

Flight planning

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21PAP/PIL EN



An aerial photograph showing a vast, flat landscape covered in a dense layer of white, fluffy clouds. The clouds are illuminated from the left, creating soft shadows and highlights. The sky above is a clear, deep blue, transitioning to a lighter blue near the horizon. The overall scene is serene and expansive.

Lesson 7: Practical planning– IFR flights

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- Planing minima (!!!) – **Important**
- Preflight briefing

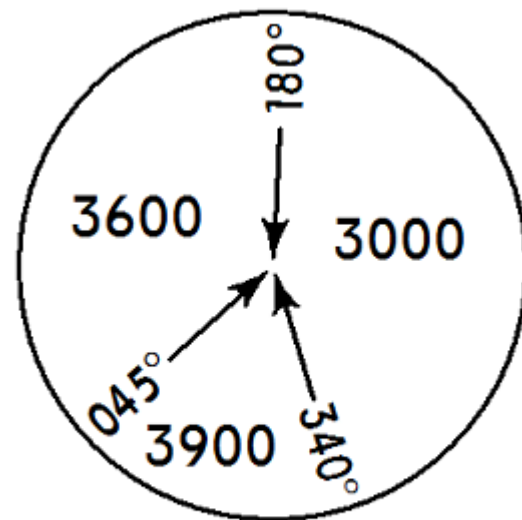
"The pilots are just drinking for pleasure. Either because they have a good landing or they have survived the bad one."

Minimum altitude for IFR

- 1000 ft above ground
- 2000 ft above ground if there is high terrain

MSA

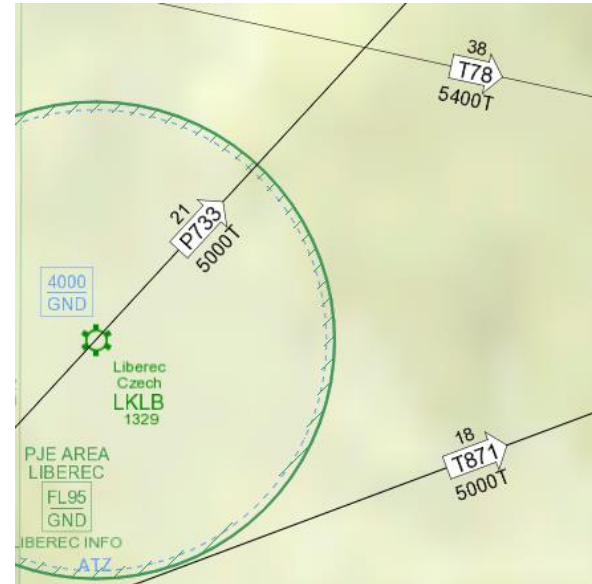
- Minimum Sector Altitude (MSA)
- The Minimum Sector Altitude (MSA) is the lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in the area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.



MSA OKL VOR

MOCA

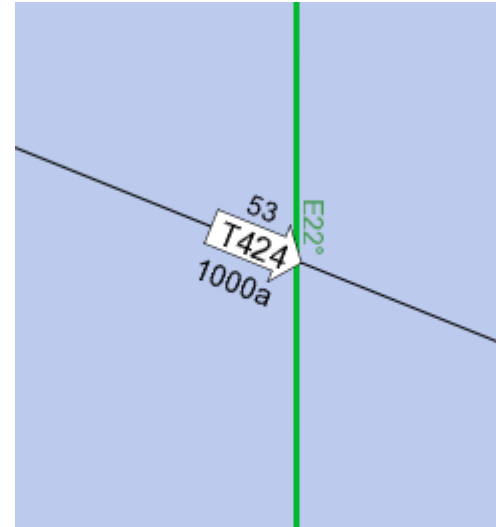
- Minimum Obstruction Clearance Altitude
- The MOCA is the minimum altitude for a defined segment that provides the required obstacle clearance. A MOCA is determined and published for each segment of the route
- The MOCA provides the required clearance above obstacles contained inside the obstacle clearance areas. Charting accuracies are taken into account when establishing minimum altitudes by adding both a vertical and a horizontal tolerance to the depicted objects on the chart.
- The minimum obstacle clearance value to be applied in the primary area for the en-route phase of an IFR flight is 1000 ft (300 m). In mountainous areas, the minimum obstacle clearance applied is 2000ft
- „T“ placed after altitude denotes a Minimum Obstruction Clearance Altitude (MOCA)



MORA

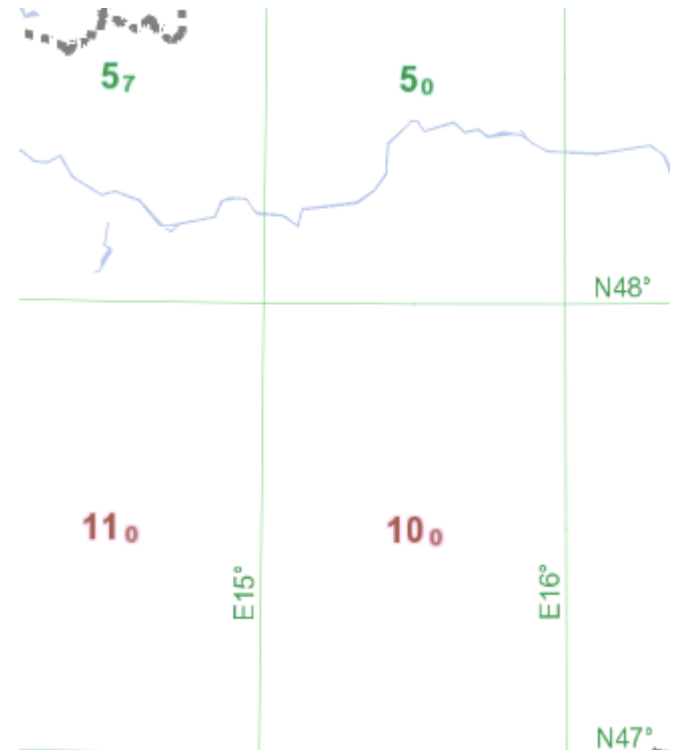
- Minimum Off Route Altitude (MORA)
- The minimum off route altitude named MORA is an altitude which provides 2,000 feet of terrain clearance in mountainous areas and 1,000 feet in non-mountainous regions; at the same time it provides a reference point of clearance of 10 nm from the route centreline.
- In mountainous areas, the minimum obstacle clearance applied is 2000ft
- „a“ placed after altitude denotes a

Minimum Obstruction Clearance
Altitude (MORA)



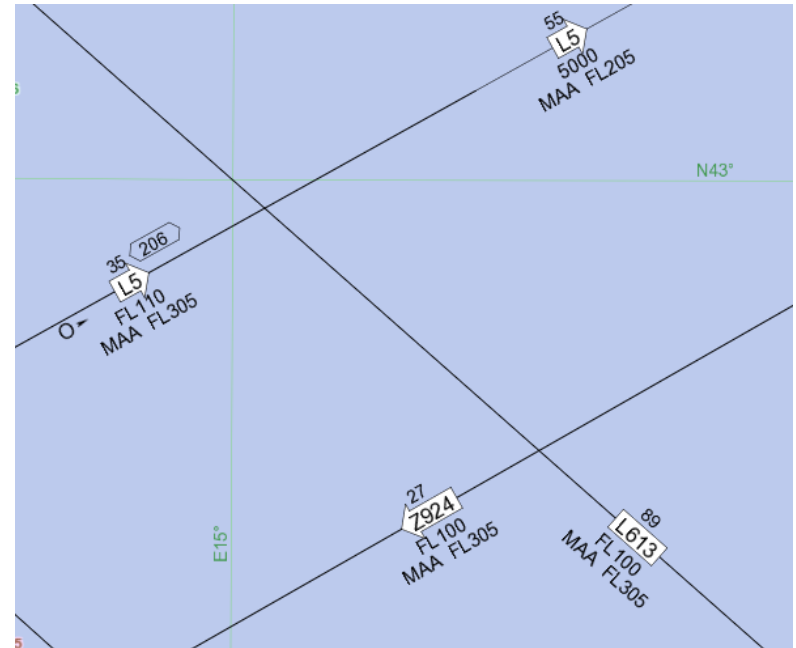
Grid MORA

- Grid Minimum Off Route Altitude (Grid MORA)
- The GRID MORA provides terrain and man-made structure clearance within the section outlined by latitude and longitude lines. The Grid MORA value clears all terrain and man-made structures by 1000ft in areas where the highest elevations are 5000ft MSL or lower and by 2000ft in areas where the highest elevations are 5001ft MSL or higher.



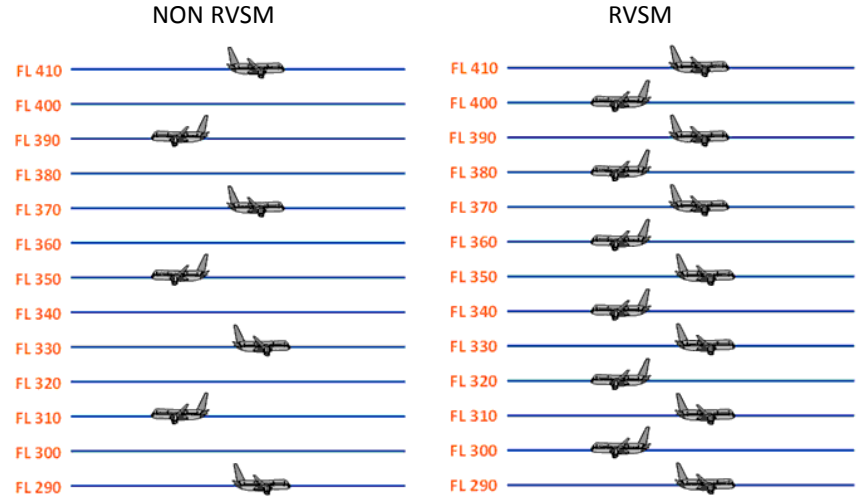
MEA and MAA

- **Minimum En-route Altitude (MEA)**
 - The minimum en-route altitude (MEA) is the altitude for an en-route segment that provides adequate reception of relevant navigation facilities and ATS communications, complies with the airspace structure and provides the required obstacle clearance.
- **Maximum authorized altitude (MAA)**
 - An MAA is a published altitude representing the maximum usable altitude or flight level for an airspace structure or route segment.



Flight levels

- **Transition altitude**
 - The transition altitude is a published height above sea level at which pilots climbing to their cruising level change their barometric altimeter datum from the regional pressure setting to the common international standard setting of 1013.2hPa
- **Převodní hladina**
 - The lowest flight level available for use above the transition altitude
 - 1013,25 -> QNH
- **Odd/Even flight levels**
 - Standard: EAST = Odd; West = Even
 - Nonstandard: South = Odd; North = Even
 - Some FIRs (LE, LI, LP...), Some routes
- **Vertical separation**
 - 300m (1000 ft)
 - RVSM FL290 – FL410 - 1000 ft
 - Non RVSM FL290 – FL410 – 2000 ft



- **VFR Flights**
 - Levels ended by „5“ 125, 135, 145
- **IFR Flights**
 - Levels ended by „0“ 200, 210, 220

Meteo conditions

- Necessary for flight planning
- Weather has to be suitable **one hour before** arrival and **one hour after** arrival!!!

Planning minima for DEST

- The operator shall only select the destination aerodrome when:
 - the appropriate weather reports and/or forecasts indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the applicable planning minima as follows:
 - RVR/visibility (VIS) specified in accordance with CAT.OP.MPA.110; and
 - for an NPA or a circling operation, the ceiling at or above MDH;
- Or two destination alternate aerodromes are selected.

Take off alternate

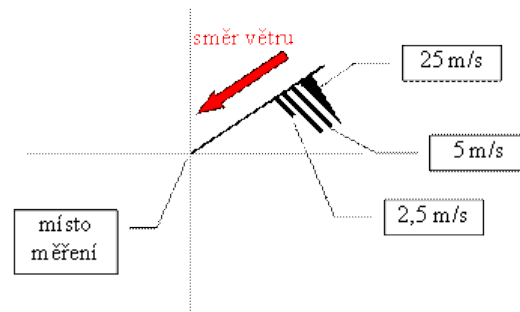
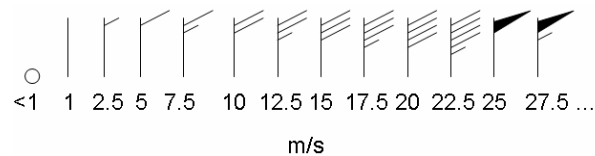
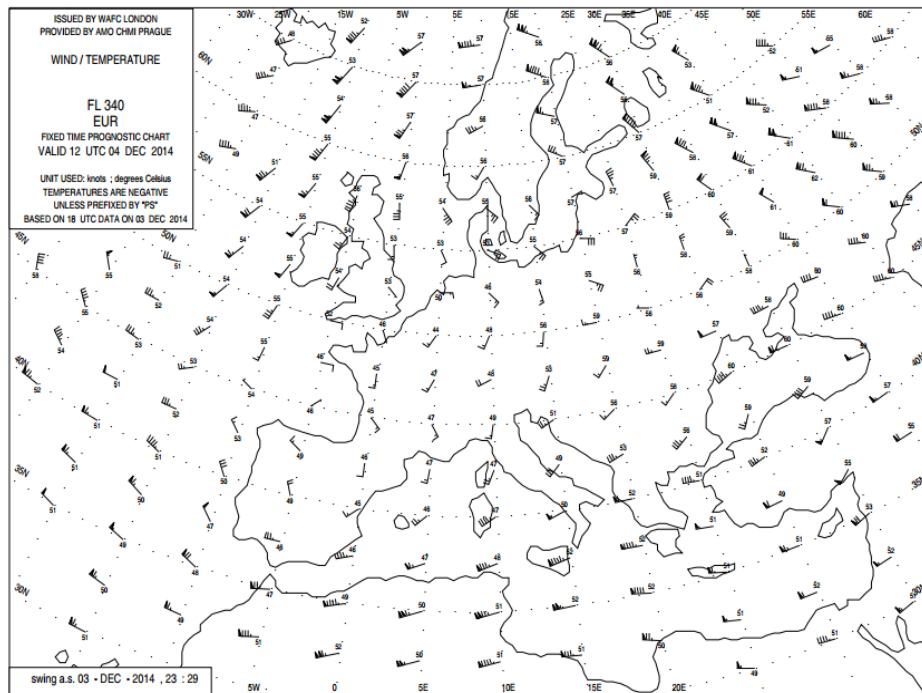
- The operator shall only select an aerodrome as a take-off alternate aerodrome when the appropriate weather reports and/or forecasts indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the applicable landing minima specified in accordance with CAT.OP.MPA.110. The ceiling shall be taken into account when the only approach operations available are non-precision approaches (NPA) and/or circling operations. Any limitation related to OEI operations shall be taken into account.

DEST ALTN, ERA ALTN, ISOLATED AD

- Planning minima for a destination alternate aerodrome, isolated aerodrome, fuel en-route alternate (fuel ERA) aerodrome, en-route alternate (ERA) aerodrome
- The operator shall only select an aerodrome for one of these purposes when the appropriate weather reports and/or forecasts indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the planning minima in Table:

Type of approach	Planning minima
CAT II and III	CAT I RVR
CAT I	NPA RVR/VIS Ceiling shall be at or above MDH
NPA	NPA RVR/VIS + 1 000 m Ceiling shall be at or above MDH + 200 ft
Circling	Circling

Wind maps



Significant weather charts

PGDE14 EGRR 031200

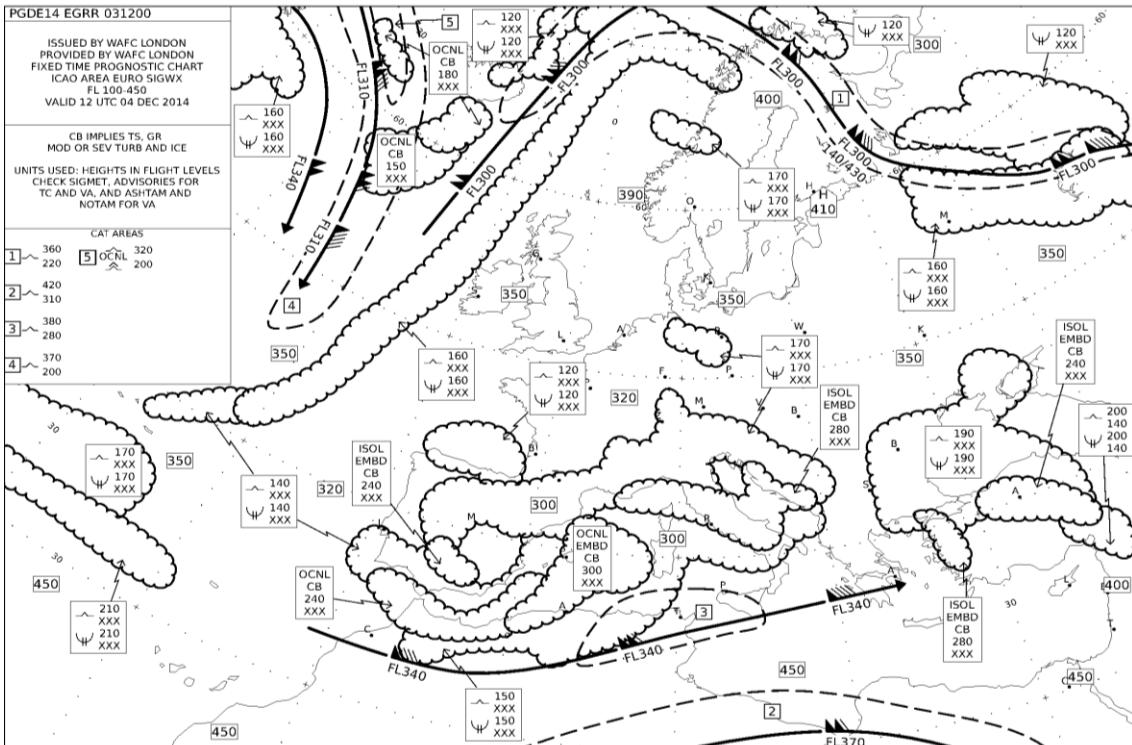
ISSUED BY WAFc LONDON
 PROVIDED BY WAFc LONDON
 FIXED TIME PROGNOSTIC CHART
 ICAO AREA EURO SIGWX
 FL 100-450
 VALID 12 UTC 04 DEC 2014

CB IMPLIES TS, GR
 MOD OR SEV TURB AND ICE

UNITS USED: HEIGHTS IN FLIGHT LEVELS
 CHECK SIGMET, ADVISORIES FOR
 TC AND VA, AND ASITAM AND
 NOTAM FOR VA

CAT AREAS

1	360	OCNL	320
	220		200
2	420		310
3	380		280
4	370		200



	Thunderstorm		Drizzle
	Tropical cyclone		Rain
	Severe squall line		Snow
	Moderate turbulence		Shower
	Severe turbulence		Widespread blowing snow
	Mountain waves		Severe sand or dust haze
	Slight aircraft icing		Widespread sandstorm or dust storm
	Moderate aircraft icing		Widespread haze
	Severe aircraft icing		Widespread mist
	Widespread fog		Widespread smoke
	Hail		Freezing precipitation
	Volcanic eruption		

	Cold front at the surface		Position, speed and level of maximal wind
	Warm front at the surface		Convergence line
	Decoupled front at the surface		Freezing level
	Quasi-stationary front at the surface		Intertropical convergence zone
	Tropopause High		State of the sea
	Tropopause Low		Sea surface temperature
	Tropopause Level		

FL 300 FL 340

The double bar denotes changes of level by 3000 ft or less and/or wind speeds by 37 km/h-20 kt in the example, at the double bar the wind speed is 225 km/h-120 kt.

The heavy line delineating the jet axis begins/ends at the points where a wind speed of 160 km/h-80 kt is forecast.

metar, Taf, sigmet

- METAR

- Meteorological Terminal Air Report (METAR) - literally 'Meteorological Terminal Air Report' or more straightforwardly 'Routine aerodrome meteorological report'

```
LKPR 051530Z 33017KT 9999 SCT045 09/M02 Q1018 TEMPO SCT020
```

- TAF

- An aerodrome forecast (TAF) consists of a concise statement of the expected meteorological conditions at an aerodrome for a specified period

```
TAF LKPR 051100Z 0512/0618 34008KT 9999 SCT030  
TEMPO 0512/0517 34012G26KT -SHRA BKN025  
BECMG 0520/0522 27008KT  
BECMG 0604/0607 9999 BKN030  
TEMPO 0607/0617 30014KT
```

- SIGMET

- SIGMET information is information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.

```
WSSW31 LSSW 051441  
LSAS SIGMET T01 VALID 051441/051802 LSZH-  
LSAS SWITZERLAND FIR/UIR EMBD TS FCST AT 1441Z WI N4730 E00706 -  
N4734 E00722 - N4652 E00914 - N4544 E00758 - N4604 E00539 - N4726  
E00652 - N4730 E00706 TOP FL340 STNR NC=
```

SNOWTAM

- A)LSZH B)11070620 C)10 D)2200 E)40L F)4/5/4 G)20/10/10 H)30/35/30MUM J)30/5L K)YES L L)TOTAL M)0900 P)YES 12 S)11070920 T)FIRST 300M RWY 10 COVERED BY 50 MM SNOW, RWY CONTAMINATION 100%

A)LSZH
AERODROME LOCATION INDICATOR

B)11070620
DATE/TIME OF OBSERVATION (in UTC)

C)10
RUNWAY DESIGNATORS

D)2200
CLEARED RUNWAY LENGTH, if less than published length (m).

E)40L
CLEARED RUNWAY WIDTH, if less than published. (m: if offset left or right of center line add "L" or "R").

F)4/5/4
DEPOSITS OVER TOTAL RUNWAY LENGTH (Observed on each third of the runway starting from threshold having the lower runway designation number).

NIL - CLEAR AND DRY	5 - WET SNOW
1 - DAMP	6 - SLUSH
2 - WET	7 - ICE
3 - RIME OR FROST	8 - COMPACTED SNOW
4 - DRY SNOW	9 - FROZEN RUTS OR RIDGES

G)20/10/20
MEAN DEPTH (mm) FOR EACH THIRD OF TOTAL RUNWAY LENGTH.

H)30/35/30
FRICTION MEASUREMENT ON EACH THIRD OF RUNWAY AND FRICTION MEASURING DEVICE.

MEASURED or CALCULATED COEFFICIENT	ESTIMATED SURFACE FRICTION	TYPE OF MEASURING EQUIPMENT USED
0.40 and above	5 - GOOD	BRD=Brakemeter-Dynometer
0.39 - 0.36	4 - MEDIUM/GOOD	GRT=Grip Tester
0.35 - 0.30	3 - MEDIUM	MUM=Mu-meter
0.29 - 0.26	2 - MEDIUM/POOR	RFT=RWY friction tester
0.25 and below	1 - POOR	SFH=Surface Friction tester (high pressure tire)
9	9 - Unreliable	SFL=Surface Friction Tester (high pressure tire)
		SKL=Skiddometer (low pressure tire)
		TAP=Tapmeter

J)30/5L
CRITICAL SNOWBANKS. If present, insert height (cm) / distance from the edge of runway (m) followed by L or R or LR if applicable.

K) YES L
RUNWAY LIGHTS (If obscured insert YES followed by L or R or both LR if applicable).

L) TOTAL
FURTHER CLEARANCE (If planned insert length (m) / width(m) to be cleared or if full dimensions insert TOTAL.

M)0900
FURTHER CLEARANCE EXPECTED TO BE COMPLETED BY...(UTC).

N)...
TAXIWAY (if no appropriate taxiway is available, insert NO).

P)YES 12
TAXIWAY SNOWBANKS (If more than 60 cm, insert "YES" followed by distance apart, m)

S) 11070920
NEXT PLANNED OBSERVATION/MEASUREMENT IS FOR (month/day/hour UTC).

T) First 300M RWY 10 covered by 50 mm
PLAIN LANGUAGE REMARKS (Including contaminant coverage and other significant information like sanding or deicing).


Route finding

- NMOC
 - IFPUV, route catalogue, Flight list
 - RAD document
- Flightaware.com
- Flight planning software
 - NAV system, PPS, Jet planner, etc.

Pre-flight information briefing

- Flight order
- OFP
- General declaration
- PIB – NOTAM +WX
- Weather charts

TVS – Flight Order, Gendec

FLIGHT ORDER printed on 15.3.2019 at 07:52 UTC 

CSA760 (J) CSA2DZ 15.03.2019 PRG LKPR CDG LFRG
 OK-TVO 738 PRAHA/VACLAV HAVEL PARIS CHARLES DE GAULLE
 1125 UTC 1315 UTC
 1225 LTM 1415 LTM

OPT Airport DB version: 190313R01
 Valid from: 2019-03-13 18:00:00
 Always check the validity period before real-life performance calculations.

CREW

<CP>	<PR>
<FO>	<SC>
<FO>	<CC>
< >	<CC>
	<CC>
	<CC>

CREW DHC

<CC>
<CC>

FLIGHT DECK CREW NOTICE

(EN) Security Search:
Required.

(EN) Delay:
In case of delay, pilots are asked to fill detailed reason of delay into Journey log. Especially, please monitor delays caused by the handler and fill details into Journey log properly.

(EN) ACMI CSA:
Operating procedure for flights on behalf of CSA is available at EFA Download section (EFA / Download / Navigation warnings. Operating procedures. Fleet status / Operating procedures).

CARGO 0 Kg, 0 packages

Flight order automatically generated by EFA Signature of Pilot in Command


LEGEND

Positions:

<CD>= Commander; <CP>= Captain; <FO>= First Officer; <LT>= LT/LTE; <PR>= Purser; <SC>= Senior Cabin Attendant; <CC>= Cabin Attendant; <GE>= Engineer/Technical Staff; <OP>= Observer Flight Deck; <OC>= Observer Cabin; <OP>= Observer (Other);

Abbrevs:

<FOO>= Flight Operations Officer; <EFO>= Expert Flight Observer; <SAP>= Service Personnel; <TAP>= Technical Personnel;
 <AM>= Air Marshal; <SVF/SVC>= Supervising Personnel; <TRA>= Base Training Trainee; <OTF/OTC>= Other Persons.

 **OFF RELEASE ACCEPTANCE**
 Crew hereby accepts ODP Nr. 7481 for flight calculated by sloda at 2019-03-15 06:50:33

PIC signature

GENERAL DECLARATION outward / inward ICAO ANNEX 9 APPENDIX 1
 printed on 15.3.2019 at 07:52 UTC

Operator: Smartwings Flight No: CSA760 (ARCID: CSA2DZ)
 Marks of Nationality and Reg: OK-TVO, 738 Departure from: PRG (PRAHA/VACLAV HAVEL)
 Date: 2019-03-15 Date: Arrival at: CDG (PARIS CHARLES DE GAULLE)

FLIGHT ROUTING
 *Airport: *Column always to list origin, every en-route stop and destination

Airport	Id	Name	PS	No. of passengers on this stage	Cargo
PRG			FO	Departure Place:	
CDG			CP	Embarking:	
			PR	Through on same flight:	
			OC	Arrival place:	
			CC	Disembarking:	
			CC	Through on same flight:	

Declaration of health	For official use only
<p>Name and seat number or function of persons on board with illnesses other than AIDS/HIV or the effects of accidents, who may be suffering from a communicable disease (a fe-vertemperature 38°C/100°F or greater associated with one or more of the following signs or symptoms, e.g. appearing obviously unwell/persistent coughing, impaired breathing, persistent diarrhoea, persistent vomiting, skin rash, bruising or bleeding without previous injury, or confusion of recent onset, increases the likelihood that the person is suffering a communicable disease) as well as such cases of illness disembarked during a previous stop.</p> <p>Details of each disinfecting or sanitary treatment (place, date, time, method) during the flight. If no disinfecting has been carried out during the flight, give details of most recent disinfecting</p> <p>Signed, if required, with time and date</p> <p>Crew Member concerned</p>	
<p>I declare that all statements and particulars contained in this General Declaration and in any supplementary forms required to be presented with this General Declaration are complete, exact and true to the best of my knowledge and that all through passengers will continue/have continued on the flight.</p> <p style="text-align: right;">K Letišti 1068/30, 160 08 Praha 6 Česká republika IČO: 266 83 135, DIČ: CZ25663135</p> <p>Signature: _____ Authorized Agent or Pilot-in-Command</p> <p>Delete as necessary</p>	

TVS - OFP

Log Nr.: 7481 Page 1 LKPR-LFPG CSAZSE
 COMP. BY: TIME: skoda / 15-03-2019 / 06:50:28Z
 DATE: 15.03.2019
 AC/REG: B738 /OVTO PERF COMP: 3.5 CRSM: 3/6
 AC CONF: 189Y PANTRY: / BOB
 CAPT: F/O: CTOT INFO: TOTAL PERS:
 ADEP: PRAGUE/BRUXNE LKPR/PRG 1125Z RW24.BALTU.BA.LTU
 ADEP: PARIS/CHARLES D LFPG/CDG 1315Z VEDUS.VEDUSBE.RW08L
 ALTN1: PARIS/CDG LFPG/CDG
 ALTN2: BRUSSELS NATION EBRU/BRU
 ERA: /
 ADEP ALIN: / ADEP STAND:
 VERT.PROF: LKPR/FL340/TOLVU/FL350/RAPOR/FL340/
 TIME FUEL QND DIST AIR DIST WCOMP WDIR ISA DEY DOW/DOI
 TRIP 1:37 / 4154 516 613 --66 303/083 -4 43183
 ALTN EBRU 0:38 / 1704 192
 FIN. RES. 0:30 / 1099 FMS RES 2853
 COM. SA 0:45 / 208
 AFD. FUEL 0:00 / 0 CRUISE CI 24
 TAXI 2:51 / 200
 MIN. FUEL 2:51 / 7415
 COMP EXT 0:00 / 0 <<<< MTOW 79015 TOW 65669
 FUEL SUM 2:51 / 7415 TP 4154
 CAPT EXT
 TOT. FUEL
 ADEP OFF BLOCK TAKEOFF
 ADEP IN BLOCK LANDING
 BLOCK TIME FLT TIME FUEL REM
 FL PLANNING NOTICE:
 TNRNG INFO: LOSS 610/TON ADEP: LowFuel PHNTY: *N1L / ADEP: 0 kgs PHNTY: 148
 TRIP FUEL MODIFICATIONS: STATISTICAL EXTRA FUEL: FUEL INFO ADEP: 39 Kg
 ZFW +/- 160KGS 181 Kg NO. OF FLTS : 253 CSN/IM-SL2 / 7036
 TRIP FUEL FOR -2000FT 4138 Kg 99A STAT : 111 FUEL INFO ADEP: 111
 TRIP FUEL FOR -2000FT 4138 Kg 99A STAT : 181 GFA-SL2 / 6686
 REMARK :
 ADEP ATIS:
 RTE: LKPR BALTU L984 DONAD L602 SOGPA T170 RAPET US93 LOBRE UL984
 NOCPA UN857 TOLVU/N0438P350 UN857 RAPOR/N0440F340 U2157
 VEDUS
 ATC CLAR:
 RWY: F1 DER: ASS.TMP: N1: V1: Vr: V2:
 RWY: F1 DER: ASS.TMP: N1: V1: Vr: V2:
 ENG-OUT PROC.:
 RWY: ALTITUDE CAPT F/O ALTIMETERS: STRY
 FL CAPT F/O STRY

Log Nr.: 7481 Page 5 LKPR-LFPG CSAZSE
 AMY COORD WPT /NAME / T M TM DIST W TAS FL FU POB
 G.MORA PRQ CT AT T100 MH DTGVO V GS +15A aFOB
 FIR
 STAR N51:06.5 TH149 STAR WAYPOINT 1 129 1 300/ 373 DDC 5907 1508
 18 E004:53.0 071 443 2 1300
 EBBU
 STAR N51:05.5 TH194 STAR WAYPOINT 0 170 1 300/ 373 DDC 5916 1499
 18 E004:53.2 071 414 2 1291
 EBBU
 STAR N50:57.4 IRL11 STAR WAYPOINT 2 204 9 300/ 373 DDC 5998 1416
 25 E004:47.5 071 372 2 1209
 EBBU
 STAR N50:55.9 IRL58 STAR WAYPOINT 1 249 5 300/ 373 DDC 6044 1371
 25 E004:39.8 071 323 2 1163
 EBBU
 STAR N50:53.9 RW25L STAR WAYPOINT 1 249 6 300/ 373 DDC 6099 1316
 25 E004:31.4 071 323 2 1108
 EBBU
 DCT N50:54.1 EBRU BRUSSELS NATION 0 275 1 300/ 373 DDC 6108 1307
 25 E004:52.1 071 307 2 1099
 EBBU
 ICAO NAME WIND FL NM MT TIME FUEL ---BLOCK---
 LFOB BVA BEAUVAIS/TILLE 280 54 100 57 328 016 784 2123 6444
 LFGD LIL LILLE/LASQUIN 280 68 210 121 012 018 1276 2136 6937 USA
 EHAM AMS AMSTERDAM/SCHIP 286/ 86 390 240 022 045 2072 2152 7733
 ERLG LGG LIEGE 282/ 73 310 174 048 017 1637 2144 7288 USA
 ELLM LUX LUXEMBOURG 288 63 310 175 074 017 1632 2144 7293 USA

Log Nr.:7481 Page 5 PPS 8. 0. 724. 0 3 To be continued next page.....

Log Nr.: 7481 Page 6 LKPR-LFPG CSAZSE
 FIR: ERT/EMM0019 EMM0020 LRAA0020 EDDU0031 EBSU0057 LFFP0103
 ENROUTE WINDS
 IDENT FL 260 FL 300 FL 340 FL 380 FL 410
 W/T TMP W/V DMC W/V DMC W/V DMC W/V DMC W/V DMC
 BALTU 317/091 -38 316/106 -49 316/116 -57 320/103 -62 316/075 -60
 DOPRV 317/091 -38 316/106 -49 316/116 -57 320/103 -62 316/075 -60
 DONAD 314/090 -38 312/095 -49 308/108 -57 312/109 -62 310/084 -62
 SOGPA 314/090 -38 312/095 -49 308/108 -57 312/109 -62 310/084 -62
 -TOC- 314/090 -38 312/095 -49 308/108 -57 312/109 -62 310/084 -62
 314/090 -38 312/095 -49 308/108 -57 312/109 -62 310/084 -62
 UNWV1 314/090 -38 312/095 -49 308/108 -57 312/109 -62 310/084 -62
 KOSKE 308/079 -37 388/088 -48 306/101 -57 308/104 -63 307/084 -63
 DIMSU 308/079 -37 388/088 -48 306/101 -57 308/104 -63 307/084 -63
 LOBRE 308/079 -37 388/088 -48 306/101 -57 308/104 -63 307/084 -63
 REAT1 306/081 -37 384/086 -47 304/095 -56 304/098 -64 304/079 -65
 BOMBI 306/081 -37 384/086 -47 304/095 -56 304/098 -64 304/079 -65
 FFW 306/081 -37 384/086 -47 304/095 -56 304/098 -64 304/079 -65
 RIEUS 306/081 -37 384/086 -47 304/095 -56 304/098 -64 304/079 -65
 ORIGA 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 ANSNI 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 NOCPA 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 NIV 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 RALAM 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 ARFUG 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 DIX 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 IDORA 302/078 -36 300/082 -47 298/086 -56 300/088 -64 302/074 -65
 TOLVU 299/077 -36 296/078 -47 296/083 -56 296/087 -64 298/074 -66
 RAPOR 299/077 -36 296/078 -47 296/083 -56 296/087 -64 298/074 -66
 VEDUS 299/077 -36 296/078 -47 296/083 -56 296/087 -64 298/074 -66
 -TOC- 303/055 -36 298/060 -46 302/069 -56 304/073 -64 304/066 -64
 ATC FPL:
 (FPL-CSAZSE-IS
 -B738/M-SOPF1LORWXYZ/LR1
 -LFPG1125
 -N0441F340 BALTU L984 DONAD L602 SOGPA T170 RAPET US93 LOBRE
 UL984 NOCPA UN857 TOLVU/N0438P350 UN857 RAPOR/N0440F340
 U2157 VEDUS
 -LFPG0117 LFPG EBRU
 -RW/ALIN0115111 COM/TAO DOP/1901515 REB/OVTO
 ERT/EMM0019 EMM0020 LRAA0020 EDDU0031 EBSU0057 LFFP0103
 SEL/CONF CSN/18193 RW/200 GPO/TYS ORGN/LFFP/TVX
 RW/CLLISION CSA LINES, OCC CTC 00220116069
 -E0251 F/168 R/0VE J/L
 A/WRITE
 C/)

TVS – MEL, NOTAM, WX

MEL Report

printed on 15.3.2019 at 07:52 UTC



▲ IMPORTANT

Always check LIST OF DEFERRED DEFECTS in A/C Logbook.

✈ A/C OK-TVO

PRG SERVICEABLE

LVD:	CAT IIIA	SATCOM:	No
Var no:	V172	ELT:	Lx fixed
Cabin:	180Y	FMS:	Dual
Tech docs:	GOL	MCD:	No
EF No:	602	Spare Wheel:	No
Entertainment:		ACARS:	Ops
HF:	LX Honeywell	ETOPS:	
		Overwater:	No

OPEN MEL: C, 33-7, Lights

INS: 11/Mar/19 05:48 E/P: 21/Mar/19
DESCRIPTION: RM Wing light INCP.

OPEN MEL: A, 25-NSRIL-B-1, NSRIL

INS: 1/Dec/18 17:30 E/P: 1/Dec/19
DESCRIPTION: RV OVP BINS/SEAT ZDEF MISSING EXTRUSION-SEAT ROW MARKER

MEL report automatically generated by EFA.

NOTAMs for flight TVSCSA760(CSA2DZ)-LKPR-L (STD 151125)

(NOTAM search performed 2019.03.15 07:52:34 UTC.
Searched for NOTAMs with validity within the time period ESTL ± EST - 2 hours.
Search for NOTAMs for cruise phase FIRs additionally limited to relevant flight level range.
All NOTAMs with Circles CROOK (circled) excluded.
NOTAMs within each series are sorted by effective time start in descending order.
Details on any NOTAM which may have been excluded in accordance with company policy, and/or by user, listed at end of NOTAM search result.
NOTAM uniform abbreviation for Q code second and third line specification shown in short brackets above/right of each NOTAM.
In some short brackets, uniform abbreviation is followed by vertical line and number of days since NOTAM in effect time, or text 'NEW TODAY' if less than one day.)

NOTE: NOTAMs applicable to more than one FRI (FIR ICAO in Item Q) contains 'X' or 'XXX' will appear under each relevant FRI header.

Departure airport **LKPR - PRG - PRAQUE/RUZINE RWY 04 06 12 22 24 30**

A0177/19 NOTAMN

Q) ICAO/QOSCE/V/M/A/000/999/5006N01416E005

A) LKPR B) 1903130600 C) 1909012159

E) OBST - MOBILIS CRANE FOR 500610, 55N0140952, 41E

(3NM E LKPR). MAX HGT 24,2M AGL/ELEV 403M

(obst | 2)

A0180/19 NOTAMN

Q) ICAO/QFAXX/I/NBO/A/000/999/5006N01416E005

A) LKPR B) 1903121200 C) 1903112200

E) A-COM TRAIL OF MILESTONE 1 IN A-COM PROCEDURES, VALIDATION OF SOB2

(SCHEDULED OFF-BLOCK TIME) AND SOB2 IN OPERATIONAL USE.

(ad | 2)

A0167/19 NOTAMN

Q) ICAO/QFALT/V/NBO/A/000/999/5006N01416E005

A) LKPR B) 1903081137 C) 1905091300

D) SR-SS

E) FOLLOWING RESTRICTIONS WILL BE APPLIED DAILY PM SR-SS DUE TO REDUCED AD CAPACITY FOR VFR FLIGHTS:

- DELAY (20-30 MIN) ON ARR/DEP CLEARANCE MAY NOT BE ISSUED

- TRAINING FLIGHTS LIMITED

- RESTRICTIONS WILL NOT BE APPLIED TO FOLLOWING FLIGHTS:

- FLIGHTS FOR HUMAN LIFE SAVING

- SAR FLIGHTS

- ACT IN EMERGENCY

- POLICE FLIGHTS

- MIL ACT FLIGHTS

- CRA FLIGHTS

- GND EQPT FLTCK

- THOR/LDG OF HEL FM/TO TLOF

(ad | 6)

A0091/19 NOTAMN

Q) ICAO/QFATT/V/NBO/A/000/999/5006N01416E005

A) LKPR B) 1903070700 C) 1903202359

E) TRIGGER NOTAM

AIP SUP 3/19 WEF 7 MAR 2019 TILL 9 MAY 2019

- PRAHA ROUTING INCP - CLOSURE OF RWY 12/30

(ad | 8)

A0139/19 NOTAMN

Q) ICAO/QMCL/V/M/A/000/999/5006N01416E005

A) LKPR B) 1903010700 C) 1906141400

E) TWY B1 SW TWY H AND STAND C CLSD.

TWY B SW TWY A AND TWY B2 CLSD.

TWY A SW TWY B2 AND STAND B3 CLSD.

PUSH POSITION 1 AND 2 ON TWY B1 CLSD.

WEP, DAY AND NIGHT HOLDING.

(twy | 14)

A0121/19 NOTAMR A1402/18

Q) ICAO/QFALT/V/NBO/A/000/999/5006N01416E005

A) LKPR B) 1902250738 C) 1903200000

E) SID RWY 06 VENOX 5D, DOBEN 4D, BALTU 4D - VALIDITY SUSPENDED.

(sid | 18)

WEATHER FORECAST

printed on 15.3.2019 at 07:52 UTC



CSA760 PRG-CDG 2019-03-15

TAF

BRATISLAVA	LZIB	150500Z 1506/1606 21015KT 9999 SCT049 SCT080 PROB30 TEMPO 1506/1508 -RA BKN037 TEMPO 1506/1602 2902030KT BECMG 1516/1518 7800 -RA SCT020 OVC045 TEMPO 1521/1606 5000 RA BR BKN012 OVC027 PROB40 TEMPO 1522/1602 32025040KT
WROCLAW ST	EPWR	150500Z 1506/1606 22015KT 9999 BKN039 TEMPO 1506/1509 28016020KT SHRA BKN014 BKN020CB TEMPO 1509/1522 28018630KT SHRA BKN025CB BECMG 1520/1522 29019308KT
BRNO TURAN	LKTB	150500Z 1506/1612 23012KT 9999 -RA BKN030 TEMPO 1506/1600 28014026KT TEMPO 1518/1610 8000 RA BKN020 BECMG 1600/1602 20013KT
WIEN SCHWE	LOWM	150515Z 1506/1612 28017KT 9999 FEW050 TX11/1512Z TN07/1506Z TEMPO 1506/1512 28020630KT BECMG 1515/1517 23018KT -RA FEW030 OVC050 TEMPO 1517/1521 18095KT 8000 RA FEW020 OVC030 TWIS2100 27020030KT 9999 FEW040 BKN040 TEMPO 1521/1604 28030645KT FM160400 33010KT 9999 -RA FEW025 OVC040 TEMPO 1604/1611 6000 RA FEW015 OVC025
NAMSET	LKNA	150500Z 1506/1606 27012KT 9999 BKN035 TEMPO 1506/1510 28014526KT SCT035 PROB30 TEMPO 1510/1515 SHRA BKN030 BECMG 1516/1518 27012KT RA BKN020 OVC030 TEMPO 1522/1606 7000 RA BKN010 OVC020
ZIELONA G	EPZG	PZG 140701Z 1507/1515 25015KT 9999 SCT008 BKN023 TEMPO 1507/1515 27017628KT SHRA BKN007 BKN014CB
PARDUBICE	LKPD	150500Z 1506/1606 27016KT 9999 SCT040 TEMPO 1506/1605 24018930KT PROB40 TEMPO 1508/1515 7000 SHRA BKN044 BECMG 1515/1517 8000 RA BKN015 OVC020 PROB30 TEMPO 1520/1603 4000 +RA BKN010
CASLAV	LKCV	KCV 150500Z 1506/1606 27016KT 9999 BKN045 TEMPO 1506/1606 27020KT PROB40 TEMPO 1508/1515 2702030KT 8000 SHRA BKN051T BECMG 1513/1516 8000 RA BKN020 OVC030 PROB30 TEMPO 1521/1602 28025035KT 8000 RA BKN014 OVC022
PRAHA-VINCI	LKPR	150500Z 1506/1612 24018KT 9999 -RA BKN030 TEMPO 1506/1612 27018032KT TEMPO 1511/1601 8000 RA BKN015
LNZ	LOWL	150515Z 1506/1606 28015KT 9999 FEW030 BKN040 TX09/1521Z TN05/1506Z TEMPO 1511/1606 26020030KT RA BKN025 PROB30 TEMPO 1521/1606 29025040KT
DRESDEN	EDDC	DDC 150525Z 1506/1606 27015025KT 9999 BKN025 TEMPO 1507/1512 27020630KT BECMG 1518/1521 2702030KT
KARLOVY LA	LKKV	150500Z 1506/1612 25014KT 9999 -RA BKN023 TEMPO 1506/1612 26017030KT PROB30 TEMPO 1506/1510 3000 -SHRASN BKN007 TEMPO 1512/1612 5000 RA BR SCT005 BKN010
LEIPZIG	EDDP	150500Z 1506/1606 25015025KT 9999 BKN040 BECMG 1507/1509 24020630KT TEMPO 1517/1522 27025040KT
MUNICHEN	EDMM	150500Z 1506/1612 25015025KT 9999 SCT020 PROB30 TEMPO 1511/1517 RA BKN014 BECMG 1512/1514 2602030KT TEMPO 1521/1603 28025040KT
BERGPAFFE	EDMO	150506Z 1507/1515 23018KT 9999 BKN020 BECMG 1507/1509 24015025KT TEMPO 1511/1515 RA BKN012 BECMG 1512/1514 2502030KT
NURNBERG	EDNN	150500Z 1506/1606 25012KT 9999 SCT020 TEMPO 1510/1523 RA BKN012 BECMG 1513/1515 24020630KT BECMG 1523/1601 20012KT
ERFURT-WEI	EDDE	150500Z 1506/1606 25015025KT 9999 BKN035 BECMG 1507/1509 24020630KT BECMG 1521/1523 27015025KT
BRAUNSCHWE	EDVE	150641Z 1507/1515 25012KT 9999 BKN025 BECMG 1508/1511 25015025KT TEMPO 1511/1515 2402030KT 4000 RA BKN012
MEMMINGEN	EDJA	150500Z 1506/1515 23015KT 9999 SCT035 BECMG 1506/1509 28015030KT TEMPO 1507/1515 4000 RA BKN012 TEMPO 1511/1515 26020640KT
KASSEL CAL	EDVK	150501Z 1507/1515 23018KT 9999 BKN025 TEMPO 1512/1515 25015025KT
STUTTGART	EDDS	150500Z 1506/1606 22008KT 9999 BKN025 TEMPO 1506/1515 4000 RA BKN014 BECMG 1509/1512 24015025KT TEMPO 1512/1516 24020630KT BECMG 1516/1519 24011KT TEMPO 1519/1606 24015025KT
PADERBORN	EDLP	150500Z 1506/1606 25012KT 9999 BKN025 TEMPO 1506/1512 4000 RA BKN008 BECMG 1509/1512 24020630KT PROB40 TEMPO 1512/1517 25023040KT 4000 SHRA BKN010CB BECMG 1515/1520 28015025KT BECMG 1603/1606 25007KT
FRANKFURT	EDDF	150500Z 1506/1612 24012KT 9999 FEW020 BECMG 1506/1508 BKN020 TEMPO 1507/1511 23015025KT 4000 RA BKN009 TEMPO 1511/1515 23020630KT 4000 RA BKN013 TEMPO

TVS – RAIM

Raim Prediction Summary

Calculation details

Calculation time	2019-03-15 06:50:33
Almanac	1020.599824
Nanus	2019032.2019033.2019030
Start time	2019-03-15 11:25:00
Name	OKTVO
Algorithm	FDE
Receiver	129
SA	False
Baro aided	True

Aerodromes

ICAO	IATA	Name	Outages	From	To
LKPR	PRG	PRAGUE/RUZYNE	0	15-03-2019 11:10:00	16-03-2019 11:10:00
LFPG	CDG	PARIS/CHARLES D (NPA)	1	15-03-2019 12:47:00	16-03-2019 12:47:00
LFPO	ORY	PARIS/ORLY (NPA)	1	15-03-2019 13:03:00	16-03-2019 13:03:00
EBBR	BRU	BRUSSELS NATION (NPA)	0	15-03-2019 13:26:00	16-03-2019 13:26:00

Route to Destination

Legs

From	To	-15	-10	-5	0	5	10	15
LKPR	LKPR	0	0	0	0	0	0	0
LKPR	BALTU	0	0	0	0	0	0	0
BALTU	DOPOV	0	0	0	0	0	0	0
DOPOV	DONAD	0	0	0	0	0	0	0
DONAD	SOPGA	0	0	0	0	0	0	0
SOPGA	RAPET	0	0	0	0	0	0	0
RAPET	UNAVI	0	0	0	0	0	0	0
UNAVI	KODUK	0	0	0	0	0	0	0
KODUK	DIMSU	0	0	0	0	0	0	0
DIMSU	LOHRE	0	0	0	0	0	0	0
LOHRE	ESATI	0	0	0	0	0	0	0
ESATI	BOMBI	0	0	0	0	0	0	0
BOMBI	FFM	0	0	0	0	0	0	0

Raim Prediction Summary

Route to Destination

Legs

From	To	-15	-10	-5	0	5	10	15
FFM	RUDUS	0	0	0	0	0	0	0
RUDUS	OBIGA	0	0	0	0	0	0	0
OBIGA	ADENU	0	0	0	0	0	0	0
ADENU	NOSPA	0	0	0	0	0	0	0
NOSPA	NTM	0	0	0	0	0	0	0
NTM	RALAM	0	0	0	0	0	0	0
RALAM	ARVUG	0	0	0	0	0	0	0
ARVUG	DIK	0	0	0	0	0	0	0
DIK	IDOSA	0	0	0	0	0	0	0
IDOSA	TOLVU	0	0	0	0	0	0	0
TOLVU	RAPOR	0	0	0	0	0	0	0
RAPOR	VEDUS	0	0	0	0	0	0	0
VEDUS	LFPG	0	0	0	0	0	0	0

Offsets

Time offset	Outages	Legs affected
-15	0	0
-10	0	0
-5	0	0
0	0	0
5	0	0
10	0	0
15	0	0

Route to Alternate1

Legs

From	To	-15	-10	-5	0	5	10	15
LFPG	LFPO	0	0	0	0	0	0	0

Raim Prediction Summary

Offsets

Time offset	Outages	Legs affected
-15	0	0
-10	0	0
-5	0	0
0	0	0
5	0	0
10	0	0
15	0	0

Route to Alternate2

Legs

From	To	-15	-10	-5	0	5	10	15
LFPG	EBBR	0	0	0	0	0	0	0

Offsets

Time offset	Outages	Legs affected
-15	0	0
-10	0	0
-5	0	0
0	0	0
5	0	0
10	0	0
15	0	0

Thank you



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