ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

1. Glider flying

Following types of LS-R for gliders are defined:
- LS-R for gliders located outside TMA;
- LS-R for gliders located within TMA.
- LS-R for gliders located within CTR.

Apart from the localization of these LS-R for gliders, one of the other main difference between these areas for gliders is laying in the associated distance to clouds to be respected.

1.1 LS-R for Gliders outside TMA

A restricted area is an airspace of defined dimensions, above the land areas or territorial waters of a State, within which the FLT of ACFT is restricted in accordance with certain specified conditions.

The restricted areas are tabulated in § 8.1 and depicted on the aeronautical charts. The restrictions which apply to each individual area are specified in the column “Remarks” of the corresponding area.

These LS-R for gliders, as depicted on the GLDC 1:300 000, are permanently active from **MAR 01 to OCT 31 from sunrise until sunset** (exempt are LSR28, LSR30, part of LSR44 and the AMC / Locarno Flight OPS Manageable parts.

Within these restricted areas, gliders have to respect the conditions of use of airspace class E. However, within these types of restricted areas, gliders may fly at vertical distance of at least 50 m below clouds and a horizontal distance of at least 100 m from clouds.
Flights other than glider flights can, according to the rules of airspace E and VFR only, enter these LS-R for gliders. They should note the special rules given to glider flights (glider operations closer to clouds).

1.2 LS-R for gliders within TMA

Areas of defined dimensions, within airspace class C and D. Once activated, the airspace class within these LS-R for gliders changes to E. Airspace users are required to (1) monitor a dedicated frequency or to (2) maintain two-way- radio communication with a designated ATS unit.
The airspace is mainly used by gliders (incl. hang-gliders), self-sustaining gliders, self-launching gliders and their tow aircraft. Other VFR flights (incl. parachute jumping) may enter a LS-R for gliders within TMA with approval from the designated ATS unit. Traffic information will be provided as far as practicable. IFR flights are not permitted.

Vertical and lateral dimensions, as well as activation and deactivation procedures, are subject to local agreements between the ATS authority and airspace users (REF: 8.2 and glider flying chart GLDC 1:300 000 / Area Charts Geneva and Zurich 1:250 000).

Note: For glider areas over French delegated terrirory, (REF: 9. and glider flying chart GLDC 1:300 000).

1.3 LS-R for gliders within CTR

Areas of defined dimensions within CTRs. Once activated, special rules as defined for each of these restricted areas apply. These restricted areas are subject to local agreements between the ATS authority and airspace users.

1.4 Glider Sectors

Areas of defined dimensions in CTRs, which are reserved exclusively for gliders (incl. hang-gliders), self- sustaining gliders, self-launching gliders and their tow aircraft.
Within glider sectors, once activated, the rules of airspace class E apply. Vertical and lateral dimensions also are subject to local agreements between the ATS authority and airspace users.

2. Cloud flying procedure

A cloud flight is defined as an instrument flight according to art. 25 of the Ordinance on the Rules of the AIR (SR 748.121.11).

Conditions for cloud flying **(ATC clearance is required for each cloud flight)**

- outside CTR / TMA
- outside airspace Class G
- outside LS-R for gliders
- outside P/R/D areas
- SR-SS
- Mode S transponder required
- continuous 2-way radio communication required

2.1 Authorisation procedures

The clearance for performing a cloud flight can be requested on the following radio frequencies:
- ALPS RADAR FREQ **119.225** MHz En, Zurich Information FREQ **124.700** MHz Ge/En.
- ALPS RADAR FREQ **119.175** MHz En, Geneva Information FREQ **126.350** MHz Fr/En.

Each request shall contain the following information:

- call sign,
- position of flight,
- upper limit intended,
- direction intended,
- time frame intended.

3. Distance flights crossing the national border

In accordance with VFR Manual RAC 4-2-1, §1.4, the cross-country flight plan form issued by the Federal Office of Civil Aviation (FOCA) for cross-border glider flights must be carried where states do not require a flight plan.

At present, both Austria and Germany do not require a flight plan for gliders.

The cross-country flight plan form can be obtained from:
Post: Federal Office of Civil Aviation
CH-3003 Berne
Email: sbfl@bazl.admin.ch

Website for glider pilots:
URL: https://www.bazl.admin.ch/bazl/de/home/fachleute/ausbildung-und-lizenzen/ausbildungsorganisationen/flugschulen.html

Website for balloons:
URL: https://www.bazl.admin.ch/bazl/de/home/fachleute/flugoperationen/bop.html

If a flight plan has not been filed, an alerting service will be subject to a delay. Flight plans are monitored and an emergency will be declared if an arrival report has not been submitted (SERA.4020).

4. Flights within classes C and D

These rules apply in particular to LS-R for gliders within TMA as well as glider sectors.
Within classes C and D airspace, glider flights **without** radio contact with the relevant Air Traffic Control unit are forbidden.

The ATC service is required for the following flights:

- VFR flights in airspace classes C and D

FOCA determines the necessary exceptions and publishes them in AIP Switzerland.

Occasional flights of gliders through classes C and D airspace may be **authorised** by the relevant Air Traffic Control unit or FOCA which will define the conditions, where two-way radio contact can be continuously maintained.

Once the conditions have been established, the relevant Air Traffic Control unit can also authorise the crossing, without radio, of the aforementioned airspaces (see VFR Flights).

The radio contact shall be established and the clearance shall be received prior to entering classes C and D airspace. During the flight within classes C and D airspaces, continuous listening shall be maintained.

Competence for radio communications: REF ICAO Chart 1:500 000 or glider flying chart GLDC 1:300 000.

The following information shall be passed to Air Traffic Service units:
- Call sign
- Position according to **ICAO chart 1:500 000** or **glider flying chart 1:300 000**
- Flight altitude in *ft* or *m*
- Intention of the flight.

A flight radio telephony operator’s licence is required for radio communication with Air Traffic Service units.

CTR 1 Zurich is closed for glider flying.
In CTR 2 Zurich, glider flying is permitted under the following regulations:
- SSR-transponder (mode S) is mandatory
- Clearance has to be received with Zurich TWR prior to entry.

Note 1: Standard voice is English.
Note 2: During Dubendorf active times (according to AFIS) request clearance with Dubendorf TWR.
Note 3: During times of IFR approaches to RWY 34, no clearance will be granted.

5. Special frequencies for glider flying

- **122.305 / 123.580** MHz REGION NORD
- N of a line: Augst - Route nat. N2 - Lucerne - Rapperswil (dam) - Altenrhein.
- **122.480 / 123.680** MHz REGION ALPES
- S of a line: Montreux - Thoune (incl.) - Lucerne - Route nat. N2 - Augst.
- **121.130 / 125.030** MHz REGION OUEST
- W of a line: Montreux - Thoune (excl.) - Lucerne - Route nat. N2 - Augst.
- **122.955** MHz School ACT in all 3 regions.

Only the following radio communications are admitted on these frequencies:

- radio tests
- position messages
- meteorological messages
- exchange of messages between pilot and accompanying vehicle, and
- between pilot and instructor.

Languages used: Fr, Ge, Swiss-German idiom and It.

The flight radio telephony operator’s licence is not required for these radio communications.

6. Powered gliders

For **powered gliders with engine running,** the Rules of the Air for powered ACFT are applicable; for powered gliders with the engine stopped, the Rules of the Air for gliders are applicable.

7. Minimum equipment for gliders

REF: VFR Manual

8. List of restricted areas for gliders

8.1 LSR for gliders outside TMA

LS-R FOR GLIDERS OUTSIDE TMA
(TEMPORARY RESTRICTED AREAS ACT 01 MAR - 31 OCT)

Rules of Airspace E apply.
According to art. 26 of the Ordinance on the Rules of the AIR (SR 748.121.11), reduced distances to clouds are admitted to gliders as follows:
- vertical distance to clouds: 50 m
- horizontal distance to clouds: 100 m

ACT from 01 MAR - 31 OCT SR - SS (exceptions: see RMK for each LS-R for gliders outside TMA and NOTAMS)
* REF Glider Chart 1:300'000 Switzerland

NO IFR Traffic allowed in these LS-R
A VFR entry into this type of LS-R is approved for all airspace users;
one shall take notice of gliders operating closer to clouds

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR20 **GRUYERES** 46 43 56 N / 007 19 15 E - 46 42 25 N / 007 23 36 E - 46 39 35 N / 007 23 53 E - 46 29 11 N / 007 14 55 E - 46 26 43 N / 007 00 46 E - 46 34 07 N / 007 01 16 E - 46 43 56 N / 007 19 15 E	FL 090 (2750 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR21 **UNTERWALLIS N** 46 15 29 N / 006 51 18 E - ALONG SWISS-FRENCH BORDER - 46 22 40 N / 006 48 17 E - 46 20 49 N / 006 52 44 E - 46 21 04 N / 006 53 11 E - 46 21 16 N / 006 53 38 E - 46 21 53 N / 006 55 15 E - 46 23 12 N / 006 55 46 E - 46 24 19 N / 006 56 07 E - 46 26 07 E / 006 55 49 E - 46 26 46 N / 006 54 59 E - 46 27 26 N / 006 54 28 E - 46 27 52 N / 006 54 13 E - 46 28 16 N / 006 53 56 E - 46 28 32 N / 006 53 21 E - 46 34 07 N / 007 01 16 E - 46 26 43 N / 007 00 46 E - 46 20 58 N / 006 57 12 E - 46 17 08 N / 006 54 50 E - 46 16 52 N / 006 54 17 E - 46 15 27 N / 006 51 19 E - 46 15 29 N / 006 51 18 E	FL 080 (2450 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR22 **BERNER OBERLAND** 46 37 04 N / 007 21 42 E - 46 35 57 N / 007 26 11 E - 46 33 45 N / 007 29 13 E - 46 33 19 N / 007 42 10 E - 46 34 47 N / 007 45 34 E - 46 34 59 N / 007 48 08 E - 46 31 41 N / 007 51 05 E - 46 30 12 N / 007 52 21 E - 46 25 11 N / 007 38 26 E - 46 20 12 N / 007 28 57 E - 46 16 59 N / 007 19 50 E - 46 15 21 N / 007 12 11 E - 46 13 17 N / 007 04 06 E - 46 15 06 N / 007 03 19 E - 46 14 43 N / 006 55 48 E - 46 16 52 N / 006 54 17 E - 46 17 08 N / 006 54 50 E - 46 20 58 N / 006 57 12 E - 46 26 43 N / 007 00 46 E - 46 29 11 N / 007 14 55 E - 46 37 04 N / 007 21 42 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR23 **UNTERWALLIS S** 46 11 08 N / 006 48 34 E - ALONG SWISS-FRENCH BORDER - 46 15 27 N / 006 51 19 E - 46 16 52 N / 006 54 17 E - 46 14 43 N / 006 55 48 E - 46 15 06 N / 007 03 19 E - 46 12 46 N / 007 04 20 E - 46 12 09 N / 007 02 47 E - 46 11 08 N / 006 48 34 E	FL 100 (3050 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR24 **WALLIS S** 46 15 38 N / 008 04 49 E - ALONG SWISS-ITALIAN AND SWISS-FRENCH BORDER - 45 59 49 N / 007 00 38 E - 46 08 30 N / 007 16 07 E - 46 10 21 N / 007 25 42 E - 46 19 33 N / 008 01 29 E - 46 15 38 N / 008 04 49 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** MIL OFF: upper limit FL 150 (4550 m)

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR25 **WILDHORN** 46 37 04 N / 007 21 42 E - 46 35 57 N / 007 26 11 E - 46 33 45 N / 007 29 13 E - 46 33 19 N / 007 42 10 E - 46 34 47 N / 007 45 34 E - 46 34 59 N / 007 48 08 E - 46 31 41 N / 007 51 05 E - 46 30 12 N / 007 52 21 E - 46 25 11 N / 007 38 26 E - 46 20 12 N / 007 28 57 E - 46 16 59 N / 007 19 50 E - 46 15 21 N / 007 12 11 E - 46 13 17 N / 007 04 06 E - 46 15 06 N / 007 03 19 E - 46 20 58 N / 006 57 12 E - 46 26 43 N / 007 00 46 E - 46 29 11 N / 007 14 55 E - 46 37 04 N / 007 21 42 E -	FL 150 (4550 m) / FL 130 (3950 m)	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs P/R/D areas)**
LSR26 **CHARBONNIERES** 46 40 57 N / 006 16 09 E - ALONG SWISS-FRENCH BORDER - 46 46 00 N / 006 26 18 E - 46 43 47 N / 006 33 55 E - 46 36 07 N / 006 22 14 E - 46 40 57 N / 006 16 09 E	*6000 ft AMSL* *(1850 m) /* 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR27 **NEUCHATEL** 46 58 56 N / 006 34 22 E - 46 51 30 N / 006 34 54 E - 47 00 45 N / 006 51 17 E - 47 01 15 N / 006 50 44 E - 47 04 25 N / 006 54 10 E - 47 06 40 N / 007 00 41 E - 47 07 47 N / 007 01 26 E - 47 08 41 N / 007 01 20 E - 47 08 59 N / 007 01 06 E - 47 09 31 N / 007 02 56 E - 47 10 57 N / 007 07 52 E - 47 07 56 N / 007 11 41 E - 47 05 08 N / 007 08 09 E - 47 02 14 N / 007 01 07 E - 46 57 48 N / 006 54 32 E - 46 50 36 N / 006 43 22 E - 46 43 47 N / 006 33 55 E - 46 46 00 N / 006 26 18 E - ALONG SWISS-FRENCH BORDER - 46 58 56 N / 006 34 22 E	*4000 ft AMSL* *(1200 m) /* 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR28 **YVERDON** 46 58 56 N / 006 34 22 E - 46 51 30 N / 006 34 54 E - 46 50 36 N / 006 43 22 E - 46 43 47 N / 006 33 55 E - 46 46 00 N / 006 26 18 E - ALONG SWISS-FRENCH BORDER - 46 58 56 N / 006 34 22 E	*6000 ft AMSL* *(1850 m) /* *4000ft AMSL* *(1200 m)*	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR29 **TAVANNES** 47 20 03 N / 007 03 25 E - 47 20 18 N / 007 11 24 E - 47 19 03 N / 007 26 13 E - 47 14 34 N / 007 29 27 E - 47 13 06 N / 007 21 59 E - 47 11 36 N / 007 18 02 E - 47 08 44 N / 007 12 40 E - 47 07 56 N / 007 11 41 E - 47 10 57 N / 007 07 52 E - 47 09 31 N / 007 02 56 E - 47 11 47 N / 007 01 40 E - 47 17 09 N / 006 56 26 E - ALONG SWISS-FRENCH BORDER - 47 20 03 N / 007 03 25 E	*6000 ft AMSL* *(1850 m)* / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR30 **NEUVEVILLE WEST** 47 09 31 N / 007 02 56 E - 47 05 08 N / 007 08 09 E - 47 02 14 N / 007 01 07 E - 46 57 48 N / 006 54 32 E - 47 00 45 N / 006 51 17 E - 47 01 15 N / 006 50 44 E - 47 04 25 N / 006 54 10 E - 47 06 40 N / 007 00 41 E - 47 07 47 N / 007 01 26 E - 47 08 41 N / 007 01 20 E - 47 08 59 N / 007 01 06 E - 47 09 31 N / 007 02 56 E	FL 80 (2450 m) / *4000 ft AMSL* *(1200 m)*	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR32 **GOMS** 46 27 58 N / 008 28 07 E - 46 27 51 N / 008 26 18 E - ALONG SWISS-ITALIAN BORDER - 46 15 38 N / 008 04 49 E - 46 19 33 N / 008 01 29 E - 46 29 07 N / 007 53 15 E - 46 38 46 N / 008 15 29 E - 46 34 45 N / 008 27 08 E - 46 27 58 N / 008 28 07 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** MIL OFF: upper limit FL 150 (4550 m)

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR33 **BALSTHAL** 47 19 08 N / 007 51 27 E - 47 14 34 N / 007 29 27 E - 47 19 03 N / 007 26 13 E - 47 20 18 N / 007 11 24 E - 47 21 00 N / 007 39 58 E - 47 24 02 N / 007 47 52 E - 47 19 08 N / 007 51 27 E	*5000 ft AMSL* *(1500 m)* / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR34 **CAMPO** 46 34 46 N / 008 29 08 E - 46 34 45 N / 008 27 08 E - 46 27 58 N / 008 28 07 E - 46 28 07 N / 008 35 15 E - 46 20 13 N / 008 36 24 E - 46 20 55 N / 008 53 04 E - 46 26 40 N / 008 46 14 E - 46 31 03 N / 008 31 35 E - 46 34 46 N / 008 29 08 E	*10500 ft AMSL* *(3200 m) /* 2000 ft AGL (600 m)	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT TEMP available: MIL ON, 01 MAR - 31 OCT Activation required by Chief Flight Operations Locarno Phone: +41 (0) 58 481 24 68 Request for clearance TIL 0830 (0730) **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** MIL OFF: upper limit FL 130 (3950 m)
LSR35 **NEUVEVILLE EAST** 47 10 57 N / 007 07 52 E - 47 07 56 N / 007 11 41 E - 47 05 08 N / 007 08 09 E - 47 09 31 N / 007 02 56 E - 47 10 57 N / 007 07 52 E	*6000 ft AMSL* *(1850 m) /* *4000 ft AMSL* *(1200 m)*	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR36 **KANDERGRUND** 46 35 57 N / 007 26 11 E - 46 35 26 N / 007 29 58 E - 46 36 40 N / 007 40 54 E - 46 36 13 N / 007 41 50 E - 46 35 38 N / 007 43 00 E - 46 35 05 N / 007 44 56 E - 46 34 51 N / 007 46 32 E - 46 34 47 N / 007 45 34 E - 46 33 19 N / 007 42 10 E - 46 33 45 N / 007 29 13 E - 46 35 57 N / 007 26 11 E	FL130 or *13000 ft AMSL* *(3950 m)* whichever is lower / 2000 ft AGL - (600 m)	Glider	Available: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** Upper limit FL 130 (3950 m) or *13000 ft AMSL* based on LSMM QNH whichever is lower
LSR42 **CHURFIRSTEN W** 47 02 55 N / 009 12 03 E - 47 02 49 N / 009 00 27 E - 47 09 09 N / 008 59 19 E - 47 14 22N / 009 10 08 E - 47 02 55 N / 009 12 03 E	FL 080 (2450 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR43 **CHURFIRSTEN E** 47 21 07 N / 009 36 21 E - ALONG SWISS-AUSTRIAN, LIECHTENSTEIN- AUSTRIAN AND LIECHTENSTEIN-SWISS BORDER - 47 02 57 N / 009 29 04 E - 47 02 55 N / 009 12 03 E - 47 14 22 N / 009 10 08 E - 47 18 34 N / 009 18 51 E - 47 20 58 N / 009 23 56 E - 47 21 07 N / 009 36 21 E	FL 100 (3050 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)**
LSR44 **OBERALP** 46 34 52 N / 008 36 26 E - 46 38 15 N / 008 38 43 E - 46 45 18 N / 008 42 05 E - 46 48 42 N / 009 01 38 E - 46 46 32 N / 009 01 49 E - 46 30 37 N / 009 04 02 E - 46 21 25 N / 009 05 16 E - 46 21 14 N / 009 00 42 E - 46 23 11 N / 008 59 19 E - 46 30 29 N / 008 50 24 E - 46 34 52 N / 008 36 26 E	*10500 ft AMSL* *(3200 m) /* 2000 ft AGL (600 m)	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT TEMP available: MIL ON, 01 MAR - 31 OCT Activation required by Chief Flight Operations Locarno Phone: +41 (0) 58 481 24 68 Request for clearance TIL 0830 (0730) **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** MIL OFF: upper limit FL 130 (3950 m)
LSR54 **CALANDA** 47 02 57 N / 009 29 04 E - ALONG LIECHTENSTEIN-SWISS AND SWISS-AUSTRIAN BORDER - 46 50 38 N / 010 06 58 E - 46 47 41 N / 010 09 40 E - 46 46 08 N / 010 06 17 E - 46 41 13 N / 009 57 46 E - 46 39 09 N / 009 21 29 E - 46 28 01 N / 009 24 34 E - ALONG SWISS-ITALIAN BORDER - 46 30 34 N / 009 21 44 E - 46 30 37 N / 009 04 02 E - 46 46 32 N / 009 01 49 E - 46 48 42 N / 009 01 38 E - 47 02 49 N / 009 00 27 E - 47 02 55 N / 009 12 03 E - 47 02 57 N / 009 29 04 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** MIL OFF: upper limit FL 150 (4550 m) or *15000 ft AMSL* based on LSZS QNH whichever is lower

ID NR and name Lateral limits COORD WGS84	Upper limit / Lower limit	Type of Activity	Restrictions Remarks
1	2	3	4
LSR55 **SERRA** 46 43 58 N / 010 24 01 E - ALONG SWISS-ITALIAN BORDER - 46 20 27 N / 009 47 05 E - 46 34 50 N / 010 02 41 E - 46 42 12 N / 010 14 39 E - 46 42 38 N / 010 19 33 E - 46 42 43 N / 010 20 18 E - 46 42 55 N / 010 21 17 E - 46 43 11 N / 010 22 12 E - 46 43 46 N / 010 23 30 E - 46 43 58 N / 010 24 01 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D areas)** MIL OFF: upper limit FL 150 (4550 m)
LSR56 **MUTTLER** 46 57 19 N / 010 19 42 E - ALONG SWISS-AUSTRIAN BORDER- 46 51 15 N / 010 28 12 E - ALONG SWISS-ITALIAN BORDER - 46 47 54 N / 010 26 26 E - 46 48 14 N / 010 26 27 E - 46 48 54 N / 010 26 20 E - 46 49 29 N / 010 26 09 E - 46 50 00 N / 010 25 53 E - 46 50 32 N / 010 25 31 E - 46 57 19 N / 010 19 42 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available from: SR-SS, 01 MAR - 31 OCT **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D)** MIL OFF: upper limit FL 150 (4550 m)
LSR62 **MISOX** 46 30 34 N / 009 21 44 E - ALONG SWISS-ITALIAN BORDER - 46 21 57 N / 009 16 43 E - 46 21 54 N / 009 16 39 E - 46 21 25 N / 009 05 16 E - 46 30 37 N / 009 04 02 E - 46 30 34 N / 009 21 44 E	FL 130 (3950 m) / 2000 ft AGL (600 m)	Glider	Available: MIL OFF, SR-SS, 01 MAR - 31 OCT TEMP available: MIL ON, 01 MAR - 31 OCT Activation required by Chief Flight Operations Locarno Phone: +41 (0) 58 481 24 68 **Other defined airspace excluded** **(e.g. CTRs, TMAs, P/R/D)** MIL OFF: upper limit FL 150 (4550 m)

8.2 Restricted areas for gliders within TMA

LS-R FOR GLIDERS WITHIN TMA

Airspace class within these LS-R for gliders within TMA changes to E when active.
Standard distances to clouds apply:
- vertically: 300 m
- horizontallly: 1500 m

NO IFR Traffic allowed in these LS-R for gliders

Other VFR TFC into this type of LS-R for gliders is allowed with approval from the designated ATS unit

Designation and lateral limits COORD WGS84		Vertical limits ALT ft AMSL (m)	Operator/ User TEL NR	Remarks and time of ACT Conditions of use m AMSL (ft)
1		2	3	4
LSR69 **T SCHAFFHAUSEN EAST**	47 46 55 N 008 52 12 E - 47 43 59 N 008 52 49 E - 47 44 17 N 008 47 06 E - 47 42 33 N 008 37 55 E - 47 46 25 N 008 35 29 E - 47 46 55 N 008 52 12 E	*6500 (2000)* --- *5500 (1700)*	Phone: +41 (0) 43 931 69 61	Approval request by head of aerodrome Schaffhausen with TWR Zurich; Phone: +41 (0) 43 931 69 61 or exceptionally by pilot in flight with FIC Zurich **124.700** MHz. Activation times available on Glider-Info on **120.880** MHz. Keep a listening watch on glider FREQ **122.305** MHz.
LSR70 **T SCHAFFHAUSEN WEST**	47 46 25 N 008 35 29 E - 47 42 33 N 008 37 55 E - 47 42 04 N 008 34 05 E - 47 41 57 N 008 31 01 E - 47 46 11 N 008 28 21 E - 47 46 25 N 008 35 29 E	*6500 (2000) or 5500 (1700)* --- *4500 (1350)*	Phone: +41 (0) 43 931 69 61	
LSR71 **T SCHAFFHAUSEN SOUTH**	47 42 33 N 008 37 55 E - 47 41 35 N 008 38 31 E - 47 40 39 N 008 32 09 E - 47 40 44 N 008 31 48 E - 47 41 57 N 008 31 01 E - 47 42 04 N 008 34 05 E - 47 42 33 N 008 37 55 E 47 40 39 N 008 32 09 E - 47 41 35 N 008 38 31 E - 47 40 31 N 008 34 56 E - 47 40 18 N 008 32 04 E - 47 40 44 N 008 31 48 E - 47 40 39 N 008 32 09 E	*5500 (1700)* --- *4500 (1350)* *5500 (1700)* --- *3000 (900)*	Phone: + 41 (0) 43 931 69 61	
LSR72 **T BOHLHOF**	47 39 01 N 008 20 13 E - 47 40 45 N 008 20 15 E - 47 41 20 N 008 25 51 E - 47 39 03 N 008 25 49 E - Arc of circle centred on - 47 39 02 N 008 23 01 E - Radius 1.89 NM, clockwise 47 39 01 N 008 20 13 E	*3500 (1050)* --- *3000 (900)*		

Designation and lateral limits COORD WGS84		Vertical limits ALT ft AMSL (m)	Operator/ User TEL NR	Remarks and time of ACT Conditions of use m AMSL (ft)
1		2	3	4
LSR73 **T WINTERTHUR WEST**	47 32 38 N 008 55 12 E - 47 30 21 N 008 54 35 E - 47 31 01 N 008 49 52 E - 47 30 58 N 008 48 29 E - 47 32 19 N 008 47 50 E - 47 34 20 N 008 51 35 E - 47 32 38 N 008 55 12 E	*5500* *(1700)* --- *4500* *(1350)*		Approval request by head of aerodrome Winterthur with TWR Zurich; Phone: +41 (0) 43 931 69 61 or exceptionally by pilot in flight with FIC Zurich **124.700** MHz. Activation times available on Glider-Info on **120.880** MHz. Keep a listening watch on glider FREQ **122.305** MHz.
LSR74 **T WINTERTHUR EAST**	47 32 17 N 009 00 00 E - 47 29 32 N 009 00 19 E - 47 30 21 N 008 54 35 E - 47 32 38 N 008 55 12 E - 47 32 17 N 009 00 00 E	*6500* *(2000)* or *5500* *(1700)* --- *4500* *(1350)*		
	47 31 55 N 009 04 54 E - 47 28 56 N 009 04 24 E - 47 29 32 N 009 00 19 E - 47 32 17 N 009 00 00 E - 47 31 55 N 009 04 54 E	*6500* *(2000)* --- *5500* *(1700)*		
LSR75 **T DITTINGEN WEST**	47 25 56 N 007 23 04 E - 47 24 45 N 007 22 49 E - 47 25 27 N 007 15 16 E - Swiss border line - 47 25 56 N 007 23 04 E	*5000* *(1525)* --- *3000* *(900)*		Exclusive usage from aerodrome Dittingen.
	47 27 30 N 007 25 41 E - 47 27 39 N 007 29 21 E - Arc of circle 1.35 NM radius clockwise centred on 47 26 18 N 007 29 28 E - 47 26 48 N 007 31 19 E - 47 26 06 N 007 31 44 E - 47 23 43 N 007 32 32 E - 47 24 45 N 007 22 49 E - 47 25 56 N 007 23 04 E - Swiss border line - 47 27 30 N 007 25 41 E	*5000* *(1525)* --- 1000 AGL (300)		
LSR76 **T DITTINGEN EAST**	47 26 06 N 007 31 44 E - 47 27 00 N 007 39 00 E - 47 28 58 N 007 44 25 E - 47 25 52 N 007 46 41 E - 47 23 00 N 007 39 30 E - 47 23 43 N 007 32 32 E - 47 26 06 N 007 31 44 E	*5000* *(1525)* --- 1000 AGL (300)		
LSR77 **T ALBIS**	47 19 53 N 008 33 14 E - 47 15 25 N 008 36 18 E - 47 13 56 N 008 25 55 E - 47 18 11 N 008 22 40 E - 47 19 53 N 008 33 14 E	*7500* *(2300)* or *6500* *(2000)* --- *5500* *(1700)*		Activation only when Zurich TMA 14/15 is not active. Approval request by head of aerodrome Hausen with TWR Zurich; Phone: +41 (0) 43 931 69 61 or exceptionally by pilot in flight with FIC Zurich **124.700** MHz. Activation times available on Glider-Info on **120.880** MHz. Keep a listening watch on glider FREQ **122.305** MHz.

Designation and lateral limits COORD WGS84		Vertical limits ALT ft AMSL (m)	Operator/ User TEL NR	Remarks and time of ACT Conditions of use m AMSL (ft)
1		2	3	4
LSR78 **T BACHTEL WEST**	47 20 51 N 008 48 55 E - 47 16 22 N 008 46 47 E - 47 16 35 N 008 44 29 E - 47 15 25 N 008 36 18 E - 47 19 53 N 008 33 14 E - 47 20 33 N 008 41 00 E - 47 20 51 N 008 48 55 E	*7500* *(2300)* or *6500* *(2000)* --------- *5500* *(1700)*		Activation only when Zurich TMA 14/15 is not active. Approval request by head of aerodrome Speck-Fehraltorf with TWR Zurich; Phone: +41 (0) 43 931 69 61 or exceptionally by pilot in flight with FIC Zurich **124.700** MHz. Activation times available on Glider-Info on **120.880** MHz. Keep a listening watch on glider FREQ **122.305** MHz.
LSR79 **T BACHTEL EAST**	47 15 37 N 008 55 04 E - 47 16 22 N 008 46 47 E - 47 20 51 N 008 48 55 E - 47 21 08 N 008 56 38 E - 47 15 37 N 008 55 04 E	*7500* *(2300)* or *6500* *(2000)* --------- *5500* *(1700)*		
	47 20 49 N 009 04 52 E - 47 16 24 N 009 02 44 E - 47 15 19 N 008 58 21 E - 47 15 37 N 008 55 04 E - 47 21 08 N 008 56 38 E - 47 20 49 N 009 04 52 E	*7500* *(2300)* --------- *6500* *(2000)*		
LSR80 **T VALLORBE**	46 38 23 N 006 12 37 E - 46 41 00 N 006 16 30 E - 46 46 04 N 006 26 24 E - 46 44 00 N 006 33 26 E - 46 34 23 N 006 19 35 E - 46 38 23 N 006 12 37 E	FL 95 *(2900)* ---------- FL 75 *(2300)*	Phone: +41 (0) 22 747 13 91 GLD ATIS **124.755** MHz	Advise ALPS RADAR **119.175** MHz and continuous listening watch on FREQ **125.030 MHz**.
		above FL 95 *(2900)*	Phone: +41 (0) 22 747 13 91 GLD ATIS **124.755** MHz	Clearance by ALPS RADAR **119.175** MHz required. If sector activated, continuous listening watch on FREQ **119.175** MHz.
LSR81 **T LE BRASSUS**	46 34 34 N 006 06 39 E - 46 38 23 N 006 12 37 E - 46 34 23 N 006 19 35 E - 46 24 40 N 006 05 17 E - Swiss border - 46 34 34 N 006 06 39 E	FL 85 *(2900)* ---------- FL 75 *(2300)*	Phone: +41 (0) 22 747 13 91 GLD ATIS **124.755** MHz	Advise ALPS RADAR **119.175** MHz and continuous listening watch on FREQ **125.030 MHz**.
		above FL 85 *(2600)*	Phone: +41 (0) 22 747 13 91 GLD ATIS **124.755** MHz	Clearance by ALPS RADAR **119.175** MHz required. If sector activated, continuous listening watch on FREQ **119.175** MHz.

8.3 Restricted areas for gliders within CTR

LS-R FOR GLIDERS WITHIN CTR

No airspace class.
MIN Visibility 5 km.

Following distances to clouds apply:
- vertically: 300 m
- horizontallly: 1500 m

HEMS Flights in active Restricted Areas: REF ENR 5.1 §1.1

NO IFR Traffic allowed in these LS-R
No VFR Traffic allowed, except airspace users that are part of the agreement (Segelflugvereinbarung) with ATC.

Designation and lateral limits COORD WGS84		Vertical limits ALT ft AMSL (m)	Operator/ User TEL NR	Remarks and time of ACT Conditions of use m AMSL (ft)
1		2	3	4
LSR82 LAENGENBERG	46 52 01 N 007 23 50 E - Arc of circle 5.02 NM centred on 46 55 09 N 007 29 32 E - anticlockwise - 46 50 08 N 007 29 20 E - 46 53 12 N 007 29 44 E - 46 54 37 N 007 28 14 E - 46 55 08 N 007 27 07 E - 46 55 13 N 007 26 43 E - 46 55 14 N 007 25 46 E - 46 54 08 N 007 21 20 E - 46 52 01 N 007 23 50 E	*5500 (1700)* --- GND	Authorisation for activation required (Bern ATC).	ACT: Broadcasted on ATIS Bern. Transponder Mode S required. FREQ for LSR82; **123.405** MHz listening watch required. HEMS Flights: blind calls on **123.405** MHz. (not via TWR)

Figure 1. RESTRICTED AREAS FOR GLIDERS WITHIN TMA

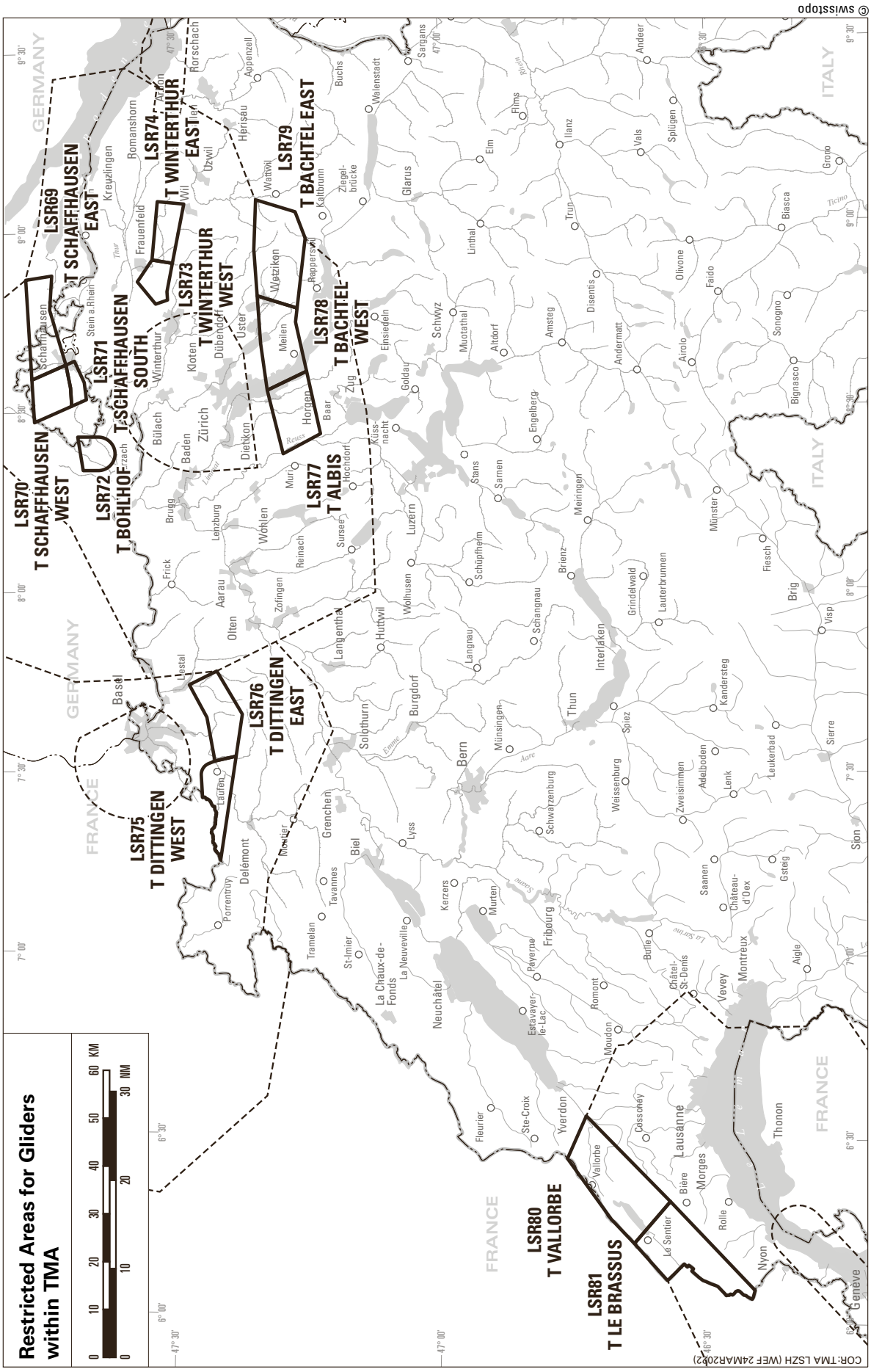
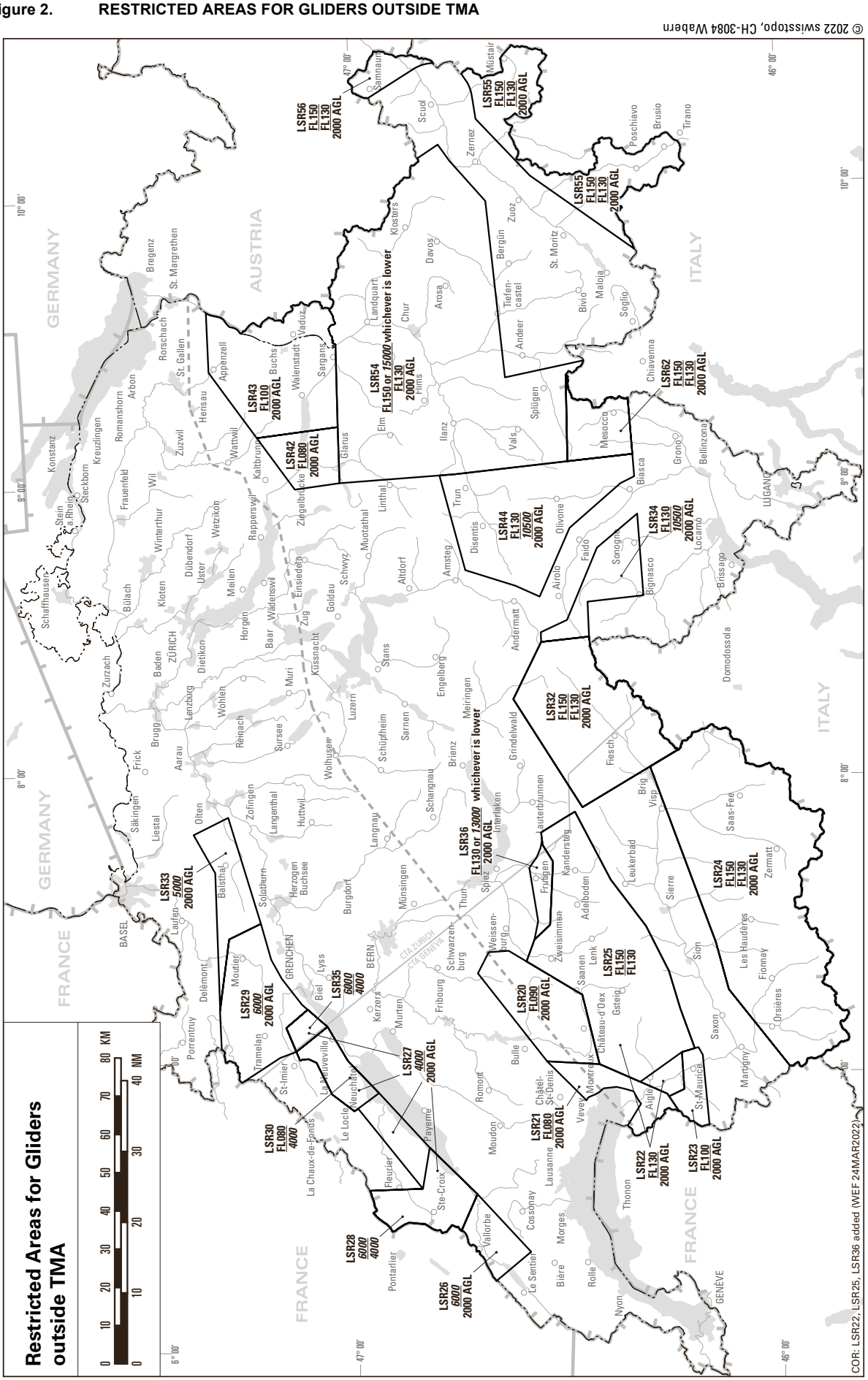


Figure 2. RESTRICTED AREAS FOR GLIDERS OUTSIDE TMA



9. List of glider areas (over French delegated territory)

Oyonnax North (TMA Lyon part 8.1.)	46 21 48 N 005 24 28 E - 46 28 38 N 005 36 22 E - 46 18 44 N 005 44 36 E - 46 14 14 N 005 34 35 E - 46 21 48 N 005 24 28 E	*2600* (FL 85) / *2300* (FL 75)	Phone: +41 (0) 22 747 13 91 GLD ATIS **124.755** MHz	Advise ALPS RADAR **119.175** MHz . Downgraded in airspace Golf as written in the protocol. Info available on GLD ATIS **124.755** MHz.
Oyonnax South (LF-R 135)	46 18 44 N 005 44 36 E - 46 16 10 N 005 46 43 E - 46 08 54 N 005 36 03 E - 46 09 13 N 005 34 25 E - 46 14 14 N 005 34 35 E - 46 18 44 N 005 44 36 E	*2600* (FL 85) / *2300* (FL 75)		Clearance by ALPS RADAR **119.175** MHz required. For transit flights only.
St-Claude North (TMA Geneva part 4.1)	46 28 38 N 005 36 22 E - 46 30 00 N 005 35 10 E - 46 30 00 N 005 53 26 E - 46 34 34 N 006 06 39 E - follow border to next point 46 27 05 N 006 04 42 E - 46 22 22 N 005 57 47 E - 46 18 44 N 005 44 36 E - 46 28 38 N 005 36 22 E	*2600* (FL 85) / *2300* (FL 75)	Phone: +41 (0) 22 747 13 91 GLD ATIS **124.755** MHz	Advise ALPS RADAR **119.175** MHz. Downgraded in airspace Golf as written in the protocol. Info available on GLD ATIS **124.755** MHz.
St-Claude South (LF-R 219)	46 15 16 N 005 47 28 E - 46 18 44 N 005 44 36 E - 46 22 22 N 005 57 47 E - 46 15 16 N 005 47 28 E	*2600* (FL 85) / *2300* (FL 75)		Clearance by ALPS RADAR **119.175** MHz required. For transit flights only.

10. Special rules for free balloon flights

10.1 General

For free balloon flights
- the Ordinance on the Rules of the AIR (SR 748.121.11), as well as
- the special rules set out hereafter (notably, SR 748.941) are applicable.

10.2 Radio communication

5 minutes before entering classes C and D airspace, radio contact with the competent ATC unit shall be established and maintained during the flight.
In case of interruption of the radio communication during flight in **classes C and D airspace,** the following procedure shall be applied:

a. set code 7600 on the SSR transponder; and when continuing the flight maintain the last reported altitude or a lower altitude; or
b. leave the controlled airspace by the shortest route (laterally or vertically).

10.3 Frequencies

The frequencies **122.255** MHz and **122.130** MHz are available for radio communications between balloons and between balloons and retrieving vehicles. See §15: FREQUENCIES FOR SPECIAL USE.

10.4 ATC instructions

The competent ATC unit can impose certain conditions for a flight if the traffic situation requires it.
The instructions of ATC are mandatory.

10.5 SSR-transponder

For flights in classes C and D airspace, the carriage of an operational SSR transponder (Mode A/C or Mode S) is required, except in CTR's.
It shall be switched on upon instruction by ATC.

10.6 Ascents in ground fog conditions

See ENR-1.8, § 2.

10.7 Flights by night

3 HR prior to the planned take-off, at the latest, a flight plan shall be filed with the competent ATS unit.

Ascents and flights in classes C and D airspace are only permitted with a clearance from the competent ATC unit.

Ascents and flights in the whole airspace during military night flights are only permitted with a clearance from the competent ATC unit.

In case of radio failure during a flight by night within classes C and D airspace, the procedure detailed in 12.2 applies.

If the airspace in question can only be left by executing a landing, such a landing may be delayed until morning civil twilight, provided the radio failure occurred less than 30 MIN before the beginning of morning civil twilight.

10.8 Flights crossing the national border

For flights to Germany, Austria and France, consult the instructions of FOCA of 10 MAY 1978 (on reverse of ”Laissez-passer“ form), with respect to customs clearance.

For flights to Germany and Italy, a flight plan must be filed 60 MIN prior to ascent with the appropriate Air Traffic Control unit.

For flights to France, a flight plan must be filed with the appropriate Air Traffic Control unit, as a rule by radio, shortly before crossing the border.

Ascents by night in France are basically prohibited. Requests for exemption permission have to be addressed to:

Post: Direction de la Navigation Aérienne,
48, rue Camille Desmoulins,
F-92452 Issy-les-Moulineaux.

11. Mountain flying

The terrain configuration of mountainous areas and the particular weather conditions prevailing in them require the following recommendations to be considered when planning VFR-flights over the Alps:

The crossing of the Alps in a north-south direction and vice-versa shall be planned in a way to take the shortest possible flight routes over inhospitable regions.

The following main routes are recommended for overflight in good weather conditions:

a. Zurich - Vierwaldstättersee - Reusstal - Andermatt - **Gotthardpass** - Val Leventina - Locarno;
b. Berne - Spiez - Kandersteg - **Gemmipass** - Visp - Brig - **Simplonpass** - Domodossola;
c. Altenrhein - Sargans - Chur - Lenzerheide - **Julierpass** - Samedan.

The 3 routes above, as well as several more that are recommended for VFR crossing of the Alps, are shown on the ICAO aeronautical chart 1:500’000 (2253-B), Switzerland.

VFR flight route	
Mountain pass with spot elevation in ft	
Recommended minimum altitude in ft	

The crossing of the Alps should not be carried out above closed cloud cover. The necessary high altitudes and the corresponding strong reduction in engine power may lead to unexpected situations of flight in IMC between invisible peaks.

Updrafts and downdrafts are much stronger in the mountains than in the plains. Consequently, mountain passes shall be approached from the side at a safety height of at least 1000 ft AGL (300 m), in such a way that a 180° turn can be flown safely should the terrain behind the pass be covered by clouds.
A mountain pass should not be crossed in a climb, but in level flight or even in descent at a sufficient airspeed to enable the traversing of zones of downdrafts rapidly.

Pilots with little experience in mountain flying are recommended to restrain from crossing the Alps, respectively to stop such a crossing in time:

a. during fœhn situations;
b. when the MET report states: „Alps in clouds“;
c. when observing thunderstorm formation;
d. during showers (even in summer);
e. when the cloud base is too low over the mountain passes.

12. Safety measures

Attention should be paid to part GEN 3.6.

Further, it is recommended to carry warm clothes, blankets, signalling lamps and rockets, as well as emergency food supplies.

After an emergency landing in high mountains, it is recommended to stay near the aircraft and not to undertake dangerous climb-downs over glaciers or crags without suitable equipment or without mountain experience.

Whenever possible, emergency calls should be sent with the aircraft transmitter, not only on the emergency frequency 121.500 MHz but also on an appropriate FIC frequency, as well as any frequency used for airway traffic control.

13. Collision with birds of prey

Isolated cases are known where aeroplanes have been attacked by eagles. Therefore during flights in the Alps collisions with eagles should be considered possible. Related information is published in ENR 5.6.

14. Information service on hazards in Swiss airspace

The information about other dangers provides data on acrobatic flights, parachuting outside aerodromes, captive balloon ascents, extensive flying, gliding or helicopter activities outside permanent danger areas, towing and guided missile flights.
In NOTAM, when referring to locations on a map, the aeronautical chart ICAO 1:500 000 Switzerland is used.
The completeness of the information concerning hazards in the airspace and the observance of the times indicated therein cannot be quaranteed.

15. FREQUENCIES FOR SPECIAL USE

FREQUENCIES FOR SPECIAL USE			
FREQ / Channel MHz	**UTILISATION**		**Languages used**
1	**2**		**3**
GLIDER FLIGHTS			
122.305	Region NORTH	A/G	Ge, Fr, It, Swiss-German Only the following transmissions are permitted on these frequencies: - Test transmissions - Location reports - Weather reports - Message exchange, pilot-accompanying vehicle - Message exchange, pilot flight instructor Languages used: German, French, Italian, Swiss-German In-flight radio telephonists do not require a licence for radio communications of this nature.
123.580	Region NORTH	A/A	
120.880	GLD INFO (GLD ACT within TMA Zurich)		
122.480	Region ALPS	A/G	
123.680	Region ALPS	A/A	
121.130	Region WEST	A/G	
125.030	Region WEST	A/A	
124.755	GLD ATIS (GLD ACT within TMA Geneva)		
122.955	Training		
BALLOONS			
122.255	E of Basel - St. Moritz and Alps		Ge, Fr, It, Swiss-German
122.130	W of Basel - St. Moritz		
	The frequencies 122.255 MHz and 122.130 MHz are available for balloonists communicating with one another and with accompanying vehicles.		
PARACHUTING PRACTICE			
123.480	Training		Ge, Fr, It, Swiss-German
Powered-flight training			
122.205	Powered-flight training		Ge, Fr, It, Swiss-German
Mountain landing strips			
130.355	Mountain landing strips		Ge, Fr, It, Swiss-German
HANG GLIDERS			
123.430	Training		Ge, Fr, It, Swiss-German
130.930	For general use		
MIL FREQ			
135.475	For communications between CIV ACFT and MIL navigation equipment (Reserve-FREQ)		En, It
HELICOPTERS			
130.355	Mountain frequency: For TKOF and LDG or FLT below 150 m AGL		En
123.380	Coordination frequency for hospital helipads For TKOF and LDG		