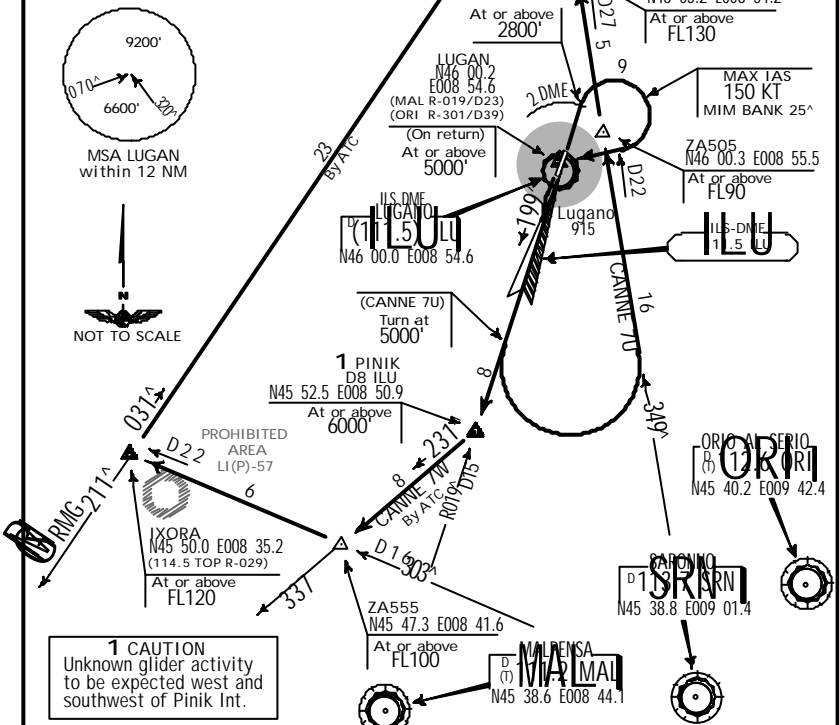


TRANS LEVEL: BY ATC
TRANS ALT: 8500' north of LUGAN
6000' south of LUGAN

**CANNE SEVEN UNIFORM (CANNE 7U)
CANNE SEVEN WHISKEY (CANNE 7W)
DEPARTURES
(RWYS 01, 19)**

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-Kts	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



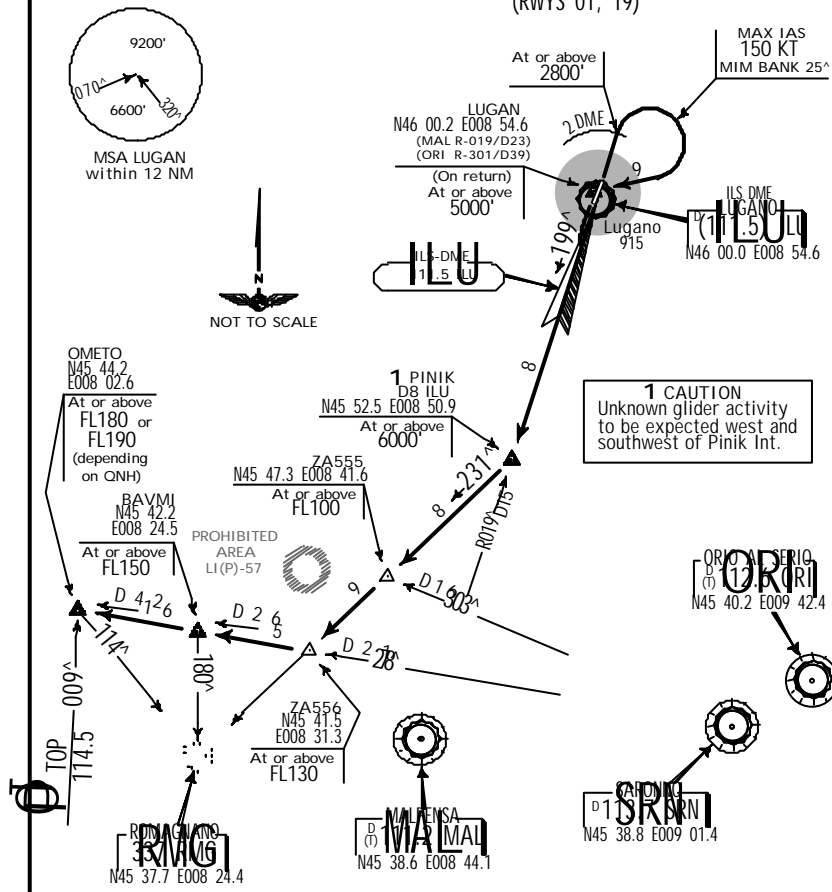
RWY	TAKE-OFF	ALTITUDE
01	Straight ahead to ILU 2 DME, turn RIGHT (MAX IAS 150 KT, MIM bank 25°) to Lugan Int, utilize Localizer 01 (MAL R-019 inbound). Maintain VMC up to 2800'.	Cross ILU 2 DME at or above 2800', Lugan Int at or above 5000'.
19	Straight ahead utilizing Localizer 01 (MAL R-019 inbound).	

SID	ROUTING	ALTITUDE
CANNE 7U	At 5000' turn LEFT, intercept SRN R-349 to Canne Int.	Cross ZA505 at or above FL90, ZA506 at or above FL130, Canne Int at or above FL140 or FL150 (depending on QNH).
CANNE 7W By ATC	Proceed to Pinik Int, 231° bearing towards RMG Lctr to ZA555, intercept SRN R-303 to Ixora Int, 031° bearing from RMG Lctr to Canne Int.	Cross Pinik Int at or above 6000', ZA555 at or above FL100, Ixora Int at or above FL120, Canne Int at or above FL140 or FL150 (depending on QNH).

CHANGES: SIDs renumbered & revised.

TRANS LEVEL: BY ATC
TRANS ALT: 8500' north of LUGAN
6000' south of LUGAN

**OMETO SEVEN WHISKEY (OMETO 7W)
DEPARTURE
(RWYS 01, 19)**



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-Kts	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	TAKE-OFF	ALTITUDE
01	Straight ahead to ILU 2 DME, turn RIGHT (MAX IAS 150 KT, MIM bank 25°) to Lugan Int, utilize Localizer 01 (MAL R-019 inbound). Maintain VMC up to 2800'.	Cross ILU 2 DME at or above 2800', Lugan Int at or above 5000'.
19	Straight ahead utilizing Localizer 01 (MAL R-019 inbound).	

ROUTING	ALTITUDE
Proceed to Pinik Int, 231° bearing towards RMG Lctr via ZA555 to ZA556, intercept SRN R-278 via BAVMI Int to Ometo Int.	Cross Pinik Int at or above 6000', ZA555 at or above FL100, ZA556 at or above FL130, BAVMI Int at or above FL150, Ometo Int at or above FL180 or FL190 (depending on QNH).

CHANGES: SID renumbered: x-breaks replaced by NCRPs.

TRANS LEVEL: BY ATC
 TRANS ALT: 8500' north of LUGAN
 6000' south of LUGAN

ORIO SEVEN UNIFORM (ORI 7U) ORIO SEVEN WHISKEY (ORI 7W) DEPARTURES (RWYS 01, 19)

At or above 2800' MAX IAS 150 KT MIM BANK 25°

LUGANO 915 (MAL R-019/D23) (ORI R-301/D39) (On return) At or above 5000'

PINIK 1 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 (depending on TL)

ZA527 N45 46.3 E009 08.7 At or above FL100

SULLUR N45 44.9 E008 56.7 At or above FL80

MAL N45 38.6 E008 44.1 At or above FL80

SRN N45 38.8 E009 01.4 MCA according next airway segment

ORI N45 40.2 E009 42.4 At or above FL120

ORI N45 38.6 E009 50.5

1 CAUTION
 Unknown glider activity to be expected west and southwest of Pinik Int.

Gnd speed-Kts	75	100	150	200	250	300
681' per nm	851	1134	1701	2268	2834	3403
608' per nm	760	1013	1519	2025	2532	3038
352' per nm	441	587	881	1175	1468	1762

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'.

RWY	TAKE-OFF	ALTITUDE
01	Straight ahead to ILU 2 DME, turn RIGHT (MAX IAS 150 KT, MIM bank 25°) to Lugan Int, utilize Localizer 01 (MAL R-019 inbound), proceed to Pinik Int. Maintain VMC up to 2800'.	Cross ILU 2 DME at or above 2800', Lugan Int at or above 5000', Pinik Int at or above 6000'.
19	Straight ahead utilizing Localizer 01 (MAL R-019 inbound), proceed to Pinik Int.	Cross Pinik Int at or above 6000'.

SID	ROUTING	ALTITUDE
ORI 7U	Intercept SRN R-332 inbound to Sullur Int, intercept ORI R-278 inbound to ORI VORDME.	Cross Sullur Int at or above FL80, ORI VORDME at or above FL120.
ORI 7W	Intercept ORI R-289 inbound via ZA526 and ZA527 to ORI VORDME.	Cross ZA526 at or above FL80 or TL (depending on TL), ZA527 at or above FL100, ORI VORDME at or above FL120.

CHANGES: SIDs renumbered; x-breaks replaced by NCRPs.

TRANS LEVEL: BY ATC
 TRANS ALT: 8500' north of LUGAN
 6000' south of LUGAN

PINIK SEVEN ALFA (PINIK 7A) SARONNO SEVEN WHISKEY (SRN 7W) VOGHERA SEVEN WHISKEY (VOG 7W) DEPARTURES (RWYS 01, 19)

At or above 2800' MAX IAS 150 KT MIM BANK 25°

LUGANO 915 (MAL R-019/D23) (ORI R-301/D39) (On return) At or above 5000'

PINIK 1 D8 ILU N45 52.5 E008 50.9 (PINIK 7A) At 6000' (SRN 7W, VOG 7W) At or above 6000'

SULLUR N45 44.9 E008 56.7

MAL N45 38.6 E008 44.1 At or above FL80

SRN N45 38.8 E009 01.4 MCA according next airway segment

ORI N45 40.2 E009 42.4

VOG N44 57.9 E008 58.2 At or above FL110

1 CAUTION
 Unknown glider activity to be expected west and southwest of Pinik Int.

2 Do not fly east of SRN R-345 and south of SRN R-301.

Gnd speed-Kts	75	100	150	200	250	300
681' per nm	851	1134	1701	2268	2834	3403
608' per nm	760	1013	1519	2025	2532	3038
352' per nm	441	587	881	1175	1468	1762

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'.

RWY	TAKE-OFF	ALTITUDE
01	Straight ahead to ILU 2 DME, turn RIGHT (MAX IAS 150 KT, MIM bank 25°) to Lugan Int, utilize Localizer 01 (MAL R-019 inbound). Maintain VMC up to 2800'.	Cross ILU 2 DME at or above 2800', Lugan Int at or above 5000'.
19	Straight ahead utilizing Localizer 01 (MAL R-019 inbound).	Cross Pinik Int at or above 6000'.

SID	ROUTING	ALTITUDE
PINIK 7A	Proceed to Pinik Int, join holding at 6000'.	
SRN 7W	Proceed to Pinik Int, intercept SRN R-332 inbound to SRN VORDME.	Cross Pinik Int at or above 6000', SRN VORDME according next airway segment.
VOG 7W	Proceed on MAL R-019 inbound via Pinik Int to MAL VORDME, intercept VOG R-346 inbound to VOG VORDME.	Cross Pinik Int at or above 6000', MAL VORDME at or above FL80, VOG VORDME at or above FL110.

CHANGES: SIDs renumbered; crossing altitude at SRN VORDME.

NOISE ABATEMENT PROCEDURES

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
- Kamov.

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 MIN. 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 RESTRICTION

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 till 0800LT):
 Sat 2045-2200LT, Sun 0700-0800LT

- 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 till 1800LT):
 Mon-Sun 0700-0800LT and 2000-2200LT.

NOISE ABATEMENT PROCEDURES

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.

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 5 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.

13 JUL 97

10-6

LUGANO, SWITZERLAND
LUGANO

**SPECIAL REGULATIONS FOR CONTROL ZONE (CTR)
AND TERMINAL CONTROL AREA (TMA)**

Airport capacity for IFR approaches and departures is restricted for reasons of ATS provision as well as airspace and RWP capacity. This requires an appropriate management of FR movements. FPR for all IFR flights due to restrictions issued by Italian ATS Authorities. Exceptions: scheduled flights, rescue flights, emergency and State flights. Priority will be given to based aircraft at Lugano airport.

Requests to airport Authority via Lugano AIS shall be made between 2000-1700 LT the day before the date of flight:

Facsimile: (091) 805 59 12
TELEX: 844 532 arlu ch
AFTN: LSZAZ PZX

Decision of acceptance will be made by airport Authority at 1800 LT and pilots are requested to get info about the decision at AIS between 1830-2030 LT.

It is possible that IFR clearance will not be granted by Milan ACC for joining/leaving within Milano TMA. Requests shall contain a confirmation of the minimum requirements for pilot qualifications and aircraft performance demonstration.

Pilot Qualification

Any pilot wishing to operate under FR at Lugano shall be instructed and qualified according to the following program. The pilot has to demonstrate his ability to calculate the correct MTOM and climb performance with regard to the climb requirements and to the obstacle situation.

Flight training program

- a. one straight-in IGS approach with one engine-inoperative procedure;
- b. one IGS approach with circling;
- c. one departure with simulated engine failure and one engine-inoperative procedure for both runways;
- d. one straight-in IGS approach with landing.

Qualification

After the FR familiarization flight at Lugano, pilots will be authorized to execute corresponding IFR procedures, provided they have performed two IFR approaches and departures at Lugano during the last six months.

In case of an interruption of more than 6 months, the approach at Lugano airport must be executed with a MDA/CA of 2300ft and a visual range of 3000m (for all approach procedures).

The pilot qualification is valid for the respective aircraft category and slower aircraft. If a pilot e.g. is qualified on aircraft category A and wishes to extend his permission to aircraft category B, he has to pass another airport pilot qualification training. The program may be shortened accordingly by the instructor.

Training flights with the purpose to obtain the FR qualification shall be arranged at least 24 hours prior to flight with the airport Authority FAX (091) 844 532 and will be granted only on working days.

Aircraft Qualification

For any aircraft to be operated under IFR at Lugano airport, its ability to comply with the IFR procedures published by Federal Office of Civil Aviation (LSZA IAC LSZA STAR/SIC) shall be demonstrated. A MTOM-Table/Individual Runway Table (IRT) for the obstacle and climb requirements has to be presented to the designated instructor pilot.

Application procedure

The supervision of this introduction and qualification procedure is delegated by Federal Office of Civil Aviation of the airport Authority. The airport Authority will also keep a record of all qualified pilots and enforce compliance. With these regulations companies and organizations authorized to accomplish their training for this qualification with their internal instructors shall send a list of all qualified pilots to Lugano airport. Pilots wishing to become instructors for Lugano Airport Qualifications shall address their application to Federal Office of Civil Aviation, Section Flight Operations at Zurich airport.

Aircraft performance demonstration and pilot qualification can be combined during the same flight as described above.

Operators wishing to obtain the Lugano airport FR qualification shall submit performance data at least two weeks before the demonstration flight to:

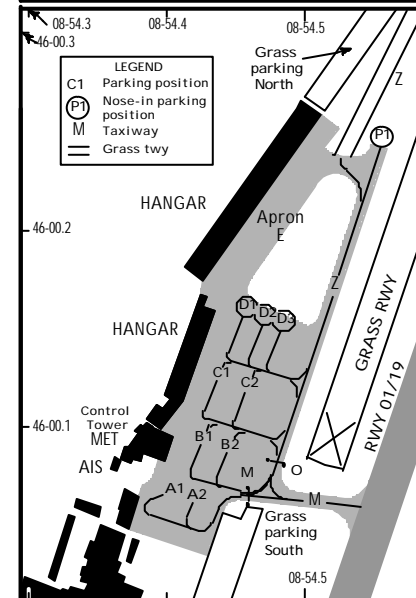
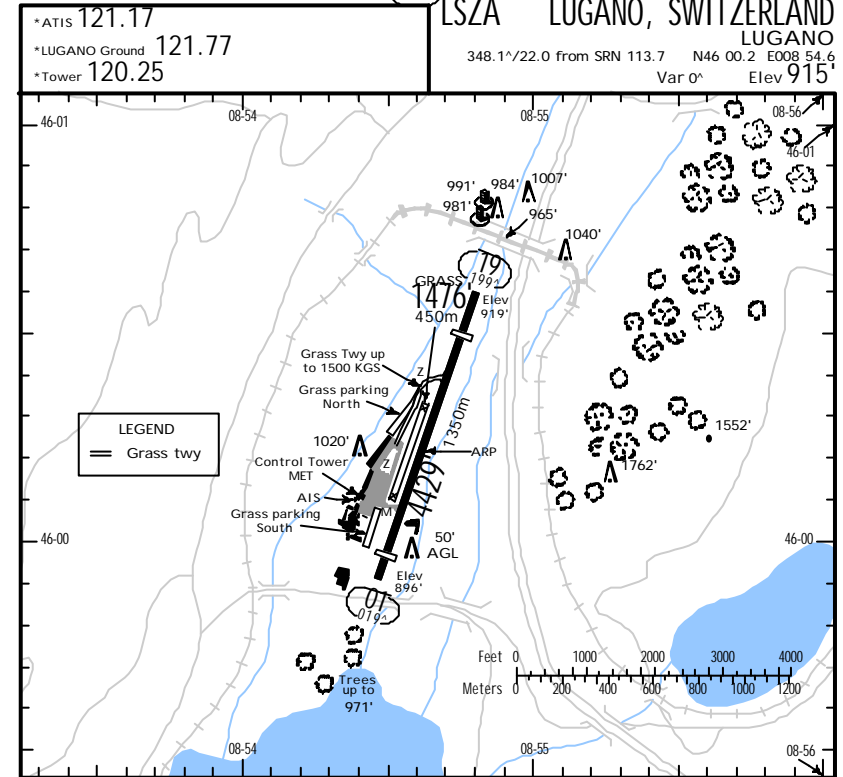
Lugano airport
TEL.: (091) 844 532
FAX: (091) 844 532
TELEX: 844532 arlu ch

The training program or a part of it may be executed on a simulator with an approved visual model for Lugano. Permission will be given by Federal Office of Civil Aviation, Section Flight Operations, Zurich Airport.

CHANGES: Pilot qualification

11 JUL 97 10-9

LSZA LUGANO, SWITZERLAND
LUGANO
348.1°/22.0 from SRN 113.7 N46 00.2 E008 54.6
Var 0° Elev 915'



INS COORDINATES	
STAND No.	COORDINATES
A1, A2	N46 00.1 E008 54.4
B1, B2	N46 00.1 E008 54.4
C1	N46 00.1 E008 54.4
C2	N46 00.1 E008 54.5
D1 thru D3	N46 00.2 E008 54.5
P1	N46 00.2 E008 54.6

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

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

Use caution when entering or leaving parking area via taxi Z and twy M due to vehicular traffic.

CHANGES: TWR frequency, Variation.

11 JUL 97

10-9A

AIRPORT.
LUGANO, SWITZERLAND
LUGANO

GENERAL
Asphalt parking PPR 24 hrs, if ground time is more than 30 min.
Arriving acft using asphalt apron shall indicate elapsed ground time in FPL under item 18.
Due to limited parking positions expect delay or diversion to ALTN.

ADDITIONAL RUNWAY INFORMATION

RWY	USABLE LENGTHS	LANDING BEYOND		TAKE-OFF	WIDTH
		Threshold	Glide Slope		
01	RL(50m) REIL 1 PAPI (4.17°, MEHT 23')	2	3599' 1097m	3	98'
19	RL(50m) PAPI-L (4.17°, MEHT 24')				

- 1 **WARNING:** Do not undershoot PAPI glide path due to trees below approach path.
 2 **LDA RWY 01:** Multi engine acft: 4068' (1240m) Single engine acft: 3757' (1145m) **LDA RWY 19:** Multi engine acft: 3757' (1145m) Single engine acft: 3100' (945m)

	Multi engine acft operators using AOC for T/O performance calculation	Multi engine acft operators not using AOC for T/O performance calculation	Single engine acft
TORA rwy 01	4429' 1350m	3757' 1145m	3757' 1145m
TORA rwy 19	4429' 1350m	4068' 1240m	2740' 835m

Take-off from rwy 01 for jet aircraft from displaced threshold only. TORA 4068' (1240m). Request for full rwy length at latest with start-up from TWR.

01	19	Grass runway (temporarily closed)	98'	30m
----	----	-----------------------------------	-----	-----

PARKING PROCEDURES

- Psn ABC: Self maneuvering facing north or south. Max wingspan B: 72'/22m, C: 95'/29m. Pilots have to line up left side window of cockpit with stop line.
 Psn D: Follow marshaller instructions. MAX wingspan 69'/21m.
 Psn E: Aircraft will be guided on twy Z to apron by yellow CL and from there must be marshalled and pushed back.
 Psn P1: Max wingspan: 98'/30m.

TAKE-OFF

	RWY 01		RWY 19	
	AIR CARRIER	Without lights	AIR CARRIER (FAR 121)	Without lights
A	1900'-1500m	500m	1900'-1500m	500m
B	400m 1	600m	400m	600m
C				
D	NOT APPLICABLE			NA

1 Switzerland auth CAT A 250m, CAT B & C 300m.

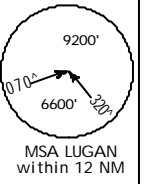
NOISE ABATEMENT PROCEDURE

Do not start engines before aircraft is ready to leave parking position in order to minimize ground noise. Aeroplanes shall be operated so as to reduce noise to a minimum during taxi and holding operations.
 Recommendations for turboprop aeroplanes: Taxi: one engine idle power/low RPM.
 Holding: both engines idle power/low RPM.

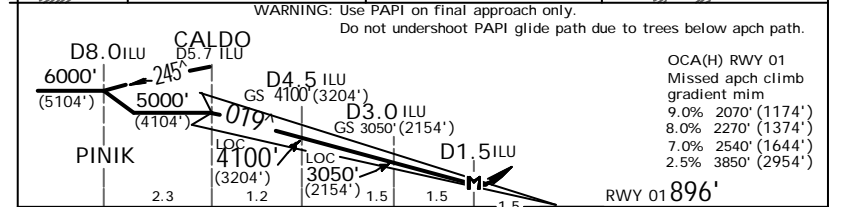
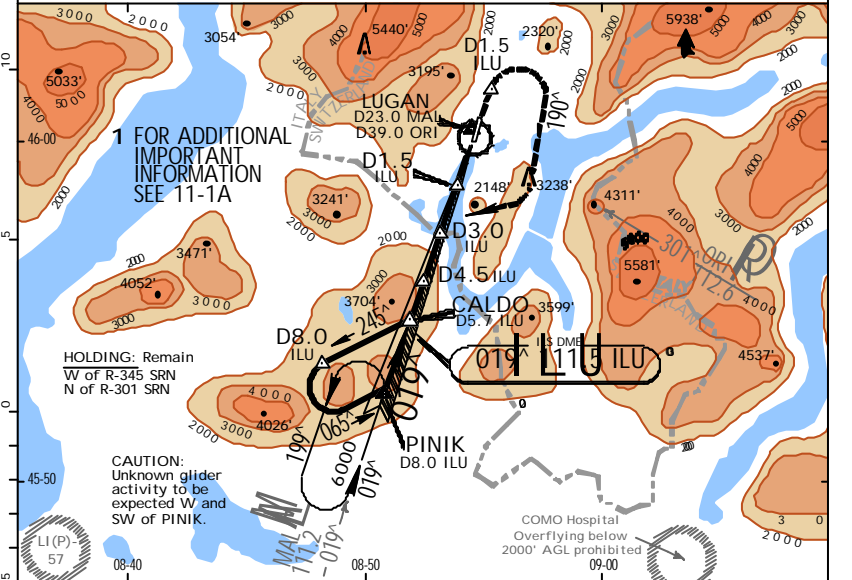
CHANGES: Parking procedures.

LSZA LUGANO
10 MAR 00 11-1 Eff. 23. Mar. 1 CAT A & B IGS Rwy 01
LUGANO, SWITZERLAND

*ATIS 121.17		*LUGANO Tower 120.25		*Ground 121.77	
LOC ILU 111.5	Final App Crs 019°	GS D4.5 ILU 4100' (3204')	ILS DA(H) Refer to Minimums	Apt Elev 915'	RWY 896'



MISSED APCH: Climb STRAIGHT AHEAD to D1.5 ILU (after ILS DME), then turn RIGHT (MAX IAS 150 KT, BANK 25°) onto track 190° climbing to 6000'. When reaching 5000' turn RIGHT to intercept R-019 inbound MAL VOR and proceed to PINIK.



Gnd speed-Kts	70	90	100	120	140	160	REIL PAPI	Refer to Missed Apch above
TGS GS 6.65° or LOC Descent Gradient	832	1070	1189	1427	1665	1902		

STRAIGHT-IN LANDING RWY 01				CIRCLE-TO-LAND
Missed apch climb gradient mim				
9.0% 23	8.0% 23	7.0% 3	2.5%	For VFR Circle-to-land to rwy 19 see 19-1
DA(H) 2070' (1174')	DA(H) 2270' (1374')	DA(H) 2540' (1644')	DA(H) 3850' (2954')	
A	1500m			
B				

- 1 If GP unusable: DA(H) applicable as for IGS, VIS 1600m.
 2 If pilot in command has not executed at least 2 IFR approaches during last 6 months: DA(H) 2300' (1404'), VIS 3000m.
 3 Climb gradient up to 3600' (2704').

CHANGES: Procedure.

LSZA

10 MAR 00 **11-1A** .Eff.23.Mar.

LUGANO, SWITZERLAND
LUGANO

DESCRIPTION OF INSTRUMENT GUIDANCE SYSTEM (IGS) RWY 01

The use of the instrument approach procedure is limited to pilots and aircraft having a special authorization from the FEDERAL OFFICE for CIVIL AVIATION, FLIGHT OPERATIONS, 8058 ZURICH, SWITZERLAND.

IGS COMPONENTS:

- SRN VOR DME
- ILS (LOC/GP/DME) for line-up and final approach

PROCEDURE:

IGS procedure may be flown as ILS procedure. Published altitudes at D4.5 & D3.0 ILU are strictly to be observed. After MAP proceed to runway maintaining visual ground contact. At MAP runway is still 1.5 NM (or according to DA(H)) ahead and may not yet be in sight. LOC track is aligned with runway axis 01. Follow the PAPI for final descent segment (4.17°).

Higher category of aircraft may use the same procedure if they comply with following speed limitations:

- initial approach: 180 KT
- final approach: 130 KT
- holding: 170 KT
- initial missed approach: 130 KT
- final missed approach: 150 KT

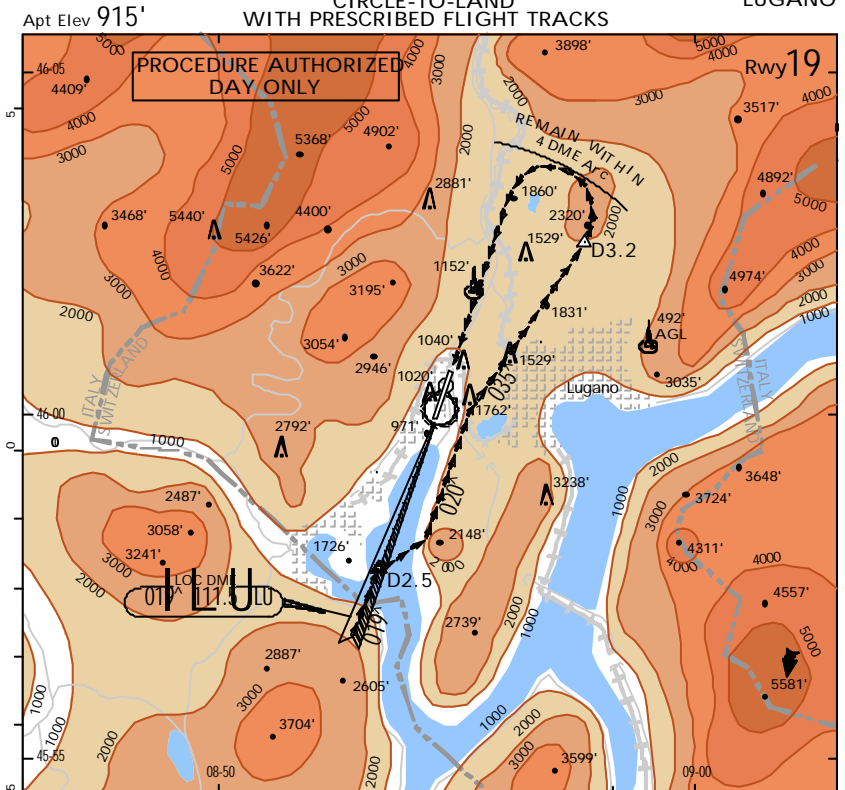
RADIO COMMUNICATION FAILURE

- Transponder 7600.
- Proceed via STAR to PINIK.
- At last received or acknowledged EAT or, if no EAT has been received or acknowledged, at Flight Plan ETA, descend in the PINIK holding to 6000'.
- Execute a STANDARD INSTRUMENT APPROACH to RWY 01, if needed followed by a circling to RWY 19.

LSZA

1 OCT 99
Eff.7.Oct. **19-1**

LUGANO, SWITZERLAND
LUGANO



1 CIRCLE-TO-LAND TO RWY 19

Max Kts	After IGS Apch MISSED APCH CLIMB GRADIENT MIM 7.0%		After IGS Apch MISSED APCH CLIMB GRADIENT MIM 2.5%	
	MDA(H)	VIS	MDA(H)	VIS
A 100	2800 (1885')	1900m	3850 (2935')	1900m
B 135	2800 (1885')	2800m	3850 (2935')	2800m
C	NOT APPLICABLE			
D				

1 If Ceiling and Visibility permit, maintain mim 3500' (2585') until D3.2.

If Ceiling and Visibility do not permit to follow prescribed flight track, earlier base turn at pilot's discretion.

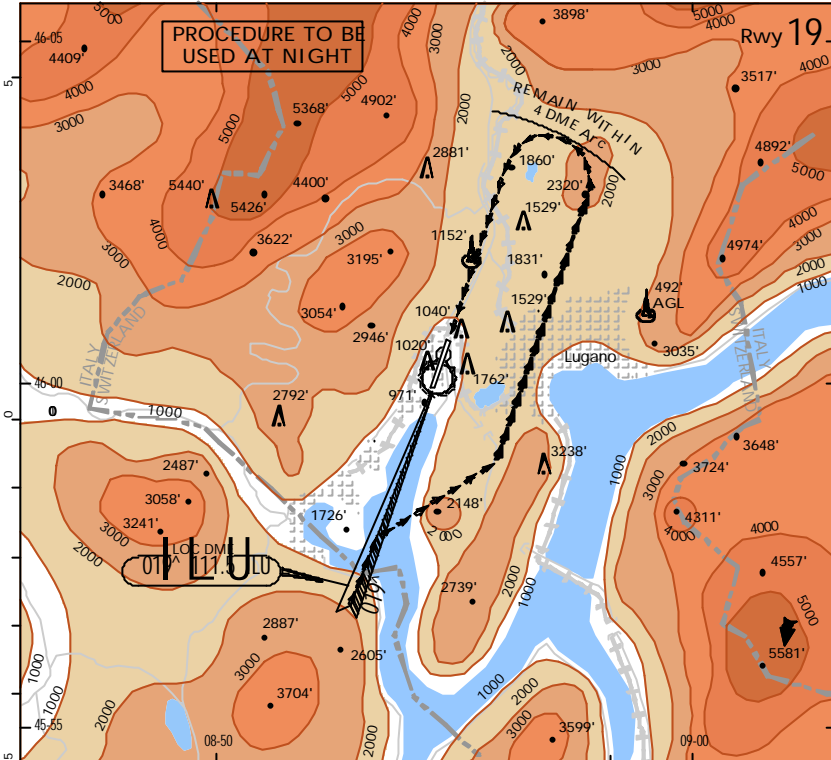
Descent is to be arranged so as to maintain clean configuration as long as possible, safety and ATC requirements considered.

LSZA

1 OCT 99
Eff. 7 Oct. 19-1A

LUGANO, SWITZERLAND
LUGANO

Apt Elev 915'
CIRCLE-TO-LAND
WITH PRESCRIBED FLIGHT TRACKS



CIRCLE-TO-LAND TO RWY 19
Not authorized West of RCL

Max Kts	After IGS Apch MISSED APCH CLIMB GRADIENT MIM 7.0%		After IGS Apch MISSED APCH CLIMB GRADIENT MIM 2.5%	
	MDA(H)	VIS	MDA(H)	VIS
A 100	3600' (2685')	1900m	3850' (2935')	1900m
B 135	3600' (2685')	2800m	3850' (2935')	2800m
C	NOT APPLICABLE			
D				

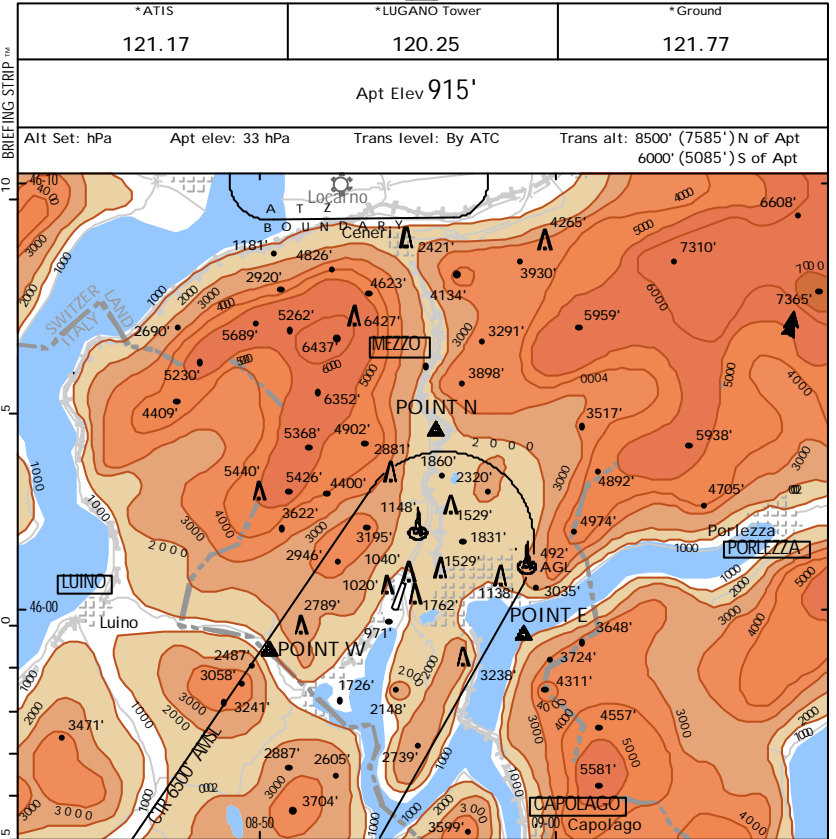
Descent is to be arranged so as to maintain clean configuration as long as possible, safety and ATC requirements considered.

CHANGES: New procedure.

LSZA
LUGANO

10 DEC 99
19-2

LUGANO, SWITZERLAND
VISUAL APPROACH CHART



First RADIO contact compulsory at following locations: LUINO, PORLEZZA, CAPOLAGO, MEZZO.

After passing CRP inbound airport MAX IAS 180 KT.

AD circuit: Aircraft up to 3000 kg MTOW 2600' (1685').
Aircraft above 3000 kg MTOW 3600' (2685').

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

FOR VISUAL APPROACH PROCEDURE SEE 19-2A.

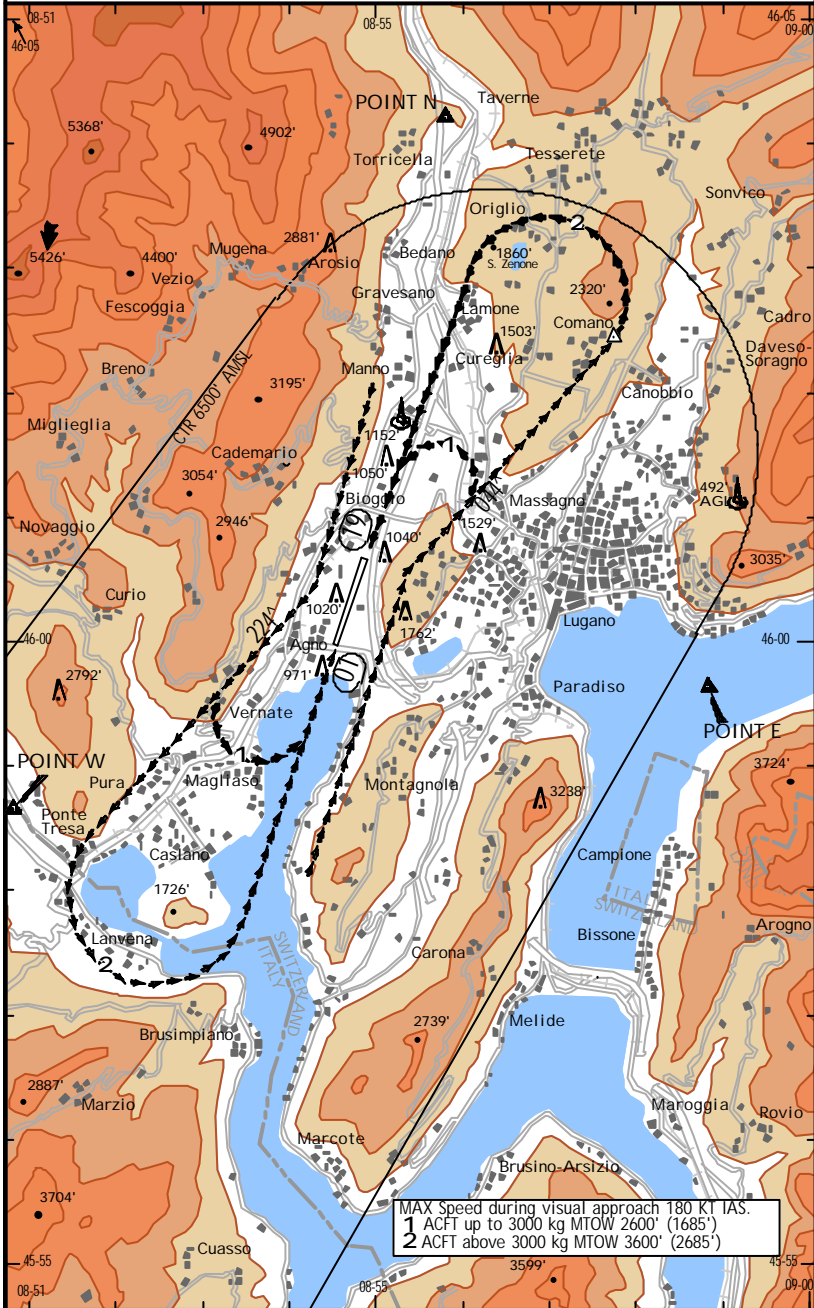
CHANGES: Radio contact point. New chart format.

LSZA
Apt Elev 915'

10 DEC 99 (19-2A)

LUGANO, SWITZERLAND
LUGANO

VISUAL APPROACH PROCEDURE



CHANGES: New chart format.