



(Musée Hystorique de l'Hydraviation), the only one in Europe. The site has a glorious water flying tradition. On the lake two seaplane bases existed up to WW II: the Latécoère base, used by the famous french seaplane constructor, and Les Hourtquets, the base from which the huge six-engined 'Laté 631' used to depart for their transcontinental flights. Also in Biscarrosse, as in Como, an authorized water landing surface survived the war, but in Biscarrosse all infrastructures disappeared and



Above, the Piper PA18 of the expedition described in the text, photographed by the Cessna 172, in the Alps.

From Como (Italy) to Biscarrosse (France)

Purpose. In Biscarrosse, situated on a nice coastal lake, south-east of Bordeaux, France, there is a very well managed museum on the history of water flying



Right, the Piper PA18 of the expedition described in the text, photographed by the Cessna 172, flying on top during the approach to the Alps.

Left, flying over the Monginevro pass. It is very pleasant to have a confirmation that the weather on the other side "is nice", as the meteo office forecasted.

no significant seaplane operator has functioned in the last 45 years.

The pleasure of making an interesting journey was accompanied by the satisfaction of making a historic place live a little of its glorious past. One of the reasons why the modern seaplane pilot organizes an expedition is often what he has to consider a duty: to open, to keep opened and to re-open water surfaces to water flying.

Type of aircraft for the expedition. The historic aim of this expedition suggested the use of a straight -i.e. non amphibious - seaplane. This involved many more logistic problems and more work, but also much more fun! We decided to use a Cessna 172 and a Piper PA 18 Super Cub.

Feasibility. A Cessna 172 on 2130 EDO floats, with 50 Gal./190 liter tanks, has an endurance of 6-7.5 hours, depending on the power setting. In a 6.5 hours flight at 75 KTS 487 miles/903 kms can be run. The same computations for the Piper PA18 lead to an endurance of 5 hours and 380 miles/703 kms.

The choice of the best path from Como to Biscar-





The aircraft at Marignane Berre, the water landing area near Marseille airport (France).



- The flight path should pass, if possible, over surfaces where an emergency landing could be safely done (lakes, rivers, artificial basins, the sea).
- The path should pass over interesting places and in scenic regions.
- New water surfaces shall be opened, if possible, for future uses by seaplanes.



According to all the above mentioned parameters, the first leg can end only in Marseille, where the only French seaplane base open to the traffic exists and where customs service of the international airport nearby can be supplied to seaplanes.

To reach Marseille, a short and scenic route crosses the Alps and follows the river Durance. If the weather in the Alps is poor a longer route is possible, crossing the Appennines, reaching the Mediterranean Sea and following the coast up to Marseille.

The Alpine route is 430 kms long, within the range of the Piper PA18, while the Mediterranean route would be very near to the limit for the same aircraft. A stop for refueling is to be considered. Genoa offers a large port just beside the international airport, where customs service is provided. A complex procedure was started to get permission to operate in the middle of the port of Genoa, something that in Italy is not very easy, considering the Bizantine legislation.

Finally, having obtained the permission to operate in Genoa harbor, we had the option of choosing the proper route at the moment of departure.

rosse has to take into account the following parameters:

- No leg can be longer than the range of the Piper PA18.
- At the end of any leg 100LL gasoline has to be found for refueling.
- The leg crossing the Italian-French border must be run between airports or seaplane bases that have a customs facility (no longer needed within the European Community).



Expeditions are very interesting also from a cultural and historical point of view. Here is the medieval walled town of Aigues Mortes, in France, founded by the Romans.

Coastal lakes and lagoons of Camargue (Southern France) are a wonderful landscape and provide many alternates in case of emergency.





Four views of the operations on Lake Pareloup, in the Cevennes. The marks of the variation of water level is clearly visible.



planes are those used by the Canadair fire fighters or those used by ULMs, if long enough.

The Canadair operation responsables told us that their surfaces could be used only in case of emergency. For a normal operation they did not have the authority to issue permission. In any case they gave us all the maps of the surfaces.

Finally we found a member of the ULM French association who managed a water surface on Lake Pareloup, in the Cevennes, at the altitude of about 3000 feet. The ULM operator would have brought us 100LL gasoline. A perfectly flat lake at that altitude, on a hot day and no wind conditions, used by a fully loaded Cessna, presents some risk of not climbing on the step or requiring a take off run longer then the lake itself (a problem not encountered with the Piper). The Cessna would have landed in Lake Pareloup only if the conditions were suitable for the take off. Otherwise she would have continued her one-leg trip from Marseille to Biscarrosse.



Article published in the newspaper 'Centre Presse', describing the operations of the seaplanes on Lake Pareloup. Information to the press of water flying activity is not vanity: it helps maintain the image that seeing seaplanes on local water surfaces is usual.

But a lake in a mountainous area could be in the clouds in case of bad weather. We had to have an alternate, possibly in the plain. In other words, in a place that could be reached more easily in bad weather conditions. Another surface used by ULMs was found in Moissac, on the river Garonne. In case of landing there, nobody would have helped us and we would have to get gasoline from the nearest airport and bring it to the river.

The final Lake Pareloup-Biscarrosse or Moissac-Bis-

The Marseille-Biscarrosse leg was possible for the Cessna, but definitely not for the Piper, and an intermediate stop for refuelling had to be found. In France, where water flying is performed very seldom and only one seaplane is present, it is very difficult to be authorized to land on a water surface and a bureaucratic procedure of 4-6 months is required. The only existing water surfaces that can be used by sea-



Right, Biscarrosse. The point of arrival of a long journey doesn't appear particularly significant in a picture, but it is very inviting for the pilot.

carrosse leg, entirely over flat land, could be done without problems.

Flight planning. To plan a flight means to establish the safest route from point A to point B. Safest doesn't mean shortest nor most pleasant. A safe route for a seaplane trip means overflying landable water as much as possible. On the Alpine route we planned a route passing over many lakes of the Po plain, the river Po itself, an artificial basin near to the Moncenisio Pass, in the Alps, and the river Durance in France, with all connected canals and lakes. On the Mediterranean route we planned a trip overflying some part of the Po and Ticino rivers, the port of Genoa and the sea up to Marseille.

One may think that planning most of the trip over the sea is very safe for a seaplane, because a continuous alternate is offered by nature. The truth - in our case - is that the Alpine route, despite its being a wholly continental route and a route that has to cross a huge mountain range, is much safer, as far as alternates are concerned. The operator of light seaplanes knows well that the open sea is usually unsuitable for landing and if a landing in swells does not endanger lives, it may end with the loss of the aircraft. A landing on a river or lake or on the grass, along the continental route, is much safer.

On the leg from Marseille to Biscarrosse an almost continuous alternate is offered by the coastal lakes of Camargue, the Canal du Midi and the river Garonne. In case of a stop-over in Lake Pareloup, a mountainous area with few alternates has to be crossed.

Possible problems. As far as meteorology is concerned, the problems of the first part of the trip are those of crossing a mountainous area. In Provence and Camargue a typical wind, the Mistral, can blow at 50 KTS. Unlike alpine weather, the Mistral is normally forecasted well in advance. In the French plain it is not uncommon to find morning fog and very low ceilings in bad weather. Near the Atlantic Ocean strong westerly winds can be encountered.

As far as logistics is concerned, all the material to anchor or to secure aircraft at buoys or on unprepared shores in strong winds had to be available on board, including an inflatable dingy to move from the aircraft to the shore and vice versa.

The real trip. The real flight was performed along the Alpine route and along the Mediterranean Sea on the way back, when the Alps were closed for bad weather. No problem was encountered on the rest of the one week trip; we only had to proceed in the clear area between two fronts on the way back.

We stopped on all water surfaces considered in the planning, just to create the habit of seeing seaplanes on the water and to establish a previous case for the authorities. The ULM operator called the press, who assisted our operations on Lake Pareloup and dedicated a half page of the next day's newspaper to seaplanes. Our operation in Biscarrosse, where seaplanes have been absent since WW II, was so appreciated that the Seaplane Museum, sponsored by the Municipality, organized a regular annual seaplane fly-in that had great success in the following years. Now a small water flying school has been established on Lake Biscarrosse, operating the only general aviation seaplane in France, a Cessna 172 XP. All this was born from our expedition.

We learned from our experience that if you limit yourself to 40 minute flights around your seaplane base, you will remain a beginner and sooner or later you will stop flying, while if you commit yourself to a more demanding - but more interesting - activity, such as organizing or participating in longer flights, even expeditions, you will become an experienced seaplane pilot and you will have much more fun. In addition, you will help the water flying community to open or to keep opened waters to seaplane activity.

From left, Paolo Gavazzi, Gerolamo Gavazzi, Madame Vié-Klaze, Bruno confalonieri, Pascal Parpaite, Cesare Baj. Below, Bob Willis with his Lake Buccaneer, who reached Biscarrosse from England.

