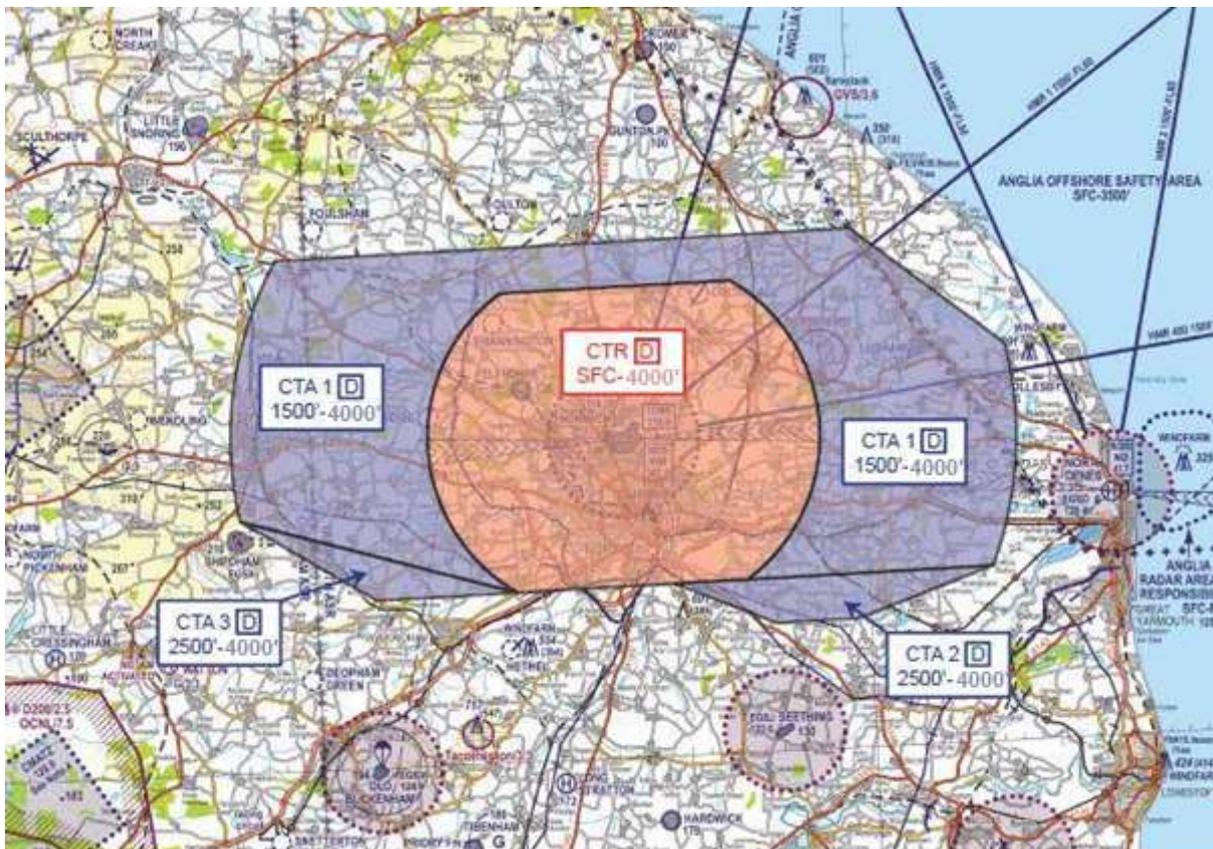


CLASS D CONTROLLED AIRSPACE GUIDE

Introduction

Norwich International Airport is surrounded by Class D Controlled Airspace (CAS). This airspace is made up of a Control Zone (CTR) and a Control Area (CTA). In the diagram below, the pink central zone is the CTR and extends from the surface up to altitude 4000ft. The CTA is the blue area wrapped around the edges of the CTR and extends from Altitude 1,500ft up to altitude 4000ft in the sections labelled CTA1, and from altitude 2,500ft up to altitude 4000ft in the sections labelled CTA2 and CTA3. The Transition Altitude at Norwich is 5000ft.



[Full Details of the airspace are contained in the UK AIP Aerodrome Section - available online via the UK AIS Website.](#)

Class D Airspace – Concept of Operations

The aim of Class D CAS is to create a known traffic environment whilst still allowing aircraft to operate both **VFR** and **IFR** with maximum freedom. This applies to aircraft transiting as well as arrivals and departures. The way this is achieved is by ATC passing traffic information to **VFR** aircraft about **IFR** aircraft. The primary method of avoiding collisions between **VFR** and **IFR** traffic is the “see and avoid” principle. ATC will separate **IFR** aircraft from each other.

Flights Transiting the Norwich CTR or CTA

Pilots requiring transit of the Norwich CTR or CTA must call Norwich Radar on 119.350 to request transit of controlled airspace. An initial call when aircraft are 5 to 10 minutes flying time from the boundary of CAS is the ideal. Any notice less than this may result in an instruction to “Remain Outside Controlled Airspace”, in order to give ATC sufficient time to coordinate the flight through controlled airspace, issue a clearance and receive a full readback from the pilot.

Effects of weather on transiting flights

The inflight meteorological conditions are determined by the pilot of the transiting aircraft. Pilots should request a clearance appropriate to these conditions. The clearances available are listed below:

VFR Clearance

If a transiting aircraft is operating in Visual Meteorological Conditions, then a request for a VFR transit would be the most appropriate clearance as this would give the maximum flexibility to the pilot. A typical VFR transit clearance would be “GABCD is cleared to transit Controlled Airspace, from South to North, VFR, **not above** altitude 3,000ft, Norwich QNH 1028”.

Notwithstanding the see and avoid principal, VFR aircraft may be given a routing to follow as they transit CAS that will keep them clear of IFR let down, approach and climb out areas. This would most likely be an instruction to route via the published VRPs (Visual Reference Points).

IFR Clearance

An IFR clearance is more restrictive due to the requirement for ATC to maintain separation from other IFR traffic. A typical IFR transit clearance would be “GABCD is cleared to transit Controlled Airspace, from South to North, **at** altitude 3,000ft, Norwich QNH 1028”.

SVFR Clearance

There is also the option of a **Special VFR (SVFR)** clearance, which is where an aircraft is given permission for the flight to be made in accordance with special instructions instead of in accordance with the Instrument Flight Rules and remains clear of cloud and in sight of the surface.

In general terms, SVFR is a specific clearance within the Instrument Flight Rules, and pilots should treat any such clearance as merely relaxing the requirements to fly as IFR rather than being an extension of VFR.

The main use for SVFR at Norwich is for helicopters flying to and from offshore installations below the IFR Minimum Sector Altitude due to low cloud and icing conditions.

Flights to or from Norwich International Airport

Effects of weather on arriving and departing flights

For flights taking-off or landing at aerodromes within Class D airspace the reported meteorological visibility at the aerodrome concerned shall be taken to be the flight visibility. For the “see and avoid” principal to work safely there is a minima for **VFR** flight in Class D Airspace.

VFR

When the reported meteorological conditions at aerodromes in Class D airspace reduce below the following minima, ATC will advise pilots of aircraft intending to operate under VFR to or from such aerodromes, and request the pilot to specify the type of clearance required:

By day:

- Aircraft other than helicopters: ground visibility 5 km and/or cloud ceiling 1,500 feet.
- Helicopters: ground visibility 1500 m and/or cloud ceiling 1,500 feet.

By night:

- Aircraft including helicopters: ground visibility 5 km and/or cloud ceiling 1,500 feet.

ATC are unable to issue any further VFR clearances to aircraft wishing to operate under VFR to or from an aerodrome, or enter the aerodrome traffic zone, or aerodrome traffic circuit in Class D airspace when the official meteorological report indicates:

By day:

- Aircraft other than helicopters: ground visibility less than 5 km.
- Helicopters: ground visibility less than 1,500 m.

By night:

- Aircraft including helicopters: ground visibility less than 5 km and/or cloud ceiling less than 1,500 feet.

The definition of “Cloud Ceiling” is “The lowest part of any cloud visible from the aerodrome which is sufficient to obscure more than one half of the sky”. ie **BKN** or **OVC**.

Special VFR

Except for helicopters using a “Rescue” callsign, ATC is unable to issue a Special VFR clearance to aircraft wishing to operate under SVFR to or from an aerodrome in Class D airspace when the official meteorological report indicates:

By day or night:

- Aircraft other than helicopters: ground visibility less than 1500 m and/or cloud ceiling less than 600 feet.
- Helicopters: ground visibility less than 800 m and/or cloud ceiling less than 600 feet

Norwich ATC Frequencies

ATC Callsign	Frequency	Use
Norwich Radar	119.350	Initial Contact Frequency for Inbound Aircraft, CAS Transits, LARS.
Norwich Tower	124.250	Aircraft Start Calls, Departure Clearance Requests, Ground Runs.
Norwich Director	128.325	As directed by ATC
Norwich ATIS	128.625	Recorded METAR and Aerodrome Information

Norwich Visual Reference Points (VRPs)

Several Visual Reference Points have been established both inside and outside of controlled airspace. These may be used to route VFR aircraft arriving, departing or transiting CAS.

VRP	Coordinates
Attlebridge (Disused AD + Turbines)	524136N 0010631E
Brundall	523704N 0012600E
Coltishall (Disused AD)	524511N 0012119E
Hethel (Disused AD)	523345N 0011030E
Keswick (A47 / A140 Roundabout)	523517N 0011630E
Lenwade Lakes	524307N 0010609E
Norfolk Showground	523901N 0011107E
Aylsham	524704N 0011519E
Stoke Holy Cross (Masts)	523430N 0011953E
Thorpe (A47 Roundabout)	523737N 0012242E

The following pages contain aerial photographs of the above VRPs

Attlebridge – Looking East towards Norwich Airport
(Photo taken prior to construction of 2 large wind turbines)



Brundall - Looking North-West towards Norwich Airport



Coltishall Disused - Looking South-West towards Norwich Airport



Hethel Disused - Looking North-East towards Norwich Airport



Keswick Roundabout - Looking North towards Norwich Airport



Lenwade Lakes Looking South-East towards Norwich Airport



Norfolk Showground Looking North-East towards Norwich Airport



Aylsham - Looking South towards Norwich Airport



Stoke Holy Cross - Looking North towards Norwich Airport



Thorpe Roundabout - Looking North-West towards Norwich Airport



General hints and tips for transiting close to or inside Controlled Airspace

1. Check NOTAMs on the AIS website before flying and learn to use an efficient method like 'narrow route brief' features if possible. In any case, double check on any temporary airspace restrictions using the free phone number [0500 354802](tel:0500354802).
2. If you plan to route through controlled airspace, have a back up plan to avoid it if necessary. Make a decision checkpoint on where to take this avoidance route if a clearance is not possible – it is much easier to route around a block of airspace from a few miles away rather than to divert successfully when against the boundary.
3. If you do have to fly very close to a boundary, consider calling ATC responsible for that airspace or a nearby LARS unit. Even when you are totally accurate, you will be a minor distraction to a busy controller who is not sure exactly what you are doing.
4. Workload rises rapidly in less than ideal weather – and so do infringements. If the weather starts to deteriorate, consider your options early and if necessary divert or turn back in good time.
5. Check the links on www.flyontrack.co.uk which has airspace guides written by local ATC for most of the CTRs in the UK giving tips, photos and preferred routings.
6. Airspace infringements happen in good weather too, especially with a strong 'across track' wind blowing towards a controlled airspace boundary. It does not take much loss of concentration while you admire the wonders of flying in good weather to accidentally drift over the line.
7. Beware of GPS; it is a great navigational tool but pressing GOTO or NRST and simply following the line can lead you into a whole world of trouble if the track line goes straight through controlled airspace and you fail to notice.
8. The instruction to 'Standby' means just that; it is not an ATC clearance or even a precursor to one. Even if given a squawk or any other sort of service, this does not mean you can enter controlled airspace. Only cross the airspace boundary if the controller issues a specific clearance to do so, otherwise consider your plan 'B'.
9. If you want to transit controlled airspace think about what you need to ask in advance and call the appropriate ATC unit at around 10 nautical miles or 5 minutes flying time from the boundary. This gives the controller time to plan ahead. Think about your routing and the active runway alignment. You are much more likely to get a crossing approved perpendicular to the runway than along it.
10. Be aware that ATC might be busy when you call, even if you hear no-one. Just because the frequency does not sound busy may not mean that the controller is not tied up on another frequency or a landline.
11. Think before you press the transmit switch. Using the correct radio phraseology helps controllers to help you. A free knee board insert is available from the CAA or www.flyontrack.co.uk which will help you form any request for a zone crossing by giving you a template to slot your words into.

12. Your route through controlled airspace may appear simple on your chart, but be prepared for a clearance that does not exactly match your planned route. Tell the controller the moment anything is not clear, or if you are unsure of exactly where you are. Even if not planning to cross controlled airspace, do not delay in calling ATC if uncertain of your position. Overcoming your embarrassment might prevent an infringement, which may in turn prevent an airprox (or worse).

13. If you have a transponder with mode 'C', use the ALT (altitude reporting) setting at all times in flight unless instructed otherwise by an ATC unit. Do not fly with the transponder set only to 'ON' as ATC will be unable to see if you have other traffic at the same level as you.

14. Finally... Don't forget that ATC is there to help (no, really they are) so do not be afraid to talk to them for a service.

If you require any further information regarding flight in or around the Norwich Control Controlled Airspace you can contact Norwich Air Traffic Control on telephone number 01603 420641. This number will connect you directly to the Air Traffic Control Switchboard where an assistant can put you through to a controller who will be happy to discuss any issues you may have.

1:250000 chart extract.



Disclaimer: This is an uncontrolled document. Check the UK AIS Website for the latest aeronautical information: www.ais.org.uk

Version 3.0

Changes: Upper limit of CAS reduced to altitude 4,000ft. Transition Altitude changed to 5,000ft.