

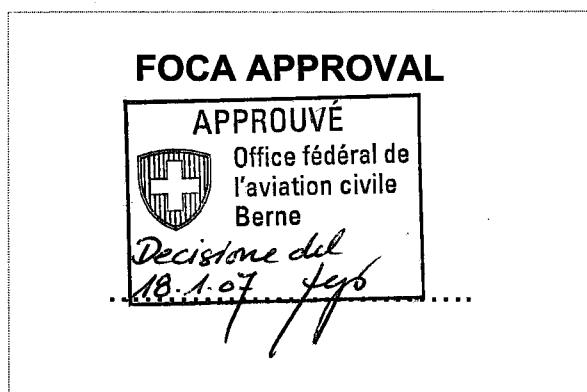
Annex G to the Airport Operational Regulations



Training Requirements Application Manual

Guidelines for the Lugano Airport Pilot Qualification

version December 16 2006



Lugano Airport guidelines for the Pilot Qualification

1 Pilot Qualification

To operate at Lugano under IFR or Commercial VFR, all flight crew members must hold a valid Pilot Qualification for the applicable type of operation and flight procedures.

The training programme for each Pilot Qualification type is described in this Training Requirements Application Manual (TRAM).

To achieve the Pilot Qualification, the Operator (or the Pilot) shall forward a proof of conducted pilot training to the Airport Authority.

A Pilot Qualification done on a Single-Pilot aircraft is only valid for Single-Pilot aircrafts, a Pilot Qualification done on a Multi-Pilot aircraft is only valid for Multi-Pilot aircrafts.

2 TRAM (Training Requirements Application Manual)

This document shall be regarded as a guideline covering the minimum training requirements, defined by the Airport Authority Lugano (AALugano) and approved by the Swiss Federal Office for Civil Aviation (FOCA), to obtain the corresponding Pilot Qualification type A, B or C.

The requirements contained in this document doesn't exempt an Operator or a Pilot from observing the overall governing regulations, such as JAR-OPS.

3 Applicability

The guidelines of this manual are applicable for the training of:

- a) Swiss flight crews,
- b) Foreign flight crews, and
- c) Instructors intending to operate in IFR at Lugano.

Operators holding a JAA AOC may use this guideline to set up their own (Company) training programme that shall be submitted to the respective National Aviation Authority (NAA) for approval.

4 Pilot and Operator Qualifications and Aircraft Certification

4.1 Overview

REQUIREMENTS OVERVIEW					
Flight operation & procedures		Requirements	Pilot Qualification	Operator Qualification procedures	Aircraft Certification performances *
VFR	Commercial VFR departure / arrival		minimum Type A	nil	nil
IFR approach and landing	a) IFR Visual approach b) LLZ-DME HOTEL (approach angle 4.4°) c) Circling FOXTROT (day only) d) Circling CHARLIE (VIS 5000 meters or more day only / ceiling 3100 ft AAL or higher)		minimum Type A	nil	nil
	e) Circling CHARLIE with contingency (VIS 5000 meters or more night / ceiling 3100 ft AAL or higher)		minimum Type B	Approved contingency procedure (circling missed approach) required	nil
	f) Circling CHARLIE with contingency (VIS 3000 meters or more day / VIS 5000 meters or more night / ceiling 1700 ft AAL or higher) g) LLZ-DME LIMA (approach angle 5.4°)		minimum Type B	Approved contingency procedure (circling missed approach) required	glide certification > 5.4°
	h) IGS (approach 6.65°, landing 6°)		minimum Type C	nil	glide certification > 6°
IFR departure	i) IFR departure under visual meteo conditions j) Take-off (VIS 3000 meters or more / ceiling 2100 ft AAL or higher)		minimum Type A	nil	nil
	k) Take-off (VIS 400 meters or more)		minimum Type B	Approved contingency procedure (take-off RWY 19 and/or 01) required	nil
Note:		*The aircraft must always meet the climb requirements of the applicable procedure.			
Legend:		nil = not required			

4.2 Qualification and Certification requirements for using Lugano flight procedures

What are the requirements to obtain the Qualifications and/or the Certification?	Pilot Qualification			Operator Qualification procedures	Aircraft Certification performances *
	Type A	Type B	Type C		
	The pilot must at least complete the training for Pilot Qualification type A (see Lugano Airport internet briefing under www.lugano-qualification.ch)	The pilot must at least complete the training for the Pilot Qualification type B	The pilot must complete the training for the Pilot Qualification type C	The respective contingency procedure must be available for training	The corresponding AFM supplement for the approach procedure or a "Letter of non Objection" must be available for training
Note:		*The aircraft must always meet the climb requirements of the applicable procedure.			
Legend:		AFM = Aircraft Flight Manual			

4.3 Procedures to obtain the Qualifications and/or the Aircraft Certification

What are the correct procedures to obtain the Qualifications and/or the Certification?	Pilot Qualification			Operator Qualification procedures	Aircraft Certification performances *
	Type A	Type B	Type C		
a) for Operators holding a JAA AOC	<p>The single pilot applies for the Pilot Qualification type A to the AALugano (see Airport Briefing under www.lugano-qualification.ch)</p> <p>AALugano verifies the validity of the application</p> <p>AALugano confirms the Pilot Qualification type A to the single pilot</p> <p>AALugano updates the type A Qualified Pilots List and informs the Swiss NAA</p>	<p>The Operator submits its Pilot Qualification type B or C training programme to the respective NAA for approval</p> <p>Pilots absolve the type B or C training according to the programme approved by the respective NAA</p> <p>The Operator transmits an updated list of pilots, who own a valid type B or C Pilot Qualification to the AALugano</p> <p>AALugano updates the type B or C Qualified Pilots List and informs the Swiss NAA</p>		<p>The Operator calculates the required contingency procedures (acc. JAR OPS)</p> <p>The Operator submits the contingency procedures to the respective NAA for approval</p> <p>The respective NAA confirms the approval of the contingency procedures to the Operator</p> <p>The Operator transmits the approval confirmation to the AALugano</p> <p>AALugano updates the Qualified Operators List</p>	<p>The Operator presents the corresponding AFM supplements or a "Letter of non Objection" to the respective NAA</p> <p>The respective NAA confirms the validity of the AFM supplements to the Operator</p> <p>The Operator transmits the confirmation to the AALugano</p> <p>AALugano updates the Certified Aircraft List</p>
b) for all other Operators	Same procedure as for Operators holding a JAA AOC	<p>The Operator or the pilot proves to the AALugano (see corresponding application form), that Pilot Qualification type B or C has been accomplished</p> <p>AALugano updates the type B or C Qualified Pilots List</p>		<p>The Operator calculates the required contingency procedures (acc. PANS OPS)</p> <p>Same procedure as for Operators holding a JAA AOC</p>	Same procedure as for Operators holding a JAA AOC

Note: *The aircraft must always meet the climb requirements of the applicable procedure.

Legend: JAA = Joint Aviation Authorities NAA = National Aviation Authority (Foreign Operators) AALugano = Airport Authority Lugano AFM = Aircraft Flight Manual

4.4 Instructor requirements for the Lugano Airport Pilot Qualifications Training

Which instructor is authorised to conduct the Lugano Airport Training?	Pilot Qualification			Operator Qualification procedures	Aircraft Certification performances *
	Type A	Type B	Type C		
a) for Operators holding a JAA AOC	not required	<p>The instructor shall hold the corresponding Lugano Qualification, including Class and Type Rating (exceptions to the Class and Type Rating requirements may be given by the respective NAA)</p> <p>Operator's Training Programme approved by the respective NAA</p>		<p>The respective contingency procedure must be available for training</p>	<p>The corresponding AFM supplements or a "Letter of non Objection" for the approach procedure must be available for training</p>
b) for all other Operators	not required	<p>The instructor shall hold the corresponding Lugano Qualification, including Class and Type Rating (exceptions to the Class and Type Rating requirements may be given by the Swiss NAA)</p> <p>Training according to the minimum training programme (see guidelines for the Lugano Airport Pilot Qualification)</p>		<p>The respective contingency procedure must be available for training</p>	<p>The corresponding AFM supplements or a "Letter of non Objection" for the approach procedure must be available for training</p>

Note: *The aircraft must always meet the climb requirements of the applicable procedure.

Legend: JAA = Joint Aviation Authorities NAA = National Aviation Authority (Foreign Operators) AFM = Aircraft Flight Manual

5. Minimum training requirements

The minimum training programme for the crew qualification (type A, B or C) shall respectively comply with the content of article 5.1, 5.2 or 5.3. of this manual.

The training for pilots wishing to operate under IFR conditions in Lugano shall fulfil the training and checking requirements for the applicable type or class of aircraft according to JAR-OPS 1 level C aerodrome.

5.1 Qualification type A

A theoretical self-instruction on:

- Lugano general operational requirements (FOCA & Airport Authority),
- Local weather phenomena and dangers,
- Lugano orographic and topographic situation, including all relevant obstacles,
- Approach and departure procedures (VFR and IFR), contingency procedure (OEI),
- Noise abatement and communication procedures,
- Aircraft performance (AEO and OEI), including calculations of MTOM, MLM gradients and applicable minima,
- Emergency procedures and if applicable the relevant company contingency procedures.

5.2 Qualification type B

5.2.1 Qualification for Commander

A) Airport briefing theoretical instruction according to the items mentioned under article 5.1 of this manual.

B) Practical training as Pilot Flying, including at least:

1) Departure:

- 1 take-off RWY 01 climbing to 6000 ft QNH onto SID or applicable contingency procedure. This, with a simulated One Engine Inoperative (OEI) condition (not before V_2 when executed on an aircraft),
- 1 take-off RWY 19 climbing to 6000 ft QNH onto SID or applicable contingency procedure. This, with a simulated One Engine Inoperative (OEI) condition (not before V_2 when executed on an aircraft).

2) Approach:

- 1 approach All Engine Operative (AEO) with a simulated One Engine Inoperative (OEI) go-around procedure,
- 1 approach (AEO) followed by a Charlie circling procedure to a full-stop,
- 1 approach (AEO) followed by a Charlie circling procedure with a go-around from circling according company contingency procedures.

For the practical training, to be conducted on the aircraft in Lugano, the meteorological conditions shall be at least VIS 5000 meters and ceiling 5000 ft QNH.

5.2.2 Qualification for First Officer

Training for First Officer shall include at least:

- Items mentioned under article 5.2.1, paragraph A of this manual, and
- items mentioned under article 5.2.1, paragraph B (as Pilot Non Flying)

5.3 Qualification type C

5.3.1 Qualification for Commander

- A) Training according to article 5.2.1 of this manual.
- B) Steep approach crew qualification, including at least:
 - 1) Steep approach and landing as Pilot Flying:
 - 1 approach IGS 01, All Engines Operative (AEO), with a landing out of a steep approach angle between 6° and 6.65° in Lugano, to a full stop.
 - 1 approach IGS 01, All Engines Operative (AEO), followed by a go-around from MDA with a simulated One Engine Inoperative (OEI) condition, climbing to 6000 ft QNH.
 - 2) If the Commander has not been previously qualified for steep approach, a basic training should be done, including at least 6 landings out of steep approach angles at or higher than 5.5°.

Training may be conducted on a Full Flight Simulator (FFS) certified under JAR-STD having visual scenery of Lugano. If the simulator or the scenery is not available, training shall be conducted on the corresponding aircraft class or type in Lugano. For the practical training, meteorological conditions shall be at least VIS 5000 meters and ceiling 5000 ft QNH.

5.3.2 Qualification for First Officer

In order to perform a landing out of a steep approach, the First Officer must complete the training mentioned under article 5.3.1, paragraph B of this manual, too.

6. Training for Airport Qualification

The authorisation and qualification for instructors and training organisations wishing to conduct training for the Lugano Airport Qualification is under the jurisdiction of the respective National Aviation Authority (NAA).

7. Training organisations

Any FTO, TRTO or operator's training organisation, approved by its National Aviation Authority (NAA), may conduct the Lugano Airport Qualification training.

8. Instructors

Any instructor, approved by his/her NAA, may conduct the Lugano Airport Qualification training, provided he/she holds a valid Lugano Pilot Qualification of the respective type (A, B or C), including Class and Type Rating (exceptions to the Class and Type Rating may be given by the National Aviation Authority).

9. Training programme

The minimum training programme shall comply with the content of section 5 of this manual, and must be conducted in accordance with the requirements of the applicable procedure.

10. Recency

10.1 Pilots operating under JAA AOC

Airport qualification recency shall be maintained according to JAR-OPS 1 and JAR-FCL.

10.2 Pilots part of private operator and commercial operator other than AOC-holder

All flight crews are recent for IFR procedures and IGS operation, regardless of position, rank and function, if at least 1 IFR approach into- and 1 IFR departure from- Lugano are conducted within a 6 month period, and not being part of recurrent training.

In case of an interruption of the recency of more than 6 months, the applicable minima for the first 3 approaches shall be augmented by 500 feet and the applicable visibility by 1000 meters. Furthermore, the first 3 take-offs shall be conducted with a minimum VIS of 3000 meters and a minimum ceiling of 2100 ft AAL.

In case of an interruption of the recency of 12 months and more, training shall be completed including at least:

- 1 approach, All Engines Operative (AEO), (IGS if applicable) followed by a go-around. This with a simulated One Engine Inoperative (OEI) condition, climbing to 6000 ft QNH.
- 1 take-off RWY 19 climbing to 6000 ft QNH onto SID or applicable contingency procedure. This, with a simulated One Engine Inoperative (OEI) condition (not before V2 when executed on an aircraft).

In case of an interruption of the recency of 24 months and more, the airport qualification is no longer valid and must be fully redone.

11. Grandfather rights

All flight crews holding a valid Lugano Qualification dated before OCT 2003 are still qualified (for the respective Pilot Qualification type) provided:

- the training proof complies with the requirements of Pilot Qualification section 0 of this manual, and
- the training was done within the last 24 months before the above mentioned date.

Grandfather rights are not applicable if the Airport Qualification Recency requirements are not met.

12. Exemption

Flight crews that are requested to execute calibration flights may request to the Swiss National Aviation Authority (NAA) to be exempted from part of the requirements of section 5 of this manual.

13. Authority

The Airport Authority Lugano (AALugano) has the right to denies or withdraw a Pilot Qualification, as well as to request additional requirements or clarifications for the approval of a Pilot Qualification.