



## CAPTION: AERODROME SECTION - FLIGHT INFORMATION NEEDED ON-BOARD FOR FLYING

Information about each aerodrome, airfield and heliport is framed to one-fourth of the page. This frame of one aerodrome is enlarged here and the legend is written directly in the respective fields of the frame. The **description shown in blue** indicates the contents of the fields, **notes in red** includes interpretation of various options such information.

## Aerodrome NAME

the name of the aerodrome equals **CALLSIGN**, if callsign is only part of the name it is marked by **pale lower case**, if it is completely different from the name it is mentioned together with FREQ:  
e.g. **HOSIN (FREQ: RADIO 130,200)**  
= callsign: HOSIN RADIO  
e.g. **Brno TUŘANY (FREQ: TWR 119,600)**  
= callsign: TUŘANY TOWER  
e.g. **Mikulovice (FREQ: JESENÍK INFO 123,500)** = callsign: JESENÍK INFO (see AD)

## COMM frequencies/ channels and service provided

**TWR** = ATC service (*tower - controlled AD*),  
**APP** = approach ATC service, **ACC** = area control  
**INFO** = AFIS - Aerodrome Flight Information Services (*tower - non controlled aerodrome*),  
**RADIO** = information for known traffic on aerodrome or microlight/UL field  
**[RADIO 125,830]** = group frequency for microlight fields without radio service - for blind calling use 125,830 (max.1500ft AGL)  
**E** = COMM available also at English, **\*E** = see specified details at **FREQ** (lower at text block)  
**\*** = frequency will be replaced during season (see **FREQ**)

RWY DESIGNATION (LDG - landings only, or T/O - take-offs only = one-way RWY)	RWY usable dimensions (metres) and surface  heliports: <b>FATO and TLOF</b>
---	---

**Contacts:** **OPR** - AD operator,  
telephones: ☎ phone numbers to AD,  
further phone numbers are **direct numbers**  
to AD services: **TWR / RADIO** - AD control  
tower or dispatcher, **APP** - approach unit,  
**ATIS** - ATIS broadcasting by phone,  
**DELIVERY** - delivery unit, **FPL** - flight plan  
filling, **CHIEF** - AD chief, **ARO** - ATS  
reporting office, **MET** - meteorological office  
**another phone and fax numbers to AD**  
and to provided services (such **refueling**,  
**handling**, **custom services**, local **TAXI**,  
accommodation at aerodrome vicinity ...) are  
published at **section AD INFO**

all numbers are shown at national form (CZ:  
9 digits at groups by three, SK: local area  
code-number) including area code, without  
international code. **International code:**

**Czech Republic** = +420 (dial from abroad:  
+420 222.720.960), **Slovak Republic** = +421  
(to dial from abroad omit first zero: 0903-  
533601 = +421 903 533 601)

**LOC/DME:** ILS available: RWY FREQ (ID)  
and accurate MAG BRG for ARR

⌚ **AD operational hours H24** = nonstop  
service / **24H** = 24 hours in advance (eg.  
O/R 24H = service is provided only upon  
request at least 24 hours in advance)

**ICAO code**, AD availability, **PJE** = para-  
chuting within and above ATZ - up to upper  
limit of class E (Slovakia G), **GPS name** -  
name used in special software for GPS

## Aerodrome / UL field Status

**public** = open for all users  
**private** = for designated users only, the  
other shall **obtain a permission for  
landing from AD (UL Field) OPR in  
advance**

**international** = for international and  
domestic traffic - customs, immigration  
and similar services are provided on AD  
**domestic** = for domestic and for  
Schengen area traffic

**UL Field** = field for take-offs and  
landings of **MICROLIGHT PLANES**  
(registered = registered at LAA register)  
**Attention: UL Field is NOT AIRFIELD!**  
**Other Status** (military, closed ...)

**Aerodrome location** - distance and  
direction from geographical point  
(**S-South, N-North, W-West, E-East**)

**ELEV** - AD elevation above  
sea level ft (m)

**ALT** - AD traffic circuit  
altitude at ft AMSL

**QR code**  
**AD**  
**contacts**

**ALL TIMES ARE STATED IN UTC** (unless  
otherwise noted), **hours stated in  
parenthesis are also in UTC**, but are  
applicable during the period of Central  
European Summer Time (see caption  
**Presentation of time**)!

**Example: 0700-1500(0600-1400) (UTC)**  
**mean:** 8:00 - 16:00 in summer and 8:00 -  
16:00 in winter (LT - local time)

⛽ **fuels available** at aerodrome

⛽ **= availability to fill up fuel during whole  
week/all day (min. each working day)**

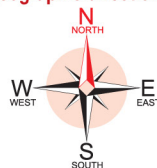
**HEL:** additional information about heliports:  
designation, strength TLOF, ARR/DEP -  
directions for arrival/departure, lights (FATO  
and TLOF is at RWY section); aerodrome  
heliports: designation, FATO, TLOF, ELEV,  
ARR/DEP directions, lights availability

**FREQ:** additional comm frequencies and  
languages availability/conditions (if specified),  
frequencies for operation in the vicinity,  
/operational hours/ (each frequency for  
operation in the vicinity is annotated to  
which airspace or aerodrome belongs, freq.  
are ranked by importance - to request ATC  
clearance always call first freq. referred to  
as the first and only then another - eg. in  
poor radio coverage)

## GROUND PLAN / APP CHART:

**Aerodrome = depicting ground  
situation** - contains RWY(s),  
their directions and location,  
airport circuit direction (if  
declared), MAG BRG of RWY,  
ILS device FREQ when RWY is  
equipped (LOC/DME), elevation  
of RWY threshold (only in case  
of a major difference from AD  
ELEV), ARP, location of  
buildings, appearance of  
surrounding terrain.  
**UL Field (airfield for  
microlights/UL planes) = APP  
Chart** in scale 1:150 000  
including airspace information  
(CTR/TMA, P, R...) from ground  
(GND) up to 4000ft AMSL,  
with marked airfield location,  
RWY, airfield circuit (if declared),  
circuits of airfields in the vicinity -  
see caption Aeronautical charts.

All geographic directions are:



## AD (= LOCAL REGULATIONS):

additional information about the  
aerodrome, arrival/departure  
procedures, operating  
conditions, restrictions, notices  
and cautions. **PPR** = Prior  
Permission Required.

**NOISE:** noise abatement  
procedures

**Attention:** Information  
concerning the arrangement of  
rescue and firefighting services  
at airports is not handled in the  
Aerodrome Database (for aircraft  
with total length greater than or  
equal to 9 m or with maximum  
fuselage width greater than 2 m)!  
**FREQ, Local regulation and  
NOISE text** is displayed in blue  
and mostly in the left frame, but  
may also exceed to the ground  
plan frame if there is more  
information.

Information validation (unregistered airfields are marked: THIS RECORD IS NOT VALIDATED!)

WEF: date of effect of the record (last update) - RED => attention - come into force subsequently



## CAPTION: SECTION AD INFO - INFORMATION NEEDED FOR PRE-FLIGHT AND AFTER LANDING

## RECORD CAPTION

## AERODROME NAME (ICAO/IATA code)

**ARP:** GPS coordinates of aerodrome reference point (at WGS84)

**OPR:** aerodrome operator and postal address

**☎ phone and fax numbers** to aerodrome, **AFTN** address

**e-mail:** aerodrome e-mail address

**web:** aerodrome internet pages address; **so:** social network address (FaceBook, Twitter...)

**direct phone numbers and contacts** to local units and provided services:

**air traffic / aerodrome information services:** TWR / RADIO - control tower or dispatcher,

APP - approach unit, ATIS - ATIS broadcasting by phone, DELIVERY - delivery unit, FPL - flight plan filling, CHIEF - aerodrome chief, ARO - ATS reporting office, MET - meteorological office

**refueling:** FUEL, if there is a direct contact for a specific type of fuel - it is labeled according to the type of fuel: AVGAS, MOGAS (for MOGAS and also for automobile-fuels for UL/microlights planes), JET A1

**handling and aerodrome services:** HAND - handling services, FBO - provider of complex ground services for GA planes and crew (Fixed-Base Operator)

**custom services:** CUST, **other services:** SERV, **on-line meteo/web cams:** MET/CAM (listed shortened URL using [www.dl.cz/api/](http://www.dl.cz/api/) + 4 digits => the browser opens the camera page)

**Other contacts:** detailed contacts to companies and individuals active in the aerodrome, stated - function on aerodrome: name and contacts, remark, linguistics skills (ENG/GER/ITA/ESP/FRA/RUS)

**⛽** fuels available at aerodrome, symbol **⛽** = availability to fill up fuel with regular operational hours - during whole week/all day (min. each working day)

**Lubricants:** lubricants available

**📶 custom services** on aerodrome

**WiFi:** wireless internet on aerodrome availability - WiFi

**Services:** other services offered on aerodrome (hangar space, repairs, services for pilots...)

**💰 landing fees:** always in local currency (CZ=CZK / SK=EUR),

categories: UL - microlight/UL planes, GLD - gliders, ACFT - GA aircrafts, PAX - passengers service, PARKING: parking fees, fees are stated for every initiated MTOM ton, cleared person, hour and MTOM ton for parking, or when mentioned /UL / /ACFT for the whole plane

**🔄** possibilities of **refreshment / accomodation**

**🍽️ at aerodrome / attraction at aerodrome:** restaurants / accomodation and attractions on AD

**📍 at vicinity:** possibilities of refreshment / accomodation at aerodrome vicinity,

informations: *Town:* name of place [★=sun - rating by local pilots 1-5★ (1★=poor / 5★=excellent)], phone and other contacts (road distance from aerodrome, remark, number\* - grade/hotel stars, accurate GPS coordinates of place at WGS84)

**🚗 traffic connection to aerodrome**

**CAR RENT - contacts to local car rental services:** informations: *Town:* (not indicated if located directly at the AD) name of company and phone number (remark and other contacts)

**info:** activities and operations at the aerodrome or around, sporting and cultural possibilities

## RECORD SAMPLE

## BRNO TUŘANY (LKTB/BRQ)

**ARP:** N49°09'05,00" E016°41'38,00"

**OPR:** Letiště Brno a.s., letiště Brno-Tuřany 904/1, 62700 Brno

☎ 545.521.310, 545.521.111;

fax 545.216.346; AFTN LKTBVDYX

**e-mail:** info@brno-airport.cz

**web:** <http://www.bruno-airport.cz>

**so:** facebook.com/BRNO-Airport

**TWR:** 548.424.870; **MET:** 545.216.487;

**FUEL:** Shell 737.272.885 (H24);

**HAND:** Letiště Brno 545.521.309,

handling@brno-airport.cz;

**CUST:** 545.521.204

**MET/CAM:** [www.dl.cz/api/1234](http://www.dl.cz/api/1234)

**Other contacts:**

handling: Letiště Brno 545.521.309,

fax 545.216.346, handling@brno-airport.cz

co-ordination of training flights: 545.521.311,

fax 545.216.346, handling@brno-airport.cz,

or FREQ BRNO HANDLING

**⛽** Jet A-1,

Avgas 100LL

**Lubricants:** TotalAero D100

**📶** at operational hours

**WiFi:** available - free

**Services:** hangar space O/R

**💰** ACFT: 300,-/t; PAX: 370,-; PARKING: 14,- /t/h(day), 7,-/t/h(night)

**🏠** restaurant MON-FRI 10-18, SAT-SUN 11-18 (LT) and by timetable

**🛏️** lodging house 3x2 beds (300,-/Kč/bed)

**📍/🍽️ at vicinity:** Brno: hotel and restaurant

Sluneční dvůr [4★] 724.828.083,

545.211.442 (4km, [www.slunceindvur.cz](http://www.slunceindvur.cz),

GPS: N49°10'41,00" E016°41'03,00")

**🚌** municipal Bus no. 76, taxi, taxi service also ba OPR by own cars

**CAR RENT:** CARTO car rental for pilots

774.540.003, [www.carto.cz](http://www.carto.cz)

**info:** Entire equipment and services for processing passengers and freight.

## MET/CAM: DIRECT LINKS TO WEATHER CAMERAS AND WEATHER STATIONS LOCATED AT AERODROMES

MET/CAM information containing a direct link to a weather camera or weather station located directly at the aerodrome.

It can be found in the section of extended aerodrome information - so you don't have to search for the link on the aerodrome's website. In the online Aerodrome Database (for example in mobile applications), this link to the weather camera / weather station is listed as a web link (it is possible to click on it directly). In the printed edition, a system of abbreviated links is introduced using the URL of the Aerodrome Database: [www.dl.cz](http://www.dl.cz).

It works simply - at the aerodrome, which operates a weather camera on its website, there is a link containing the URL address [www.dl.cz/api/XXXX](http://www.dl.cz/api/XXXX) => where XXXX presents four digits (for example [www.dl.cz/api/1051](http://www.dl.cz/api/1051)). If you enter this URL into your web browser, our server will recognize it and redirect it directly to the weather camera of the aerodrome (just as you would enter the URL of the weather camera directly into your browser - for example "<http://portal.chmi.cz/files/portal/docs/meteo/kam/prohlizec.html?cam=lkmt>"). We introduced the abbreviated link because rewriting such a long URL is not practical and many users would probably make a mistake in transcribing several times before entering the address correctly.

A small trick is that the URL is also included in the QR code provided at the aerodrome (containing contacts to the aerodrome in electronic form for your smartphones and tablets). After loading the QR code into your phone / tablet, you can click directly on the weather camera address and you do not have to rewrite anything at all.

Links to weather cameras / weather stations are, of course, only given at aerodromes whose operators wish to publish these links in the Aerodrome Database. However, we believe that the number of published links will increase over time.

## QR CODES AT AERODROME DATABASE

QR (Quick Response) codes are based on barcodes. Allows quick and easy transfer of information from printed media or monitor to mobile device such as a mobile phone or tablet.

Read content of QR code by using the camera on your phone/tablet.

To retrieve the QR code you must have the appropriate application - QR code reader. You will find this reader pre-installed on most mobile phones and tablets or it is already directly part of the operating system. **QR codes in the Aerodrome Database hold information in vCard format.**

**QR code with contacts:** is given for each aerodrome next to the contact field, containing up to 6 **phone numbers** to the aerodrome. Phone numbers are listed in the same order as they are printed in the Aerodrome Database for better clarity. The QR code also contains the **website address and e-mail address** (if the aerodrome operator uses it). Tip: QR code can also be used for simple and fast storage of complete aerodrome contact to your phone memory!

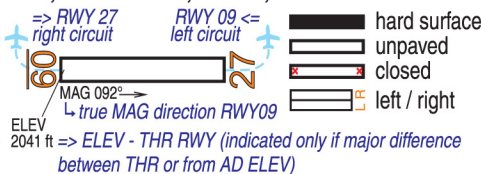
**QR code with the GPS coordinates:** you will find next to the approach chart at approach plates of Aerodrome Database PROFIL (published electronically at various software/apps for mobile devices), it contains a web link to the aerodrome location on Google maps (GPS coordinates of ARP - aerodrome reference point in WGS84).



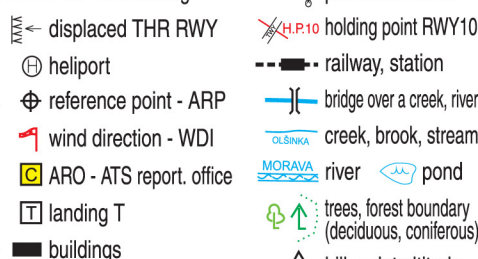
This sample QR code contains contact to the Aerodrome Database publisher.

## CAPTION: GROUND SITUATION PLANS

**RWY, their direction, surface, traffic circuit direction**



**TWY A TWY and marking**



**TWR description, notes**



caption, scale, direction to the north

## PRESENTATION OF TIME

**ALL TIMES** mentioned in this publication are in **UTC**. **Hours stated in parenthesis** are also in UTC, but are applicable during the period of Central European Summer Time.

In the Czech and Slovak Republics Local Time (LT) is used:

Central European **Time (winter) = UTC +1 hour**

Central European **Summer Time = UTC +2 hours**

**Example: 0700-1500(0600-1400) (UTC) mean:**

**8:00 - 16:00 at winter and 8:00 - 16:00 at summer (LT).**

**Sumer time** in CZ and SK begin every year on the last March Sunday at 0100 UTC and end on the last October Sunday

at 0100 UTC.

**Night** is the period between the end of civil twilight and the beginning of civil morning twilight. Table of sunrises/sunsets and the civil twilight beginning/end is located in section GEN - Tables.

## PHONE NUMBERS FORMAT

All phone numbers at Aerodrome Database are listed in national format - as you dial it when you are on the national territory. If you are calling from abroad, add the specified international prefix (see below).

### Czech Republic

**= International prefix: +420 (or 00420)**

Phone numbers in the Czech Republic are composed of a 9-digits. For calls from abroad just put the international prefix before the phone number. Each phone number is here divided into three groups of three digits for better readability. Individual groups are separated by small dots (dial a phone number on your phone without these dots). Phone numbers of mobile operators usually begin with number 6 or 7 (eg: 602.420.260). Green lines begin 800 (free of charge, also 801-809, eg: 800.123.456). Lines with shared costs begin to 844 (calling for a basic flat-rate fee, also 840-841, eg: 844.123.456). Premium Line - audiotext services begin 90 (calling for an increased fee, eg: 906.123.456). Special lines of public services begin 973 (mostly calling for a basic fee, this numbers are used usually by military, police, financial administration etc., eg: 973.123.456)

### Slovak Republic

**= International prefix: +421 (or 00421)**

Phone numbers in the Slovak Republic are composed by local prefix with an initial zero and its own telephone number. For calls from abroad with international prefix is necessary to omit the initial zero at local prefix. For example, the number recorded 02-4363 8586 call internationally: +421 2 4363 8586 or 0905-123 456 call +421 905 123 456. The phone number local prefix is here separated by a dash for better readability (dial the phone number on your phone without a dash).

**Phone numbers contained in the QR codes** are of course listed including the international prefix, so you are able easily to use the numbers immediately after reading the QR code on your phone/tablet.





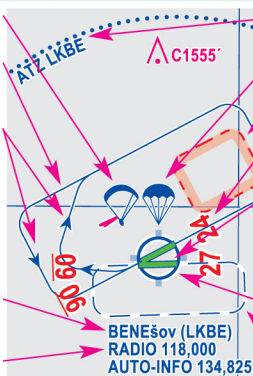
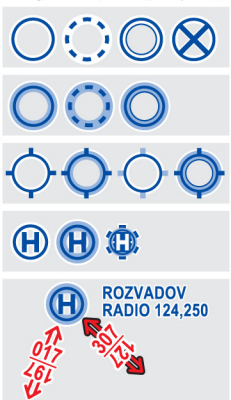
# CAPTION: AERONAUTICAL CHARTS - CHART SYMBOLS

## SYMBOLS: AERODROMES, HELIPORTS, RWY, TRAFFIC CIRCUITS, SKYDIVING AND PG TAKE-OFFS

ParaGliding take-offs with winch/unwinder (hanging rope).  
Traffic circuit pattern - corresponds exactly to the position specified by AD OPR as the ideal shape of circuit).

Direction of flight the circuit when the circuit is only one-way.

Aerodrome name and call sign communication frequency and service - the name of the aerodrome is also the RDST callsign, if the callsign is only part of the name it is marked by lower case, if it is completely different from the name it is mentioned together with FREQ.  
\* = Frequency will be replaced during season (see frequency table).



ATZ zone of aerodrome.  
PJE - Parachute jumping exercise within and above ATZ.  
Noise restrictions zones.  
RWY designation always facing the RWY direction (RWY 06/09 underlined for better readability).  
RWY - location of each runway symbol corresponds to the actual RWY position in the landscape, each runway is plotted exactly as long as it is long in fact (maintaining chart scale).  
Aerodrome ring situated in the aerodrome reference point - ARP.  
Traffic circuit for gliders (marked by dashed line).

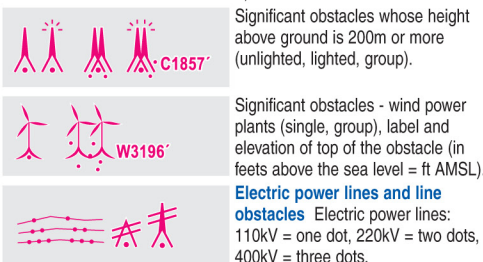
Unpaved RWY is shown in green, paved RWY in black and closed RWY in gray. The length and direction of RWY symbols in the aerodrome icon (and the relative position of RWYs at multiple runways) corresponds exactly to the actual length, direction and mutual position of the runway in the landscape.  
Designation of one-way RWY: T/O = take-offs only, LDG = landings only.

Public aerodromes are marked by blue line ring with a white rim. GA aerodromes have solid line. UL fields have dashed line. Military aerodromes have double line. Closed aerodromes are marked by cross.  
Private aerodromes are marked additionally by light blue rim (for arrival at the private aerodrome is absolutely necessary to obtain permission from the aerodrome operator in advance).  
International aerodromes are marked additionally by four short segments around the ring. Public domestic/private international aerodrome has the following segments light blue.  
Heliports are marked by blue line ring with the letter H inside. Public heliports have circle with a white rim, private have a light blue rim, heliports usable only for Medical Rescue Service have a hexagram inside.  
Heliports included within the Aerodrome Database are marked by ARR/DEP directions (available for night operations have a black outline additionally). The text label indicates the magnetic direction of ARR/DEP.

Aerodromes with IFR operation have a symbol showing the real shape of the aerodrome area (RWY symbol also match actual length and location). There are also indicated the main taxiways. RWY equipped by ILS are marked by ILS symbol including frequency at MHz, ID and accurate RWY MAG direction. Military aerodromes has additionally a double line around the area.

## CHART SYMBOLS - OBSTACLES

Significant obstacles: unlighted, lighted, group of unlighted, group of lighted. Obstacle label (see below) and elevation of top of the obstacle (all elevations are mentioned in feet above the sea level = ft AMSL).



## CHART SYMBOLS - RADIONAVIGATION FACILITIES

Radionavigation facilities VOR/DME letter designation and transmitting frequency, navigational arrow pointing in the direction of the magnetic north (rotated by magnetic variation at the area).  
Radionavigation facilities DME and NDB letter designation and transmitting frequency.

## CHART SYMBOLS - REPORTING POINTS, OTHER

Visual Reporting Points - symbol and label (name), navigational lines of ARR and DEP routes, route magnetic heading, distances (nm) and maximum flight altitude (ft AMSL). Holding Pattern including magnetic heading.

Line obstacles: electric power lines >= 100 m AGL, >= 200 m AGL - represent power lines above the valley, riverbed and etc. where the relative height of lines >= 100 m (>= 200 m) above the ground (this symbol has no label).  
Obstacle category marking: Labels: C = Chimney, M = Mast, T = Tower, B = Building. For each group of the obstacles is the exact position of each one obstacle associated to this group marked by tiny dot. By the group symbol is marked the highest obstacle of the group (the exact position of the obstacle corresponds to the dot in the base of symbol). Each group is labeled by elevation of top of the highest obstacle of the group.

Enroute Reporting Points - symbol and label (name).  
Flight sites for paragliding (PG): take-off site, landing area, training terrain.  
Geographical coordinates (WGS84) The charts use the UTM - Universal Transverse Mercator projected coordinate system. Mercator projection - WGS 84 coordinates grid, WGS 84 ellipsoid reference surface.



# CAPTION: AERONAUTICAL CHARTS - AIRSPACE

## AERONAUTICAL CHART AIRSPACE SYMBOLS AND LABELS AND FLIGHT REQUIREMENTS

**Airspace symbols and labels** at our aeronautical charts are designed to simplify as much as possible reading of important information about airspaces and navigate uncontrolled VFR flights at altitudes most commonly used by general aviation pilots (common flight altitude of about 1000 ft AGL). Chart therefore contains a **color under-prints of airspaces** with the lower vertical limit starting from ground (GND) or less than 500 ft AGL => airspaces that is not possible "under-fly" at the time of activation. Lower airspace aeronautical chart VFR 1:1 000 000 also includes a lighter color under-prints of airspaces with the lower limit close to common flight altitude (about 1000 ft AGL) = airspaces that can be under-flown, but you must be vigilant to the flight altitude (chart 1:1 000 000 contains lighter under-prints because it does not contain topographical base with which they were lighter under-prints illegible). Furthermore are by inverted colors **highlighted airspace lower vertical limit labels for airspaces that has the lowest lower limit in the area**. This enhancement increases the clarity and allows for rapid determination of the maximum flying altitude particularly in areas where it is superposed several airspaces in layers.

**Published hours** = maximum time for which airspace can be activated, after its use was planned and published by AUP (AUP = Airspace Use Plan). For planning and activation outside the published hours would have to be issued NOTAM.

**Scheduled hours** = is published the day before by the AUP report (can not exceed the published hours).

**Activation hours** = actual activation time, information is provided by mentioned ATC unit - **information from the ATC unit has a validity of 15 minutes = we must leave the airspace within 15 minutes or repeat query (well in advance)!**

**The vertical limits of airspace:** in aeronautical charts of scale 1:200 000, 1:500 000, 1:1 000 000, and for aerodromes with controlled airspace (its own CTR) in approach plates of Aerodrome Database PROFI (published electronically at various software/apps for mobile devices) is depicted airspace with a **vertical limits from GND up to FL95 (on the territory of Slovakia up to FL195)**. In the airfield approach charts at aerodrome section and for non-controlled aerodromes in the approach plates of Aerodrome Database PROFI is depicted airspace with a **vertical limits from GND up to 4000 ft AMSL (this corresponds to the vertical limits of the ATZ zone)**.

### FIR sector (non-controlled flights)

- double blue line with white center (clearly distinguishable even in case of overlapping)

### FIS (Flight Information Service)

- COMM frequency to the FIS unit providing the service in the region

### Color under-prints of airspaces CTR / RMZ / R / TRA / TSA / D -

by light background (the same color as airspace label) are under-printed the airspaces with the lower vertical limit starting from ground (GND) or less than 500 ft AGL (the airspaces that is not possible to "under-fly" it at the time of activation)

### Airspace labels on the perimeter

- additional labels are given around the perimeter of the airspace for better identification of individual airspaces

### Semitransparent border (rim) -

shows the inner part of the airspace and highlights its boundary

### TRA GA / GLD / PJE -

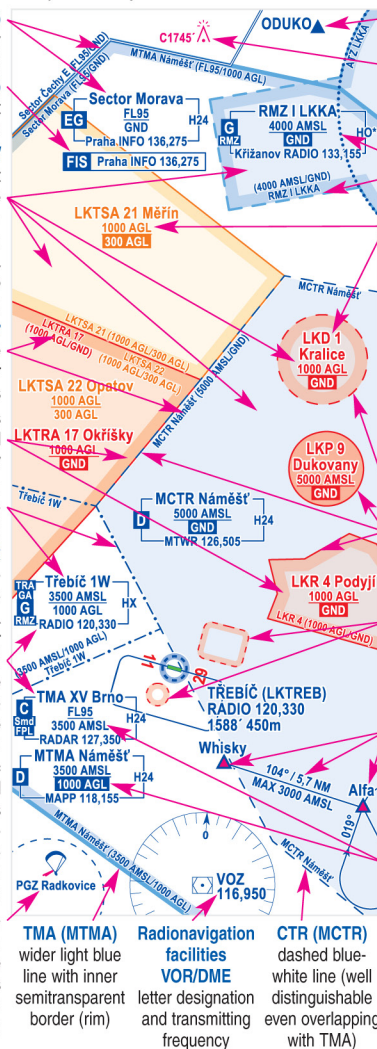
blue dot-and-dash line (it is easy to read even in case of the common border with CTR/TMA or ATZ)

### Airspace main label of FIR sector / CTR / TMA / TRA GA / GLD / PJE / RMZ -

contains type and label of airspace (name), vertical limits (GND, ft AGL/AMSL or FL), COMM frequency and call sign (for call sign details see CTR/TMA detailed description), on the left side of label is the class of airspace (if multiple classes are listed - the class is corresponding to the flight altitude) and any special requirements (SSR transponder - Cnd = C-mode or Smd = S-mode, FPL - required flight plan, RMZ), on the right side is airspace activation hours (H24/HO\*/HX\* - details of airspaces that are not active H24 can be found in the overview table in section GEN Airspace)

### PGZ -

dashed thin blue-white line and the symbol of paragliding parachute with hanging rope, airspace label (name), the common vertical range of all PGZ is CZ: GND - 4000 ft AMSL, SK: within G class airspace (GND - 8000 ft AMSL)



**Enroute significant point -** symbol and label (name)

**Significant obstacle -** the symbol corresponds to the obstacle category, the label contains category marking and the obstacle peak altitude (ft AMSL)

**ATZ -** blue dotted line

**RMZ -** dashed light blue line including inner rim

**Airspace main label of P / R / TRA /**

**TSA / D -** contains type and label of airspace (name) including the additional name, vertical limits (GND, ft AGL/AMSL or FL), the label does not contain the class of airspace (it is declassified during period of activation - excluding Danger airspace) neither the airspace activation hours (it is individual for each airspace) neither the COMM frequency - all these details can be found in the overview table in section GEN Airspace

**Danger airspace D -** dashed red line including inner rim

**Airspaces P / R / TRA / TSA -** solid red line (orange color for TSA) including inner rim, prohibited airspaces P are filled with saturated red background

### Airspaces with noise restrictions

- dashed red line including a narrow inner rim, this airspace has no label (the common restriction applied: minimum flight altitude 1000 ft AGL!)

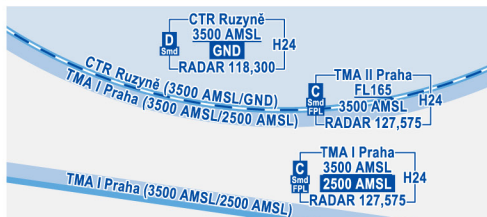
**Visual reporting points -** symbol and label (name), navigational lines of ARR and DEP routes, route magnetic heading, distance (nm) and maximum flight altitude (ft AMSL), holding pattern including magnetic heading

### Highlighted airspace lower vertical limit

- by inverted color is highlighted airspace lower vertical limit that has the lowest lower limit in the area - this enhancement allows for rapid determination of the lowest airspace in the area (eg. the maximum flying altitude in the area) particularly in areas where it is superposed multiple airspaces in layers

# CAPTION: AERONAUTICAL CHARTS - AIRSPACE

## AERONAUTICAL CHART AIRSPACE SYMBOLS AND LABELS AND FLIGHT REQUIREMENTS



**CTR - Aerodrome control zone (MCTR = military CTR)**

**TMA - Terminal control area (MTMA = military TMA)**

CTR and TMA are controlled airspaces, for flights within CTR/TMA is necessary to obtain clearance from the appropriate ATC.

CTR is drawn in charts by dashed line, so that the boundary is well distinguishable even when overlap with other airspaces. TMA is drawn by wider solid line in light blue color. TMA usually follow the boundaries of CTR and extend it, so the line is chosen that both common border were clearly distinguishable even the boundaries overlapping. TMA also includes a semitransparent rim showing the inner part of the airspace (to avoid confusion, what is inside and what is outside of airspace).

The label contains the airspace name and vertical limits, heights are given in feet (AGL/AMSL) / flight levels. On the label right side you will find information about the operating hours - the hours when the airspace is active (H24 = nonstop, HO/HX\* = airspace with variable or not specified hours - details can be found in a table in section GEN Airspace). On the label left side is mentioned class of the airspace (G/E/D/C - for description and flight requirements see section GEN Airspace), the SSR transponder requirements (Cmd = C-mode / Smd = S-mode required), flight plan requirements FPL = filled and activated flight plan required for entering the airspace. At the bottom of the label is given communication frequency to responsible ATS unit and kind of service (TWR/APP). When only the kind of service is mentioned the callsign is name of the airspace and kind of service (eg. TMA III Ostrava, APP 125,100 - callsign is Ostrava APP/Approach on frequency 125,100), but if callsign is different - it is shown in full (star \* = this frequency will be replaced during season - see frequency table). Each airspace is additionally labeled on its rim - labels contains the airspace name, and the vertical limits of airspace if there is space enough.

**TRA GA / GLD / PJE - Temporary reserved area designated for local operations**

Specific airspace within the environment of Class D or C controlled airspaces (CTR/TMA), designated for the local traffic (GA/GLD/PJE).

The reservation is not published by AUP/UUP, information about activation can be obtained on INFO/ RADIO of belonged AD, by ATC of CTR/TMA or FIC. Airspace is drawn by blue dot-and-dash line (without rim) to be distinguishable even when overlap with CTR/TMA. Airspace label has the same format as CTR/TMA with the inverse TRA GA/GLD/PJE sign. Attention: TRA GA/GLD/PJE can be declared as RMZ (see RMZ sign in the left bottom part of the label)!



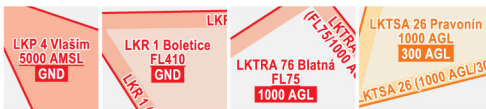
**RMZ - Radio mandatory zone** Aircraft shall be equipped with operating COMM VHF. Obligation to establish COMM with the AFIS/RADIO unit before entering RMZ, monitor FREQ throughout the flight and notify leaving the RMZ. RMZ is drawn by dashed light blue

line including inner rim. Airspace label has the same format as CTR/TMA with the inverse RMZ sign. Attention: RMZ may also be declared in another type of airspace - for example in TRA GA airspace.

**ATZ - Aerodrome traffic zone**

Usually Circle with a radius of 3 nm (about 5,5

km) centered at the aerodrome reference point. The vertical range is GND to 4000 ft AMSL. ATZ is drawn by blue dotted line without inner rim. ATZ has no main airspace label but is labeled on its rim by ATZ + aerodrome ICAO code.



**P - Prohibited area**

**R - Restricted area**

**TRA - Temporary reserved area**

**TSA - Temporary segregated area**

These are airspaces with forbidden access or with limited possibilities of entry by the current state of airspace activation. Flights within prohibited areas (P) is not possible in any case. Flights within restricted areas (R) and temporary reserved areas (TRA) can be carried out at a time when not activated, at the time of activation only after obtaining flight clearance from the appropriate ATC unit (published/scheduled/activation hours - see description above). Flights within temporary segregated areas (TSA) can be carried out at a time when not activated, during activation flight is not possible in any case.

This airspaces are drawn in charts by solid red line (P/R/TRA) or by solid orange line (TSA). Airspaces also includes a semitransparent rim showing the inner part of the airspace.

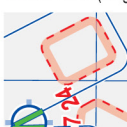
The label contains the airspace name and vertical limits (heights are given in feet/flight levels). Each airspace is additionally labeled on its rim - labels contains the airspace name, and the vertical limits of airspace if there is space enough. Detailed information about the published hours, method of announcing the planned periods of activity, communication frequencies ATC unit providing information about the current activation and granting permission for entry into the airspace at the time of activation can be found in a table in section GEN Airspace.



**D - Danger area**

An airspaces in which the danger is threaten to aircrafts (over the territory where it is discharged flammable gas or disposal of military ammunition).

Danger area airspaces are drawn by dashed red line and also includes a semitransparent rim. The label contains the airspace name and vertical limits (heights are given in feet/flight levels).



**Airspaces with noise restrictions**

Usually it cover areas around the aerodromes where it is not convenient to conduct flight operations. These airspaces are not banned or restricted - it is declared only by AD operators. It is mostly highly populated areas with conflict due to excessive aircraft noise or nature reserves and parks.

Airspaces are drawn by dashed red line and also includes a narrow semitransparent rim. This airspaces has no label. In principle, it is the areas where should not be performed flight below 1000 ft AGL. If necessary, further specification is indicated in the text at the aerodrome record. **Caution: on the territory of Slovakia are indicated by this symbol also OFFICIAL airspaces with "fauna sensitive to air traffic noise".** Here are the same restriction: minimum flight altitude 1000 ft AGL.



**PGZ (ParaGliding Zone) - para gliding (PG) and hang gliding (HG) flights area and winch/unwinder take-offs**

Areas of frequent PG/HG activity - warning. **The vertical range is CZ: GND to 4000 ft AMSL, SK: within G airspace (GND to 8000 ft AMSL).** By the symbol of paragliding parachute with hanging rope are marked areas where is frequently exercised take-offs on the winch/unwinder. **Beware of thin nylon rope with rising paraglider high at the end of this rope (somewhere very high - even more than 3 000 feet above the GND!).** This in-flight almost invisible rope is very dangerous obstacle to the aircraft.

**FIR boundaries**  
FIR Praha (LKAA)  
FIR Wien (LOWW)  
Flight information region boundary.

**FIR sectors (for non-controlled flights)**  
Sector Czechy E (FL950)  
Sector Morava (FL850)  
Boundary is drawn by a double blue line with white center.



CAPTION: AERONAUTICAL CHARTS - TOPOGRAPHICAL SYMBOLS

AERONAUTICAL CHART 1:200 000 - AERODROME APPROACH CHARTS (1:150 000, 1:200 000, 1:250 000)

HABITATION, STATE BORDER, CONTOUR LINES AND SPOT HEIGHT

	Build up areas
	Houses
	Main cities
	Cities
	Towns
	Villages
	Districts, quarters
	Church, chapel
	Lodge, mill
	State boundary
	Contour line 100m, 50m
	Major peak, peak
	Name of peak
	Spot height at feet
	Saddleback - height at ft

WATER AREAS, RIVERS, STREAMS, FORESTS, VINEYARDS

	Water area
	Major river, river
	Creek, stream
	Canal
	Ferry lines
	Marsh
	Ferry
	Forest, glade
	Vineyard
	Bush, scrub

RAILWAYS, CABLEWAY, RAILROAD STATIONS AND STOPS

	Multitrack railroads electrified
	Multitrack railroads
	Singletrack railroads electrified
	Singletrack railroads
	Tourist railway
	Railway siding
	Railway tunnel
	Railway bridge
	Tram
	Cableway
	Funicular
	Ski lift
	Railway terminal, station
	Railway stop, stop out of order

HIGHWAYS, ROADS, PATHS, TUNNELS, BRIDGES

	Highway
	Highway under constr.
	Highway / Motorway planned
	Motorway
	Motorway under construction
	Highway / Motorway tunnel
	Highway / Motorway slip road
	Multi-lane road 1st class
	Road 1st class
	Road 1st/2nd class under construction
	Tunnel on 1st class road
	Multi-lane road 2nd class
	Road 2nd class
	Tunnel on 2nd class road and road
	Multi-lane road
	Road
	Road tunnel
	Street
	Asphalt path
	Paved path
	Unpaved path - field / forest path
	Planned road, under construction
	Bridge on 1st class road and road
	Environmental bridge for fauna
	Roundabout

AERONAUTICAL NAVIGATION CHART VFR 1:500 000

	Brno	Main city (build-up area)
	Cheb	
	Slaný	
	Neveklov	Town more than 1000 residents
	Heřmaničky	Town 1000 residents and less
	Dual highway	
	Dual highway under construction	
	Highway tunnel	
	Main road (1st class)	
	Main road under construction	
	Road tunnel	
	Road (2nd class)	
	Road under construction	
	Other road (3rd class)	
	Railroad - multiple tracks	
	Railroad - single tracks	
	Railroad tunnel	
	Forest area	
	Sněžka 5256	Spot height with name and elevation at feet AMSL
	Šumava	Mountain range name
	rybník Svět	Water surface, lake, pond and name
	Vltava	Main river and name
	River	
	Creek	
	Stream	
	Canal	
	Castle, mansion	
	Fort, fortress	
	Ruins	

FLY SAFE!

Use **CURRENT** edition of  
**AERODROME DATABASE!**

Order it on-line with secured payment  
on [www.aerobaze.cz/pilotshop](http://www.aerobaze.cz/pilotshop)

Avion® - Patrik Sainer • [www.avion.eu](http://www.avion.eu) • phone: (+420) 602 420 260 • e-mail: [info@avion.eu](mailto:info@avion.eu)

CAPTION  
BRIEFING  
APP  
AD  
AD INFO  
ADDRESS BOOK  
FLIGHT PROCEDURES  
SR/ISS  
TABLES  
MAPS  
AIRSPACE  
FREQUENCIES  
ABBREVIATIONS