



Flight Safety Information

V 176
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IFR / VFR – Air Traffic in Airspace E, Sympathetic Cooperation

In the last few years an increase in airproximity incidents (AIRPROX) in **Airspace E** was recorded. With the commensurate approach distance such incidents are classified as serious incidents according to the Law Relating to the Investigation into Accidents and Incidents Associated with the Operation of Civil Aircraft (FIUUG) because an accident almost happened.

Of special importance are airprox incidents between commercial transport aircraft and general aviation aircraft such as motor planes, gliders and aerial sports equipment. The spatial distance between the aircraft and the distance of the flight paths at the intersection, respectively, was sometimes less than 1 NM horizontally and less than 300 ft vertically.

Airspace E is a controlled airspace. The upper limit is FL 100 (Alps FL 130) and the lower limit is between 1,000 ft and 2,500 ft GND.

In Germany mixed air traffic according to Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) takes place in this airspace.

During nice weather periods and on weekends this airspace sees a lot of air traffic with aircraft of different performance profiles. The ICAO standard is „see and avoid“. According to this motto everybody shall contribute to safety in this airspace.

Radio contact and an ATC clearance are not required for VFR flights but powered aircraft at 5,000 ft AMSL or 3,500 ft GND or more are required to set a transponder code. In Airspace E, ATC provides separation only between IFR flights.

The IFR flight will receive VFR information if it is available and if the situation allows it; recommendations for an avoidance manoeuvre are given if requested.

VFR flights will also get traffic information of any other traffic (IFR and VFR) provided they are in radio contact with ATC (Tower or FIS). However, traffic information can only be given if the situation will allow it. Radio contact with FIS does **not** mean the flight path is monitored at all times or that the VFR flight is under any type of "control".

An IFR pilot flies with charts which do not have to include sufficient information on the structure of the airspace (Image 1). Only with the additional use of a VFR airspace chart would he be able to recognise any entrance and exit of Airspace E.

For VFR pilots it is mandatory to have an up-to-date VFR chart on board and any VFR pilot should - at any time - be able to relate his position to a respective airspace. However, he is flying according to visual flight rules all the time and will therefore monitor the airspace attentively.

How the approach path of an IFR flight to an airport is patterned by which Airspace E has to be crossed first, depicts Image 2.

Airprox between IFR and VFR flights in Airspace E were especially recorded in the area of control zones of airports (Airspace D) and airfields with sporadic IFR operations (Airspace F).

In order to avoid airprox between IFR and VFR flights in Airspace E the BFU recommends:

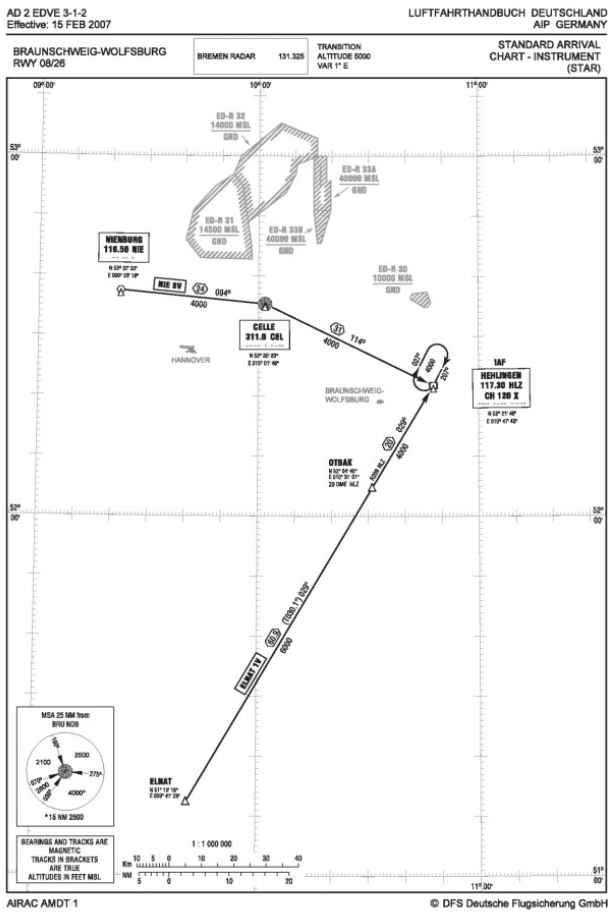
IFR Pilots:

- Check during approach to an airport if and when you are entering Airspace E. Approach and departure routes do not always run through a TMA.
- Expect unidentified traffic whenever you are in Airspace E. Monitor the airspace consequentially and attentively.
- Keep in mind that not all VFR flights have a transponder on board and very often they are not in radio contact with ATC.
- Please respect that IFR flights do not generally have the right of way over VFR flights. In Airspace E the rules of the air of the Air Traffic Order **apply to everybody** in equal measure. Explicit attention should be paid to the fact that air ships, gliders, hang gliders, paragliders, balloons and aircraft towing gliders have the right of way.
- Attention should be paid to the speed limit: maximum 250 KIAS below FL100!
- During pre-flight preparation attention should be paid to the airspace structure of the departure and destination airports.

VFR Pilots:

- Become aware of the flight path of IFR flights:
 - Approach and departure procedures of IFR flights also run through Airspace E.
 - **Departure routes** usually run from the respective airport to the next available route or way point. Due to the high angle of attack during climb the view down and forward is very limited especially in commercial aircraft.
 - **Standard arrival routes** run from a nearby radio beacon or way point to the runway's final approach.
 - IFR approaches and departures can be guided on individual headings which are not published in any public procedure (Air Traffic Order para 26 (2)).
- Intensify monitoring the airspace whenever you are in Airspace E in approach or departure sectors of airports, aircraft have the right of way during final approach (Air Traffic Order para 13 (4)).
- In case of doubt waive your right of way whenever you recognise another aircraft in time. **Initiate an avoidance manoeuvre in time.** You can much easier recognise a large commercial aircraft than a commercial air transport pilot can recognise you.
- Make increased use of the Flight Information Service either on the FIS or Tower frequency. Thus controllers / FIS specialists can give valuable air traffic information to everyone using the airspace.
- Even if you are not in contact with ATC and fly below 5,000 ft AMSL / 3,500 ft GND switch on your transponder. Thus traffic information can be passed on to others and the traffic warning system (TCAS) can react if necessary.
- Do not depend on any traffic warning system aboard your aircraft but use them as support to monitor the airspace.
- Adhere to the required minimum distance to clouds.

Flying in airspace E is a coexistence of IFR and VFR air traffic. It works better if all parties concerned fly with the awareness of others and the required caution.



Suggested reading: Flight Safety Information V 158 - Vermeidung von Zusammenstößen bei Flügen nach Sichtflugregeln. www.bfu-web.de

Image 1: IFR Approach for Braunschweig (EDVE)

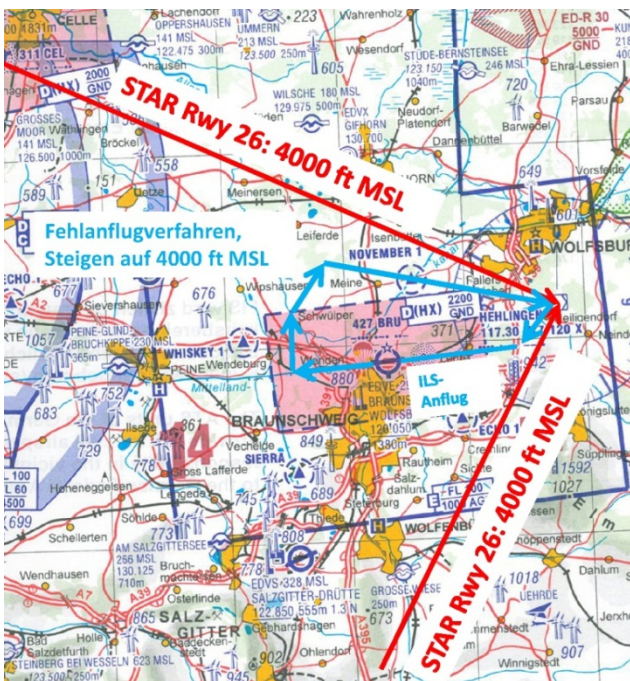


Image 2:

STAR to IAF completely in Airspace E

Instrument landing system (ILS): Initial altitude 2,500 ft. For about 10 NM in Airspace E

Missed approach procedure: Climb to 4,000 ft and entrance into Airspace E

Source: DFS / AIP / BFU