



SEGELFLUGVERBAND DER SCHWEIZ

FEDERATION SUISSE DE VOL A VOILE

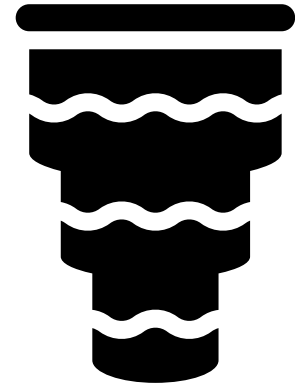
FEDERAZIONE SVIZZERA DI VOLO A VELA



Airspace Refresher 2025

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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 20.02.2025
- Standardized European Rules of the Air (SERA) as of December 2024
- Verfügung betreffend Änderung der Luftraumstruktur der Schweiz 2025 vom 4. Februar 2025
- Verfügung betreffend Änderung der Luftraumstruktur Zürich und Dübendorf vom 5. März 2025

I am happy to receive any feedback.

Flurin Schwerzmann

Airspace Delegate, Segelflugverband der Schweiz

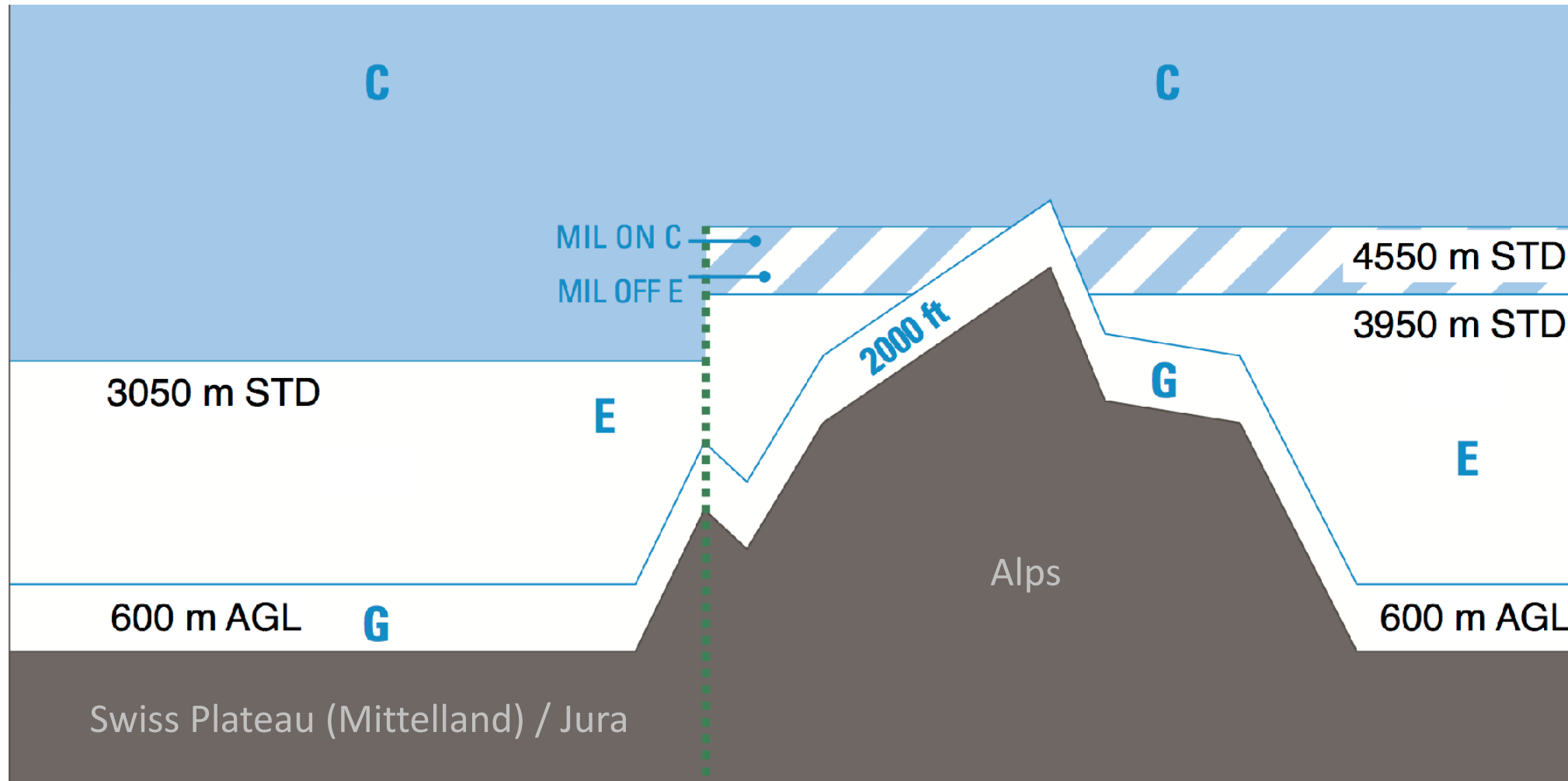
airspace@sfvs-fsvv.ch

Airspace Classification

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

*IFR with FOCA approval

Swiss Air Space Structure



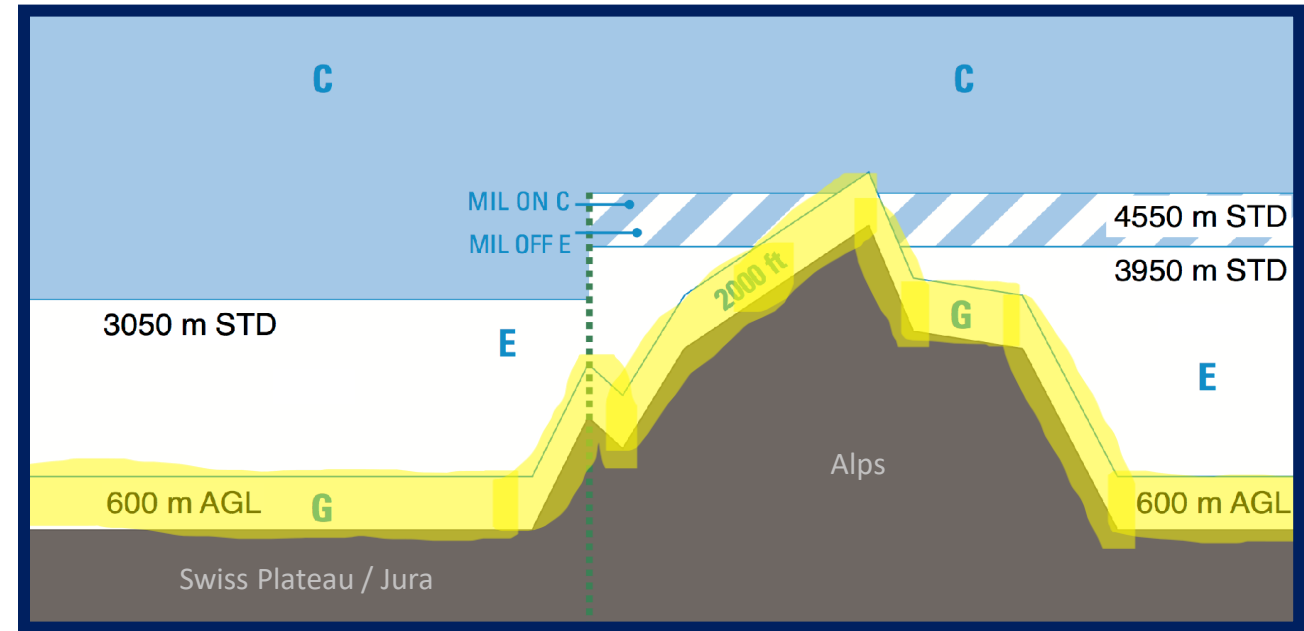


Airspace Golf

Everywhere (except CTR)

GND up to 600m AGL

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



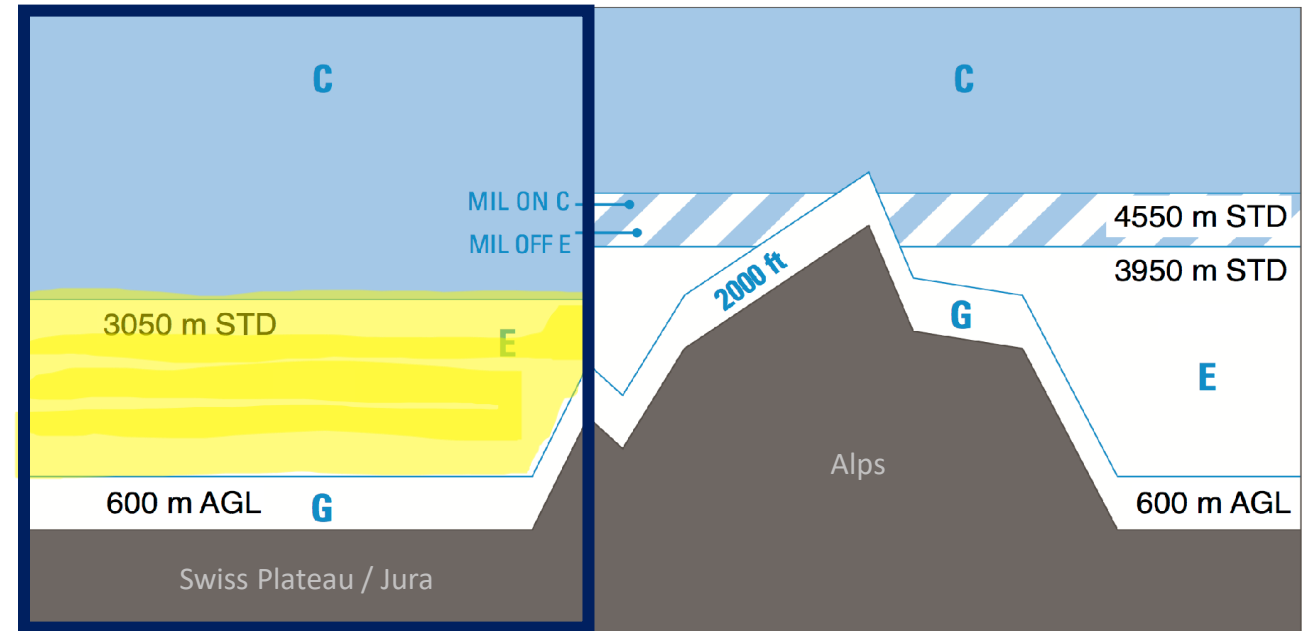


Airspace Echo

Swiss Plateau/Jura

600m AGL up to 3050m STD

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



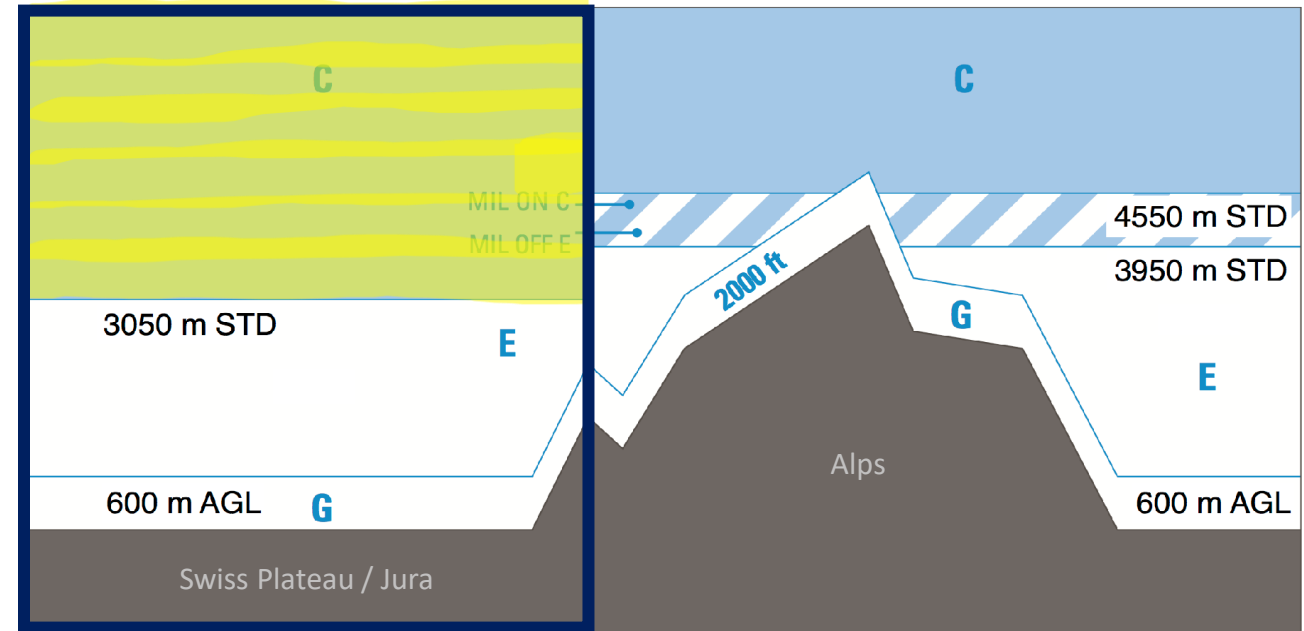


Airspace Charlie

Swiss Plateau/Jura

Above 3050m STD

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





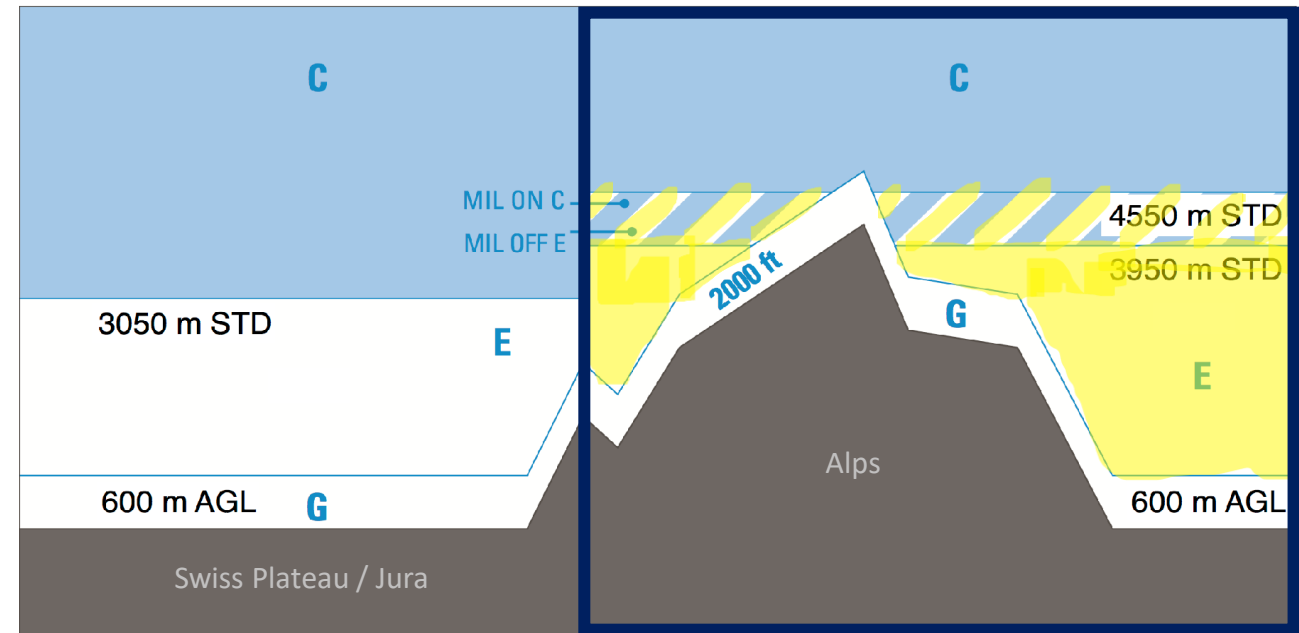
Airspace Echo

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





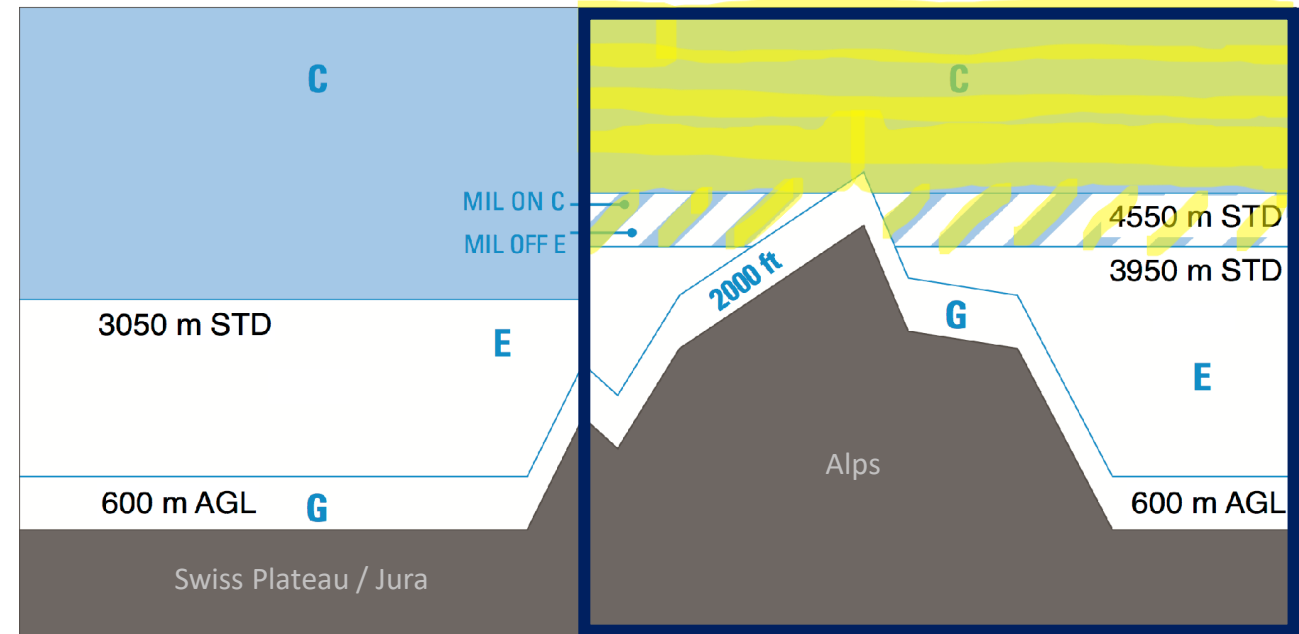
Airspace Charlie

Alps

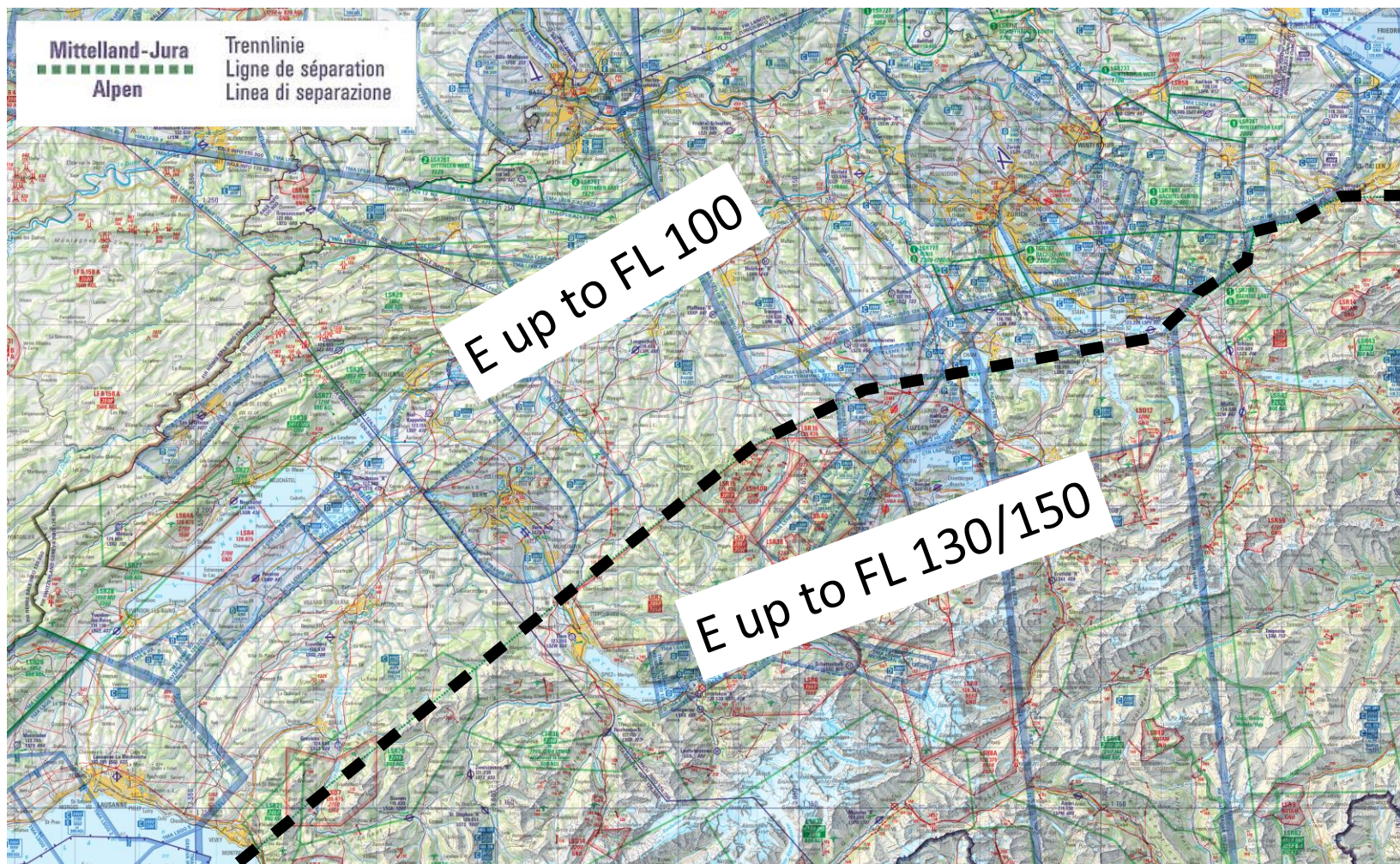
Mil ON – Above 3950m STD

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

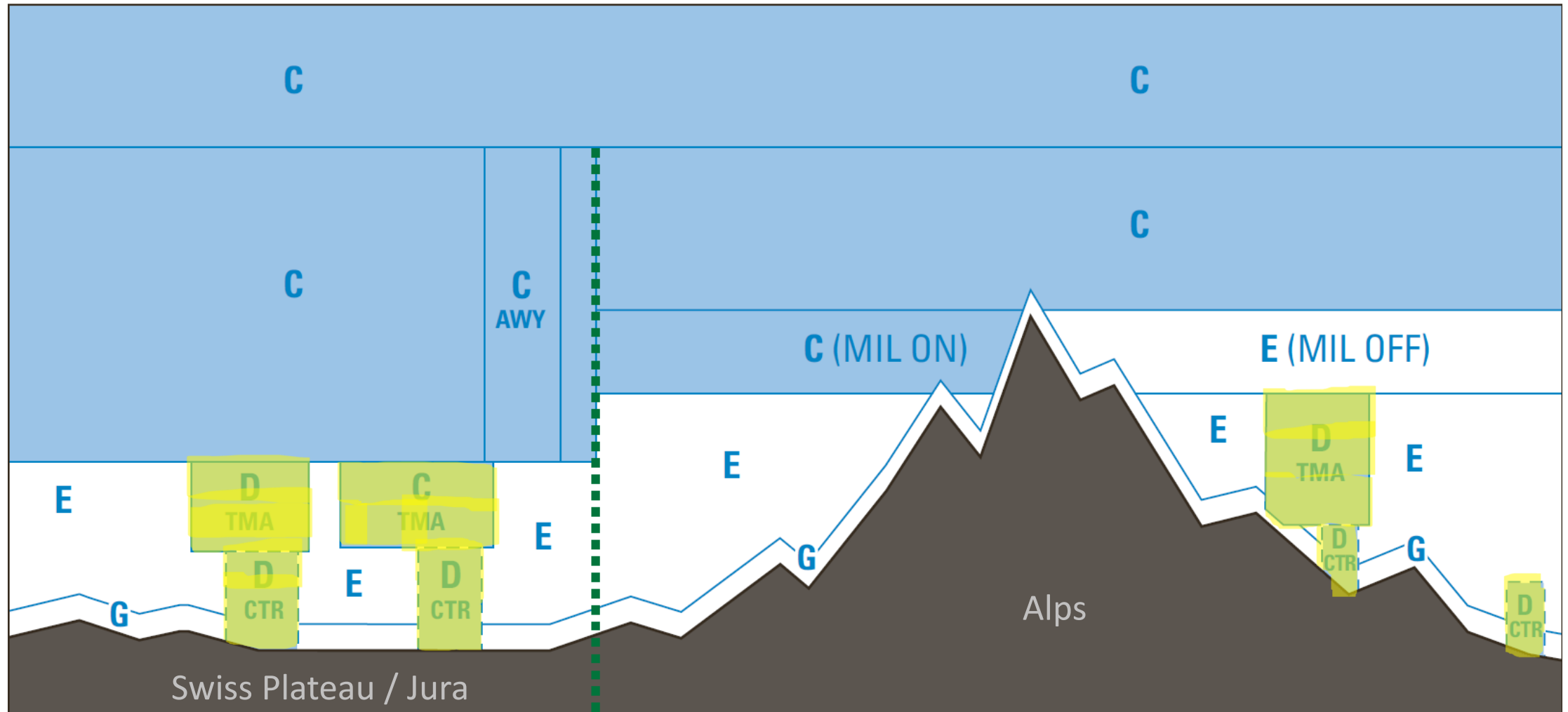
0730LT – 1205LT

1315LT – 1705LT

Mil OFF

Echo up to FL150

Air Space Structure with CTR/TMA





D

CTR & TMA

C

D

Control Zone (CTR)

GND to upper limit

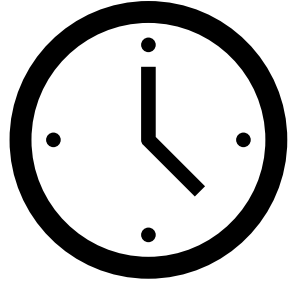
- Controlled
- VFR and IFR
- ATC clearance required
- Large cloud distance minima

Terminal Control Area (TMA)

Lower to upper limit

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

TEMPO vs. HX



TEMPO

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

Alpnach TMA 2 and 4

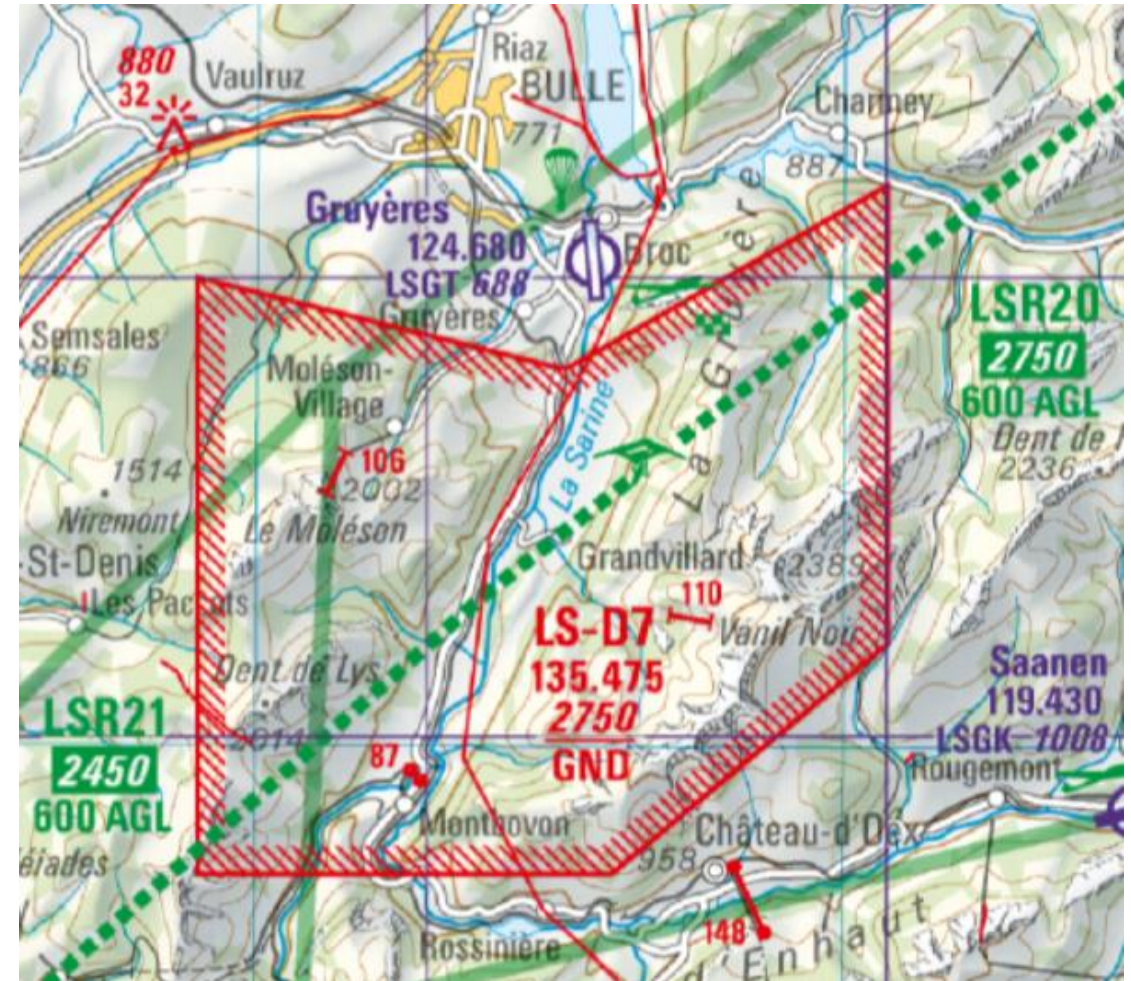
Sion TMA 1, 2 and 3

HX

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

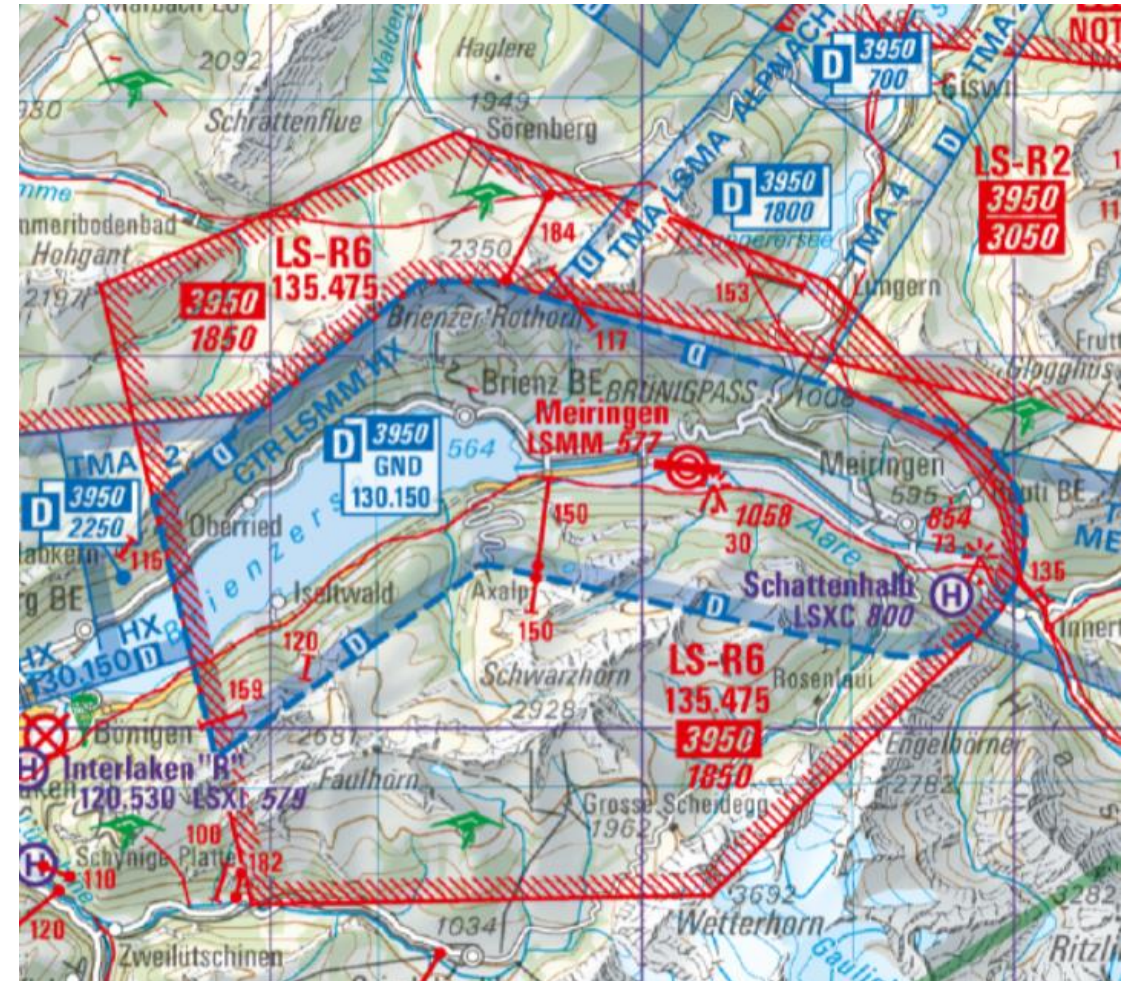
Danger Area

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



Restricted Area

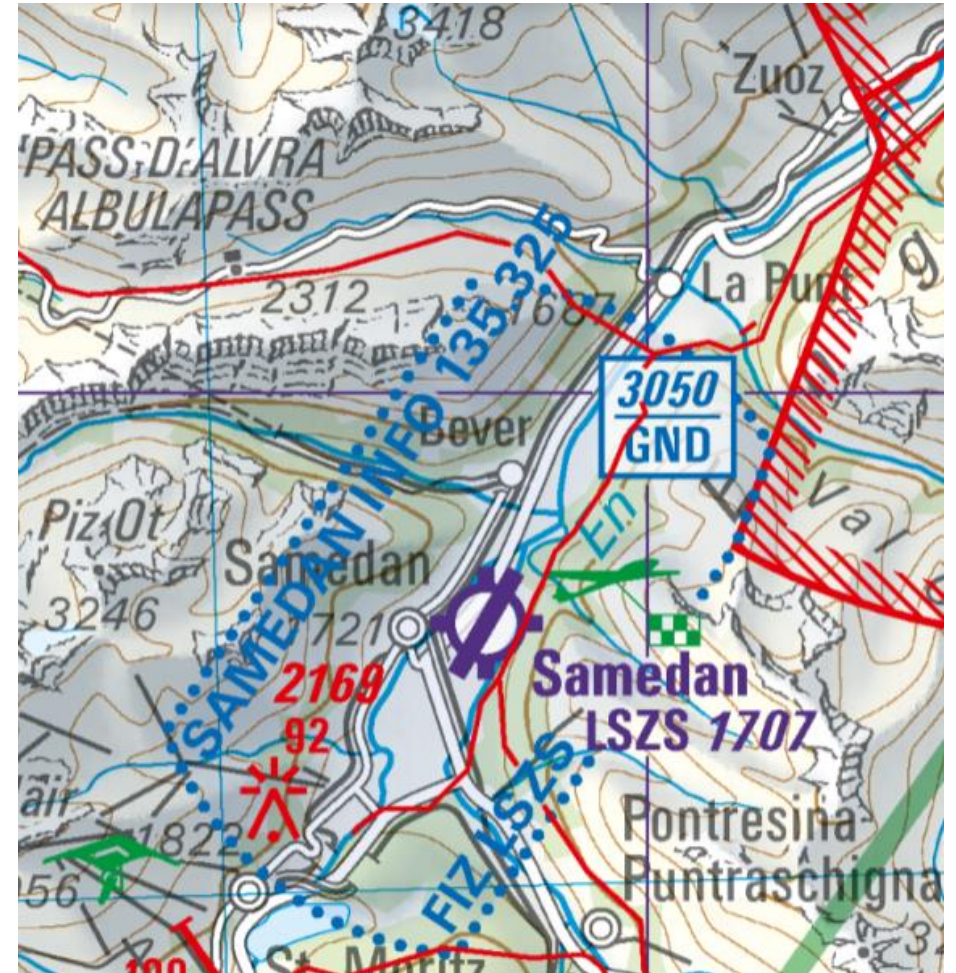
- Entry prohibited (when active)
- No specific working hours
- Activation via DABS/NOTAM
- Assure deactivation before entry
 - Designated frequency
 - INFORMATION



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



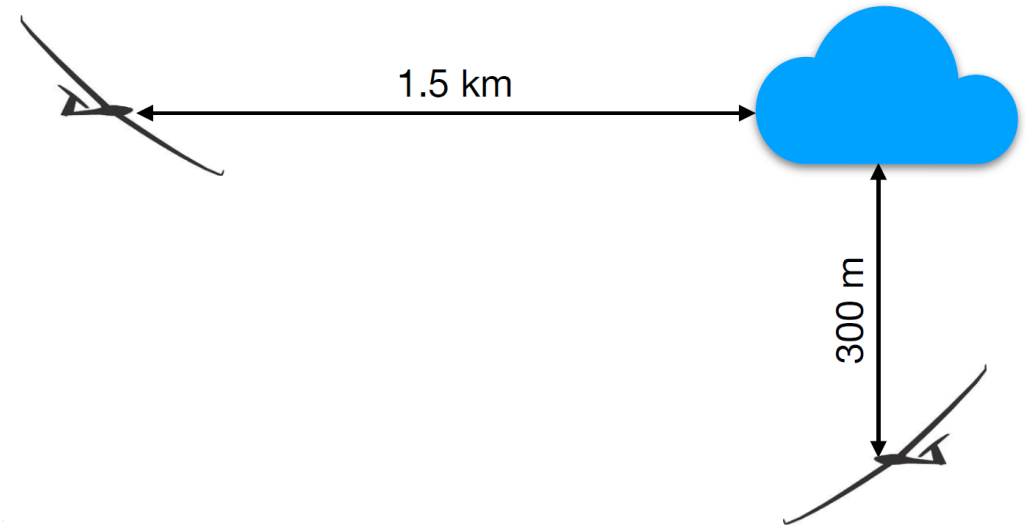
Large Cloud Distance Minima

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)



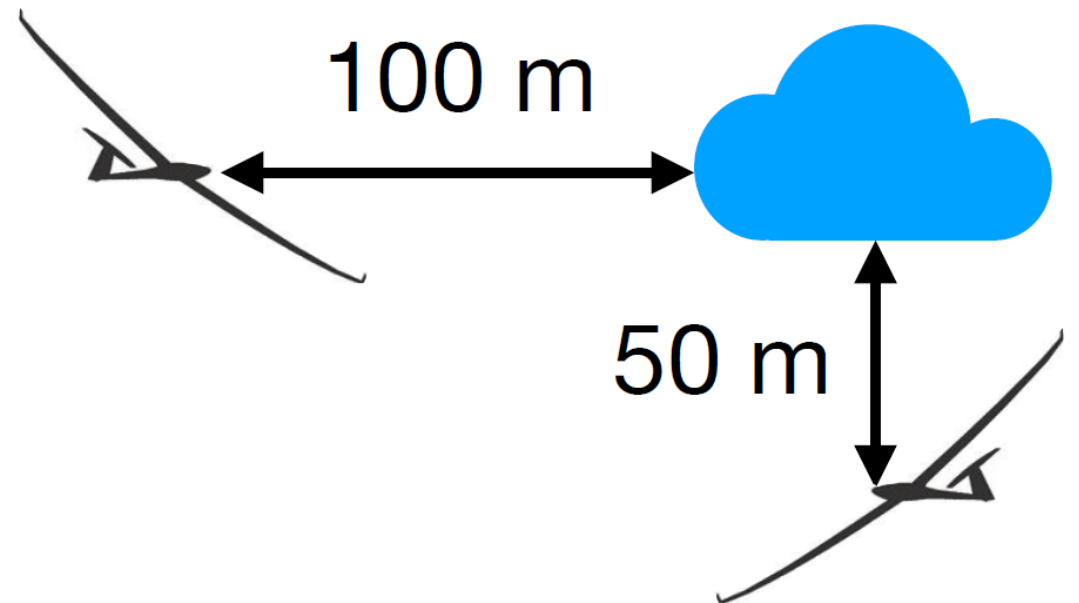
Reduced Cloud Distance Minima

Airspace class: Echo

- LSR for gliders outside TMA

Visibility:

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



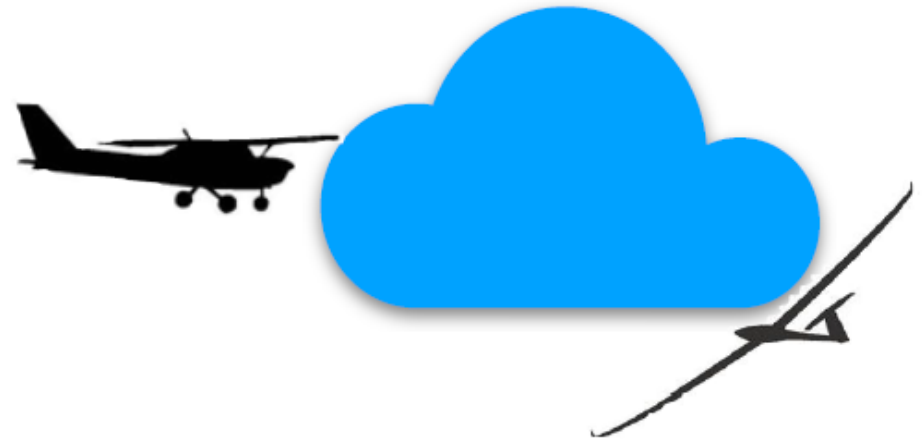
No Cloud Distance Minima

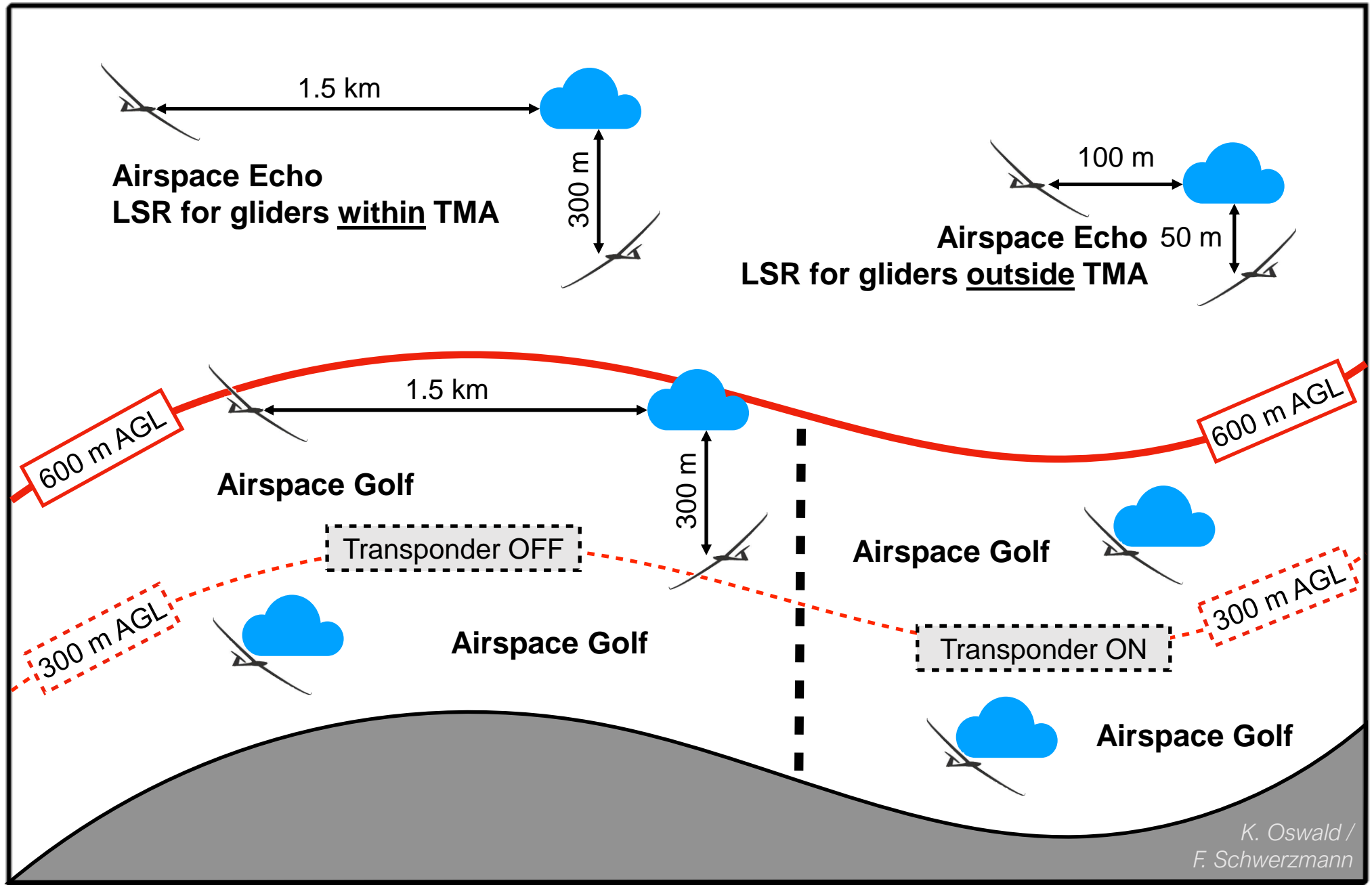
Airspace class: Golf

- 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

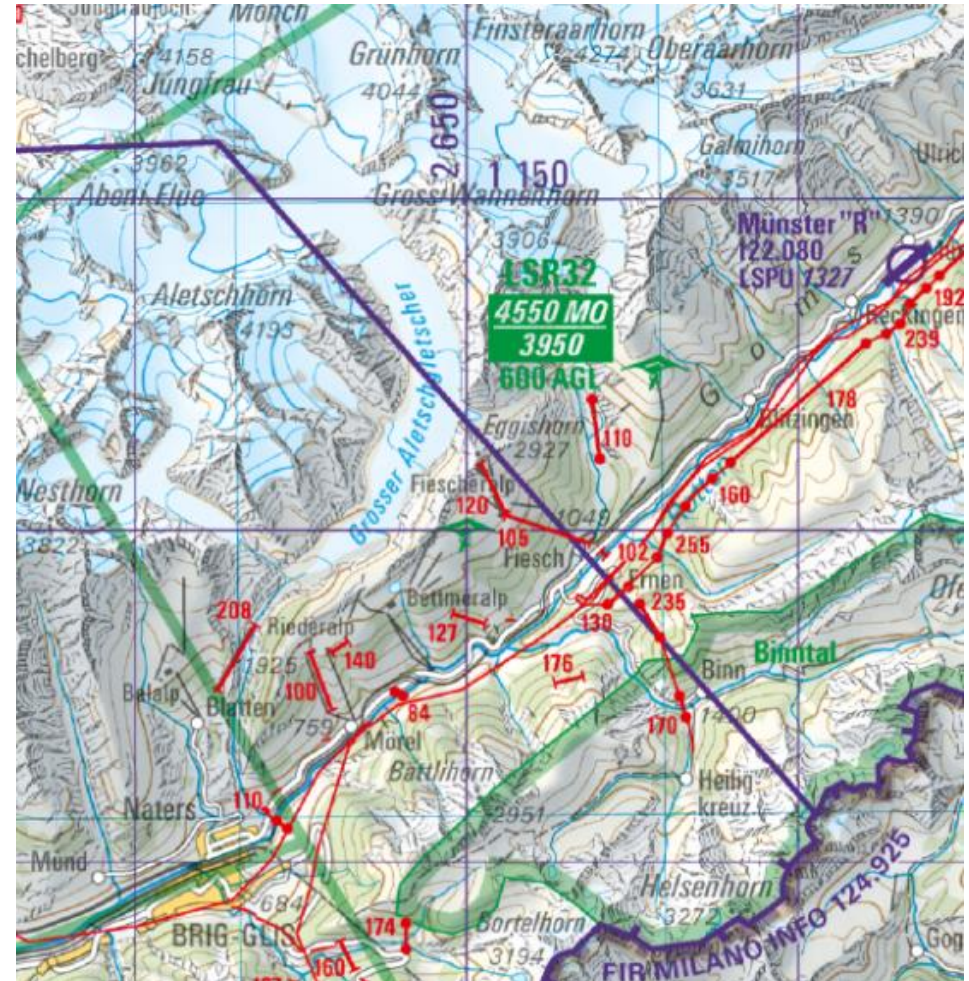




LSR for Gliders Outside TMA

Outside TMA

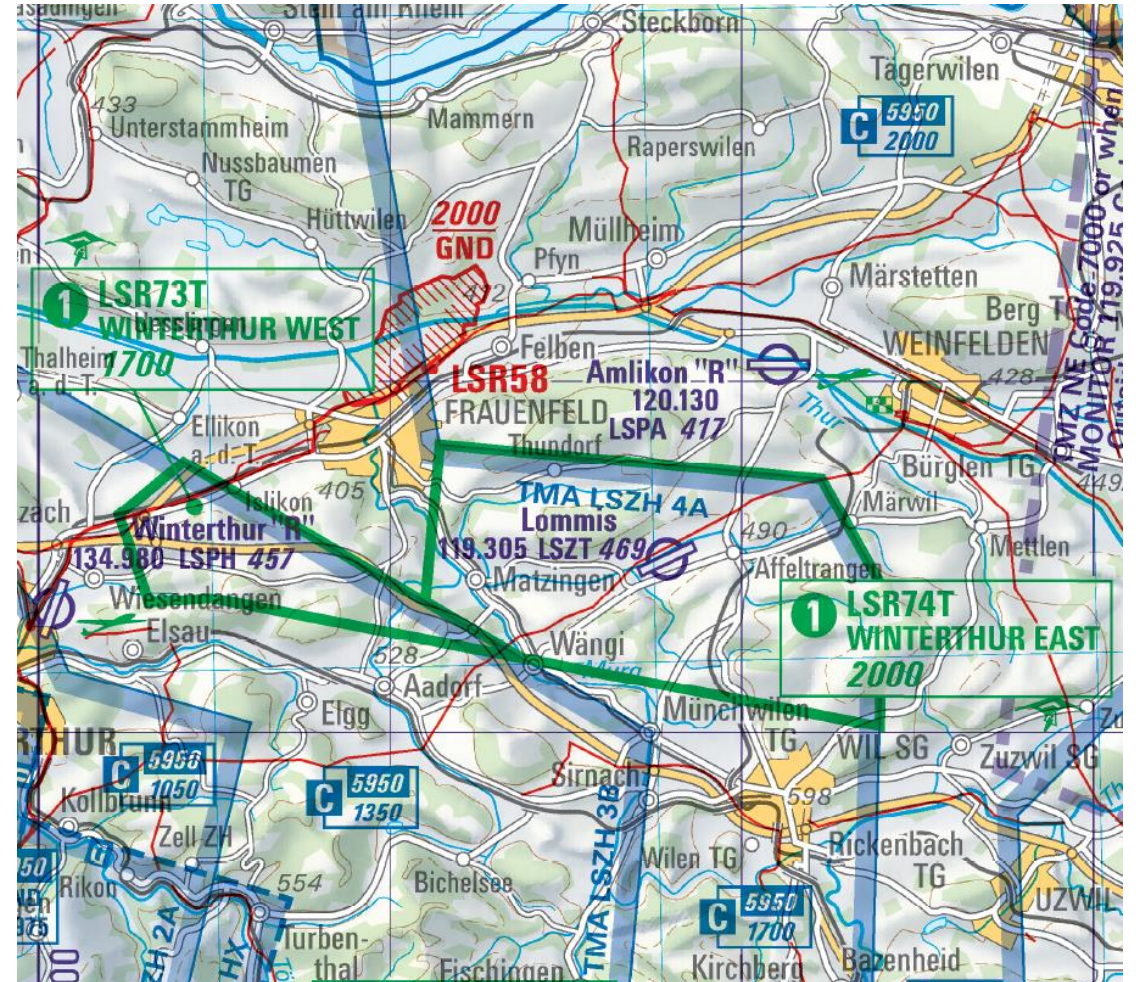
- Reduced cloud distance minima
 - 100 m lateral, 50 m vertical
- Active from 1. March until 31. October
 - SR to SS
 - Mil OFF without approval
 - Mil ON only with specific approval



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

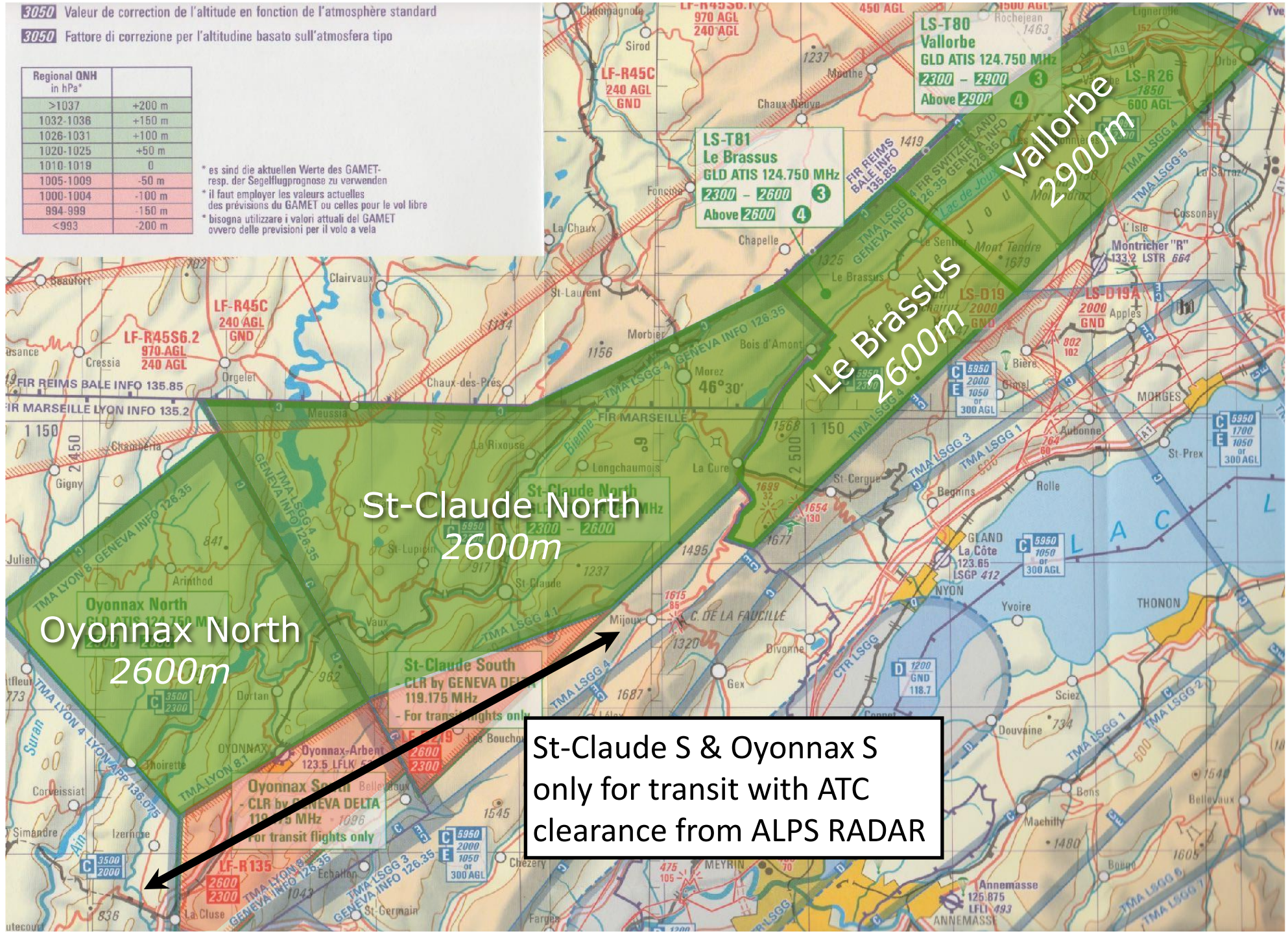


TMA Genève with LSR for Gliders

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



Oyonnax North
2600m

St-Claude North
2600m

Le Brassus
2600m

Vallorbe
2900m

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)	2900 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 ③
	above 2900	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If not active: Clearance by ALPS RADAR 119.175 MHz required. ④ If sector activated: Continuous listening watch on FREQ 119.175 MHz
LSR81T LE BRASSUS a)	2600 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 ③
	above 2600	+41 (0) 22 747 13 91 GLD ATIS 124.755 MHz	If not active: Clearance by ALPS RADAR 119.175 MHz required. ④ If sector activated: Continuous listening watch on FREQ 119.175 MHz
TMA GENEVE 4.1 ST-CLAUDE NORTH b)	2600 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	2600 2300	c)	Clearance by ALPS RADAR 119.175 MHz required. For transit flights only
TMA LYON 6.1 Oyonnax North b)	2600 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	2600 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

New CTR & TMA Zurich

valid as of
20 MAR 2025

Advantages

- + Smallest possible CTR & TMA
- + Retention of LSR for gliders
- + Less separate sectors
- + Reduction of low TMAs

Deteriorations

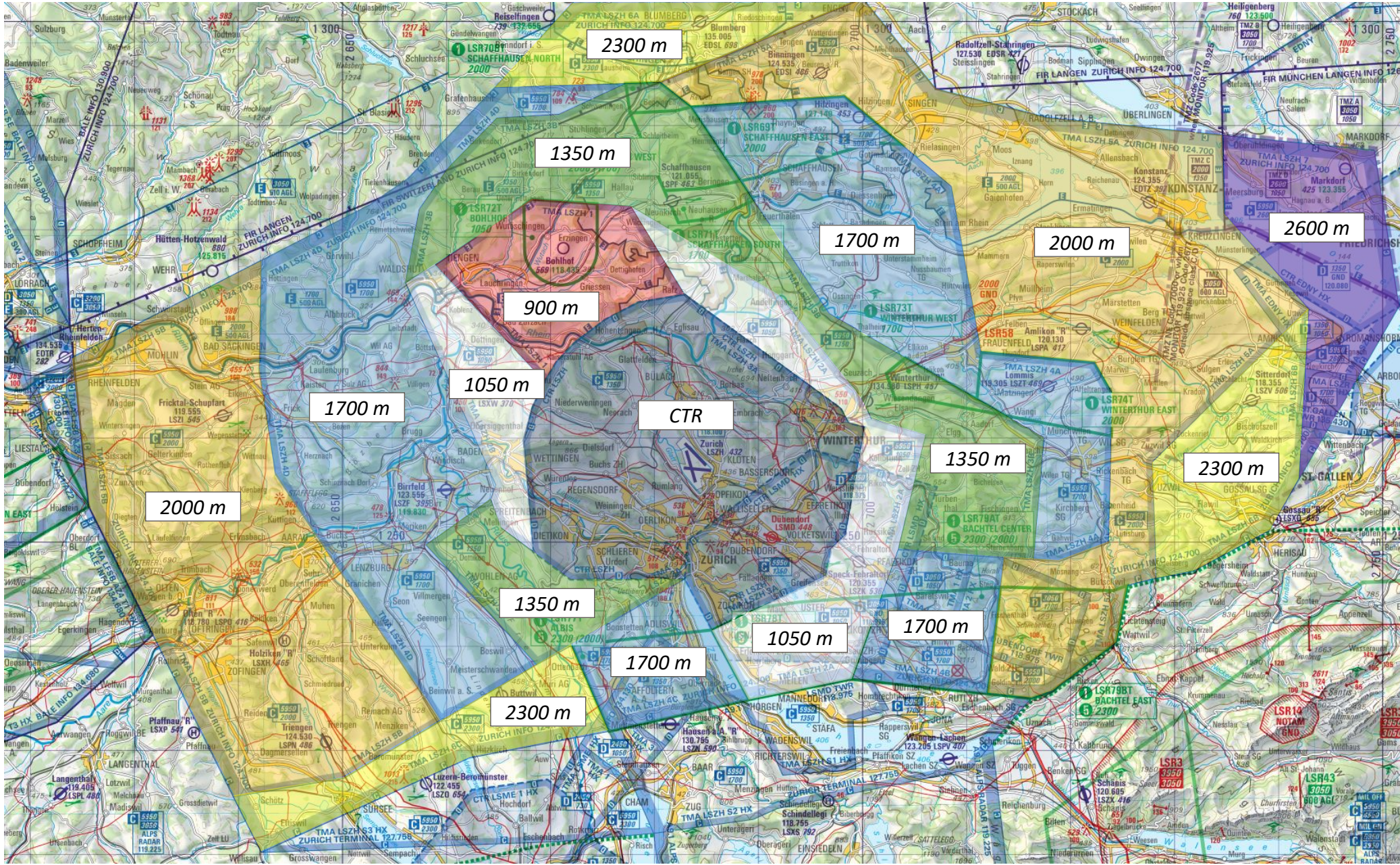
- Locally marginal extension of TMAs
- Complex overlap with Mil HX
- Lots of zigzag lines
- H24 TMA at 1050m south of CTR

This airspace structure has been developed in a small expert team (including SFVS). It constitutes an acceptable compromise. Variable buffers to instrument flight procedures have been calculated using innovative collision risk modelling. Many local issues have been solved during productive discussions.

SFVS appreciates this collaborative effort and fully supports the new CTR & TMA Zurich.



New CTR & TMA Zurich: All HX OFF

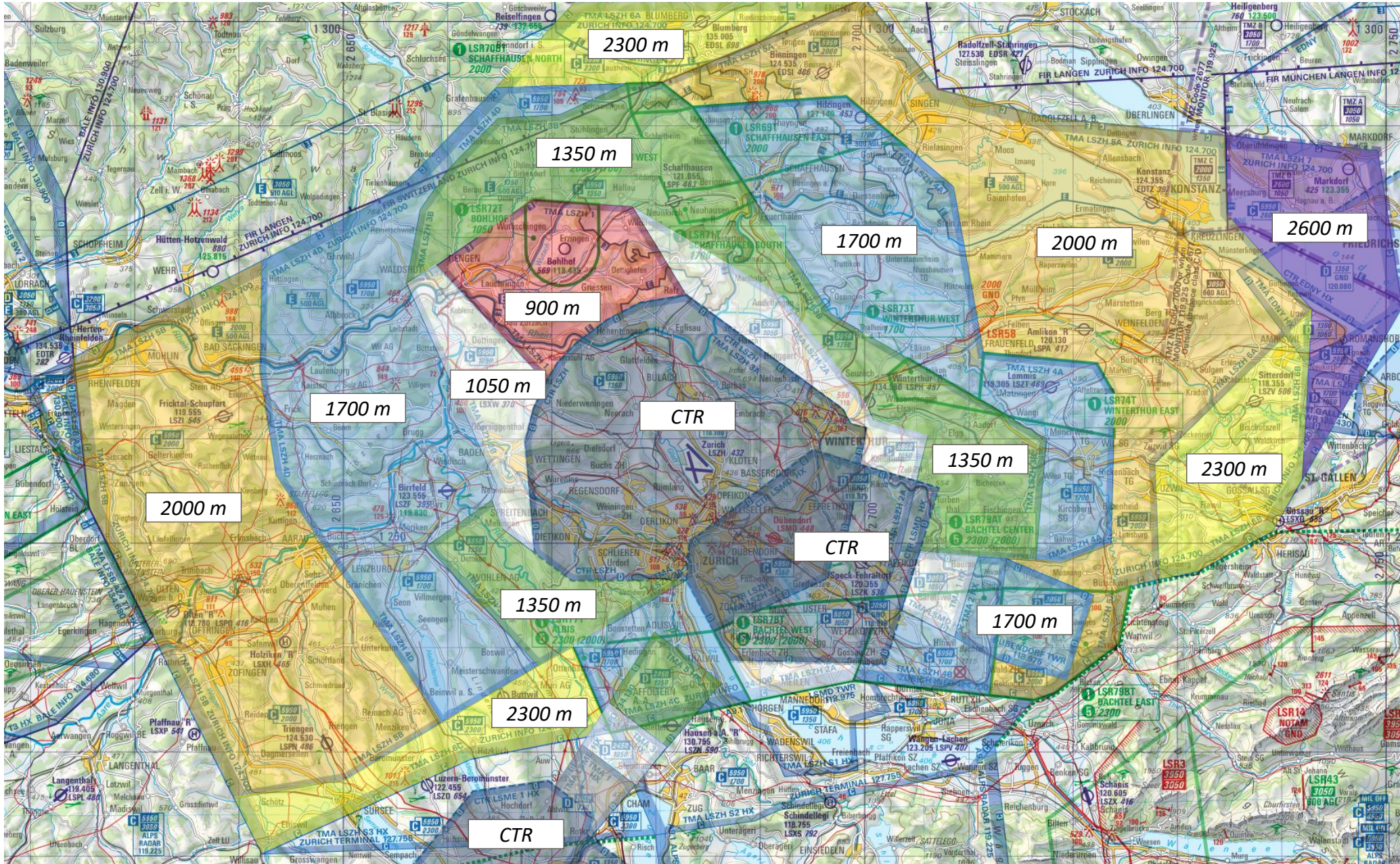


Applicability
Normal weekend

Charted HX
LSZH OFF
LSMD OFF
LSME OFF

HX Status
LSMD 118.975
LSZH 129.005
LSME 134.130

New CTR & TMA Zurich: Mil HX ON



Applicability
Normal weekdays
(Mil ON hours)

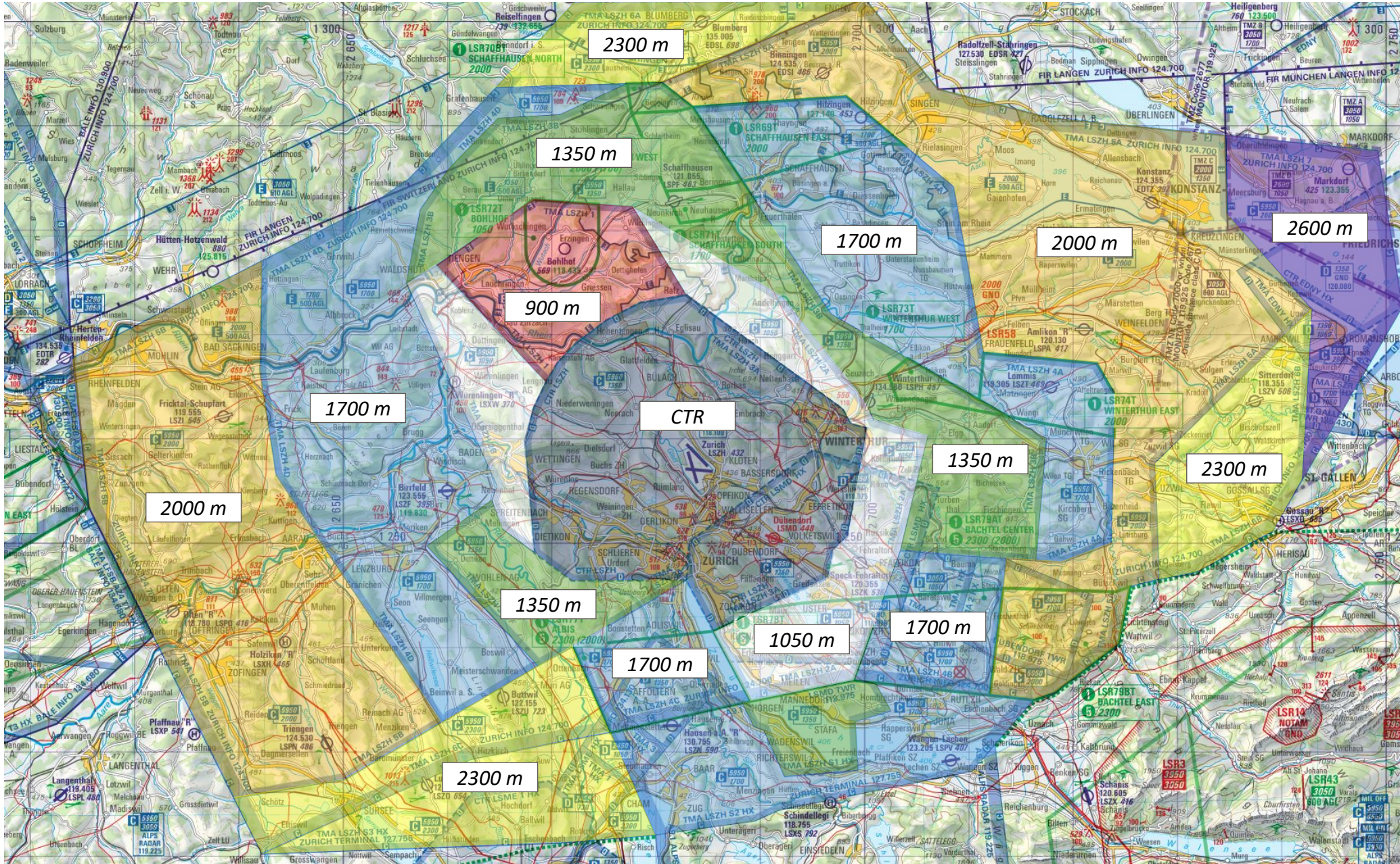
Chartered HX

LSZH	OFF
LSMD	ON
LSME	ON

HX Status

LSMD	118.975
LSZH	129.005
LSME	134.130

New CTR & TMA Zurich: Zurich HX ON

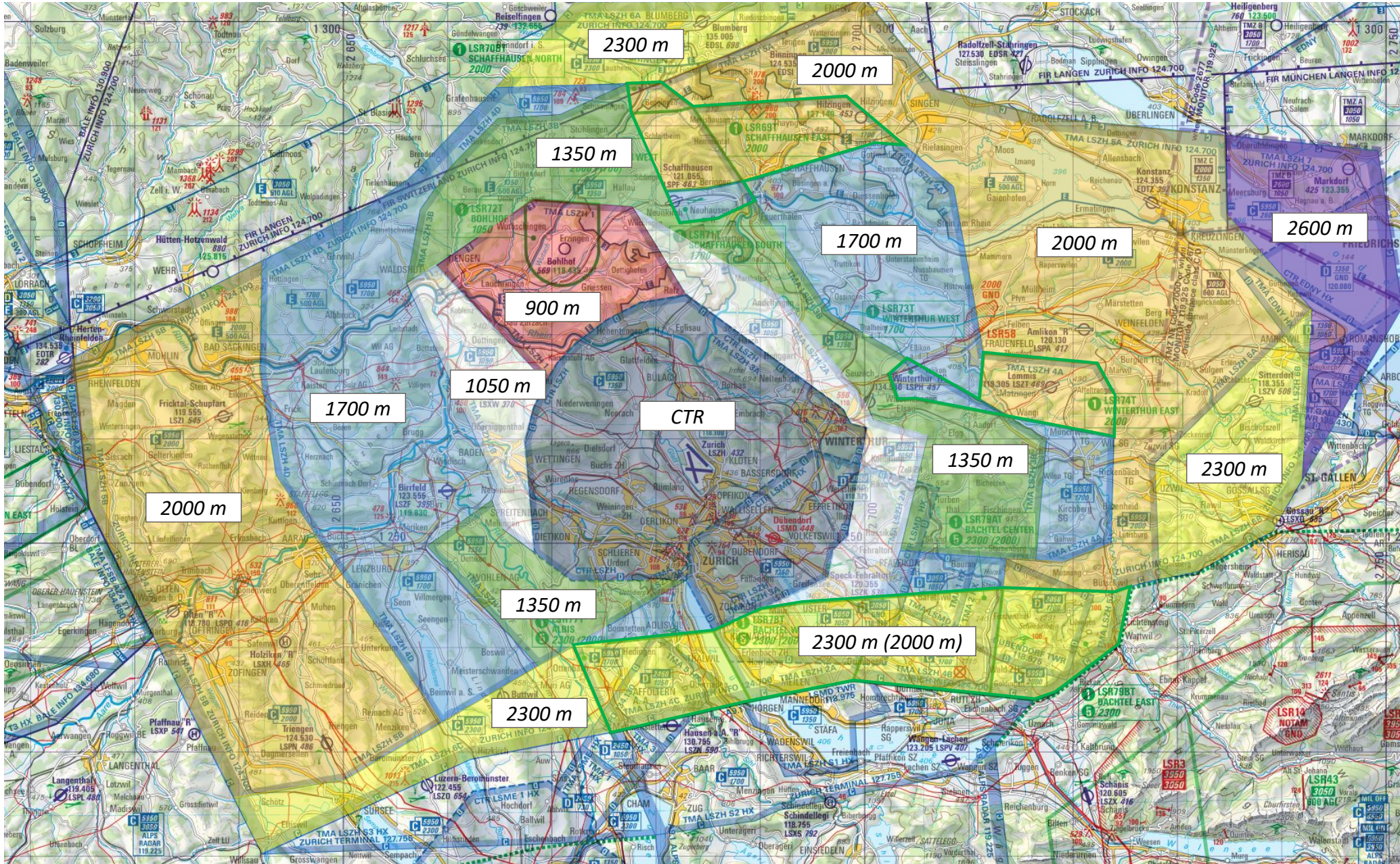


Applicability
Early morning & late evenings

Charted HX
LSZH ON
LSMD OFF
LSME OFF

HX Status
LSMD 118.975
LSZH 129.005
LSME 134.130

New 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 118.975
 LSZH 129.005
 LSME 134.130
 GLD Info 120.880

Electronic Conspicuity

There is no mandate for non-motorized aircraft to carry and operate an SSR transponder in Switzerland.

Obligation to operate:

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

In practice, a transponder is often required 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
- Substitute/deferral for SSR transponder mandate

→ Mandatory **e**-conspicuity by 2028

→ Path towards **i**-conspicuity by 2035

More information: [FOCA](#)

