



EASA Rules from Regulator side

Switzerland

15.6.2017, Peter Tschümperlin



Agenda

- 1. Introduction**
- 2. EASA Aerodromes Transition Project ARFF**
- 3. Audit ARFF**
- 4. Key Points**
- 5. Questions**

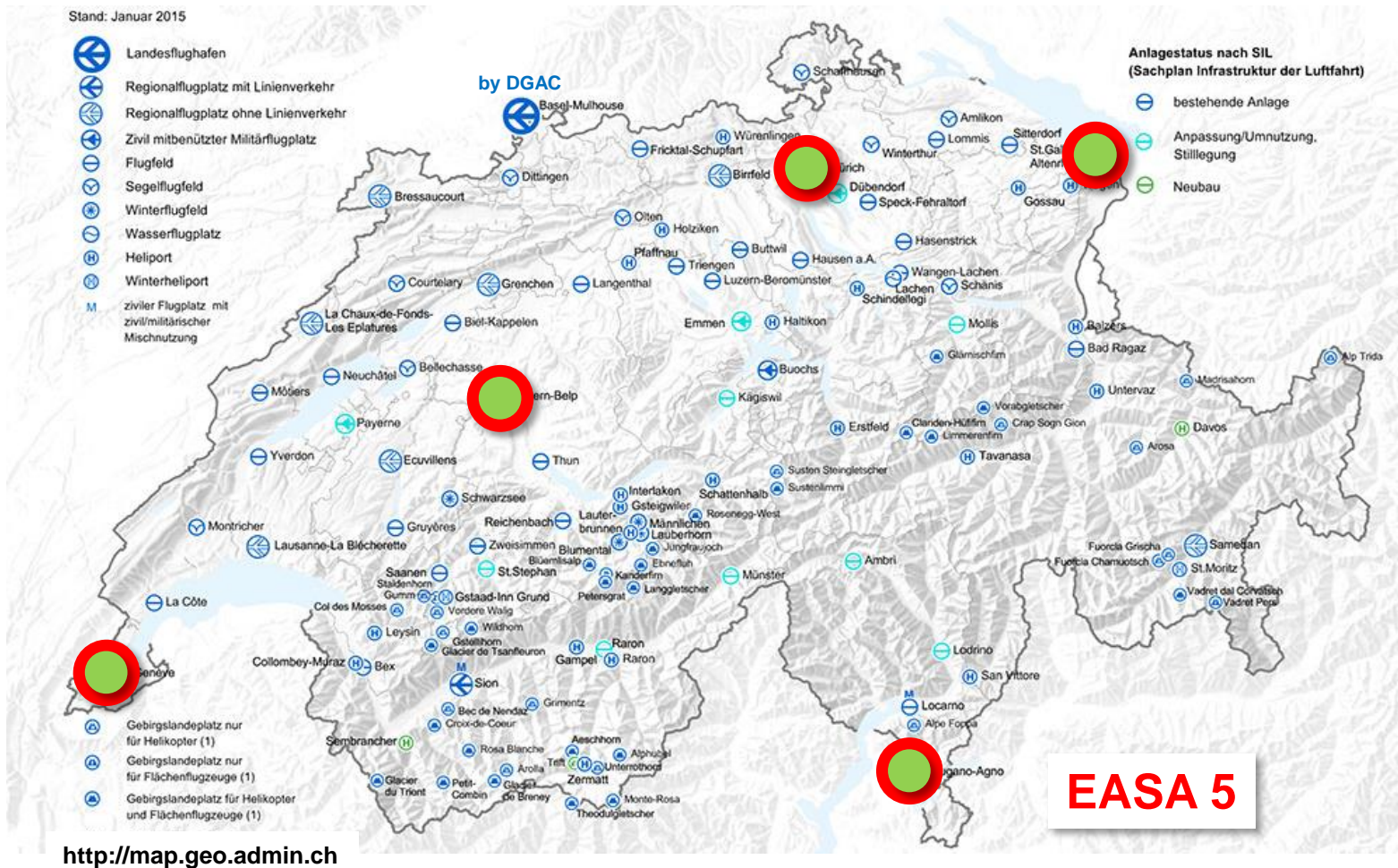


Introduction





Aerodrome Certification





EASA Aerodromes Transition Project ARFF

Swiss civil aviation safety is regulated by regulations and directives of the EU, the EASA and Eurocontrol, as well as ICAO SARPS and Swiss legislation

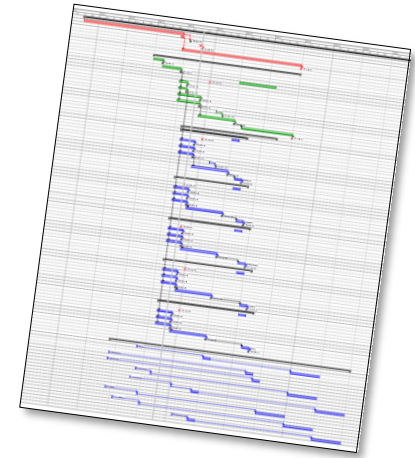
- **ICAO Annexes and Manuals directly applicable**
- **EU / EASA regulations and directives** (directly applicable after adoption by the Joint Committee into the appendix to the bilateral agreement on air transport between Switzerland and the EU)
- **Eurocontrol regulations directly applicable**
- **Swiss legislation**





Timing

Aerodrome	Conversion
Geneva	20.12.2016
Lugano	21.12.2016
Altenrhein	May 2017
Zürich	July 2017
Bern	October 2017



- **End of transition period (31.12.2017)**
- **Parallel ICAO (re)certifications for 8 aerodromes**



EASA Certificate

- **Unlimited duration with max. oversight cycle 4 years**
- **Terms of certificate attached**
- **Separate national (ICAO) certificate for subjects not (yet) regulated by EASA (e.g. heliports)**





Audit EASA





Audit ARFF - Focus

Aerodrome Emergency Planning

Audit 1 h – check of documents

- Emergency Plan
- Coordination of appropriate organisations
- Intervention aerodrome located close to water
- Emergency in difficult environment (swampy areas)
- Assessment of approach and departure areas within 1000 m of the runway threshold
- Fence and gate
- Response time
- Emergency exercises (full-scale and partial)

LSGG are asking for an AltMOC (Alternative Means of Compliance) for emergency exercises to increase the interval



Audit ARFF – Focus (1/2)

Rescue and Firefighting

What FOCA are doing during the year:

- Check of Response time
- Check of Emergency Exercises

Audit 1 h – check of documents

- Number of staff, vehicles, extinguishing agents (Task Resource Analysis)
- Training (Program) – basic and live drills
- Check of responsibilities (Instructors – Assessors)
- Verification competence of staff
- Medical and Fitness
- Reserve of complementary agent (foam and powder)



Audit ARFF – Focus (2/2)

Rescue and Firefighting

- Inventory of rescue material
- Response time max 3 minutes with intervention layout
- Low visibility process
- Training in human performance including team coordination
- Task Resource Analysis



Audit ARFF - Focus

Disabled Aircraft Removal

Audit 1 h – check of documents

- Responsibility of COO (chief of aerodrome)
- Plan for the removal of an aircraft with checklist
- Model contract (removal contract)
- Equipment and personnel
- Responsibility of the pilot / aircraft owner
- Training



Zurich Airport



Category 10

- Main station: 2 vehicles
- Nord station: 2 vehicles
- Tarmac: 1 vehicle
- Min 11 firefighters
- Schutz und Rettung Zurich (professional)

2016

- 236'000 Movement
- 26.6 Mio Pax

- Emergency plan on website airport
- Operations manual ARFF with training details
- Assessment 1000 m in task resource analysis




Zurich Airport





Zurich Airport

 Stadt Zürich Schutz & Rettung	Verantwortlich Formular	Jan Bauke 1385 / 0354700
BF_N_Ei Bergungsvertrag Deutsch		
Geltungsbereich:	BFN, FZAG-SMS	
Ziel:	Regelt die Verantwortlichkeiten bei Flugzeugbergungen auf dem Flughafen Zürich	

Vertrag zwischen

Stadt Zürich, Schutz und Rettung (SRZ), Zürich
und

Auftraggeber:

Vertreten durch:

- Der Auftraggeber erteilt (SRZ) den Auftrag, das Luftfahrzeug welches sich zurzeit in (Unfallstelle) befindet, zu bergen.
- SRZ verpflichtet sich, die für die Bergung erforderliche Spezialausrüstung sowie ausgebildetes Bergungspersonal zur Verfügung zu stellen.
- SRZ führt die Bergung in Übereinstimmung mit ihrem Standard-Verfahren auf Kosten und Gefahr des Auftraggebers durch. Die Kosten bestehen namentlich aus:
 - Personalkosten
 - Benutzung der Spezialausrüstung
 - weitere Kosten im Zusammenhang mit der Bergung
- Der Auftraggeber verpflichtet sich, SRZ alle Daten, Dokumente und Informationen zu liefern, welche für die Bergung erforderlich sind.
- SRZ führt die Bergung nach der Freigabe des verunfallten Luftfahrzeuges durch die Schweizerische Unfalluntersuchungsstelle (SUST) durch.
- Das oben erwähnte Luftfahrzeug wird nach der Bergung dem Auftraggeber auf dessen alleinige Gefahr zur Verfügung gestellt.
- Jegliche Haftung von SRZ, ihrer Angestellten, Hilfspersonen und Subunternehmen für Schäden bzw. für Forderungen, welche in Zusammenhang mit der Erfüllung dieses Vertrages entstehen bzw. geltend gemacht werden, wird weg bedungen. Der Auftraggeber stellt SRZ, ihre Angestellten, Hilfspersonen und Subunternehmen von allen Ansprüchen und Kosten frei, welche von Dritten im Zusammenhang mit der Erfüllung dieses Vertrages gegen sie geltend gemacht werden.
- Dieser Vertrag untersteht schweizerischem Recht. Der Gerichtsstand ist Zürich.

Ort, Datum Stadt Zürich, Schutz & Rettung, Zürich

.....

Ort, Datum Auftraggeber

.....





Geneva Airport



Category 9

- Main station: 3 vehicles
- Min 9 firefighters
- During 23h30-06h00
Cat 7 – 7 firefighters

2016

- 148'000 Movement
- 16.4 Mio Pax

- New emergency plan including proximity of the airport
- Responsibility between city and airport fire brigade
- Assessment 1000 m (areas of France) in task resource analysis



Geneva Airport

GENÈVE
AÉROPORT

Manuel du Plan d'urgence
de Genève Aéroport



Alarme, intervention et gestion de crise

*Edition 8.0
Janvier 2017*



(c) DPTS - December 2006





Geneva Airport





Altenrhein Airport



Category 2

- 2 firefighters
- Category 3-6 for scheduled traffic
3-7 firefighters
- Main station: 2 vehicles

2016

- 2'100 Movement
- 99'000 Pax

- Infrastructure / vehicles
- Training in Vienna
- Emergency Exercises



Altenrhein Airport





Lugano Airport



Category 4

- 5 firefighters
- Category 6 for scheduled traffic
7 firefighters
- Main station: 2 vehicles

2016

- 5'200 Movement
- 167'700 Pax

- Infrastructure Lake
- Training
- Emergency Exercises



Lugano Airport

Lugano Airport
L'Aeroporto della Svizzera italiana

PIANO DI EMERGENZA

Versione 2.0

01.01.2017





Bern Airport



Category 4

- 5 firefighters
- Category 6 for scheduled traffic
7 firefighters
- Main station: 2 vehicles

2016

- 7'700 Movement
- 167'300 Pax

- Home base of states airplanes
- Training
- Infrastructure / Vehicles



Bern Airport





Key Points





Key Points

Mandatory personnel – Directive FOCA

At the airports personnel must be properly trained and Rescue and Fire Fighting staff must be available during all aviation operations. The minimal mandatory number of personnel is defined as follows:

- Category 1 **1** Person
- Category 2 **2** Persons
- Category 3 **3** Persons
- Category 4 according task resource analysis
- Category 5 according task resource analysis
- Category 6 according task resource analysis
- Category 7 according task resource analysis
- Category 8 according task resource analysis
- Category 9 according task resource analysis
- Category 10 according task resource analysis



Key Points

- Documents and processing unit
- Training
- Task Resource Analysis
- Level of Protection
- Number of RFFS vehicles
- Extinguishing agents
- Response time
- Personnel
- Communication (Pilot, TWR)



Key Points

Open items

- Approval AltMOC interval emergency exercises (LSGG)
- Response time – interpretation of second and third vehicle (LSZH)

for example:

- Cat 10 / 3 vehicles (32'300 lt / level B)
 - One vehicle with 12'500 lt water, discharge 11'200 lt/min)
 - First vehicle 1 min 38 sec
 - Second 2 min 40 sec and third vehicle 2 min 50 sec
- **Any vehicle , other than the first responding vehicle(s), required to achieve continuous agent application of the amount of extinguishing agents specified in Table 1 of AMC4 ADR.OPS.B.010 arrives no more than one minute after the first responding vehicle(s)**



Questions

