Lugano Airport

Lugano-qualified instructor briefing package (Types B-C-D)

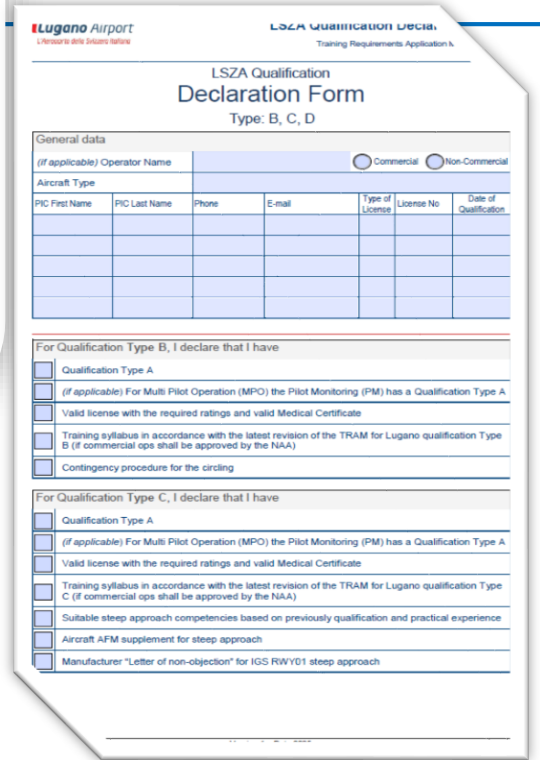

Lugano Airport
L'Aeroporto della Svizzera italiana

Training Requirements Application Manual
Lugano Category C Airport Guidelines for the Pilot Qualification

Lugano Airport
L'Aeroporto della Svizzera italiana

Training Requirements Application Manual
Guidelines for the Lugano Airport Pilot Qualification

Version 2 – March 2025


Lugano Airport
L'Aeroporto della Svizzera italiana

LSZA Qualification
Declaration Form
Type: B, C, D

General data

(if applicable) Operator Name	◯ Commercial ◯ Non-Commercial
Aircraft Type	

PIC First Name	PIC Last Name	Phone	E-mail	Type of License	License No	Date of Qualification

For Qualification Type B, I declare that I have

- ☐ Qualification Type A
- ☐ *(if applicable)* For Multi Pilot Operation (MPO) the Pilot Monitoring (PM) has a Qualification Type A
- ☐ Valid license with the required ratings and valid Medical Certificate
- ☐ Training syllabus in accordance with the latest revision of the TRAM for Lugano qualification Type B (if commercial ops shall be approved by the NAA)
- ☐ Contingency procedure for the circling

For Qualification Type C, I declare that I have

- ☐ Qualification Type A
- ☐ *(if applicable)* For Multi Pilot Operation (MPO) the Pilot Monitoring (PM) has a Qualification Type A
- ☐ Valid license with the required ratings and valid Medical Certificate
- ☐ Training syllabus in accordance with the latest revision of the TRAM for Lugano qualification Type C (if commercial ops shall be approved by the NAA)
- ☐ Suitable steep approach competencies based on previously qualification and practical experience
- ☐ Aircraft AFM supplement for steep approach
- ☐ Manufacturer "Letter of non-objection" for IGS RWY01 steep approach

June 2025 – Ver1

TRAM: Chapter 3.3 Lugano-qualified instructor

The objective of the training provided is to ensure operational efficiency and safe operation of Lugano Type(s) B, C, D qualified pilot.

The minimum qualification required and the training needed for a Lugano-qualified instructor it is in the responsibility of the operator and/or of the training provider.

However, Lugano Airport ensures that useful Lugano Airport operational information (**Lugano-qualified instructor briefing package**) is consistent and available to the operator and/or training provider.

In case of doubts the operator or the training provider may request an advice to Lugano Airport Accountable Manager.

Objective

To support an instructor with relevant knowledge for Lugano qualifications Type B-C-D

Content

1. LSZA Qualifications B, C, D
2. Type of IFR Approaches
3. Lugano Weather Situations
4. SIDs Climb Gradients
5. Emergency Procedures
6. Sensitive Noise Areas

Content

1. LSZA Qualifications B, C, D

REQUIREMENTS OVERVIEW

Flight Procedure	Flight Operation			Pilot Qualifications	Operator Qualification Procedures	Aircraft Performances
Approach and Landing (1)	- VFR commercial - IFR Visual APP			Type A	NIL	NIL
	- LOC R01, Circling C R19 - LOC R01, Circling F R19	*VIS 5000 m or more and ceiling 3100 ft AAL or higher*	*-Day Only-*			
Type B →	- LOC R01 Circling C R19	*(VIS 3000 m or more)* *(VIS 5000 m or more (ceiling 1700 ft AAL or higher)*	*-Day-* *-Night-* *-Day and Night-*	Type B	Contingency procedure for circling missed approach required	NIL
Type C →	- IGS			Type C	NIL	glide > 6° (ch.3.2)
Departure (1)	- IFR Departure			-	-	-
	Take-off SE/ME	VIS 3000 m or more and ceiling 2100 ft AAL or higher		Type A	NIL	NIL
Type D →	Take-off ME	VIS 400 m or more and less than 3000 m		Type D	Contingency procedure for take-off RWY 19 or 01 required	NIL
	Take-off SE	VIS 800 m or more and less than 3000 m, ceiling 1200 ft AAL or higher				

1. LSZA Qualifications B, C, D

Type B

2.1.2 Type B

The PIC performs the training according to the operator's training syllabus and ensures that the "LSZA Qualification Declaration Form" has been fill out according the qualification **type B** (refer to chapter 6).

The PIC/Operator ensures that the related contingency procedure for circling missed approach are in compliance with the requirements and the aircraft performance meets the required limitations.

Type B

3.1.2 Qualification Type B

The PIC shall:

- Pass the On-line test to get the qualification type A
- Practice as Flying Pilot, including at least:
  - One approach LOC RWY 01 for Circling C RWY19 AEO, followed by a go-around at MDA/ MAP:
    - *FSTD*: with one-engine inoperative
      or
    - *Aircraft*: OEI performances with symmetric thrust reduction
  - One approach LOC RWY 01 for Circling C RWY19 AEO, followed by a circling C with a go-around from circling, according to company contingency procedures
  - One approach LOC RWY 01 for Circling C RWY19 AEO, followed by a circling C to a full stop LDG

On a multi-pilot operation (MPO), the Pilot Monitoring (PM) has to pass at least the qualification type A.

Type C

2.1.3 Type C

The PIC performs the training according to the operator's training syllabus and ensures that the "LSZA Qualification Declaration Form" has been fill out according the qualification **type C** (refer to chapter 6).

The PIC/Operator ensures that the related AFM supplements for steep approach and/or a manufacturer "Letter of non-objection" are in compliance with the requirements and the aircraft performance meets the required limitations.

Type C

3.1.3 Qualification Type C

The PIC shall:

- Pass the On-line test to get the qualification type A
- Practice as Flying Pilot, including at least:
  - Before the PIC is eligible for the qualification Type C must have suitable steep approach competencies based on previously qualification and practical experience
  - One approach IGS RW01 AEO, followed by a go-around at DA:
    - *FSTD*: with one-engine inoperative
      or
    - *Aircraft*: OEI performances with symmetric thrust reduction
  - One approach IGS RW01 AEO, followed by a full stop LDG

On a multi-pilot operation (MPO), the Pilot Monitoring (PM) has to pass at least the qualification type A.

1. LSZA Qualifications B, C, D

Type D

2.1.4 Type D

The PIC performs the training according to the operator's training syllabus and ensures that the "LSZA Qualification Declaration Form" has been fill out according the qualification **type D** (refer to chapter 6).

The PIC/Operator ensures that the related contingency procedures for take-off RWY 19 or 01 are in compliance with the requirements and the aircraft performance meets the required limitations.

Type D

3.1.4 Qualification Type D

The PIC shall:

- Pass the On-line test to get the qualification type A
- Practice as Flying Pilot, including at least:
  - One take-off runway 01 climbing onto the SID or applicable contingency procedure:
    - *FSTD*: with one-engine inoperative
      or
    - *Aircraft*: OEI performances with symmetric thrust reduction
  - One take-off runway 19 climbing onto the SID or applicable contingency procedure:
    - *FSTD*: with one-engine inoperative
      or
    - *Aircraft*: OEI performances with symmetric thrust reduction

On a multi-pilot operation (MPO), the Pilot Monitoring (PM) has to pass at least the qualification type A.

1. LSZA Qualifications B, C, D

3.2 Training environment for qualification type B, C and D

Practical training on Aircraft

The practical training might be conducted on the aircraft at LSZA. However, the meteorological conditions shall be at least:

- VIS => 6 km, and
- Ceiling => 5'000 ft QNH

Practical training on a FSTD

If available, the training may also be conducted on an evaluated (*Note 1*) and approved FSTD as follow:

- Full Flight Simulator (FFS); or
- Flight Training Device (FTD)

Note 1: A FSTD evaluation is required to ensure suitable Lugano visual layout and appropriate navigation equipment. The evaluation shall be conducted by the operator before the FSTD may be used for Lugano training qualification purpose. A list of already evaluated FSTD are published on Lugano Airport website www.lugano-qualification.ch.

The training to obtain a pilot Lugano qualification might be delegated to a Training Provider.

3.3 Lugano-qualified instructor

The objective of the training provided is to ensuring operational efficiency and safe operation of Lugano Type(s) B, C, D qualified pilot.
The minimum qualification required and the training needed for a Lugano-qualified instructor it is in the responsibility of the operator and/or of the training provider. However, Lugano Airport ensures that useful Lugano Airport operational information (Lugano-qualified instructor briefing package) is consistent and available to the operator and/or training provider.
In case of doubts the operator or the training provider may request an advice to the Lugano Airport Accountable Manager.

1. LSZA Qualifications B, C, D

5 Validity

5.1 Qualification Type A

Airport qualification type A is valid for two years.

5.2 Qualification Type B, C and D

Pilots must hold a valid qualification type A.

The PIC shall fly at least 1 IFR approach and 1 IFR departure from LSZA within a 12 months period on the aircraft or on a suitable FSTD.
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 type B, C or D is required.

In case Lugano qualified pilot will transit to a new aircraft the Lugano qualification will remain valid only if the following conditions are cumulatively met:

- The type of qualification is still current and valid
- The transition is from Multi Engine (ME) to Multi Engine (ME) or is from Single Engine (SE) to Single Engine (SE)
- The size and the mass of the aircraft remains within a reasonable range
- The aircraft has similar complexity and performance
- The Airport Authority has been informed at least 1 week in advance

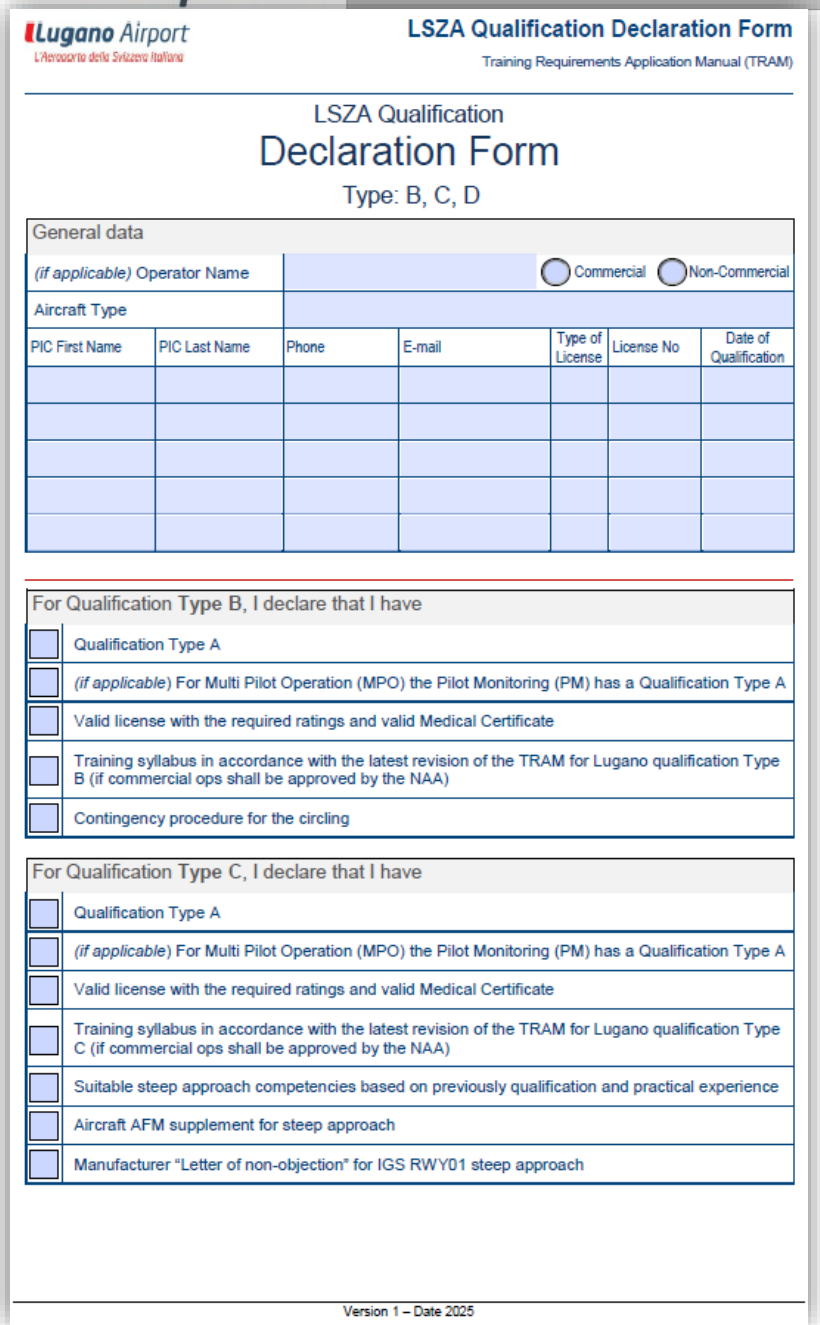
In case of doubts the PIC/Operator shall request an advice to the Lugano Airport Accountable Manager.

It is the responsibility of either the operator or the PIC to inform Lugano Airport Authority of the continuous validity of the qualification. The Accountable Manager reserves the right to deny or to withdraw a Pilot Qualification. Furthermore, the Accountable Manager reserves the right to request documentation proving a continuous safe, effective and efficient flight operation.

1. LSZA Qualifications B, C, D

6 LSZA Qualification Declaration Form

When LSZA training qualification type(s) B, C, D is completed the PIC/Operator must submit to Lugano Airport Authority the "LSZA Qualification Declaration Form" for each aircraft type, either as scanned hard copy or electronically fill out and electronically signed off.



Lugano Airport
L'Aeroporto della Svizzera Italiana

LSZA Qualification Declaration Form

Training Requirements Application Manual (TRAM)

LSZA Qualification

Declaration Form

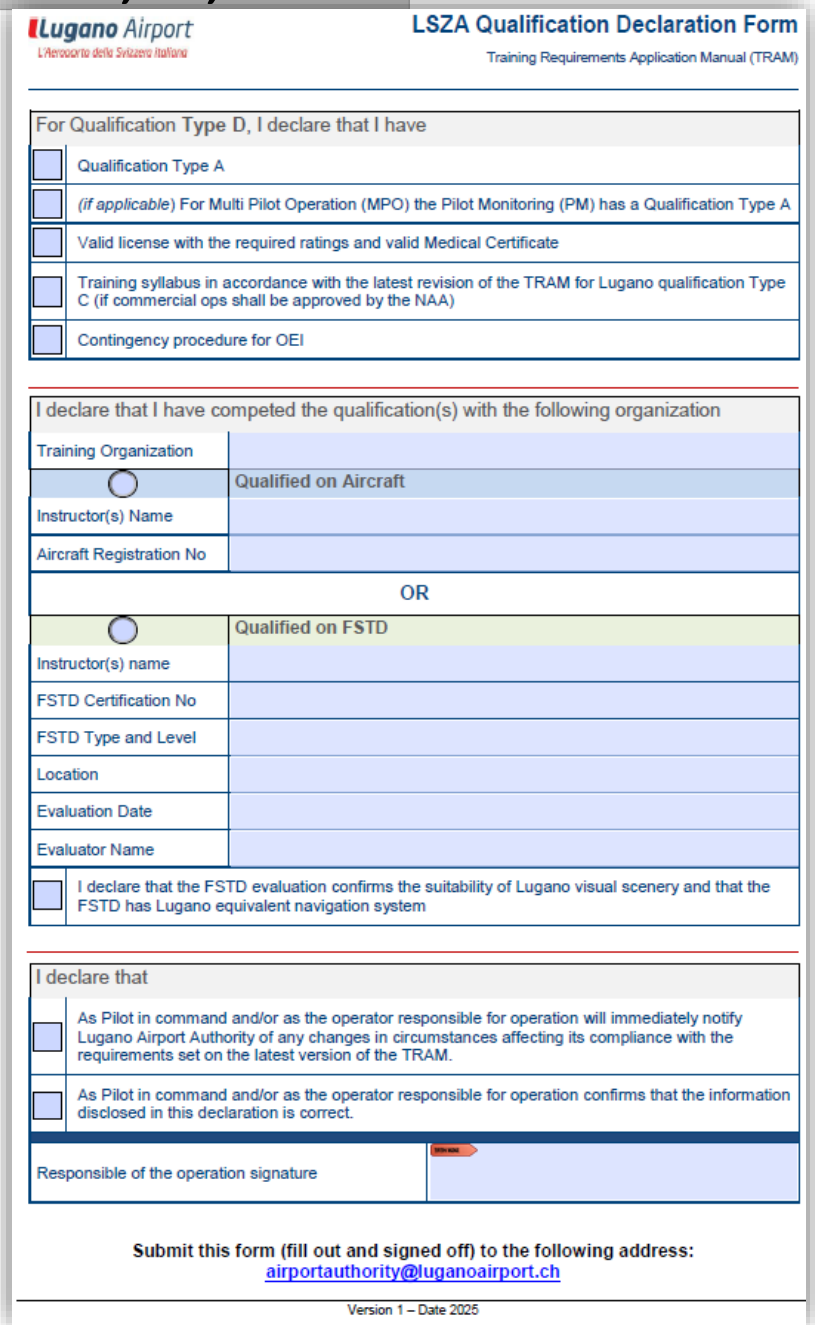
Type: B, C, D

General data						
(if applicable) Operator Name			◯ Commercial ◯ Non-Commercial			
Aircraft Type						
PIC First Name	PIC Last Name	Phone	E-mail	Type of License	License No	Date of Qualification

For Qualification Type B, I declare that I have	
☐	Qualification Type A
☐	*(if applicable)* For Multi Pilot Operation (MPO) the Pilot Monitoring (PM) has a Qualification Type A
☐	Valid license with the required ratings and valid Medical Certificate
☐	Training syllabus in accordance with the latest revision of the TRAM for Lugano qualification Type B (if commercial ops shall be approved by the NAA)
☐	Contingency procedure for the circling

For Qualification Type C, I declare that I have	
☐	Qualification Type A
☐	*(if applicable)* For Multi Pilot Operation (MPO) the Pilot Monitoring (PM) has a Qualification Type A
☐	Valid license with the required ratings and valid Medical Certificate
☐	Training syllabus in accordance with the latest revision of the TRAM for Lugano qualification Type C (if commercial ops shall be approved by the NAA)
☐	Suitable steep approach competencies based on previously qualification and practical experience
☐	Aircraft AFM supplement for steep approach
☐	Manufacturer "Letter of non-objection" for IGS RWY01 steep approach

Version 1 – Date 2025



Lugano Airport
L'Aeroporto della Svizzera Italiana

LSZA Qualification Declaration Form

Training Requirements Application Manual (TRAM)

For Qualification Type D, I declare that I have	
☐	Qualification Type A
☐	*(if applicable)* For Multi Pilot Operation (MPO) the Pilot Monitoring (PM) has a Qualification Type A
☐	Valid license with the required ratings and valid Medical Certificate
☐	Training syllabus in accordance with the latest revision of the TRAM for Lugano qualification Type C (if commercial ops shall be approved by the NAA)
☐	Contingency procedure for OEI

I declare that I have competed the qualification(s) with the following organization	
Training Organization	
◯	Qualified on Aircraft
Instructor(s) Name	
Aircraft Registration No	
OR	
◯	Qualified on FSTD
Instructor(s) name	
FSTD Certification No	
FSTD Type and Level	
Location	
Evaluation Date	
Evaluator Name	
☐	I declare that the FSTD evaluation confirms the suitability of Lugano visual scenery and that the FSTD has Lugano equivalent navigation system

I declare that	
☐	As Pilot in command and/or as the operator responsible for operation will immediately notify Lugano Airport Authority of any changes in circumstances affecting its compliance with the requirements set on the latest version of the TRAM.
☐	As Pilot in command and/or as the operator responsible for operation confirms that the information disclosed in this declaration is correct.
Responsible of the operation signature	

Submit this form (fill out and signed off) to the following address:
airportauthority@luganoairport.ch

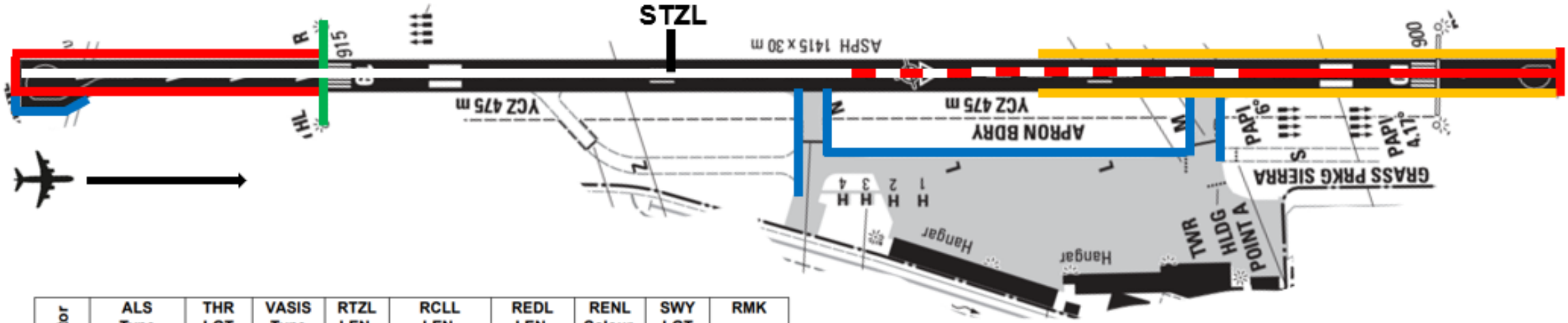
Version 1 – Date 2025

Content

1. LSZA Qualifications B, C, D
2. Type of IFR Approaches
3. Lugano Weather Situations
4. SIDs Climb Gradients
5. Emergency Procedures
6. Sensitive Noise Areas

2. Type of IFR Approaches

AIRPORT LAYOUT: LIGHTING R19



RWY Designator	ALS Type LEN, INTST	THR LGT Colour INTST WBAR	VASIS Type PSN, MEHT	RTZL LEN, INTST	RCLL LEN, spacing, colour, INTST	REDL LEN, spacing, colour, INTST	RENL Colour, INTST	SWY LGT LEN, colour	RMK
1	2	3	4	5	6	7	8	9	10
01	NIL	RTHL G, LIH, WBAR; RTIL FLG W	PAPI 4.17°, L, 6.27 m; PAPI 6.00°, L, 15.54 m	Simple TZL* 323 m FM THR 01, W, LIH	740 m, 30 m, W, LIH; 375 m, 30 m, R/W, LIH; 300 m, 30 m, R, LIH	110 m, 60 m, R, LIH; 830 m, 60 m, W, LIH; 475 m, 60 m, Y, LIH	R, LIH	NIL	PAPI 6.00° only switched on for IGS RWY 01 approaches
19	RLLS, Seq. FLG LGT W LIH; SALS, 360m, LIH	RTHL G, LIH, WBAR; RTIL FLG W	PAPI 4.17°, L, 6.71 m	Simple TZL*, 323 m FM THR 19, W, LIH		280 m, 60 m, R, LIH; 660 m, 60 m, W, LIH; 475 m, 60 m, Y, LIH	R, LIH	NIL	RLLS follows circling Charlie track

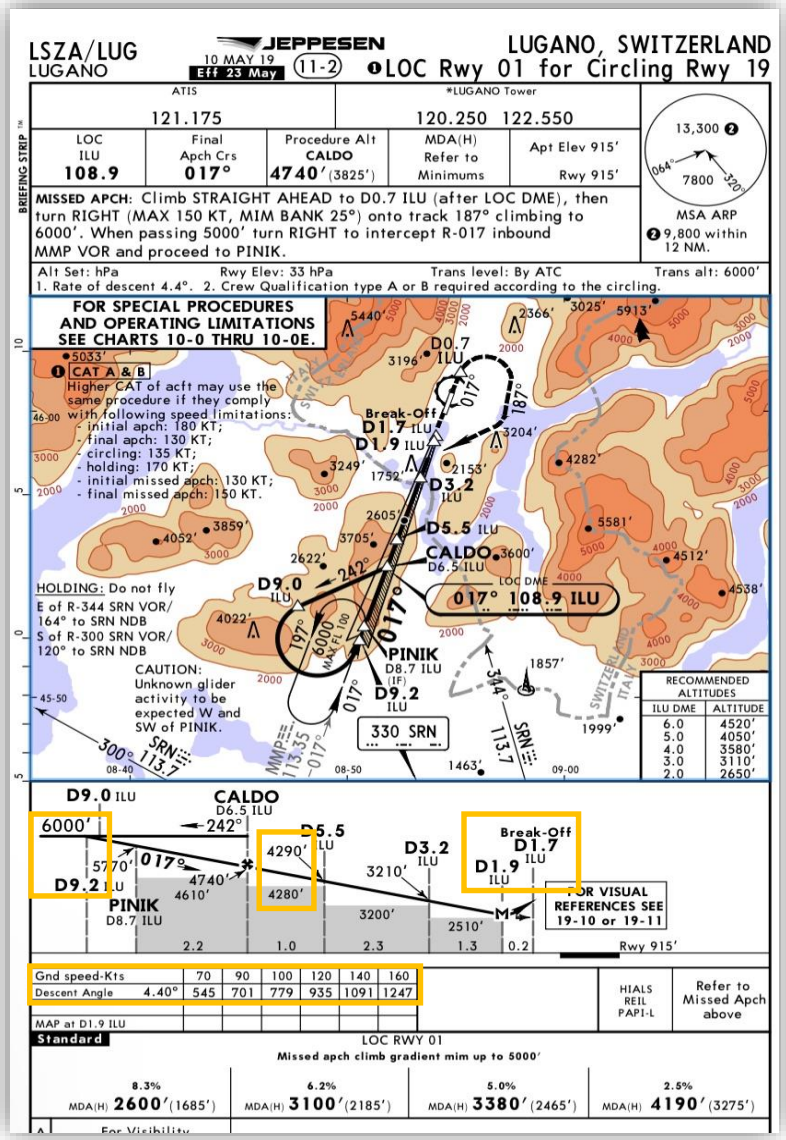
* The purpose of simple touchdown zone lights is to provide pilots with enhanced situational awareness in all visibility conditions and to help enable pilots to decide whether to commence a go-around if the aircraft has not landed by a certain point on the runway.

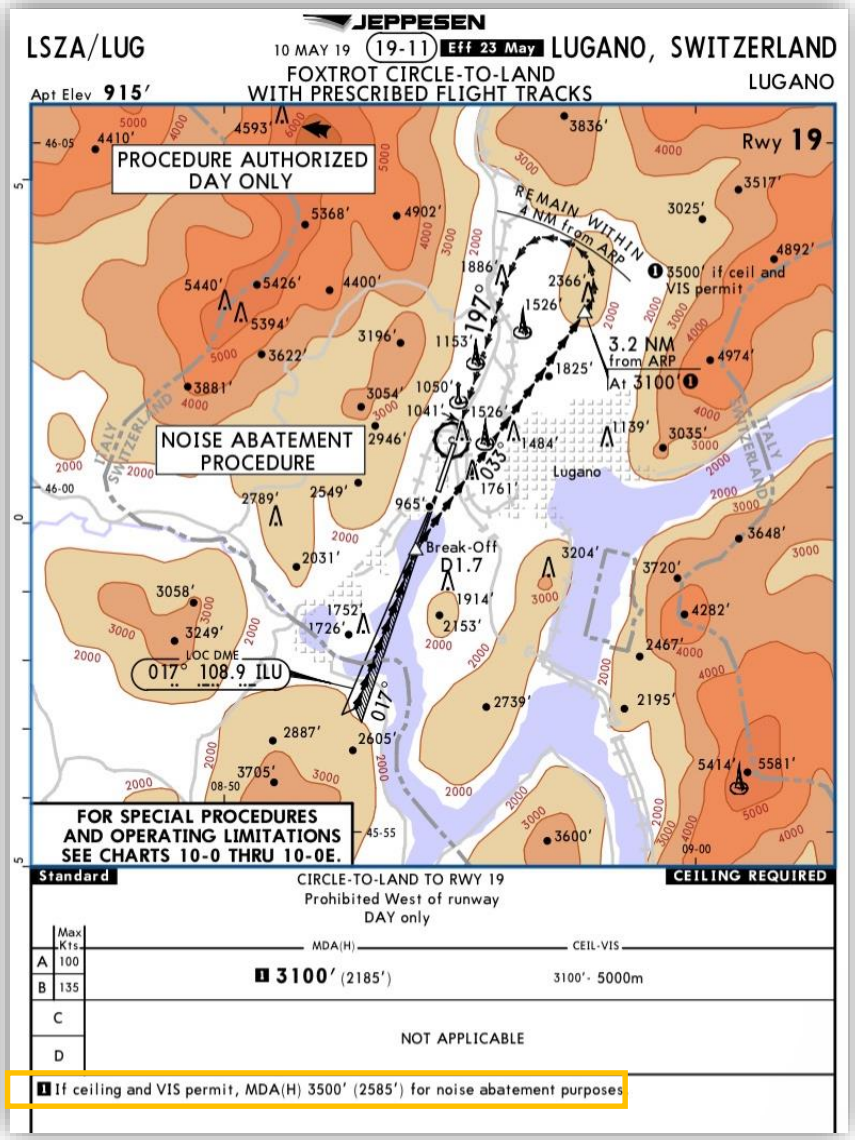
STZL	**=**	**812 m**
W / R	**=**	**675 m**
YELLOW	**=**	**475 m**
RED	**=**	**30(**

2. Type of IFR Approaches

Qualification Type A

- *LOC approach, Circling **Foxtrot** RWY 19*



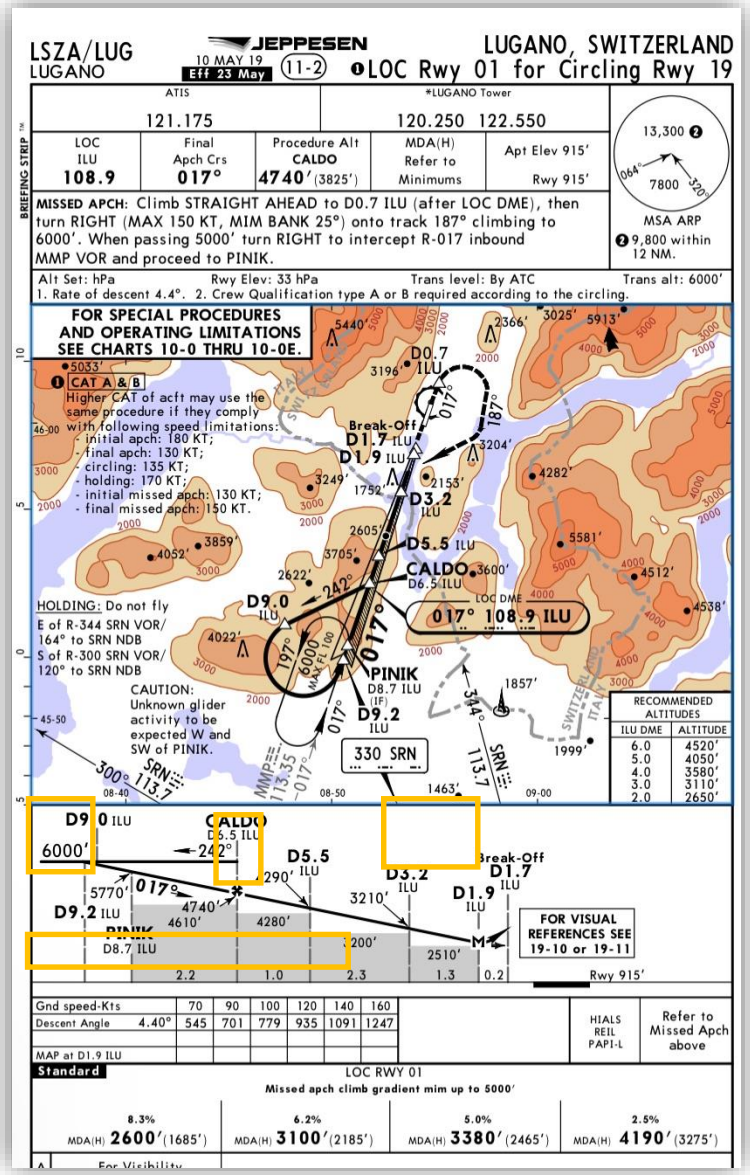


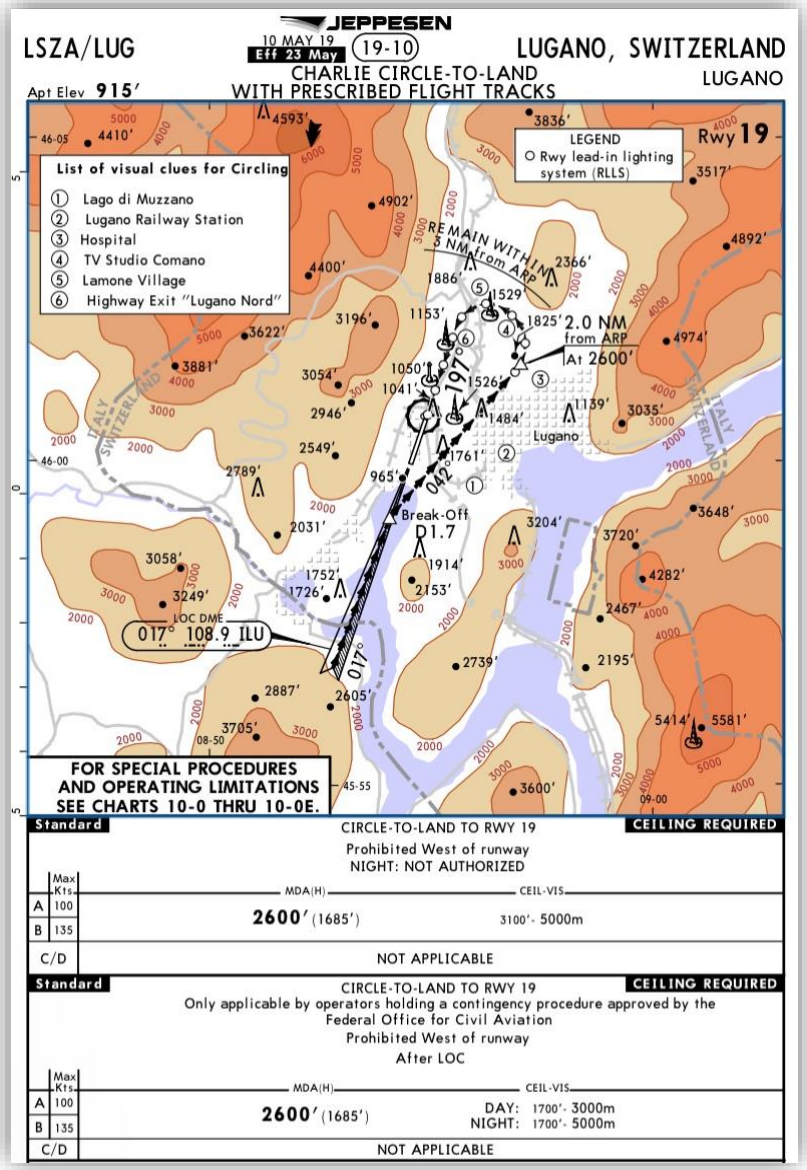
- → Continuous descend to end of downwind
- → Low drag configuration
- → End of downwind 3500 ft / 3100 ft
- → Base 2750 ft
- → Entry into final 2300 ft (*EGPWS*)

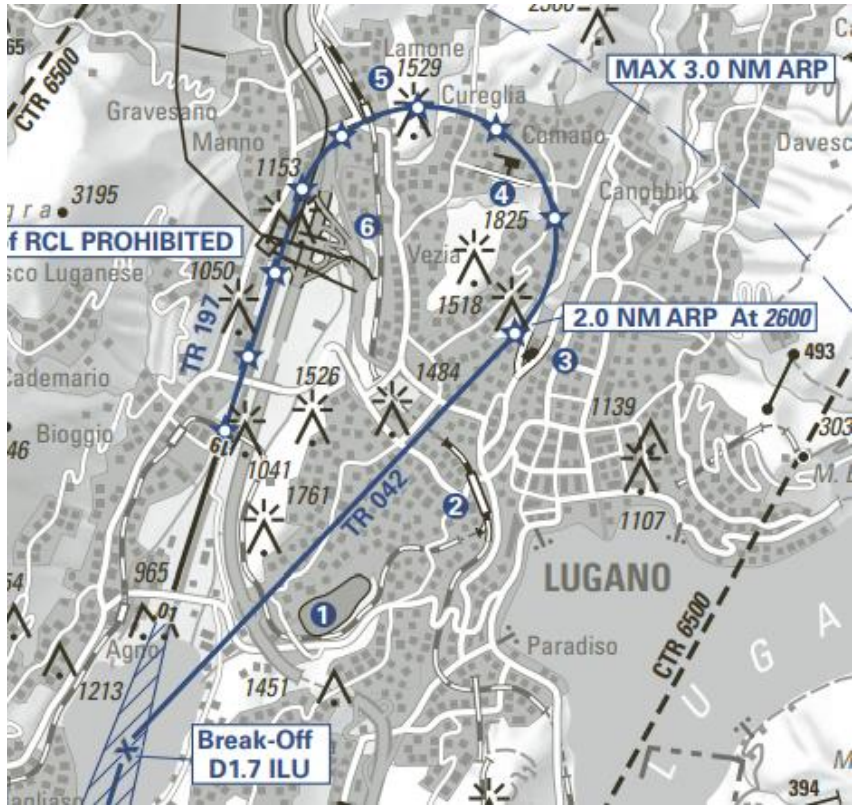
2. Type of IFR Approaches

Qualification Type B

- *LOC approach, Circling Charlie RWY 19*







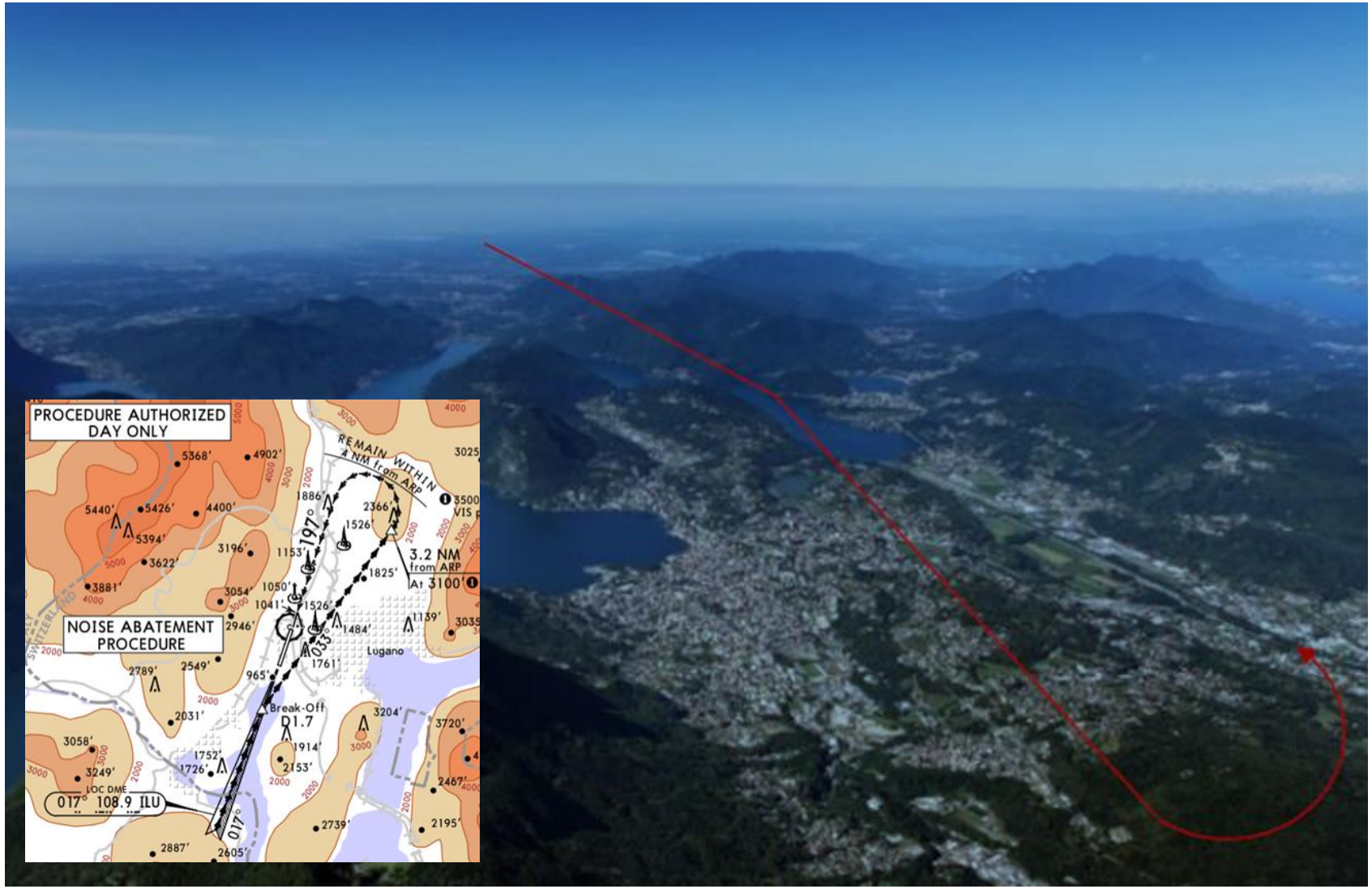
→ Brake-off:
1 o'clock hospital light

→ Base:
11 o'clock technique

2. Type of IFR Approaches

- Visual approach RWY 19

Qualification Type A



→ Continuous descend to end of downwind MDA 3500 ft / 3100 ft

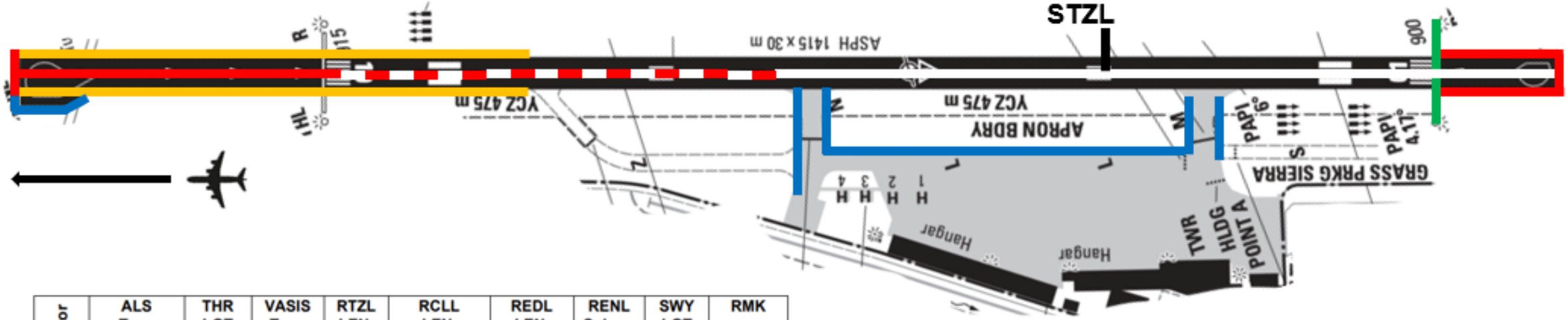
→ Low drag approach

→ WX, wind aloft difference S on RWY, N above GND

→ It can be requested in flight but it cannot be planned

2. Type of IFR Approaches

AIRPORT LAYOUT: LIGHTING R01



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19	RLLS, Seq. FLG LGT W LIH; SALS, 360m, LIH	RTHL G, LIH, WBAR; RTIL FLG W	PAPI 4.17°, L, 6.71 m	Simple TZL*, 323 m FM THR 19, W, LIH		280 m, 60 m, R, LIH; 660 m, 60 m, W, LIH; 475 m, 60 m, Y, LIH	R, LIH	NIL	RLLS follows circling Charlie track

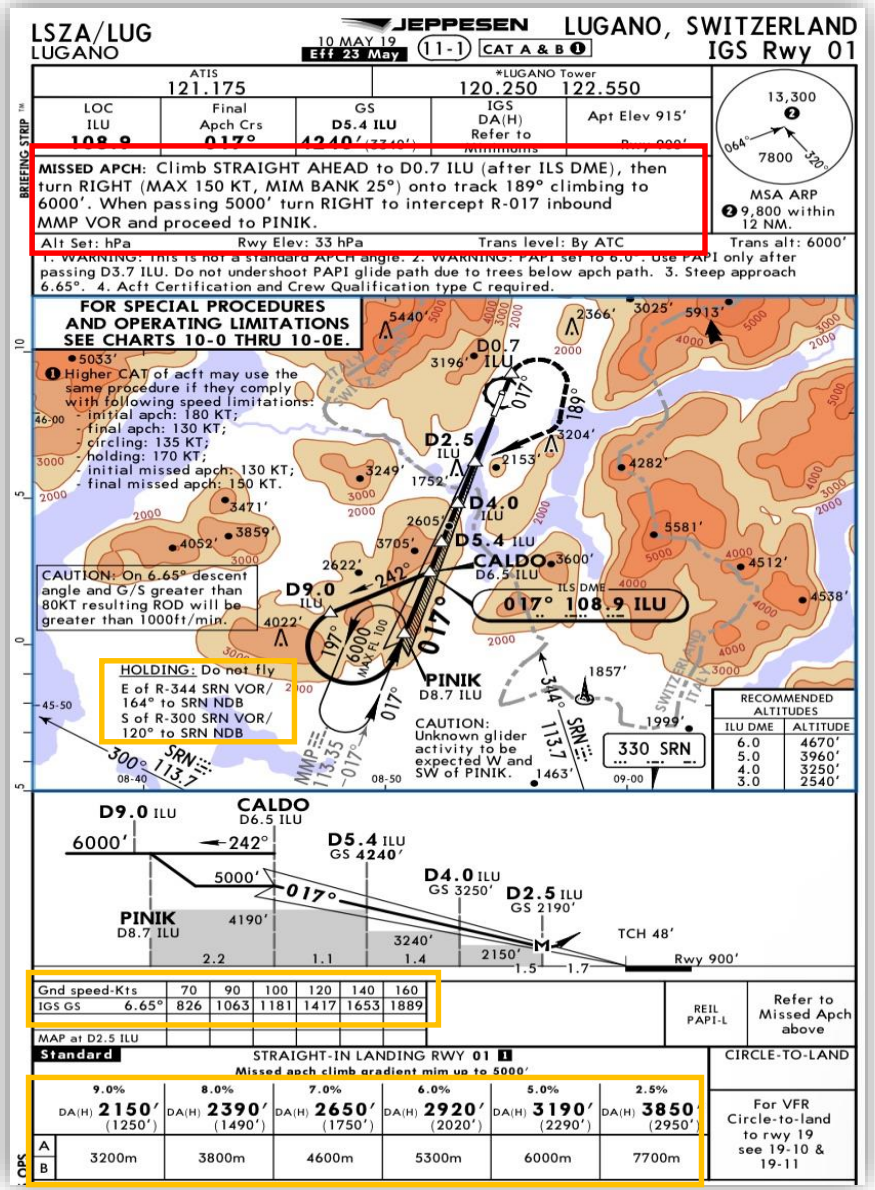
* The purpose of simple touchdown zone lights is to provide pilots with enhanced situational awareness in all visibility conditions and to help enable pilots to decide whether to commence a go-around if the aircraft has not landed by a certain point on the runway.

STZL	**=**	**982 m**
W / R	**=**	**675 m**
YELLOW	**=**	**475 m**
RED	**=**	**300 m**

2. Type of IFR Approaches

Qualification Type C

- IGS RWY 01

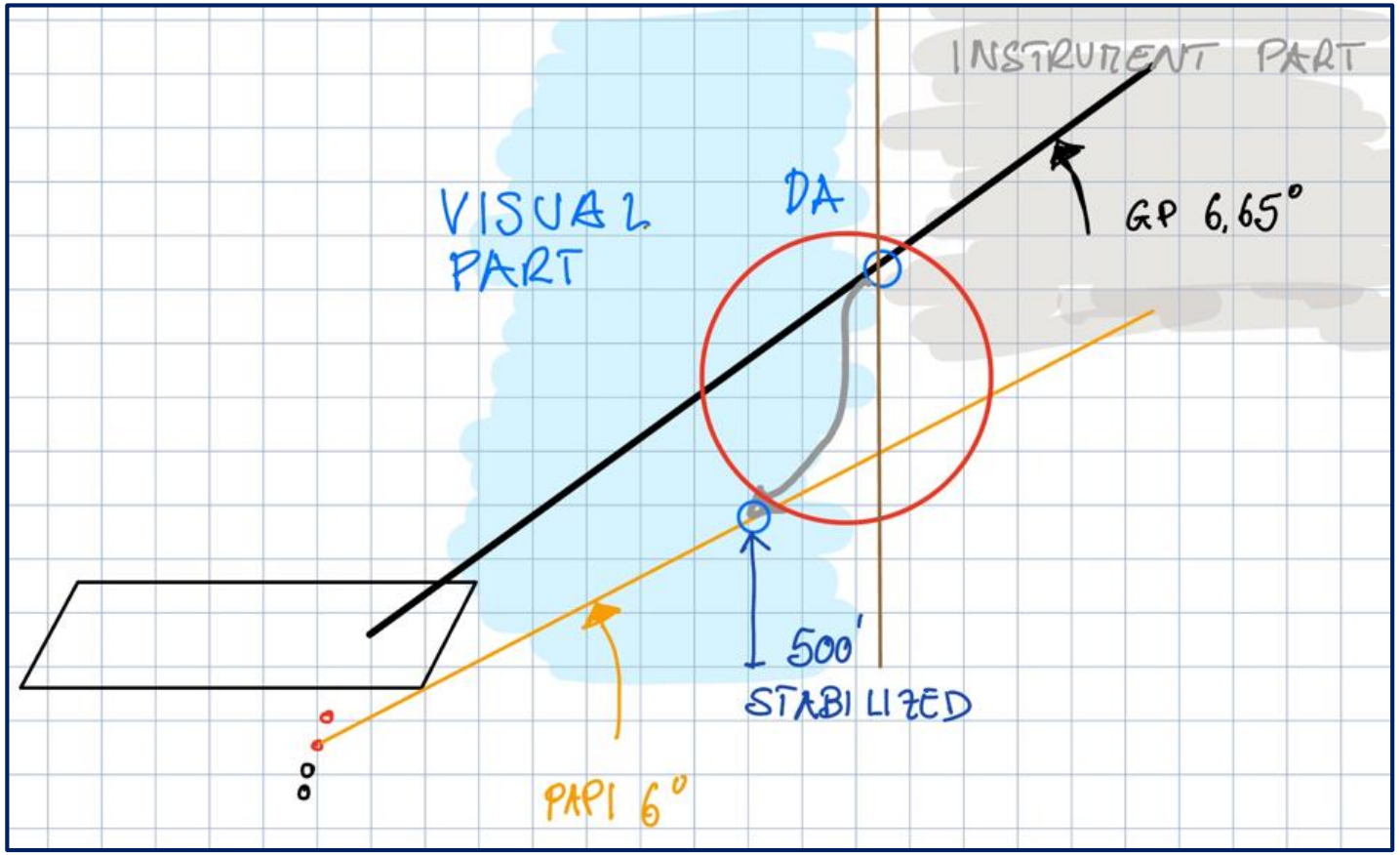


→PINIK HLD, focus on distance leg
→Stabilized GS when leaving FAF
→DA vs Alt
→WX vs DA, FEW 005
→NAV, best equipment for MAP
→SPD control in MAP turn, bank
→Situational awareness in MAP. HDG to intercept
→SPD control to PINIK, HLD limit

2. Type of IFR Approaches

Qualification Type C

- IGS RWY 01



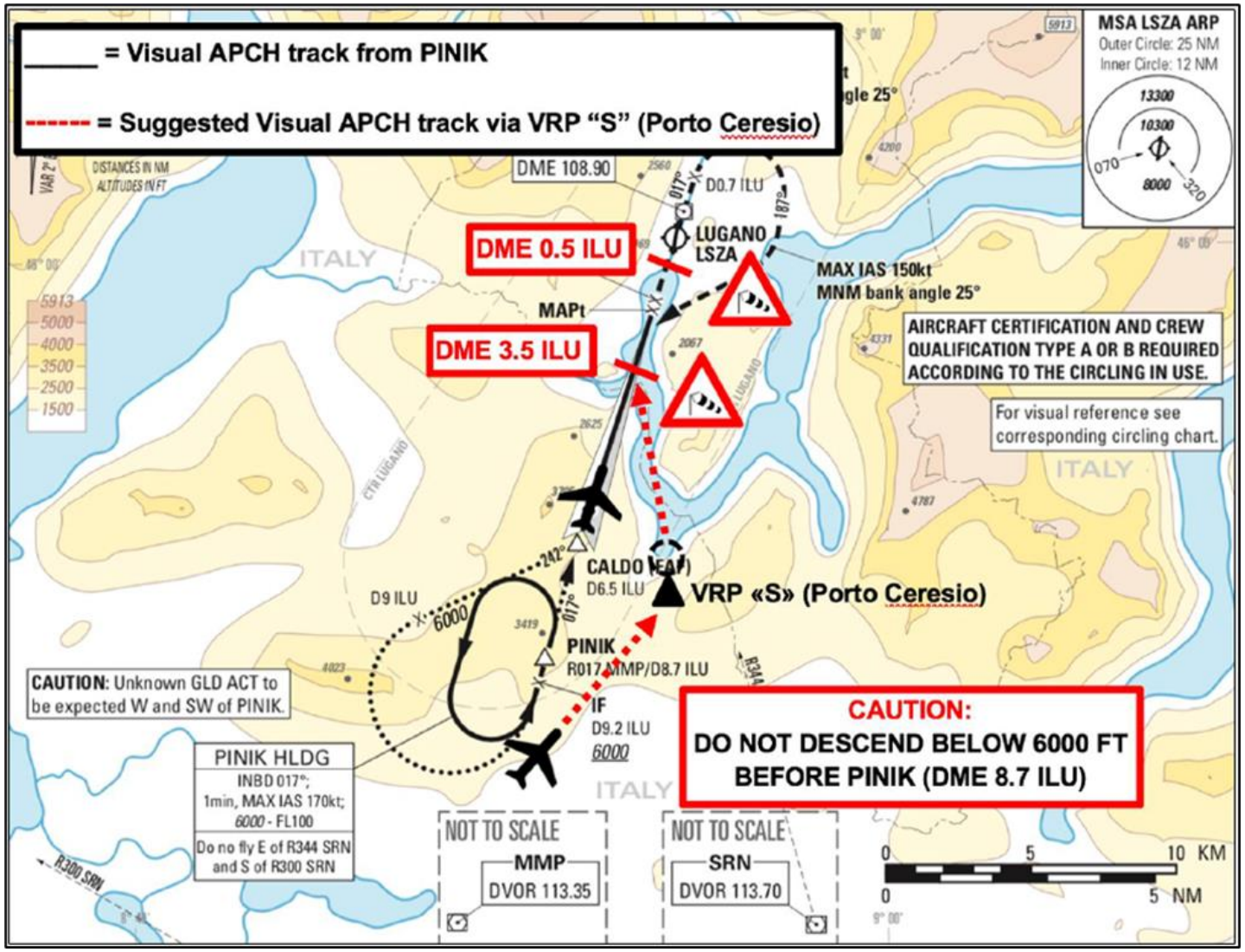
	Full tail wind component from AFM Supplement	½ tail wind component from AFM
AFM Supplement 6.65°	X	
AFM Supplement 6° plus LONO		X
LONO only		X

Supplement is intended as AFM Supplement or Annex depending on the manufacture wording
LONO: Letter of No Objection from the manufacture

2. Type of IFR Approaches

- *Visual approach RWY 01*

Qualification Type A



→ Comply with the traffic flow on RWY in use by ATIS for your approach and landing. If the other RWY is required due to performance, coordinate with Milano Radar or Swiss Radar to pass your request to Lugano TWR. Do not call Lugano TWR on your second set of radio.

→ PAPI 6° vs 4.1° requesting visual approach from an IGS clearance

→ It can be requested in flight but it cannot be planned

Content

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3. Lugano Weather Situations


Westerly Wind

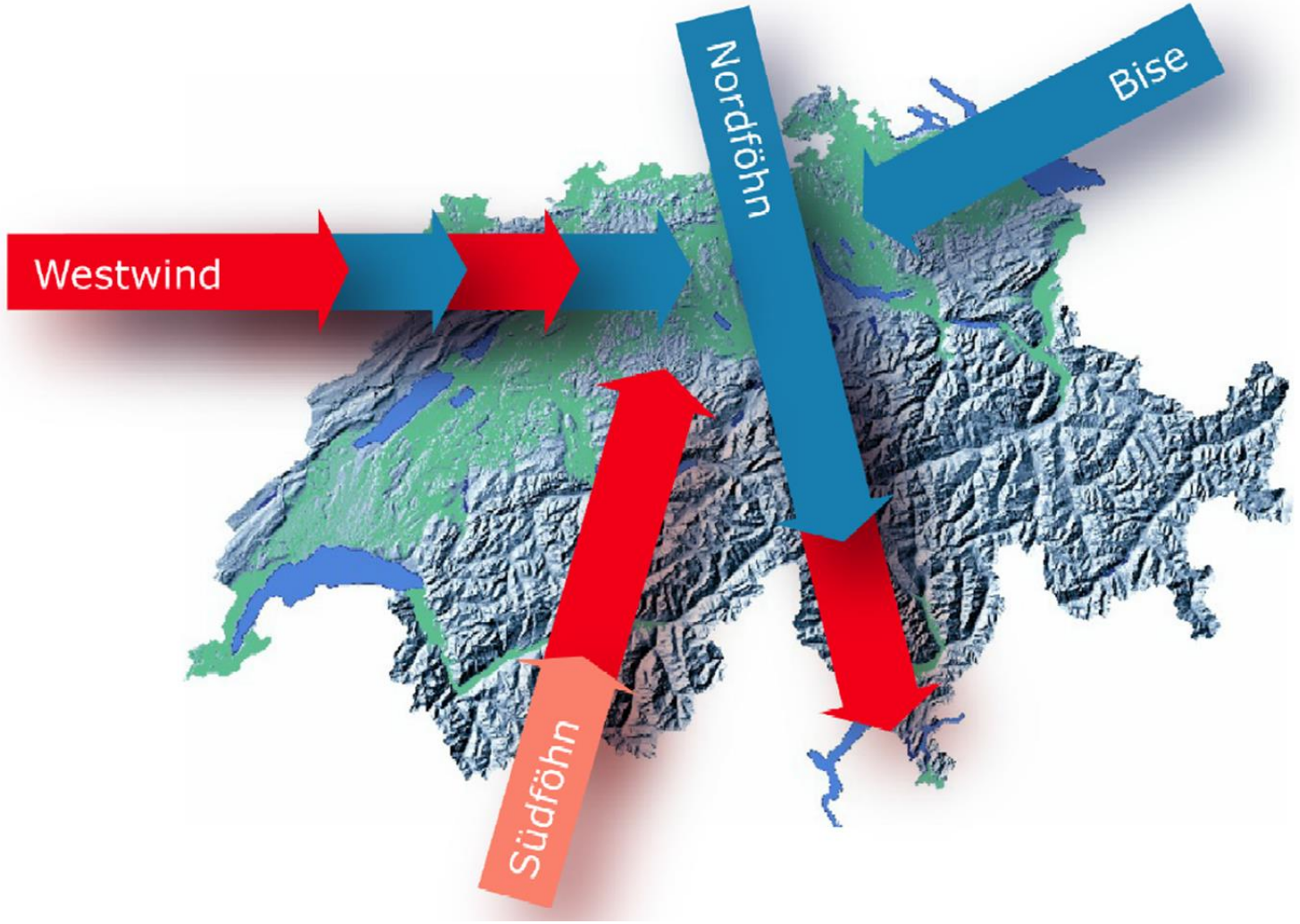

Easterly Wind (Bise)


Southerly Wind


Northly Wind

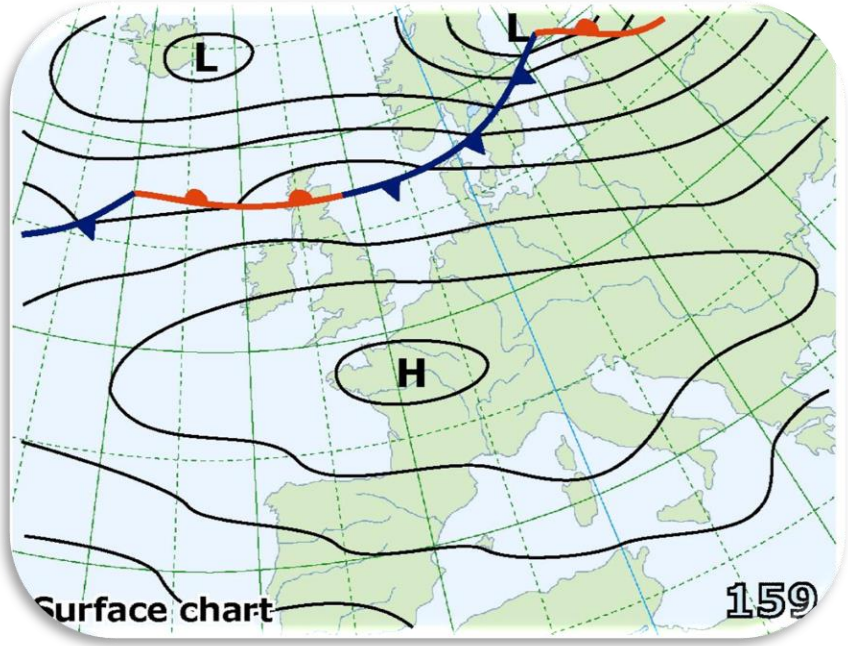

High Pressure (H)

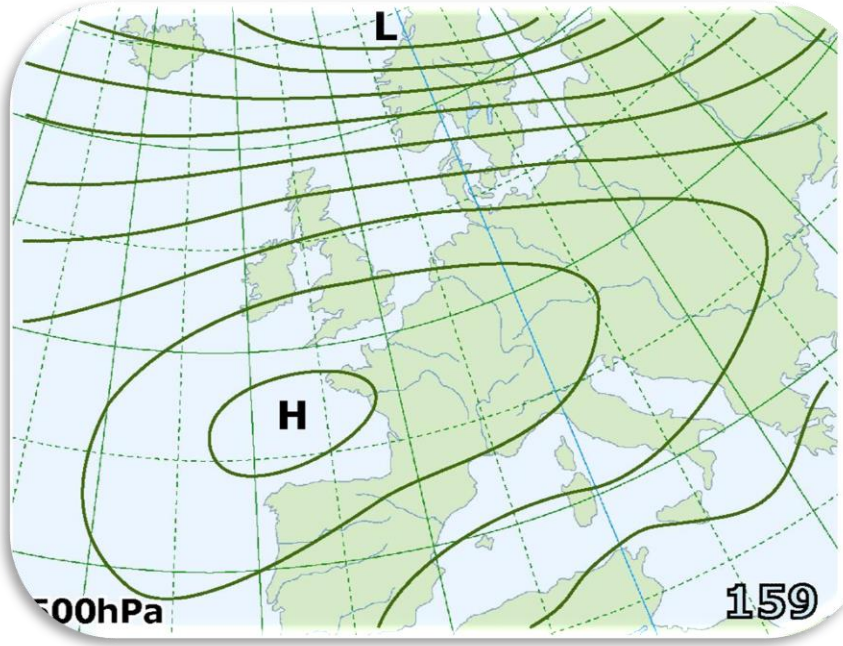

Level Pressure



3. Lugano Weather Situations

- High pressure system





High pressure normally bring **fog** in the early morning during winter time **up to 11:00 LT**.

In some **exceptional case**, few time in a year during winter time, the **fog persist all day long**.

If the air is dray enough we will have a splendid day but the **runway** condition can become **slippery** due to ice or frost film over the surface. [*Grooved RWY - RCC 5/5/5, 4/4/4*]

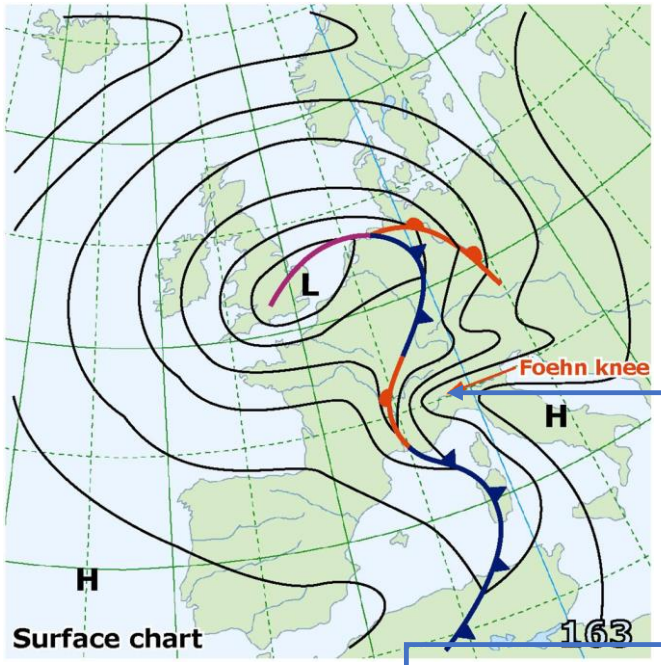
During the middle day the mist (BR) can reduce the visibility at very low value. [*approx. 5000 ft amsl*]

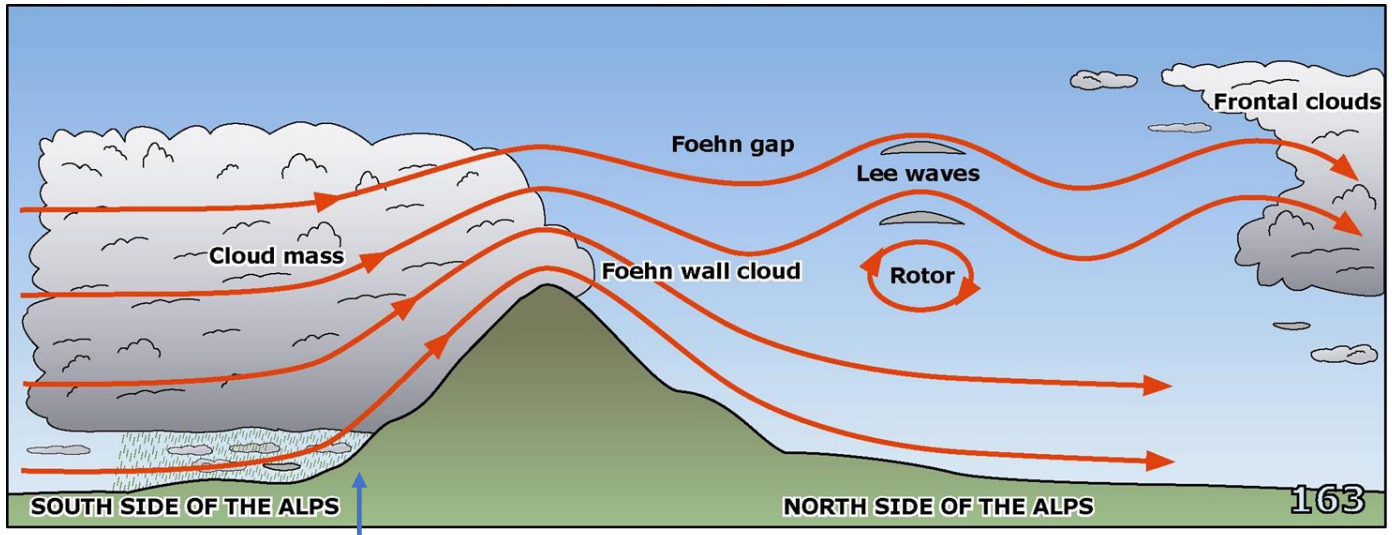
3. Lugano Weather Situations

- High pressure system

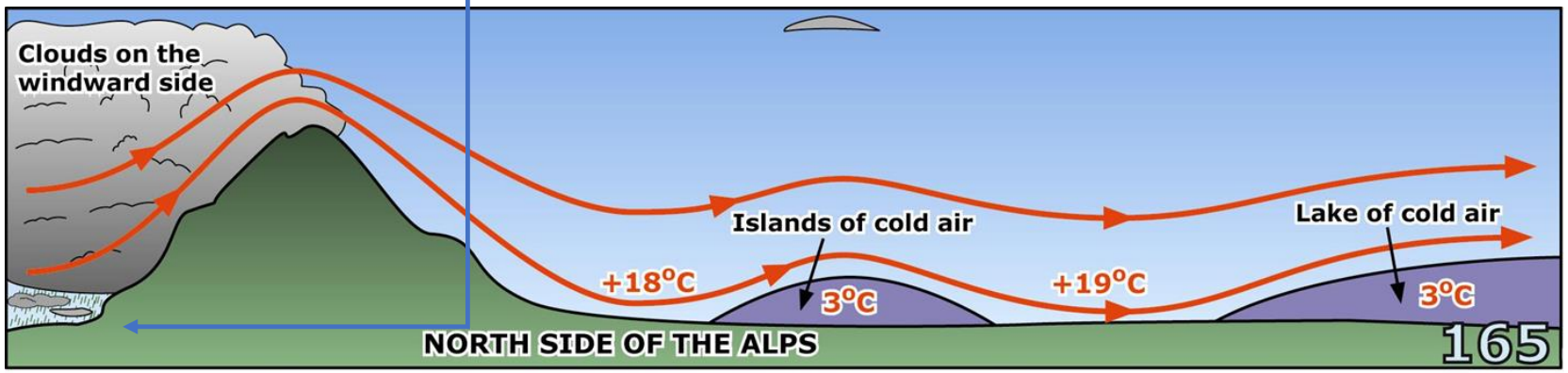
3. Lugano Weather Situations

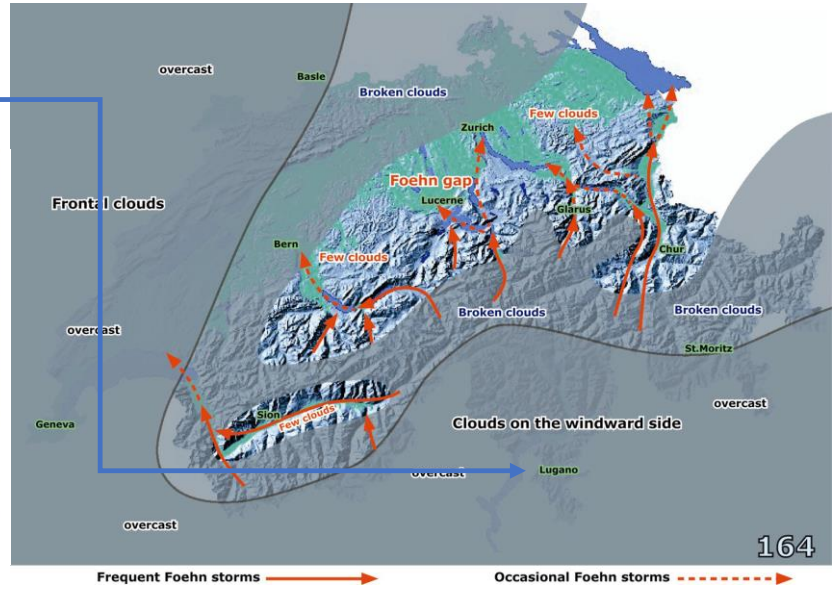
- South wind (Foehn) in the north of the Alps (South Stau)





LSZA - Lugano





3. Lugano Weather Situations

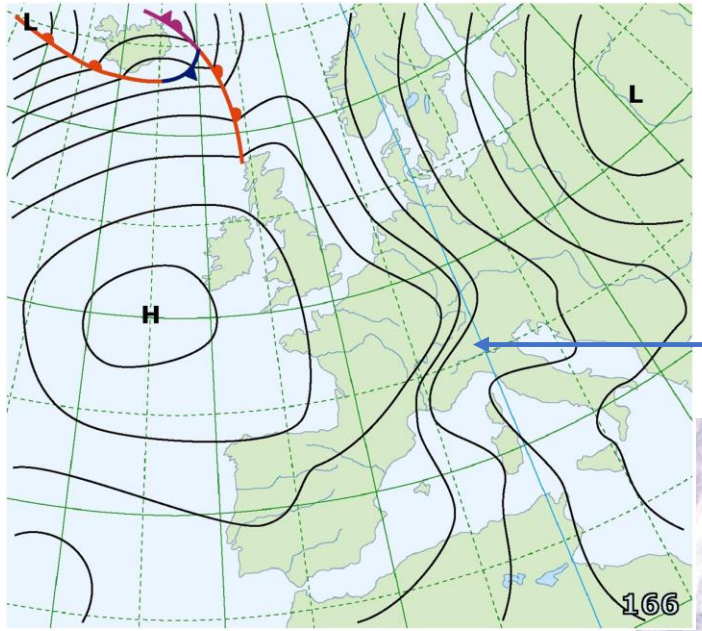
- South wind (Foehn) in the north of the Alps (South Stau)

Low stratiform clouds (ST, SC, NS), persistent moderate rain (++RA) and in low temperature condition snow fall (+SN), are some of the “the South Stau” weather.

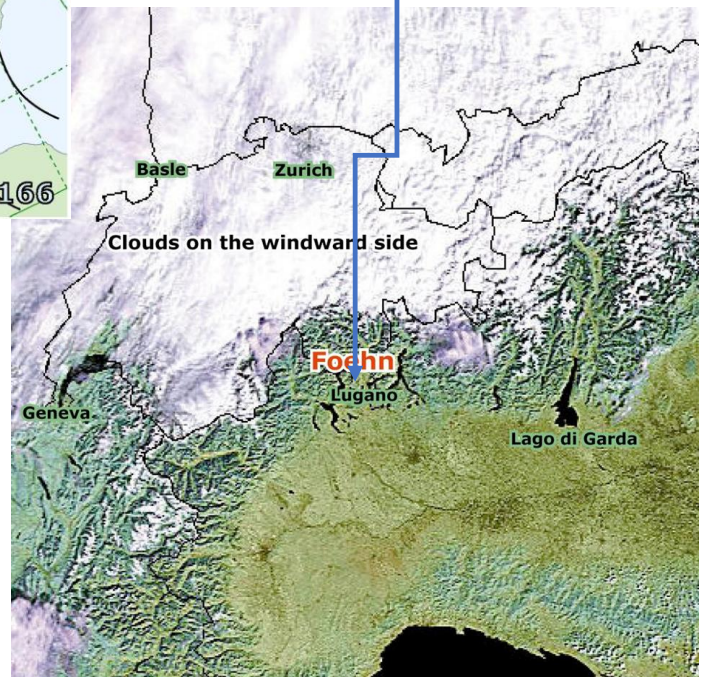
The **wind aloft** can be **fast and gust** from the **south west or east**. [*Approach speed vs GS*]

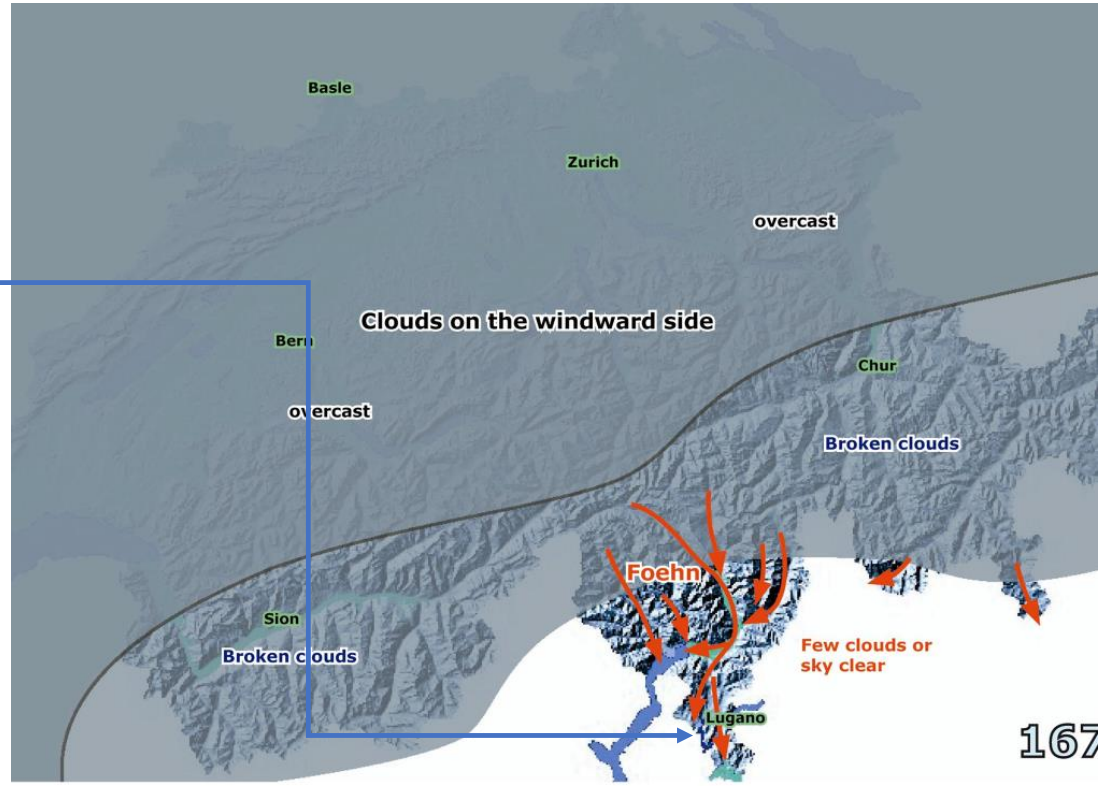
We are normally face with **wet runway during rain**, but the situation can become more limiting with the **snow fall** with **very slippery surface**. [*Grooved RWY - RCC 5/5/5, 4/4/4*]

- North wind (Foehn) in the south of the Alps (North Stau)



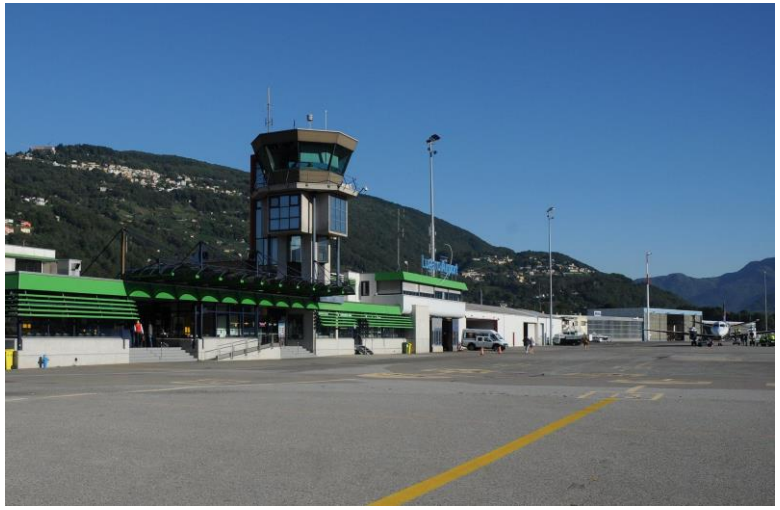
LSZA - Lugano





3. Lugano Weather Situations

- North wind (Foehn) in the south of the Alps (North Stau)



Sunshine, brilliant blue sky, extended visibility, low QNH, **very dray air** are the weather that every pilot will love.

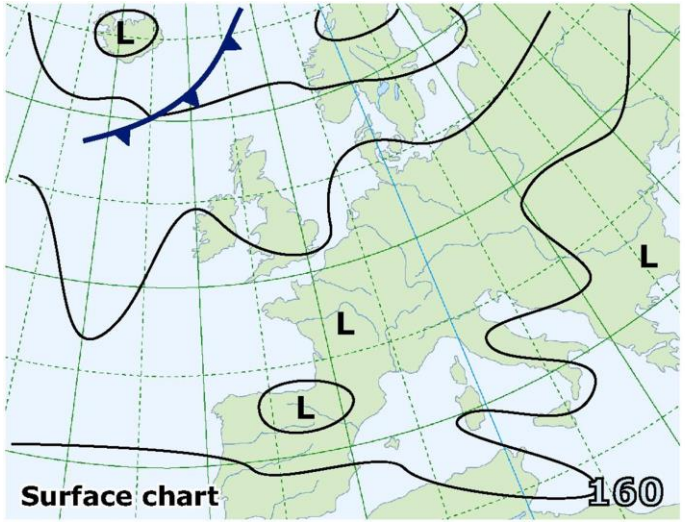
The wind is from the North sector in **moderate speed 20 kt with gust up to 30 – 35 kt**.

When the situation **stabilize** the **wind is laminar on the runway axis**.

Before and after the **stabilization** phase you will have some **irregularities in the direction and speed (WS)** giving some **problem** to have a well **stabilize approach** in regards to Pitch Power and Speed.

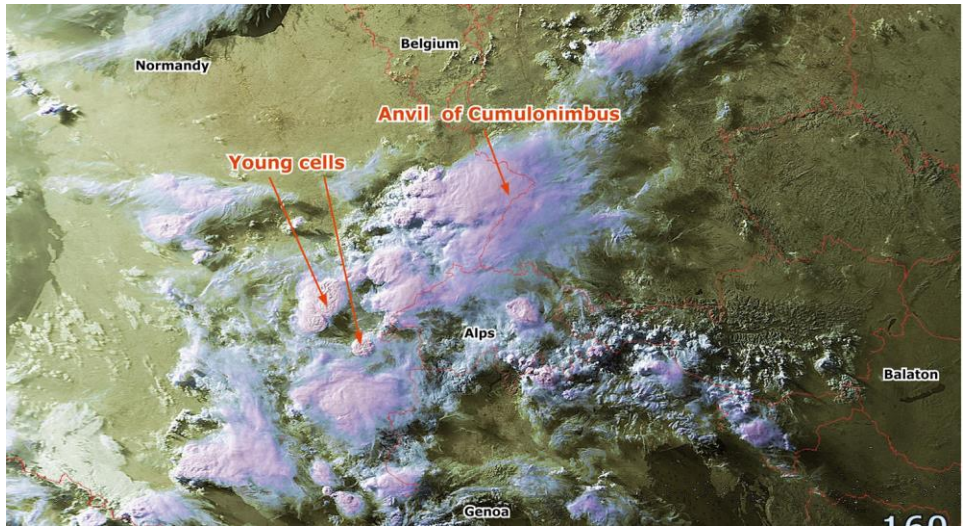
3. Lugano Weather Situations

- Level Pressure



During **winter** level pressure weather look like the high pressure weather, stable atmosphere.

Level pressure in **summer** is a typical weather phenomena pre announcing instability, TCU, CB, TS are the related weather during the end of afternoon, due to earth irradiation.



1 -Castellanus indicating possible thunderstorm activity

3. Lugano Weather Situations

- Level Pressure

2 - Cumulus humilis

3 - Cumulus mediocris

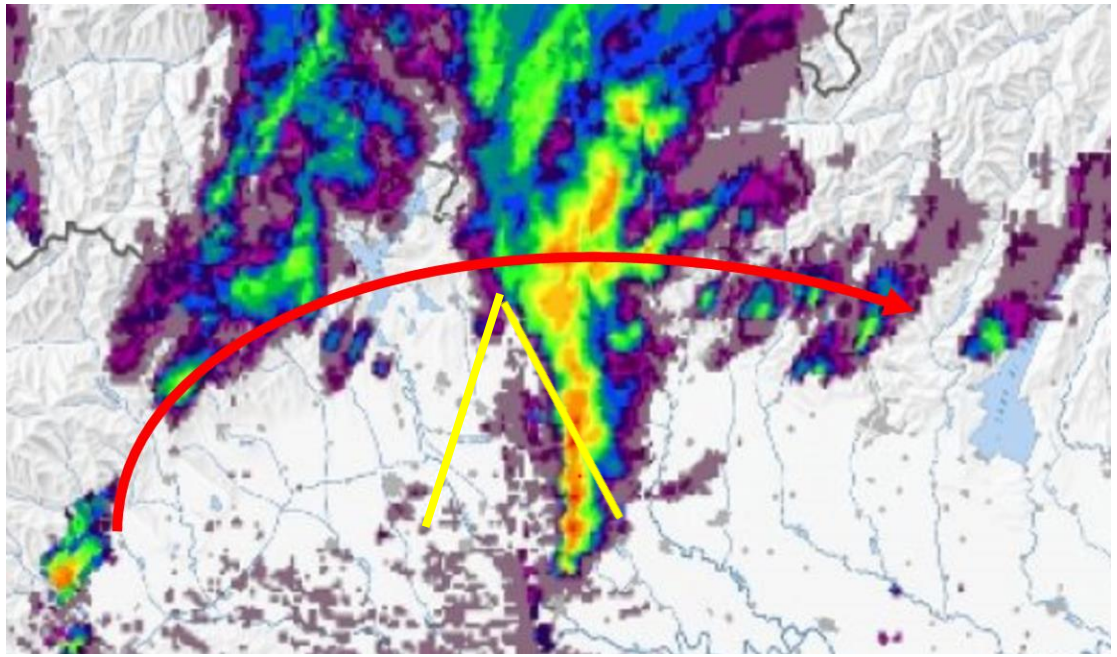
4 - Cumulus congestus

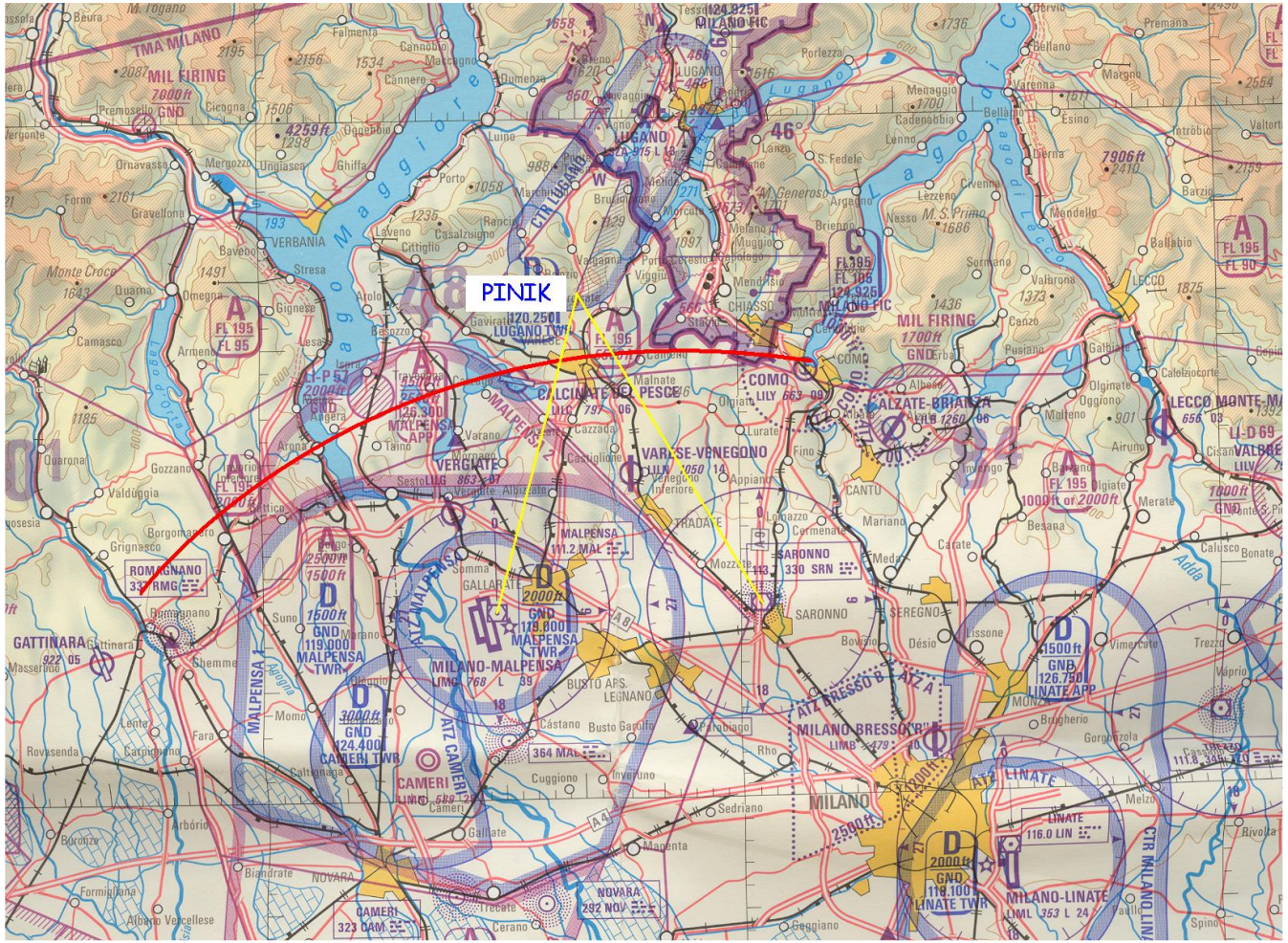
5 - Cumulonimbus calvus

6 - Cumulonimbus capillatus

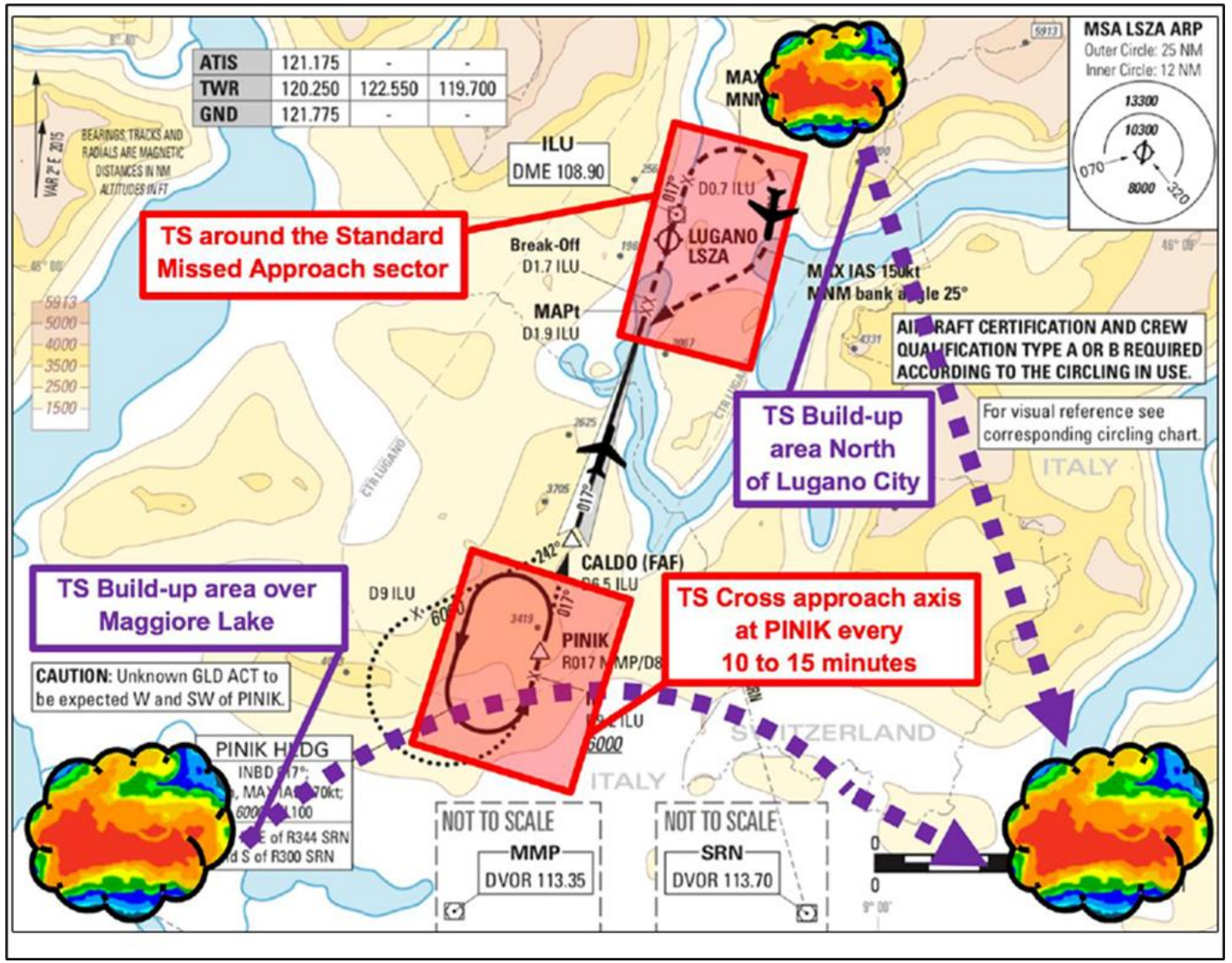
3. Lugano Weather Situations

- Level Pressure





- Level Pressure



Content

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5. Emergency Procedures
6. Sensitive Noise Areas

SID's Climb Gradients Rwy 19 & Minimum Crossing Altitudes T/O Rwy 19

RWY 01
These SIDs require an average climb gradient of 8.1% up to 5000 at LUGAN.
RWY 19
These SIDs require a minimum climb gradient of 10.2% up to 4100.

Gnd speed-KT	75	100	150	200	250	300
8.1% V/V (fpm)	615	820	1230	1641	2051	2461
10.2% V/V (fpm)	775	1033	1549	2066	2582	3099

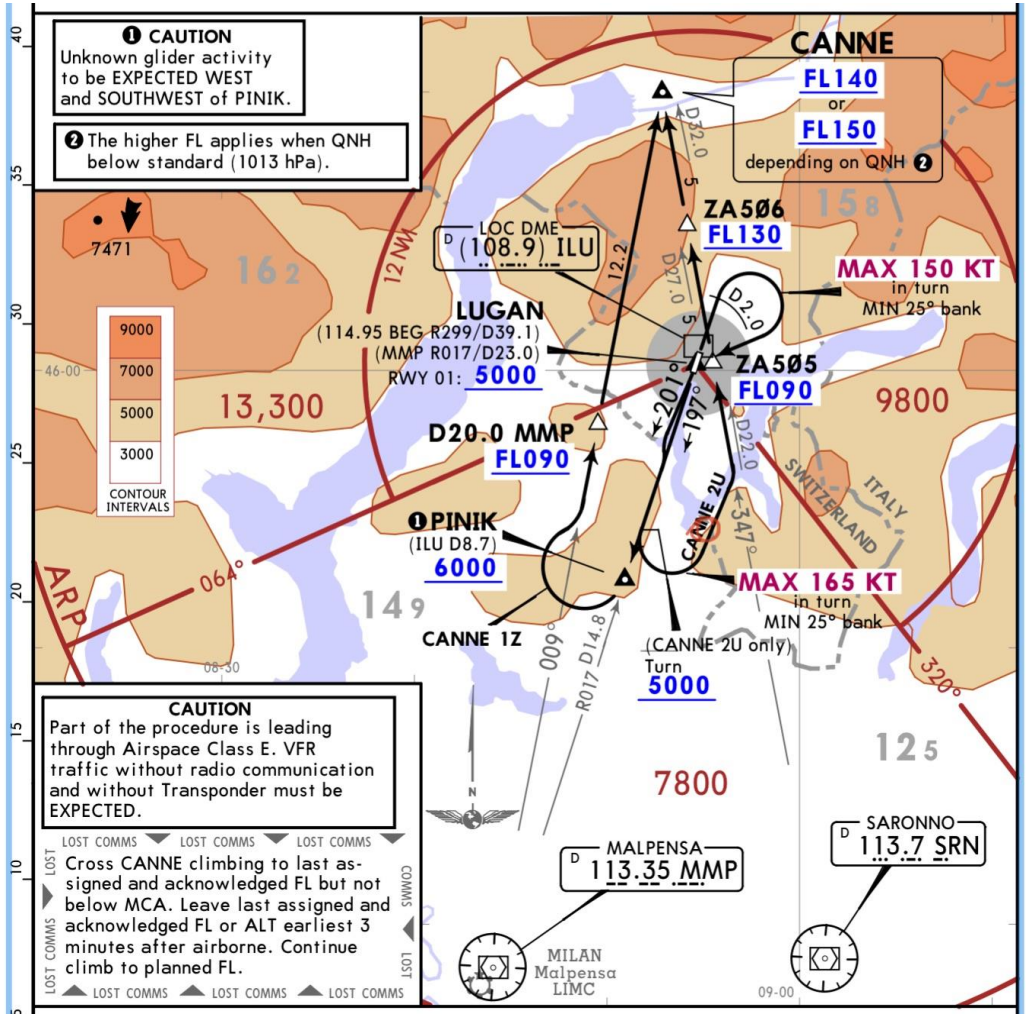
RWY	ILU DME	D1.0	D2.0	D3.0	D4.0	D5.0	D6.0	D7.0
19	minimum ALT	1070	1690	2310	2930	3550	4130	4330

RWY	INITIAL CLIMB
01	Climb straight ahead to D2.0 ILU, turn RIGHT to LUGAN. MAINTAIN visual ground contact up to LUGAN.
19 HIGH PERFORMANCE SID	Climb on 201° track until receiving MMP, intercept MMP R017 inbound.

Ground Speed x Climb or Descent Gradient

=

Rate of Climb or Descent



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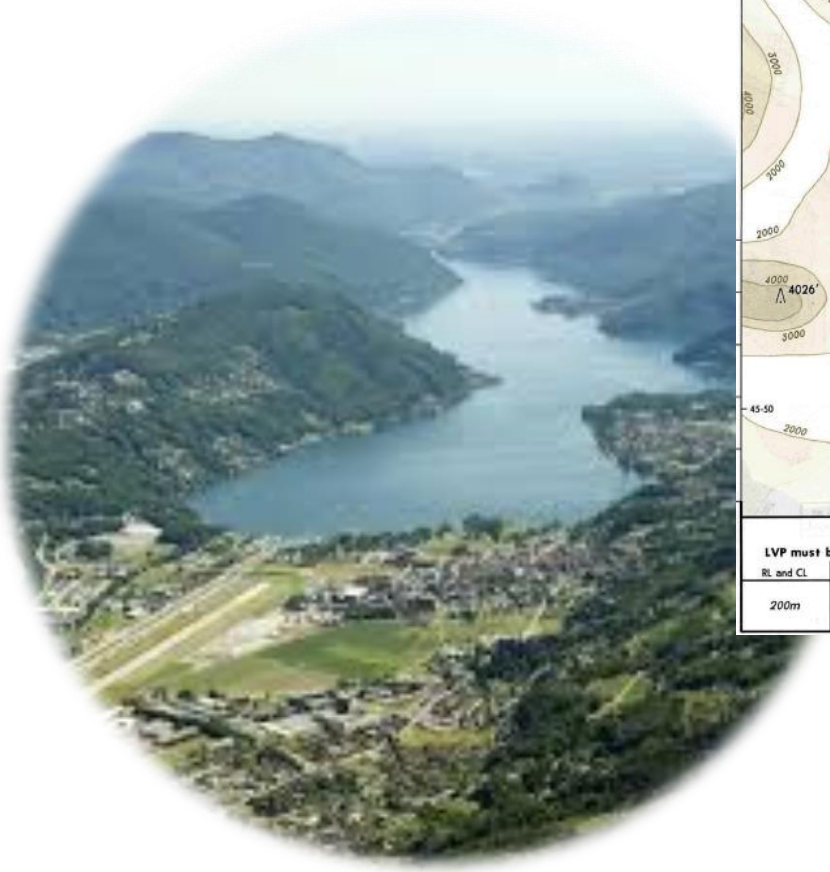
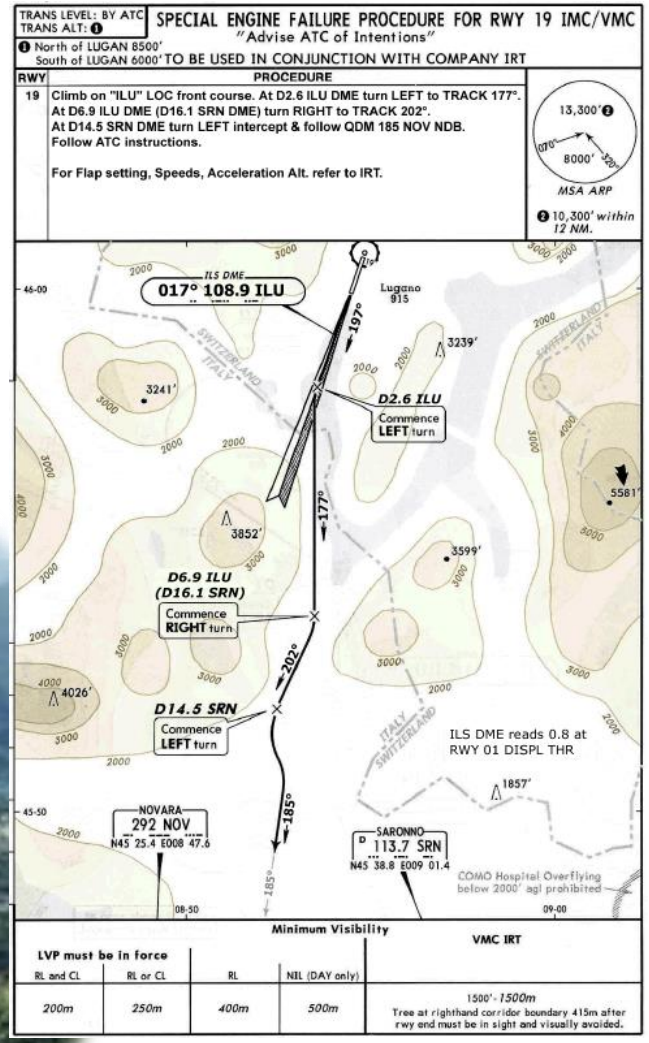
5. Emergency Procedures





Demonstrate, train, practice the best contingency procedure considering the highest airmanship possible, respecting AFM limitation, performance and company policies.

LSZA/LUG
LUGANO

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

Proceed via STAR to PINIK.
At last received or acknowledged EAT or, if no EAT has been received or acknowledged at FPL ETA, descend in the PINIK holding pattern to 6000.
Carry out a standard instrument approach to RWY 01, if needed followed by a circling to RWY 19.

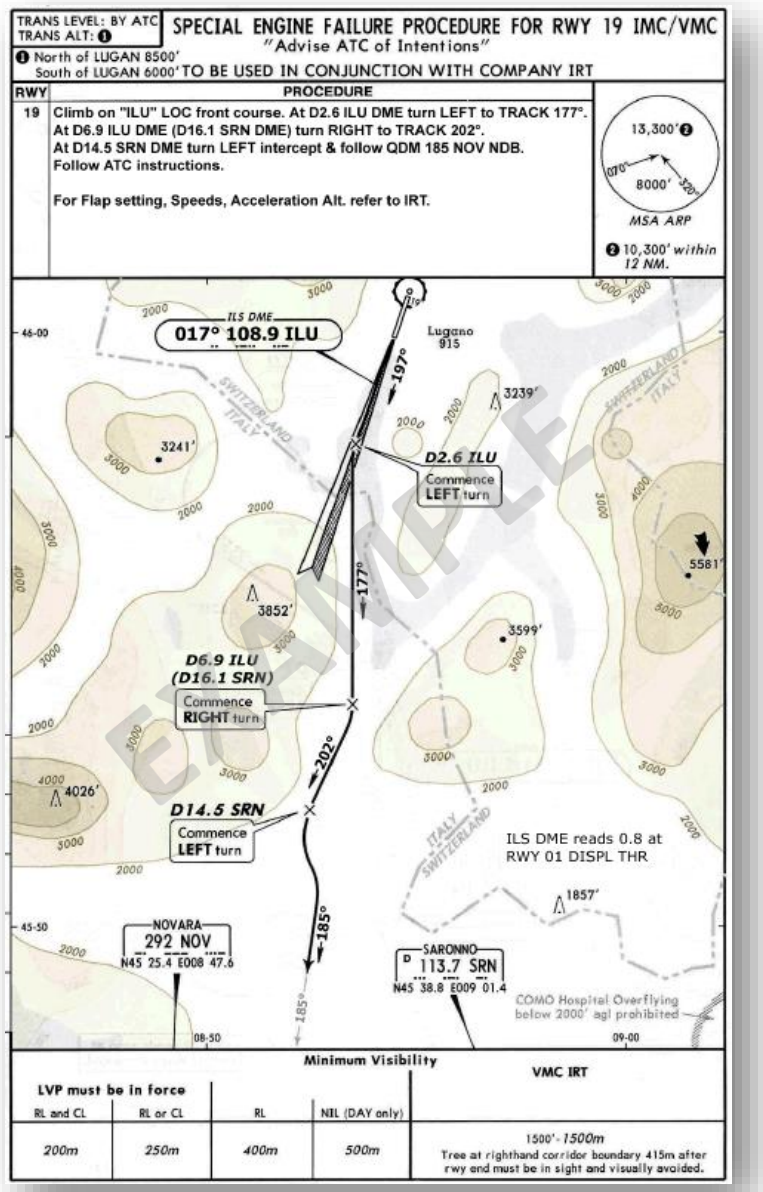
▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

Considerations for take-off briefing for operational circumstances:

i. Aeroplane performance vs runway and performance limiting factors
ii. Contingency procedure, type and conditions vs SID
iii. Adjacent airspace
iv. Take-off alternate requirement [ICAO or EASA Part CAT, NCC]
v. Environmental conditions
vi. Best Runway vs overall circumstances
vii. Crew composition and Lugano experience

Qualification Type D

- *Contingency procedure RWY 19 (example)*



Takeoff Runway 19DP1

TAKEOFF WEIGHTS FOR RWY 19DP1 REQUIRE THE USE OF THIS TAILORED NON-RNAV DEPARTURE PROCEDURE

NOTE: NON-RNAV PROCEDURE. ALL FIXES ARE FLY-OVER FIXES UNLESS OTHERWISE NOTED. ALL TURNS ARE CLIMBING 15 DEGREES OF BANK UNLESS OTHERWISE NOTED.

MAINTAIN RUNWAY HEADING TO ILU 2.6 DME (1.8 NM FROM DER)

TURN LEFT HEADING 172 DEGREES TO INTERCEPT MMP VOR R-022 INBOUND DIRECT TO MMP VOR

CLIMB IN HOLDING PATTERN AT MMP ON MMP VOR R-022 (HOLD NORTH, RIGHT TURNS, 25 DEGREE BANK, 5NM LEGS, 202 COURSE INBOUND)

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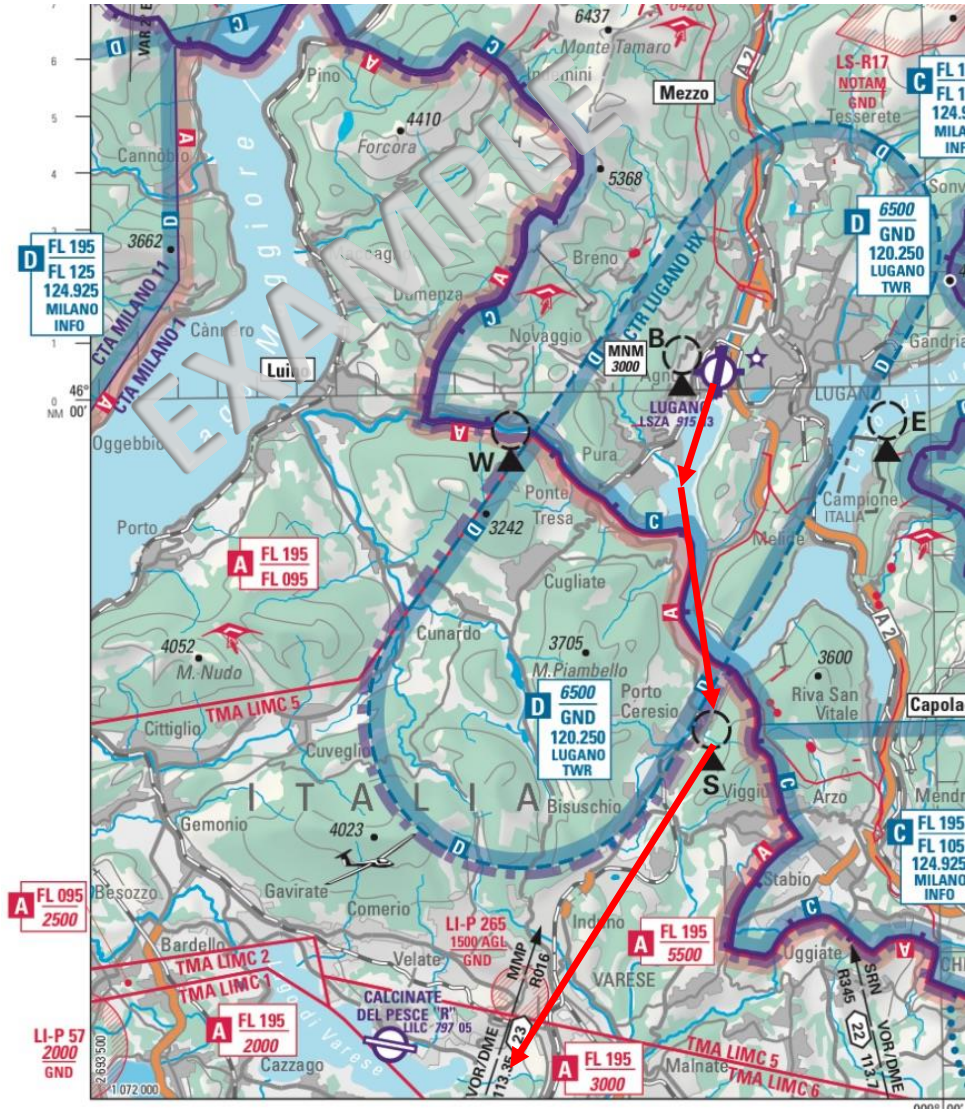
Correct take-off profile, highest precision navigation, compliance with DP, to be briefed and threat managed with mitigation.

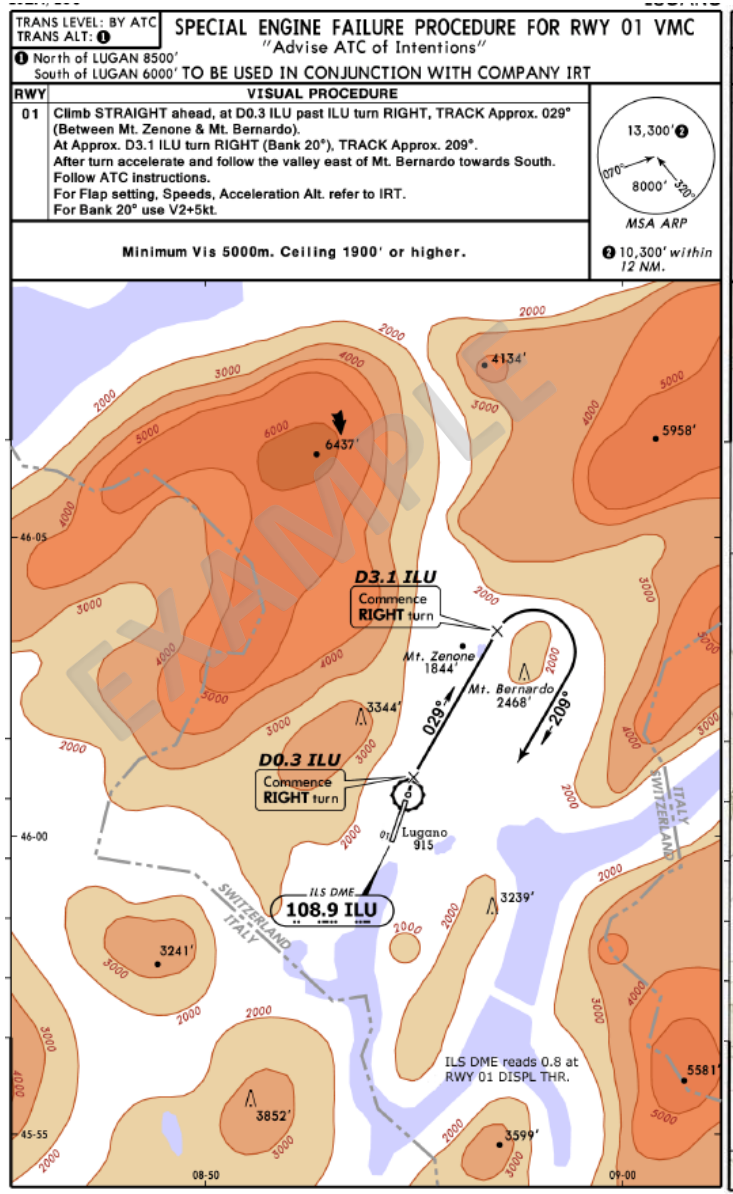
Qualification Type D

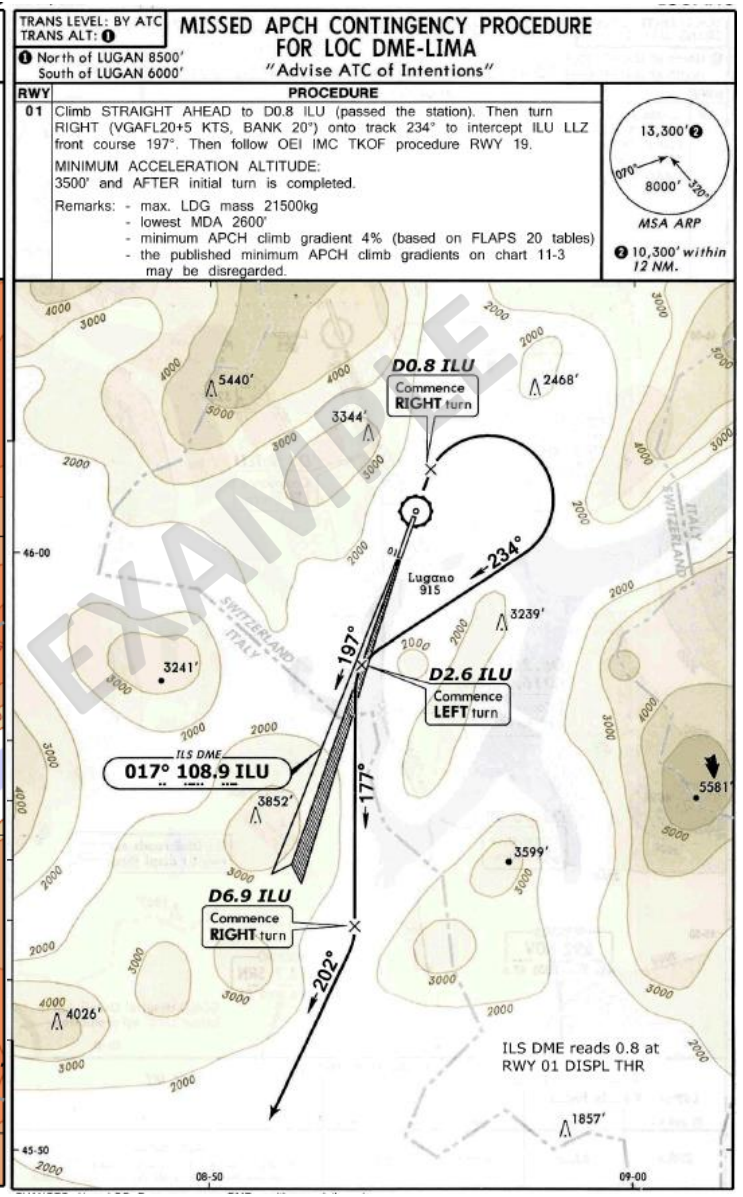
- *Contingency procedure RWY 19 (example)*



Qualification Type D

- Contingency procedure RWY 01 (example)





Takeoff Runway 01DP3

TAKEOFF WEIGHTS FOR RWY 01DP3 REQUIRE THE USE OF THIS TAILORED NON-RNAV DEPARTURE PROCEDURE

NOTE: NON-RNAV PROCEDURE. ALL FIXES ARE FLY-OVER FIXES UNLESS OTHERWISE NOTED. ALL TURNS ARE CLIMBING 15 DEGREES OF BANK UNLESS OTHERWISE NOTED.

CLIMB HEADING 024 DEGREES TO ILU 2.9 DME

TURN RIGHT HEADING 203 DEGREES **DO NOT EXCEED 130 KIAS UNTIL ESTABLISHED ON HEADING 203 DEGREES**

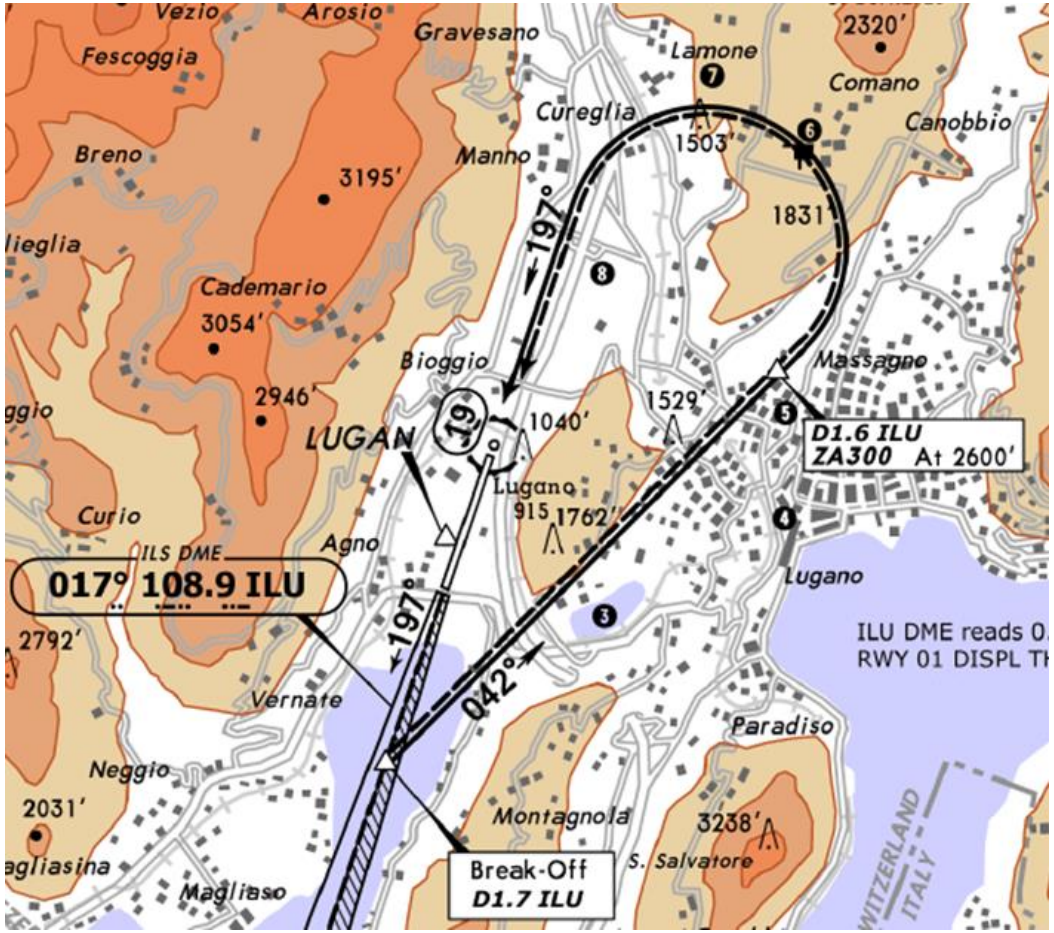
###

EXAMPLE

In addition to what we review for RWY 19, this DP will lead to high demanding environment as per wind condition, turbulence and downdraft.

Qualification Type B

- *Contingency procedure Circling Charlie (Example)*



Missed Approach Procedure during the Circling-C RWY19

If at any time after leaving the fix at D1.7 ILU on LOC RWY 01 proceeding on track 042° a missed approach is initiated the aeroplane must proceed climbing on track 042° to 1.6 ILU (2.0 NM ARP) before commencing a left turn into track 197° with a bank angle of 25°. After having intercepted the back course LOC RWY 01 proceed to PINIK at 6000 ft.

Note:

Maintain Slats+Flaps Full & Gear Down minimum speed VREF +10Kt ***max speed 135 KIAS (max speed a/c Cat B), Bank angle 25° until on track 197°.***

If a Missed approach is initiated at 1.6 ILU (2.0 NM ARP) a minimum climb gradient of 8% must be maintained. (Landing Gross Climb Gradient – all engines).

TRAM 3.1.2 Qualification Type B – DOES NOT REQUIRE OEI

• One approach LOC RWY 01 for Circling C RWY19 AEO, followed by a circling C with a go-around from circling, according to company contingency procedures;

5. Emergency Procedures

- COM failure procedure

STAR - APPR

LSZA/LUG
LUGANO

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

LOST COMMS ▶ Proceed via STAR to PINIK.
At last received or acknowledged EAT or, if no EAT has been received or acknowledged at FPL ETA, descend in the PINIK holding pattern to 6000.
Carry out a standard instrument approach to RWY 01, if needed followed by a circling to RWY 19. ◀ LOST COMMS

▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST

SID

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

LOST COMMS ▶ Cross CANNE climbing to last assigned and acknowledged FL but not below MCA. Leave last assigned and acknowledged FL or ALT earliest 3 minutes after airborne. Continue climb to planned FL. ◀ LOST COMMS

▲ LOST COMMS ▲ LOST COMMS ▲ LOST

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

LOST COMMS ▶ Cross BRL/SRN climbing to last assigned and acknowledged FL but not below MCA. Leave last assigned and acknowledged FL or ALT earliest 3 minutes after airborne. Continue climb to planned FL. ◀ LOST COMMS

▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

LOST COMMS ▶ Cross OMETO climbing to last assigned and acknowledged FL but not below MCA. Leave last assigned and acknowledged FL or ALT earliest 3 minutes after airborne. Continue climb to planned FL. ◀ LOST COMMS

▲ LOST COMMS ▲ LOST COMMS ▲ LOST

LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS

LOST COMMS ▶ Cross BEG/SRN climbing to last assigned and acknowledged FL but not below MCA. Leave last assigned and acknowledged FL or ALT earliest 3 minutes after airborne. Continue climb to planned FL. ◀ LOST COMMS

▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS ▲ LOST COMMS

Content

1. LSZA Qualifications B, C, D
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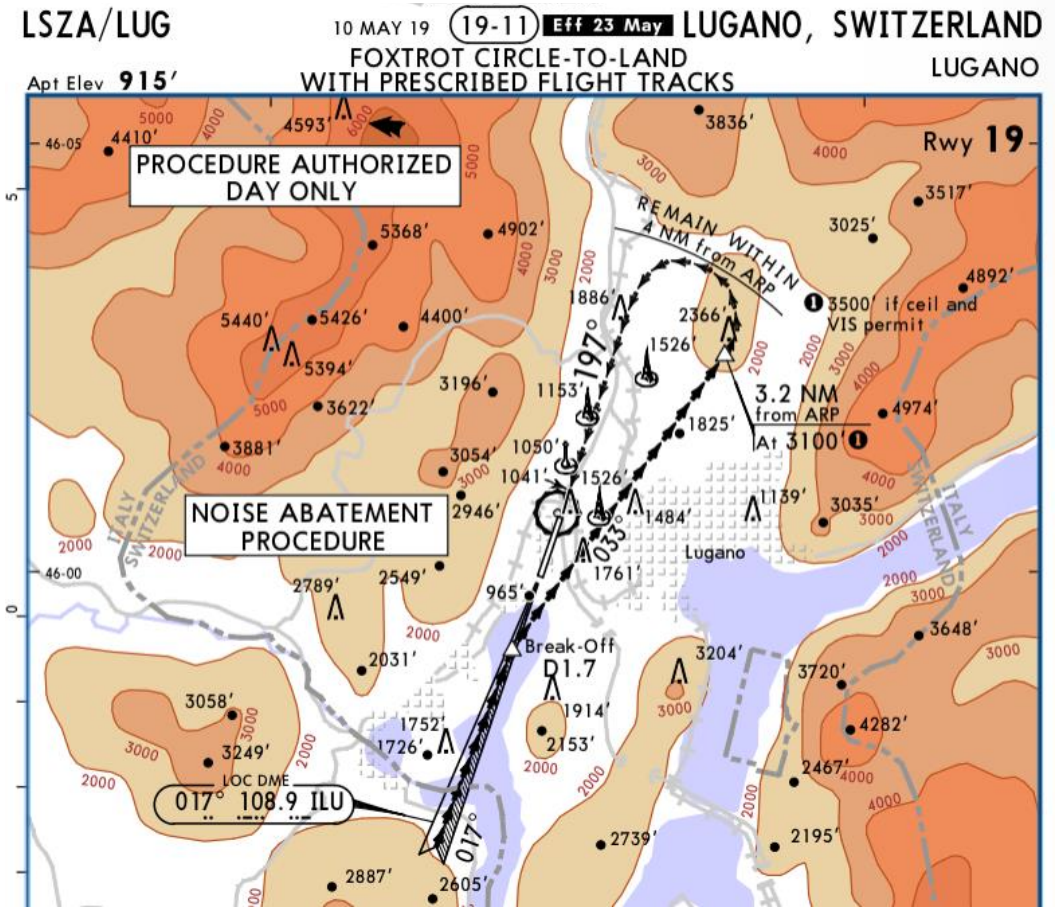
6. Sensitive Noise Area

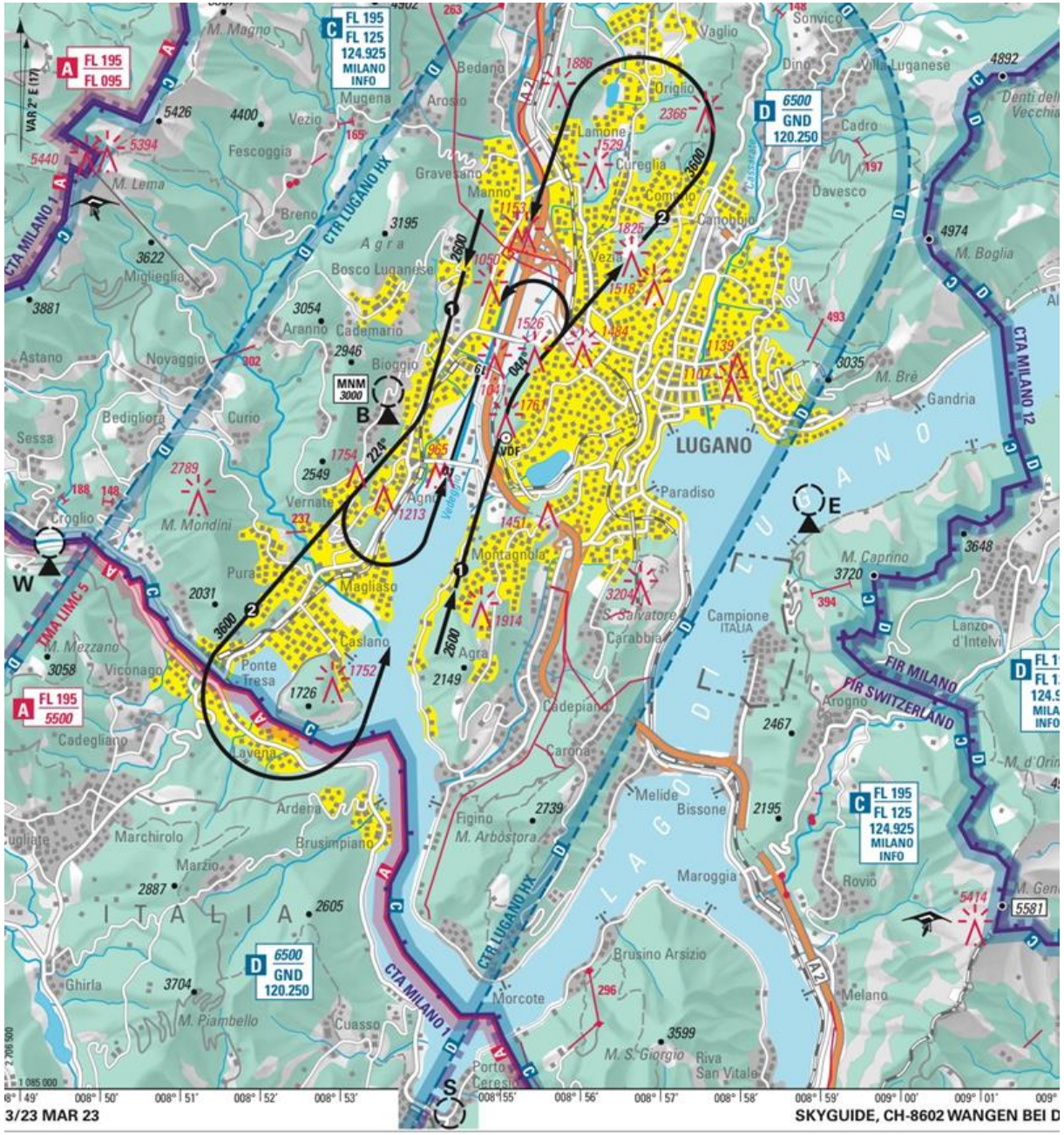
From Swiss AIP

3. Circling procedure RWY 19

The Circling Foxtrot procedure is the preferential manoeuvre for noise abatement purposes when LDG on RWY 19.
FLTs performing a visual APCH to RWY 19 from a PSN south or east of the AP are requested, if conditions permit, to join the circling Foxtrot pattern at the beginning of the base turn.



6. Sensitive Noise Area



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