

# SOARING FLIGHT *in Argentina*

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First manifestation of aviation in South America—from the data we have been able to obtain—was done with a glider, and took place in Argentina around the year 1895 when popular Pablo Suárez, after corresponding with Otto Lilienthal, constructed a glider similar to that of the German pioneer, successfully following his directions and advice.

Later with the passage of time, much was written and read about the development of motorless flight in Germany and the feats of Kronfeld, Hirth, Gronhoff, and others. In 1923 the Argentine engineer, D. Biró, designed and constructed a glider very similar to the "Vampyr," but on the test flight the pilot, Otto Ballod, was killed while doing a shock cord launching from a small hill.

In 1930 by the initiative of the magazine *Popular Science* of Buenos Aires, The "Club Argentino de Planeadores Albatros" (Albatross Soaring Club of Argentina) was founded through which the sport was to be developed and encouraged throughout the surrounding territory, creating new clubs and groups which afterward were to affiliate with the "Albatros" to form a federation. In actuality, the country can count over 30 clubs that are operated under the directions of the mother club, receiving folders, illustrations, programs, construction manuals, etc.

Argentina, because of its geographical position, (between the parallels 22 degrees and 55 degrees south) possesses all sorts of climates and contains the most varied topographical conditions. It is possibly one of the most logical countries for the development of soaring flight. There are zones in which it is possible to fly thermally during 12 months of the year.

Among the Argentine provinces, taking into account the great expanse of territory, that of Buenos Aires is the one which offers the best conditions for the establishment of the most important center of motorless flight because of the density of its population and because it is conveniently located near the national government as well as the industries which provide basic materials for the construction of gliders.

But the interesting thing is that this province offers also good possibilities for the realization of outstanding flights, especially distance flights. As a result of which, Merlo (the village in which the Club Albatross, principal school for motorless flight in the country, is located) is situated some 35 miles to the west of the Río de la Plata, which embraces it in a curve that goes from NNW to SSE. This on first sight would seem to be a great inconvenience, but that is not the case as has been demonstrated by successful flights already by Argentine pilots, and also by those made by the German scientific mission of motorless flight which was conducted by Professor Walter Georgii in 1934, using the military air base of El Palomar which is even closer to the Río de la Plata. Peter Riedel made a flight with his Fafnir to the town of Perez Millán, (approximately 100 miles).

From our observations, the best season in the province of Buenos Aires is from the end of spring to the begin-

ning of autumn, because of the repeated presence of cumulus clouds in quantities and because the zones of atmospheric pressures are quite variable. On days of unlimited ceiling, high pressure prevails during these months, it being common to encounter thermals of 2-3 and up to 5 meters per second. From January to the middle of February (mid-summer) Buenos Aires frequently is in a low pressure region with ceiling unlimited and the atmosphere saturated with humidity, and on very rare occasions cumulo-nimbus clouds. Nevertheless excellent flights can be made.

In Buenos Aires the winds are prevalently from the North. This is almost always favorable, above all when it follows a very strong wind from the south or southeast of several days duration which saturates the entire area, bringing almost always high pressure areas. But after the first 2 days of blowing from the north, the third day begins to get nasty with cirrus and very high fogs obscuring the sun and lowering the atmospheric pressure.

The impression exists among us that the best distance flights will be made using the "Pampero" (strong west wind from the Argentine Pampas) or on the advance of a cold front from the south. The "Pampero" progresses eastward in which direction is the Río de la Plata, whose minimum width from Argentine to the coast of Uruguay is some 35 miles. The "hop" could only be attempted in very special cases accompanied by cumulo clouds or in gliding flight after having obtained a safe altitude, in order not to have to undergo a ducking.

On clear days there are visibly presented to the pilot, either on the ground or in flight, many natural indicators of up currents. The rapid rate of descent of the Grunau Baby (most prevalent type of sailplane in Argentina) is the cause that has obliged us to maintain a very close attention to the air in order to discover one of those natural indicators, above all when we clearly realize that the altitude will be lost very soon and we haven't time to bring our instruments into action. We refer principally to the birds such as the "Chimango," "Chajá," etc., which are abundant in Argentina and which many times have spiraled in the interior of our dust-devils without causing us any concern except as other occupants and manifestations of nature.

Often we have taken pains to observe the swarms of locusts (unfortunately so common in this country) having noted that although these pests may be busy in the ground revouring the vegetation, at the passage of a thermal, they rise flying in formation and move, without any great effort, to other fields where they light to continue their deadly work. Flying toward them, we hear presently, as we ascend, how sharply they strike against the leading edge of the wings.

Other inhabitants that are effective collaborators at times in indicating to us the presence of ascending thermal currents are the vulgarly called "ratitas" or "visiting weavers," or they may be some very small weavers which descend from and ascend to branches by means of their own saliva which makes a long and very fine thread re-