1 Training Requirements Application Manual

1.1 Introduction

This document is a guideline covering the minimum training requirements, defined by the Lugano Airport Authority and approved by the Swiss Federal Office for Civil Aviation (FOCA), to obtain the corresponding qualification type A, B or C.
The requirements contained in this document do not exempt an operator or a pilot from complying with the overall governing regulations, such as EASA and national rules.
The training for pilots wishing to operate in Lugano shall fulfil the training according to the Commission Regulation 965/2012, Annex III, Part-ORO, ORO.FC.105 (b) for category C aerodrome.

1.2 Pilot Qualification

To operate at Lugano under IFR or commercial VFR, pilots must hold a valid pilot qualification for the applicable type of operation and flight procedures.
Under flight operations that require a pilot qualification B or C, only the pilot in command or the pilot under instruction has the right to conduct the landing in Lugano.
The Lugano Airport Authority has the right to deny or withdraw a Pilot qualification, as well as to request additional requirements or clarifications.

1.3 Applicability

The guidelines of this Training Manual are applicable for the training of aeroplane flight crews and instructors intending to operate under IFR or VFR commercial at Lugano only.
Helicopter flight crews are allowed to operate without Lugano qualification.
All pilots holding a valid qualification before the approval of this TRAM update remain qualified.

2 Procedures to obtain the qualification

2.1 Overview

REQUIREMENTS OVERVIEW				
Flight Procedure	Flight Operation	Pilot Qualification	Operator Qualification Procedures	Aircraft Performances
Approach and landing	- VFR commercial - IFR Visual APP - LOC DME Circling C (VIS 5000 m or more and ceiling 3100 ft AAL or higher / Day Only) - LOC DME Circling F (Day only)	minimum type A	NIL	NIL
	- LOC DME Circling C (VIS 3000m or more day / VIS 5000 m or more night / ceiling 1700 ft AAL or higher)	minimum type B	Approved contingency procedure for circling missed approach required	NIL
	- IGS	minimum type C	NIL	glide > 6° See Explanation § 3.1.4
Departure	- IFR departure	minimum type A	NIL	NIL
	- T-O (VIS 400m - 3000m)	minimum type B	Approved contingency procedure for take-off RWY 19 and/or 01 required	NIL

2.1.1 Type A

The pilot applies for the Pilot qualification type A to the Lugano Airport Authority on : www.lugano-qualification.ch. The qualification consist in a familiarization briefing and a test with multiple-choice questions. The Lugano Airport Authority verifies the validity of the application and updates the Type A qualified pilots list.

2.1.2 Type B

The operator submits its training syllabus with the related approved contingency procedure to the respective NAA for approval and transmits the approval confirmation to the Lugano Airport Authority.
The pilot in command performs the training according to the training syllabus approved by the respective NAA. Once done, the operator transmits an updated list of pilots who obtained the Type B qualification to the Lugano Airport Authority which will update the list of qualified pilots accordingly.

2.1.3 Type C

The operator submits its training syllabus to the respective NAA for approval and transmits the approval confirmation to the Lugano Airport Authority.
The operator presents the corresponding AFM supplements or a "Letter of non-objection" (described in chapter 2.3.4) to the Lugano Airport Authority.
The pilot in command performs the training according to the training syllabus approved by the respective NAA. Once done, the operator transmits an updated list of pilots who obtained the Type C qualification to the Lugano Airport Authority which will update the list of qualified pilots accordingly.

3 Minimum training requirements

3.1.1 Qualification Type A

A Theoretical Airport self-Instruction on-line include the following sections:
- LSZA general operational requirements,
- Local weather phenomena and dangers,
- LSZA orographic and topographic situation, including all relevant obstacles,
- APP and DEP procedures, VFR and/or IFR, Contingency Procedure for OEI,
- Noise abatement procedure
- Communication procedures,
- Aircraft performance, AEO and OEI,
- Emergency procedures and if applicable, the revelant company contingency procedures.

3.1.2 Qualification Type B

The Pilot in command shall:
- Pass the On-line test to get the qualification A
- Practice as Flying Pilot, including at least :
    - One take-off runway 01 climbing onto the entire SID or applicable contingency procedure with a simulated one-engine inoperative.
    - One take-off runway 19 climbing onto the entire SID or applicable contingency procedure with a simulated one-engine inoperative,
    - One approach LOC DME AEO, followed by a go-around at MDA, with a simulated one-engine inoperative;
    - One approach LOC DME AEO, followed by a circling C with a go-around from circling, according to company contingency procedures; and
    - One approach LOC DME AEO, followed by a circling C to a full stop LDG.

On a multi-pilot aircraft, the first officer has to pass at least the qualification A.

3.1.3 Qualification Type C

The Pilot in command shall:
- Pass the On-line Test to get the qualification A
- Practice as Flying Pilot, including at least :
    - One take-off runway 01 climbing onto SID or applicable contingency procedure with a simulated one-engine inoperative.
    - One take-off runway 19 climbing onto SID or applicable contingency procedure with a

simulated one-engine inoperative,
• One approach IGS 01 AEO, followed by a go-around at MDA, with a simulated one-engine inoperative; and
• One approach IGS 01 AEO, followed by a full stop LDG.

If the commander has not been previously qualified for steep approach, a basic training should be done, including at least 4 landings out of steep approach angles at or higher than 5.5°.

On a multi-pilot aircraft, the first officer has to pass at least the qualification A.

3.1.4 Operational characteristics for IGS RWY 01

For aircrafts certified for steep approaches of 6.65 ° or more, the instrument approach procedure IGS 01 can be used at an angle of 6.65 ° for the entire approach to landing.
For aircrafts certified for steep approaches with an angle between 6 ° and 6.64 °, the use of the instrument approach procedure IGS 01 is regulated as follows:

- The aircraft shall obtain a "Letter of non-objection" from the manufacturer to carry out approaches with a maximum angle of 6.65.
- The approach takes place at an angle of 6.65 degrees from the Final Approach Fix (FAF) to the Minimum Descent Altitude (MDA). The next landing phase starting from the Minimum Descent Altitude (MDA) is carried out with a maximum angle of 6° using the PAPI (Precision Approach Path Indicator).
- The aircraft must be stabilized at the latest at an altitude of 500 feet above the airport elevation; otherwise the approach procedure must be interrupted and a go-around procedure must be initiated.
- An approach can only be done if the tailwind component does not exceed half of the value of the tailwind component according to the flight manual of the aircraft.
- The maximum discrepancy allowed along the trajectory corresponds to a half scale on the glide-slope Indicator (usually 1 "dot"). If this limit is exceeded, a go-around procedure must be carried out without exception.

3.1 Qualification for Instructors

Any instructor or a training organisation, approved by his/her National Aviation Authority, may conduct the Lugano airport qualification training, provided he/she holds a valid Lugano type B or C qualification. Five instrument approaches on site are necessary prior to conduct Lugano airport qualifications as an instructor.

3.2 Training environment for qualification B and C

The practical Training, must be conducted on the aircraft at LSZA, the meteorological conditions shall be at least VIS > 5000 meters and ceiling > 5000 ft QNH.

Training may be conducted on a certified Full Flight Simulator having visual scenery of LSZA. If the FFS or the scenery is not available, the training shall be conducted on the corresponding aircraft class or Type at Lugano Airport.

4 Validity

4.1 Qualification Type A

Airport qualification type A is valid for two years.

4.2 Qualification Type B and C

Pilots must hold a valid qualification type A.
The pilot in command shall fly at least 1 IFR approach into and 1 IFR departure from LSZA within a 12 months period.
In case of an interruption of the recency of 12 months and more, the applicable minima for the first 3 approaches shall be augmented by 500 feet for Ceiling and the applicable visibility by 1000 meters.
In case of an interruption of the recency of 24 months and more, a new qualification B or C is required.