



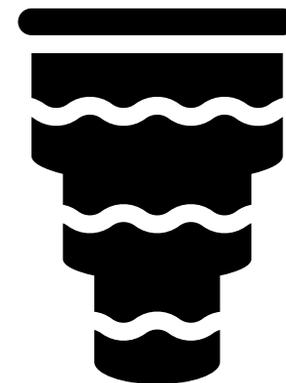
FEDERATION SUISSE DE VOL A VOILE  
FEDERAZIONE SVIZZERA DI VOLO A VELA

# Introduction to the Swiss Airspace Structure



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- [Airspace classification](#)
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This presentation has been prepared with great care. Nevertheless, mistakes may occur. In any case, the official publications on the current aeronautical charts, VFR manual and NOTAM are authoritative.

All map cutouts are courtesy of swisstopo and not for operational use.

References:

- eVFR Manual as of 19.03.2026
- Standardized European Rules of the Air (SERA) as of August 2025
- Verfügung betreffend Änderung der Luftraumstruktur der Schweiz 2026 vom 17. Dezember 2025

I am happy to receive any feedback.

Flurin Schwerzmann

Airspace Delegate, Segelflugverband der Schweiz

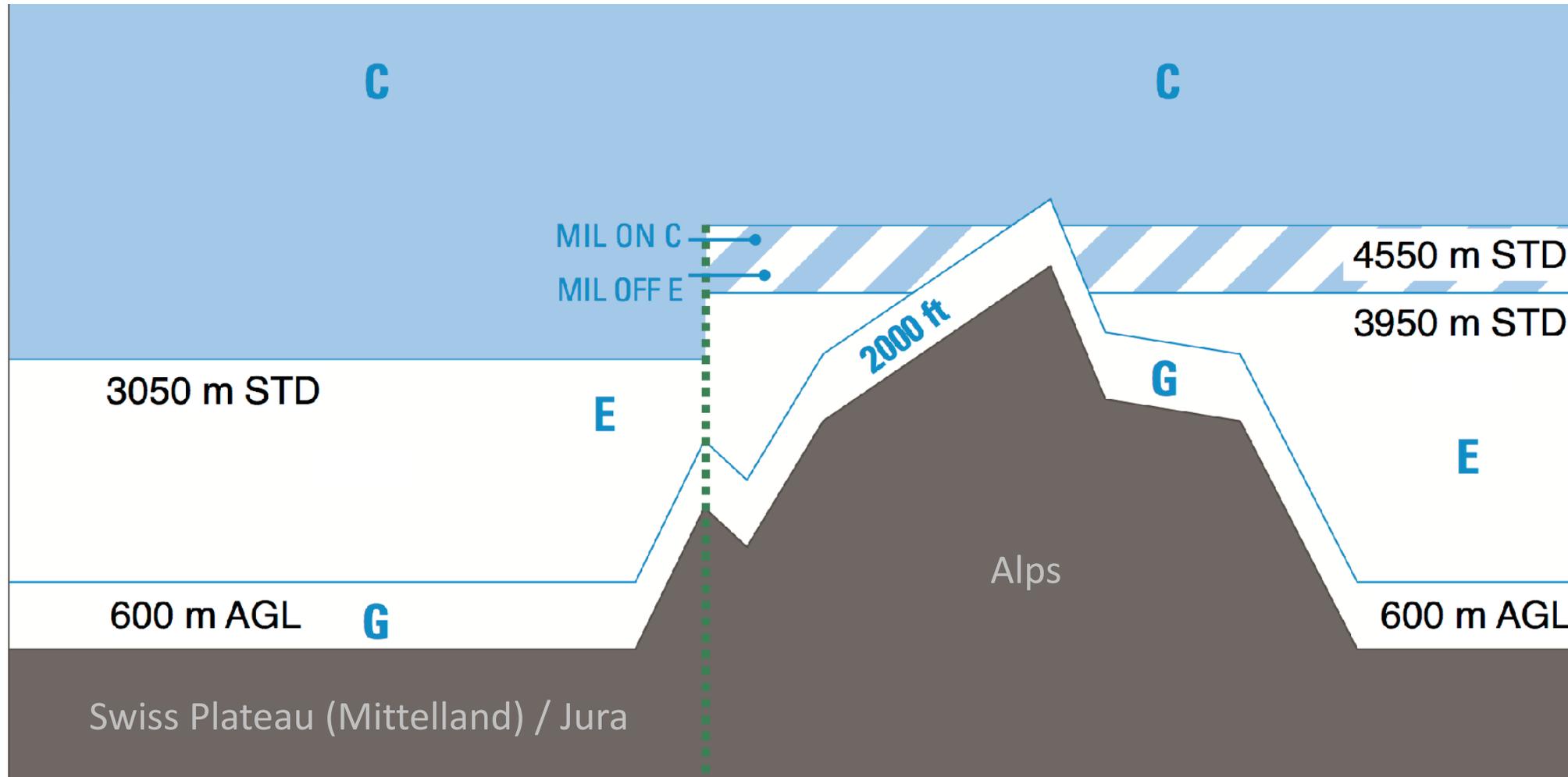
[airspace@sfvs-fsvv.ch](mailto:airspace@sfvs-fsvv.ch)

# Airspace Classification

ICAO/EASA	ATC Clearance	Flight Rules
<b>C</b>	Required	VFR and IFR
<b>D</b>		
<b>E</b>	Not required	VFR only*
<b>G</b>		

\*IFR with FOCA approval

# Swiss Airspace Structure



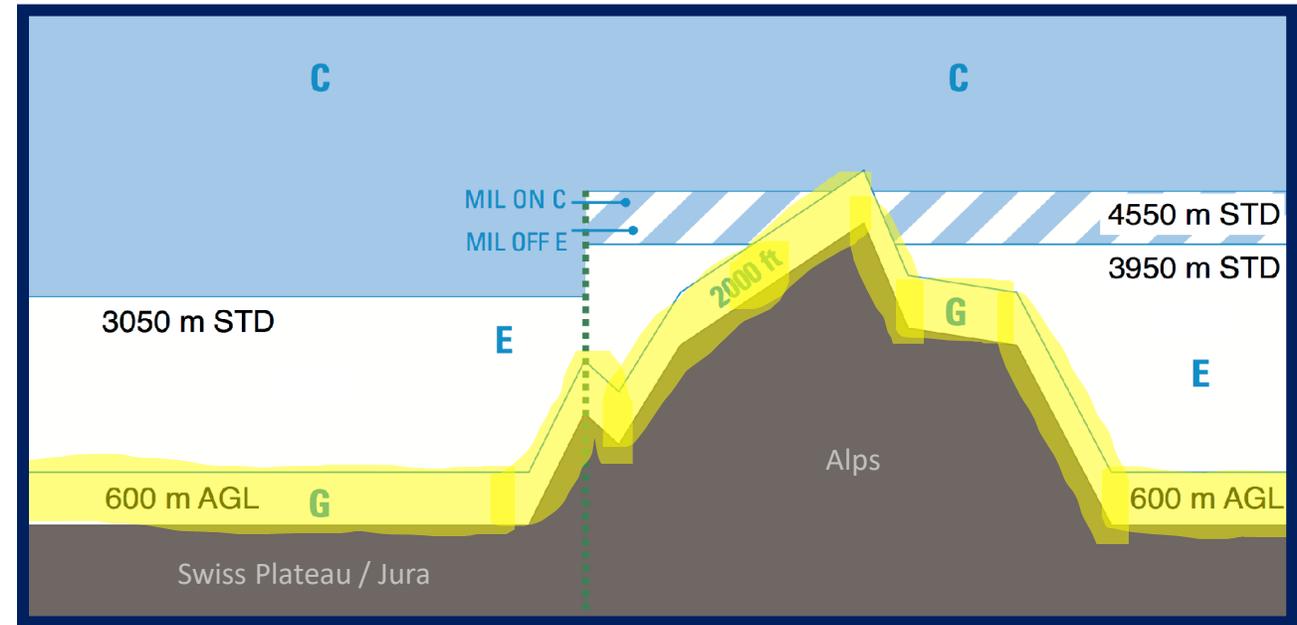


# Airspace Golf

Everywhere (except CTR)

GND up to 600m AGL

- Uncontrolled
- VFR and IFR
- No ATC clearance required
- Outside of clouds
  - > 300m AGL with transponder ON



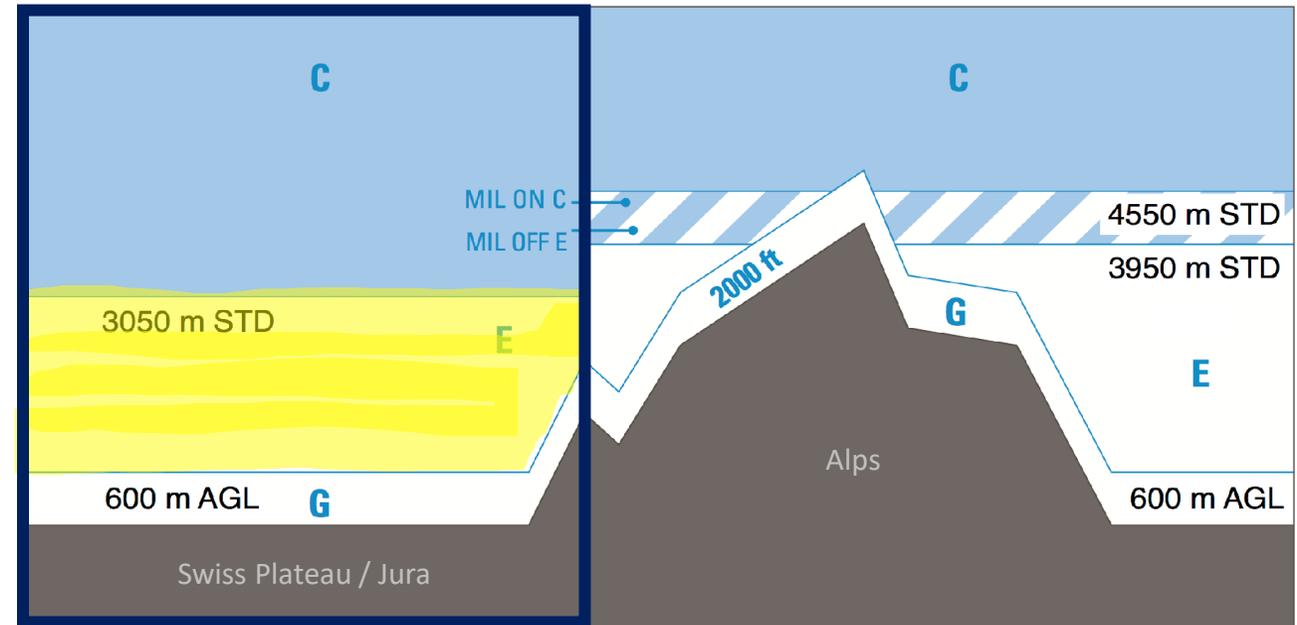


# Airspace Echo

## Swiss Plateau/Jura

600m AGL up to 3050m STD

- Controlled
- VFR and IFR
- No ATC clearance required
- Large cloud distance minima



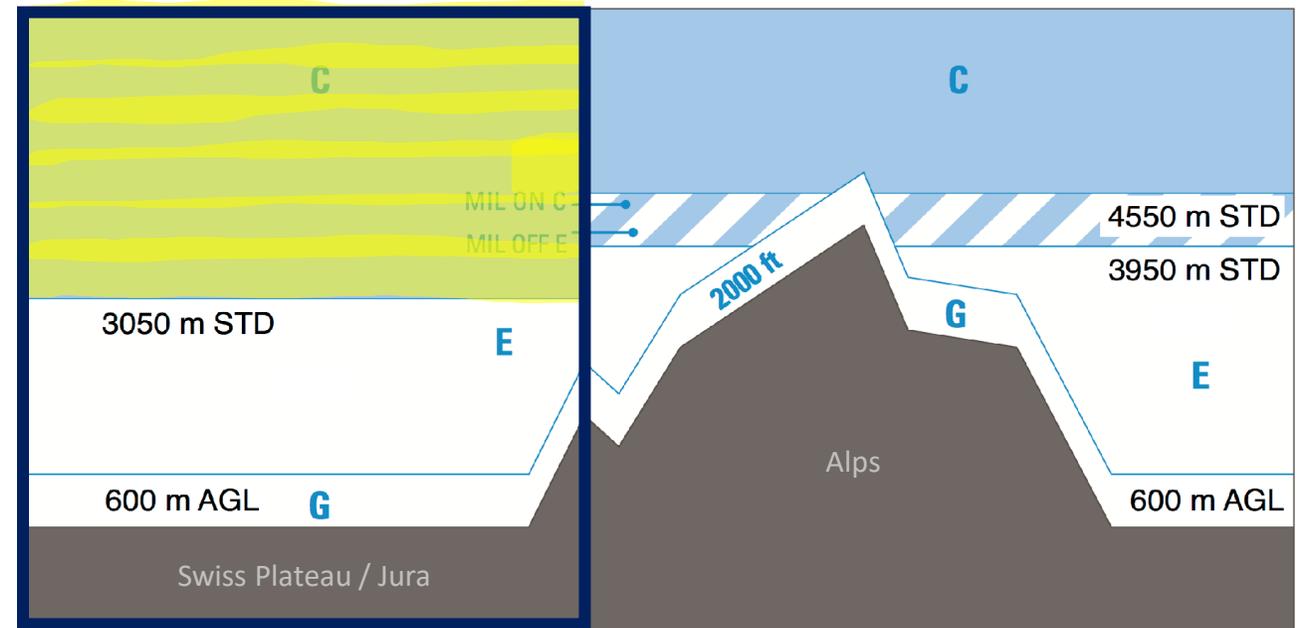


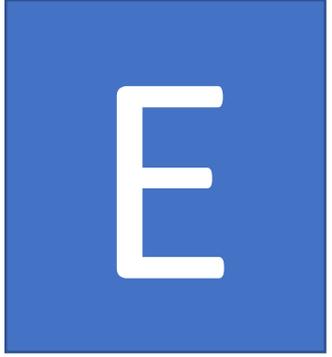
# Airspace Charlie

## Swiss Plateau/Jura

Above 3050m STD

- Controlled
- VFR and IFR
- ATC clearance required
- Large cloud distance minima





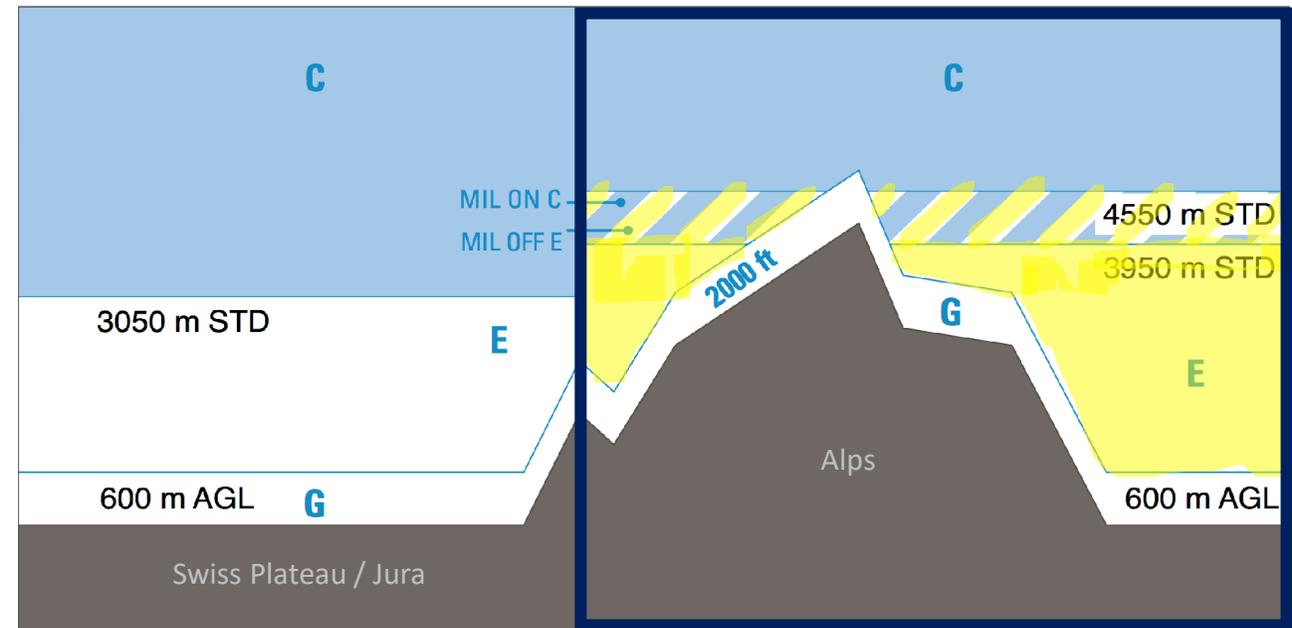
# Airspace Echo

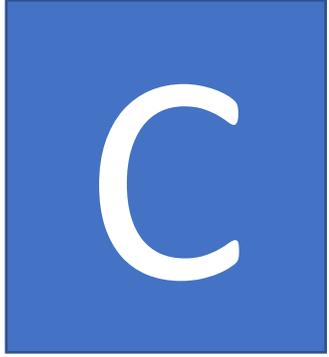
## Alps

*Mil ON*: 600m AGL up to 3950m STD

*Mil OFF*: 600m AGL up to 4550m STD

- Controlled
- VFR and IFR
- No ATC clearance required
- Large cloud distance minima





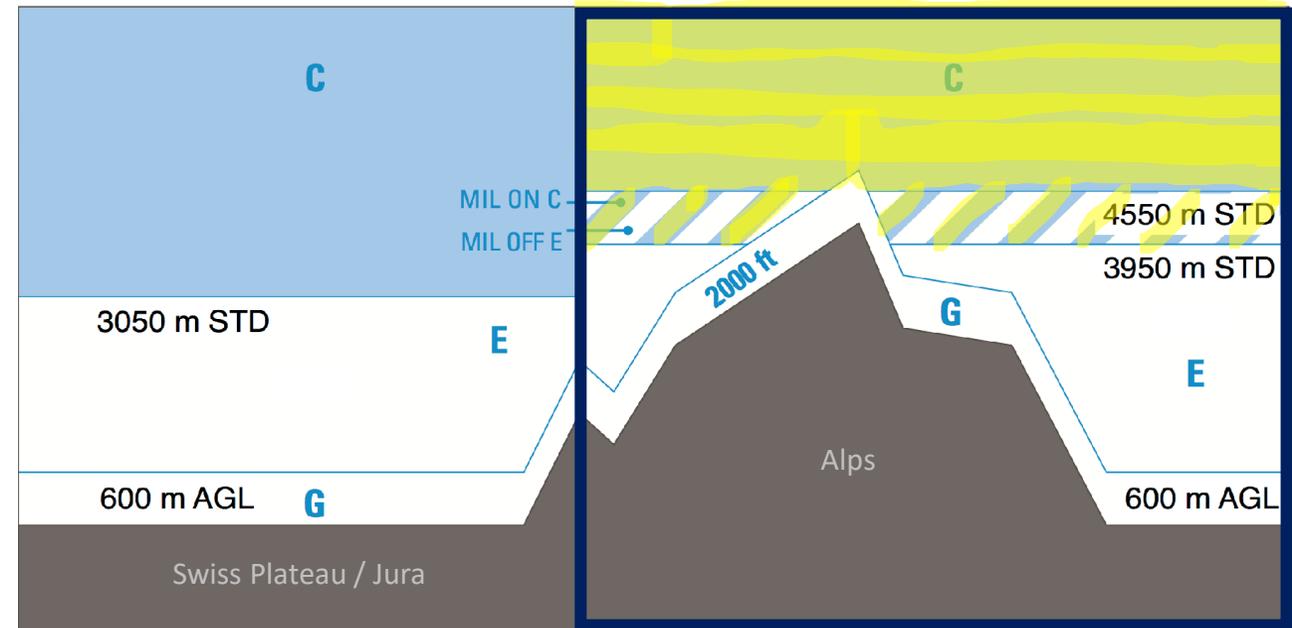
# Airspace Charlie

## Alps

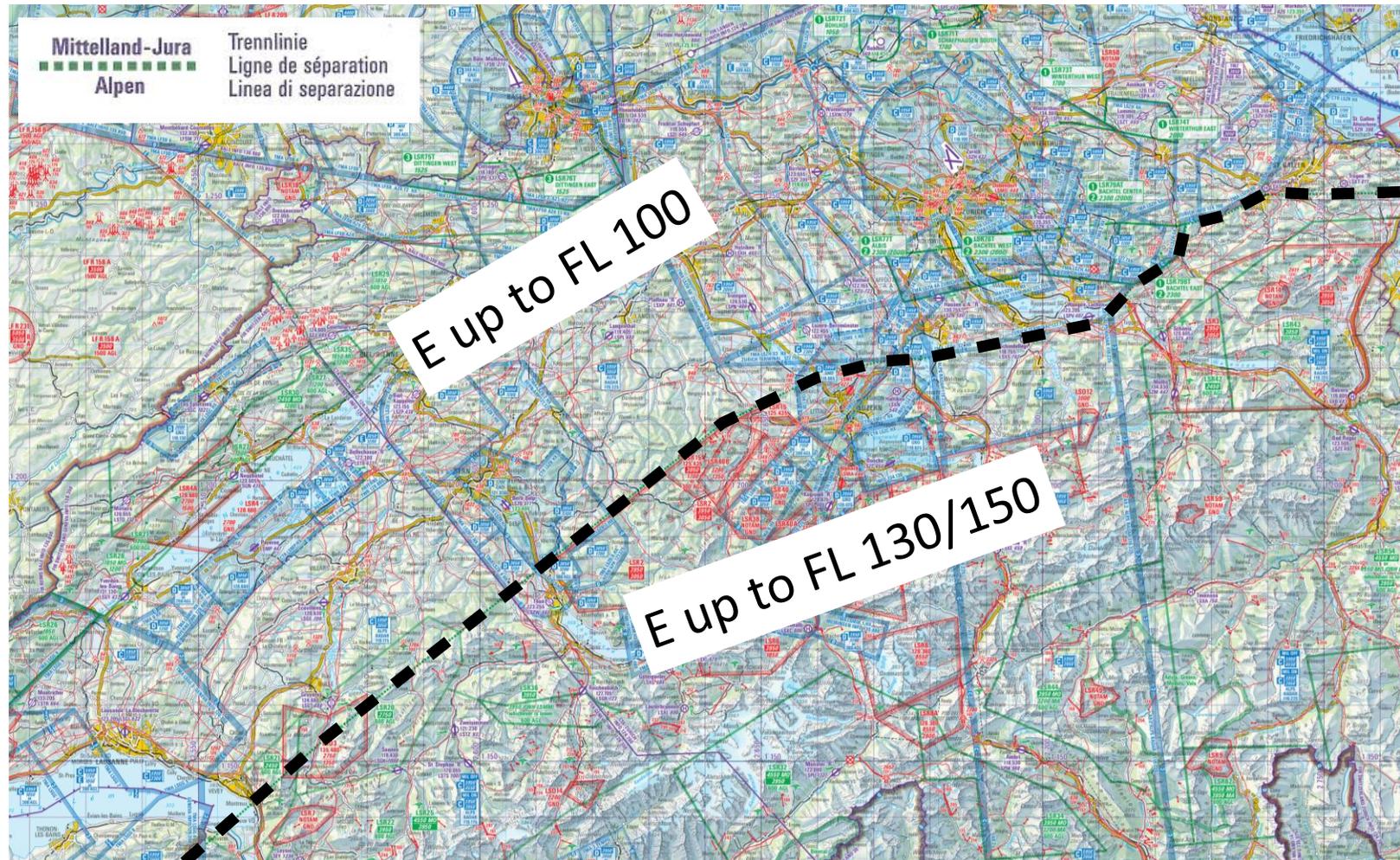
*Mil ON* – Above 3950m STD

*Mil OFF* – Above 4550m STD

- Controlled
- VFR and IFR
- ATC clearance required
- Large cloud distance minima



# Higher Airspace



*Echo up to FL100*

Mil ON

*Echo up to FL130*

Monday – Friday

0730LT – 1205LT

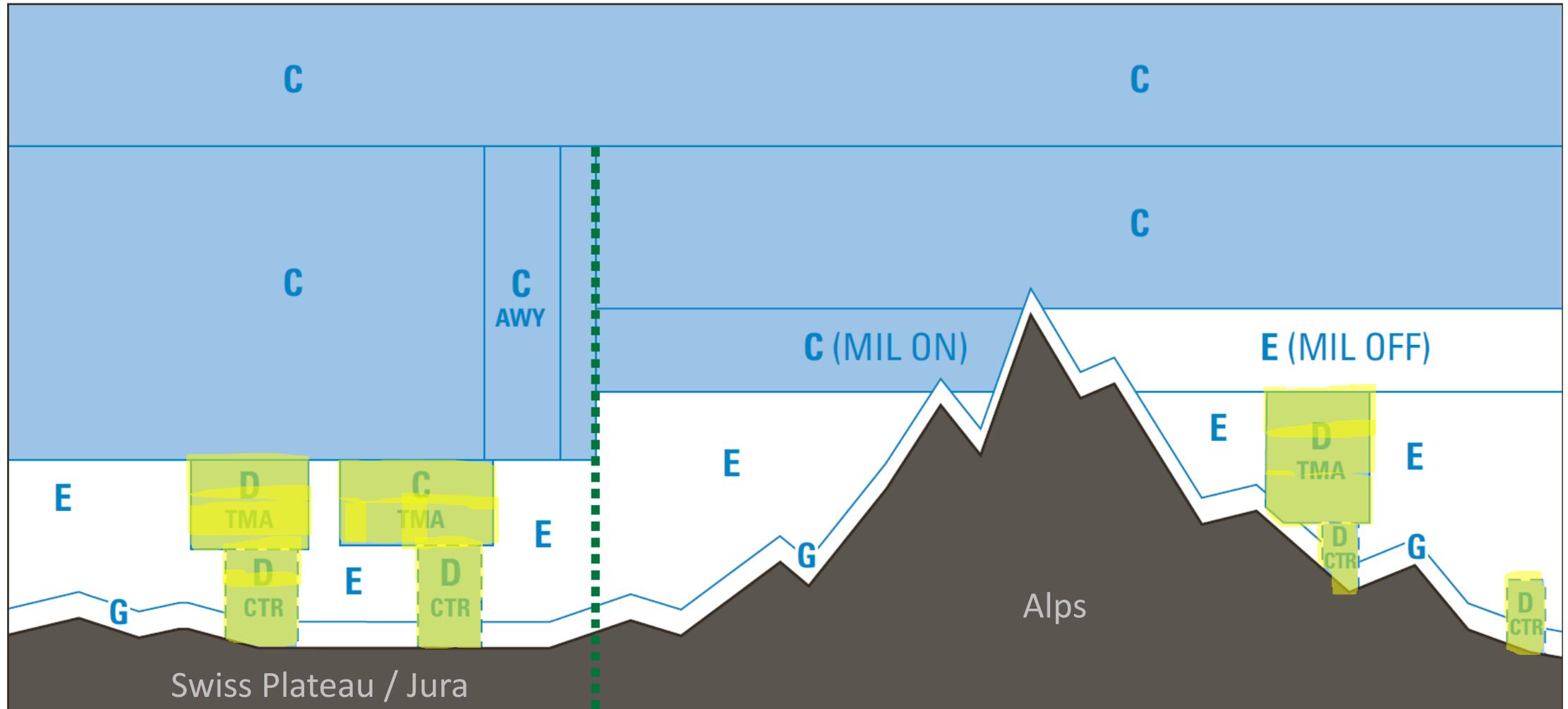
1315LT – 1705LT

or NOTAM

Mil OFF

*Echo up to FL150*

# Airspace Structure with CTR/TMA





D

## CTR & TMA

C

D

### Control Zone (CTR)

*GND to upper limit*

- Controlled
- VFR and IFR
- ATC clearance required
- Large cloud distance minima

### Terminal Control Area (TMA)

*Lower to upper limit*

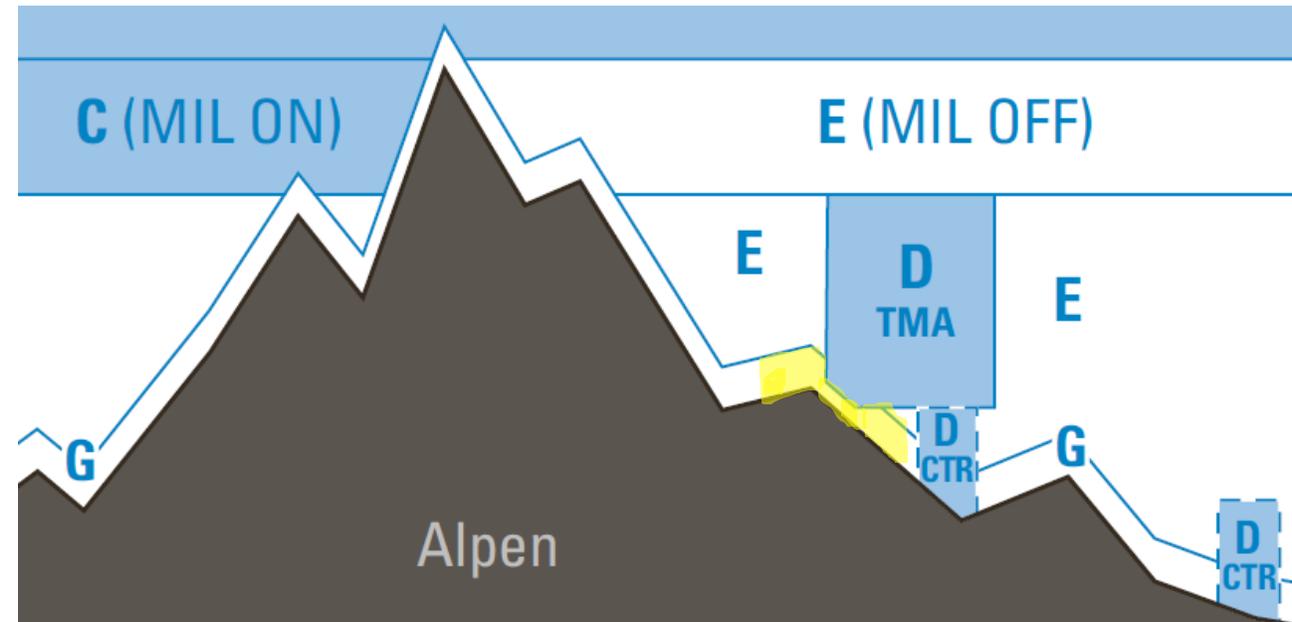
- Controlled
- VFR and IFR
- ATC clearance required
- Large cloud distance minima



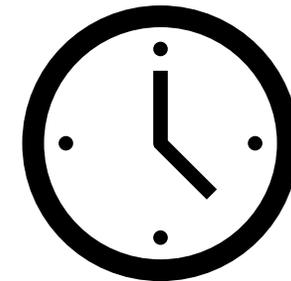
# Airspace Golf below TMA

## Alps

- Golf from GND up to 300m AGL
- Typically MIL TMA
- Only south of separation line Swiss Plateau/Alps!



# TEMPO vs. HX



## TEMPO

- Chart: Thin bright blue ribbon
- Activation via DABS/NOTAM
  - Generally not active!

*Alpnach TMA 2 and 4*

*Sion TMA 1, 2 and 3*

## HX

- No specific working hours
- Check status before entry
- Maintain listening watch
- Deactivation: Same as surrounding airspace G and E

# Altitude Limits on Glider Chart

*STD*: Inverted and italic

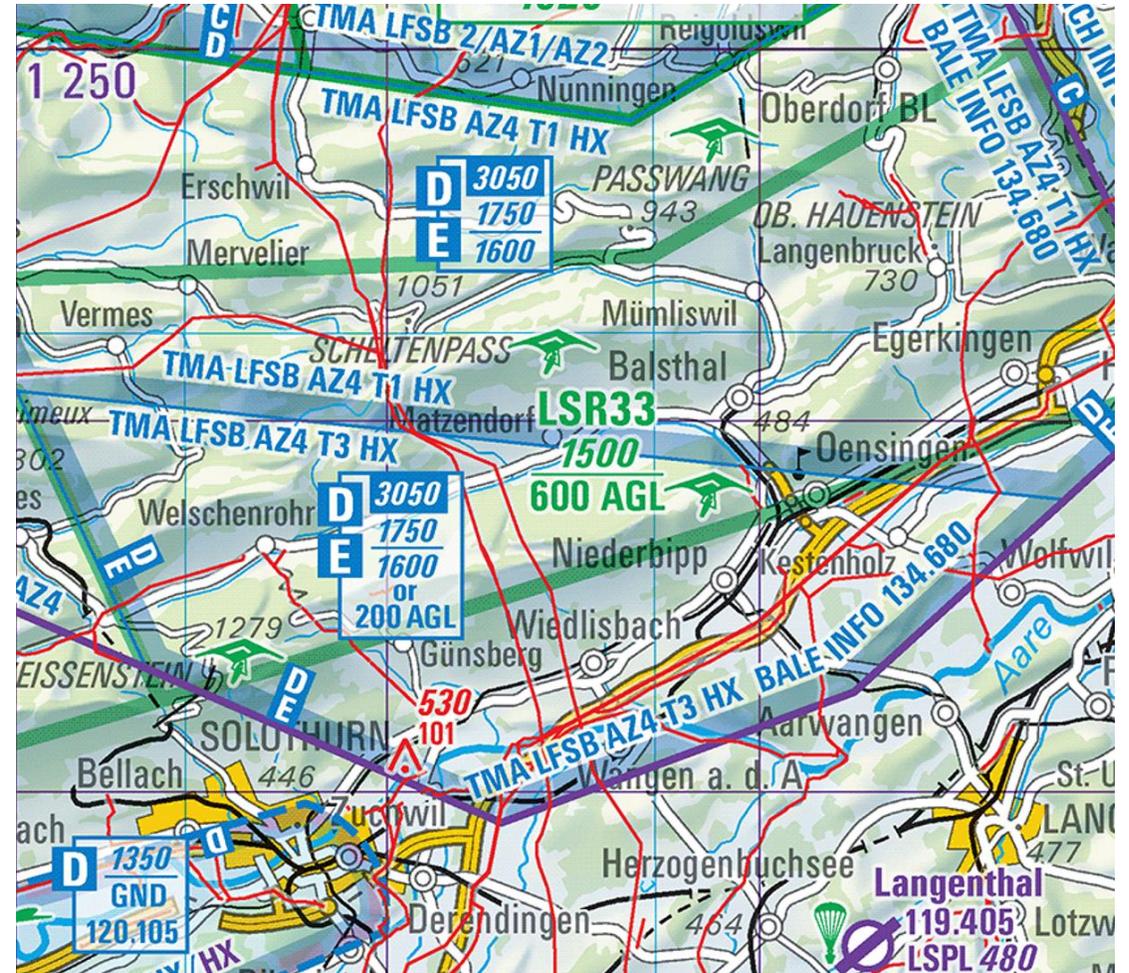
- 1013 hPa (transponder display)

*AMSL*: Italic

- QNH (or GPS)

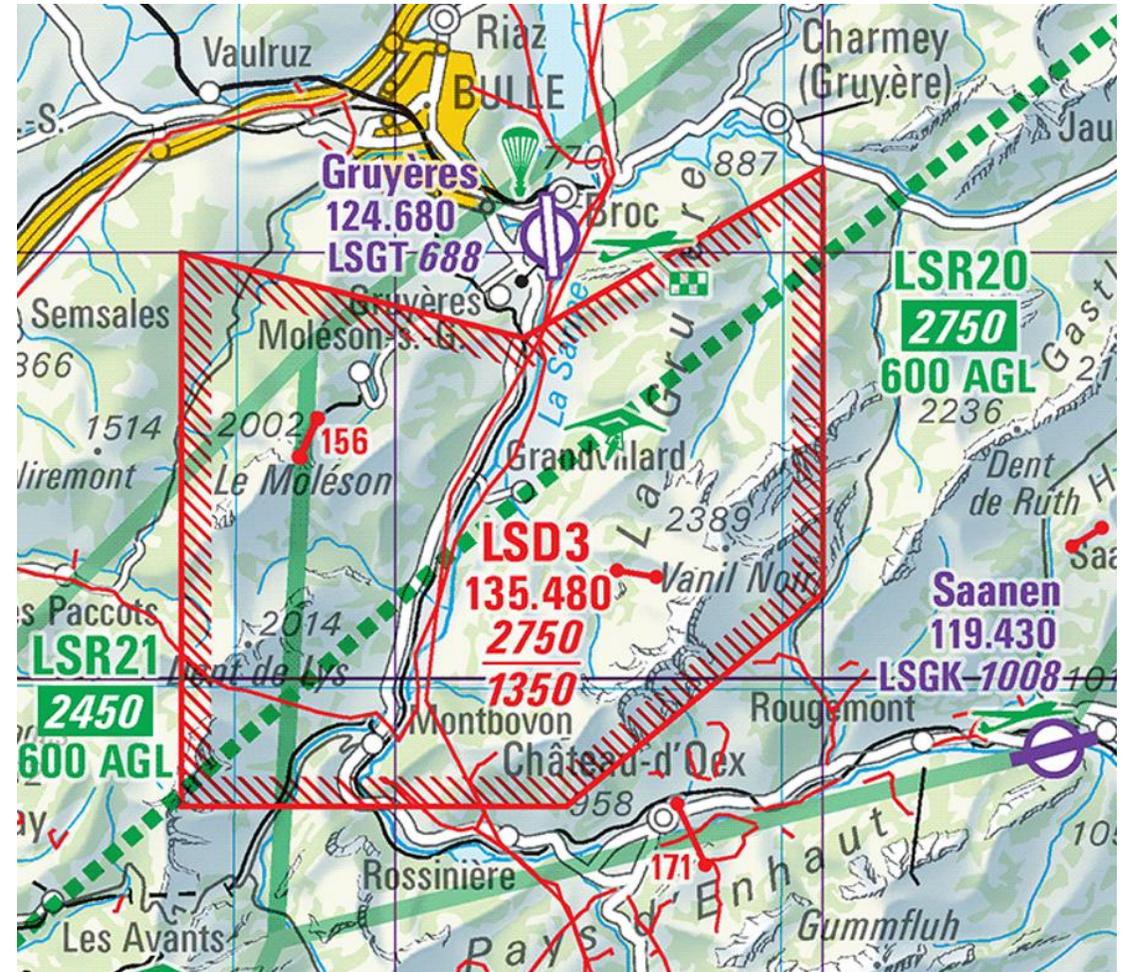
*AGL*: Height above ground

- QNH (visual estimate or GPS)



## Danger Area

- Activities dangerous for aircraft
- No specific working hours
- Activation via DABS/NOTAM
- Entry not recommended
  - Legally allowed

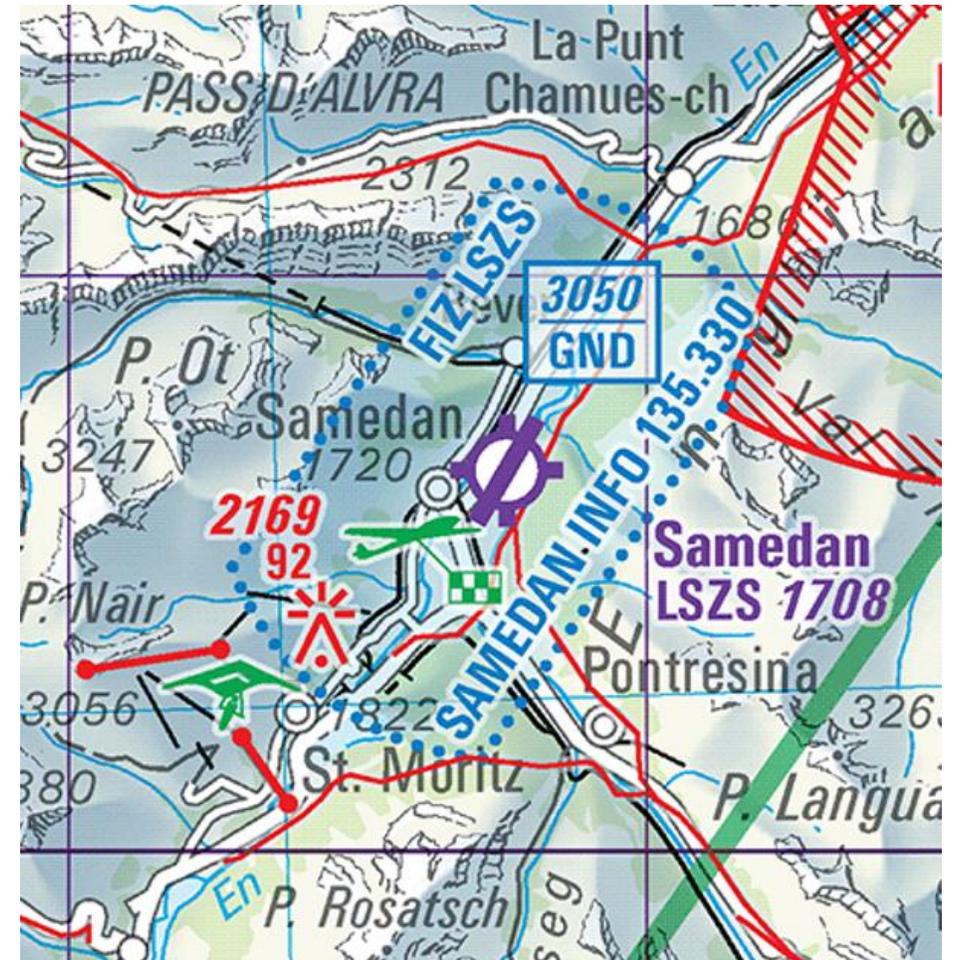




## Flight Information Zone

- Flight information and alerting services
- Mandatory radio contact before entry
  - No ATC clearance required!
- Maintain listening watch
- Airspace class remains Golf and Echo
- Separation is pilot's responsibility

*Samedan, various airports in Italy*

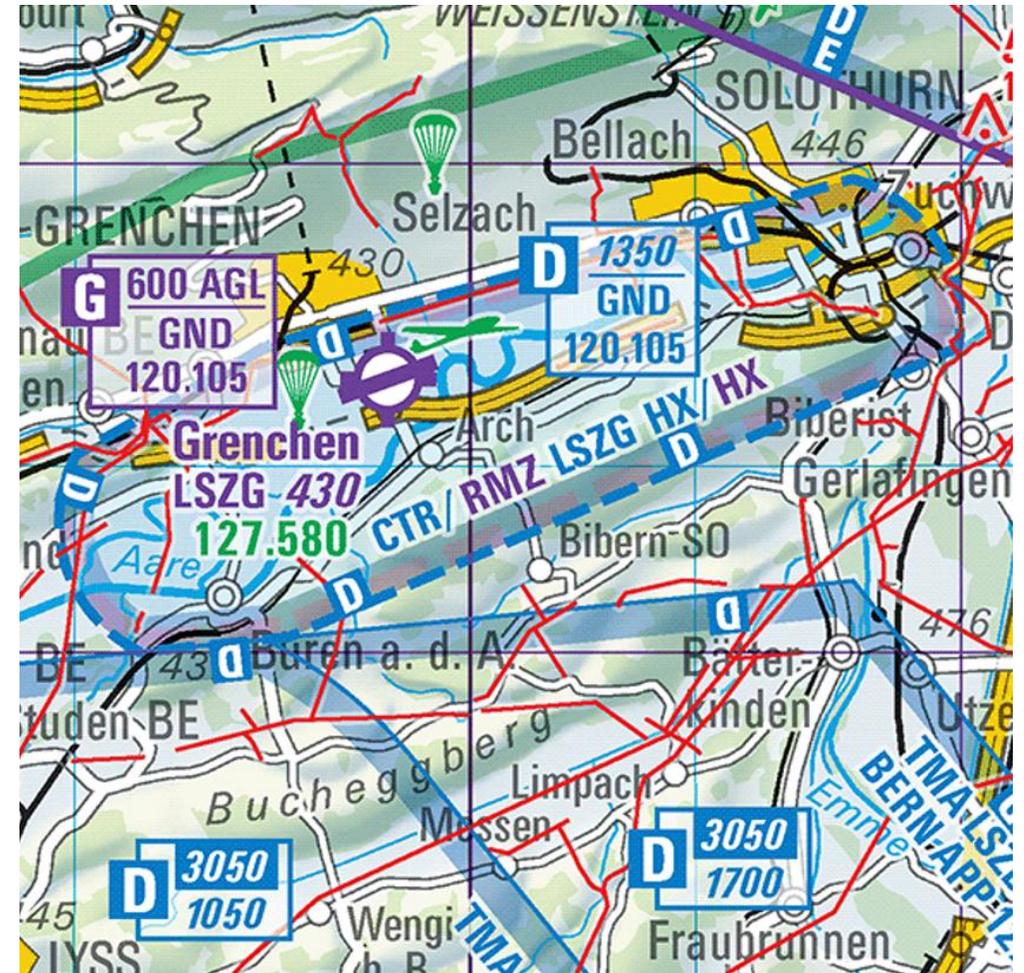


## Radio Mandatory Zone

- Blind transmission before entry, maintain listening watch
- Separation is pilot's responsibility
  - «see and avoid»
- Airspace class remains Golf

*Grenchen (without ATC)*

*Various airports in Germany!*

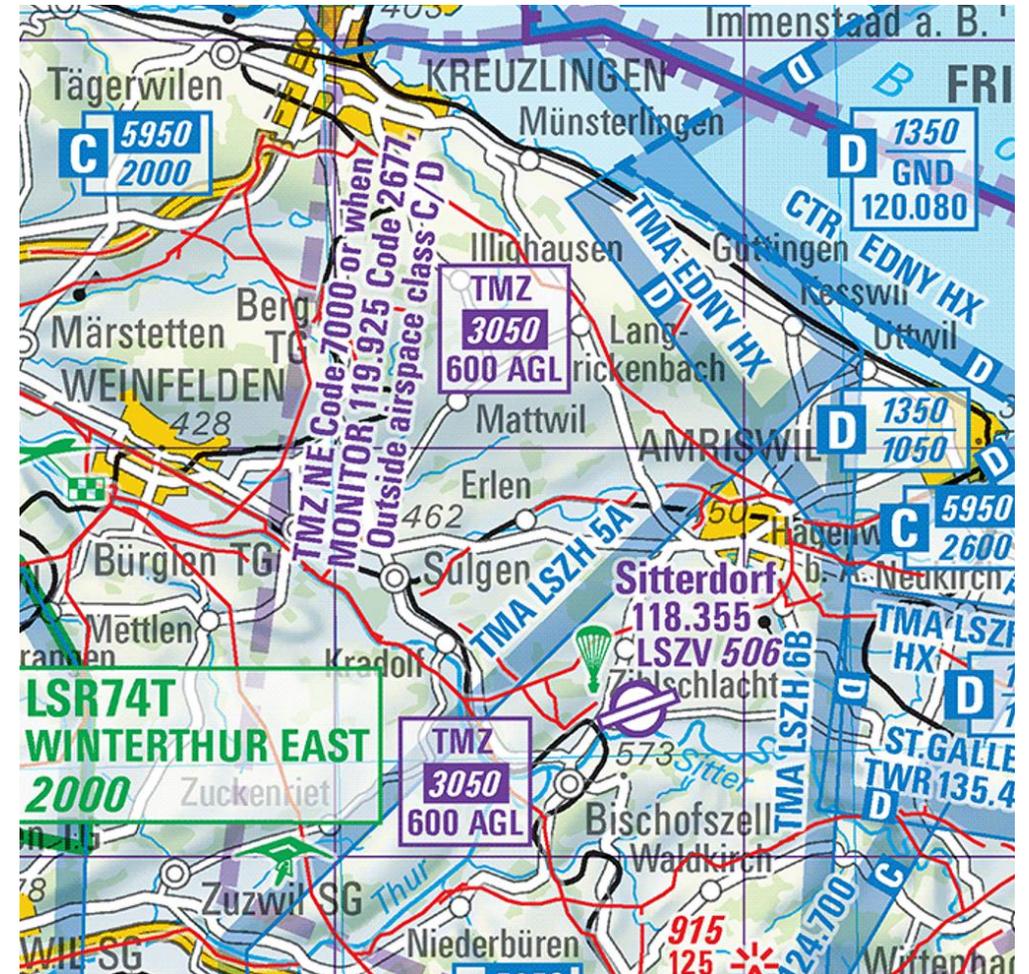


## Transponder Mandatory Zone

- Entry only with transponder ON
  - Mode S (i.e. ALT)

### *Switzerland: TMZ North East*

- Without listening watch: Code 7000
  - Visible to ATC, no traffic information
- With listening watch: Code 2677
  - Frequency 119.925
  - Traffic information by ATC



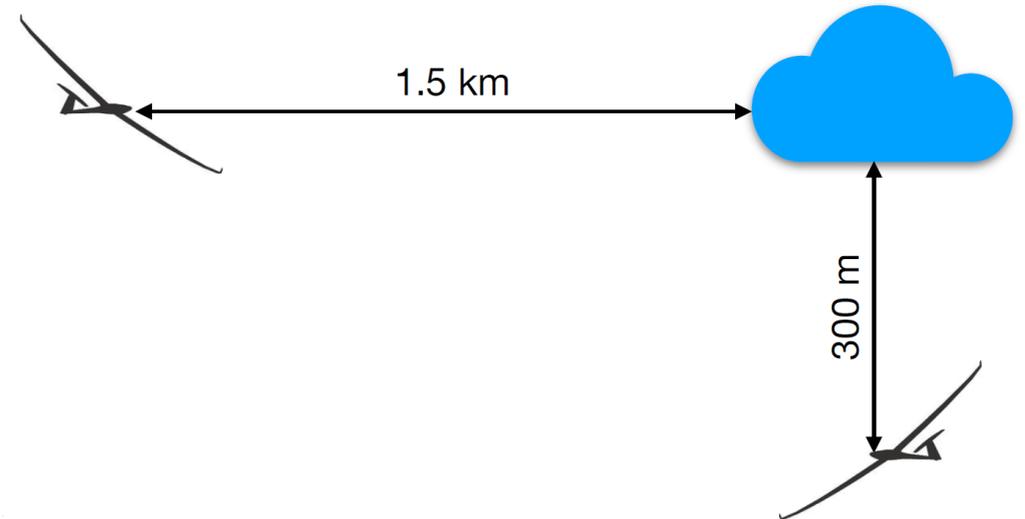
# Large Cloud Distance Minima

## *Airspace classes:*

- Charlie, Delta, Echo
  - LSR for gliders within TMA
- Golf > 300m AGL (transponder OFF)

## *Visibility:*

- 8km above FL100 (3050m STD)
- 5km below FL100 (3050m STD)



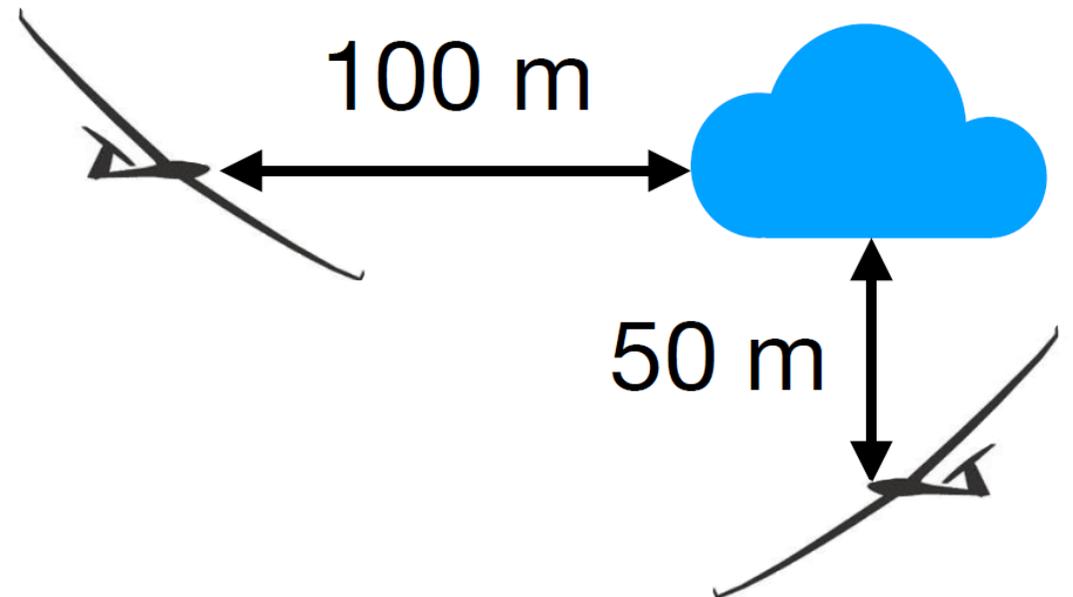
# Reduced Cloud Distance Minima

*Airspace class:* Echo

- LSR for gliders outside TMA

*Visibility:*

- 8km above FL100 (3050m STD)
- 5km below FL100 (3050m STD)



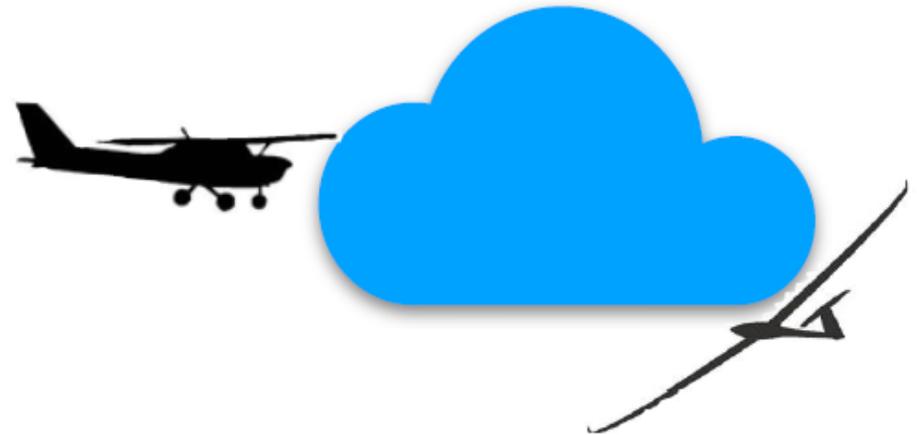
# No Cloud Distance Minima

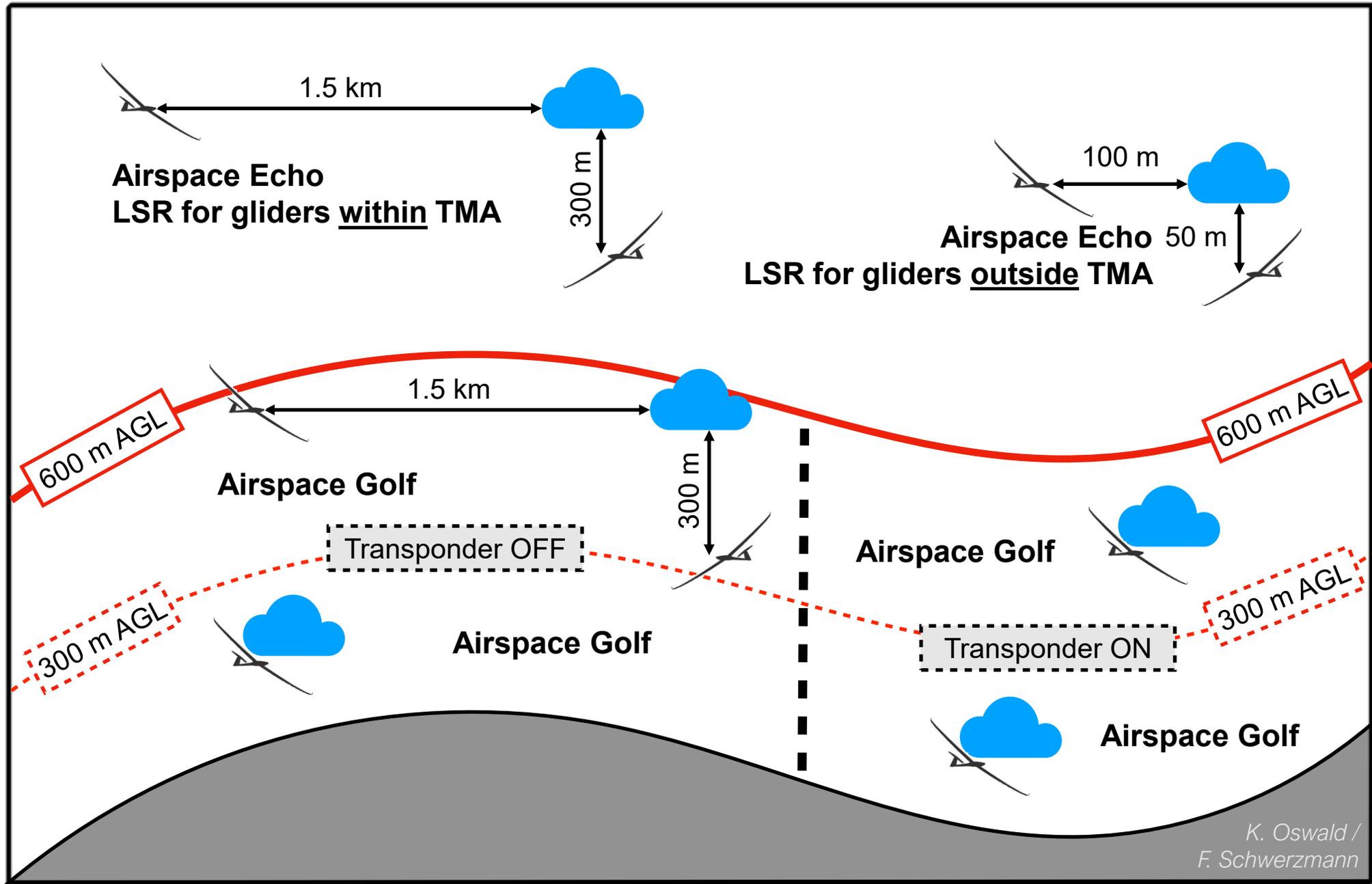
*Airspace class:* Golf

- GND up to 300m AGL
- 300m to 600m AGL (transponder ON)

*Visibility:*

- 5km
- 1.5km, traffic avoidance ensured
  - Ground surface in sight
  - Max. 140 knots

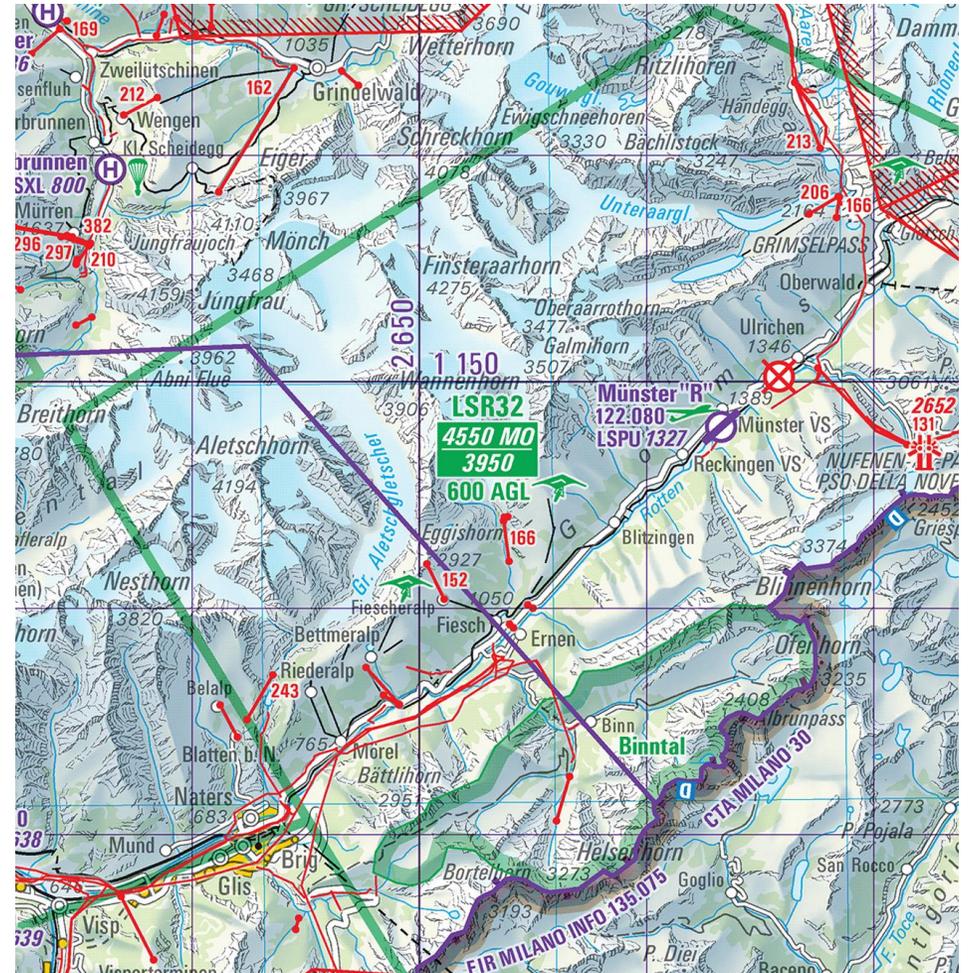




## LSR for Gliders Outside TMA

### Outside TMA

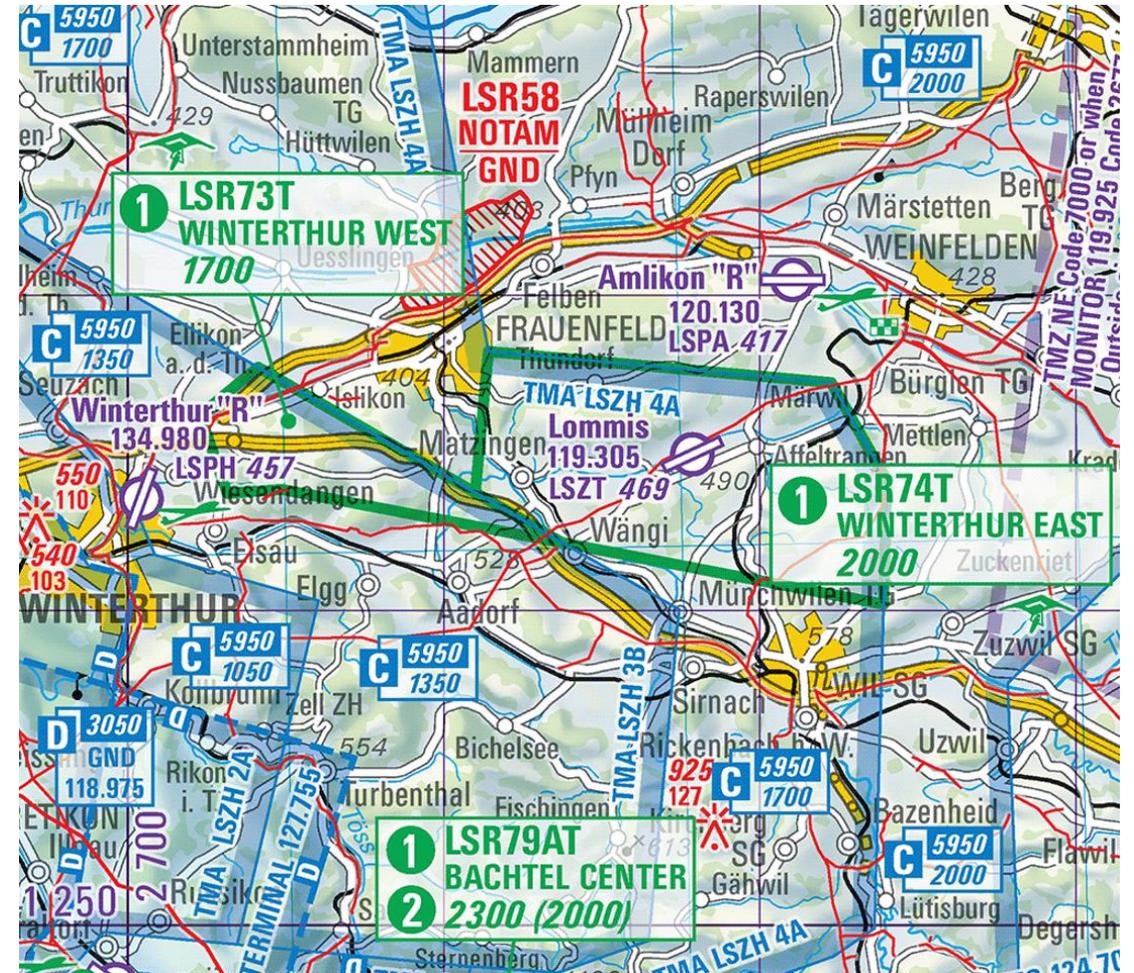
- Reduced cloud distance minima
  - 100 m lateral, 50 m vertical
- Active from 1. March until 31. October
  - SR to SS
  - Mil OFF without approval
  - Mil ON only with specific approval



## LSR for Gliders Within TMA

### Within TMA

- No ATC clearance required
  - Only for gliders and tow planes
- Rules of airspace class Echo
  - Large cloud distance minima!
- Activation: See glider chart
- Maintain listening watch

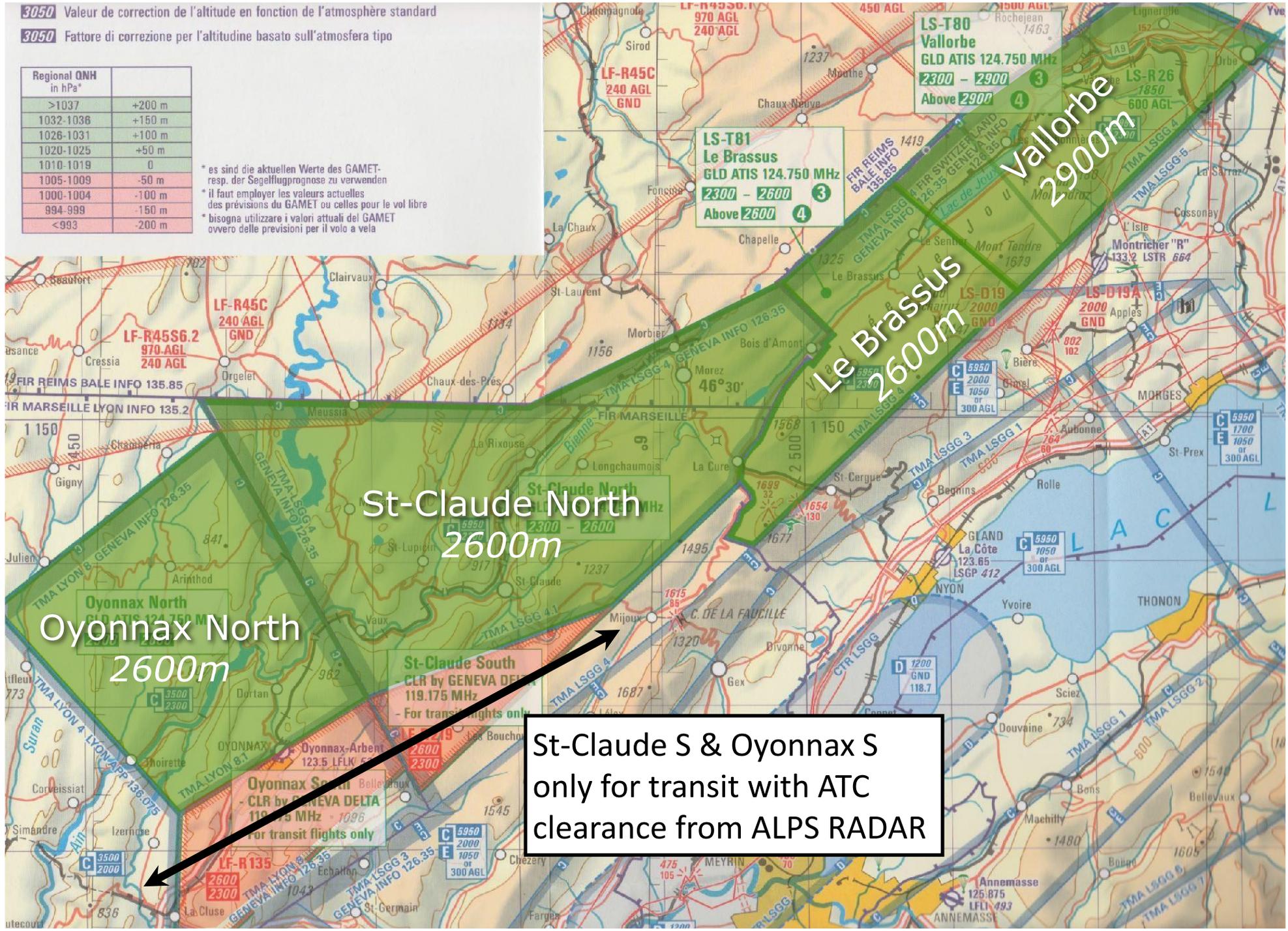


# TMA Genève with LSR for Gliders

**3050** Valeur de correction de l'altitude en fonction de l'atmosphère standard  
**3050** Fattore di correzione per l'altitudine basato sull'atmosfera tipo

Regional QNH in hPa*	
>1037	+200 m
1032-1036	+150 m
1026-1031	+100 m
1020-1025	+50 m
1010-1019	0
1005-1009	-50 m
1000-1004	-100 m
994-999	-150 m
<993	-200 m

\*es sind die aktuellen Werte des GAMET-resp. der Segelflugprognose zu verwenden  
 \*il faut employer les valeurs actuelles des prévisions du GAMET ou celles pour le vol libre  
 \*bisogna utilizzare i valori attuali del GAMET ovvero delle previsioni per il volo a vela



St-Claude North  
2600m

Oyonnax North  
2600m

St-Claude S & Oyonnax S  
only for transit with ATC  
clearance from ALPS RADAR

Designation	MAX ALT <i>m</i> STD Altimeter (FL)	Operator / User TEL NR	Remarks and time of ACT Conditions of use
1	2	3	4
LSR80T VALLORBE  a)	<del>2900</del> 2300	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If not active: Advise ALPS RADAR 119.175 MHz If sector activated: Continuous listening watch on FREQ 121.130 MHz <b>3</b>
	above <del>2900</del>	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If not active: Clearance by ALPS RADAR 119.175 MHz required. <b>4</b> If sector activated: Continuous listening watch on FREQ 119.175 MHz
LSR81T LE BRASSUS  a)	<del>2600</del> 2300	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If not active: Advise ALPS RADAR 119.175 MHz If sector activated: Continuous listening watch on FREQ 121.130 MHz <b>3</b>
	above <del>2600</del>	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If not active: Clearance by ALPS RADAR 119.175 MHz required. <b>4</b> If sector activated: Continuous listening watch on FREQ 119.175 MHz
TMA GENEVE 4.1 ST-CLAUDE NORTH  b)	<del>2600</del> 2300	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If TMA active: Advise ALPS RADAR 119.175 MHz If TMA deactivated: Continuous listening watch on FREQ 121.130 MHz
LF R 219 ST-CLAUDE SOUTH	<del>2600</del> 2300	c)	Clearance by ALPS RADAR 119.175 MHz required. For transit flights only
TMA LYON 6.1 Oyonnax North  b)	<del>2600</del> 2300	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If TMA active: Advise ALPS RADAR 119.175 MHz If TMA deactivated: Continuous listening watch on FREQ 121.130 MHz
LF R 135 Oyonnax South	<del>2600</del> 2300	c)	Clearance by ALPS RADAR 119.175 MHz required. For transit flights only

# Caption

## *Glider TMA Genève*

*Vallorbe & le Brassus:*

a) LSR for Gliders

*St-Claude North & Oyonnax North:*

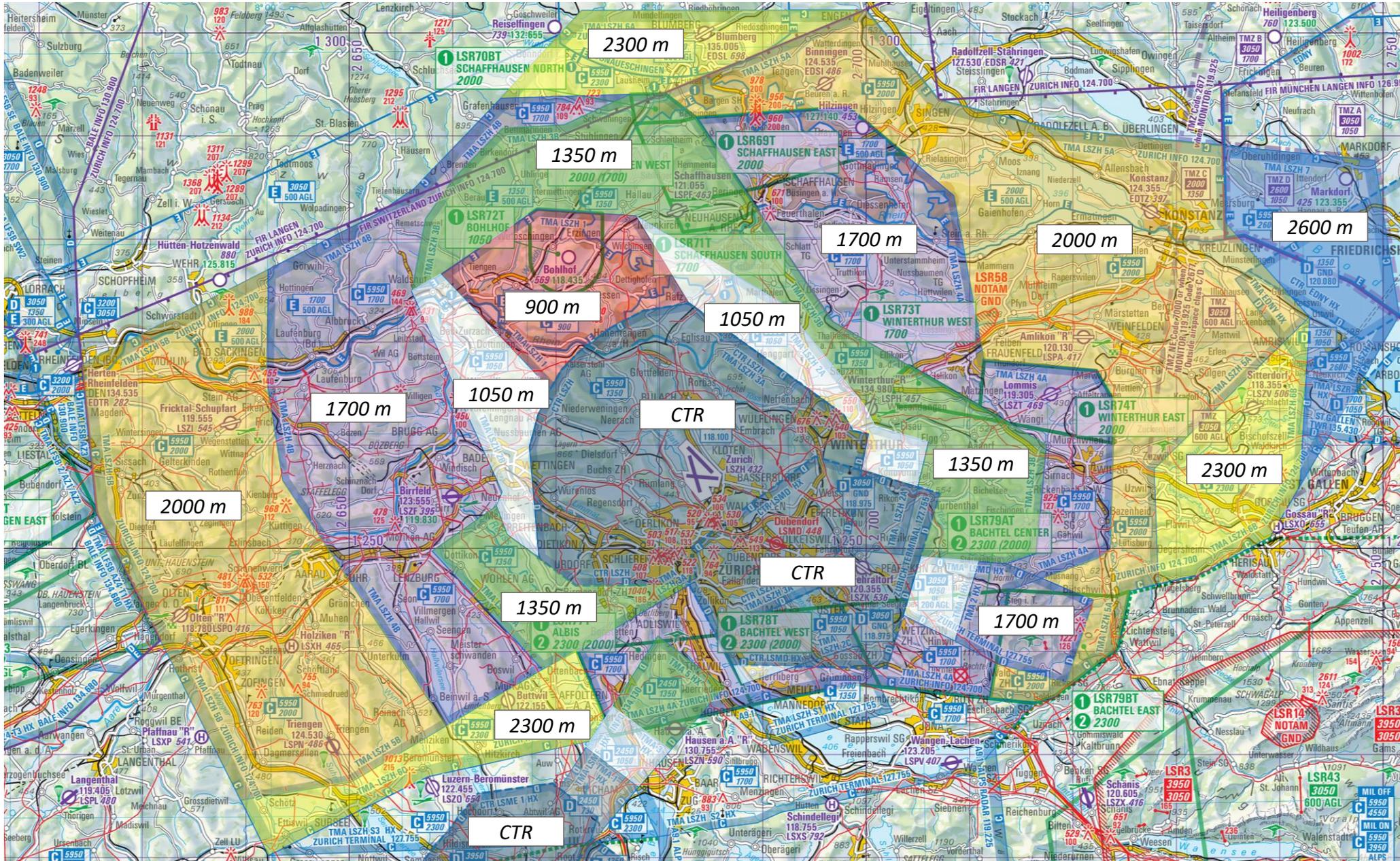
b) Declassified to airspace Golf

*St-Claude South & Oyonnax South:*

c) LF-R – transit only, clearance required



# CTR & TMA Zurich: Mil HX ON



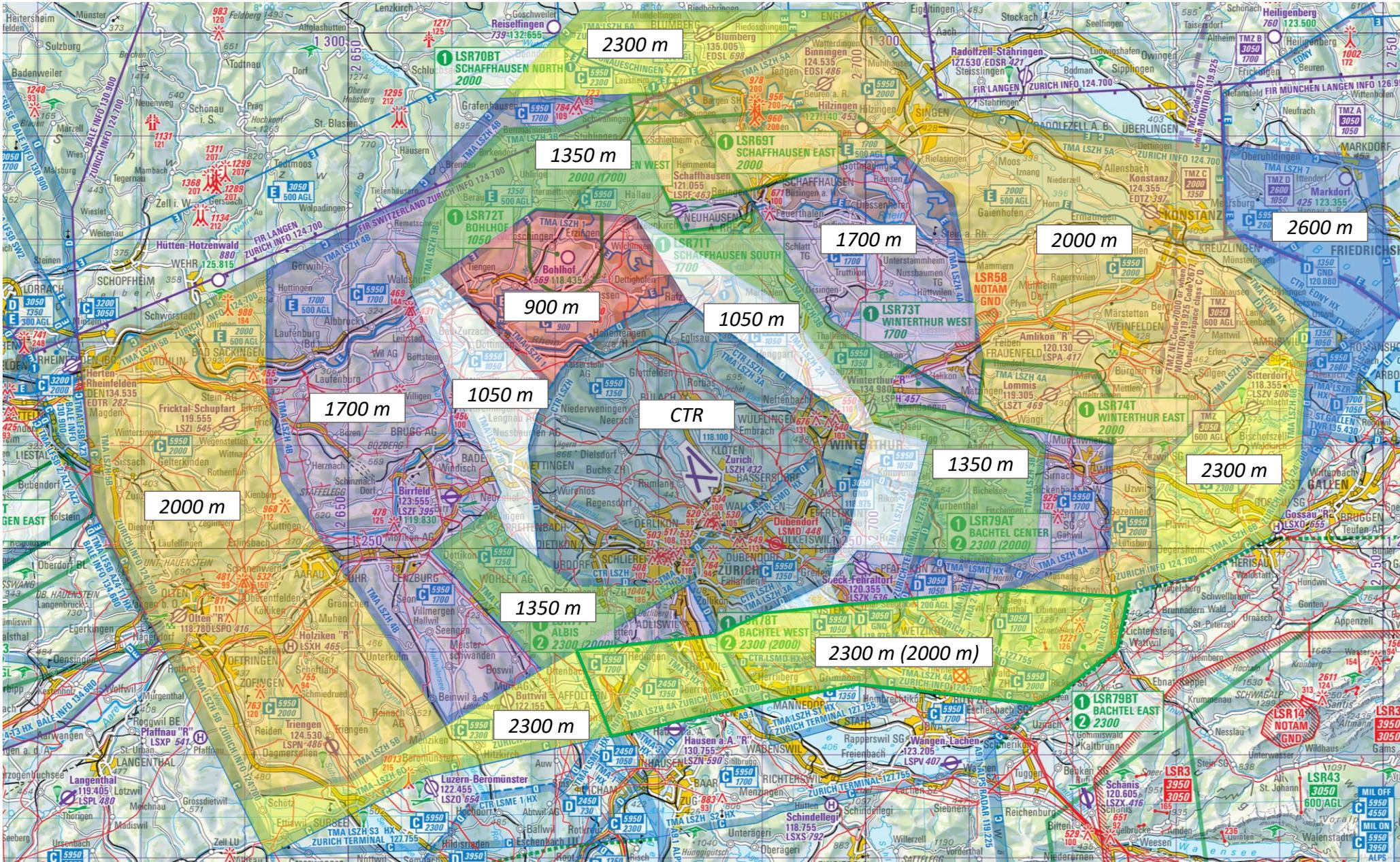
Applicability  
Normal weekdays  
(Mil ON hours)

Chartered HX  
LSZH OFF  
LSMD ON  
LSME ON

HX Status  
LSMD 127.755  
LSZH 129.005  
LSME 134.130



# CTR & TMA Zurich: LSR for Gliders



Applicability  
 Activation upon request by local airfield or pilot

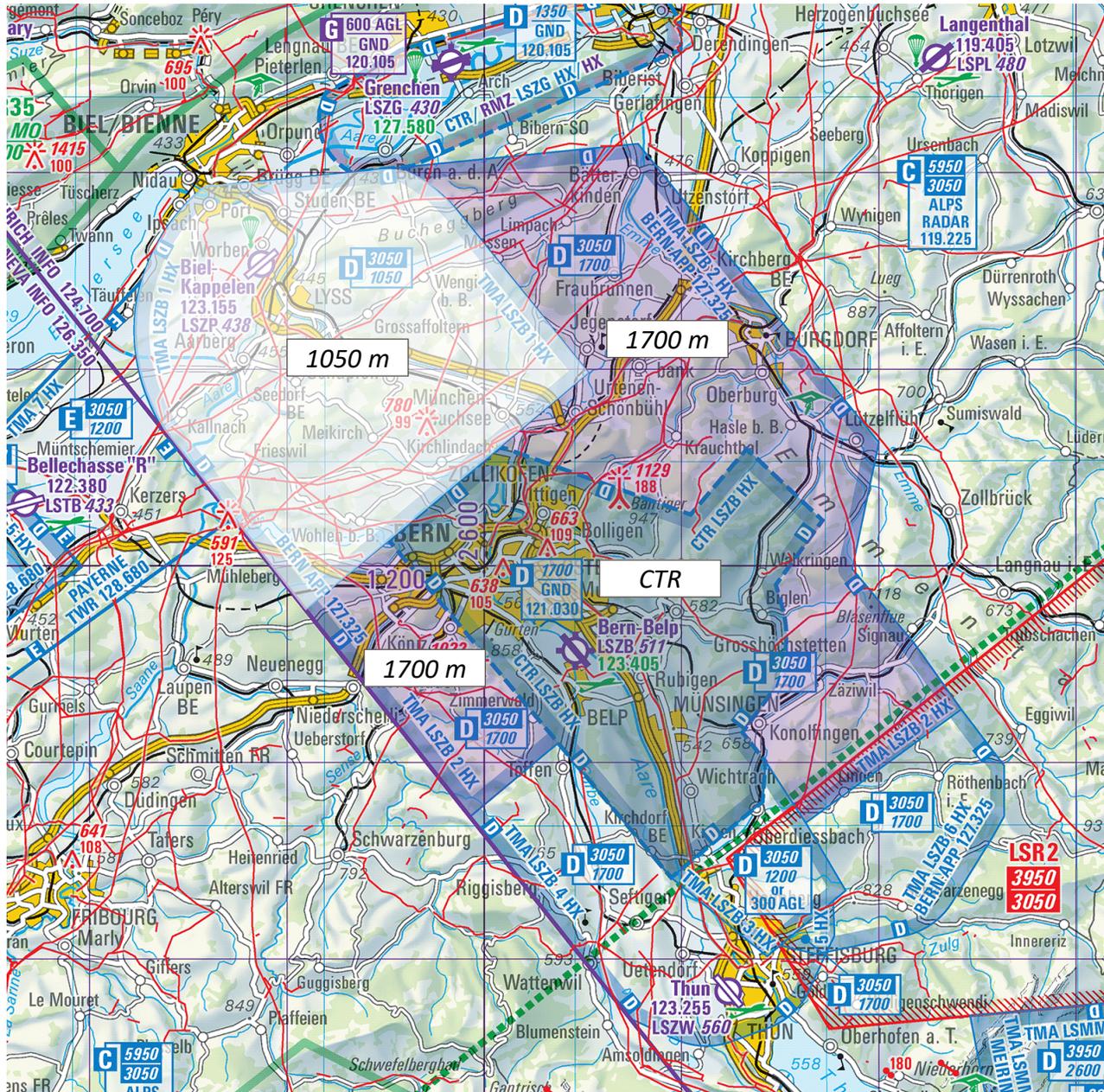
Charted HX  
 LSZH OFF  
 LSMD OFF  
 LSME OFF

HX Status  
 LSMD 127.755  
 LSZH 129.005  
 LSME 134.130  
 GLD Info 120.880

# CTR & TMA Bern

## *Modus Operandi:*

- IFR approaches either from the East, West or North
  - Joint activation of easterly and westerly TMAs only for exceptional reasons
  - Northern TMA is always active (protecting a holding)
- Status broadcast on 125.130 (ATIS)
- Activation within 30 min
  - Monitor 121.025 (CTR) or 127.325 (TMA) or check ATIS every 15 min
- Special ruling (e.g., East only) possible for competitions



# CTR & TMA Bern: HX North ON

## Applicability

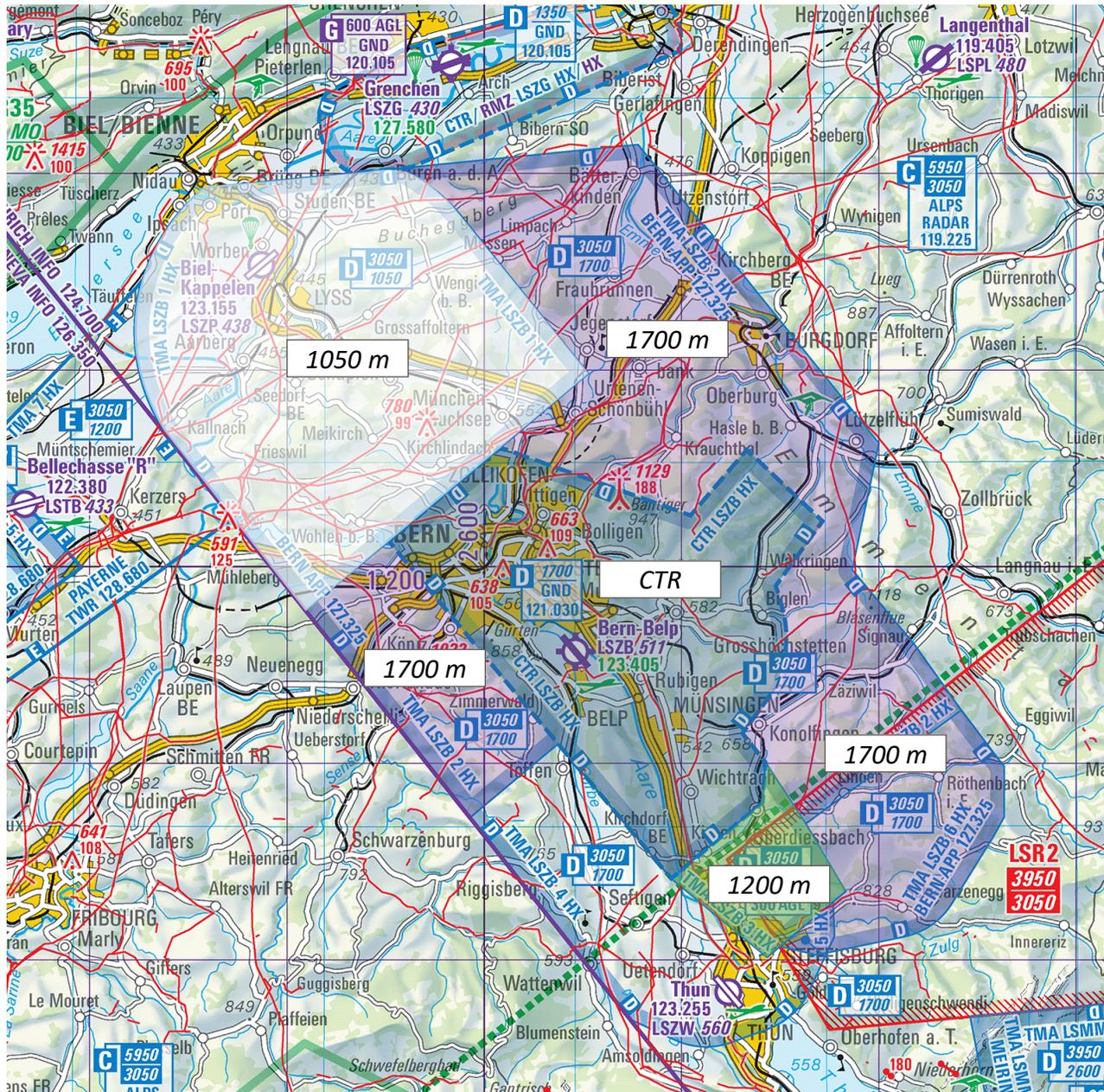
Wind allowing approaches to runway 14.

## Charted HX

North	TMA 1	ON
South	TMA 3/5	OFF
West	TMA 4	OFF
East	TMA 6	OFF

## HX Status

ATIS	125.130	Check every 15 min
Monitor	121.025	
Monitor	127.325	



# CTR & TMA Bern: HX East ON

## Applicability

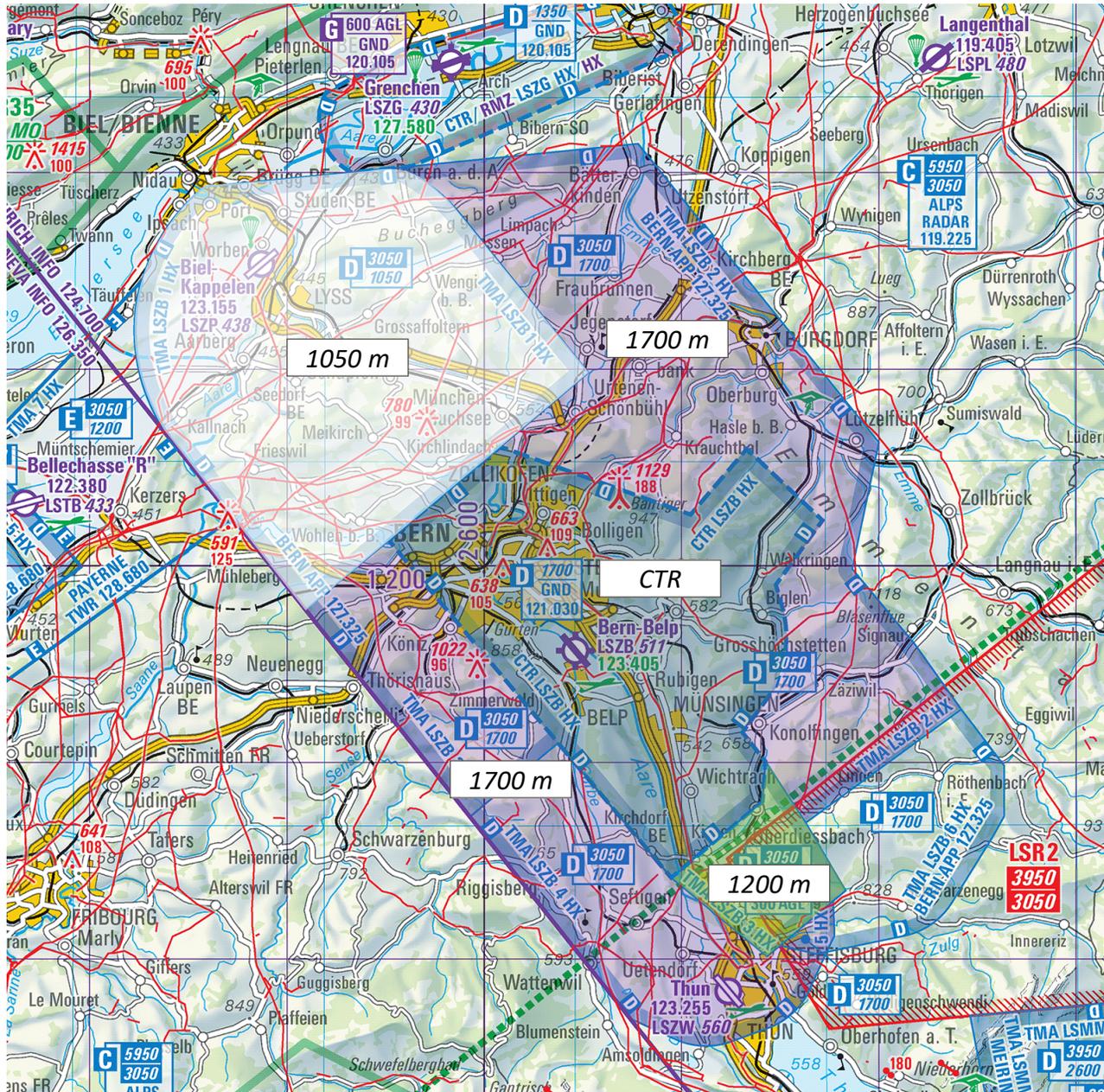
Standard configuration for approaches to runway 32.

## Charted HX

North	TMA 1	ON
South	TMA 3/5	ON
West	TMA 4	OFF
East	TMA 6	ON

## HX Status

ATIS	125.130	Check every 15 min
Monitor	121.025	
Monitor	127.325	



# CTR & TMA Bern: HX West ON

## Applicability

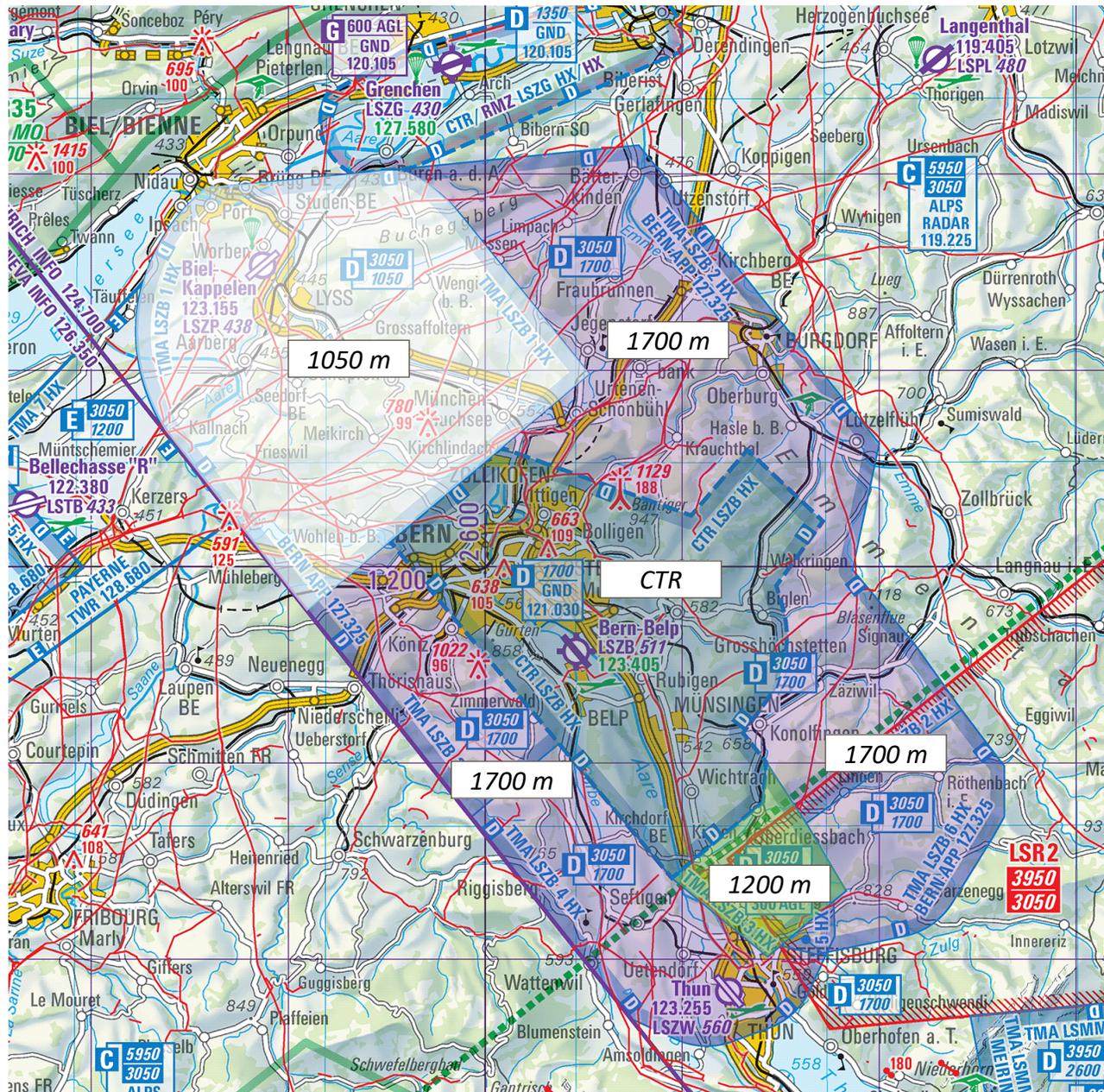
Non-standard configuration for approaches to runway 32.

## Charted HX

North	TMA 1	ON
South	TMA 3/5	ON
West	TMA 4	ON
East	TMA 6	OFF

## HX Status

ATIS	125.130	Check every 15 min
Monitor	121.025	
Monitor	127.325	



# CTR & TMA Bern: All HX ON

## Applicability

Exceptional circumstances, e.g. unusually bad weather.

## Charted HX

North	TMA 1	ON
South	TMA 3/5	ON
West	TMA 4	ON
East	TMA 6	ON

## HX Status

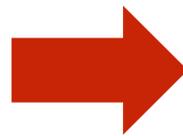
ATIS	125.130	Check every 15 min
Monitor	121.025	
Monitor	127.325	



# Tango Sectors Bâle

- Status HX, frequency 134.680
  - Maintain listening watch

*Bâle TMA Tango sectors not active. Activation announced on frequency 134.680 MHz – Monitoring mandatory.*



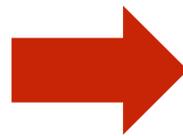
- Activation by ATC Bâle
  - Approaches from the South

*Activation of Bâle TMA  
Tango sectors at 0930  
UTC. Contact Bâle Info on  
130.9 MHz for transit  
clearance in D airspace or  
vacate the airspace.*

# Tango Sectors Bâle

- Call Bâle INFO on 130.9
  - Standard radio call for TMA

*Activation of Bâle TMA  
Tango sectors at 0930  
UTC. Contact Bâle Info on  
130.9 MHz for transit  
clearance in D airspace or  
vacate the airspace.*



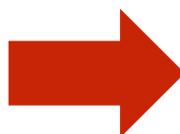
- ATC clearance
- Transponder code (squawk)

*Bâle TMA Tango sectors  
active. Clearance and  
radio contact mandatory  
on frequency 130.9 MHz  
for transit in D airspace.*

# Tango Sectors Bâle

- Status HX, frequency 134.680
  - Maintain listening watch

*Bâle TMA Tango sectors active. Clearance and radio contact mandatory on frequency 130.9 MHz for transit in D airspace.*



- Deactivation by ATC Bâle

*Bâle TMA Tango sectors not active. Activation announced on frequency 134.680 MHz – Monitoring mandatory.*

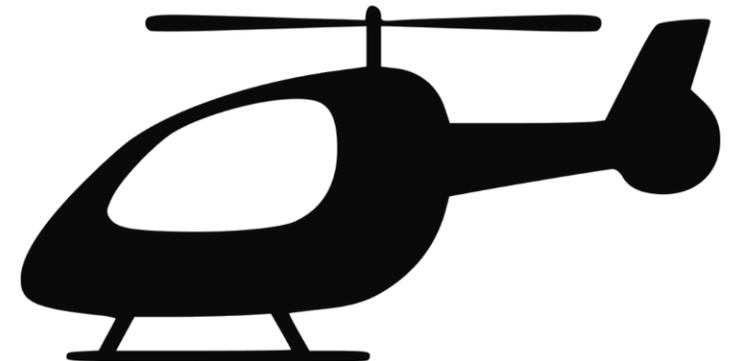
# LFN PinS Chart

*LFN*: Low Flight Network

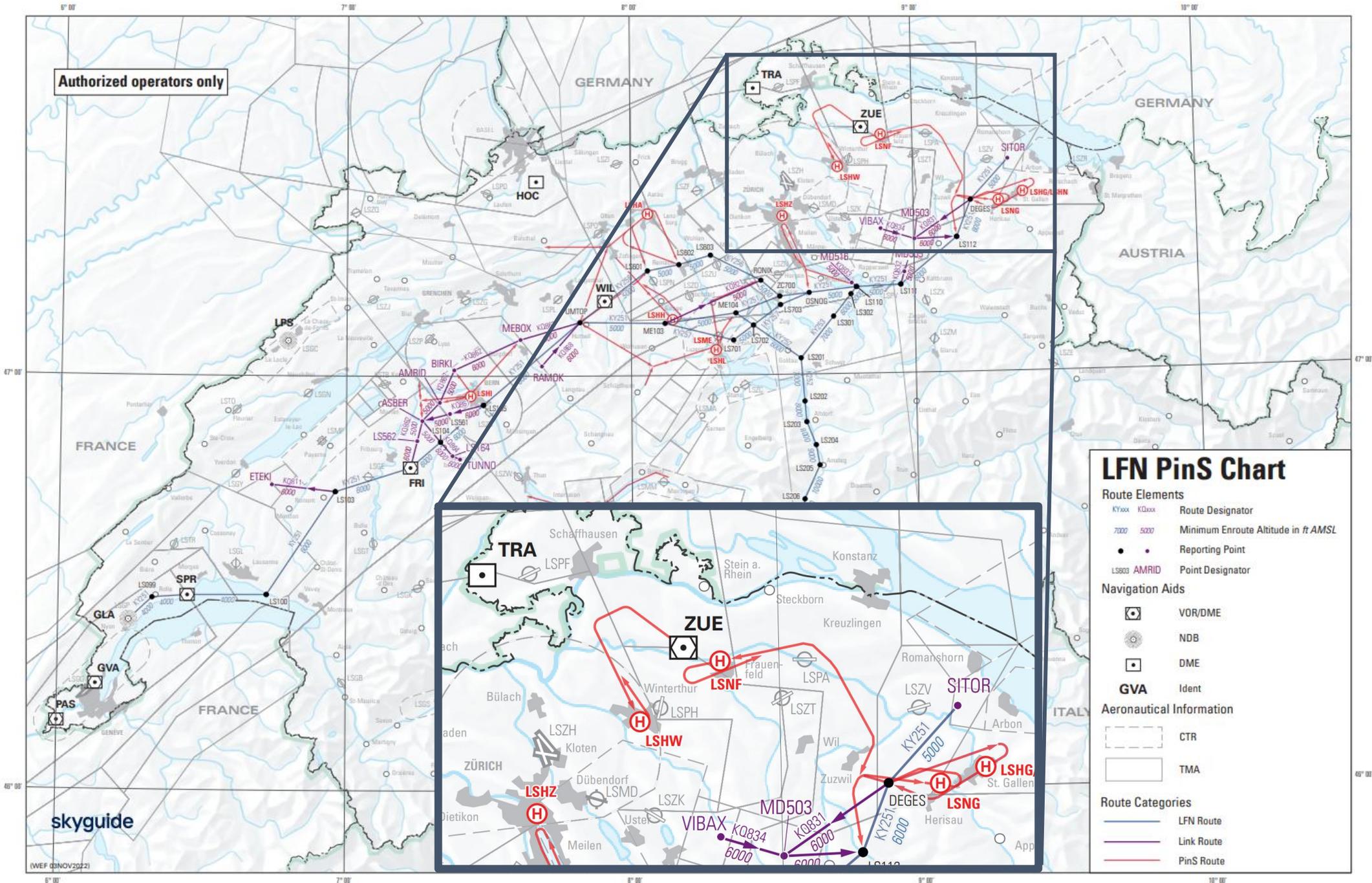
*PinS*: Point in Space

- Low-level IFR routes for helicopters in airspace G and E
- Transportation of patients in case of bad weather
- Usage by REGA and Swiss Air Force

→ See and avoid



Authorized operators only



### LFN PinS Chart

- Route Elements**
  - KYxxx KQxxx Route Designator
  - 7000 5000 Minimum Enroute Altitude in ft AMSL
  - ● Reporting Point
  - LS803 AMRID Point Designator
- Navigation Aids**
  - VOR/DME
  - NDB
  - DME
  - GVA Ident
- Aeronautical Information**
  - CTR
  - TMA
- Route Categories**
  - LFN Route
  - Link Route
  - PinS Route

<https://www.skybriefing.com/de/lfn-pins-chart-ch>

# Electronic Conspicuity

*There currently is no mandate for non-motorized aircraft to carry and operate an SSR transponder in Switzerland.  
FOCA is drafting plans to change this as of 2028.*

As of today - obligation to operate:

- Aircraft is transponder equipped
  - Sufficient supply of electrical power
- Turn on your transponder!

In practice, a transponder is helpful to obtain an ATC clearance for controlled airspace.



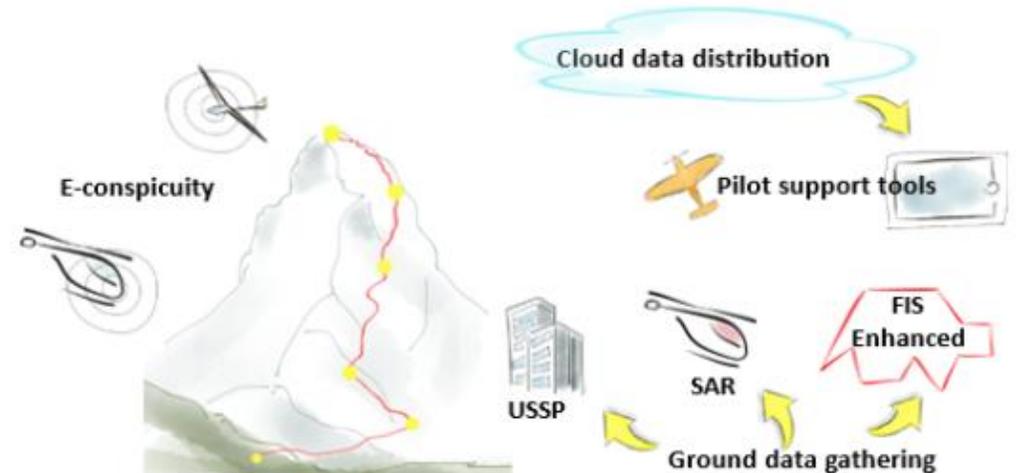
# FASST-CH

## *Future Aviation Surveillance Services and Technologies in Switzerland*

- Government initiative to foster innovative solutions for e-conspicuity
- Co-existence of certified and non-certified equipment
- ADS-L, ADS-B, SSR Mode C & S, FLARM, FANET etc.
- Usage of ground-based infrastructure for interoperability

→ Mandatory e-conspicuity by 2028, likely requiring SSR Mode S for gliders.

More information: [FOCA](#)



# Airspace Infringement

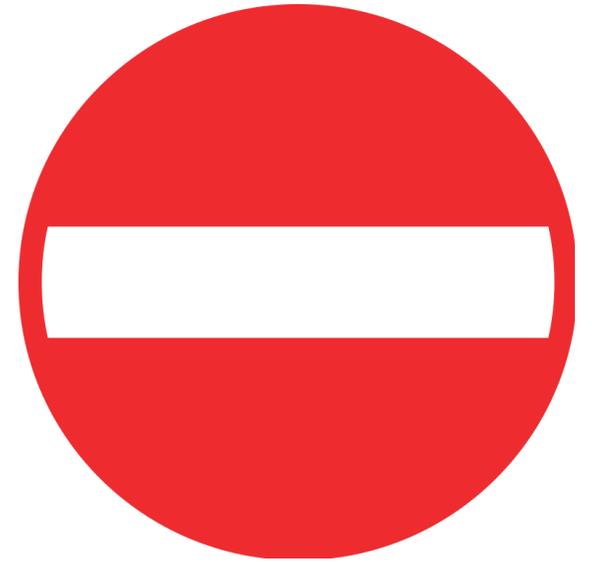
→ **Prohibited!**

*Possible consequences:*

- Fine up to 30'000 Fr.
- Withdrawal of pilot's license
- Charging of costs of investigation and compensation

*Reporting obligation:*

- Just culture
- Impunity for «honest mistake»
  - Intentional acts will always be punished



# Respect Airspace Boundaries

- I know how to operate my navigation instruments.
- I understand the relevant airspace structure.
- I ask for ATC clearance in a timely manner.
- I prepare my flight thoroughly.
- I comply with altitude limits.
- I fly with up-to-date charts.

→ *If necessary*: I report my mistakes.

