



By **CECILE HAMILTON**  
*Managing Editor*

## **TO PARIS BY**

Flying the Atlantic in a well-equipped light twin-engine business plane is an experience every pilot would enjoy, particularly when the weather cooperates.

Entire crossing looked much like this view taken from 11,000 feet and over the usual broken undercast.

Pico Alto, rising more than 7,000 feet above Pico island in the Azores, was first landfall on the 1,600-mile hop from Torbay, Newfoundland.



Landfall on 880 leg from Azores was this bit of Portuguese coastline near the famous resort of Estoril, about 15 miles east of Lisbon.







Refueled, radios adjusted, and baggage being loaded, Commander Six Eight Zero Echo is ready for take-off from Boston for flight to Torbay.

# AERO COMMANDER

**A**N INVITATION TO FLY TO PARIS in an Aero Commander 680E is hardly one to be turned down by any pilot, and certainly not by this one. I had flown the Atlantic a number of times in commercial airliners, but never in a light twin. And it had been 25 years since I had flown a plane around in Europe—an experience I can heartily recommend to all pilots; believe me, that's the way to see Europe.

Ferry flights of light twins across the Atlantic have been accomplished in sufficient numbers in the past few years to make the crossing by a well-equipped 680E seem comparatively routine. The only unusual factor in this instance was that the command pilot would be a woman, Miss Jerrie Cobb, who had recently set a new world speed record in a 680E and previously had established world records for distance and altitude in Aero Commanders.

However, being a woman pilot myself, I naturally saw nothing out of the ordinary in this circumstance and, on the contrary, felt that her knowledge of the aircraft as well as her previous experience in flying the Atlantic made her particularly well qualified for the flight. Twenty-eight years old, Jerrie has logged some 6,000 hours, the majority on long-range ferrying operations, including 12 Atlantic crossings, piloting C-46s, C-47s and B-17s for an international ferrying outfit. She also had made a number of flights to South America ferrying AT-6s and PBVs.

The other member of our crew would be James Watson, service manager for Aero Design and Engineering Co., manufacturers of the Aero Commander line. Jim, like myself, is not a professional pilot. We both fly single engine aircraft, strictly VFR. He's a service manager and I'm a managing editor—we leave the professional bit to pilots who can concentrate on professional proficiency. So this would be Jerrie's flight, with assists from us.

Fresh off the production line, our aircraft had 14 hours break-in time when Jerrie and Jim arrived with it at New York International from the plant at Bethany, Okla. A straight production model being delivered to Paris for Jerrie to demonstrate at the Paris Air Show and later

throughout Europe where it would be sold, the only non-regulation feature was a 90-gallon auxiliary tank installed in the cabin. Normally a seven-seat cabin arrangement, the three-place rear seat had been removed and would be shipped to Paris by air freight. The tank itself was rather special, having been built to FAI specs for Jerrie's record flights, so was a rectangular affair which somewhat blocked the entrance doorway but was otherwise inoffensive. Usual ferry installation would have been two utilitarian 55-gallon drums. A pressure pump in the baggage compartment behind the tank provided necessary boost for the fuel to the main center tank. Normal fuel load in a 680E totals 223 gallons—33½ in each outboard wing tank, and 156 in the center tank. With the 90-gal. aux tank, we had 313 usable gallons—enough for 10 to 10½ hours at 55 per cent power, or maximum range, with any luck, of better than 2,000 miles.

Route decision for the crossing depends pretty much on weather although the northern route via Iceland and Scotland offers the additional advantage of alternates on the long stretch to Iceland. There's nowhere to go en route to the Azores, and you either make it into the civil field at Santa Maria, or about 150 miles short of there to the military base at Lajes, which has GCA.

Jerrie decided on the southern route—we had a bit of sightseeing in mind and were looking forward to the flight from Lisbon across Portugal, Spain and France to Paris. Jerrie and I both knew Scotland and Iceland from away back and, since this was Jim's first European trip, he went along readily with our sightseeing plans.

After all, this was not to be any kind of "record" run—we weren't trying to prove anything. We had plenty of time to make a safe and comfortable crossing, spending a night at each fueling stop—Torbay in Newfoundland, Santa Maria in the Azores, Lisbon and possibly Madrid. We could wait out at these points the worst of the Atlantic's weather and the 680E's performance should take care of any marginal or unpredicted weather encountered.

For this is quite an airplane. Basically the same air-



craft as its predecessor models, the first of which set a record for single-engine performance by spanning the continent from take-off to landing on one engine—the 680E has a five-foot increase in wingspan which gives it some 500 pounds extra gross without any appreciable loss in speed or range. With its two Lycoming 340-hp supercharged, gear-driven, fuel-injection engines and Hartzell three-bladed, constant-speed, full-feathering props, it has a top speed at 10,000 feet of 255 mph, cruise at 10,000 and 70 per cent power of 226 mph. Our particular plane was also equipped with deicer boots on leading edges of wings, empennage and prop blades.

Supercharging, which operates automatically, gives the 680E a service ceiling of 25,350 feet and, as Jerrie demon-

Sales coordinator and pilot for Aero Design & Engineering Co., Jerrie Cobb holds three world records, has flown Atlantic many times.



strated in Europe, it does nicely at 28,000. While the cabin is not pressurized as is its companion model, the Alti-Cruiser, the 680E has a seven-unit Scott oxygen set installed in the cabin which, incidentally, we did not need at any time on the crossing.

Communication and navigating equipment in our plane included a full set of Collins radios—VHF transceiver, separate VHF receiver, standby 90-channel VHF transmitter; omni with glide slope and marker beacon receiver; HF transceiver; and ADF/LF receiver. In addition to the usual full gyro panel, we had a Sperry Gyrosyn compass with remote unit.

Pilot and co-pilot panels were duplicates with the exception that the pilot's air speed indicator read in knots and the co-pilot's in miles per hour; and the pilot's altimeter was calibrated in millibars, while the co-pilot's was in inches of mercury. Needless to say, when I was not up front, I rode the rear seat behind the pilot so I could watch the co-pilot's panel diagonally in front of me. Center panel contained the engine instruments and was visible from both rear seats.

To supplement the two timepieces on the panels, the three of us kept our watches on three different time zones—Jerrie's on Greenwich for operations, Jim's on whatever local time we were trying to live on, and mine remained on Eastern Daylight to keep track of activities back home. In nothing flat, of course, we lost all track of normal time—eating when we were hungry and sleeping when the schedule called for it.

After experiencing some radio adjustment problems plus a day of driving rain and fog which grounded trans-Atlantic airliners to say nothing of our bird, we finally got off from Boston the morning of June 4. As this was an export aircraft, we had a full load of papers—export license, carnets, etc., but experienced no difficulties whatever in clearing Customs at Boston. This was to be true throughout the flight and I can only surmise that either the many reports that come to my desk of Customs and

immigration troubles around over the world are way off base or the pilot in such cases should have been an attractive gal like Jerrie.

Since our registration number was N680E, we were "Commander Six Eight Zero Echo" to the dozens of voices that were to talk to us across the Atlantic and up through southern Europe to Paris. And these voices were, for me at least, the most interesting part of the flight. As long as your radio is functioning, you are never alone, with a constant stream of talk back and forth between ground stations, radar picket ships, ocean weather stations, traffic controllers, and other aircraft in flight. Twice we encountered radio relay problems—once, when only a hundred miles southeast of Newfoundland, we could not contact Gander Control but were picked up loud and clear by New York Control which relayed for us to Gander; and again, between the Azores and Lisbon, when a TWA Connie asked us to relay to Lisbon his ETA at Casablanca since he was unable to raise Lisbon but heard us talking to them.

On the long hop from Newfoundland to the Azores, we were amused to be queried twice—once by a radar picket ship and again by ocean station Delta: "Are you a female type?" They seemed genuinely pleased to talk to a woman, the Delta operator commenting that they had been on station for 20 days, and adding somewhat irrelevantly that surface weather at the time was 400 feet, visibility one-eighth of a mile, with fog. We gave him our sympathy, reporting that at 11,000 feet we had clear skies and unlimited visibility.

Weather throughout the trip was excellent, with only 20 minutes of instrument flight when we passed through the equatorial front that usually lies between Newfoundland and the Azores. And even there we were guided past the worst of the front by a defense picket ship, going off his scope just as we entered the storm area. However, climbing to 14,000 we encountered no turbulence and picked up only a minor amount of ice.

For some reason we were never able to get an en route reading on weather at Santa Maria, until about an hour out when the controller, speaking in very patient but heavily accented English which we had difficulty understanding, finally tired of repeating his carefully detailed report of cloud coverage and visibility and gave it to us straight, "Weather at Santa Maria is good . . . weather at Santa Maria is good!"

Flight procedure on all hops was simple: climbing to cruise altitude, usually 11,000, cruise control was set up and the ship trimmed out. In a 680E this involves reading the manifold pressure and tach settings off a chart, then matching these by pulling the throttles back to line up with the manifold reading, and the props with the rpm. Mixture control is automatic so once the trim is established there's nothing to do but rest your hands on the controls and follow a needle.

Navigation was an equally simple process of ADF homing, with the exception of some 200 miles in the area of the front when we rode a compass heading until picking up Delta's signal, which they were good enough to leave on continuously for our use until we had passed over, gone beyond and picked up the signal from the Flores islands which lie about 100 miles northwest of the Azores. All communications were HF from the time we left Boston Tower until we contacted Lisbon Tower on VHF.

The flight from Boston to Torbay, 974 statute miles, was made in 4 hours 32 minutes. Visibility was excellent. We checked the operation of our aux tank en route, running down the center tank and then transferring our extra 90-gallon load to it. All worked smoothly. On the ground at Torbay, a joint civil-military (USAF-RCAF) field serving St. John, Newfoundland, we en- (Continued on page 88)



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## To Paris by Aero Commander

(Continued from page 36)

countered difficulty with overnight accommodations. The austerity program has hit our military bases and, with no rooms available in St. John's one hotel, they were hard put to accommodate us in the BOQ at Pepperill.

A pleasant note was added, however, by permission being granted us to dine at the Pepperill Officers Club where the Newfoundland chef, Fred Evans, very kindly put up a box lunch of fried chicken and all the fixings for our next day's flight. This, together with a thermos of water, constituted our "supplies" for the crossing, plus, of course, a life raft and Mae Wests stowed aboard the plane.

Next morning, after the usual two to two and a half hours of weather briefing, flight planning and paper work, we were off by 7:10 local time for the approximately 1,600 mile run to Santa Maria. Ahead were 7 hours and 22 minutes of very interesting, if unexciting, flying on top of broken or solid overcast, most of the way at 11,000 feet. Making this leg at 55 per cent power, we still had a good two and a half hours of fuel remaining on arrival—not enough to go anywhere but a fair margin for stoozing around if the weather at Santa Maria had not been good.

On the ground at Santa Maria we were greeted by Antonio da Cruz, Portuguese government representative and a long time friend of international private flying, who eased us through the formalities and aided our stay on the island with true Portuguese hospitality. He also gave us the news that Max Conrad had that day not only broken the single-engine distance record but had gone on beyond El Paso to land at Los Angeles (see story on page 61). Max was an old friend, being almost an Atlantic commuter, and had made many a stop at Santa Maria.

The next day our 880-mile flight to Lisbon was accomplished in 4 hours 11 minutes of very smooth flying and 7 minutes ahead of our ETA. Take-off at Santa Maria had been particularly interesting. Jerrie and I had been discussing the short field performance of the 680E the night before and, to demonstrate the point next morning, she hauled it off at 80 mph, full 7,500 pound maximum gross, climbing out at better than 1,500 feet per minute.

The flight from Lisbon to Paris was made after a very pleasant week end at Estoril, the famous Portuguese resort. Since you just don't enter a foreign country with an export airplane on a Sunday, we had spent the extra day sightseeing by taxi. And since another stop at Madrid would throw our Paris schedule off, we decided on a direct 1,060-mile Lisbon-Paris route, which would take us diagonally across Portugal, Spain, the Bay of Biscay at Biarritz, over Bordeaux and up the Loire valley.

Most of our route would have broken and scattered cloud at 5,000 so we cleared for 3,000 in order to see the countryside, only going on top for a few minutes to cross the coastal range of mountains in northern Spain. Communications were

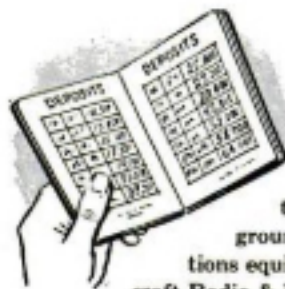
(Continued on page 90)

FLYING—October 1959



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(Continued from page 88)



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excellent, all in very good English, though Jerrie's Oklahoman ear and pronunciation tangled occasionally with calls like Valledolid, Fuenterrabia, Merignac, Poitiers and finally the tower at Toussusle-Noble, the sport and business flying field near Versailles, and headquarters of Fenwick Aviation, French distributors for Aero Commander.

The five hour 8 minute flight was perfect from a sightseeing standpoint—low enough to take a good look at castles in Spain, and chateaux in the Loire valley, to see the red tile roofs of southern France change to grey slate farther north, and finally to see the Eiffel Tower on a grey horizon that was Paris. The slight turbulence under broken cumulus gave me an opportunity for the first time to feel the 680E as a thing to fly—before it had just been a matter of adjusting trim as we burned off gas. It responds neatly and positively, without yaw or pitch—a good, solid machine.

Bare statistics of the flight showed a total distance from New York to Paris of 4,730 miles; total elapsed flight time 22:28; average ground speed around 210 mph, though on the long hop to Santa Maria we made good 220 mph even with a detour through the front. Fuel consumption averaged out at about 31 gallons per hour.

Such statistics, however, do not tell much of a story. Lots of airplanes can and do make the Atlantic crossing. The calculated risk varies with the many factors involved such as pilot's knowledge of the Atlantic, the equipment available for navigation and the pilot's ability to use it, the fuel load and consumption of the engines, whether your equipment allows you to go above or around the weather—or through it. And so on for an infinite number of items.

As for our flight I can only report that we had superb luck with weather all the way and that the plane, although it started with only 14 hours break-in and might be expected to develop a few bugs, performed like the thoroughbred it is.

An old saw has it that flying is hours and hours of boredom relieved only by moments of stark terror. If this is true, then our flight was the exception that proved the rule for there was not a moment of boredom nor a split second of terror.

I have been asked many times since the flight if I now feel that crossing the Atlantic in a light twin-engine aircraft can be considered as a routine undertaking for the average businessman who wants to have his plane available for travel in Europe. There can be no categorical answer to such a question, since there are too many factors involved. In the first place, if he's in a hurry, he'll ride the jets. But if a businessman is himself a professional pilot with considerable knowledge of Atlantic weather and navigation, or hires such a pilot to do the flying—and if he has time to wait out the worst of the weather en route or, as we did, schedules an overnight stop at each re-fueling point—then the remaining element of risk merely adds a bit of sporting zest to what can be a memorable and worthwhile experience.

END