GEN 3.6 SEARCH AND RESCUE

1. Responsible service

The SAR service is under the responsibility of FOCA. The provision execution of SAR is delegated to the Swiss Air Force (RCC and search FLTs).
SAR can task further resources or supporting organisations, if deemed necessarily, such as:

- Air force units;
- Army units;
- Canton police forces;
- Civil aviation companies;
- Neighbor RCCs
- OFCOM
- Skyguide (ATS).
- the Swiss Air Ambulance (REGA) and other HEMS operators;
- Swiss Alpine Rescue;
- Swiss Red Cross organisations;

SEARCH AND RESCUE CO-ORDINATION CENTRE (RCC) SAR Centre Zurich				
Postal address	**TEL H24**	**FAX**	**Telex AFTN**	**Notes**
Schweizer Luftwaffe / Swiss Air Force RCC / Op Zen LW Flugplatz Dübendorf / OZD CH-8600 Dübendorf Switzerland	+41 (0) 58 484 10 00	+41 (0) 58 484 20 05	LSARYCYX	Email: rcc.lw@vtg.admin.ch
Search And Rescue area: Switzerland and Liechtenstein **Supervising authority:** Federal Department of Environment, Transport, Energy and Communications (DETEC) **Name and location of Rescue SubCentre:** NIL				

The SAR service in Switzerland is provided in accordance with ICAO SARPS.

The following publications are applied:

- ICAO Annex 12: Search and Rescue;
- ICAO DOC 7030: The regional supplementary procedures for alerting and SAR-services;
- ICAO DOC 9731: International Aeronautical and Maritime Search and Rescue Manual.

2. Area of responsibility

The SAR area encompasses the territories of the Swiss Confederation and of the Principality of Liechtenstein. This area is enclosed by the frontiers and is not coincident in all parts with the FIR Switzerland (different from ICAO Annex 12, recommendation 2.2.1.1).

3. SAR agreements

3.1 Co-operation with search and rescue services of other States

Prior request for the participation of foreign SAR units in SAR operations in Switzerland and in the Principality of Liechtenstein must be submitted to the Swiss RCC. The Swiss Air Force is able to grant the appropriate permission.

In accordance with ICAO Annex 12, § 4.2.2, refuelling, lubricating and servicing facilities can be made AVBL for foreign SAR ACFT at the following ADs: Bern-Belp, Genève, Locarno, Sion, St. Gallen-Altenrhein and Zurich.

4. Conditions of availability

NIL

5. Procedures and signals used

5.1 Procedures

The applicable procedures are in accordance with the standards of chapter 5 of ICAO Annex 12.

5.2 Communications

Frequencies AVBL for SAR transmissions are as follows:

AIR-GROUND and vice versa in VHF radiotelephony:

- ATC service frequencies in use;
- EMERG FREQ **121.500** MHz.

Survival radio equipment which may be carried on board ACFT:

RTF and radio beacon:

- **121.500** MHz;
- **243** MHz;
- **406** MHz.

Automatic 406 MHz ELT's are highly recommended for all operations in Swiss airspace even if not mandated for certain types of aircraft.

SAR-VHF communications:
Working-FREQ **123.100** MHz.

For ground comunications, the TEL lines, the direct transmission circuits of the ATC service and the TX network will be used.

5.3 Alerting

Observations and notifications concerning ACFT in states of EMERG are to be reported to:

- RCC Zurich (designated SAR point of contact for the receipt of Cospas-Sarsat distress data), or
- ATC Geneva or Zurich, which in turn, will immediately inform RCC Zurich.

5.4 Operations

A flight plan submitted at the point of DEP constitutes, in the case of an incident, the basis for providing the SAR service (REF: ENR-1.10). Therefore, pilots are advised to also submit a flight plan before DEP for VFR FLTs over areas of difficult access in the Alps, the Prealps and the Jura (REF: ENR-5.5).

The written notification of an intended FLT according to article 31, § 1, ORA/Rules of the Air, will serve the needs of local surveillance. It may be used to a limited extent only, for possible international SAR operations.3

When an ELT is carried, this shall be mentioned in the written FLT notification, (article 31, § 1, ORA/Rules of the air) or in ITEM 19 of the ICAO flight plan (REF: ENR-1.10).
If the pilot lands at an AD other than the one specified in the submitted flight plan, the competent services at the DEP AD and at the AD of first DEST shall be notified without delay.
The costs of SAR operations are paid by the FOCA, which could pass on the costs to the ACFT operator or the third-party who caused them.
Upon a special decision of the Federal Council or in the case of the SAR to foreign ACFT registered in a State which takes responsibility for the costs of the SAR of Swiss ACFT within its territory, the costs are borne by the Confederation.

5.5 False alerts by emergency location transmitters ELT

The increased sensitivity of ground facilities and the better coverage of SARSAT/COSPAS satellites are such that the RCC Zurich is alerted more frequently about distress signals by ELTs. **In most cases, those are false alerts**, which are blocking resources in any case.
In order to ensure the safety of airspace users which find themselves in real distress situation, FOCA demands adherence to the recommended procedures applicable to avoid false alerts:

a. listen on EMERG FREQ **121.500** MHz prior to and after each FLT (these operations shall be part of the checklist);

b. if the ACFT has suffered strong shocks, e.g. during a hard LDG, when crossing thresholds of hangar doors, during loading, transporting or unloading of gliders, etc., also verify the ELT is off on EMERG FREQ;

c. ELT live Test are prohibited. ELT Self tests may be carried out in accordance to the ELT manufacturer manual. **406 MHz ELTs tests have to be carried out by an APV MAINT facility** using APV test equipment. Following procedure is only valid for ELTs **solely transmitting on 121.500 MHz.** For a very brief period during the first MIN after any HR (on the HR). To do this, set the ELT from ”ARM” to ”ON”, then to **”OFF”**, setting it to ”ARM” AGN;

d. For major MAINT works on the ACFT, the ELT shall be removed and batteries shall be disconnected or removed. Batteries shall be replaced in accordance with the ELT manufacturer manual.

Any inadvertent activation of an ELT shall be immediately notified to RCC Zurich or the appropriate ATS by indicating the location and the duration of the Emmission, so that the alert can be CNL:

RCC Zurich	Phone:	+41 (0) 58 484 10 00 or
ACC Zurich	Phone:	+41 (0) 43 931 69 60 or
ACC Geneva	Phone:	+41 (0) 22 747 13 40

5.6 Helicopter Priority Procedures with ATC

5.6.1 Declaration of priority via RTF

Except as defined in § 6.6.2 below, priority by helicopter emergency, rescue and SAR flights shall be declared on the appropriate ATS frequency. For this purpose, the following phrases shall be used:

- "REQUEST PRIORITY" or
- "REQUEST MEDIUM PRIORITY"

"REQUEST PRIORITY" indicates a high priority flight equivalent to an ambulance transport with blue lights flashing (no delay acceptable).
"REQUEST MEDIUM PRIORITY" advises about the ability to absorb some delay, which is to be agreed with the ATS.

Whenever deemed necessary by the medical personnel, a helicopter emergency, rescue and SAR flight may, at any time, change its status of priority from "medium" to "high", by making the appropriate call on the ATS frequency.

5.6.2 Declaration of priority via call/sign

When so established in an appropriate Letters of Agreement (LoA) between the helicopter emergency, rescue and SAR operators and ATS units, flight crews of emergency, rescue and SAR flights may use their call signs to differentiate between the high, medium and no priority requests.

When call signs are used for the declaration of helicopter emergency, rescue and SAR priority, they shall be established as per the following model:

- HIGH PRIORITY: telephony designator followed by the flight number and "P",which shall be pronounced as PRIORITY on initial call. Thereafter, as "PAPA",
- MEDIUM PRIORITY: telephony designator followed by the flight number,
- NO PRIORITY: telephony designator followed by the last two letters of the aircraft registration.

To establish a LoA with Skyguide contact: atm@skyguide.ch

5.6.3 Transponder Code

All emergency, rescue and SAR flights should use the transponder code 7100, unless differently in-structed by the ATC or another emergency (7700, 7600 or 7500) code is used.

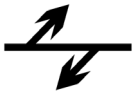
5.7 Search and rescue signals

(REF: ICAO Annex 12)

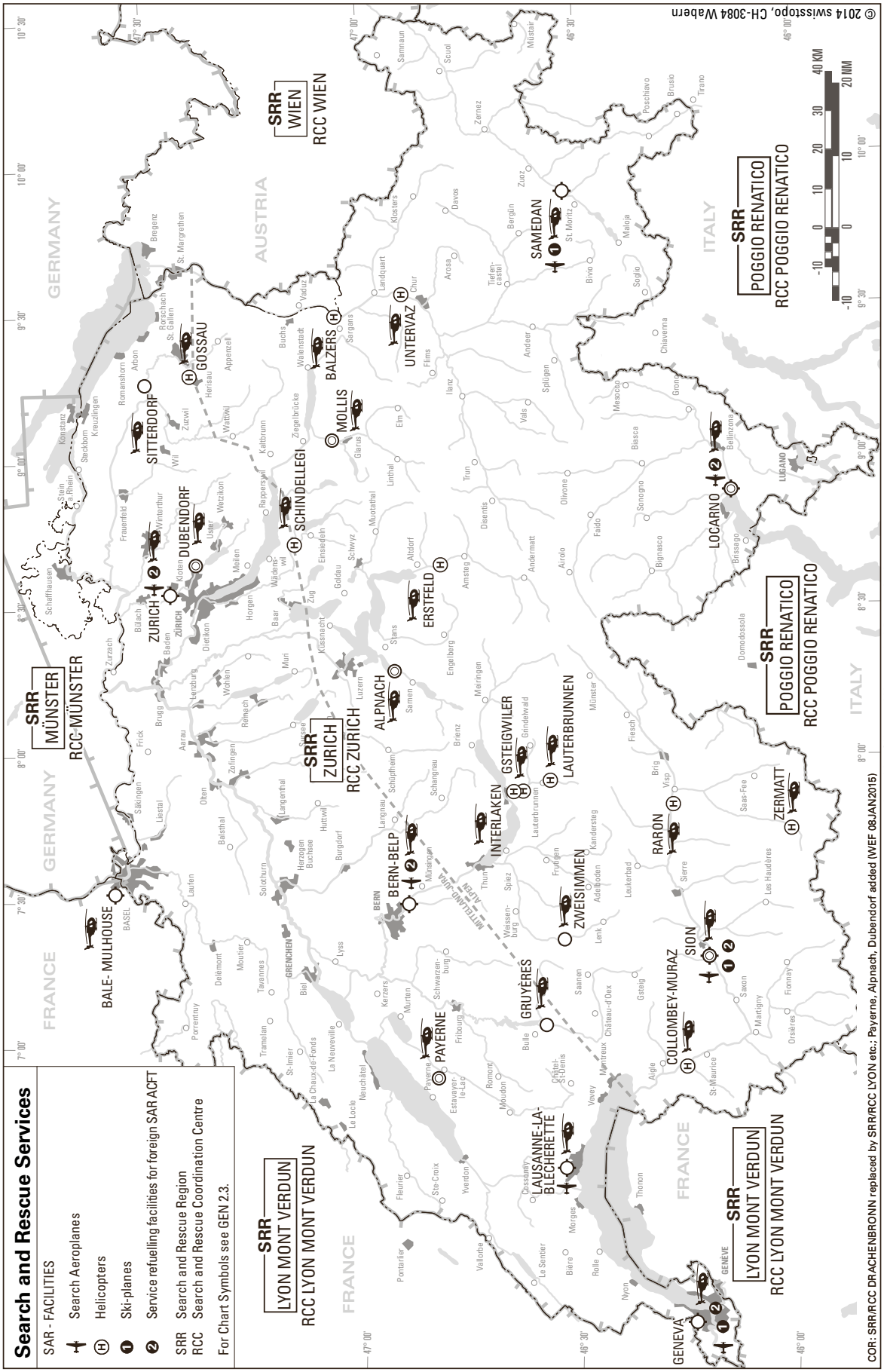
Ground-air visual signal code for use by survivors

No	Message	Code symbol
1	Require assistance	V
2	Require medical assistance	X
3	No or Negative	N
4	Yes or affirmative	Y
5	Proceeding in this direction	↑

Ground-air visual signal code for use by rescue units

No	Message	Code symbol
1	Operation completed	LLL
2	We have found all personnel	L L
3	We have found only some personnel	++
4	We are not able to continue. Returning to base	X X
5	Have divided into two groups. Each proceeding in direction indicated	
6	Information received that aircraft is in this direction	→ →
7	Nothing found. Will continue to search	N N

5.8 SEARCH AND RESCUE SERVICES



THIS PAGE INTENTIONALLY LEFT BLANK