10. Entering Controlled Airspace

AIRSPACE INFRINGEMENT

Infringement of controlled airspace, danger and restricted areas, etc. is a serious aviation hazard and occurs when an aircraft enters the airspace without permission.

It seems that some pilots are not familiar with the correct procedure for entering controlled airspace, and do so without clearance. This Guidance Note (GN) offers some practical advice to prevent that. Other notes are listed at the bottom of the next page

CLEARANCE TO ENTER OR CROSS CONTROLLED AIRSPACE

The Rules of the Air state that clearance **must be obtained before** an aircraft enters controlled airspace. All aircraft wishing to do so must file a flight plan, either on the ground before flight, or in the air (calling on the ATC frequency), and the air traffic services involved must receive the request a certain number of minutes (usually 10) before the expected time of entry. Your licence and aircraft equipment must also allow you to enter the particular Class of airspace in the conditions prevailing (VMC or IMC).

In practice, a full flight plan is seldom required unless the pilot intends to remain within controlled airspace for a considerable time. Instead, the pilot may request the appropriate clearance in flight using a shortened format (see below).

Getting clearance may take time; the controller is responsible for other aircraft, and has to check the position and level of other aircraft in the airspace. That is why you must make your request at least 10 minutes before entry time. You **must not enter** controlled airspace until you receive clearance. It is not sufficient that you have informed the controller of your request; you must wait until a formal clearance is issued, so always have an alternative plan of action ready in case of refusal, as in the picture below. If you cannot plan an alternative route avoiding CAS, you may need to turn back or land at a nearby aerodrome. **While you are awaiting clearance, stay clear of controlled airspace. "Stand-by, I will call you" does not mean you have a permission to enter CAS.**

PLANNING AN AIRWAY CROSSING

Plan to cross an airway at right angles, so that you are in controlled airspace for the minimum period. Aim to cross at a designated reporting point - ideally a navigation facility. This will ensure that the controller knows exactly where you want to cross - and it will make your navigation simpler.
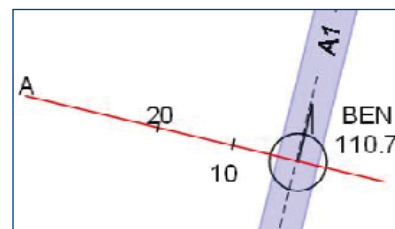
Suppose you are flying a Cessna 172, call sign ABCDE. You plan to cross airway A1 at a VOR/DME called 'Benton', call sign BEN. From position A in the diagram, you fly towards BEN on a heading of 100° at 120kt. You have tuned and identified BEN and plan to call ATC to ask for crossing clearance when you are approaching 20NM DME from BEN (10 minutes before). If you get clearance straight away, then you will continue to home in on the BEN VOR. But if you do not get immediate clearance, you must plan to turn back before you reach the airway. If the airway is 10 NM wide, then aim to ensure that you don't get any closer than 10 NM from BEN, to give a 5 NM safety margin.

If there is no navigation beacon at your intended crossing point, then plan to fly from or to a radio beacon. Draw your track

and check points on the map and measure the distances or bearings from a convenient beacon. In the second example, you plan to cross at reporting point BENTA. Point A is an NDB and the track from this to BENTA is 100°. The 20 NM and 10 NM points are on bearings of 200° and 170° respectively from VOR CDA.
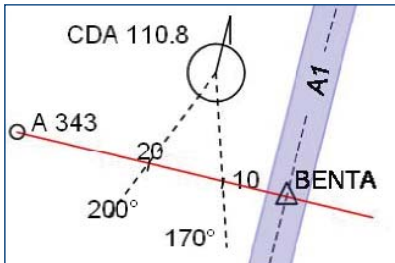
If you are navigating visually, select visual check points that you will be able to find easily at similar distances, and mark the times or distances on your map. If using GPS, enter these as waypoints.

PLANNING TO ENTER A CONTROL ZONE OR CONTROL AREA
Aim to enter beside a Visual Reference Point (VRP) if flying visually, or along a Standard Arrival Route (STAR) from a navigation beacon if IFR. Make your call several (usually 10) minutes before entering CAS, and plan a point at least 5 miles outside the boundary at which you can either change to your alternative track to avoid the CAS, or orbit (not letting the wind blow you closer) until you receive entry clearance.

HOW TO GET CLEARANCE
Call the ACC responsible for the airspace sector you wish to cross or enter using the frequency specified in the AIP or flight guide. Make the initial call at least 10 minutes before you expect to enter. Simply give your call sign followed by a brief statement of your request.

> "Zenda Control ABCDE, request cross A1 at Benton", or "request Zone crossing".

The controller will reply, typically saying either:

> "ABCDE, Zenda Control Standby", or else "ABCDE, Zenda Control, pass your message" or "ABCDE, Zenda Control, advise intentions".

If the reply was "Standby", then you do not have clearance, but must wait, staying out of controlled airspace. If you don't get clearance by the 10 NM point, turn back.

If the reply was "pass your message" or "advise intentions", then pass the following information: Aircraft identification and type, departure and destination points, present position, level and flight conditions, crossing or entry position, requested crossing level and estimate for that position.

> "Zenda Control ABCDE is a Cessna 172 from Midburg to Sandville, 25 miles West of Benton, FL 70 VMC, request cross Airway A1 at Benton FL 70 at 1023."

Or "Zenda Control, ABCDE is a Cessna 172 from Midburg to Sandville, 20 miles South of Purl VRP at 2500 feet on 1010, VMC, request transit your CTA from Purl to Nitting at 2500 feet, estimate Purl at 1235".

You may not get clearance straight away. Until you do get the clearance, you must stay out of the airspace. When the controller passes your clearance, you must read it back so that he/she can check you have copied it correctly. If the clearance is not exactly the same as you asked for, you must obey it; for example, if cleared to cross at FL 80, you must climb to that level before you enter the airway.

HAVE A SAFE FLIGHT
We hope you have found this useful. If you have any suggestions for improvement, please let us know.

OTHER GUIDANCE NOTES
1. Rules for VFR Flight
2. Flight preparation
3. Getting Aeronautical Information Before Flight
4. Getting Meteorological Information Before Flight
5. Using Meteorological Information for Planning
6. Visual Navigation
7. VOR / DME / ADF Navigation
8. GPS Navigation
9. Getting Aeronautical & Met Information In Flight
10. Entering Controlled Airspace
11. Getting the Most out of your Transponder

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