

2256 KILOMETERS

BIGGEST FLIGHT IN THE NORTHERN HEMISPHERE

BY HELGE ZEMBOLD

PHOTOS BY GORDON BOETTGER

Thinking of long-distance flights ranging 2000 kilometers or more, areas like South America and perhaps New Zealand come to mind. However, the biggest of the Northern Hemisphere took place on May 31st in the USA, ranging over 2250 kilometers or 1401 miles.

Of course, everyone has already heard of the Sierra Nevada in the western United States as an interesting gliding area - after all, it's where you find the legendary Hilton ranch. But it seems that flights over such distances fit to the United States - to Europeans, everything is a bit bigger there. Thus it is hardly surprising that the biggest flight on the Northern Hemisphere somehow got overlooked. It is not only the distance alone which is impressive: the 2256 kilometres were flown with an average speed of 176.6 km/h in a nearly 40-year-old Kestrel.

Pilot Gordon Boettger definitely has some long-haul experience: He is a captain of the MD11 with freight company FedEx. In gliding, he recorded three flights over 1500 kilometers and also three over more than 2000 kilometers - two of them this year. The most

recent flight started seven to ten days earlier with a first analysis of the weather. Then comes the paperwork: "Since my flights take me into controlled airspace, the administrative work involved with making sure all the paperwork is done is exhausting. That's the part of it that is not so much fun", says 44-year-old Boettger.

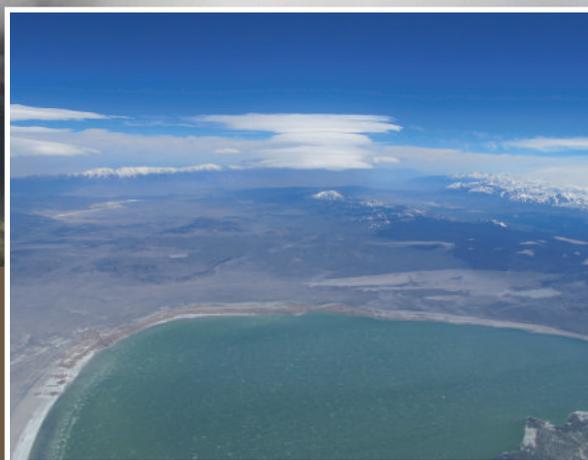
Also the glider has to be prepared, sufficient oxygen and charged batteries are essential as well as warm clothes. His farthest flights Boettger has always been doing with the Kestrel or the Duo Discus from a friend. "One issue I have is my height. At 1.95 meters, there aren't too many sailplanes I can fit into with all of my equipment that I must wear. The Kestrel has a large cockpit and is very comfortable. Even with the Duo, the only possibility is to shoehorn myself



into the back seat. There would be no way to fly from the front. After having made a 2200 kilometer flight a month earlier in the Duo, making the 2256 kilometers flight in the Kestrel in May which was totally unexpected makes me appreciate how much more difficult it is to fly that distance in a 40 year old sailplane."

Boettger's home aerodrome Minden, Nevada is just minutes away from his house. "Minden is a very good area to fly for several reasons. Being situated on the lee side of the Sierra Mountains allows one to easily tap into the wave, which can lead to flights north and south along the Sierra as well as flights downwind. Airspace restrictions are minimal allowing for greater flexibility in task selection" says Boettger.

On the night before the big flight, he was

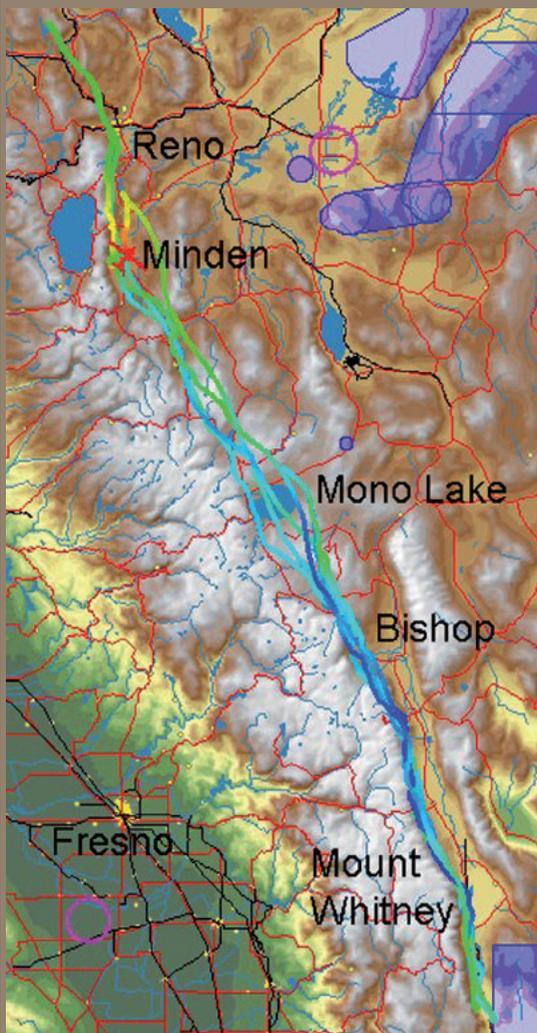


Above: Pulling the speed brakes despite perfect weather – Gordon Boettger otherwise would have left his height band he was assigned by ATC



Left: Overhead Mono Lake heading southbound, gaining some height for the next leap to the clouds. On the ground, the wind had freshened up to 120 km/h - not a good place to land out

Below: Perfect lenticularis northwest of Bishop, Nevada



hardly thinking of sleep, again and again checking that he had forgotten nothing in the preparations and playing through various weather changes and their impacts.

Ambition requires IFR

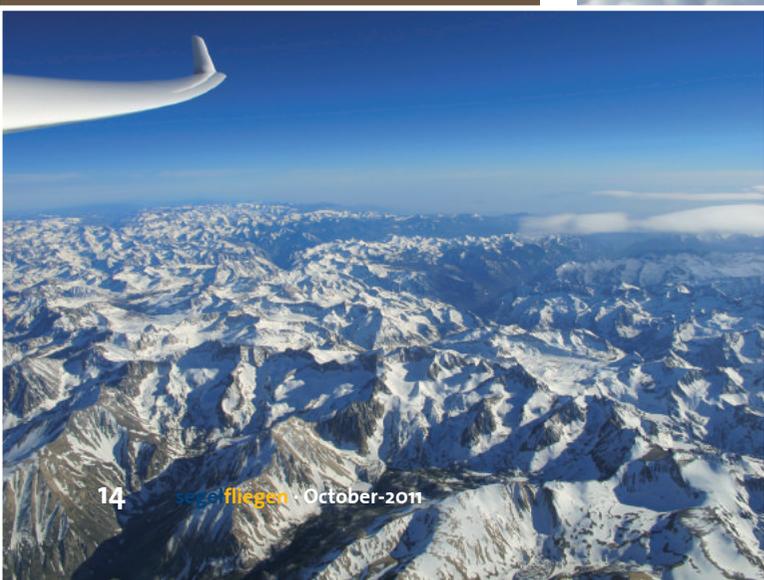
“The forecasted excessive southerly wind component made it look less than ideal, so I didn’t have any high expectations. I assembled the afternoon before and was planning on an easy takeoff around 9 a.m. for a 1000 kilometer out and return, but eventually my competitive edge got the best of me and I knew that I’d be kicking myself if conditions proved to be better than forecast, so I changed my proposed takeoff to sunrise.” The original plan was to stay below FL180 and remain VFR, but when Boettger awoke at 04:30 in the morning, his competitive edge got him again and he filed an IFR flight plan and a military airspace request. The launch took place shortly after sunrise, in the rough rotor Boettger climbed to FL180, activated his IFR flight plan and was initially assigned a height band between FL220 and FL250. On the way to the south clouds marked the updrafts in the normally difficult area around Bridgeport and Mono Lake.

On the southern edge of the Owens Valley the wave dissolved, so the first turnpoint was set 376 after kilometers before turning back north - directly into the wave of Mount Whitney, being the highest mountain in the United States without Alaska, 4421 meters high.

“My mind was still not convinced of accomplishing anything more than 1250 kilometers. I guess I got spoiled flying the much heavier and better performing Duo Discus”, says Boettger. After almost four and a half hours he was back in Minden and then flew on further north up to Reno, “although the sky did not look very promising at all.” A call by satellite phone from friend and meteorologist Doug Armstrong brought certainty: A frontal system in the north suppressed all thermal activity. At 11:21 local time Boettger turned southbound again, after less than five and a half hours 855 kilometers had been logged. “The cold front was slowly making its way southbound. I arrived west of the Minden airport at 12:15 at about 2500 meters in poor conditions. My intention was to land and call it a day, however a call from a friend who had contacted the wave just to the south got my spirits up again.”

Below: Looking south over the snow-covered Sierra Nevada from FL270

Right: View of a lenticular cloud in FL270. “FL400 would not have been a problem on this day,” says Gordon Boettger.



No landing field except the desert

After the ascent to 6000 meters Boettger struggled against the strong southeasterly wind: "East of Mono Lake where I took a slow climb to FL240. I needed a lot of height here to make a 50 kilometer jump in strong sink to very good-looking clouds to the south. If this did not work, there would be no place to land except in 100 km/h winds in the desert." The painstakingly gained height paid off as Boettger reached a solid looking lenticular cloud that connected with the wave of Owens Valley.

"Now it was redline flying southbound in the Owens Valley. Often I had to fly out of the wave or pull the spoilers at FL280 to prevent from climbing above my ATC limit of FL290", said Boettger, who profited from his experience as a professional pilot in contact with air traffic control. "The controllers need to know that they can deal with someone that has experience in that airspace. There is so much flexibility that's required when flying in the wave regarding altitude and course deviations, so I must be on the same page as the controller." Then it went like clockwork: Shortly before 15 o'clock, after 1330 kilometers, a new

turning point was set, an hour and 250 kilometers later another one near Mono Lake. Waypoint number five was reached after another 250 kilometers at 17:28. "I could accomplish well over 2000 kilometers with a five turn point task. My goal would be OLC distance points. During the next several hours I flew at very high speeds covering kilometers very fast. I had to make many calculations to determine where my turn points had to be in order to accomplish a 2200 kilometer flight. This was very stressful while flying at these speeds at the high altitudes. At the same time, I had to inform ATC of altitude and route changes as they became very confused with my back and forth legs. All while making sure I don't pull the wings off of the old Kestrel."

The electrical system threatens to collapse

On the final leg to the North Boettger reached the end of the wave East of Mono Lake - for the final approach, however, still a decent climb was needed to overcome the last 150 kilometers through the sinking airmass towards Minden. Moreover, the electrical system had been complaining about the voltage being too low for the past two hours. "This added greatly to the stress. If my battery died I would lose my entire trace. I climbed to FL270 southeast of Mono Lake and made a run for Minden. I wanted to get below FL180 as soon as possible yet remain above glide for Minden. I needed to do this so I could cancel IFR and turn the transponder and radio off to save my battery power, which was now critically low. As I got below FL180, I cancelled my IFR flight plan and made it back to Minden 20 minutes later."

The landing was nearly an hour before sunset. "I would have love to continue the journey downwind for what might have

been another 200 kilometers, but I didn't take the risk with the low battery", says Boettger. "On my last leg of 405 kilometers I averaged 254 km/h. The strong tailwind component on the last leg northbound helped immensely." The flight has been recognized as a national record over 1745 kilometers with three turning points. If one takes a look at Gordon Boettger's first 2200-kilometer flight on the 20th of April in OLC, the comment says "legal for night". The Duo Discus that Boettger and his 78-year-old co-pilot Hugh Bennett were flying with is equipped with LED lights that allow a takeoff before sunrise and landing after sunset: "Why limit ourselves at the beginning or end of day when we can fix a legality issue by putting lights on the glider? There's nothing more frustrating than having to pull the spoilers out and land when we can continue for another 200 kilometers or so."

In addition, the duo carries more than 3000 liters of oxygen and has a battery capacity of 130 amp-hours – a good condition for even greater flights? "Joachim Küttner's dream was to fly from the Sierra Mountains downwind in the wave for 2000 kilometers. I would like for his dream to come true, so that is my main objective. I think this type of flight would generate quite a bit of publicity for soaring in the US as well as fulfilling my own dream. The general public seems to understand much easier a flight from point A to point B. They don't quite comprehend the three turn point flights."

"Publicity" for gliding is of big importance in the U.S.: "At 44, I feel like the young kid at the airport. It definitely feels like a dying sport here. I hope that with the publicity that some of my flights draw, we can spark some interest with our youth. They are the key to the success of soaring in our country."



Gordon Boettger

Gordon Boettger is the son of German parents who emigrated to the USA in the Sixties. His father, Wolfgang, was a pilot in the Luftwaffe. The 44-year-old is married and has one daughter; he lives with his family in Minden, Nevada, near the Minden-Tahoe Airport. After his time as a pilot in the U.S. Navy, he now works a captain on the MD11 with freight company FedEx. In gliders, he has logged approximately 1,600 flight hours. "I've flown from aircraft carriers and now fly around the world with FedEx, but nothing comes anything close to how I feel about making long cross country flights. The accomplishment after making a

long flight, whether it's in wave or thermals, is much greater. There are just so many more dynamics involved with gliding. I learn something each and every time I fly."