jump north.

While traveling from Lenno to Tremezzo I move to the small centrally located saloon to take some pictures and notes about its arrangement. This is raised when compared to the forward and aft saloons – or these are lowered if you prefer. The reason for this of course is the midships positioned engine room. Looking forward we see the wheelhouse with the controls to port and the pilot seat on the starboard side (*see front + back cover*).

The Leopoldo
Rodríguez Shipyard
was known as
Navaltecnic for a
period of time in the
1970s
/ ANDREA PASQUALINI
photo





Villa Carlotta overlooking Tremezzo, a town particularly known for its pleasant climate even in winter
/ ANDREA PASQUALINI photo

The bridge is separated from the passenger area behind it by partitions with windows in them. The wheelhouse contains all the electrical panels, the engine and system gauges and a Decca radar. While the RHS 70 could be operated by one man, normally it carries a crew of three consisting of captain, pilot and a deckhand. The pilot seat is equipped with a desk and some drawers for navigation charts, ship books and similar documents. Between the helm and pilot positions is the stairway to the forward saloon.

The small passenger cabin holds eight seats, all of which facing aft, and two luggage racks (also used for storing life jackets and floaters) each side of the stairs to the aft saloon. Access doors are to port and starboard.

On the wall behind the pilot is the hydrofoil's identification plate with year of build (1977), type, yard number (196) and a stylized hydrofoil, which in fact is made up of the letters L and R which of course stand for Leopoldo Rodriguez. At the time of building *Freccia dei Gerani* the yard was however known as Navaltecnica, but it later reverted to the prestigious Rodriguez name. A curious detail is a separate sign below that states that "Aliscafo", the Italian word for hydrofoil, is indeed a trademark of Rodriguez/Navaltecnica.

Tremezzo, located but a few minutes north of Lenno by hydrofoil, is known for its particularly pleasant climate and is popular with tourists all year round, not the least senior citizens who want to spend some winter days in the warm and healthy climate of this charming town. Accommodation is offered by numerous hotels and bed-and-breakfasts, all located in fashion-

able 19th century buildings. Another important attraction is Villa Carlotta, a 17th century mansion surrounded by beautiful gardens and some acres of woods. Up to the late 1930s this was the property of the Duke of Sachsen-Meiningen and today is a museum.

The call at Tremezzo is a quick one too, with a few more passengers boarding, and our hydrofoil now takes us slightly south-east across the lake to Bellagio, one of the three most beautiful towns on Lake Como.

Bellagio, as can be seen on the map on page 4, is an important location because it is the hub of the three-armed lake. Thus, it not only is about half-way between Como and Colico but is the only port with connecting ferry services to Lecco, in the south of the east basin, and also connects with Tremezzo, Menaggio and Varenna by car ferries.

Hydrofoils and catamarans are not the only things afloat on Lake Como. This small car ferry, Ghisallo, is seen in the afternoon light off Bellagio
/ ANDREA PASQUALINI photo



Moreover, Bellagio is one of the most exclusive resorts on the lake, attracting tourists from all over Europe. It has a *Belle Epoque* lifestyle to it and offers breathtaking scenery and historical villas to visit, the most known of which are Villa Serbelloni and Villa Melzi.

Bellagio has attracted poets, artists and composers etc. since the Renaissance. Other than the aforementioned Italian poet Giuseppe Parini, Shelley, Longfellow, Stendhal, Flaubert and Liszt as well as most of the nobility from Milan since the Spanish domination up to the present day have either stayed or lived here.

It also attracts our party, and this is where we leave *Freccia dei Gerani* for the time being to be able to take some exterior photos of the hydrofoil as it continues to Menaggio as well as of some other vessels. We also get the opportunity to spend about half an hour walking along the promenade while enjoying the moderately warm February weather.

But time flies and we have to hurry back to the pier to catch *Freccia dei Gerani* on its return trip back to Como.

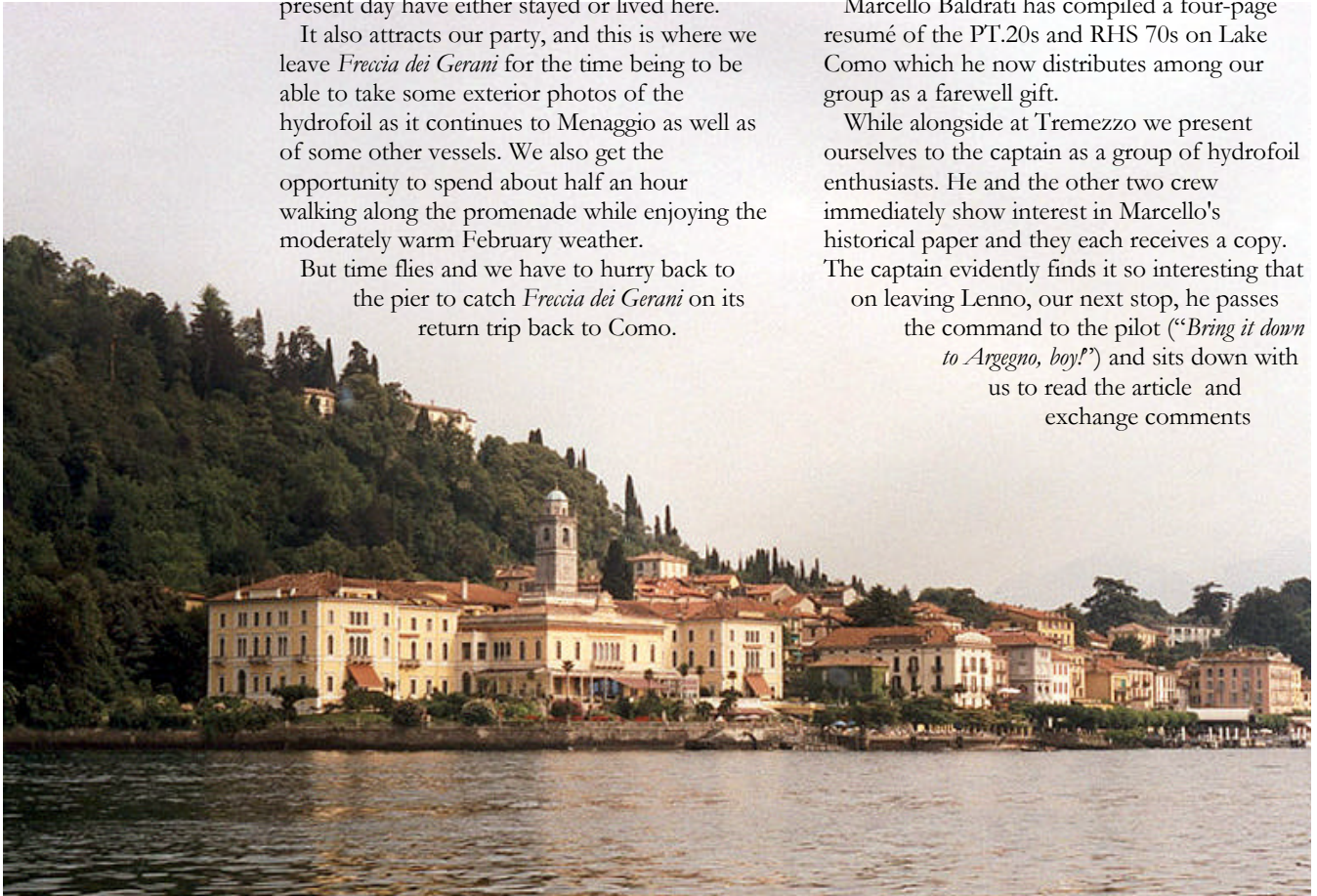
2 + 2 facing forward, 2 seats facing aft on the port side and finally a group of 4 seats arranged vis-à-vis on the starboard side. The seats are similar to those in the forward saloon.

At the front on the port side there's a tiny but functional toilet and to starboard, behind the seats, is a locker and a small storage area with additional life jackets and floaters. One interesting detail is the window next to the locker which in fact is a porthole on *Freccia dei Gerani* whereas on the other RHS 70s it's the shape of a trapezoid.

Marcello Baldrati has compiled a four-page resumé of the PT.20s and RHS 70s on Lake Como which he now distributes among our group as a farewell gift.

While alongside at Tremezzo we present ourselves to the captain as a group of hydrofoil enthusiasts. He and the other two crew immediately show interest in Marcello's historical paper and they each receives a copy.

The captain evidently finds it so interesting that on leaving Lenno, our next stop, he passes the command to the pilot (*"Bring it down to Argegno, boy!"*) and sits down with us to read the article and exchange comments



Was this taken during the 'Belle Epoque' or is it 2005? Bellagio seen from the hydrofoil and Lago di Como / ANDREA PASQUALINI photo

VIPs (VERY IMPORTANT PASSENGERS)

Back on board, the crew notices us and we overhear the pilot and captain exchanging some comments about "hydrofoil fans". It is a fact that most of the NaviComo crew members are enthusiastic people who are devoted to *their* ferry or hydrofoil, so obviously we can't miss the big opportunity on this journey – talking with the crew and, maybe, asking for something special as we aren't any longer just ordinary passengers!

This time we take our seats in the aft saloon, which is a bit narrower than the forward one but not less comfortable. The only problem is the windows, which are quite dirty from exhaust smoke. The engine noise is about the same as in the forward section.

There are 22 seats, seen from the rear : 4 contiguous seats facing forward, three rows of

and memories of the first PT.20 *Freccia del Lario* and all the hydrofoils that followed.

Enjoying the smooth ride back home to Como in the setting sun, we chat with the crew about the past, the present and the future craft on the Lake (as we had assumed, none of them likes the recent CNP catamarans very much). Approaching Argegno one of our group asks for some horn hoots to record on his mobile phone.

Arriving back at Como at 1600, right on schedule, *Freccia dei Gerani* is berthed at the main pier where it will be idling for a little over three hours until its last run (SR26) for the day at 1910. This service operates all the way to the north of the Lake where the vessel will be berthed over night at Domaso in order to work the first southbound commuter run on Monday morning.



BELOW IS WHERE THE HEART IS But before we all head home in different directions we're getting prepared for a great gift – the crew has invited us to visit the vessel's engine room.

This is reached by a step ladder from under the pilot's seat. The engine room obviously is cramped and only allows for two persons to be there at the same time, in this case one crew and one group member. The space is lighted by some roof-mounted lamps and also daylight comes in through four portholes, two on either side. Since the engine has only recently been switched off, the small space is quite hot. There's the familiar noise of metal cooling off and likewise characteristic smell of oil and

machinery, and I also feel a little roll and pitch produced by some wave motion. Sitting on the cooling water inlet pipe – having realized after one second that placing yourself on the water outlet was a bad idea, to put it mildly! – I enjoy the detailed explanation by the crew member of all the bits and pieces down here.

The engine in *Freccia dei Gerani*, as indeed in all Lake RHS 70s, is an MTU 12V 493Ty71 diesel, producing a maximum power output of 1,350HP at 1,500 rpm. This MTU has a piston displacement of about 60.000 cu.cm. on 12 cylinders in two V-mounted banks of six and has a diesel cycle unit with indirect injection (in this system the gasoline is heated in one pre-injection chamber for each cylinder and injection is single-point).

The engine is equipped with a centrifugal clutch that disconnects at idle and transfers the torque to the main shaft through an elastic joint. Forward of the engine the shaft is coupled to a gearbox that acts as the reverser (the reduction ratio is almost 1:1); the propeller shaft goes out from this gearbox at an angle of about –20 degrees and runs aft.

Cooling water is taken from intakes on the struts of the aft foil and runs in an open cycle through two pipes (about Ø30 cm). The water exhausts are located on each side, slightly aft of the engine exhaust, and on the keel.

This thirty year old engine has two features worth noting: it won't start up, or shut down, if oil pressure falls below safety level, because oil pressure also locks and unlocks the fuel pumps. More interesting, the throttle and engine act in combination with an angle-of-attack adjustment system for the bow foil. Gradually moving the throttle from 'idle' to 'full ahead' adjusts the bow foil angle of attack of 1 or 2 degrees more, restoring it to normal attitude once in full foilborne mode.

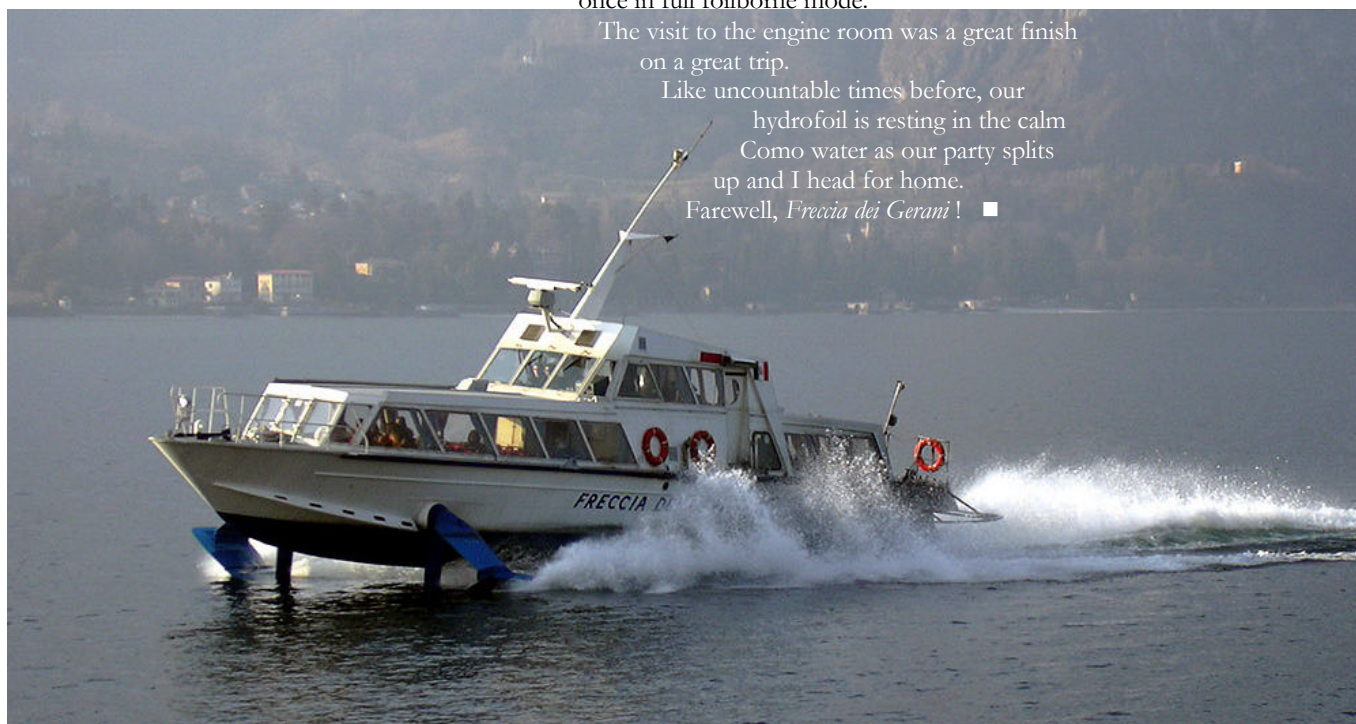
The visit to the engine room was a great finish on a great trip.

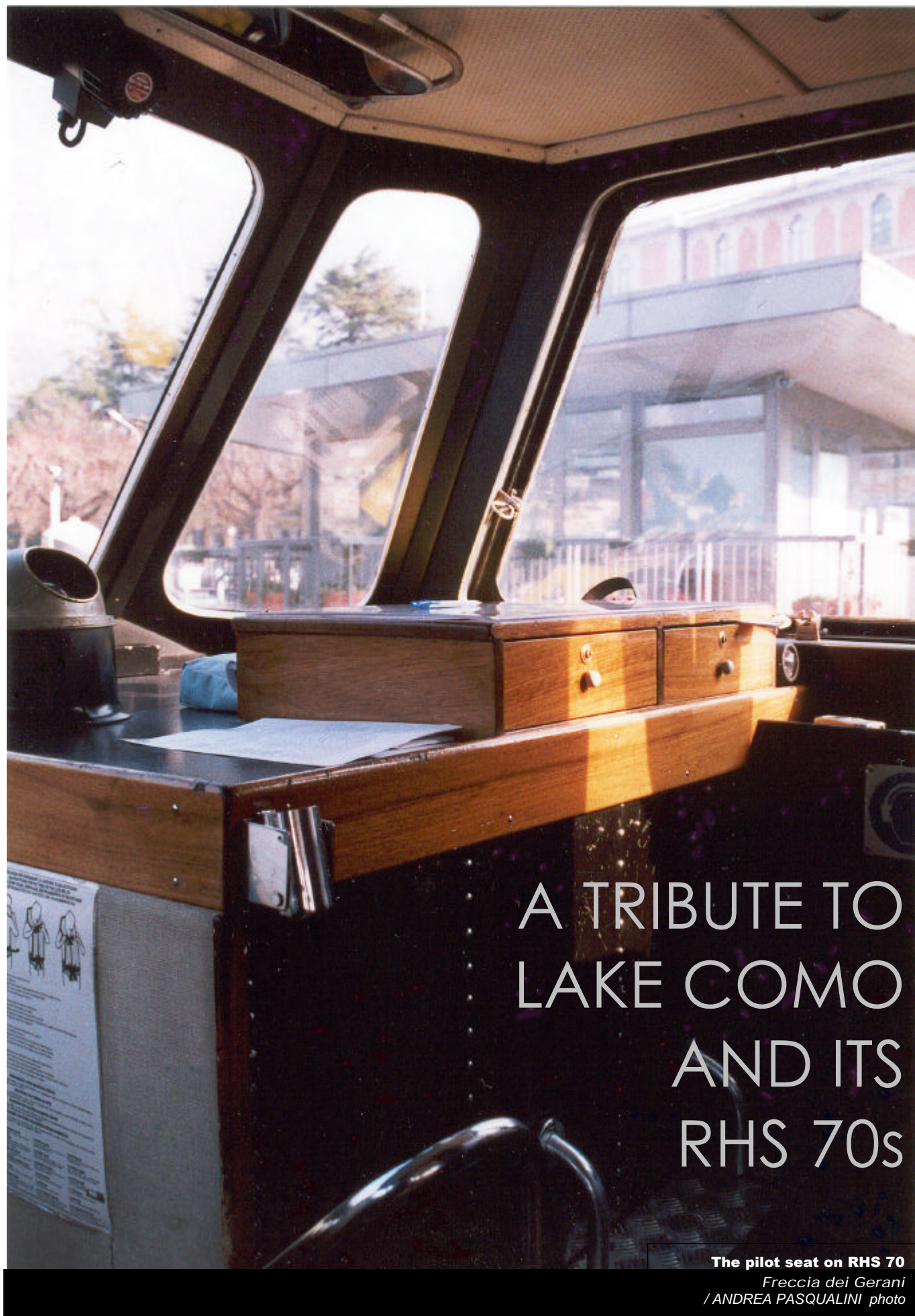
Like uncountable times before, our hydrofoil is resting in the calm Como water as our party splits up and I head for home.

Farewell, *Freccia dei Gerani*! ■

LEFT: The porthole on the starboard side in the aft saloon is unique to *Freccia dei Gerani* (top), on the other RHS 70s this is the shape of a trapezoid / ANDREA PASQUALINI photo, both

Freccia dei Gerani looking as lively as ever approaches Bellagio in February this year / MARCELLO BALDRATI photo





A TRIBUTE TO LAKE COMO AND ITS RHS 70s

The pilot seat on RHS 70

Freccia dei Gerani
/ ANDREA PASQUALINI photo