Gliding: How Louis de San beat the Asian duration and altitude records in Chungking, China, in 1940

In 1939, Louis de San set off for China to serve as a diplomat. A keen glider pilot, he was eager to taste the eastern thermal currents. When he set off in a Chinese glider, towed by a military plane, it was to be for a flight of more than four hours and set an Asian record. After the attack on Pearl Harbor, he managed to flee Hong Kong as the bombs fell, and to reach South Africa. There he joined the RAF and passed his examinations as an aeroplane pilot. Lieutenant de San then went to Congo, where he was based until the end of hostilities and undertook various missions and operations in Oxford and ST4 planes. This is his account of how he set the record in China:

It was 1940. For a year I had been in Chungking, wartime capital of the Chinese government. There was bombing day and night, crushing heat of more than 40 degrees, tension, loneliness ... There were few distractions: one was a spectator in the virtually hopeless struggle of the Chinese people, at war for two years. I travelled the country and spent hours watching the clouds, birds, weather conditions; I rapidly concluded that the good thermals had to be as numerous as fish in the Yangtze.

I knew every corner of the area around Chungking. The town was a kind of peninsula, surrounded by two mighty rivers, the Yangtze and the Kialing. Thousands of dark roofs, large areas flattened by Japanese bombing, the immediate contrast of great expanses of water, and over it all leaden skies, more oppressive than the strongest sun in Coquilhatville or Lake Leopold II in Congo.

Where great gliding birds untiringly traced their spirals higher, there had to be powerful thermal currents. Above the town, above the white sandbanks emerging from the river, one saw from morning to
evening great buzzards, eagles and other birds of prey. I watched them turning, always in the same place. I carefully observed their movements, noting the places above which they turned, and studied the thermals which they used and which seemed very powerful. I was envious.

A year earlier I was in Upper Silesia, in a German camp at Grunau in the Riesengebirge. Excellent instructors gave me all the tricks of the trade I needed to allow me to climb to 4,900 metres.

Every day conditions got ever better than the best days in Grunau. But ... I had no glider and there was no chance of getting one sent by plane from the United States. Moreover, the Chinese were not letting me fly with the war raging. One fine morning, it was April 20, my Chinese secretary translated for me a newspaper article announcing a forthcoming gliding demonstration by a Chinese pilot trained in Germany.

Two days later, a group of military pilots arrived in Chungking with two fine new planes of the “Rhônsperber” type. They were two high performance gliders equipped with the best instruments; how had they got to Chungking, after the retreat from Shanghai and then to Hangkow (2,000 km away, with no railway link) will always remain a mystery to me. But there they were, before my eyes!

On the 24th, a Chinese pilot was towed to 2,000 metres and produced a wonderful demonstration of acrobatics. Unfortunately, for reasons that were unclear, while he was still at about 100 metres, his machine went into a dive and crashed to the ground. Nothing was left of it.

Some hours after the tragic accident, I took a telephone call from the minister of war, asking if I would be willing to undertake a demonstration in the remaining glider. I accept immediately without hesitation and fix a rendezvous for the next day at 8:00 am. On April 25, 1940, I therefore found myself examining in detail the Rhônsperber, which had been placed at my disposal, as well as the Curtiss plane that was to tow me. I installed my altimeter and a special artificial horizon which I had brought from Europe in my baggage.

The glider was ready for take-off at 11:40. I give instructions to
my pilot to tow me over the town and tell him that I will release the
plane at an altitude of 300 metres and that I will climb under my own
steam to 2,000 metres. Sceptical glances from my Chinese friends, who
find it difficult to accept that a European might do something better
than a Son of Heaven.

At 11:45, I take off. At first we follow the river. The town is to our
left, set on terrace up the mountainside. There is not a breath of air; all
is calm. It was as I expected. Reaching the tip of the peninsula, we turn
90 degree to the left, and this time, still climbing at one metre per
second, we begin to fly across the town. As we arrive over the roofs, I
sense a number of small thermal currents; my gauges frequently indicate
two metres per second. But I am still only at 200 metres, and too far
from the airfield, in case I should fail to find serious thermals.

When we come over San Shin Sze, the plane begins a slight turn
to the left, and I sense that he is going to fly over the river again; my
altimeter reads just 300 metres, and I release the glider in a light thermal,
when I place myself in tight spirals. The tow had lasted seven minutes.
The sky was completely blue, without a cloud, however with a slight
violet haze over the ground. No wind, I was obliged to fly solely with
the aid of thermal currents. Almost immediately, I find myself in a
weak current. After one or two minutes, I am even descending at a
speed of about 1.5 metres per second. I am flying at 75 km per hour, at
an angle of about 35 degrees. I decide to resume the direction of the
river and to approach the airfield but I find that I have travelled further
away than I thought. There was no chance of getting back to the island
from which I had taken off. I spot a great sandbank and decide to attempt
a last chance to fly towards the point of the town, where I had observed
and felt some good currents at the start of my tow.

At 60 metres above the roofs - at last! - a few strong buffets and
my two gauges are suddenly showing two metres of climb. Steep spirals,
at an angle of 45 degrees, speed 80 km per hour, and I am climbing ... this
time evenly and without being buffeted. 200 metres, 500 metres,
1,000 metres, I am always turning, always widening my turns. The
fight becomes easier and easier and this time I am climbing at three
metres a second. I see the magnificent panorama of the town, as if
gripped in a vice between two great rivers; I see, quite small, the English,
French and American gunboats (the "Tutuila", where I used to go
regularly to eat a good curry).

I see my embassy, tiny, great water reservoirs, the beginning of the magnificent Yangtse gorges, innumerable rice fields looking like contour lines, on a relief map. A splendid landscape in miniature, the kind the Chinese love for their gardens.

I amuse myself by flying back and forth across the town. I go into crazy spirals opposite an American gunboat and climb in seconds, or so it seems, to 2,000 feet. There I decide to stop and wander about. I am worried about the Japanese who no doubt would come and bomb us and could well send a reconnaissance aircraft, which could easily come and shoot me down ... I am flying in Chinese military colours so I would be in the wrong.

Towards 4:00 pm, I feel very tired. I have eaten my lunch, great nervous tension, since I have not flown for more than a year. Moreover, the seat is hard and the parachute is stifling me. I put out the braking flaps in order to descend and I realise that I have to dive at 90 degrees to lose height, so strong are the thermals in mid-river. I amuse myself for five or six minutes in doing turns right above the British Embassy and over the airfield, where I see thousands of Chinese. Finally, I put down at the end of the island in order not to land on the cranes. A perfect landing in 42 degrees of heat after a flight of four hours, 44 minutes.

The Asian duration and altitude records were broken at the first attempt. It was the first demonstration flight in China. That evening, the capital’s newspapers gave the following news, in Chinese and English:

"New glider record registered here, - Chungking, April 25 (Central News). By remaining in the air for 4 hours and 44 minutes, M Louis de San, Belgian glider-flyer and honorary director of the Sino-French-Belgian Swiss Cultural Association, set a new endurance record for Asia to day. Flying a glider of the Aeronautical Affairs Commission, M de San took off at 11:25 this morning. He gained an altitude of 5,700 feet."
Translator’s notes:

1 Now Mbandka, Democratic Republic of Congo; one assumes de San was based there later.

2 Or attitude indicator.

3 The Tutuila was a Yangtse river patrol boat of the U.S. Navy, which was stranded at Chungking by the war after 1938.

4 This paragraph provided in English but it appears to be a re-translation via French.
1. Louis de San addresses a conference on gliding in China in April 1940.
Louis de Son (left) before his record-breaking flight in Chungking. A note, apparently in his hand, on the reverse, dates this as 24 May 1940, suggesting the reference to April in the text may be wrong.
4. Louis de San stands above the Yangtse Gorge near Chungking in 1940
6. Preparations are made for Louis de San's record-breaking flight in Chungking in 1940
7. Louis de San photographed in Syria in 1988 by Paul Bolding