

Information to VFR pilots

from LFV/NUAC

This information is published by LFV and NUAC to remind VFR pilots about procedures in Sweden aiming to prevent airspace infringement.

LFV and NUAC provide Air Traffic Services in controlled and uncontrolled airspace, including about 20 controlled airports.

Be aware that this information is for advise only and is not replacing Swedish and EU rules and regulations!

(This material may be copied and distributed freely.)



AIRSPACE INFRINGEMENT

Airspace infringement occurs when an aircraft penetrates an area into which special clearance is required without having such clearance.

Definitioner

AIP: Aeronautical Information Publication- contains information about airports, airspace and rules and regulations in order for a safe and efficient conduct of flight.

SAR: Search and Rescue- service with the aim to locate the position of aircraft reported missing, crashed or have made a forced landing, and if needed to coordinate rescue.

ETA: Estimated Time of Arrival – for VFR flight the estimated time overhead the destination airport.

ATC: Air Traffic Control Service – a service provided for the purpose of preventing collisions between aircraft, and, on the manoeuvring area between aircraft and obstructions and to expedite and maintain an orderly flow of air traffic.

IFR: Instrument Flight Rules (IFR) – are rules which allow properly equipped aircraft to be flown under instrument meteorological conditions (IMC).

JRCC: Joint Rescue Coordination Centre- Combined Centre for both MRCC (Maritime Rescue Co-ordination Centre) and ARCC (Aeronautical Rescue Co-ordination Centre).

ATC Clearance: A permission to fly an aircraft according to the conditions given by a ATC unit.

NOTAM: Notice to Airmen- a notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

Restricted area: an airspace of defined dimensions above the land areas or territorial waters of a state, within which the flight of aircraft is restricted in accordance with specific conditions.

VFR: Visual Flight Rules – are the rules that govern the operation of aircraft in Visual Meteorological Conditions (VMC) (conditions in which flight solely by visual reference is possible). Because of the limited communication and/or navigation equipment required for VFR flight, a VFR aircraft may be subject to limitations if and when it is permitted in controlled airspace.

AIRSPACE

The airspace is divided into either controlled or uncontrolled airspace.

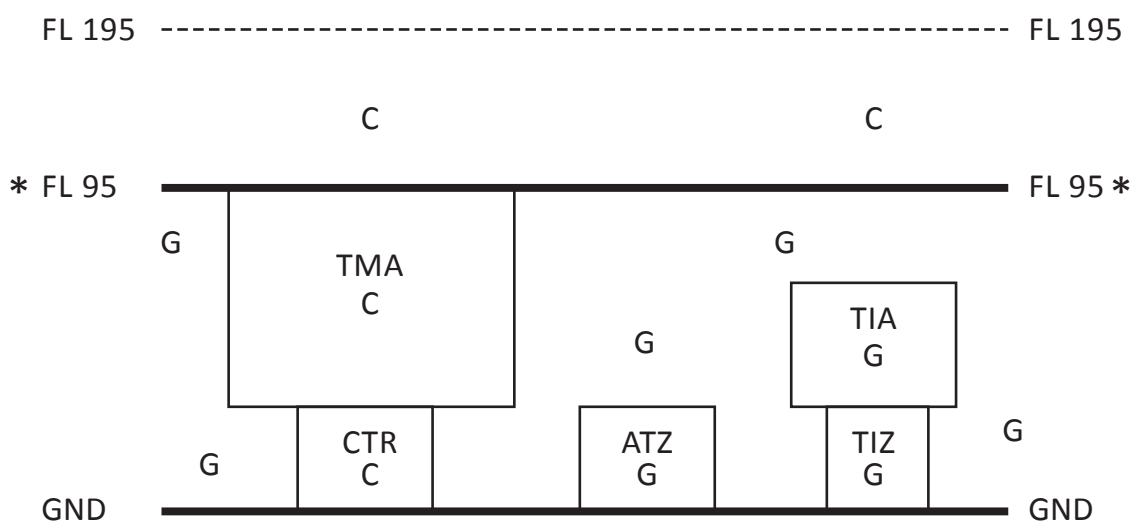
Controlled airspace is divided into:

- *controlled area (CTA)*, further divided into *area control (SUECIA CTA/UTA)* and *terminal area (TMA)*;
- *control zone (CTR)*.

Remaining airspace is the **uncontrolled airspace**.

In the uncontrolled airspace there are:

- *traffic Information areas (TIA)*
- *traffic Information zones (TIZ)*
- *aerodrome traffic zone (ATZ)*
- *remaining uncontrolled airspace*.



* The underside of the northwestern corner of Sweden is FL125.

In Sweden the airspace consists mainly of either class **C** or **G**.

Airspace class C:

- Flight in accordance with the VFR, permitted day and night
- Air traffic control (ATC) is provided for all flights (VFR and IFR)
- VFR and IFR flights are always separated by ATC
- During darkness all flights are separated to each other
- During daylight VFR flights will receive traffic information about other VFR flights.

Airspace class G:

- Flights in accordance with VFR permitted day and night.
- Air traffic control service is not provided.
- On request, traffic information is provided by ATS about known air traffic and conditions (be aware that the information about other flights is very limited, since there are no requirements to file a flight plan, nor to have radio communication with ATS).

GOOD ADVICE

Flight planning

- Always use current AIP (or IAIP), AIP SUP and NOTAM where information, for example about, opening hours for aerodromes, navigational aids, restricted airspace can be found.
- Be aware that the airspace structure (boundaries, altitudes etc) around major airports often proves to be quite complicated! Take your time before your flight and study available maps, entry/exit points and procedures. Make sure to call up ATS on radio well before your intended entry into controlled airspace. ***Do not enter controlled airspace unless you have received, and confirmed, an atc clearance! To enter controlled airspace without atc clearance is a safety hazard for you and others.***
- If your intention is to fly in uncontrolled airspace only, make sure to plan your route with a good marginal to controlled airspace (or restricted areas), Airspace infringement are often the result of too tight marginals to these areas.

Atc communication

- **Do not hesitate to call ATC to request an ATC clearance to enter or to pass a controlled area. We are here for you and other pilots!**
- Use standard phraseology and make sure to be explicit when requesting an ATC clearance (ie “request clearance to enter via... towards... at xxxx ft”) instead of a description of what you are doing.
- If you are uncertain what ATC instructs, ask again.
- Make sure to call ATC well in time! And be prepared that you might not receive an ATC clearance at that moment and need to wait outside controlled airspace.
- If you are in climb towards controlled airspace, be prepared to stop climb underneath controlled airspace until you receive an ATC clearance to a higher altitude
- When flying in accordance with VFR it is your responsibility to use the correct frequency and ask for ATC clearance **before** entering controlled airspace. Don't expect to be told a frequency and passed to another control unit – it's a service that the ATC will only provide if time permits.
- When approaching a controlled area (control zone or terminal area) do not interpret a no reply on the frequency as if the ATS unit is closed. You have to get confirmation, for example from the Area Control Centre, whether this is the case or not.

Use of transponder

- The use of transponder is compulsory in controlled airspace and if it's altitude reporting it increases the probability of detection by ATS. But it is recommended that the transponder is always on at the appropriate code setting in all airspace, it makes the flight safer for you and for other flights
- If you have not been assigned an individual code by ATS you should use code A7000.

Flight plan and the monitoring of the flight and landing

- If you are departing from an uncontrolled airfield or airport without ATS, call ATS as soon as possible to activate your FPL, by telling your actual departure time, ATD. If landing on an uncontrolled airfield or airport without ATS you must close your flight plan either over the radio prior to landing or by telephone after landing.
- Activation of your flight plan is the pre-requisite for the SAR services shall be able to track your safe arrival to the destination. Bear in mind that it is equally important to close the flight plan, either before landing or by telephone after, within 30 minutes. If your landing message fails to arrive the search organization will be activated.
- Be advised that and the filing of an ATS flight plan (FPL) is not the same as an ATC clearance!

If questions, contact LFV (Safety department):

Telephone (switchboard) +46(0)11 192000 Fax: +46(0)11 192575 Mail: lfv@lfv.se

Further reading:

*"Det nya regelverket för
privatflygning enligt VFR"*
(Transportstyrelsen)

"Information to VFR-pilots"
(Naviair) speciellt för
flygning i Danmark

References:

Information om luftrumsintrång
– *Tips till dig som flyger VFR, eller arbetar inom flygtrafiktjänst*
(Transportstyrelsen)

Definitioner från Transportstyrelsen