

**Please report any suggestions, mistakes, omissions, hints and tips to: info@aeroexplorer.biz
Thank you!**

Part of this information is derived from the "NORTH ATLANTIC International General Aviation Operations Manual",
Third Edition June 1999, U.S. Department of Transportation, Federal Aviation Administration.
Unfortunately the publication is not available anymore and according to the FAA no reprint is planned.

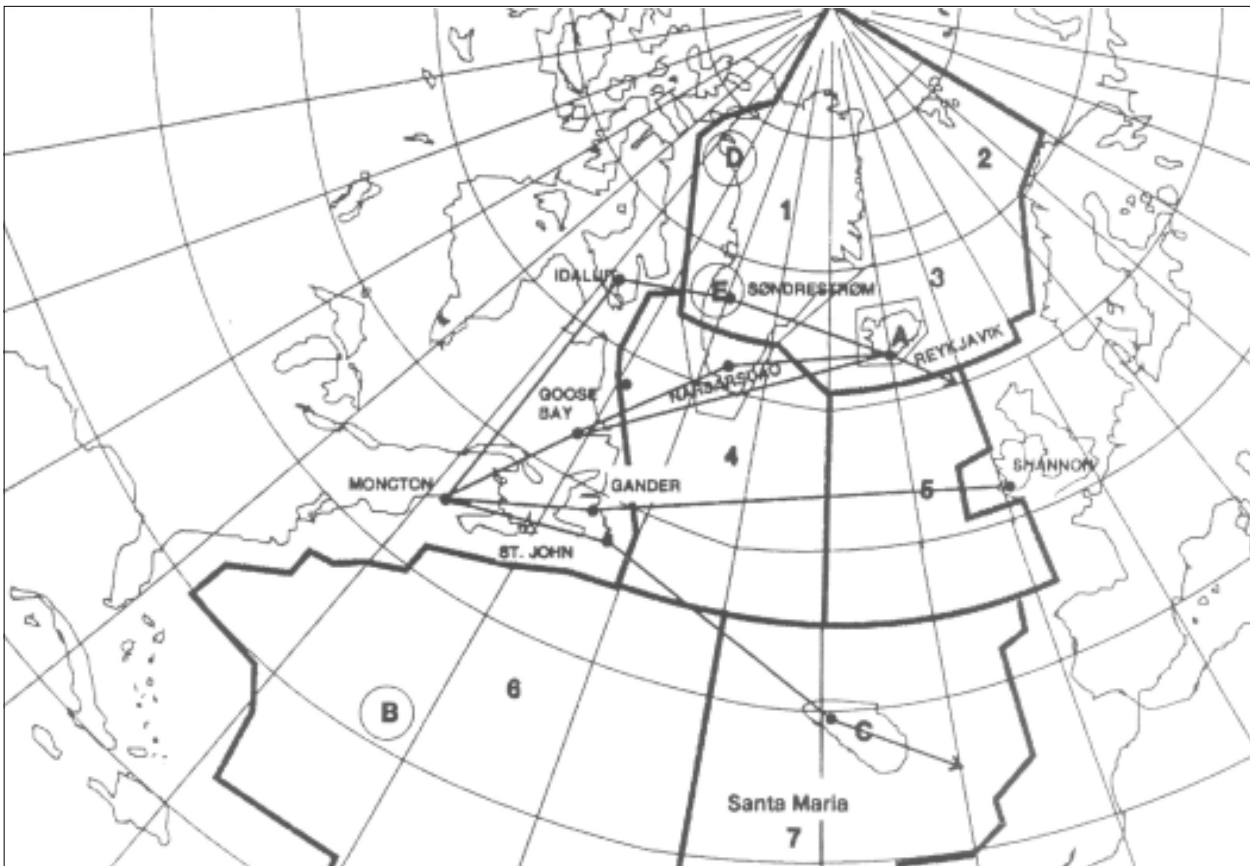
Crossing the North Atlantic

**A TRANS-ATLANTIC FLIGHT IS A SERIOUS UNDERTAKING,
WHICH HAS TO BE PREPARED ACCORDINGLY.**

The average width of the North Atlantic is 2000 NM, the same distance as between America's East- and West Coast.

Instrument Flight Rules (IFR) apply to all flights in oceanic airspace when at or above FL 060 or 2000 ft (600 m) above ground level, whichever is higher, even when not operating in instrument meteorological conditions (IMC). Canada, Denmark and Iceland require that pilot and aircraft must be IFR rated for trans-oceanic flight, regardless of the altitude to be flown. Other NAT States allow VFR flight at or below FL 055.

However, it is highly unlikely that you will remain VMC on a trans-Atlantic flight. It is therefore strongly recommended that you be instrument rated and file and fly IFR.



North Atlantic controlled airspaces include:

1. New York Oceanic, Gander Oceanic, Shanwick Oceanic, Reykjavik FIRs/CTAs.
2. Bodo Oceanic FIR/CTA when operating more than 100 NM seaward from the shoreline.
3. Sondrestrom FIR/CTA when operating outside the shoreline of Greenland.
4. Reykjavik FIR/CTA when operating in the Oceanic Sector, or in the Domestic Sector at or above FL 200.

Routes normally flown:

1. UK - Reykjavik - Sondrestrom - Iqaluit - Moncton and vv.
2. UK - Reykjavik - Narsarsuak - Goose Bay - Moncton and vv.
3. UK - Reykjavik - Goose Bay - Moncton and vv.
4. Shannon - Gander - Moncton and vv.
5. Europe - Santa Maria - St. Johns - Moncton and vv.

1 General

Air masses move mostly from West to East. Broken stratified clouds generally cover the North Atlantic. CBs are generally found on the American and European Coasts only.

Weather charts: The weather and wind patterns are normally accurate. However the position and direction of movement of the whole system may vary considerably causing deviations from calculated components. Check carefully the temperature (air mass) change allocated with the spot wind on the wind chart, this may indicate a zone of possible turbulence.

Extreme seasonal weather variations exist over the North Atlantic. Rapidly changing weather conditions involving severe icing, severe turbulence and heavy precipitation are common, particularly in winter. Changes are often so rapid that they are difficult, if not impossible, to forecast. These harsh weather conditions, along with the rugged terrain and sparsely populated areas, will undoubtedly create problems for an ill-planned flight. Proper preparation, including route and emergency situation planning, will go a long way toward successful completion of your flight. Familiarisation with all aspects of your emergency/survival equipment is vital if you are to survive an unexpectedly early termination of your flight.

2 Before departure

Equipment

You should have the equipment, documents and qualifications specified in the AEI equipment list (especially if it refers to Canada regulations or recommendations). We strongly urge you to comply with all regulations and to use common sense!

Fuel Reserves

An aircraft operated under an IFR flight plan on a transoceanic flight shall carry an amount of fuel that is sufficient to allow the aircraft to fly to and execute an approach and a missed approach at the destination aerodrome, to fly to and land at the alternate aerodrome, and then to fly for a period of 45 minutes, and in addition, carry contingency fuel equal to at least ten percent of the fuel required to complete the flight to the destination aerodrome.

Aircraft Instruments and Aircraft Equipment

Normally your aircraft must be approved for IFR flight. A VFR crossing of the North Atlantic is possible on the route GB / Ireland - N60 W010 - Keflavik - Sondrestrom - Iqaluit below FL 060 / 2000 ft AGL. Westbound VFR: a direct ATC FPL Narsarsuaq - Goose Bay may be accepted in Greenland but most probably not vv. You will have to proceed via Iqaluit.

In addition to the normal instrumentation you must have the following equipment: