

BRINGING IT HOME





TBM 700 FERRY FLIGHT FROM TARBES TO NORTH PERRY

BY TOM CUNNINGHAM

A flight across the North Atlantic is thought by many pilots to be the ultimate voyage for a single engine aircraft, and I can think of no better airplane than the TBM 700 in which to make the journey. OK, so I'm biased, but a ferry flight in a TBM is simply a thrill.



REYKJAVIK CITY, ICELAND

ICELAND



Nearly 140 TBMs have been flown over the Atlantic to North America without a single incident. The trip is never entirely routine, but one certainly made easier by the capabilities of the airplane. The TMB 700 is fast and comfortable, powered by one of the most reliable engines made, carries abundant fuel, and flies above most weather. These are all factors that will warm the heart of any pilot considering the trek across. After having made many of these flights for Socata in the last four years, I can attest that a trip across the pond rates as one of the greatest flights a pilot can enter into his or her logbook. Each crossing is an adventure to treasure.

In the Beginning

So how does a factory ferry flight begin? When a TBM 700 is ready for delivery, Christian Briand, the Socata Chief Test Pilot, reviews the flight schedule and then assigns the flight to one of the company's ferry pilots. When I am lucky enough to



APPROACHING REYKJAVIK , ICELAND

RUNWAY 31 REYKJAVIK

be selected, I always need to do some advance preparation. I gather and review all required flight charts to ensure all are current. Necessary survival equipment for the over-water crossing is packed and shipped to the factory at Tarbes. Of course I also have to get to France. So I make reservations to fly on a commercial aircraft from Miami to Paris, and then on to Pau, the nearest commercial airport to Tarbes. I generally leave on the evening flight from Miami and arrive in Pau in the afternoon of the next day. Then a quick 40 minute drive by rental car gets me to the factory. There I meet with the Delivery Manager, and we begin the review of aircraft documentation. After the paperwork is completed, I go off for some much needed rest to recover from nearly 30 hours of travel.

Since I am in Europe, why not rest in style? I choose to stay at a small eight-room hotel

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KEFLAVIK AIRPORT



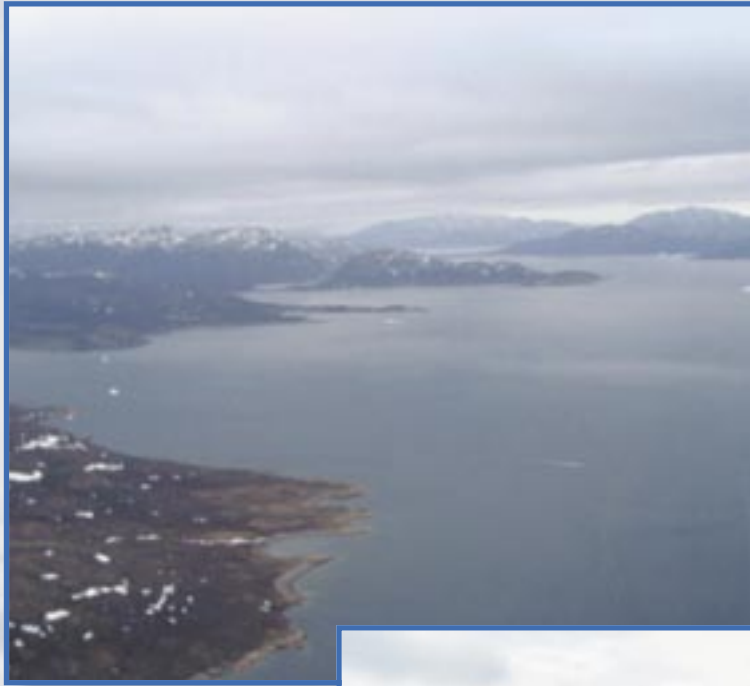
ARRIVAL NASARSUAQ, GREENLAND



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WESTERN COAST OF GREENLAND



DEPARTING FROM NASARSUAQ



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and restaurant nearby, the Le Relais de Saux, nestled into a building with a history extending beyond 300 years. All the rooms are uniquely decorated with traditional French flare. The hotel owners, Madeleine and Bernard Heres, have become friends and I look forward to a good stay. I can report that the meals here are spectacular, with some of the finest French gourmet meals found outside of Paris. Enjoying a quiet evening dinner on the patio, with a fine wine in hand, overlooking the Pyrenees Mountains, is a good way to end the long trip to Tarbes.

Lift Off

The next morning, I arrive well-rested at the factory to complete the official aircraft acceptance. Normally, a short flight is made in the aircraft to verify that all specified optional systems are installed and that the TBM is ready for the crossing to Florida. Next, I obtain a weather briefing at the main airport terminal building. I also file a flight plan for the first leg to Scotland. One last item to be completed before leaving Tarbes is to notify French customs officials of my departure. At the same time the Socata handling agent in Bangor, Maine, is notified of my planned arrival in the USA so that he can prepare the customs documents for my



REFUELING IN NASARSUAG, GREENLAND



arrival there. Finally, I receive a departure fax at the factory, which gives me my slot time and routing for the flight on the airways. There is no GPS direct on this leg. If I miss my approved slot time, I have to re-file another flight plan for a later departure.

Finally, I lift off for Scotland on the first leg, a distance of 850 nautical miles that can typically be covered in a little over three hours. The flight proceeds northward from Tarbes to Cognac, Nantes, and then Monts D'Arree, where I leave the mainland behind to cross the English Channel. On the British side the flight continues over Berry Head, northeast over Liverpool, Manchester and finally into Scotland.

Equipped for the Job

While not yet an all-glass panel, the avionics in the TBM would impress even the most jaded pilot. Equipped with 8.33 MHz radios, the plane can fly above 24,000 feet (the



BETWEEN GREENLAND AND GOOSE BAY, CANADA

altitude at any rate of climb or airspeed, level off, fly to any and all navigation points of the flight plan, descend to the destination airport, and follow the glide path down to the runway. However, I usually enjoy landing this marvelous machine myself.

Pit Stops

Several options are now available for the first stop. Frequently, I will land in Edinburgh, Glasgow, or Wick. My ancestry goes back to Scotland, so I particularly enjoy these stopovers. On some ferry flights, the owner of the TBM will join me. If the owner has not previously been to Scotland, I always recommend touring these cities, each fun in its own right and each full of history. On one occasion, we stayed overnight at the Ackergill Tower in Caithness Scotland, near the Wick Airport, a fabulous destination that ranks for me as one of the best in my many crossings. While there, you may wish to take advantage of the seaside golf course, little more than a one iron from the picturesque castle, founded in 1870.

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requirement in Europe), and I take full advantage of the higher altitudes up to the service ceiling of 31,000 feet (for the 700 C2). An impressive electronic moving map displays the details of the earth passing below. Highways, railroads, towns, lakes, height of the terrain, and airways are all displayed clearly on the MFD as I proceed northward. Aircraft flying nearby are displayed on the instrument panel, with their position, direction of flight and altitude highlighted long before I can see them out the window. Weather radar shows the best route to avoid storms. The air data computer (ADC) constantly calculates ground speed, true airspeed, and wind speed and direction. The ADC also calculates fuel burn, fuel remaining at my destination, and flying time to the alternate airport. When I arrive at my destination, a radar altimeter will electronically measure the exact height above ground. The state-of-the-art auto pilot can climb the aircraft to a selected



At any of the FBOs in Scotland, a fuel stop always proves to be quick and pleasant. If the winds are favorable and fuel permits, a stop at Stornaway, 150 miles north of Glasgow, will result in a shorter flight for the next leg. The last time I stopped there the lads had been following my flight progress on their computer, and had already obtained the weather for the next leg and filed my flight plan. What service!

This time around I landed at the Glasgow airport, so the leg to Reykjavik, Iceland, will be a distance of 720 nautical miles, which typically takes about 2.5 hours. This leg will be over the North Atlantic. An IFR oceanic clearance will be issued prior to departing the northern tip of Scotland, and navigation will now be done by GPS. The latitude and longitude of the various navigation points are entered and rechecked. Accurate data entry is critical since an error could result in flying toward a point away from Iceland, not an inviting prospect. The TBM 700 has dual Garmins, so I enter the same flight plan separately on each one. This permits a cross-check of the flight plan data. The onboard air data computer will calculate the wind speed and direction. The ADC will also automatically compute a point-of-no-return, that magic point in space from which the

aircraft no longer has sufficient fuel to retreat to the departure point. Before flying beyond the point-of-no-return to Stornaway, I ask ATC for a final check on the Iceland weather to confirm earlier forecasts for my destination.

As I approach the southeastern coast of Iceland, I confirm the weather for Reykjavik or the alternate at Keflavik. If both are below landing minimums, I then select alternate airports on the other side of the country. As a general rule, if the weather is bad on the southwestern coast of Iceland, it will be better on the north and east coast. Thus, if the flight plan needs to be changed, I opt to land at Saudarkrokur, Akureyri, or Egilsstadir.

Time for Tourism

Iceland is one of the more scenic countries of the world. If you take the trip, plan to spend some extra time here for touring. Geothermal activity is present in much of the country and has been harnessed to supply hot water for heating, swimming pools, steam generation of electricity and industrial applications. Do not miss the spa at the Blue Lagoon, a unique natural wonder of mineral-rich geothermal seawater. Whale watching tours and deep-sea fishing are also popular. In town, numerous museums, galleries, and gift

shops are a major attraction. A private tour of the area is one of the better ways to see many sights in a short time period. During the tour, plan a visit to the Gullfoss, Iceland's most famous and picturesque waterfall. The most spectacular site I have seen, as I approached the country at night, is the Aurora Borealis or northern lights. These moving sheets of dancing light drift like ghosts across the sky, suddenly shoot up and down in a frenzy, and display an awesome array of undulating colors. With no doubt the northern lights are the most amazing phenomenon I have ever witnessed in 36 years of flying.

Any layover at Reykjavik must include an evening dinner at the Laekjarbrekka or Humarhusid (Lobster House). The seafood is outstanding. Spend some time visiting The Pearl, an observatory with a spectacular panoramic view of the city, and, oddly, facilities to store the city's hot water.

Here Comes the Sun

Sleeping can be a strange experience here. During summer, daylight is a 24 hour affair. You can glance at your watch in full daylight only to discover the time is 3:00 a.m. After a night's rest at the Hotel Loftleidir with the shades drawn, a short walk across the hotel parking brings me to the airplane. Upon arrival, I find that the flight services staff has already obtained my weather for the next legs to Greenland and Labrador. They have filed the flight plans for me, and have the Canadian custom form ready to go. All I need to do is review the weather, pay for the fuel and go. This level of service is exactly why so many pilots stop here on ferry flights.

Narsarsuaq and Other Cold Places With Long Names

From Reykjavik the flight to Greenland can take me to Narsarsuaq (670 nm), Godthab (770 nm), or Sonderstram (730 nm), depending on weather. Flying to any of these destinations reminds me that naming this place Greenland was an exercise of extreme optimism. My first choice is Narsarsuaq at the southern tip of the island. But if weather fails me here, then chances are good for better weather to the north at either Godthab or Sonderstram. Jet fuel is available at all these airports, but Prist is not, or at least not always. I therefore carry several cans with me on the flight to add to the fuel as it is pumped

GNS 530 STRONG HEADWINDS (CLOSE TO 75 KT)





WESTERN COAST OF GREENLAND

into the aircraft. These legs are not too long, but the weather must be good at least two of these destinations before I take off from Reykjavik. Again, the flight is over the North Atlantic and navigation will all be by GPS. If the flight is to Sonderstram, the route extends north of the Arctic Circle, to give you a sense of where on the globe all this is taking place. On either route, the outside air temperatures are so cold, (-55 °C IOAT for example) during the late fall, winter, and early spring that 100% torque can usually be maintained. At these temperatures and altitudes, the TBM will typically exceed 300 KTAS.

The DME/ADF instrument approach to the airport at Narsarsuaq is a bit unusual, and best done for the first time in actual weather

accompanied by a pilot who has made the approach before. Although the airport elevation is only 11 feet above sea level, hardly a nose-bleeder, the minimum decent altitude (MDA) is 1500 ft, with a visibility requirement of 6000 ft for aircraft capable of 6.0% climb gradient. For less capable machines that can maintain a 4% climb gradient, the minimums are 1800 ft. Without DME the minimum decent altitude is 2750 ft. These less-than-ideal minimums are due to mountains that surround the airport with peaks between 4000 and 5750 feet. The photos of Narsarsuaq illustrate the impressive terrain.

This is a non-radar airport with all separation done by verbal reporting points. Controlled airspace begins at 19,000 feet so all

flights below that altitude are conducted in uncontrolled airspace. Thus, if a IFR approach is required, it will be the full ADF/DME approach, without the aid of radar. The tower staff will provide airport observed weather and reported positions of other aircraft in the area.

Somewhere nearby in this article you will find a photo showing a departure from Narsarsuaq, flying VFR southbound out the fjord, with the Garmin 530s in Nav mode. The aircraft is at 1100 ft AGL (from the radar altimeter), the power has been reduced to 70% torque, and the indicated airspeed is approximately 200 KIAS. The white aircraft symbol can be seen on the 530 on the right showing the aircraft in

the middle of the fjord. The area of light blue is water and the black area is ground. The Honeywell 850 MFD with EGPWS is showing the terrain for the area. The red area to the right and left is ground above the aircraft. With an avionics package like this, situational awareness is excellent, a big help in making an IFR departure among towering peaks.

Short Timer

Time spent on the ground in Greenland is generally short, since I want to get to Goose Bay and Bangor, Maine, that same day. The airport does not see heavy traffic and quite often no other planes will land during my short stay. After I pay for fuel and get weather updates, I notify the Canadian customs of my anticipated time and place of arrival. On a clear day, the departure through the fjord is spectacular. Icebergs floating out

to sea are a common sight, as you can see from some of the accompanying photos.

From Sonderstram, the next leg would be to Iqualit and then to Goose Bay, Labrador. However, most of my crossings have been to the south to Narsarsuaq and then on to Goose Bay. That leg is 675 nautical miles, and usually takes about 2.5 hours. The Goose Bay airport is used by the United States as well as several European countries as a military base. Therefore, you commonly see squadrons of jet fighters in the air or on the ramp getting ready to depart. The Canadian customs staff is normally on site to greet and examine arriving aircraft. Since I am on a "tech stop" (gas and go), the inspection is quick. If customs agents are not available to meet the aircraft, then I need to make a phone call to CANPASS

confirming my arrival and next destination.

In the late spring, summer and early fall months, enough daylight remains to go on to Bangor Maine after fueling at Goose Bay. However, during the winter months when the daylight hours are short, I generally plan for an overnight stay at Goose. During winter, snow banks 20 feet or higher are often seen around the airport as a result of snow removal.

An overnight stop at Goose Bay leads to a choice between three hotels, and the accommodations are basic all around. At one hotel restaurant, the brave can munch on reindeer burgers. During winter crossings, this is one of the few places where the aircraft can be put in a hangar overnight. When outside temperature reach down to -35 °C and winds blow 25-35 knots,

FJORD IN GROENLAND



hangar space is more than just a luxury.

U. S. of A.

Before departing for Bangor, whenever that turns out to be, I call U.S. customs to advise them of my arrival. I also check to see that they have the necessary paperwork to import the aircraft into the USA. The flight to Bangor from Goose Bay takes only 2 hours. Winter weather there can be every bit as cold as in Goose Bay. Customs, immigration, and agriculture staff will meet me. I have all the personal declaration papers completed when I arrive, so entry formalities generally go quickly. Normally, on a flight without an owner, this is the second overnight of the ferry flight. I stay at one of several nice hotels on or near the airport, and the FBO provides transportation to and from. Five time zones later, my watch shows 5:00 pm local, meaning that nearly 13 or 14

hours have elapsed since leaving Iceland.

After a good dinner and some sleep, I will begin the final leg, which is really nothing but an ordinary domestic flight. The distance from Bangor to Socata Aircraft at North Perry, Florida, is 1285 nautical miles. If winds are good, the TBM can make the trip non-stop at high altitudes in about 5 hours. If the winds are not favorable, then I make a stop about midway, typically in Wilmington, NC. This leg is a breeze since I am now in the USA, in controlled airspace for the entire distance, and all radio transmissions are without accent. During winter, I have commonly seen temperatures when departing Bangor hovering around -20 °C only to arrive in North Perry in a balmy 25 °C or greater. What joy!

Distance and Time

Total flight time for one of these ferry flights

will be between 19 and 22 hours, depending on winds. If I can make an early morning departure from Tarbes those hours can unfold in just under two days. With an afternoon departure, the trip will take about two and a half days. Clearly though no two ferry flights will be the same; each will offer a unique adventure. If you are fortunate enough to purchase a TBM 700, and even more fortunate to have an opportunity to make the ferry flight, I highly recommend you set aside at least a week for this adventure rather than rushing through in two days. Enjoy the experience, and sample the offerings of each stopover. I can not guarantee much in life, but I can guarantee absolutely that you will fondly remember the crossing for the rest of your flying days. Even with many trips under my belt, I always look forward to my next trip as if it were my first.

ICE FIELD IN GROELAND



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