

SPECIAL REGULATIONS FOR IFR APPROACH AND DEPARTURE

1. IFR PROCEDURES

The use of IFR approach or departure procedures in Lugano is limited to pilots, operators and aircraft fulfilling the Airport Qualifications according 2.

1.1 IFR APPROACH PROCEDURES

Any approaching aircraft must comply with the requirements of Aircraft Certification according 2.1 as well as with the relevant procedures on approach charts.

The following instrument approach procedures with the corresponding requirements are available:

- a) LOC DME-Hotel Rwy 01 for Circling Rwy 19 (approach procedure)
Requirements: At least Pilot Qualification type A.
Conditions: according 1.4.2, 1).
- b) LOC DME-Lima Rwy 01 for Circling Rwy 19 (steep approach procedure)
Requirements: - At least Pilot Qualification type B.
- Aircraft certification according 2.1 for steep approach of 5.4° or higher.
- Contingency procedure for circling according 1.4.2, 2b).
Conditions: according 1.4.2, 2b) Circling procedure rwy 19.
- c) IGS Rwy 01 (steep approach procedure)
Requirements: - Pilot Qualification type C.
- Aircraft certification according 2.1 for steep approach of 6° or higher.

1.2 IFR DEPARTURE PROCEDURES

Any departing aircraft must comply with the requirements of Aircraft Certification according 2.1 as well as with the relevant procedures published on SID charts.

Standard Instrument Departures (SIDs):

- a) Requirements: At least Pilot Qualification type A
Conditions: VIS ≥ 3000m and ceiling ≥ 2100'.
- b) Requirements: - At least Pilot Qualification type B.
- Aircraft complying with the climb requirements according to published procedures, or approved Company contingency procedures.
Conditions: VIS ≥ 400'.

1.3 APPROACH TO RWY 01

1.3.1 IGS RWY 01 STEEP APPROACH 6.65°

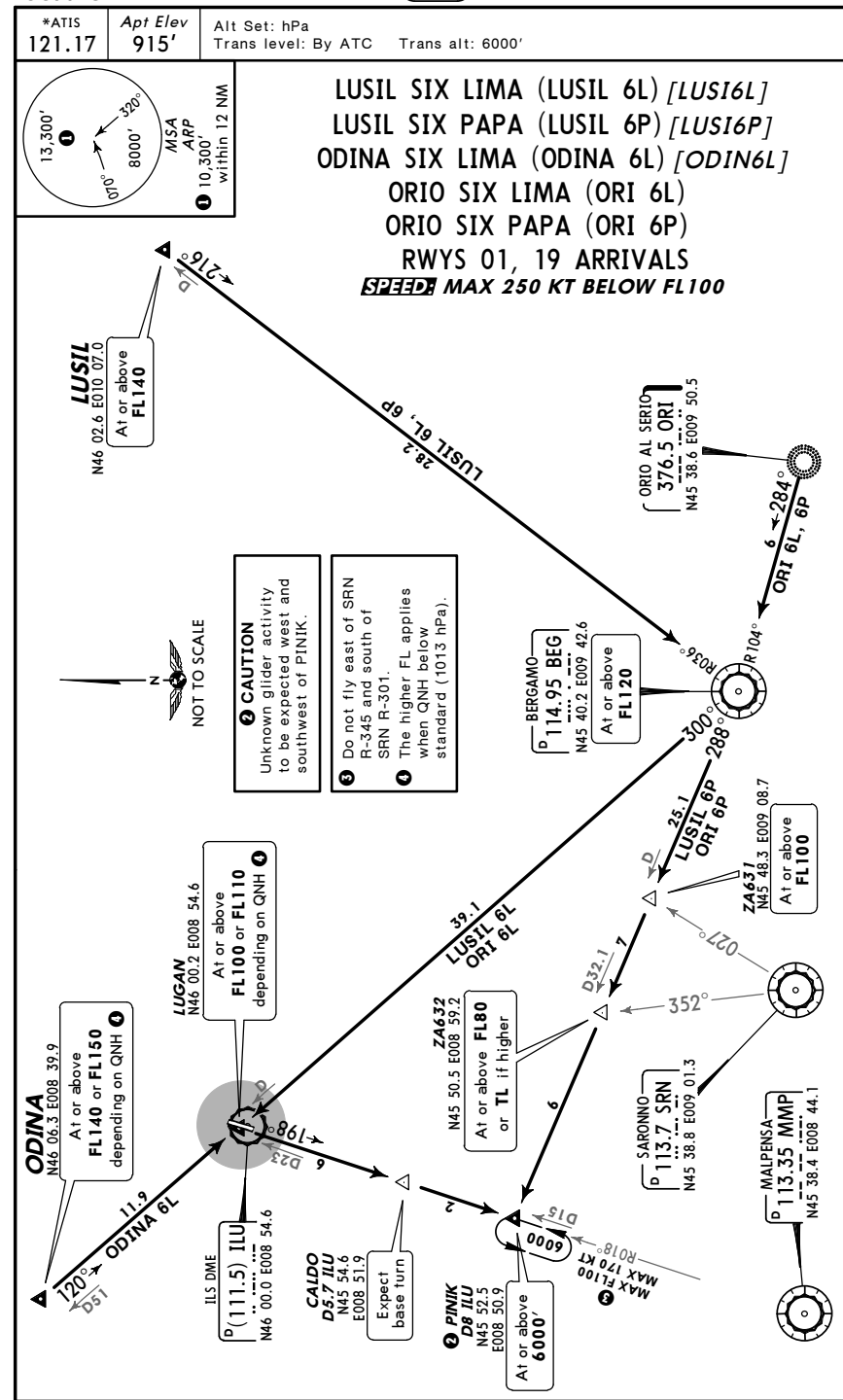
Instruction of crews using the IGS 01 approach procedure must satisfy the rules of the "Training Requirements Application Manual" (TRAM) for Lugano Airport.

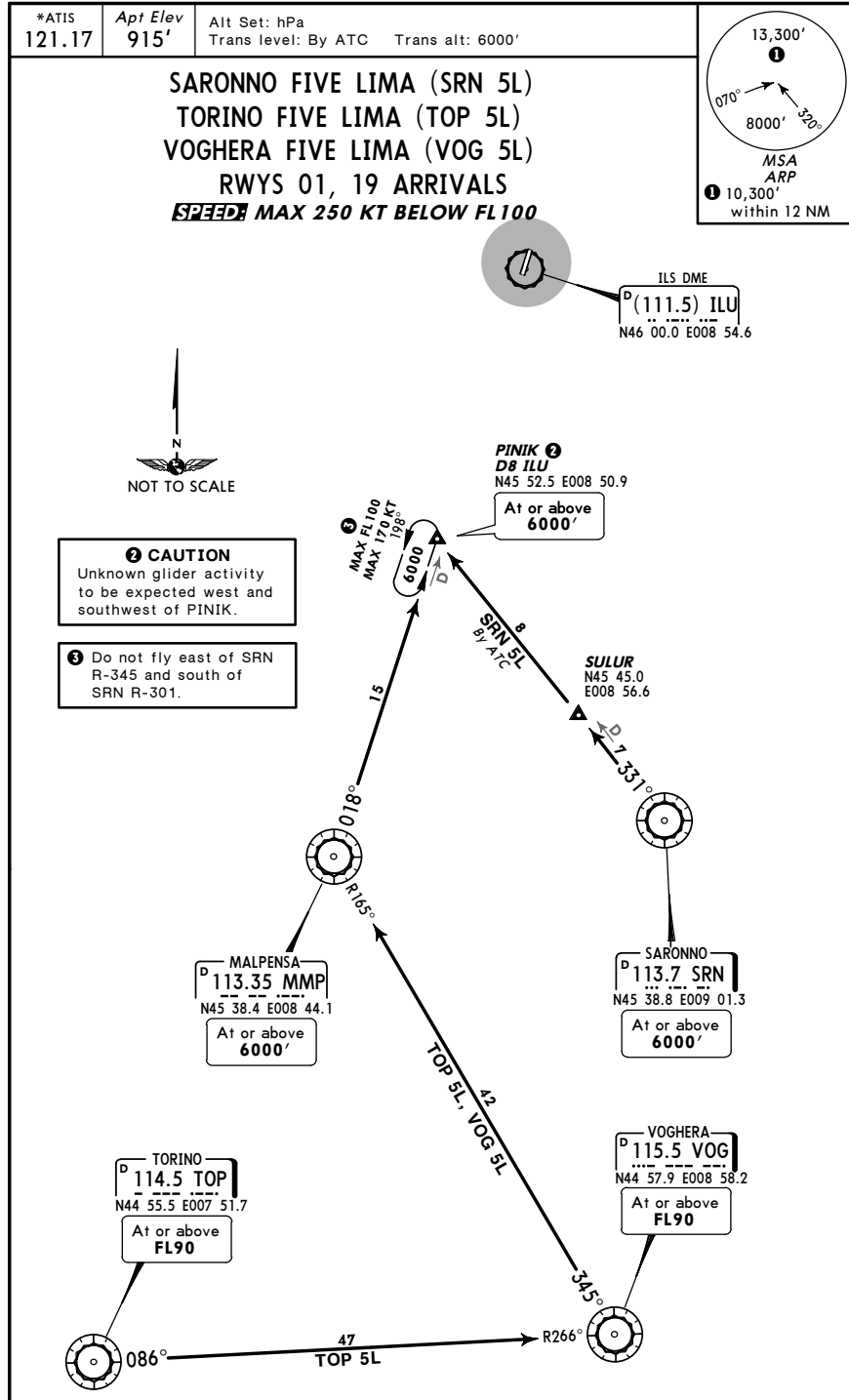
The IGS approach may only be used by qualified crew and certified aircraft for a "steep approach" of 6° or higher.

For aircraft certified for steep approaches of 6.65° or more, the instrument approach procedure IGS rwy 01 may be used with an angle of 6.65° during the entire approach until landing.

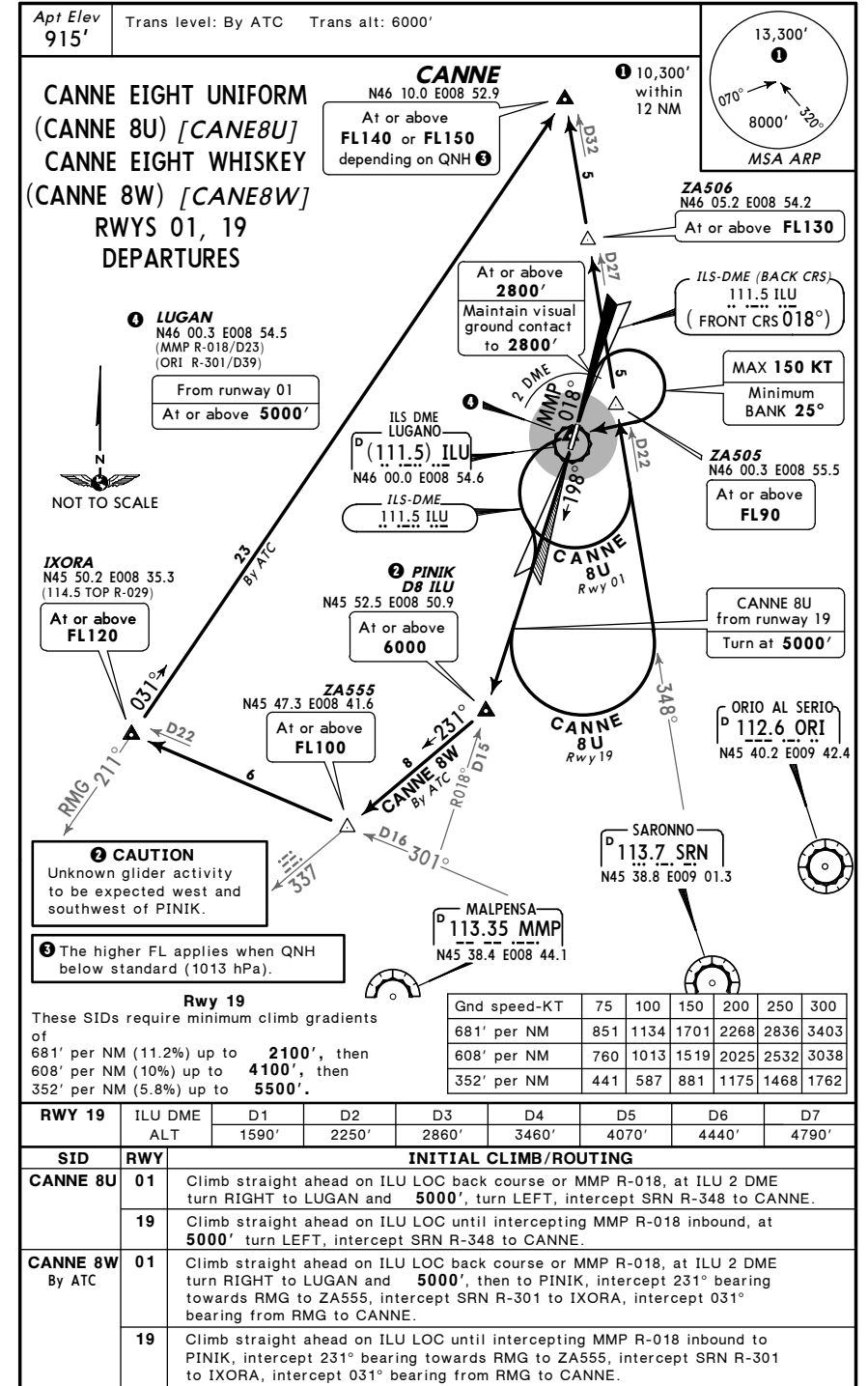
For aircraft certified for steep approaches with an angle between 6° and 6.64°, the use of the instrument approach procedure IGS rwy 01 is subject to the following regulations:

- a) The approach for landing will be performed at an angle of 6.65° (phase 1). The following landing phase (phase 2) has to be performed at a maximum angle of 6° with the help of the PAPI set on this value.
- b) The aircraft must be established (with the corresponding Vref) along the portion with an approach angle of 6° at latest at a height of 500' AAL; in any other case the approach procedure must be interrupted and a go-around procedure must be initiated.





CHANGES: None.



CHANGES: SIDs renumbered & revised.

OMETO EIGHT WHISKEY (OMETO 8W) [OMET8W] RWYS 01, 19 DEPARTURE

Apt Elev 915' Trans level: By ATC Trans alt: 6000'

At or above 2800' Maintain visual ground contact to 2800'

13,300' MSA ARP 10,300' within 12 NM

LUGAN N46 00.3 E008 54.5 (MMP R-018/D23) (ORI R-301/D39)

From runway 01 At or above 5000'

ILS DME LUGANO (111.5) ILU N46 00.0 E008 54.6

ILS-DME 111.5 ILU

ILS-DME (BACK CRS) 111.5 ILU (FRONT CRS 018°)

MAX 150 KT Minimum BANK 25°

CAUTION Unknown glider activity to be expected west and southwest of PINIK.

The higher FL applies when QNH below standard (1013 hPa).

OMETO N45 44.2 E008 02.6 At or above FL180 or FL190 depending on QNH

BAVMI N45 42.2 E008 24.5 At or above FL150

ZA555 N45 47.3 E008 41.6 At or above FL100

PINIK D8 ILU N45 52.5 E008 50.9 At or above 6000'

ORIO AL SERIO P 112.6 ORI N45 40.2 E009 42.4

SARONNO P 113.7 SRN N45 38.8 E009 01.3

ROMAGNANO 337 RMG N45 37.7 E008 24.4

ZA556 N45 41.5 E008 31.3 At or above FL130

MALPENSA P 113.35 MMP N45 38.4 E008 44.1

Rwy 19

This SID requires minimum climb gradients of 681' per NM (11.2%) up to 2100', then 608' per NM (10%) up to 4100', then 352' per NM (5.8%) up to 5500'.

Gnd speed-KT	75	100	150	200	250	300
681' per NM	851	1134	1701	2268	2836	3403
608' per NM	760	1013	1519	2025	2532	3038
352' per NM	441	587	881	1175	1468	1762

RWY 19	ILU DME ALT	D1	D2	D3	D4	D5	D6	D7
		1590'	2250'	2860'	3460'	4070'	4440'	4790'

INITIAL CLIMB

RWY	INITIAL CLIMB
01	Climb straight ahead on ILU LOC back course or MMP R-018, at ILU 2 DME turn RIGHT to LUGAN and 5000', intercept MMP R-018 inbound.
19	Climb straight ahead on ILU LOC until intercepting MMP R-018 inbound.

ROUTING

On MMP R-018 inbound to PINIK, intercept 231° bearing towards RMG via ZA555 to ZA556, intercept SRN R-277 via BAVMI to OMETO.

CHANGES: SIDs renumbered & revised.

ORIO NINE UNIFORM (ORI 9U) ORIO NINE WHISKEY (ORI 9W) RWYS 01, 19 DEPARTURES

Apt Elev 915' Trans level: By ATC Trans alt: 6000'

At or above 2800' Maintain visual ground contact to 2800'

13,300' MSA ARP 10,300' within 12 NM

LUGAN N46 00.2 E008 54.6 (MMP R-018/D23) (BEG R-301/D39.1)

From runway 01 At or above 5000'

ILS DME LUGANO (111.5) ILU N46 00.0 E008 54.6

ILS-DME 111.5 ILU

ILS-DME (BACK CRS) 111.5 ILU (FRONT CRS 018°)

MAX 150 KT Minimum BANK 25°

CAUTION Unknown glider activity to be expected west and southwest of PINIK.

PINIK D8 ILU N45 52.5 E008 50.9 At or above 6000'

ZA526 N45 50.5 E008 59.2 At or above FL80 or TL if higher

ZA527 N45 48.3 E009 08.7 At or above FL100

BERGAMO P 114.95 BEG N45 40.2 E009 42.6 At or above FL120

SULUR N45 45.0 E008 56.6 At or above FL80

MALPENSA P 113.35 MMP N45 38.4 E008 44.1

SARONNO P 113.7 SRN N45 38.8 E009 01.3

ORIO AL SERIO 376.5 ORI N45 38.6 E009 50.5

Rwy 19

These SIDs require minimum climb gradients of 681' per NM (11.2%) up to 2100', then 608' per NM (10%) up to 4100', then 352' per NM (5.8%) up to 5500'.

Gnd speed-KT	75	100	150	200	250	300
681' per NM	851	1134	1701	2268	2836	3403
608' per NM	760	1013	1519	2025	2532	3038
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RWY 19	ILU DME ALT	D1	D2	D3	D4	D5	D6	D7
		1590'	2250'	2860'	3460'	4070'	4440'	4790'

INITIAL CLIMB

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01	Climb straight ahead on ILU LOC back course or MMP R-018, at ILU 2 DME turn RIGHT to LUGAN and 5000', intercept MMP R-018 inbound.
19	Climb straight ahead on ILU LOC until intercepting MMP R-018 inbound.

ROUTING

ORI 9U On MMP R-018 inbound to PINIK, intercept SRN R-331 inbound to SULUR, intercept BEG R-278 inbound to ORI.

ORI 9W On MMP R-018 inbound to PINIK, intercept BEG R-288 inbound via ZA526 and ZA527 to ORI.

CHANGES: SIDs renumbered; ORI VOR replaced by BEG VOR.

NOISE ABATEMENT

SUMMER : LT minus 2 HOURS = UTC (Z)
WINTER : LT minus 1 HOUR = UTC (Z)

GENERAL

The following regulations are defined to avoid excessive noise at and in the vicinity of Lugano airport. Operators unable to comply with these rules and procedures shall submit the procedure they intend to apply for approval to the airport authority. All aircraft types to be used for regular services at Lugano airport will be subject to an individual noise qualification prior to receiving operating rights. In particular cases, the Airport Authority can issue differing procedures and rules for the noise abatement.

Aircraft not admitted unless special authorization

The following aircraft types intending to operate at Lugano airport will not be admitted without special authorization by the Airport Authority which must be filed at least 24 hours before the intended arrival.

JET AIRCRAFT

Reference AIP GEN 4-1 Appendix 1, class I - IV.

PROP AIRCRAFT

Reference AIP GEN 4.1.5, class A and following aircraft of class B:

- BE-55 Beech Baron 55
- C 210 Cessna 210 CENTURION

HELICOPTERS

- Bell 204
- Bell 214
- Kamow.

ARRIVALS

CIRCLING APPROACHES

The following noise abatement circling procedure for Rwy 19 has been published: Follow the published instrument approach to Rwy 01 until 3500' QNH MIM. If ceiling and visibility permit, proceed on left-hand downwind for Rwy 19 (circling East of the airport). Leave 3500' QNH not before entering base turn for Rwy 19.

LOCAL FLYING RESTRICTIONS

Flight operations are prohibited outside aerodrome operating hours (0800-2000LT).

Exceptions are given for the following flights:

a) Scheduled and non-scheduled commercial air traffic:

Mon-Fri 0700-2200LT,
Sat 0700-2045LT,
Sun 0800-2200LT.

- with special authorization (PPR til 1800LT) :

Sat 2045-2200LT, Sun 0700-0800 LT

- with special authorization only for scheduled air traffic:

Mon-Sun 0600-0700LT and 2200-2300LT.

b) Private traffic:

Mon-Sun 0800-2000LT.

- with special authorization for private traffic (PPR til 1800LT):

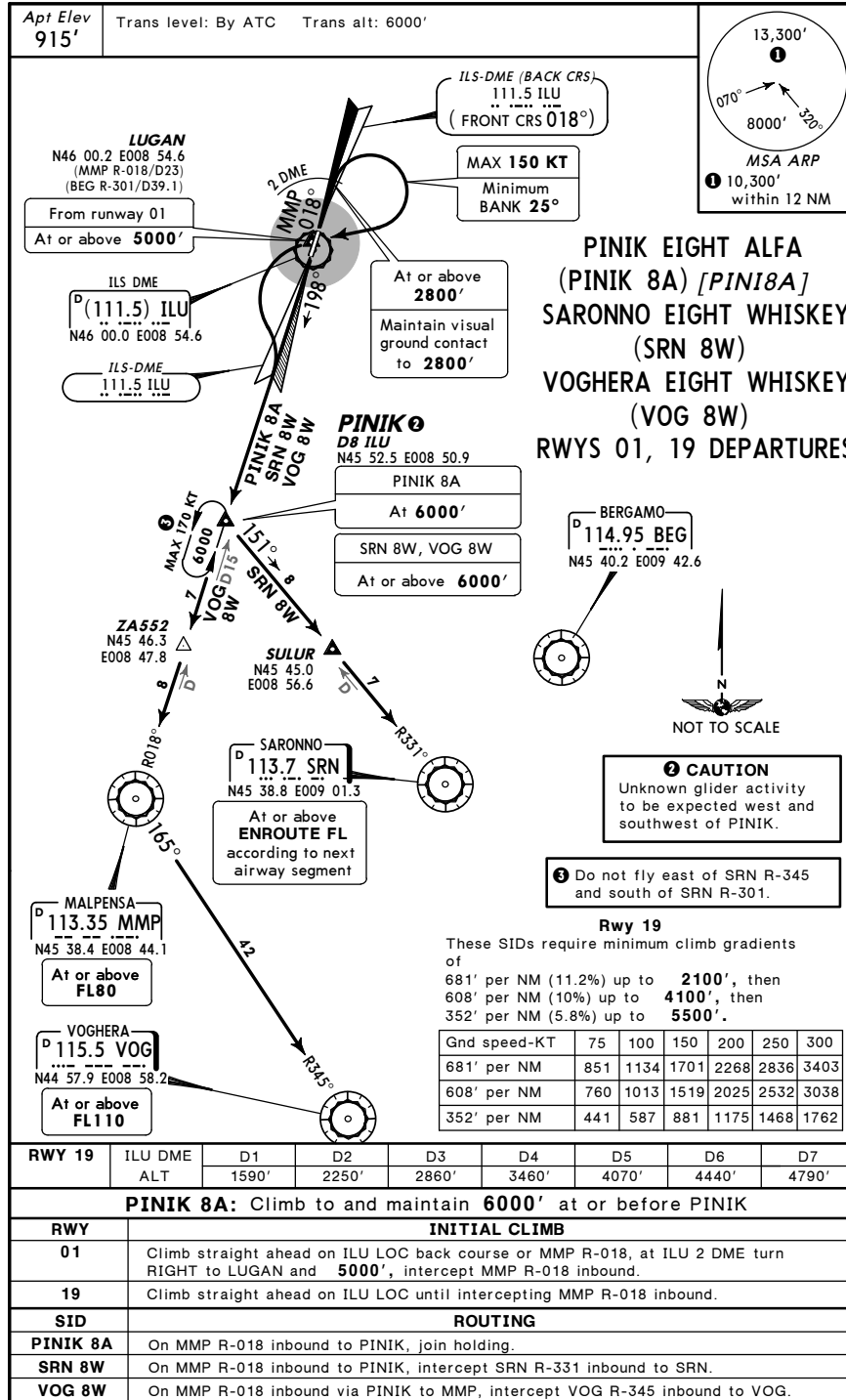
Mon-Sun 0700-0800LT and 2000-2200LT.

c) Flights with Special authorization:

Special authorization can be issued for the Federal Department of Transport, Communications and Energy and for the Swiss Federal Department of Defence, in particular for State aircraft and as well as for search and rescue flights, police and supervision flights, flights carrying sick and injured persons, flights transporting organs for implantation, relief flights in disaster cases.

Airport circuits only:

Mon-Fri 0800-1200LT and 1400LT-SS (MAX-1800LT), Sat 0900-1200LT and 1500-1700LT.



CHANGES: ORI VOR replaced by BEG VOR.

CHANGES: Text revised.

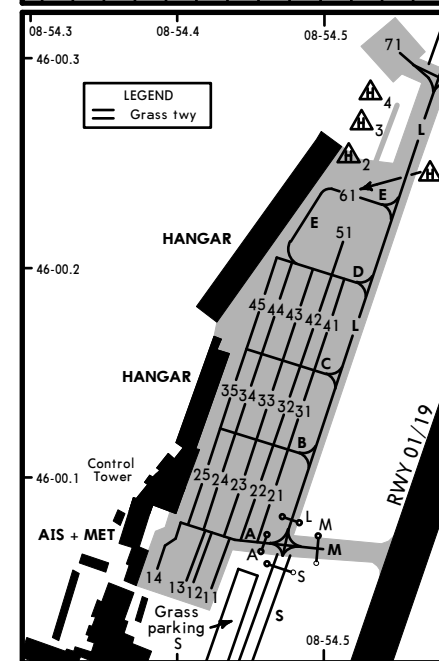
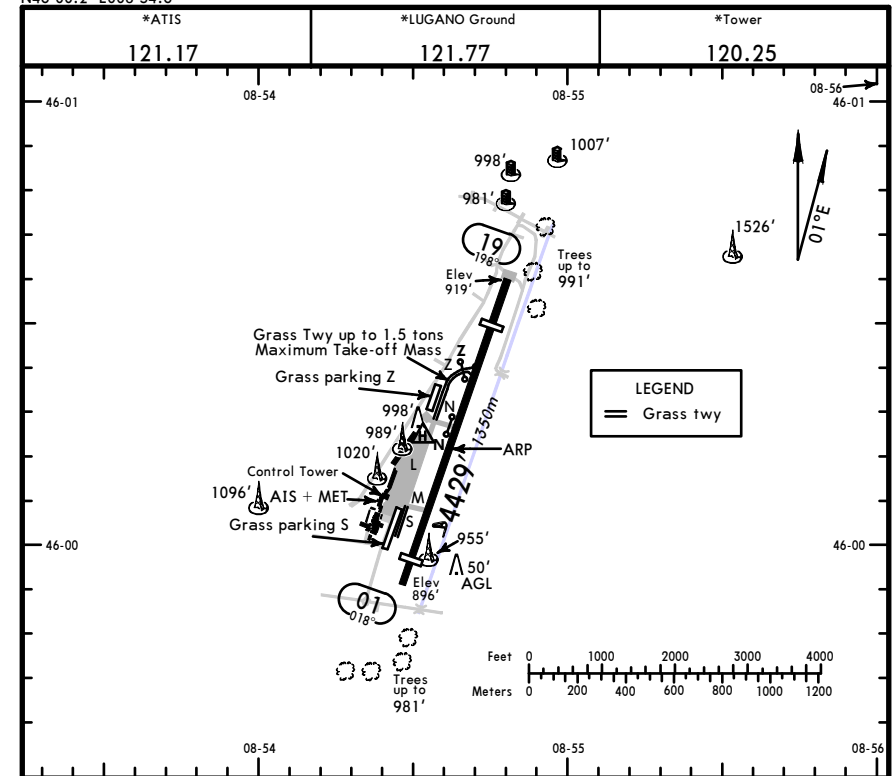
NOISE ABATEMENT

REVERSE THRUST

For deceleration it is recommended to use entire runway length available; the use of reverse thrust shall be limited for safety or particular operational reasons.

AUXILIARY POWER UNITS (APU)

The use of the APU shall be limited to 15 minutes prior to the aircraft departure or 5 minutes after arrival. The use of the APU for maintenance shall be restricted to a minimum duration.



INS COORDINATES	
STAND No.	COORDINATES
11 thru 13	N46 00.0 E008 54.4
14	N46 00.1 E008 54.4
21, 22	N46 00.1 E008 54.5
23 thru 25	N46 00.1 E008 54.4
31 thru 33	N46 00.1 E008 54.5
34, 35	N46 00.1 E008 54.4
41 thru 61	N46 00.2 E008 54.5
71	N46 00.3 E008 54.5

WARNING: Use caution to reduce jet blast when taxiing out of parking area.

Maximum caution required when taxiing on the apron due to boarding and disembarking of passengers.

Grass parking Z & S:
Follow-me compulsory on arrival.
Available up to 1.5 tonnes MTOM.

Request start-up clearance from Lugano TOWER.
No engine start-up before acft is ready to leave parking position.

ADDITIONAL RUNWAY INFORMATION					
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		LANDING BEYOND			
		Threshold	Glide Slope		
01	HIRL (60m) CL (30m) REIL PAPI-L (4.17°) ③	4068' 1240m	3599' 1097m		98' 30m
① 19	HIRL (60m) CL (30m) HIALS ② REIL PAPI-L (4.17°) ④	3757' 1145m			
<p>① Rwy 01/19 inner 3773'(1150m) grooved.</p> <p>② configuration unknown.</p> <p>③ WARNING: For IGS approach PAPI set to 6.0° only usable after passing D3.0 ILU.</p> <p>④ WARNING: PAPI only usable within 2 NM from threshold.</p>					
PARKING/PUSH-BACK PROCEDURES					
Psn 11 thru 14: Yellow TAX guidance lines for positions 11 thru 14, facing South. Follow instructions of Mashaller. Push-back required for departure.					
Psn 21 thru 45: Yellow TAX guidance lines for positions 21 thru 45, facing North or South. Marshalling required for positions 24 and 44.					
Psn 51: Yellow TAX guidance lines for position 51, facing North. Push-back required for departure.					
Psn 61: Yellow TAX guidance lines for position 61, facing West. Push-back required for departure for acft with wingspan between 49'/15m and 65'/20m.					
Psn 71: Yellow TAX guidance lines for position 71, facing West. Push-back required for departure.					
Standard TAKE-OFF ①					
A/B/C/D	Rwy 01	Rwy 19			NIL (DAY only)
		LVP must be in force	RCLM (DAY only) or RL	RCLM (DAY only) or RL	
		RL & CL	RCLM (DAY only) or RL	RCLM (DAY only) or RL	NIL (DAY only)
A	1900' - 1500m	200m	250m	400m	500m
B					
C					
D	NOT APPLICABLE	NOT APPLICABLE			
① Operators applying U.S. Ops Specs: CL required below 300m.					

- c) The approach may be performed only if at the given time the tailwind-component, which results from the values measured at the landing on the airport, doesn't exceed the half of the value of the max tailwind-component permitted according to the Aircraft Flight Manual (AFM) for steep approach procedure.
- d) Maximum permitted difference above the descent path must correspond to half-scale on the glide-slope indicator (generally 1 dot). In the case this limit is exceeded a go-around procedure must immediately initiated.

1.3.2 PAPI RWY 01

For all approaches, only one PAPI shall be illuminated and operative. The use of the 6° PAPI on rwy 01 is limited to certified aircraft and to flight crews qualified for steep approach and landing of 6° or higher. The 6° PAPI on rwy 01 will only be in use for IFR traffic performing an IGS approach. For all other approaches, the 4.17° PAPI on rwy 01 will be in use.

If on an IGS approach, IFR is cancelled, or if a visual approach is requested after having passed CALDO (inbound), then the landing procedure on rwy 01 must be completed following (and not undershooting) the 6° PAPI until landing on rwy 01, or a circling procedure for landing on rwy 19 is initiated. Under this circumstance, the aircraft may descend onto the 6° PAPI earlier than MDA or VDP but not before passing D3.0 ILU.

1.4 APPROACH TO RWY 19

1.4.1 LOC DME APPROACHES FOR CIRCLING RWY 19

Whenever possible the LOC DME approaches shall be flown on a continuous descent angle or gradient.

The break-off point on the approach will always remain at the same position, but it will be accordingly overflowed at the applicable altitude.

1.4.2 CIRCLING PROCEDURES RWY 19

There are two circling procedures available.

1) CIRCLING FOXTROT RWY 19

Requirements: At least pilot qualification type A.
Conditions: VIS ≥ 5000m, Day only and ceiling ≥ 3100'.

2) CIRCLING CHARLIE RWY 19

- a) Requirements: At least pilot qualification type A.
Conditions: VIS ≥ 5000m, Day only and ceiling ≥ 3100'.
- b) Requirements: - At least pilot qualification type B.
- Contingency procedure approved by the respective National Aviation Authority (including approach landing climb gross gradient table and 2.0 NM THR 01 Turning Point definition).
- Specific flight training associated with the before mentioned contingency procedure.
Conditions: - If the circling follows a LOC-DME HOTEL RWY 01 approach procedure, then VIS ≥ 5000m Night, and ceiling ≥ 3100'.
- If the circling follows a LOC-DME LIMA RWY 01 approach procedure, then VIS ≥ 3000m Day/VIS ≥ 5000 Night, and ceiling ≥ 1700'.

1.5 MISSED APPROACH

During all IFR approaches the applicable MDA and the corresponding minimum visibility shall be predefined by the operator and the flight crew reflecting the daily performance limits of the corresponding aircraft given by mass, temperature, density and wind conditions (including where applicable, the Company contingency procedures).

1.6 ATC

1.6.1 COMMUNICATION WITH ATC

Flight crews entering LUGANO CTR under IFR shall announce themselves, requesting the type of approach they intend to execute.

1.6.2 ATC FLIGHT PLAN

Operators holding an Airport Qualification according to 2. shall insert "AP QUALIFICATION VALID" in item 18 of ATC flight plan.

1.7 REQUIREMENTS OVERVIEW

Requirements		Pilot Qualification	Operator Qualification procedures	Aircraft Qualification performances*
Flight operation & procedures				
VFR	Commercial VFR departure / arrival	minimum Type A	nil	nil
IFR APCH and LNDG	a) IFR visual apch b) LOC DME-Hotel (apch angle 4.4°) c) Circling FOXTROT (Day only) d) Circling CHARLIE (VIS ≥ 5000m Day only, ceiling ≥ 3100')	minimum Type A	nil	nil
	e) Circling CHARLIE with contingency (VIS ≥ 5000m Night/ceiling ≥ 3100') ❶	minimum Type B	Approved contingency proc (circling missed apch) required	nil
	f) Circling CHARLIE with contingency (VIS ≥ 3000m Day/VIS ≥ 5000m Night/ceiling ≥ 1700') ❶ g) LOC DME-Lima (approach angle 5.4°)	minimum Type B	Approved contingency proc (circling missed apch) required	glide certification > 5.4°
	h) IGS (approach 6.65°, landing 6°)	minimum Type C	nil	glide certification > 6.0°
IFR DEPARTURE	i) IFR departure under visual meteo conditions j) Take-off (VIS ≥ 3000/ceiling ≥ 2100')	minimum Type A	nil	nil
	k) Take-off (VIS ≥ 400m)	minimum Type B	Approved contingency proc (take-off rwy 19 and/or 01) required	nil

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

❶ Procedure not applicable if specific flight training associated to the approved contingency procedure (circling missed approach) has not been done.

nil = not required

2. AIRPORT QUALIFICATION

To operate in Lugano under IFR, following airport requirements must be fulfilled:

- The aircraft must meet the performance requirements according to the Aircraft Certification, including (where necessary) a steep approach and landing certification.
- Operator's Contingency Procedures (if required by the type of flight operation) must be calculated and available.
- The flight crew must hold a valid Pilot Qualification for the applicable type of operation and flight procedures.

To achieve the Airport Qualification, Operators shall apply in written form to the Airport Authority.

The application shall contain:

- A letter of Endorsement from the National Aviation Authority (NAA) approving the operation into Lugano and addressing being in conformity with requirements of 2.1.
- The approval, given by respective NAA of the Operator's contingency procedures.
- The proof of conducted pilots training according to 2.2.

2.1 AIRCRAFT CERTIFICATION

Any aircraft to be operated under IFR at Lugano airport shall be able to comply with the published IFR procedures according 1. or with approved company contingency procedures.

The maximum IAS, as published on the relevant charts, shall not be exceeded during the corresponding flight manoeuvres.

Aircraft to be operated on an instrument approach procedure with a glide path steeper than 4.4°, regardless of IMC or VMC conditions, must be capable for such procedure according certified operational limitations laid down in the AFM or relevant AFM supplement or "Letter of non objection".

For aircraft certified for steep approaches with an angle of 6.65° or more

The Aircraft Certification of compliancy for the Airport Qualification shall contain:

- Type, Registration and Serial Number (S/N) of the aircraft;
- Mass, Airport and Temperature (MAT) performance table calculated and published for the operation in Lugano and for the Individual Runway Tables (IRT) including:
 - Maximum Take Off Mass (MTOM) table for all applicable Standard Instrument Departures (SID), covering One Engine Inoperative (OEI) condition,
 - Maximum Landing Mass (MLM) for approach covering the speed requirements,
 - table for applicable minima covering requirements for the approach gross climb gradient,
 - if required, contingency procedures covering the entire MAT items above.
- If required for the operation, a copy of the "steep approach" certificate, or equivalent steep approach and landing capabilities for the applicable S/N Aircraft Flight Manual (AFM).

For aircraft certified for steep approaches between 6° and 6.64°

A "Letter of non objection" is needed. The "Letter of non objection" meant to prove, from a technical/operational point of view, that in the certification, already in possession of an aircraft, also include an "initial approach" of 6.65° until the MDA published; and a further "steep approach to landing", starting latest at 500' AAL, with an angle of 6°. The manufacturer shall prove that this special procedure is supported by tests and equipments of the available certification.

Furthermore the manufacturer in the "Letter of non objection" shall clearly state the performance requirements in a such matter that they shall be properly covered in case of an aircraft is certified for 6° (tolerance of +/-2° included); for instance, the "handling qualities", the Flight Guidance systems and Autopilot until the published MDA and the performance.

2.2 PILOT QUALIFICATION

Pilots intending to operate under IFR conditions in Lugano Airport shall hold a valid Pilot Qualification according to the requirements of IFR procedures mentioned under 1.

Pilots of rotorcrafts need to comply only a Pilot Qualification type A.

2.2.1 PILOT QUALIFICATION TYPE A

The Pilot Qualification type A is directly controlled by the Airport Authority Lugano and includes:

- a) A theoretical self-instruction on:
- Lugano general operational requirements (Federal Office for Civil Aviation-FOCA & Airport Authority),
 - Local weather phenomena and dangers,
 - Lugano orographic and topographic situation, including all relevant obstacles,
 - Approach and departure procedures (VFR & IFR),
 - Noise abatement and communication procedures,
 - Aircraft performance (All Engines Operating-AEO and OEI), including calculations of MTOM, MLM gradients and applicable minima,
 - Emergency procedures.
- b) After verification of the application, a confirmation of Pilot Qualification type A will be sent to the single flight crew.

To apply for the Pilot Qualification type A, the pilot shall contact Airport Authority Lugano or consult Lugano Airport's website under www.lugano-qualification.ch.

2.2.2 PILOT QUALIFICATION TYPE B AND C

Initial and recurrence training for Pilot Qualification type B and C are to be conducted under the jurisdiction of the respective NAA.

Minimum training requirements for the Airport Qualification are collected in a so called "Training Requirements Application Manual (TRAM)" that can be requested from the Airport Authority Lugano.

2.2.3 TRAINING RECORDS AND PILOT'S QUALIFICATION

After completion of the required training, a proof of conducted initial training according to Pilot Qualification mentioned under 2.2.2 shall be sent to the Airport Authority.

The initial training confirmation form may be requested from the Airport Authority Lugano.

A list of qualified flight crews is available to the respective NAA.

2.3 AIRPORT QUALIFICATION REGENCY

It is the Operator/Pilot's responsibility to comply any time with the Airport Qualification Recency requirements and to forward, before expiring, a recency confirmation to the Airport Authority.

2.3.1 PILOTS OPERATING UNDER JAA AOC (AIR OPERATOR CERTIFICATE)

The airport qualification recency shall be maintained according to JAR-OPS 1 and JAR-FCL (Joint Aviation Requirements - Flight Crew Licensing).

2.3.2 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 one approach into and one departure from Lugano are conducted within a six month period, under normal IFR operation.

In case of an interruption of the recency of more than six months, the applicable minima for the first three approaches shall be augmented by 500' and the applicable visibility by 1000m. Furthermore, the first three take-offs shall be conducted with a minimum VIS of 3000m and a minimum ceiling of 2100'.

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

- One straight-in approach, All Engines Operative (AEO), (IGS if applicable) followed by a go-around. This, with a simulated OEI condition, climbing to 6000'.
- One take-off rwy 19 climbing to 6000' onto SID or applicable contingency procedure. This, with a simulated 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, according to 2.

2.4 DESCRIPTION OF IGS

Precision approach with ILS components.

Deviations are: Angle higher than standard (6.65°) and the definition of a MAP.

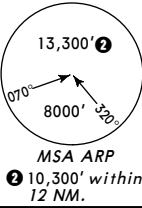
LSZA/LUG
LUGANO

18 MAR 11

(11-1) CAT A & B

LUGANO, SWITZERLAND
IGS Rwy 01

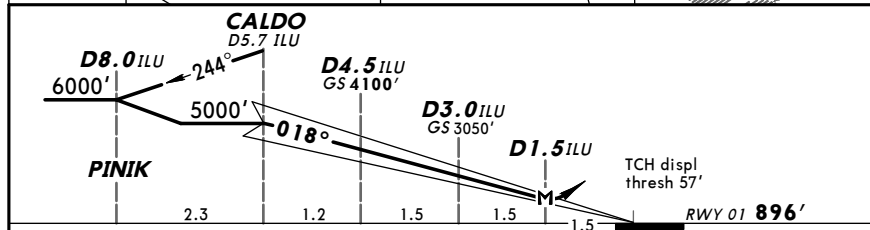
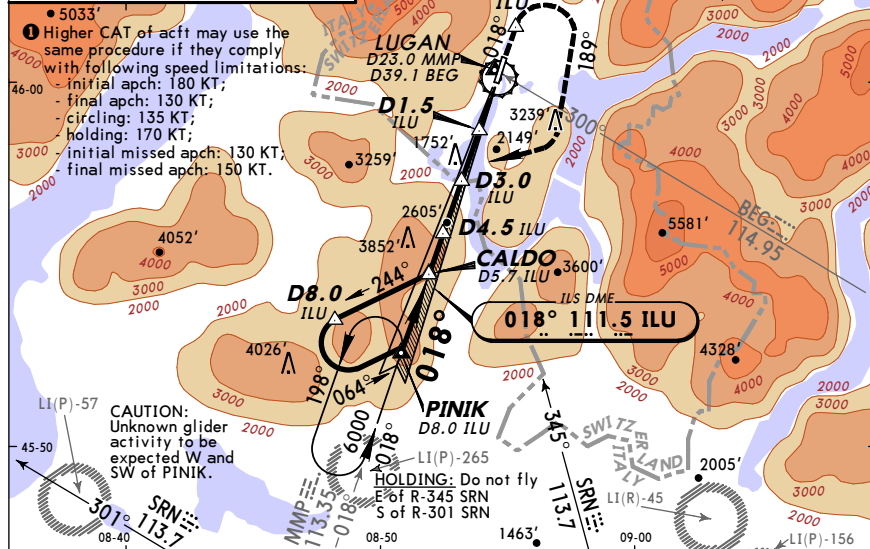
*ATIS 121.17		*LUGANO Tower 120.25		*Ground 121.77	
LOC 111.5	Final ApcH Crs 018°	GS D4.5 ILU 4100' (3204')	IGS DA(H) Refer to Minimums	Apt Elev 915'	RWY 896'



MISSD APCH: Climb STRAIGHT AHEAD to D1.5 ILU (after ILS DME), then turn RIGHT (MAX 150 KT, BANK 25°) onto track 189° climbing to 6000'. When passing 5000' turn RIGHT to intercept R-018 inbound MMP VOR and proceed to PINIK.

Alt Set: hPa Rwy Elev: 33 hPa Trans level: By ATC Trans alt: 6000'
1. WARNING: PAPI set to 6.0°. Use PAPI only after passing D3.0 ILU. Do not undershoot PAPI glide path due to trees below apch path. 2. Steep approach 6.65°. 3. Acft Certification and Crew Qualification type C required. 4. ILS DME reads zero at rwy 01 displ thresh.

FOR SPECIAL PROCEDURES AND OPERATING LIMITATIONS SEE CHARTS 10-0 THRU 10-0E.



Gnd speed-Kts	70	90	100	120	140	160			
IGS GS	6.65°	832	1069	1188	1426	1663	1901	REIL PAPI-L	Refer to Missed Apch above
MAP at D1.5 ILU									

Standard STRAIGHT-IN LANDING RWY 01							CIRCLE-TO-LAND
Missed apch climb gradient mim							
9.0% 2	8.0% 2	7.0% 2	6.0% 2	5.0% 2	2.5% 2		For VFR Circle-to-land to rwy 19 see 19-10 & 19-11
DA(H) 2070' (1174')	DA(H) 2270' (1374')	DA(H) 2540' (1644')	DA(H) 2965' (2069')	DA(H) 3360' (2464')	DA(H) 3850' (2954')		
A	3000m	3700m	4400m	5500m	6500m	7800m	
B							

1 ApcH prohibited if GP unusable.
2 Climb gradient up to 5000'.
CHANGES: Minimums.

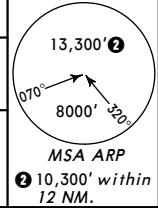
LSZA/LUG
LUGANO

18 MAR 11

(11-2)

LOC-Hotel Rwy 01 for Circling Rwy 19
LUGANO, SWITZERLAND

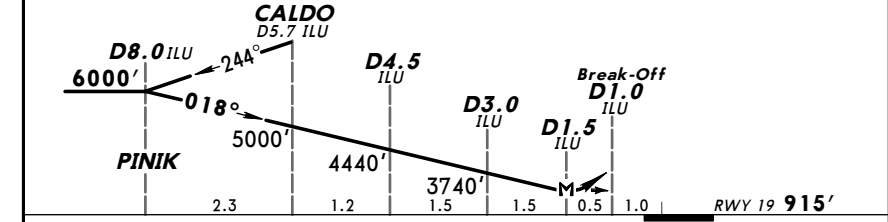
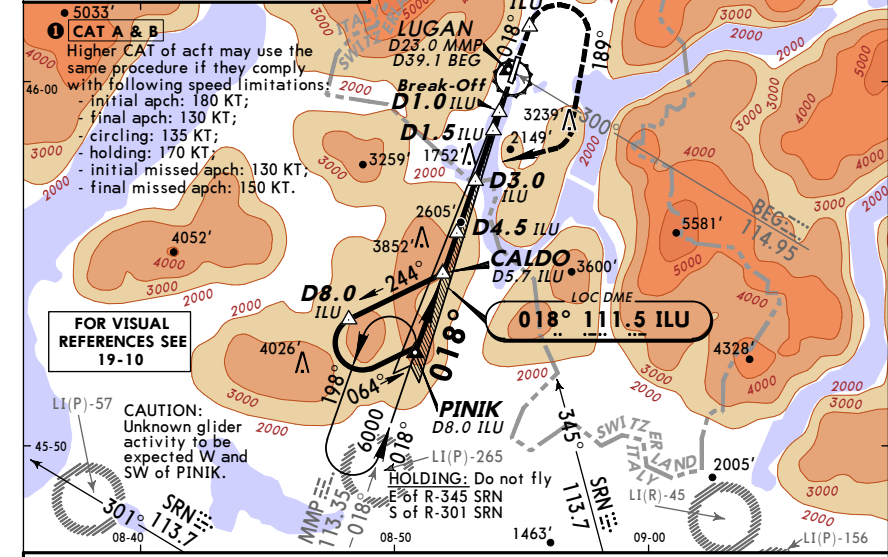
*ATIS 121.17		*LUGANO Tower 120.25		*Ground 121.77	
LOC 111.5	Final ApcH Crs 018°	Minimum Alt PINIK 6000' (5085')	MDA(H) Refer to Minimums	Apt Elev 915'	RWY 915'



MISSD APCH: Climb STRAIGHT AHEAD to D1.5 ILU (after LOC DME), then turn RIGHT (MAX 150 KT, BANK 25°) onto track 189° climbing to 6000'. When passing 5000' turn RIGHT to intercept R-018 inbound MMP VOR and proceed to PINIK.

Alt Set: hPa Rwy Elev: 33 hPa Trans level: By ATC Trans alt: 6000'
1. Rate of descent 4.4°. 2. Crew Qualification type A required. 3. LOC DME reads zero at rwy 01 displaced threshold.

FOR SPECIAL PROCEDURES AND OPERATING LIMITATIONS SEE CHARTS 10-0 THRU 10-0E.



Gnd speed-Kts	70	90	100	120	140	160			
Descent Angle	4.40°	545	701	779	935	1091	1247	REIL PAPI-L	Refer to Missed Apch above
MAP at D1.5 ILU									

Standard CIRCLING TO RWY 19				
Missed apch climb gradient mim				
6.0% 1	5.0% 1	4.0% 1	3.0% 1	2.5%
MDA(H) 3100' (2185')	MDA(H) 3300' (2385')	MDA(H) 3640' (2725')	MDA(H) 3800' (2885')	MDA(H) 3850' (2935')
For Visibility refer to respective circling chart 19-10/19-11				
A				
B				

1 Climb gradient up to 5000'.
CHANGES: Minimums.

LSZA/LUG LUGANO 18 MAR 11 (11-3) ● LOC-Lima Rwy 01 for Circling Rwy 19 LUGANO, SWITZERLAND

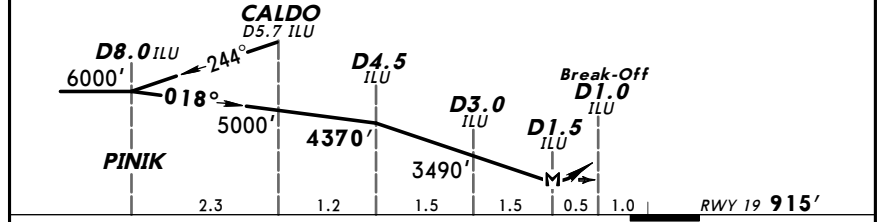
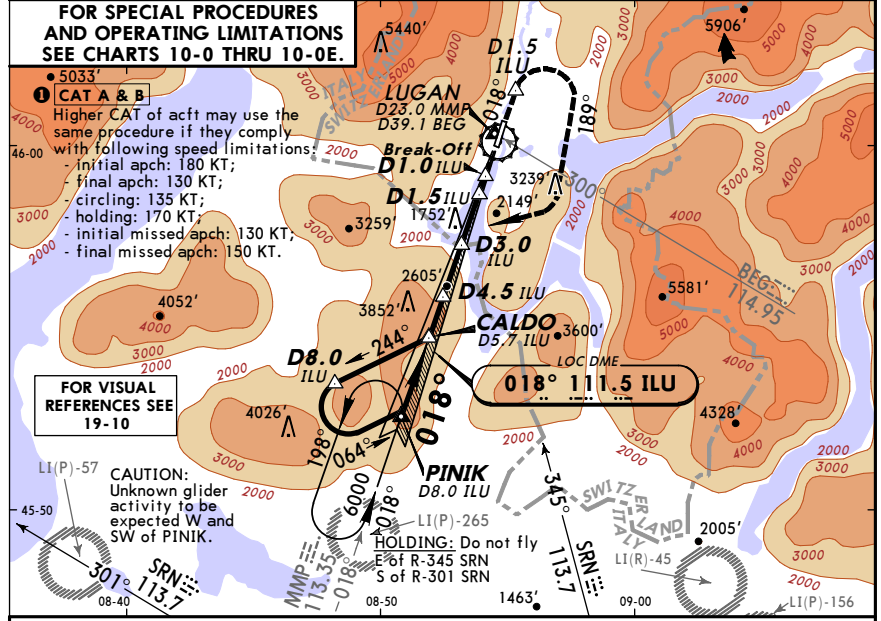
*ATIS 121.17		*LUGANO Tower 120.25		*Ground 121.77	
LOC ILU 111.5	Final Apcr Crs 018°	Minimum Alt D4.5 ILU 4370' (3455')	MDA(H) Refer to Minimums	Apt Elev 915' RWY 915'	

MISSED APCH: Climb STRAIGHT AHEAD to D1.5 ILU (after LOC DME), then turn RIGHT (MAX 150 KT, BANK 25°) onto track 189° climbing to 6000'. When passing 5000' turn RIGHT to intercept R-018 inbound MMP VOR and proceed to PINIK.

Alt Set: hPa Rwy Elev: 33 hPa Trans level: By ATC Trans alt: 6000'

1. Steep approach 5.4°. 2. Aircraft Certification and Crew Qualification type B required. 3. LOC DME reads zero at rwy 01 displaced threshold.

FOR SPECIAL PROCEDURES AND OPERATING LIMITATIONS SEE CHARTS 10-0 THRU 10-0E.



Gnd speed-Kts	70	90	100	120	140	160		
Desc Angle D8.0 ILU to D4.5 ILU 4.90°	608	781	868	1042	1215	1389		
Desc Angle after D4.5 ILU 5.40°	670	862	957	1149	1340	1532		
MAP at D1.5 ILU								

HIALS REIL PAPI-L Refer to Missed Apch above

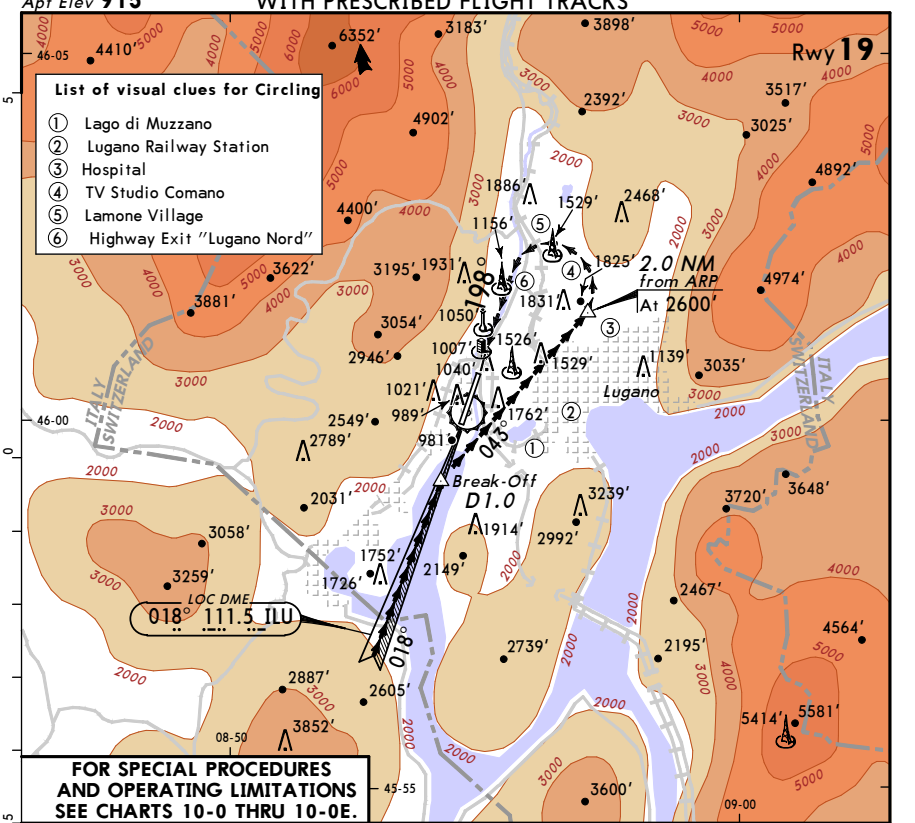
Standard					
CIRCLING TO RWY 19					
Missed apch climb gradient mim					
7.0% I	6.0% I	5.0% I	4.0% I	3.0% I	2.5%
MDA(H) 2600' (1685')	MDA(H) 2960' (2045')	MDA(H) 3300' (2385')	MDA(H) 3640' (2725')	MDA(H) 3800' (2885')	DA(H) 3850' (2935')

For Visibility refer to respective circling chart 19-10/19-11

I Climb gradient up to 5000'.

CHANGES: Minimums.

LSZA/LUG LUGANO 18 MAR 11 (19-10) ● CHARLIE CIRCLE-TO-LAND WITH PRESCRIBED FLIGHT TRACKS LUGANO, SWITZERLAND



Standard		CEILING REQUIRED	
CIRCLE-TO-LAND TO RWY 19 Prohibited West of runway NIGHT: NOT AUTHORIZED			
Max Kts	MDA(H)	CEIL-VIS	
A 100	2600' (1685')	3100' - 5000m	
B 135			
C/D NOT APPLICABLE			

Standard		CEILING REQUIRED	
CIRCLE-TO-LAND TO RWY 19 Only applicable by operators holding a contingency procedure approved by the Federal Office for Civil Aviation Prohibited West of runway			
Max Kts	MDA(H)	CEIL-VIS	MDA(H)
A 100	2600' (1685')	3100' - 5000m	2600' (1685')
B 135			
C/D NOT APPLICABLE			

WARNING: Disregard PAPI rwy 01 information. Use PAPI rwy 19 information only within 2 NM from threshold.

Descent to be arranged to maintain clean configuration as long as possible, safety and ATC requirements considered.

LOC DME reads zero at rwy 01 displaced threshold.

CHANGES: Minimums.

LSZA/LUG

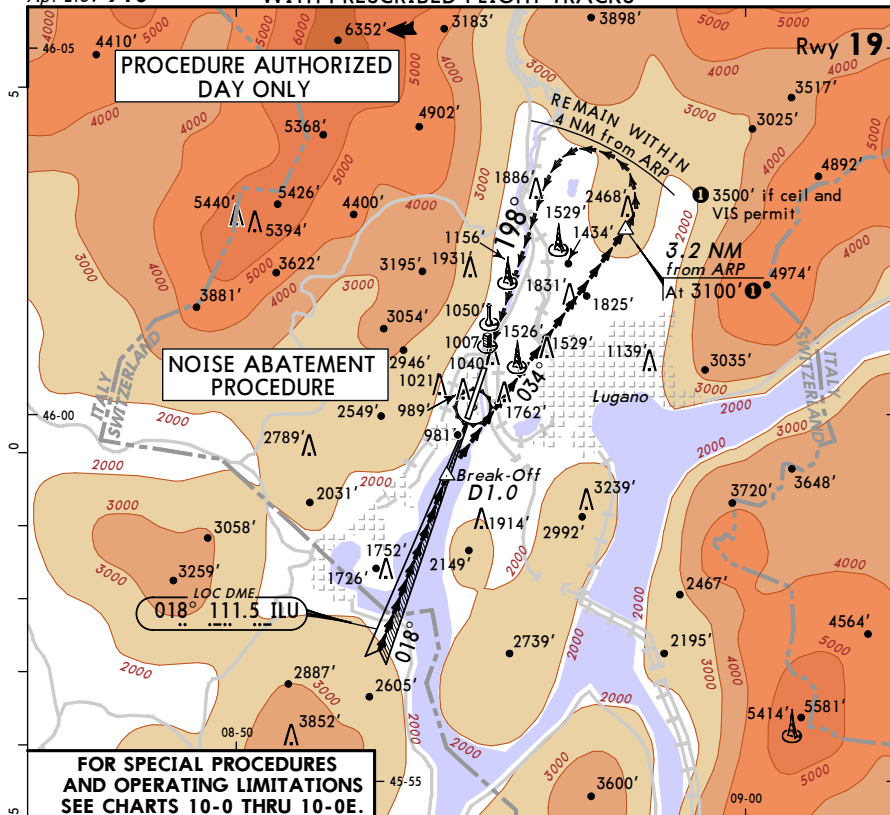
18 MAR 11 (19-11)

LUGANO, SWITZERLAND

LUGANO

Apt Elev 915'

FOXTROT CIRCLE-TO-LAND
WITH PRESCRIBED FLIGHT TRACKS



Standard CIRCLE-TO-LAND TO RWY 19 **CEILING REQUIRED**
Prohibited West of runway
DAY only

Max Kts.	MDA(H)	CEIL-VIS
A 100	■ 3100' (2185')	3100'- 5000m
B 135		
C	NOT APPLICABLE	
D		

■ If ceiling and VIS permit, MDA(H) 3500' (2585') for noise abatement purposes.

WARNING: Disregard PAPI rwy 01 information. Use PAPI rwy 19 information only within 2 NM from threshold.

Descent to be arranged to maintain clean configuration as long as possible, safety and ATC requirements considered.

LOC DME reads zero at rwy 01 displaced threshold.

CHANGES: Minimums.