MOBILE APPLICATION - APP QUICK GUIDE

Current time Local time and UTC time in parentheses (You can set the display of all times in UTC).

Current speed + HDG + ALT From GPS.

Route navigation

NAV: destination, NEXT: next turnpoint. Navigation values: distance from current location, estimated time required to reach the point, at what time you will reach the point. Tap on the text to open a detailed flight plan in the side window. Times are continuously calculated from the current speed or from the selected average speed if you do not move.

My location and flight vector Red line length changes dynamically according to your current speed - it shows where you will be in 5 minutes (or in the set time).

Other options Hold your finger to open more options (only on controls with stripe).

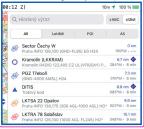
Home Open main dashboard.

Rotate and fix the map

The first tap centers the map on my location. The second tap turns on the selected map rotation (heading up, route up, north up) and the continuous centering of the map in my current position.

Search

Listing of all aerodromes, POIs and ASs. Sort alphabetically or by distance from my position, filtering. Full-text search. Tapping the arrow icon start the NAV. Longpress the search button Q display "What's here" listing - in my current position.



Navigation line on the map

67 kts • 037° M • 1506 ft AMS

NAV: Jindřichův Hradec (LKJH) [39.2 nm · 34 mi

NEXT: DITIS [8.9 nm • 8 min • 16:52 SEČ] NEXT: Nová Včelnice (LKNVCE) [31.1 nm • 27 n

Starting point - turnpoints - destination. Transparent line - already flown route, white line - active route section, arrow on the section - flight direction. Adding a point: longpress finger on the track and move the new point where you need it - it will catch the AD/POI near around it. Or tap anywhere on the map and add a point.

Main map window The map scale changes according the zoom - from the overview to the detailed map 1:200 000. The map contains complete aeronautical information and you can turn on the meteorological information layer.

One Map finger scale Graphic display of the map

Plocha SLZ veřeiná / regis

ICAO: NIL, GPS: LKKRAM

VFR - den

8

A KRAMOLÍN

AS

0

ELEV 1650 ft (503 m) / ALT 2650 ft KRAMOLÍN RADIO 122.405

scale.

Zoom map smooth zooming available.

Kramolín (LKKRAM)

Updates notifications App will automatically notify you of available updates and you will decide when to download and install them.

Side information window

Detailed information about the selected aerodrome (AD), airspace (AS) or other POI. You can view the complete Aerodrome Database eBook, AIP and VFR manual, flights (logger), my routes and points, GPS information and settings. You can maximize or hide the window.

> **Exit navigation** Terminate the route navigation.

Current navigation values From my current location - to the displayed AD (POI, AS) - distance, course, time to reach and in what hours I could reach the point.

Side window slider Smooth enlargement and reduction.

Side window controls

Selection of AD, POI, AS information displayed. Route navigation options and other detailed information. Centering the displayed point in the map window.

Map window controls AD/POI displays AD/POI icons AS displays airspaces MET show selected weather information over the map LOG show flight log



Aerodrome plan

Tap on the plan to enlarge it to the whole window (close it with a cross)



Colored control = active Tap again to turn off

(on) control. the enabled control (eg close the side window or search

window).

Maximize info

window Hides the

displays the information

map window and

in full screen.

Aerodrome information

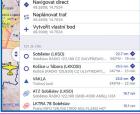
window Show details of the last displayed aerodrome.

POI or airspace. You can scroll through the window by sliding finger right - left (history of displayed AD.

POI. AS).

What's here?

Hold finger anywhere on the map for information on aerodromes, POIs and airspaces in the place (including distance from current location). Option to navigate or add your own point. 24.3 nm • 347°M • 00:20:48 • 19:31 L



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.

advance

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. HOSÍN (FREQ: RADIO 130,200) = callsign: HOSÍN 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 availale 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: **FATO and TLOF**

Contacts: OPR - AD operator. telephones: aphone numbers to AD, further phone numbers are direct numbers to AD services: TWR / RADIO - AD control tower or dispetcher, 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, accomodation at aerodrome vicinity ...) are published at section AD INFO all numbers are shown at national form (CZ: directions for arrival/departure, lights (FATO

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 languages availability/conditions (if specified), (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 provoded only upon

request at least 24 hours in advance)

ICAO code, AD availability, PJE = parachuting 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

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 and TLOF is at RWY section); aerodrome heliports: designation, FATO, TLOF, ELEV, ARR/DEP directions, lights availability FREQ: additional comm frequencies and frequencies for operation in the vicinity.

/operational hours/ (each frequency for operation in the vicinity is annotated to which airspace or aerodrome belongs, freg. are ranked by importance - to request ATC clearance always call first freg. 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 -

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

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

force subsequently 월 => attention - come update) the r of effect of date WEF

information.

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 adress

phone and fax numbers to aerodrome. AFTN address

e-mail: aerodrome e-mail address

web: aerodrome internet pages address; soc: 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 dispetcher, 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), JETA1

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/ + 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)

If the translation is the state of the sta

operational hours - during whole week/all day (min. each working day) **Lubricants:** lubricants available

custom services on aerodrome

WiFi: wirelles internet on aerodrome availability - WiFi

Services: other services offered on aerodrome (hangar space, repairs, services for pilots...) **5** 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 or /ACFT for the whole plane

possibilities of refreshment / accomodation

- 5 = excellent)], phone and other contacts (road distance from aerodrome, remark, number* grade/hotel stars, accurate GPS coordinates of place at WGS84)

raffic 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

2 545.521.310, 545.521.111;

fax 545.216.346; AFTN LKTBYDYX

e-mail: info@brno-airport.cz

web: http://www.brno-airport.cz soc: 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

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

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)
- (๑)/¬ at vicinity: Brno: hotel and restaurant Sluneční dvůr [4♣] 724.828.083, 545.211.442 (4km, www.slunecnidvur.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

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.

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 => where XXXX presents four digits (for example 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 the approach chart at approach plates of Aerodrome Database PROFI (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).



hard surface

unpayed closed

∃5 left / right

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

CAPTION: GROUND SITUATION PLANS

RWY, their direction, surface, traffic circuit direction



2041 ft => ELEV - THR RWY (indicated only if major difference between THR or from AD ELEV)

TWY A TWY and marking

parachute circle

H.P.10 holding point RWY10

⊕ heliport

--- railway, station

◆ reference point - ARP

bridge over a creek, river

wind direction - WDI

creek, brook, stream morava river om pond

C ARO - ATS report. office □ landing T

trees, forest boundary

(deciduous, coniferous)

buildings TWR description, notes

123m hill, point altitude slaný» road, trail, direction

car parking

METRY ©Databáze letiš ®, AVION® 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 vour phone/tablet.

AERODROME DATABASE APPROACH PLATES: CAPTION, COMMENTS

This kind of approach plates are published at electronic devices - software for PC, tablets, phones, GPS. It is produced at most common format - two pages plates including approach chart and aerodrome plan and all necessary aerodrome information. For approach plates is offered amendment service (distributed electronically) usually published once a year - in the summer season (in the case of major changes is prepared a special amendement edition also during the year).

Country + quick info about AD: statut short cut (GA = aerodrome, UL = field for microlights, HEL = heliport, MIL = military AD, CLSD = closed AD), availability (VFR/IFR and day/night), public (PUB) / private (PRV). page number, ICAO code

Aerodrome / UL field status AD availability and PJE

Aerodrome location - distance and direction from major geographical point, page number at Aeronautical Atlas CZ

GPS coordinates of ARP (WGS84)

Aerodrome operational hours

Effective date - last update of the record, red color WEF: date = will be effective from given date; Magnetic variation

Local regulations - arrival/departure procedures, operating conditions, restrictions, notices and cautions. NOISE: noise abatement procedures

Scheme showing the aerodrome location Date of revision, information validation

Aerodrome communication frequencies

RWY characteristics: designation and trafficcircuit direction (if declared) - L = left / R = right circuit, physical dimensions and surface, declared distances:

TORA = Take-Off Run Available, LDA = Landing Distance Available MAG BRG, THR elevation (ft), RWY lighting and strength

AD ground plan contains RWY(s) directions, traffic 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.

Direction and distance from closest VORs (identification, frequency, MAG bearing, distance at NM)

Map scale and distances in kilometers and nautical miles

BENEŠO

ICAO/IATA code + GPS code (name used as abbreviation at some GPS)

ELEV = aerodrome elevation (ft + m) / ALT = traffic circuit altitude (ft AMSL)

Aerodrome communication frequencie: service provided (RADIO/INFO/TWR/ATIS/ GND/DELIVERY/HANDLING/APP/SUP), operational hours - if declared (bounded by slashes), english language communication availability

QR code of GPS coordinates

RWY basic information - designation and surface (H - hard / S - soft)

Communication frequencies for traffic at AD vicinity (each frequency is marked by notice to which airspace or aerodrome it belongs, operational hours are at slashes):

_

₽

6

can be also found

- comm frequency of nearby controlled or un-controlled aerodromes / UL fields
- comm frequencies of nearby controlled or un-controlled airspaces with specific entrance requirement
- FIS frequency

(frequencies are ranked by importance - to request ATC clearance or information about airspace always call first frequency specified as the first and only then to other frequencies - in case of inability to contact - for example due to lack of radio

coverage)

Chart of AD and surrounding including real position of RWYs, airspace within given vertical limits, traffic circuits and other important info for ARR/DEP and

local traffic (for details see Aeronautical Chart caption) Contacts to AD OPR and other persons on AD (+QR code containing main phone

numbers and web/email): **OPR:** operator mailing adress

make phone numbers and fax, AFTN, web pages and e-mail

direct phone numbers:

TWR/APP/ATIS/DELIVERY/FPL/VLP/ARO /MET/FUEL/AVGAS/MOGAS/JETA1/ HAND/ FBO/CUST/SERV (see caption section AD INFO)

other contacts: to persons and other operators on the aerodrome, stated function on AD: name and contacts. remark, linguistics skills (ENG/GER/ITA/ESP/FRA/RUS)

CAR RENT: local car rental services

Availability of fuels and lubricants, fees, services offered directly on aerodrome or at vicinity el/ at vicinity: refreshment / accomodation at around raffic connection to AD

HEL - detailed description of heliports on AD Lubricants: fuels and lubricants available

- * other services offered on AD
- 3 landing and other fees
- custom services on AD
- WiFi: availability of wirelles internet on AD refreshment / accomodation on AD

MAPA ~1:200 000 GND - FL95

MAPA -1:150 000 GND - 4000 FT AMSL Approach chart scale and vertical limits of airspace

activities on AD or around ...

depicted: Charts of aerodromes with its own controlled airspace (CTR) has airspace vertical limits from GND up

(for details see caption section AD INFO)

INFO: aditional information about aerodrome.

MAPA -1:250 000 GND - FL95 to FL95 (on Slovakia up to FL195) and scale of 1:200 000 or 1:250 000 (according to the horizontal limits of CTR) - to hold all details of controlled airspace important for arrival/departure or passing through. These aerodromes are showed on four pages (compared to two pages standard) - format of depicted information is identical to two pages, only some sections of information are moved to the next pages. Charts of other aerodromes and UL fields has airspace vertical limits from GND up to 4000 ft AMSL (it corresponds to the vertical limits of ATZ) and scale of 1:200 000 - to make detailed information clearly legible.

AD

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



ATZ zone of aerodrome. PJE - Parachute jumping exercise within and above ATZ. Noise restrictions zones.

RWY designation always facing the RWY direction (RWY 06/08/ 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.



Aerodromes with IFR operation have a symbol showing the real shape of the aerodrome area (RWY symbol also match actual lenght 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.

during season (see frequency table).











around the ring. Public domestical/private international aerodrome has the following segments light blue. Heliports are marked by blue line ring with the letter H inside. Public

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

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.

from the aerodrome operator in advance).

Heliports for Medical Rescue Service has a minor arrows symbol without MAG labels. Using of that kind of heliports are strictly limited only for the Medical Rescue Services!

CHART SYMBOLS - OBSTACLES



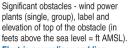
Significant obstacles: unlighted, lighted, group of unlighted, group of lighted. Obstacle label (see below)

and elevation of top of the obstacle (all elevations are mentioned in feets above the sea level = ft AMSL).



Significant obstacles whose height above ground is 200m or more (unlighted, lighted, group).







Electric power lines and line obstacles Electric power lines: 110kV = one dot, 220kV = two dots, 400kV = three dots.

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.

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



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.

UPIVA

Enroute Reporting Points - symbol and label



Flight sites for paragliding (PG): take-off site, landing area, training terrain.

13°10' 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).

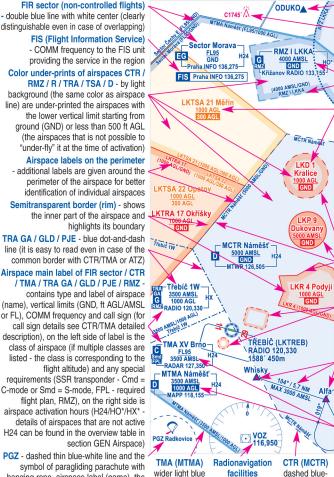
Activation hours = actual activation time, information is provided by mentioned ATC unit - information from the ATC unit has a validity of 15 minutes = we must leave the airspace within 15 minutes or repeat query (well in advance)!

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 line) 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

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 - Cmd = 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 contain category marking and the obstacle peak altitude (ft AMSL)

ATZ - blue dotted line

RMZ - dashed light blue line including

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 airspaces 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 even overlapping superposed multiple airspaces in layers

VOR/DME

letter designation

and transmitting

white line (well

distinguishable

with TMA)

line with inner

semitransparent

border (rim)

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 feets (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 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.

Bubovice 5W 5000 AMSL 3500 AMSL

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

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)! minimum flight altitude 1000 ft AGL.



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 a min (acceptable) with a radius o 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 feets/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 feets/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:



■ 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 feets above the GND!). This in-flight almost invisible rope is very dangerous obstacle to the aircraft.



Ctor Morava (FL95/GN Boundary is drawn by FIR sctors (for nona double blue line with white center.

CAPTION: AERONAUTICAL CHARTS - TOPOGRAPHICAL SYMBOLS

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

AERONAUTICAL NAVIGATION CHART VFR 1:500 000

HABITATION, STATE BORDER. CONTOUR LINES AND SPOT HEIGHT Build up areas

Houses

Cities

Towns

Villages

Districts, quarters

Church, chapel

Name of peak

WATER AREAS, RIVERS, STREAMS, FORESTS, VINEYARDS

Major river, river

Creek, stream Canal

Ferry lines

Marsh

Ferry Forest, glade Vinevard Bush, scrub

Modify in Water area

Spot height at feets

Saddleback - height at ft

Lodge, mill State boundary Contour line 100m, 50m Major peak, peak

Main cities

-

Brno

Tábor

Třeboň

Nesvačily

Měšice Karlín

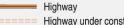
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*

Říp Klíny

HIGHWAYS, ROADS, PATHS, **TUNNELS. BRIDGES**





3
Highway under constr.
 Highway / Motorway

=====	Highway / Motorway planned
	Material

planned	
Motorway	
Material	

	construction
	Highway / Motor

 tunnel
 Highway / Motorway

slip road
 Multi-lane road

ist class
 Road 1st class
 Road 1st/2nd class
under construction

 Tunnel on 1st class road
Multi-lane road

2nd c	lass			
 Road	2nd	cla	SS	
_		_		

=====	Tunnel on 2nd class
	road and road

Toau and Toau
 Multi-lane road
 Road

 Road tunnel
Street

Asphall patri
 Paved path
 Unpayed path - fie

	/ forest path
==	Planned road, under construction

- l- - lt -- - tl-

(=	Bridge on
		1st class road and road

	Tot olaco roda aria roat
=	Environmental bridge for fauna

Roundabout

Brno Cheb

Main city (build-up area) Slaný

Neveklov	Tow	n more t	han 1	000	residents

Опеннанску	rown rood residents and les
	Dual highway

 Main	road	under	constructio

)(Road tunnel
	Road (2nd class)
	Road under construction

Othor road (ord oldoo)
 Railroad - multiple tracks

Other road (3rd class)

riamoud tarm
Forest area

Sněžka	Spot height with name
5256	and elevation at feets AMS

Railroad tunnel

Šumava	Mountain	range name
--------	----------	------------

rybník Svět	Water surface, lake, por and name
VItava	Maria American

	and name
Vltava	Main river and name

 River	
 Creek	
 Stream	
 Canal	

1	Castla	mansior
-	Oasiic,	mansion

-	Casile, mansic
£	Fort, fortress
16	Ruins

RAILWAYS, CABLEWAY, RAILROAD STATIONS AND STOPS

- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1	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

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