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## General Information

Location: Milan Ita
IATA Code: MXP
Lat/Long: N45° 37.8' E008° 43.4'
Elevation: 768 ft

Airport Use: Public
Magnetic Variation: 1.9°E

Fuel Types: Jet A-1
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: Yes

Sunrise: 0336 Z
Sunset: 1918 Z,

## Runway Information

Runway: 17L
Length x Width: 12861 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 745 ft
Lighting: Edge, ALS, Centerline
Displaced Threshold: 3094 ft

Runway: 17R
Length x Width: 12861 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 764 ft
Lighting: Edge, Centerline, REIL

Runway: 35L
Length x Width: 12861 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 714 ft
Lighting: Edge, ALS, Centerline, TDZ
Displaced Threshold: 1329 ft

Runway: 35R
Length x Width: 12861 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 708 ft
Lighting: Edge, ALS, Centerline, TDZ

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## Communication Information

ATIS 121.625 Departure Service
ATIS 120.025 Arrival Service
Malpensa Ground North Tower 121.825
Malpensa Tower 128.35
Malpensa Tower 119.0
Malpensa Ground West Ground Control 121.9
Malpensa Clearance Delivery 120.9
Milan Radar Approach Control 134.175
Milan Radar Approach Control 132.7
Milan Radar Approach Control 126.75
Milan Radar Approach Control 125.625
Milan Radar Approach Control 118.8

# 1. GENERAL

## 1.1. ATIS

ATIS Arrival 120.02
ATIS Departure 121.62

## 1.2. NOISE ABATEMENT PROCEDURES

### 1.2.1. GENERAL

ACFT classified according to ICAO Annex 16, Volume I, Chapter 2 are not allowed to use APT except in case of emergency.

In this case, take-off is allowed from RWY 17R only. Use of a different RWY will be authorized in case of adverse meteorological conditions or safety reasons only.

### 1.2.2. REVERSE THRUST

The use of reverse thrust at power higher than idle is allowed only in the event of proven safety/operational reasons.

### 1.2.3. RWY USAGE

RWY utilization will be selected by ATC according to the following wind components:

- MAX 10 KT steady and measured tail wind component.

When the RWY selection by ATC is considered not suitable for the operation desired, pilots may request permission to use a different RWY.
In such case the ACFT may be subject to delay.

### 1.2.4. RWY USAGE AT NIGHT

Between 2330-0630LT RWY 35L must be used for landing and RWY 17R must be used for take-off.
When RWY 17R is not available for safety reasons, meteorological conditions and delays of more than 20 min, RWY 35L will be used for take-off.
If RWY 35L/17R is closed, RWY 35R will be used for take-off.

### 1.2.5. RUN-UP TESTS

Engine tests other than engine pre-flight tests are not allowed. Additional engine tests may be approved on request and shall not last for more than 10 min during period SR-SS.

### 1.2.6. AUXILIARY POWER UNIT (APU)

Use of APU is allowed 5 min before STD but only to start-up engines.
In case of extraordinary reasons APU can be used; however this operation shall be limited to the shortest time.
If ground generator units are not available at the aerodrome, APU can be started up to 60 min before STD and switched off 20 min after arrival.
The term ground generator unit is intended to mean the power supply and air-conditioning units associated with the finger.

## 1.3. LOW VISIBILITY PROCEDURES (LVP)

For LVP taxi routings refer to 10-9 charts.

### 1.3.1. GENERAL

LVP will be applied during CAT II/III and take-off operations with RVR 550m (TDZ) or less, ceiling below 200' or when rapid deterioration of weather conditions recommends so.

Pilots will be informend by ATIS or RTF when LVP are in force.

Pilots wishing to conduct CAT II/III approaches and landing for training purposes shall inform ATC in advance.

When LVP are in place, RWYs shall be used as follows:

- RWY 35R only for take-off;
- RWY 35L only for landing;
- RWY 17L/R not usable.

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# 1. GENERAL

a) ACFT arriving on RWY 35L directed to Terminal 1 shall vacate the RWY only on TWY L and/or EW and/or BW and Apron TWY N, P, R, S and T to West apron.

b) ACFT arriving on RWY 35L directed to Terminal 2 shall vacate only on TWY BE and/or EM.

c) ACFT departing from RWY 35R shall taxi to CA holding point/CAT II/III holding position:
- only on TWY C if coming from Terminal 2;
- if coming from Terminal 1 taxiing only via TWY W or TWY K or apron TWY Y (direction North-South) or TWY Z (direction East-West) and then via TWY H or via TWY GW and GE to cross RWY 35L, during de-icing operations;
- ACFT from Terminal 1 to join TWY W shall use Apron TWY S and T (ATC discretion) and Apron TWY V.

d) **SINGLE RWY OPERATIONS**
Whenever one of the RWYs is not available and LVP are in place RWY shall be used as follows:

**RWY 35L**
- Arriving ACFT directed to Terminal 1, shall vacate the RWY only via TWY L and/or TWY EW and/or TWY BW.
- Arriving ACFT directed to Terminal 2, shall vacate the RWY only via TWY EM and/or TWY BE.
- Departing ACFT coming from Terminal 1, shall taxi to GW CAT I/II/III holding position, only via TWY W or TWY K or Apron TWY Y (direction North-South).
- Departing ACFT coming from Terminal 2 shall taxi to GE CAT I/II/III holding position, only via TWY C.

**RWY 35R**
- Arriving ACFT directed to Terminal 1, shall vacate the RWY only via TWY D and/or TWY E.
- Arriving ACFT directed to Terminal 2, shall vacate the RWY only via TWY E and/or AB and/or AA.
- Departing ACFT coming from Terminal 1 shall taxi to CA CAT II/III holding position, only via TWY W or TWY K or Apron TWY Y and then via TWY GW and TWY GE to cross RWY 35L or via TWY H.
- Departing ACFT coming from Terminal 2 shall taxi to CA CAT II/III holding position, only via TWY C.

ACFT will report to Tower as soon as they vacate ILS sensitive area and when reached assigned stand.

## 1.3.2. GROUND MOVEMENT

In low visibility conditions the following reference points are available for ACFT movements:

a) RWY holding positions CAT II/III:
- TWY GW - TWY GE (RWY 35L);
- TWY CA (RWY 35R).

b) Intermediate holding positions shown on 10-9 charts.

On the manoeuvring area follow-me car assistance is provided on pilot's request.

**Both SMR (Surface Movement Radar) unavailable**
Follow-me car assistance is mandatory on aprons.

## 1.3.3. MOVEMENT FROM/TO APRON GA

Arriving traffic must vacate RWY 35L via TWY BW or TWY EW and then proceed to GA apron via TWY W. Follow-me assistance mandatory to join GA apron. Follow-me assistance mandatory to reach TWY W intersection for ACFT departing from GA Aviation apron. Once on TWY W, ACFT movement must be in accordance with Tower instruction.

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# 1. GENERAL

### 1.3.4. CONTINGENCIES

Radio failure on the manoeuvring area:

Whenever an ACFT experiences a radio failure on the manoeuvring area, shall operate as follows:

- Departing ACFT: He shall continue taxiing, along the assigned route, to the clearance limit position, paying particular attention in avoiding any diversion; in this position, he shall wait for the follow-me to go back to his parking stand.
- Arriving ACFT: After vacating RWY and sensitive areas on the appropriate TWY, he shall maintain position and wait for the follow-me assistance to reach the parking stand.

The above applies in all cases, without exceptions, provided that all APT operations shall be suspended with SMR inoperative.

State of emergency and/or accident:

Whenever a state of emergency or accident occurs, Tower shall instruct all ACFT taxiing on the manoeuvring area to report and maintain their position.
Tower shall give maximum priority and assistance to the rescue means, according to the APT Emergency Plan.

## 1.4. SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM

### 1.4.1. OPERATION OF MODE S TRANSPONDER WHEN ACFT IS ON GROUND

#### 1.4.1.1. ACFT EQUIPPED WITH MODE S TRANSPONDER

From either push-back or taxi request, whichever is earlier:

- Enter through the FMS or transponder control panel:
  - Flight Identification as specified in item 7 of ICAO flight plan form; or
  - In the absence of Flight Identification, the ACFT Registration;
- Select XPDR or its equivalent depending on the specifications of the installed model;
- Select AUTO mode, if the function is available;
- Do not select the OFF or STAND BY functions;
- Set the Mode A code assigned by ATC.

After landing until at a stand:

- Select XPDR or its equivalent depending on the specifications of the installed model;
- Select AUTO mode, if the function is available;
- Do not select the OFF or STAND BY functions;
- Maintain the Mode A code assigned by ATC.

On the movement area:

- Select XPDR or its equivalent depending on the specifications of the installed model;
- Select AUTO mode, if the function is available;
- Do not select the OFF or STAND BY functions;
- Set Mode A code to 1000.

#### 1.4.1.2. ACFT NOT EQUIPPED WITH MODE S TRANSPONDER OR WITH UNSERVICEABLE MODE S TRANSPONDER

Departing ACFT maintain Mode A + C transponder OFF until line-up.
Arriving ACFT set the Mode A + C transponder to OFF as soon as the RWY is vacated.
On the movement area maintain Mode A + C transponder OFF for all the duration of displacement.

#### 1.4.1.3. WARNING

TCAS should be selected before entering the RWY, after receiving line-up clearance and should be deselected after vacating the RWY.

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# 1. GENERAL

## 1.5. RWY OPERATIONS

### 1.5.1. RWY 17R/35L CROSSING PROCEDURES

ACFT which are required to cross RWY 17R/35L will be issued instructions which will include a taxi clearance limit, in which the ACFT will be required to hold short of the RWY, by:

- the Ground Movement Controller, if taxiing out from the aprons.
- the Air Controller responsible for operations on RWY 17L/35R, if landed on RWY 17L/35R.

When approaching the clearance limit specified in the taxiing instructions, the ACFT will be instructed to change frequency to that of the Air Controller responsible for operations on RWY 17R/35L.

After crossing RWY and having reported 'RWY vacated' with the Air Controller, the ACFT will be instructed to change frequency to that of the appropriate Controller.

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# 1. GENERAL

## 1.6. TAXI PROCEDURES

### 1.6.1. GENERAL

TWY AA to be used for vacating RWY 17L/35R or for departure RWY 17L with aerodrome operative in CAT I.

TWY GS MAX wingspan 78'/24m and must be used with follow-me assistance when proceeding to GA apron.

TWY AB to be used for vacating RWY 17L/35R or for departures from intersection take-off AB RWY 17L with aerodrome operative in CAT I .

Apron TWY C MAX wingspan 118'/36m.

TWY K MAX wingspan 200'/61m while code F ACFT taxiing on TWY W.

Apron TWY N MAX wingspan 118'/36m.

TWY GH available for engine test only.

For code F ACFT use of TWYs refer to 10-9 charts.

A380 ACFT shall keep outer engines on idle power except on TWY BE, BW and H.

### 1.6.2. TWY PREFERENTIAL USE

For the description of TWY preferential use the following terms are employed:
- "IN" to indicate the TWY used to reach the apron;
- "OUT" to indicate the TWY used to leave the apron.

**Apron West**:
- TWY W used as TWY "IN";
- Apron TWY K and apron TWY Y used as TWY "OUT".

**Apron North**:
- Apron TWY A and B used as TWY "IN";
- Apron TWY C used as TWY "OUT".

**Heavy ACFT**:
- Approaching RWY 35R shall conduct the landing in order to clear the RWY via TWY E;
- Approaching RWY 35L shall conduct the landing in order to clear the RWY via TWY EM, if directed to Apron North and via TWY EW if directed to Apron West.
- In order to reduce acoustic pollution, HEAVY ACFT shall perform line-up and take-off from RWY 35L using TWY GW/GE.

In order to reduce acoustic pollution, MD80 and MD90 shall perform line-up and take-off from RWY 35L using TWY GW or GE.

TWY DB shall be used by landed ACFT proceeding Apron TWY R, S and T (for S and T holding at W6).

TWY DA and L shall be used by ACFT proceeding to Apron TWY N, P and R (for R holding at W7). ACFT coming from TWY BW will be given W10 as clearance limit. ACFT coming from TWY EW will be given W9 as clearance limit.

## 1.7. PARKING INFORMATION

Stands 108, 401 thru 413, 501 thru 513 and 601 thru 613 equipped with docking guidance system.

On stands 101 thru 117, 302, 304, 307, 309, 312, 314, 317, 319, 392, 394, 395, 396, 401, 402, 404 thru 406, 408 thru 413, 495, 499, 501 thru 513, 595, 599, 601 thru 625, 701 thru 718 and 851 thru 863 push-back required.

On stands 301, 303, 305, 306, 308, 310, 311, 313, 315, 316, 318 and 320 power-back required.

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# 1. GENERAL

## 1.8. OTHER INFORMATION

### 1.8.1. GENERAL

RWYs 35L and 35R right-hand circuit.

Birds on the manoeuvring area and surroundings.

### 1.8.2. USE OF HOLDING BAY/POSITIONS

Holding bays/positions CF1, CF2, CH1 and CH2 usable with APT operating in CAT I. CF2 is usable DAY only and may be used as isolated parking position for CAT E ACFT.

In this case movements on TWYs CF and FE are not allowed.

CH1 and CH2 available for ACFT with MAX wingspan of 118'/36m and MAX length of 153'/46.5m and usable DAY only.

Holding bays/positions 794, 795, 901, GH1 and K1 available for self-manoeuvring ACFT with APT operating in CAT I and DAY only.
K1 available for ACFT with MAX wingspan of 213'/65m.
Z1 available for ACFT with MAX wingspan of 118'/36m.
901 and GH1 used for engine test.

# 2. ARRIVAL

## 2.1. SPEED RESTRICTIONS

Unless otherwise instructed by ATC pilots must comply with following speed control:

- 270 KT at or below FL250 within area defined by following points: GEN-PIA-ORI-MARCO-ABESI-CANNE-ODINA-AKASU-PIMOT-TOP-LAGEN-GEN.
- 230 KT at or below FL100.
- 210 KT at VERCE/RIGON points or at 20NM from TDZ on straight-in approach RWY 35L/R.
- 180 KT at 9NM from TDZ.
- 160 KT at 5NM from TDZ.

## 2.2. CAT II/III OPERATIONS

RWY 35L and 35R approved for CAT II/III operations; special aircrew and ACFT certification required.

## 2.3. RWY OPERATIONS

### 2.3.1. GENERAL

RWY 35L preferential for code F ACFT landing.

### 2.3.2. MINIMUM RWY OCCUPANCY

Landing ACFT on RWY 35R are requested to vacate the RWY not after intersection E as fast as practicable. ACFT unable to comply must advise MALPENSA Tower at the first contact.

Landing heavy ACFT on RWY 35L should perform their landing in order to vacate the RWY via TWY EM or EW, or when landed on RWY 35R via TWY E.

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# 2. ARRIVAL

## 2.4. TAXI PROCEDURES

### 2.4.1. TAXI ROUTINE

#### 2.4.1.1. RWY 17L

If going to apron North via TWY C.

If going to apron West via:
- TWY C - TWY FE or TWY C - TWY CF (hold short RWY 17R/35L);
- TWY GE (hold short RWY 17R/35L).

#### 2.4.1.2 RWY 17R

If going to apron North via:
- TWY FE - TWY C (then as instructed);
- TWY GE - TWY C (then as instructed).

If going to apron West via:
- TWY F (then as instructed);
- TWY WB (then as instructed);
- TWY GW (then as instructed).

#### 2.4.1.3. RWY 35L

If going to apron North via TWY BE or TWY EM.

If going to apron West via:
- TWY EW - TWY W or TWY BW;
- TWY L - TWY DA for stands with access via Apron TWY N, P and R;
- TWY L - TWY DB for stands with access via Apron TWY S, T, U and V.

#### 2.4.1.4. RWY 35R

If going to apron North via TWY E - TWY A or AB and/or AA.

If going to apron West via:
- TWY E - TWY EM (hold short RWY 17R/35L);
- TWY D - TWY DE for stands with access via Apron TWY N, P and R (hold short RWY 17R/35L);
- TWY D - TWY DM for stands with access via Apron TWY S, T, U and V (hold short RWY 17R/35L);
- TWY H (ATC discretion) for stands with access via Apron TWY Y.

## 2.5. OTHER INFORMATION

**WARNING:** ACFT taxiing independently on TWY H underneath short final RWY 35L.

### 2.5.1. GENERAL

During SRN VOR unavailability all radial values referred to SRN VOR for published SID STAR and approach procedures can be intended as bearings referred to SRN Lctr of same value.

During TZO VOR unavailability all radial values referred to TZO VOR for published transition segment to enroute can be intended as bearings referred to TZO NDB of same value.

Arriving traffic is requested to provide MALPENSA Tower with indication of distance on final at first contact.

### 2.5.2. RADAR SEPARATION ON FINAL APPROACH

A minimum of 3NM Radar Separation will be provided between ACFT established on the same LOC course RWY 35L/35R (with additional longitudinal separation as required for wake turbulence).

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# 2. ARRIVAL

## 2.5.3. "LANDING AFTER" PROCEDURE RWY 35R

Land After Procedure is implemented with the following prescriptions:
When two successive ACFT are in sequence to land, the second one may be allowed to land before the first one has vacated the RWY in use.

This procedure may be applied only during daylight provided that:
- the RWY is dry and free of any kind of precipitation;
- the second ACFT has been informed and is able to see the first ACFT, continually, until it has vacated the runway.

When applying Land After Procedure, ATC will not issue a landing clearance.

ATC will give to the second ACFT the instruction to land after the preceding ACFT using the following phraseology: "(CALL SIGN) Land After (ACFT TYPE) landing on RWY 35R." Responsibility for ensuring adequate separation between the two ACFT rests with the pilot of the second ACFT including respect of prescribed wake turbulence separation.

## 2.5.4. PARALLEL ILS APPROACHES TO RWY 35L AND 35R

### 2.5.4.1. CONDITIONS

Dependent parallel approaches may be conducted to parallel RWYs provided that:
- Radar service is operative;
- ILS equipment is operative on both RWYs and the ACFT are making ILS approaches;
- ACFT are advised that approaches are in use to both RWYs; this information may be provided through the ATIS.

### 2.5.4.2. SEPARATION

A minimum of 1000' vertical separation or a minimum of 3NM radar separation will be provided between ACFT during turn-on to parallel LOC courses.

The minimum radar separation between ACFT established on a LOC course will be:
- 3NM between ACFT on the same LOC course (with additional longitudinal separation as required for wake turbulence);
- 3NM between successive ACFT on adjacent localizer course.

Radar service will terminate when one of the following occurs:
- Visual separation occurs;
- The ACFT reports the approach lights or RWY in sight;
- The ACFT has been instructed to contact MALPENSA Tower.

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# 3. DEPARTURE

## 3.1. APT COLLABORATION DECISION MAKING (A-CDM) PROCEDURE

### 3.1.1. GENERAL

APT Collaborative Decision Making (A-CDM) is an operational procedure to improve air traffic management through a better information sharing among all involved stakeholders. This new procedure increases efficiency and punctuality by improving air traffic flow and APT capacity management, reducing delays by improving events' predictability and optimizing resources utilization.

One of the main objectives of A-CDM is the evaluation of the "Target Take-Off Time" (TTOT) as thoroughly as possible in order to improve the "en-route" and "sector" planning by the European ATM; this can be reached by implementing a series of "DPI" (Departure Planning Information) sent to NMOC and a series of "EFD" (ETFMS Flight Data Messages) received by NMOC. Therefore APT CDM can be considered as the basis for connecting the APT to ATM system.

### 3.1.2. PRINCIPAL DEFINITIONS

| | |
|---|---|
| **SOBT** (Scheduled Off-Block Time): | In a coordinated APT the APT slot is assigned to a flight in a definite period. |
| **TOBT** (Target Off-Block Time): | Time when the ACFT is estimated to be ready to move (doors closed, boarding bridge/stairs removed, push-back vehicle available and ready to start up), according to information from flight operational process evolution. |
| **TSAT** (Target Start-Up Approval Time): | Time, computed on TOBT, when the startup Clearance can be obtained by MALPENSA Tower, based on local constraints and CTOT allocation. |
| **TTOT** (Target Take-Off Time): | Time, computed first on TOBT and later on TSAT, when ACFT is expected to take off from Malpensa with its impact on the network. |

### 3.1.3. SOBT AND EOBT

Three hours before EOBT and after receiving the ATC Flight Plan from ENAV systems, the A-CDM platform compares the EOBT with the APT slot, as updated by ETD messages sent by the airline, if any. In case of inconsistencies between the APT slot and EOBT, it will be possible to view the expected alarms on the A-CDM platform.

The airline is responsible to check the compliance of the Flight Plan EOBT and the APT slot and to monitor alarms on A-CDM platform.

### 3.1.4. TOBT

TOBT is automatically calculated by A-CDM platform when the linked incoming flight enters in LIMM FIR (Milan ACC) or, for originating flights only, at EOBT -2h.

Once the TOBT has been issued, AO/GH are responsible for its accuracy and it should be updated for changes of +/- 5 minutes. In case of discrepancy of more than 15 minutes between TOBT and EOBT, AO/GH shall send a delay message (DLA) to NMOC. In this case the A-CDM platform generates an alarm. For other changes to the flight plan, the airlines shall send a CHG message.

TOBT can be updated by AO/GH without limitations until TSAT issue (TOBT-40 minutes). Thereafter it can be updated up to a maximum of 3 times; otherwise the flight is removed by the pre-departure sequence and, when a new TOBT is input, it is rescheduled with lower priority.

TOBT is cancelled if the ACFT is not READY within TOBT.

TOBT has to be cancelled by AO/GH in case of lack of information on the reliability of the information included in the platform (e.g. ACFT with technical problems).

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# 3. DEPARTURE

In case of TOBT cancellation, TSAT is cancelled too: AO/GH are responsible of the new TOBT input which shall be at least 5 minutes after the input clock time and/or from the previous value. The new TSAT will be given in accordance with the new TOBT.

Since TOBT plays a fundamental role in the APT process, the accuracy of the data is indispensable, both in terms of its reliability and of timeliness of the communication in case of update.

### 3.1.5. TSAT

TSAT is calculated by ENAV system according to the TOBT and it is communicated to the AO/GH through the A-CDM platform. As for TOBT, also TSAT is updated for changes of +/- 5 minutes.

TSAT is issued at TOBT-40 minutes and takes into account, besides confirmed TOBT, those aspects of the ongoing situation at Malpensa APT (e.g. RWY in use) and those related to external factors dependent on the network (e.g. CTOT).

The start-up clearance by MALPENSA Tower will be in accordance with TSAT and the actual traffic situation.

### 3.1.6. TTOT

TTOT calculated from TOBT is the time when the ACFT is expected to take off basing on the expected ready communication given by AO/GH.

TTOT calculated from TSAT is the time when the ACFT is expected to take off basing on the ATC systems elaborations aimed to optimize the sequence at the holding point.

### 3.1.7. START-UP AND PUSH-BACK

The start-up clearance will take place after the READY and in accordance with the AMS procedure that is being defined.

Pilot-in-Command can ask for start-up authorization and clearance within TSAT +/- 5 minutes.

TWR Delivery will give the start-up authorization and the clearance taking into account TSAT and the actual traffic condition on the APT.

Push-back/taxi approval must be requested not later than 5 minutes after start-up authorization and start-up clearance (ASAT) and it shall start within 2 minutes from ASAT.

If the operations delays exceed the expected tolerance windows, the flight will be asked to re-contact AO/GH and input a new TOBT.

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# 3. DEPARTURE

## 3.2. DE-ICING

De-icing/de-snowing takes place at following De-Icing Areas:

Area 1: Position 795 (MAX ACFT CAT F), K1 (MAX CAT E), 794 (MAX CAT D), 799 (MAX CAT C) and Z1.
Position 794 not available for B767-400 and MD-11 and not available when CAT F ACFT in stand 795.

Area 2: Position 791 thru 793 (MAX CAT C).

Area 3: Position 202 (MAX CAT E), 204 (MAX CAT D), 201 and 203 (both MAX CAT C).

De-icing operation H24.

Minimum standard taxi-time may increase in accordance to weather condition.

**Responsibilities:**
All de-icing/de-snowing operations are under AO/Pilot-in-Command responsibility.

**Procedures:**
AO/Pilots of ACFT shall put request to de-icing provider through ramp agent attending the flight.

Pilot at start-up will report to Tower to have agreed upon previously de-icing operations.

For Area 1 (Main Area) expect Tower instructions to Y1 or K2 holding positions. After that, taxiing to de-icing areas with follow-me car.

Marshaller will guide ACFT to de-icing positions.

Pilot-in-Command shall report to Tower 'Ready to move' only after ground de-icing procedures have been completed.

**ACFT Engines Status during Operation:**

Twin-engine ACFT: Both on idle power.
Three-engine ACFT: Tail out, external idle power.
Four-engine ACFT: External out, internal idle power.
Prop ACFT: Propellers should be stopped.

## 3.3. START-UP AND TAXI PROCEDURES

### 3.3.1. APRON MANAGEMENT

Preflight data, ATC- and start-up clearance will be issued on MALPENSA Delivery.

Pilots must obtain taxi instructions and push-back approval on appropriate GROUND frequency.

Pilots shall request start-up clearance 5 min before ready to start engines, handling operations completed.

Further information concerning apron service could be provided on ATIS.

### 3.3.2. TAXI ROUTINE

RWY 35L coming from apron West via:
- TWY Y/K/W - TWY GW;
- TWY W - TWY WB;
- TWY Y/K - TWY Z - TWY WB;
- TWY U/V - TWY W;
- TWY U/V - TWY K.

RWY 35R coming from apron West via:
- TWY W/K - TWY Z - TWY H;
- TWY Y - TWY H;
- TWY U - TWY F (hold short of RWY 35L);
- TWY K - TWY GW or TWY Y - TWY GW (hold short of RWY 35L).

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# 3. DEPARTURE

RWY 35L coming from apron North via:
- TWY C - TWY GE.

RWY 35R coming from apron North via:
- TWY C - TWY CA.

RWY 17R coming from apron West via:
- Apron TWY N, P and R then TWY W then TWY EW or TWY BW.

RWY 17R coming from apron North via:
- TWY BE or TWY EM.

RWY 17L coming from apron West via:
- TWY W - TWY BW (hold short RWY 35L, then as instructed);
- TWY W - TWY EW (hold short RWY 35L, then as instructed);
- TWY U - TWY F (hold short RWY 35L, then as instructed);
- TWY K/Y - TWY G/W (hold short RWY 35L, then as instructed);
- TWY W/K - TWY Z - TWY H - TWY C (hold short RWY 35L, then as instructed);
- TWY Y - TWY H - TWY C (hold short RWY 35L, then as instructed).

## 3.4. NOISE ABATEMENT PROCEDURES

### 3.4.1. RUNWAY USAGE

During trial period RWYs 35L/R are in use according to following schemes:

- First day:
  - between 0630-1430LT: RWY 35L;
  - between 1430-2330LT: RWY 35R.
- Second day:
  - between 0630-1430LT: RWY 35R;
  - between 1430-2330LT: RWY 35L.

A daily alternation of schemes 'First day' and 'Second day' shall be applied, meaning that if on one day the applied scheme is 'First day' the next day will be 'Second day', and vice-versa.

A tolerance of +/- 10 min is allowed to the established time for RWY change to permit the management of ground operations by the tower. When RWY 35L/R is in use, take-off from RWY 17L/R is allowed, but subject to ATC delay.

| "First day" scheme 2014 | | | |
|---|---|---|---|
| JAN 01 | FEB 02 | MAR 02 | APR 01 |
| MAY 01 | JUN 02 | JUL 02 | AUG 01 |
| SEP 02 | OCT 02 | NOV 01 | DEC 01 |

| "Second day" scheme 2014 | | | |
|---|---|---|---|
| JAN 02 | FEB 01 | MAR 01 | APR 02 |
| MAY 02 | JUN 01 | JUL 01 | AUG 02 |
| SEP 01 | OCT 01 | NOV 02 | DEC 02 |

| "First day" scheme 2015 | | | |
|---|---|---|---|
| JAN 02 | FEB 01 | MAR 01 | APR 02 |
| MAY 02 | JUN 01 | JUL 01 | AUG 02 |
| SEP 01 | OCT 01 | NOV 02 | DEC 02 |

| "Second day" scheme 2015 | | | |
|---|---|---|---|
| JAN 01 | FEB 02 | MAR 02 | APR 01 |
| MAY 01 | JUN 02 | JUL 02 | AUG 01 |
| SEP 02 | OCT 02 | NOV 01 | DEC 01 |

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# 3. DEPARTURE

The above alternate use of the runways may not be applied for safety (e.g. operational or meteorological) or security reasons.

Exceptionally, two flexible windows for take-off from both runways, according to final destination and traffic congestion peaks forecast, can be applied for max 120 min under previous Civil Aviation Authority approval.

The alternate use of runways above is based on a principle of equal distribution of the ACFT on the two runways. The application of a compensation mechanism, under provision of the Civil Aviation Authority and after NOTAM issue, may change for short periods the time of change of the runways in use.

Except from what is stated above, the RWY use scheme is mandatory. Any request for different use must be approved by ENAC at least two hours in advance.

Due to daily periodic inspections RWYs 17/35 are closed at certain times. Expect short time alterations due to traffic congestion.

During take-off climb, standard noise abatement procedures established by operators in compliance with manufacturer technical documentation must be applied.

During the initial climb phase, pilots shall maintain the following parameters:

a) Up to 1500' QFE
- take-off power;
- take-off flap;
- climb at $V_2$ + 10/20 KT or as limited by body angle.

b) At 1500' QFE
- reduce thrust and climb at $V_2$ + 10/20 KT until reaching 3000'QFE.

c) At 3000' QFE
- accelerate smoothly to enroute climb speed with flap retraction.

**RWYs 17L/R**

Noise abatement procedures shall be applied until passing 4000'.

Initial climb procedures shall be performed using the maximum rate of climb compatible with the ACFT performances until passing at least 5000'.

## 3.5. RUNWAY OPERATIONS

### 3.5.1. MINIMUM RWY OCCUPANCY

Departing ACFT shall comply with ATC clearance to line-up without any delay and line-up manoeuvre shall start immediately after the preceding departing ACFT has initiated the take-off run. As far as possible pre-flight checks shall be completed before line-up. Any other checks following line-up shall be carried out as quickly as possible. Take-off run shall start immediately after take-off clearance.

Prior to line-up, pilots must inform MALPENSA Tower if unable to comply with above minimum RWY occupancy criteria.

## 3.6. OTHER INFORMATION

To reduce communication load, take-off time will not be given unless upon pilot's request.

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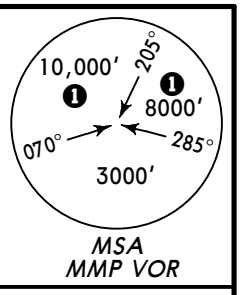
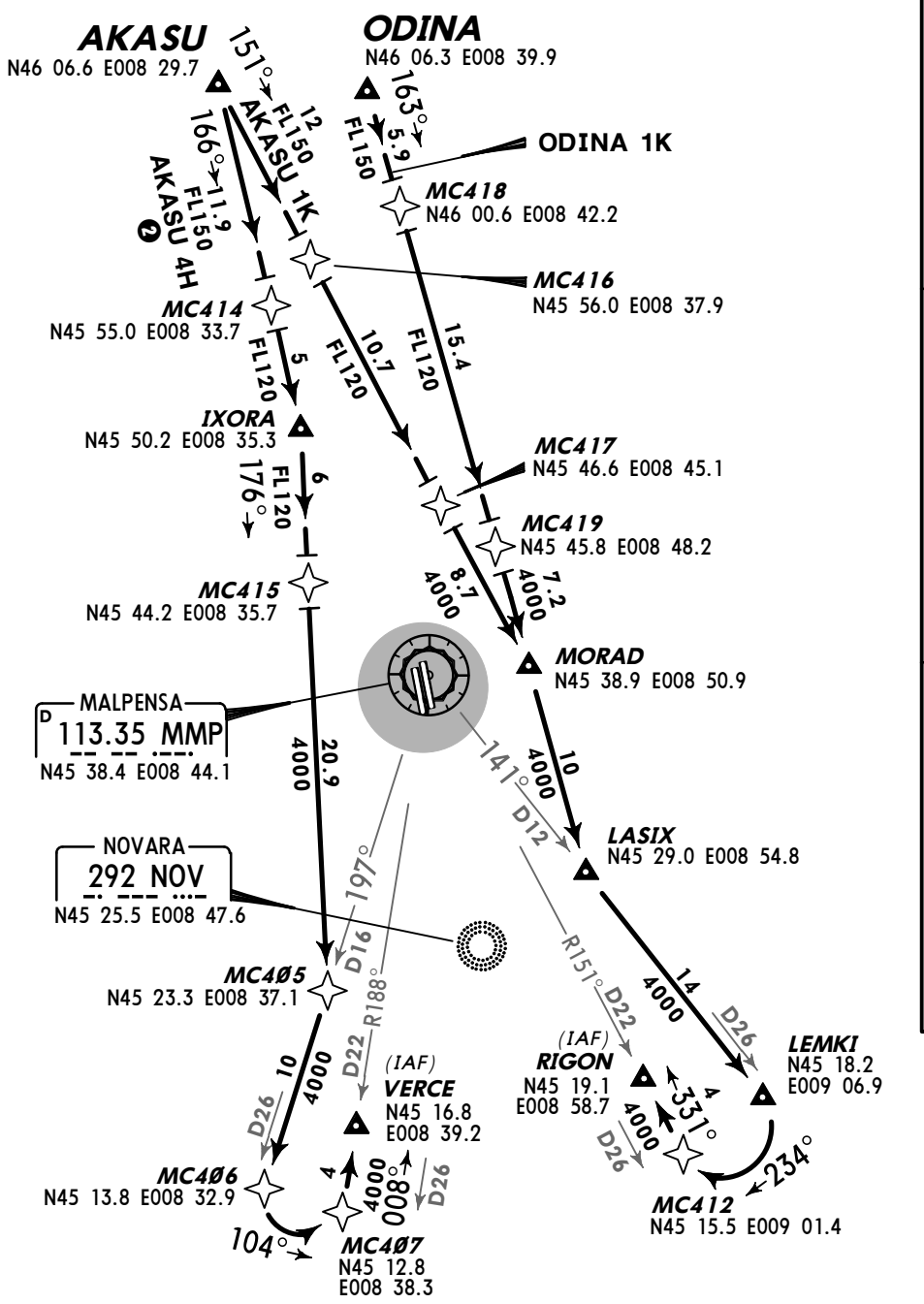
| ATIS Arrival | Apt Elev | |
|---|---|---|
| 120.02 | 768′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′<br>Holdings are defined by conventional navigation. |



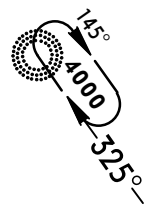

❶ 6000′ within 10 NM

# AKASU 4H [AKAS4H]❷, AKASU 1K [AKAS1K]
# ODINA 1K [ODIN1K]
# P-RNAV ARRIVALS

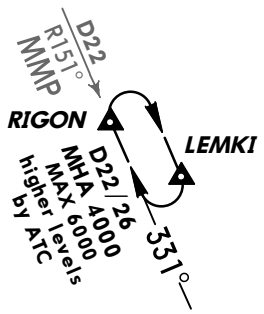
❷ By ATC.



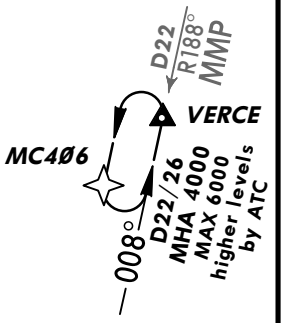

## HOLDINGS OVER NOV




## RIGON




## VERCE



NOT TO SCALE

| STAR | ROUTING |
|---|---|
| AKASU 4H | AKASU - MC414 - IXORA - MC415 - MC405 - MC406 - MC407 - VERCE. |
| AKASU 1K | AKASU - MC416 - MC417 - MORAD - LASIX - LEMKI - MC412 - RIGON. |
| ODINA 1K | ODINA - MC418 - MC419 - MORAD - LASIX - LEMKI - MC412 - RIGON. |

*CHANGES:* Speed restriction at MC407 withdrawn.

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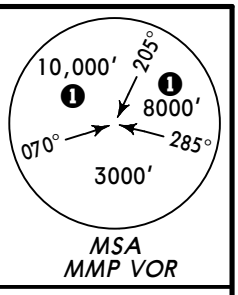
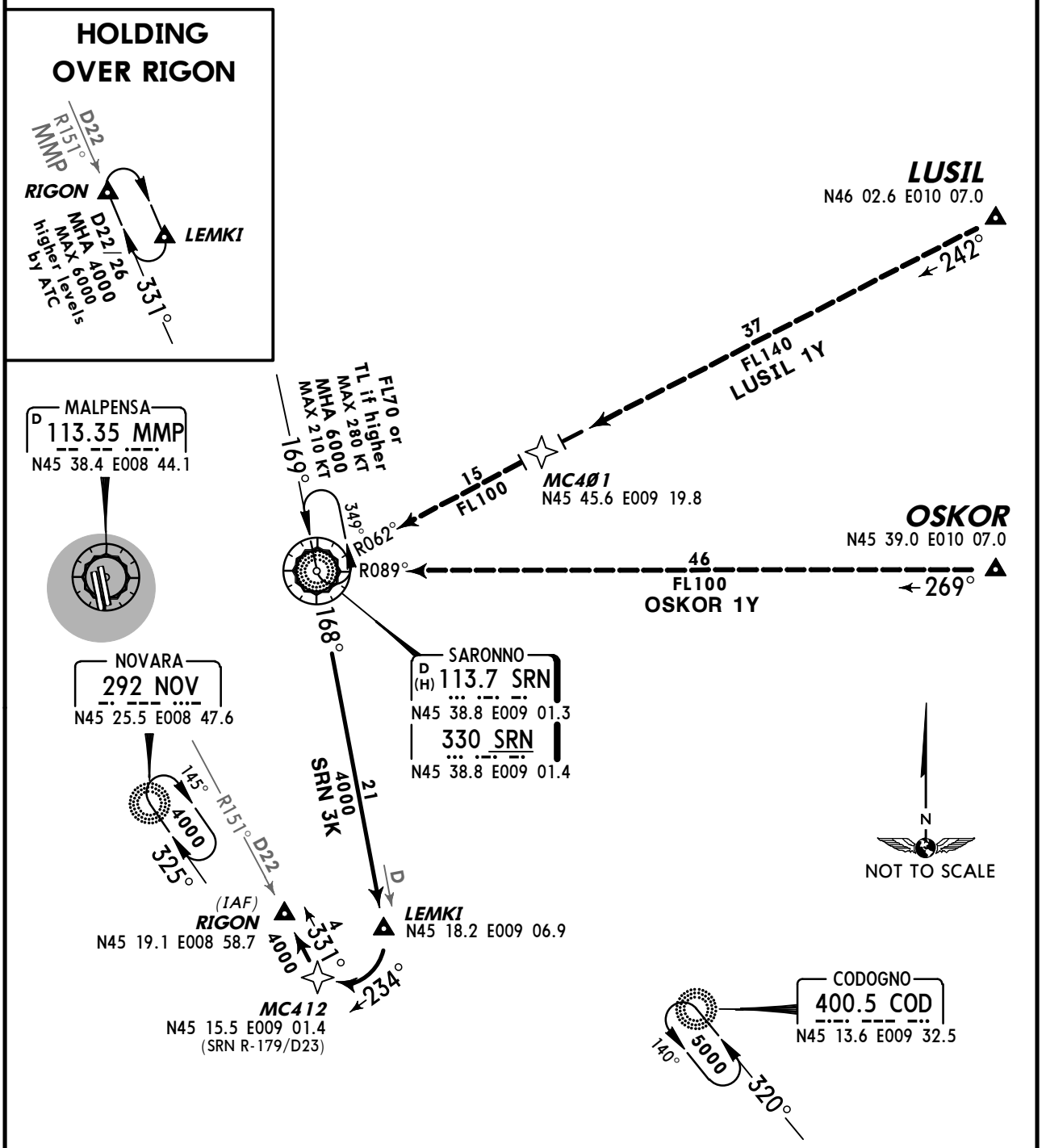
| ATIS Arrival | Apt Elev | |
|---|---|---|
| 120.02 | 768′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′<br>Holdings are defined by conventional navigation. |




# LUSIL 1Y *[LUS1Y]*, OSKOR 1Y *[OSK1Y]*
## P-RNAV TRANSITIONS
## SRN 3K
## P-RNAV ARRIVAL




| TRANSITION | ROUTING |
|---|---|
| LUSIL 1Y | LUSIL - MC401 - SRN. |
| OSKOR 1Y | OSKOR - SRN. |
| **STAR** | **ROUTING** |
| SRN 3K | SRN - LEMKI - MC412 - RIGON. |

*CHANGES:* None.

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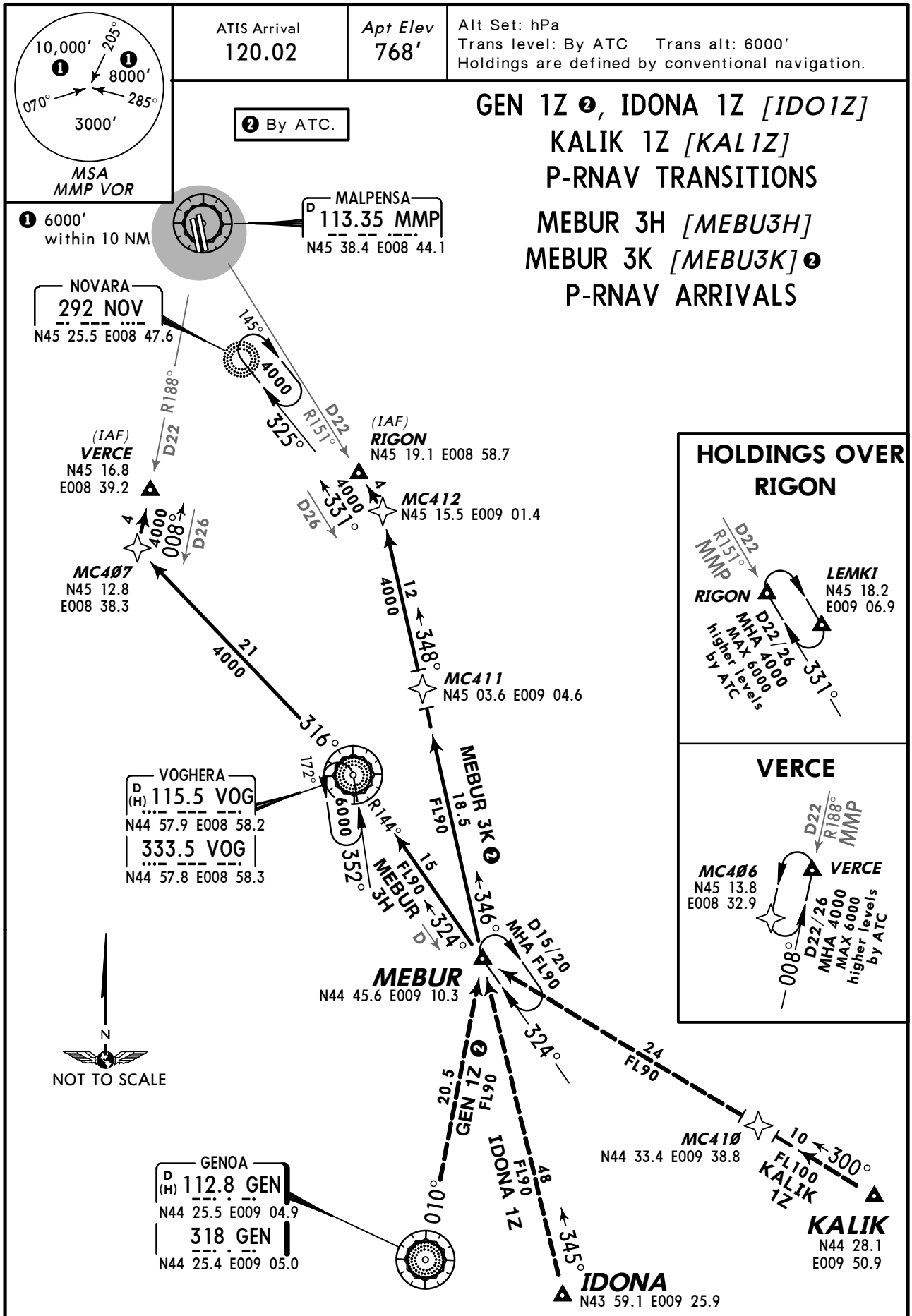
| ATIS Arrival | Apt Elev | |
|---|---|---|
| 120.02 | 768′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′<br>Holdings are defined by conventional navigation. |




| TRANSITION | ROUTING |
|---|---|
| GEN 1Z | GEN - MEBUR. |
| IDONA 1Z | IDONA - MEBUR. |
| KALIK 1Z | KALIK - MC410 - MEBUR. |
| **STAR** | **ROUTING** |
| MEBUR 3H | MEBUR - VOG - MC407 - VERCE. |
| MEBUR 3K | MEBUR - MC411 - MC412 - RIGON. |

*CHANGES:* VOG hold altitude.

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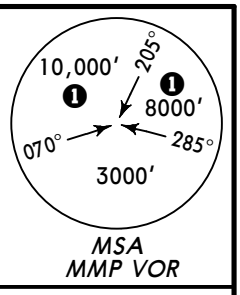
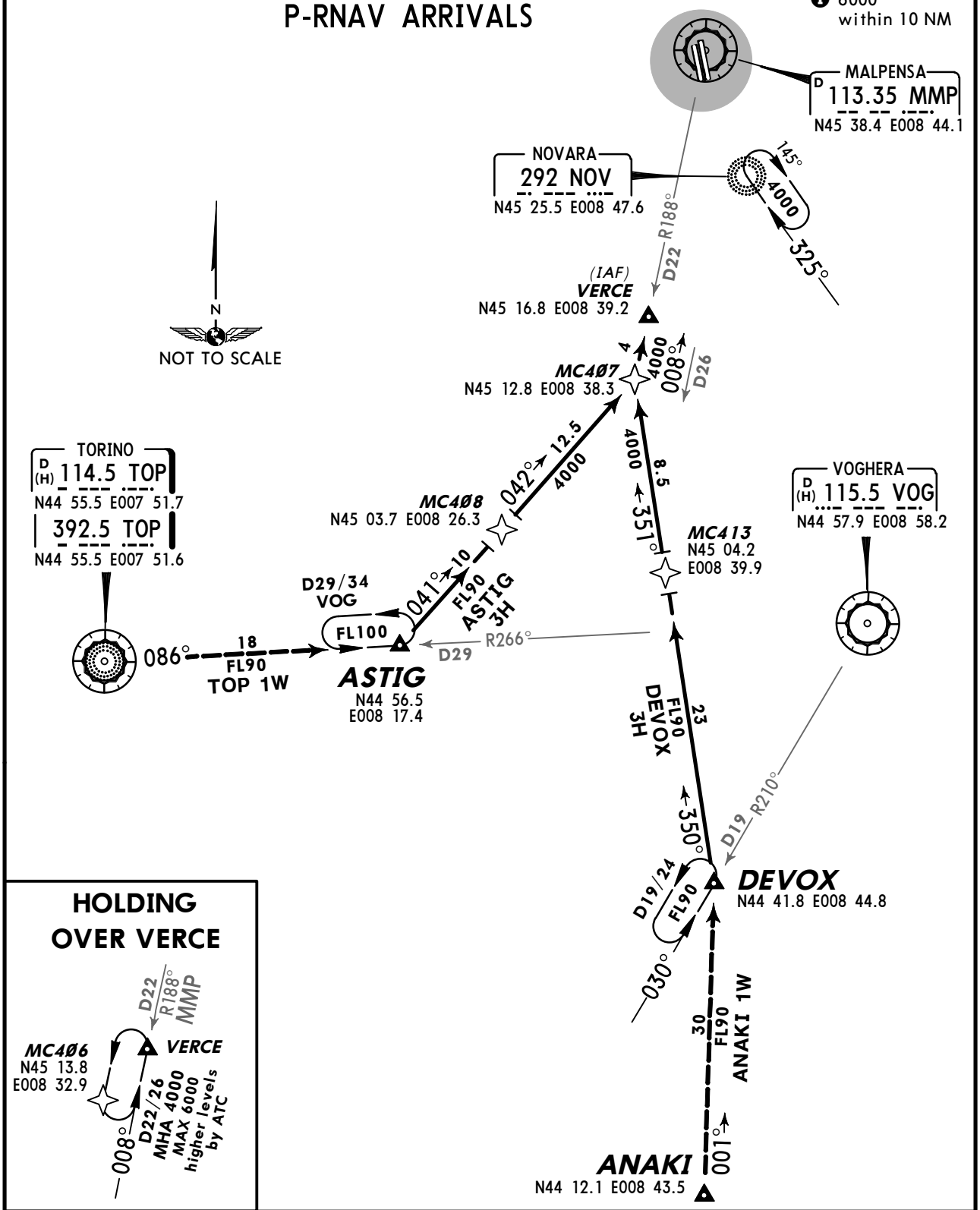
| ATIS Arrival | Apt Elev | |
|---|---|---|
| 120.02 | 768′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′<br>Holdings are defined by conventional navigation. |




# ANAKI 1W *[ANA1W]*, TOP 1W
# P-RNAV TRANSITIONS

# ASTIG 3H *[ASTI3H]*, DEVOX 3H *[DEVO3H]*
# P-RNAV ARRIVALS




| TRANSITION | ROUTING |
|---|---|
| ANAKI 1W | ANAKI - DEVOX. |
| TOP 1W | TOP - ASTIG. |
| **STAR** | **ROUTING** |
| ASTIG 3H | ASTIG - MC408 - MC407 - VERCE. |
| DEVOX 3H | DEVOX - MC413 - MC407 - VERCE. |

*CHANGES:* None.

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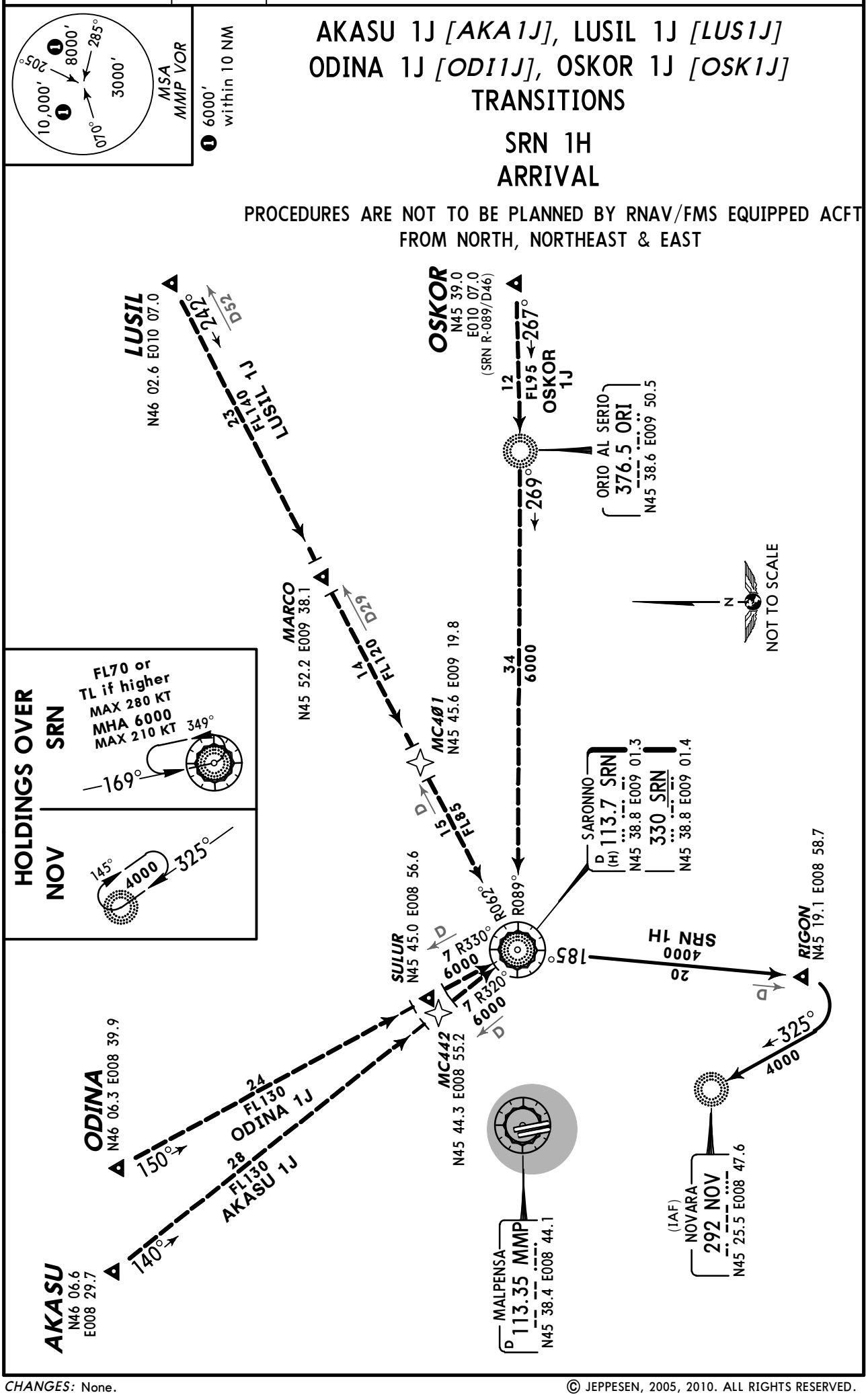
| ATIS Arrival | Apt Elev | |
|---|---|---|
| 120.02 | 768′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′ |




CHANGES: None.

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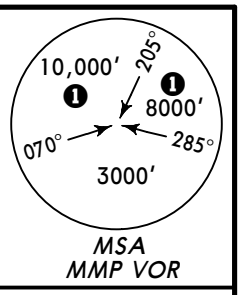
| ATIS Arrival | Apt Elev | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′ |
|---|---|---|
| 120.02 | 768′ | |

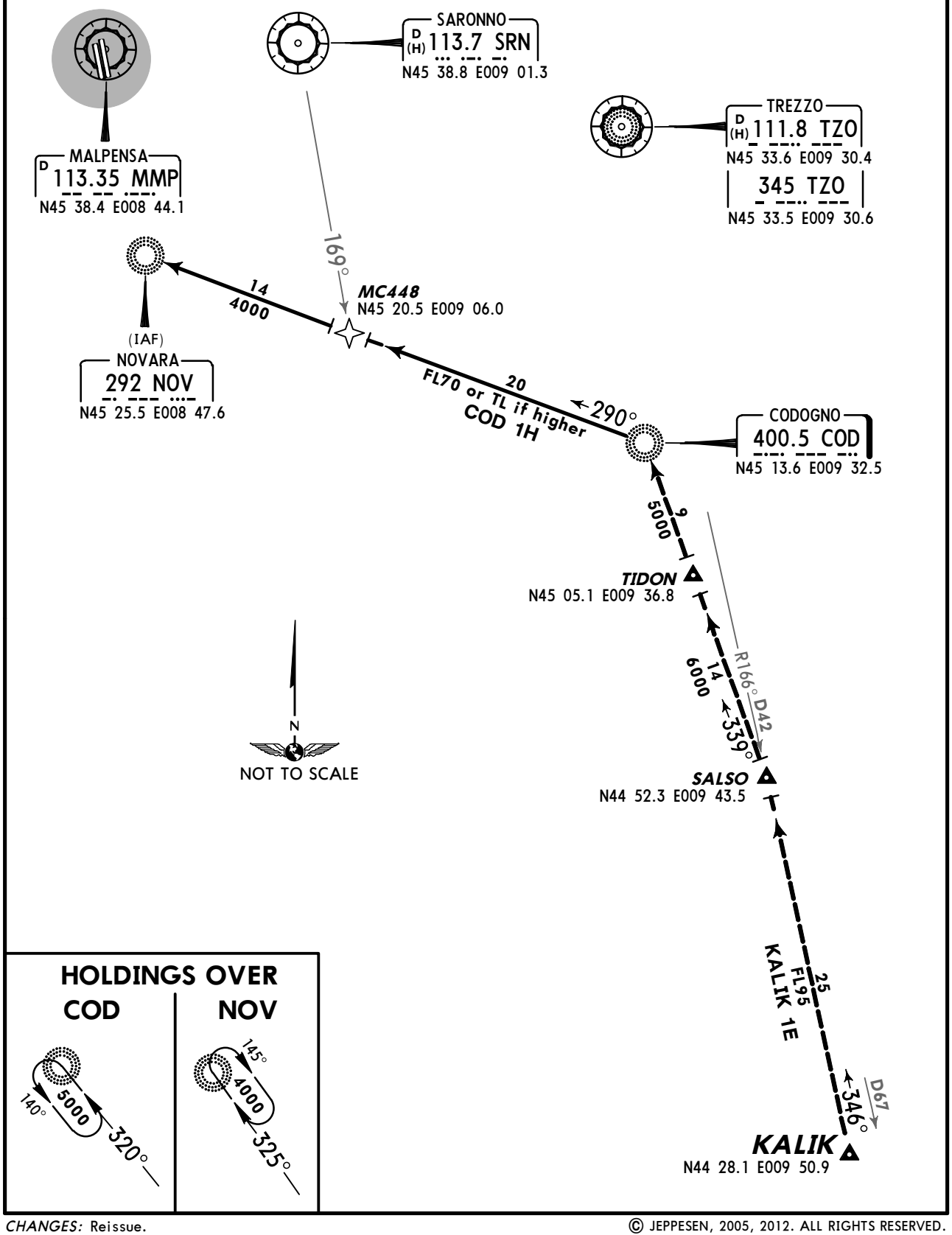



❶ 6000′ within 10 NM

# KALIK 1E *[KAL1E]*
## TRANSITION
## COD 1H
## ARRIVAL

BY ATC

PROCEDURES ARE NOT TO BE PLANNED BY RNAV/FMS EQUIPPED ACFT FROM SOUTHEAST




*CHANGES:* Reissue.

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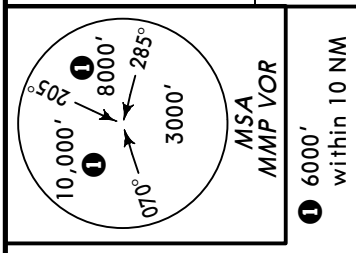
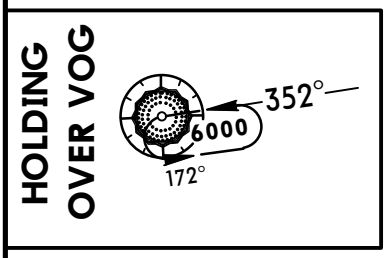
| ATIS Arrival | Apt Elev | |
|---|---|---|
| 120.02 | 768′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 6000′ |




# GEN 2F, KALIK 2F *[KAL2F]*, PAR 2F, TOP 2F TRANSITIONS

## VOG 1H ARRIVAL

PROCEDURES ARE NOT TO BE PLANNED BY RNAV/FMS EQUIPPED ACFT




PARMA
306 PAR
N44 49.3 E010 17.6

278°

41
FL100
PAR 2F

LIMBA
N44 55.6 E009 20.0

D16
10
FL100
277°

KALIK
N44 28.1 E009 50.9

D48
307°

42
FL100
KALIK 2F

MC445
N44 57.0
E009 06.7

MC444
N44 54.2
E009 04.9

VOGHERA
D (H) 115.5 VOG
N44 57.9 E008 58.2
333.5 VOG
N44 57.8 E008 58.3

Direct distance from NOV to Malpensa Apt: **13 NM**

6
R097°
6000

6
6000
R127°

27
FL90
GEN 2F

351°

6
R171°
6000

MC443
N44 51.9 E008 59.5

11
344°

5000
VOG
1H

6
R266°
6000

MC446
N44 57.6 E008 49.8

MC447
N45 08.5 E008 54.2

17.5
4000

325°

145°
4000

(IAF)
NOVARA
292 NOV
N45 25.5 E008 47.6

MALPENSA
D 113.35 MMP
N45 38.4 E008 44.1

GENOA
D (H) 112.8 GEN
N44 25.5 E009 04.9
318 GEN
N44 25.4 E009 05.0

41
FL90
TOP 2F

086°

TORINO
D (H) 114.5 TOP
N44 55.5 E007 51.7
392.5 TOP
N44 55.5 E007 51.6

N

NOT TO SCALE

*CHANGES:* RNAV TRANSITIONS renumbered.

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| SID DESIGNATION | REFER TO CHART |
|---|---|
| BLA 6C, 7D | 10-3A |
| BLA 7F | 10-3B |
| FARAK 5C, 7D | 10-3C |
| FARAK 7F | 10-3D |
| IRKED 5E, NELAB 5C | 10-3E |
| DOGUB 5L, MMP 7G, 5H | 10-3F |
| SRN 7G, 5H | 10-3G |
| TELVA 7G, 5H | 10-3H |
| BLA 5X, MMP 5W | 10-3J |
| FARAK 5X, SRN 5W | 10-3K |
| NELAB 5X, NOV 7Y | 10-3L |

| TRANSITION DESIGNATION | REFER TO CHART |
|---|---|
| AOSTA 8K, 7X, LAGEN 8X NEDED 8X, TOP 8X | 10-3M |
| ABESI 7X, CANNE 7X | 10-3N |
| ABESI 7Y, CANNE 7Y | 10-3P |
| KARPI 7Y, OSKOR 7Y, PAR 7Y, VAKON 7Y | 10-3Q |
| ABESI 9Q, CANNE 9Q | 10-3S |
| KARPI 6Q, OSKOR 5Q, PAR 9Q, VAKON 8Q | 10-3T |
| KARPI 9J, OSKOR 9J, PAR 5J, VOG 5J | 10-3U |
| KARPI 7Z, LESAN 9Z, PAR 7Z, VOG 9Z | 10-3V |
| KARPI 5U, PAR 5U | 10-3W |
| LAGEN 9U, NEDED 8U, TOP 9U | 10-3X |
| ABESI 5V, CANNE 5V | 10-3X1 |
| AOSTA 5M, 5V | 10-3X2 |
| AOSTA 8J, 5L | 10-3X3 |
| ABESI 9W, CANNE 9W | 10-3X4 |
| AOSTA 7W | 10-3X5 |
| KARPI 5W, PAR 7W | 10-3X6 |

*CHANGES:* Transition LAGEN 9X renumbered 8X.

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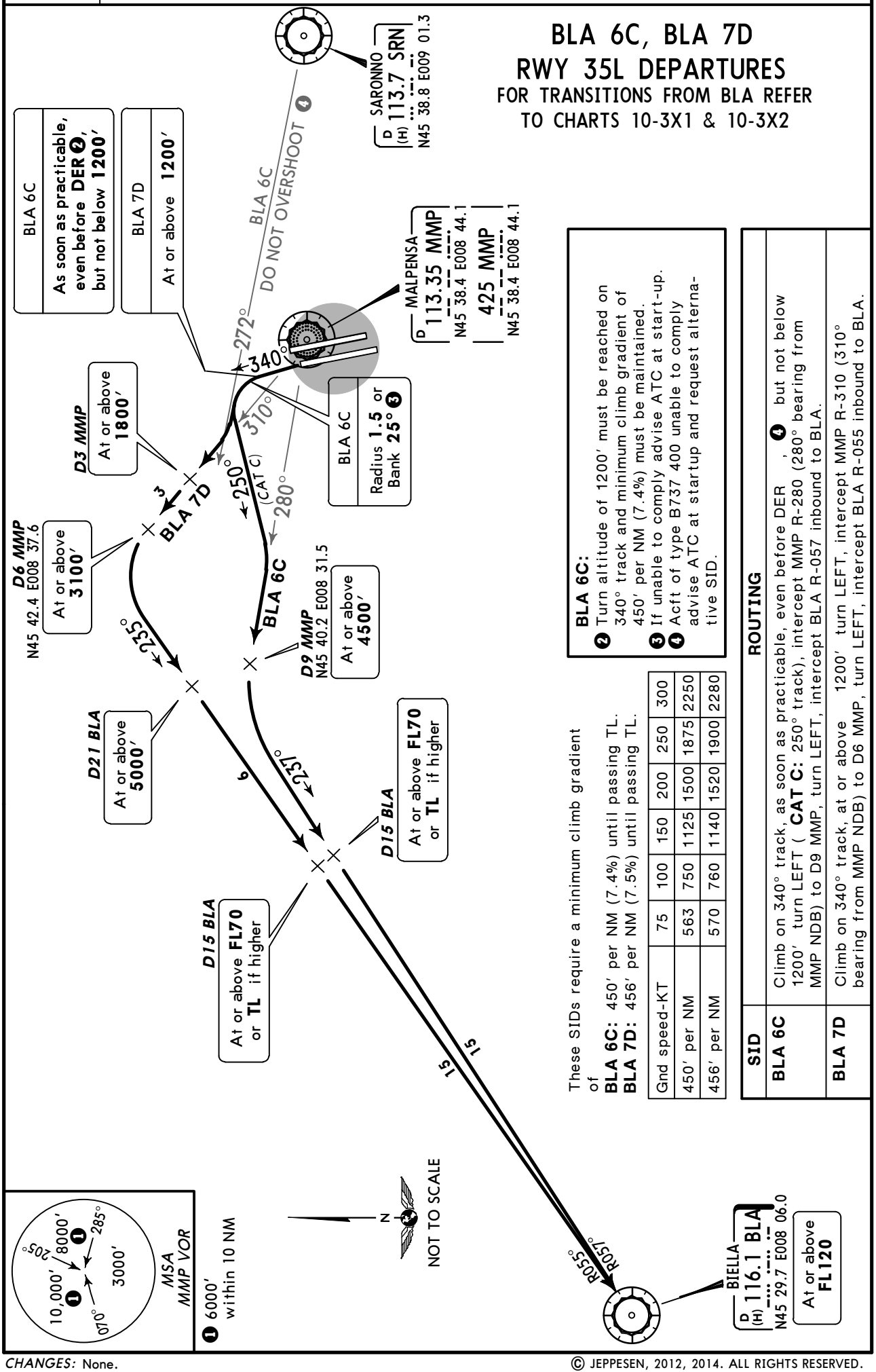
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|

# BLA 6C, BLA 7D
## RWY 35L DEPARTURES
### FOR TRANSITIONS FROM BLA REFER TO CHARTS 10-3X1 & 10-3X2




**BLA 6C:**
❷ Turn altitude of 1200′ must be reached on 340° track and minimum climb gradient of 450′ per NM (7.4%) must be maintained.
❸ If unable to comply advise ATC at start-up.
❹ Acft of type B737 400 unable to comply advise ATC at startup and request alternative SID.

These SIDs require a minimum climb gradient of
**BLA 6C:** 450′ per NM (7.4%) until passing TL.
**BLA 7D:** 456′ per NM (7.5%) until passing TL.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 450′ per NM | 563 | 750 | 1125 | 1500 | 1875 | 2250 |
| 456′ per NM | 570 | 760 | 1140 | 1520 | 1900 | 2280 |

| SID | ROUTING |
|---|---|
| BLA 6C | Climb on 340° track, as soon as practicable, even before DER , ❹ but not below 1200′ turn LEFT ( **CAT C:** 250° track), intercept MMP R-280 (280° bearing from MMP NDB) to D9 MMP, turn LEFT, intercept BLA R-057 inbound to BLA. |
| BLA 7D | Climb on 340° track, at or above 1200′ turn LEFT, intercept MMP R-310 (310° bearing from MMP NDB) to D6 MMP, turn LEFT, intercept BLA R-055 inbound to BLA. |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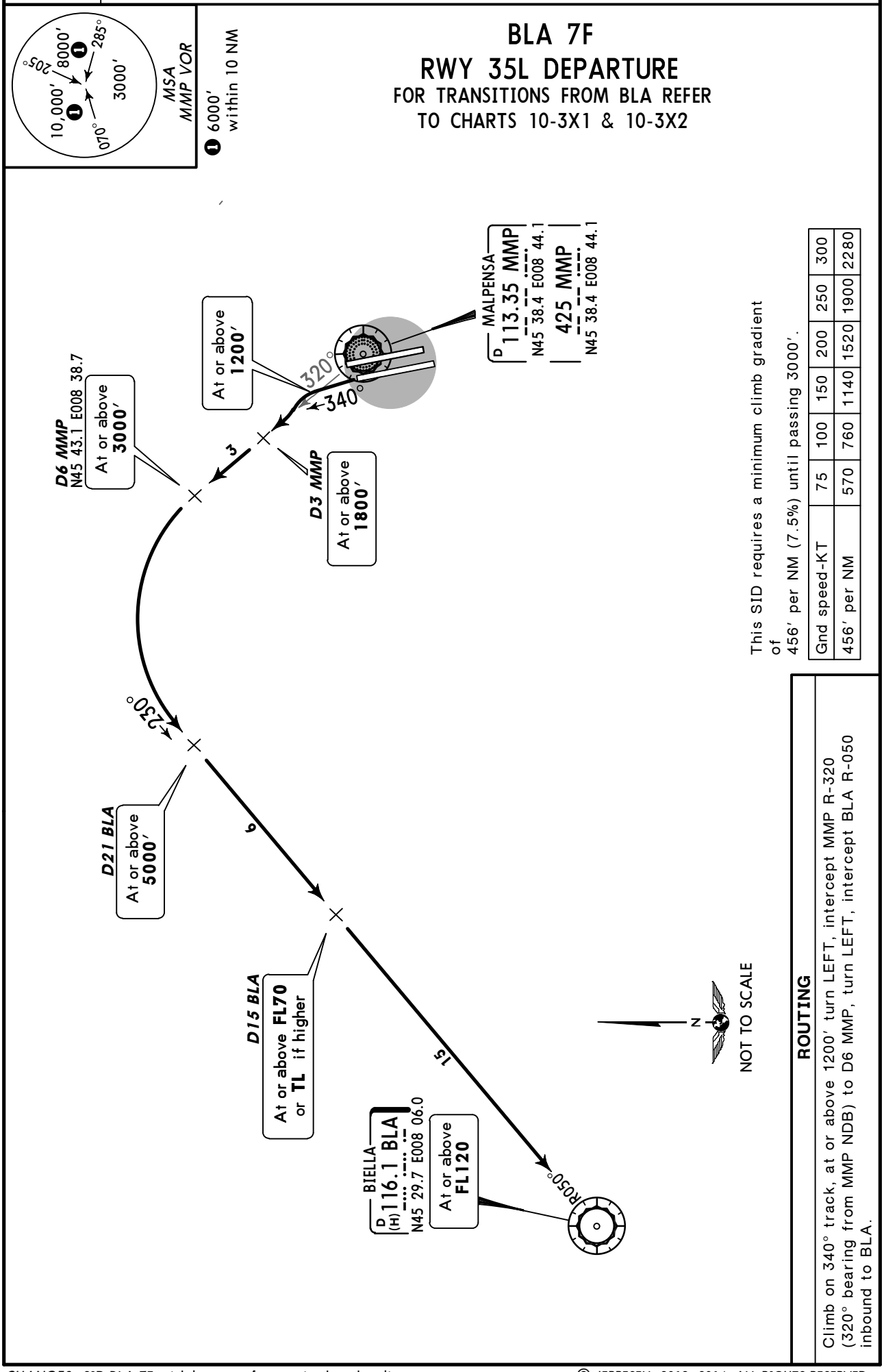
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|




This SID requires a minimum climb gradient of 456′ per NM (7.5%) until passing 3000′.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 456′ per NM | 570 | 760 | 1140 | 1520 | 1900 | 2280 |

**ROUTING**

Climb on 340° track, at or above 1200′ turn LEFT, intercept MMP R-320 (320° bearing from MMP NDB) to D6 MMP, turn LEFT, intercept BLA R-050 inbound to BLA.

*CHANGES:* SID BLA 7E withdrawn; reference in chart heading.

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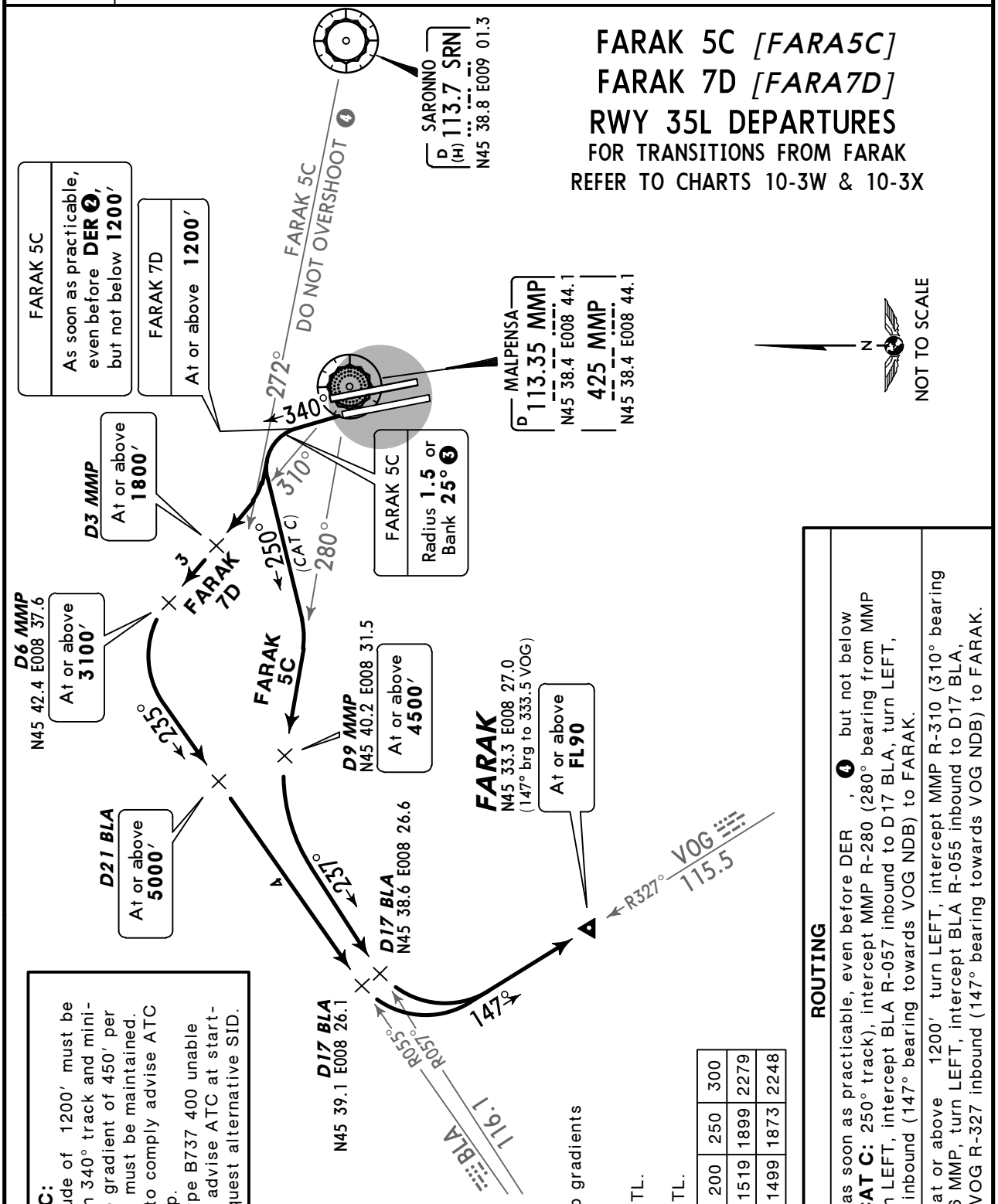
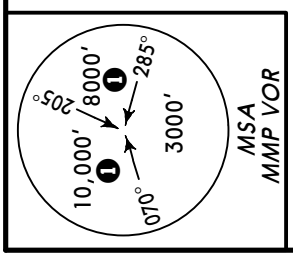
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|

# FARAK 5C *[FARA5C]*
# FARAK 7D *[FARA7D]*
# RWY 35L DEPARTURES

FOR TRANSITIONS FROM FARAK
REFER TO CHARTS 10-3W & 10-3X




**FARAK 5C:**
2 Turn altitude of 1200′ must be reached on 340° track and minimum climb gradient of 450′ per NM (7.4%) must be maintained.
3 If unable to comply advise ATC at start-up.
4 Acft of type B737 400 unable to comply advise ATC at start-up and request alternative SID.




These SIDs require minimum climb gradients of

**FARAK 5C**
450′ per NM (7.4%) until passing TL.
**FARAK 7D**
456′ per NM (7.5%) until passing TL.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 456′ per NM | 570 | 760 | 1139 | 1519 | 1899 | 2279 |
| 450′ per NM | 562 | 749 | 1124 | 1499 | 1873 | 2248 |

| SID | ROUTING |
|---|---|
| **FARAK 5C** | Climb on 340° track, as soon as practicable, even before DER , 4 but not below 1200′ turn LEFT ( **CAT C:** 250° track), intercept MMP R-280 (280° bearing from MMP NDB) to D9 MMP, turn LEFT, intercept BLA R-057 inbound to D17 BLA, turn LEFT, intercept VOG R-327 inbound (147° bearing towards VOG NDB) to FARAK. |
| **FARAK 7D** | Climb on 340° track, at or above 1200′ turn LEFT, intercept MMP R-310 (310° bearing from MMP NDB) to D6 MMP, turn LEFT, intercept BLA R-055 inbound to D17 BLA, turn LEFT, intercept VOG R-327 inbound (147° bearing towards VOG NDB) to FARAK. |

*CHANGES:* SID FARAK 6D renumbered 7D & revised; reference in chart heading.

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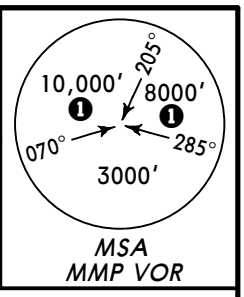
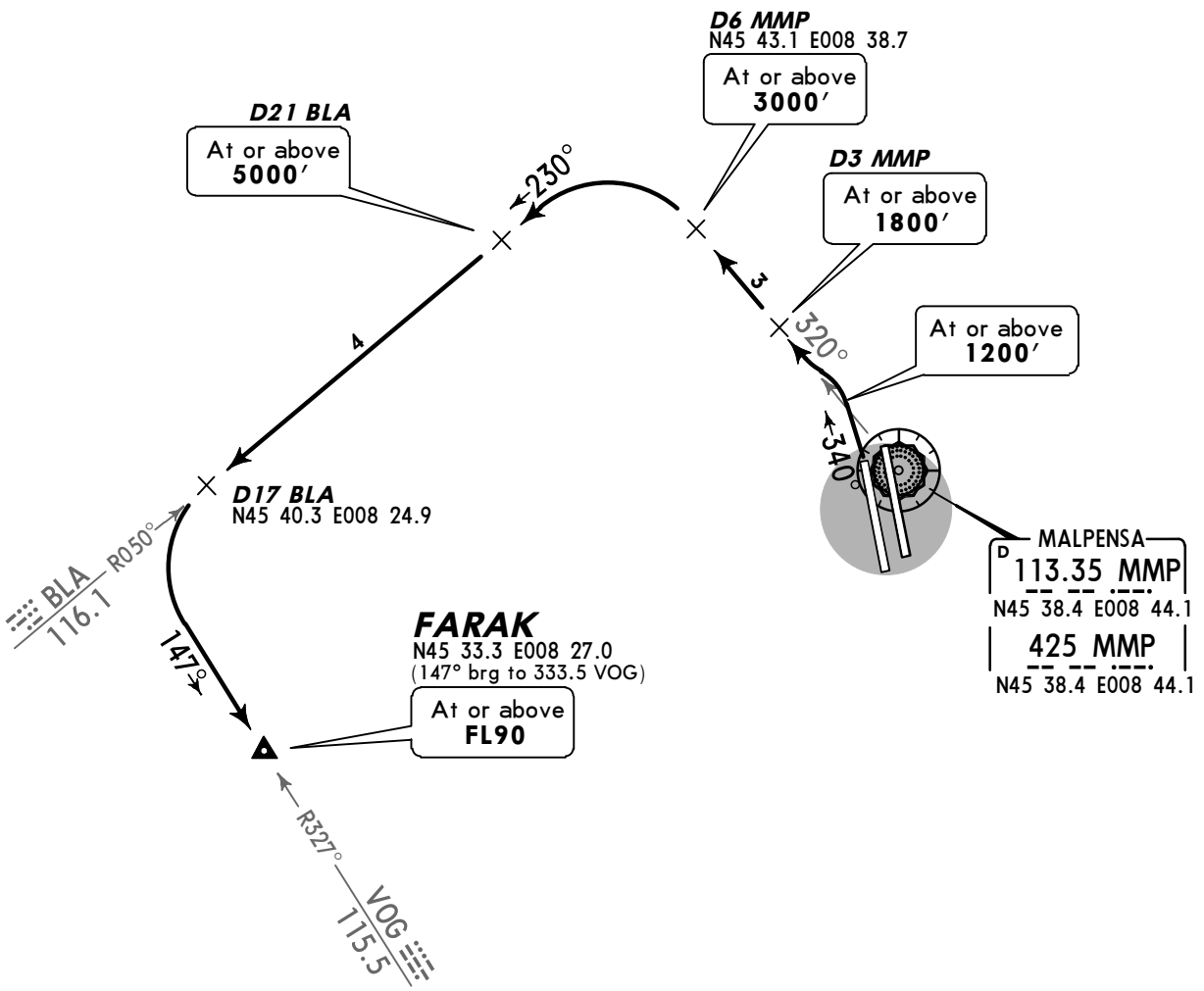
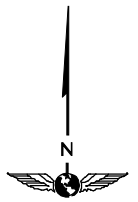
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|




# FARAK 7F *[FARA7F]*
## RWY 35L DEPARTURE
FOR TRANSITIONS FROM FARAK REFER TO CHARTS 10-3W & 10-3X




NOT TO SCALE

These SIDs require a minimum climb gradient of
456′ per NM (7.5%) until passing 3000′.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 456′ per NM | 570 | 760 | 1139 | 1519 | 1899 | 2279 |

**ROUTING**

Climb on 340° track, at or above 1200′ turn LEFT, intercept MMP R-320 (320° bearing from MMP NDB) to D6 MMP, turn LEFT, intercept BLA R-050 inbound to D17 BLA, turn LEFT, intercept VOG R-327 inbound (147° bearing towards VOG NDB) to FARAK.

*CHANGES:* SID renumbered & revised; reference in chart heading.

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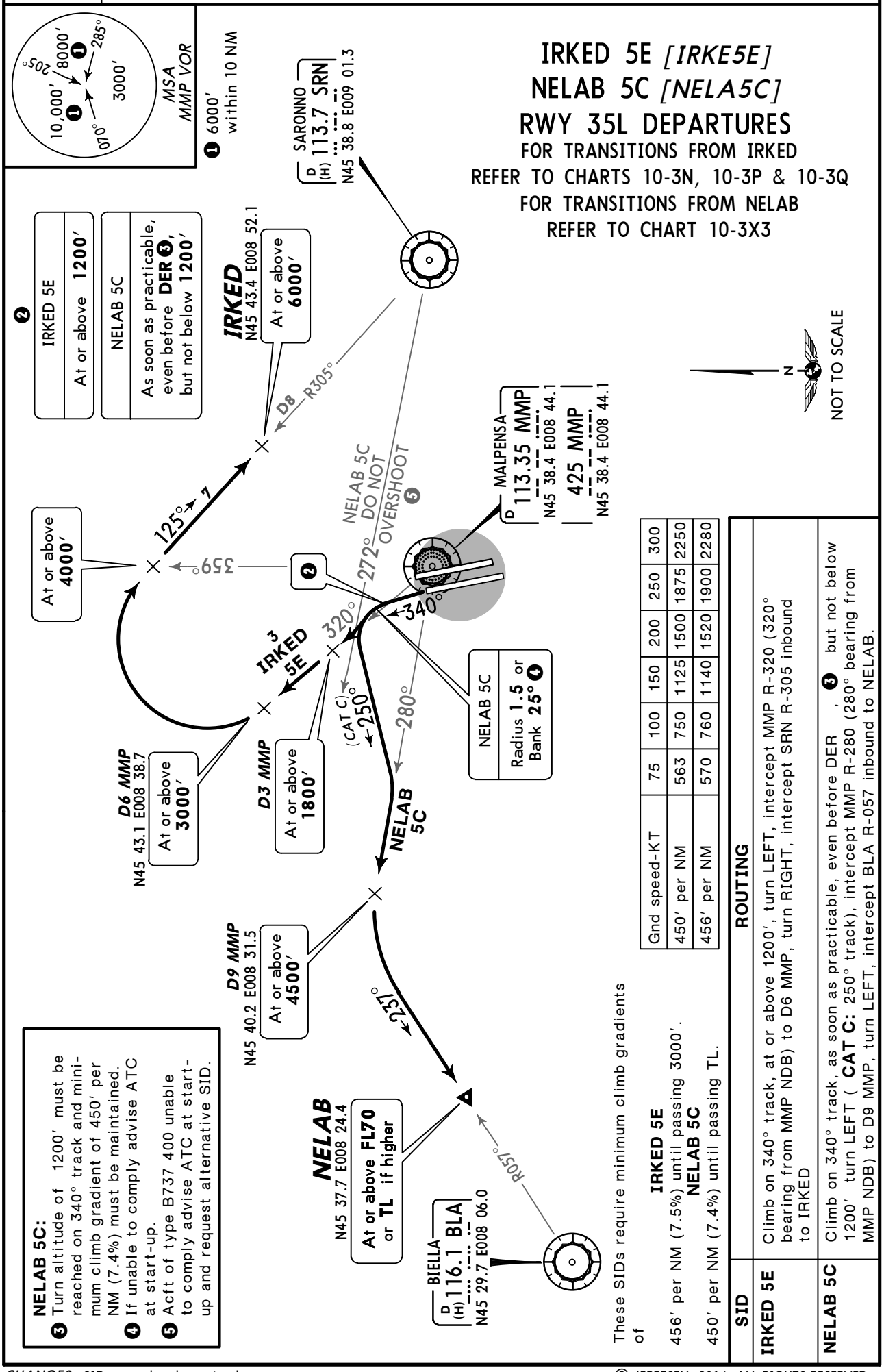
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|

# IRKED 5E *[IRKE5E]*
# NELAB 5C *[NELA5C]*
# RWY 35L DEPARTURES

FOR TRANSITIONS FROM IRKED
REFER TO CHARTS 10-3N, 10-3P & 10-3Q
FOR TRANSITIONS FROM NELAB
REFER TO CHART 10-3X3




| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 450′ per NM | 563 | 750 | 1125 | 1500 | 1875 | 2250 |
| 456′ per NM | 570 | 760 | 1140 | 1520 | 1900 | 2280 |

These SIDs require minimum climb gradients of

**IRKED 5E**
456′ per NM (7.5%) until passing 3000′.

**NELAB 5C**
450′ per NM (7.4%) until passing TL.

**NELAB 5C:**
❸ Turn altitude of 1200′ must be reached on 340° track and minimum climb gradient of 450′ per NM (7.4%) must be maintained.
❹ If unable to comply advise ATC at start-up.
❺ Acft of type B737 400 unable to comply advise ATC at start-up and request alternative SID.

| SID | ROUTING |
|---|---|
| **IRKED 5E** | Climb on 340° track, at or above 1200′, turn LEFT, intercept MMP R-320 (320° bearing from MMP NDB) to D6 MMP, turn RIGHT, intercept SRN R-305 inbound to IRKED |
| **NELAB 5C** | Climb on 340° track, as soon as practicable, even before DER , ❸ but not below 1200′ turn LEFT ( **CAT C:** 250° track), intercept MMP R-280 (280° bearing from MMP NDB) to D9 MMP, turn LEFT, intercept BLA R-057 inbound to NELAB. |

*CHANGES:* SIDs completely revised.

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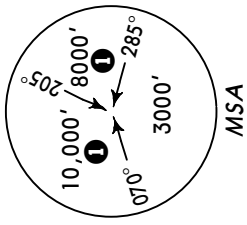
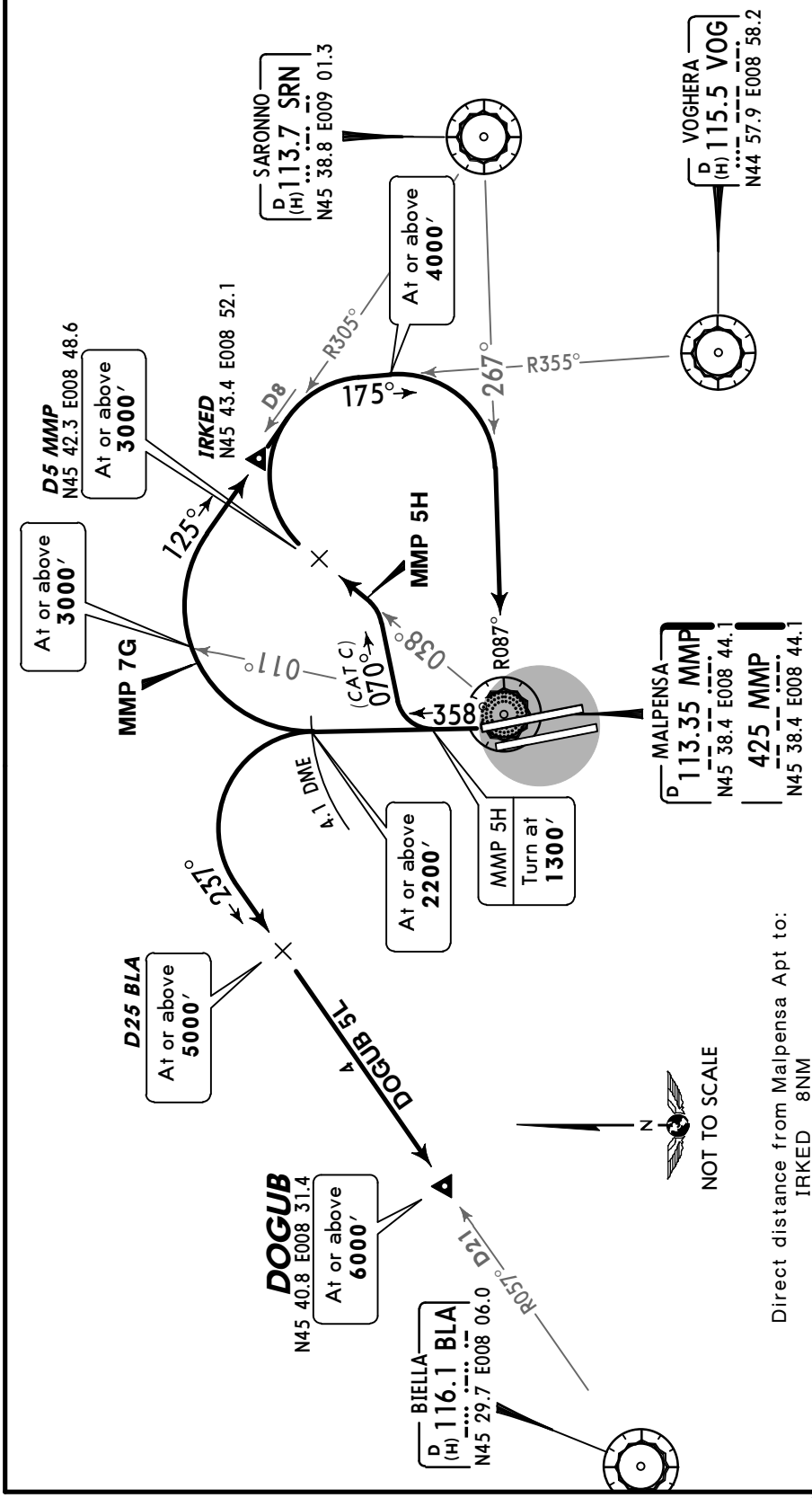
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|




❶ 6000′ within 10 NM

# DOGUB 5L *[IDOGU5L]*
# MMP 7G, MMP 5H
# RWY 35R DEPARTURES

FOR TRANSITIONS FROM DOGUB REFER TO CHARTS 10-3X4, 10-3X5 & 10-3X6
FOR TRANSITIONS FROM MMP REFER TO CHART 10-3M




Direct distance from Malpensa Apt to:
IRKED 8NM

These SIDs require minimum climb gradients of

**DOGUB 5L, MMP 5H**
462′ per NM (7.6%) until passing 3000′, then
350′ per NM (5.8%.).

**MMP 7G**
425′ per NM (7%) until passing 4000′.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 350′ per NM | 438 | 583 | 875 | 1167 | 1458 | 1750 |
| 425′ per NM | 531 | 708 | 1063 | 1417 | 1771 | 2125 |
| 462′ per NM | 578 | 770 | 1155 | 1540 | 1925 | 2310 |

| SID | ROUTING |
|---|---|
| **DOGUB 5L** | On 358° track to MMP 4.1 DME, turn LEFT, intercept BLA R-057 inbound to DOGUB. |
| **MMP 7G** | On 358° track to MMP 4.1 DME, turn RIGHT, intercept SRN R-305 inbound to IRKED, turn RIGHT, intercept VOG R-355 inbound, at or above 4000′ turn RIGHT, intercept SRN R-267 (MMP R-087 inbound) to MMP. |
| **MMP 5H** | Climb on 358° track, at 1300′ turn RIGHT ( **CAT C:** 070° track), intercept MMP R-038 (038° bearing from MMP NDB) to D5 MMP, turn RIGHT, 175° track, at or above 4000′ turn RIGHT, intercept SRN R-267 (MMP R-087 inbound) to MMP. |

*CHANGES:* SIDs completely revised.

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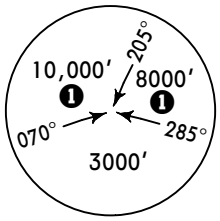
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|

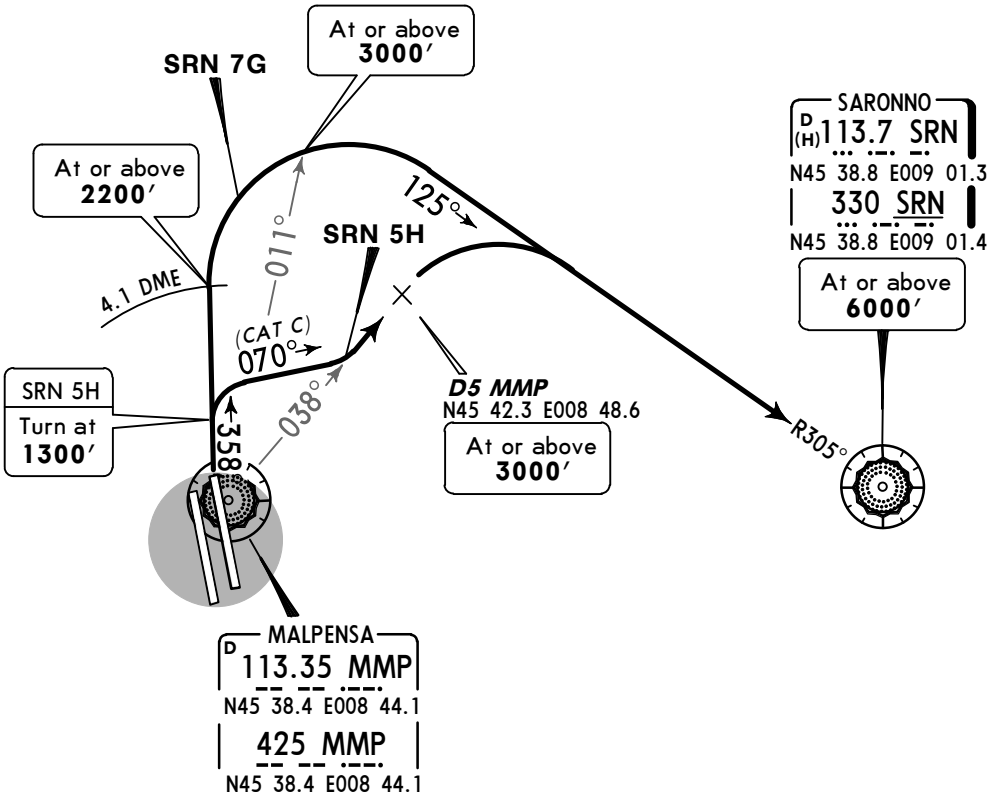



MSA
MMP VOR

❶ 6000′
within 10 NM

# SRN 7G, SRN 5H
# RWY 35R DEPARTURES

FOR TRANSITIONS FROM SRN REFER TO CHARTS 10-3S & 10-3T




Direct distance from Malpensa Apt to:
SRN 13 NM

These SIDs require minimum climb gradients of

**SRN 5H**

462′ per NM (7.6%) until passing 3000′, then 350′ per NM (5.8%).

**SRN 7G**

425′ per NM (7%) until passing 3000′.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 350′ per NM | 438 | 583 | 875 | 1167 | 1458 | 1750 |
| 425′ per NM | 531 | 708 | 1063 | 1417 | 1771 | 2125 |
| 462′ per NM | 578 | 770 | 1155 | 1540 | 1925 | 2310 |

NOT TO SCALE

| SID | ROUTING |
|---|---|
| **SRN 7G** | On 358° track to MMP 4.1 DME, turn RIGHT, intercept SRN R-305 inbound to SRN. |
| **SRN 5H** | Climb on 358° track, at 1300′ turn RIGHT ( **CAT C:** 070° track), intercept MMP R-038 (038° bearing from MMP) to D5 MMP, turn RIGHT, intercept SRN R-305 inbound to SRN. |

*CHANGES:* SIDs completley revised.

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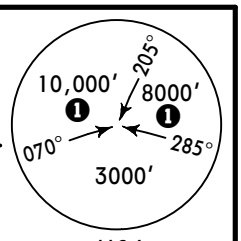
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles lower than 200′ above DER. |
|---|---|




MSA
MMP VOR

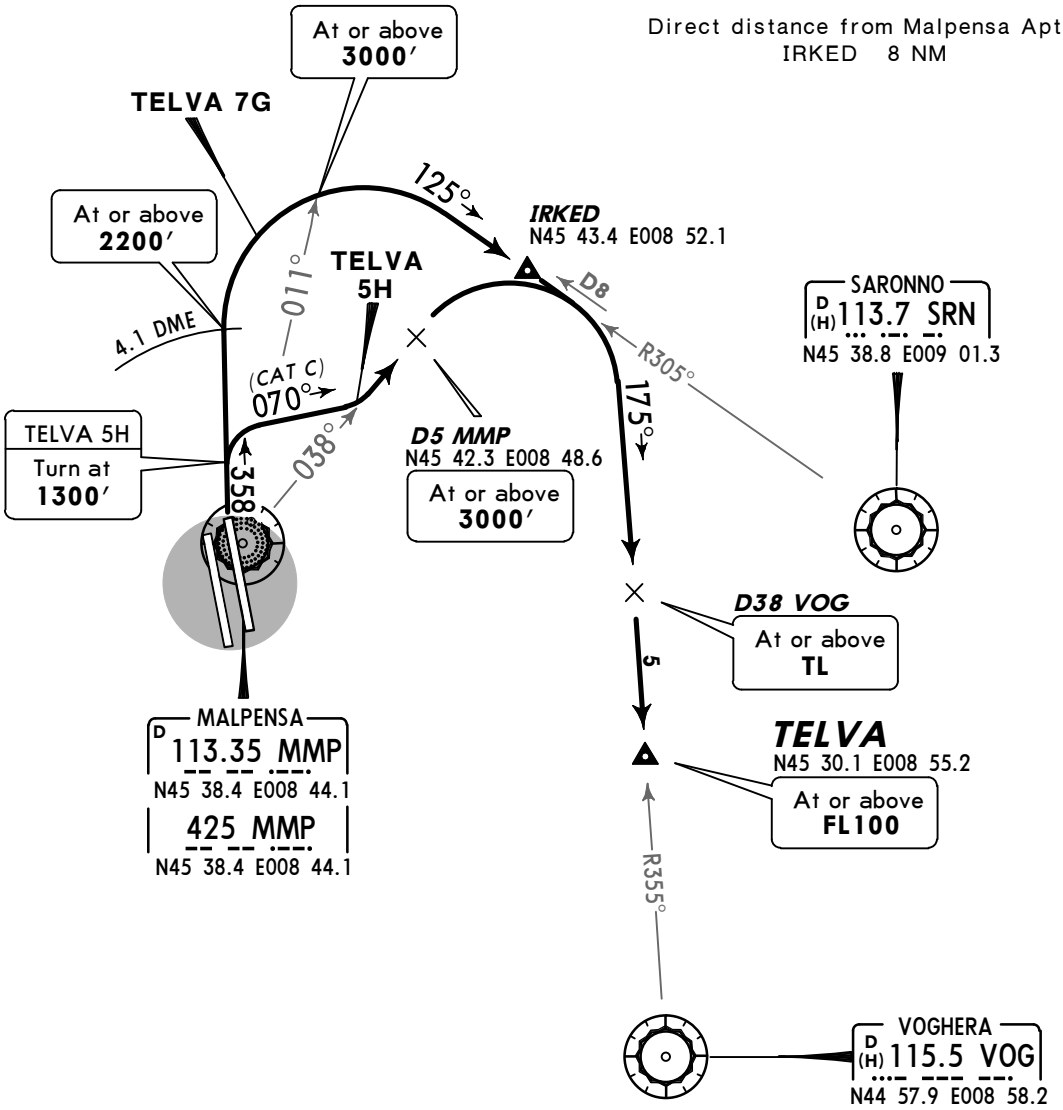
❶ 6000′
within 10 NM

# TELVA 7G *[TELV7G]*
# TELVA 5H *[TELV5H]*
# RWY 35R DEPARTURES

BY ATC

FOR TRANSITIONS FROM TELVA REFER TO CHART 10-3U

Direct distance from Malpensa Apt to:
IRKED 8 NM




These SIDs require minimum climb gradients of

**TELVA 7G**

425′ per NM (7%) until passing TL.

**TELVA 5H**

462′ per NM (7.6%) until passing 3000′, then 350′ per NM (5.8%).

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 350′ per NM | 438 | 583 | 875 | 1167 | 1458 | 1750 |
| 425′ per NM | 531 | 708 | 1063 | 1417 | 1771 | 2125 |
| 462′ per NM | 578 | 770 | 1155 | 1540 | 1925 | 2310 |

NOT TO SCALE

| SID | ROUTING |
|---|---|
| **TELVA 7G** | On 358° track to MMP 4.1 DME, turn RIGHT, intercept SRN R-305 inbound to IRKED, turn RIGHT, intercept VOG R-355 inbound to TELVA. |
| **TELVA 5H** | Climb on 358° track, at 1300′ turn RIGHT ( **CAT C:** 070° track), intercept MMP R-038 (038° bearing from MMP NDB) to D5 MMP, turn RIGHT, intercept VOG R-355 inbound to VOG. |

*CHANGES:* SIDs completely revised.

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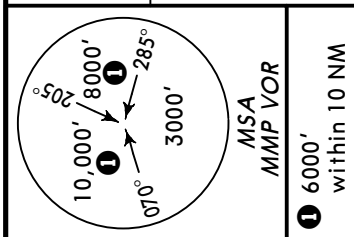
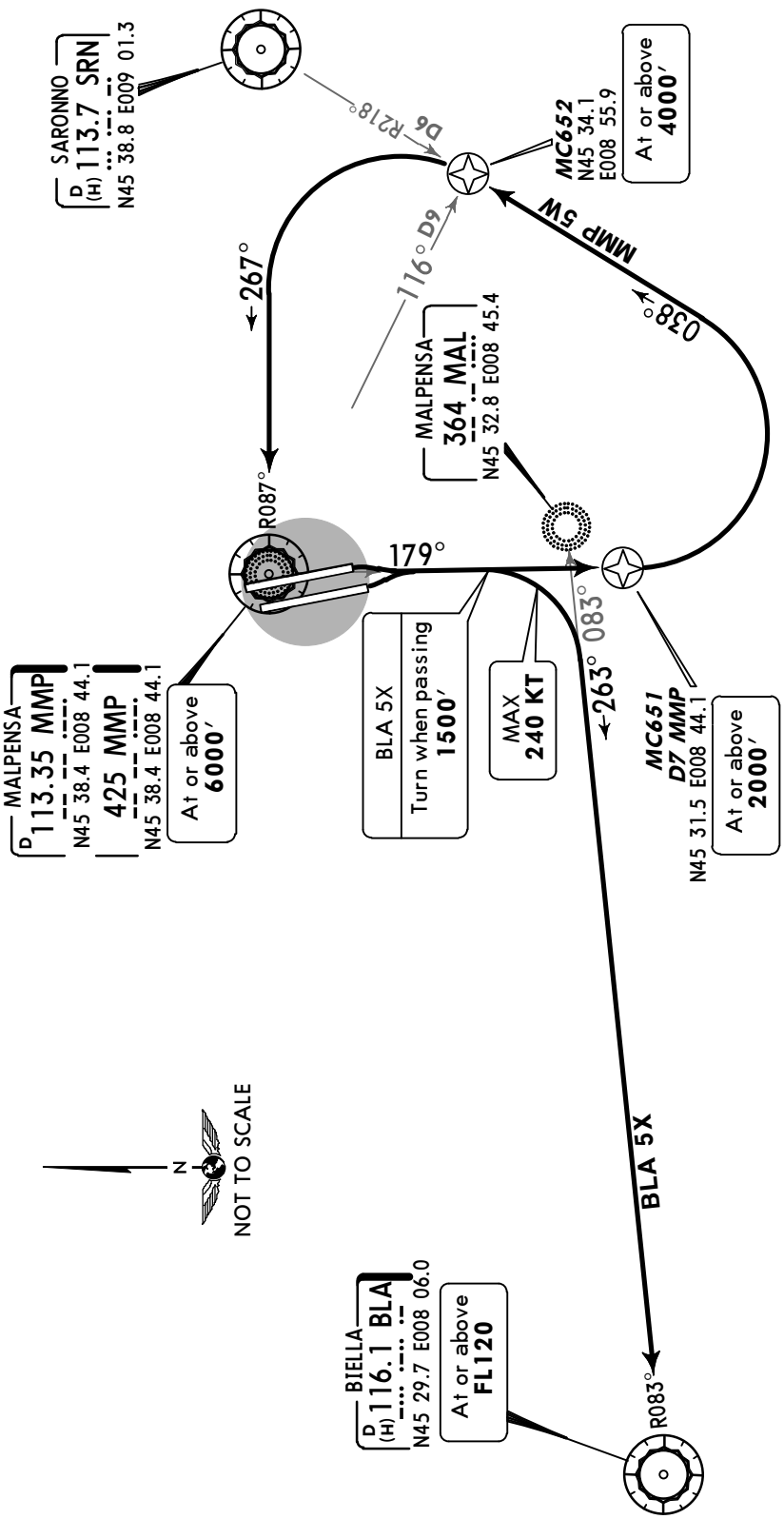
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles. |
|---|---|




# BLA 5X, MMP 5W
## RWYS 17L/R DEPARTURES
### CONVENTIONAL/P-RNAV (OVERLAY)
### FOR TRANSITIONS FROM BLA REFER TO CHARTS 10-3X1 & 10-3X2
### FOR TRANSITIONS FROM MMP REFER TO CHART 10-3M




Direct distance from Malpensa Apt to:
BLA 28 NM

These SIDs require a minimum climb gradient of
456′ per NM (7.5%)
**BLA 5X:** until passing 3000′.
**MMP 5W:** until passing 5000′.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 456′ per NM | 570 | 760 | 1140 | 1520 | 1900 | 2280 |

| SID | ROUTING |
|---|---|
| **BLA 5X ❷** | Climb on MMP R-179 (179° bearing from MMP NDB) until passing 1500′, turn RIGHT, intercept BLA R-083 inbound (263° bearing from MAL) to BLA. |
| **MMP 5W** | Intercept MMP R-179 (179° bearing from MMP NDB) to MC651, turn LEFT, intercept SRN R-218 inbound to MC652, turn LEFT to MMP. |

❷ SID subject to traffic in Cameri ATZ.

*CHANGES:* SIDs completely revised.

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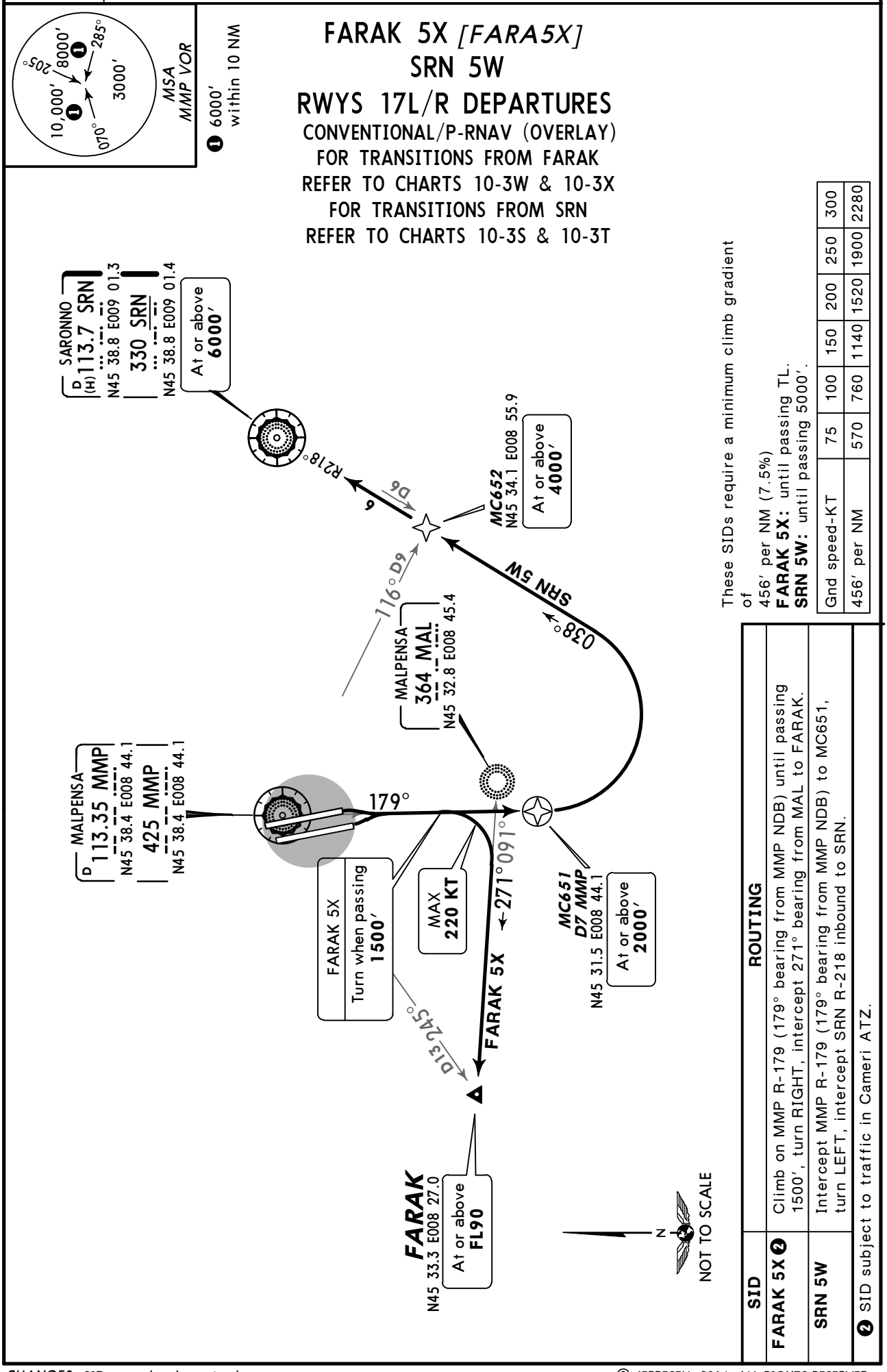
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles. |
|---|---|




*CHANGES:* SIDs completely revised.

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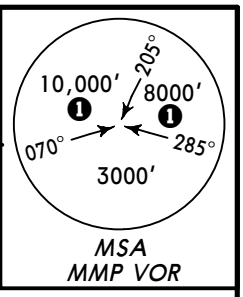
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′<br>1. SIDs are also minimum noise routings. Strict adherence within the limits of aircraft performance is mandatory.<br>2. EXPECT close-in obstacles. |
|---|---|

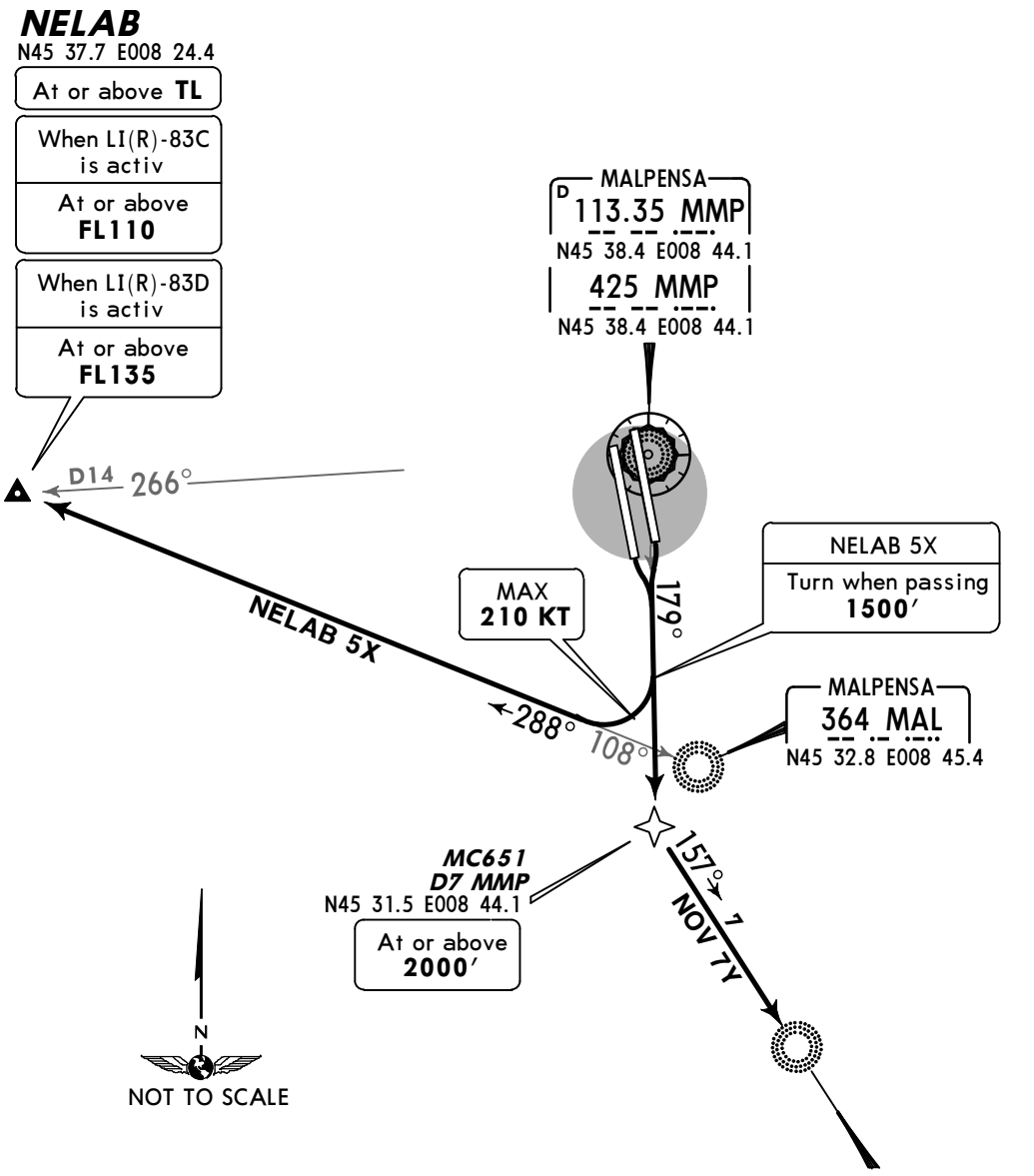



# NELAB 5X *[NELA5X]*
# NOV 7Y
# RWYS 17L/R DEPARTURES

CONVENTIONAL/P-RNAV (OVERLAY)

FOR TRANSITIONS FROM NELAB REFER TO CHART 10-3X3

FOR TRANSITIONS FROM NOV REFER TO CHART 10-3V




These SIDs require a minimum climb gradient of
456′ per NM (7.5%)
**NELAB 5X:** until passing FL90.
**NOV 7Y:** until passing 3000′.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 456′ per NM | 570 | 760 | 1140 | 1520 | 1900 | 2280 |

| SID | ROUTING |
|---|---|
| **NELAB 5X** ❷ | Climb on MMP R-179 (179° bearing from MMP NDB) until passing 1500′, turn RIGHT, intercept 288° bearing from MAL to NELAB. |
| **NOV 7Y** | Intercept MMP R-179 (179° bearing from MMP NDB) to MC651, turn LEFT, intercept 157° bearing to NOV. |

❷ SID subject to traffic in Cameri ATZ.

*CHANGES:* SIDs completely revised.

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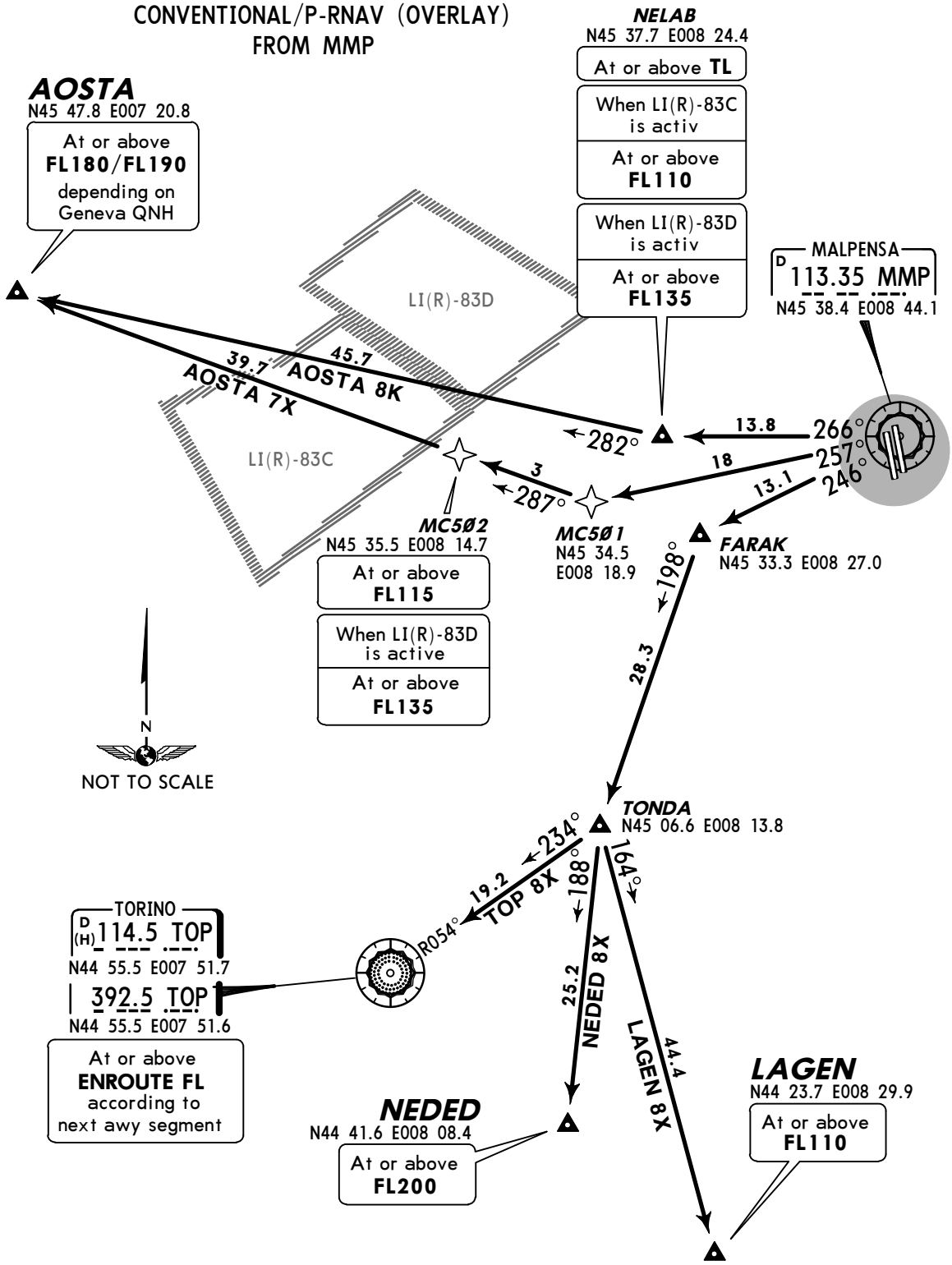
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# AOSTA 8K *[AOS8K]*, AOSTA 7X *[AOS7X]*
# LAGEN 8X *[LAG8X]*, NEDED 8X *[NED8X]*
# TOP 8X
## RWYS 17L/R, 35R TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM MMP




| TRANSITION | RWY | ROUTING |
|---|---|---|
| AOSTA 8K | 17L/R | At MMP proceed to NELAB, then to AOSTA. |
| AOSTA 7X | 35R | At MMP proceed to MC501, then via MC502 to AOSTA. |
| LAGEN 8X | 17L/R, 35R | At MMP proceed to FARAK, then to TONDA, then to LAGEN. |
| NEDED 8X | | At MMP proceed to FARAK, then to TONDA, then to NEDED. |
| TOP 8X | | At MMP proceed to FARAK, then to TONDA, then to TOP. |

*CHANGES:* RWYs 17L/R, transition LAGEN 9X renumbered 8X.

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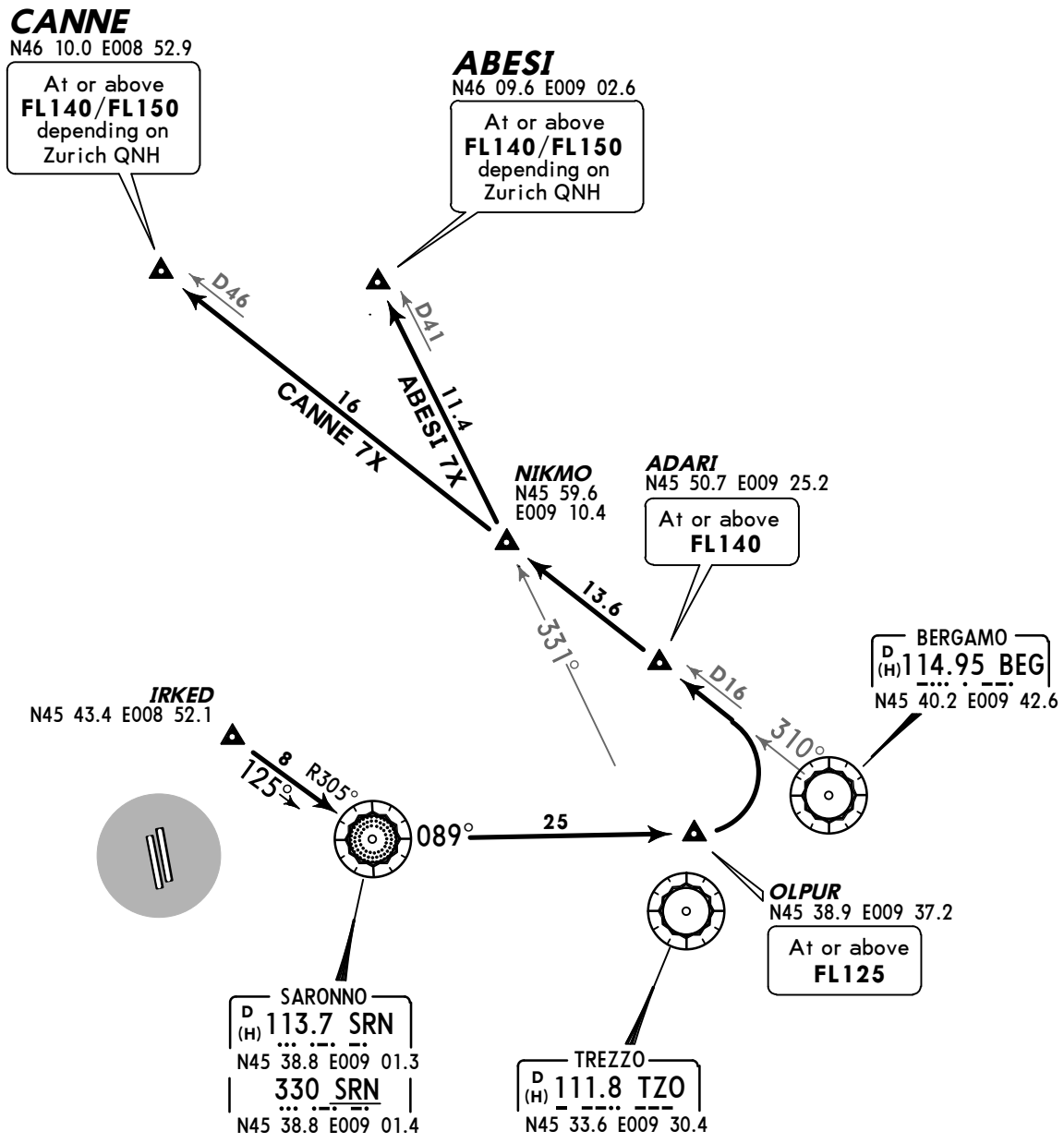
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′ |
|---|---|

# ABESI 7X *[ABE7X]*, CANNE 7X *[CAN7X]*
## RWY 35L TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM IRKED




Direct distance from Malpensa Apt to:
IRKED 8NM

N

NOT TO SCALE

| TRANSITION | ROUTING |
|---|---|
| **ABESI 7X** | At IRKED proceed to SRN, then to OLPUR, turn LEFT, intercept BEG R-310 via ADARI to NIKMO, turn RIGHT, intercept TZO R-331 to ABESI. |
| **CANNE 7X** | At IRKED proceed to SRN, then to OLPUR, turn LEFT, intercept BEG R-310 via ADARI and NIKMO to CANNE. |

*CHANGES:* None.

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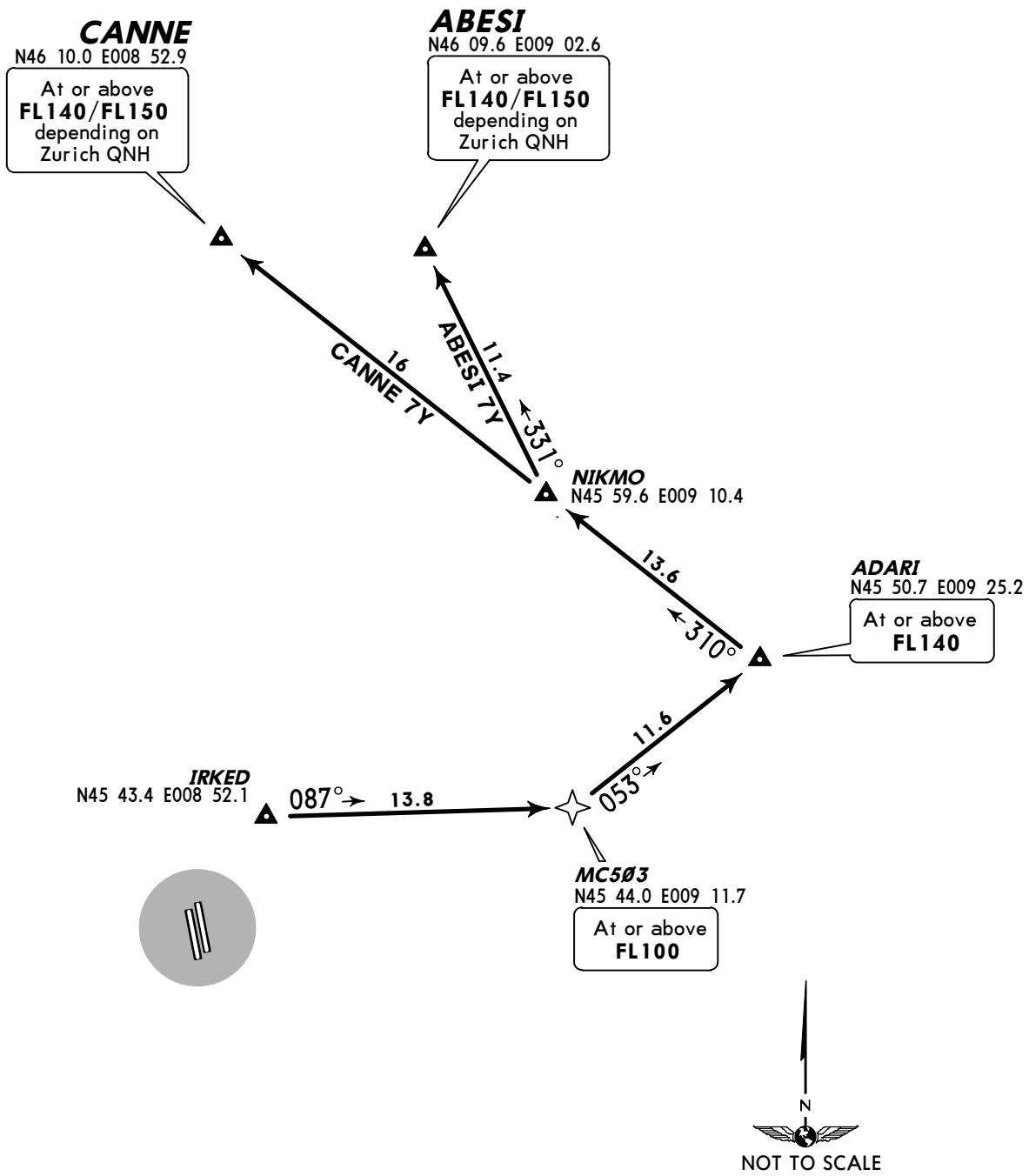
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# ABESI 7Y *[ABE7Y]*, CANNE 7Y *[CAN7Y]*
## RWY 35L TRANSITIONS
P-RNAV
FROM IRKED
BY ATC




These Transitions require a minimum climb gradient of
450′ per NM (7.4%) until passing FL130.

| Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 450′ per NM | 563 | 750 | 1125 | 1500 | 1875 | 2250 |

Direct distance from Malpensa Apt to:
IRKED 8NM

| TRANSITION | ROUTING |
|---|---|
| ABESI 7Y | IRKED - MC503 (FL100+) - ADARI (FL140+) - NIKMO - ABESI (FL140+/FL150+). |
| CANNE 7Y | IRKED - MC503 (FL100+) - ADARI (FL140+) - NIKMO - CANNE (FL140+/FL150+). |

*CHANGES:* Transitions completely revised.

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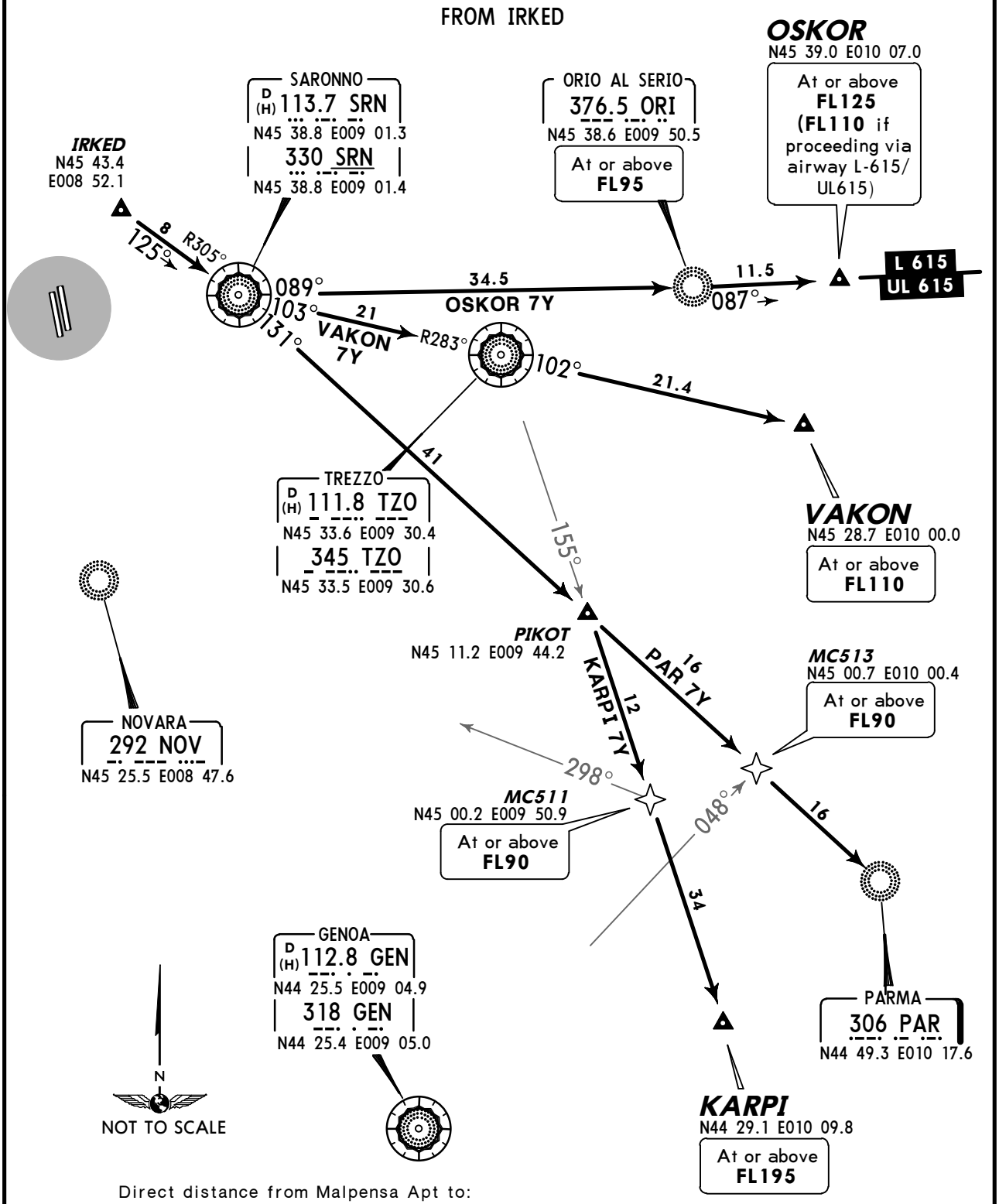
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# KARPI 7Y *[KAR7Y]*, OSKOR 7Y *[OSK7Y]*
# PAR 7Y, VAKON 7Y *[VAK7Y]*
## RWY 35L TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM IRKED




Direct distance from Malpensa Apt to:
IRKED 8NM

| TRANSITION | ROUTING |
|---|---|
| **KARPI 7Y** | At IRKED proceed to SRN, SRN R-131 to PIKOT, intercept TZO R-155 via MC511 to KARPI. |
| **OSKOR 7Y** | At IRKED proceed to SRN, then to ORI, then to OSKOR. |
| **PAR 7Y** | At IRKED proceed to SRN, then via MC513 to PAR. |
| **VAKON 7Y** | At IRKED proceed to SRN, then via TZO to VAKON. |

*CHANGES:* Transitions completely revised.

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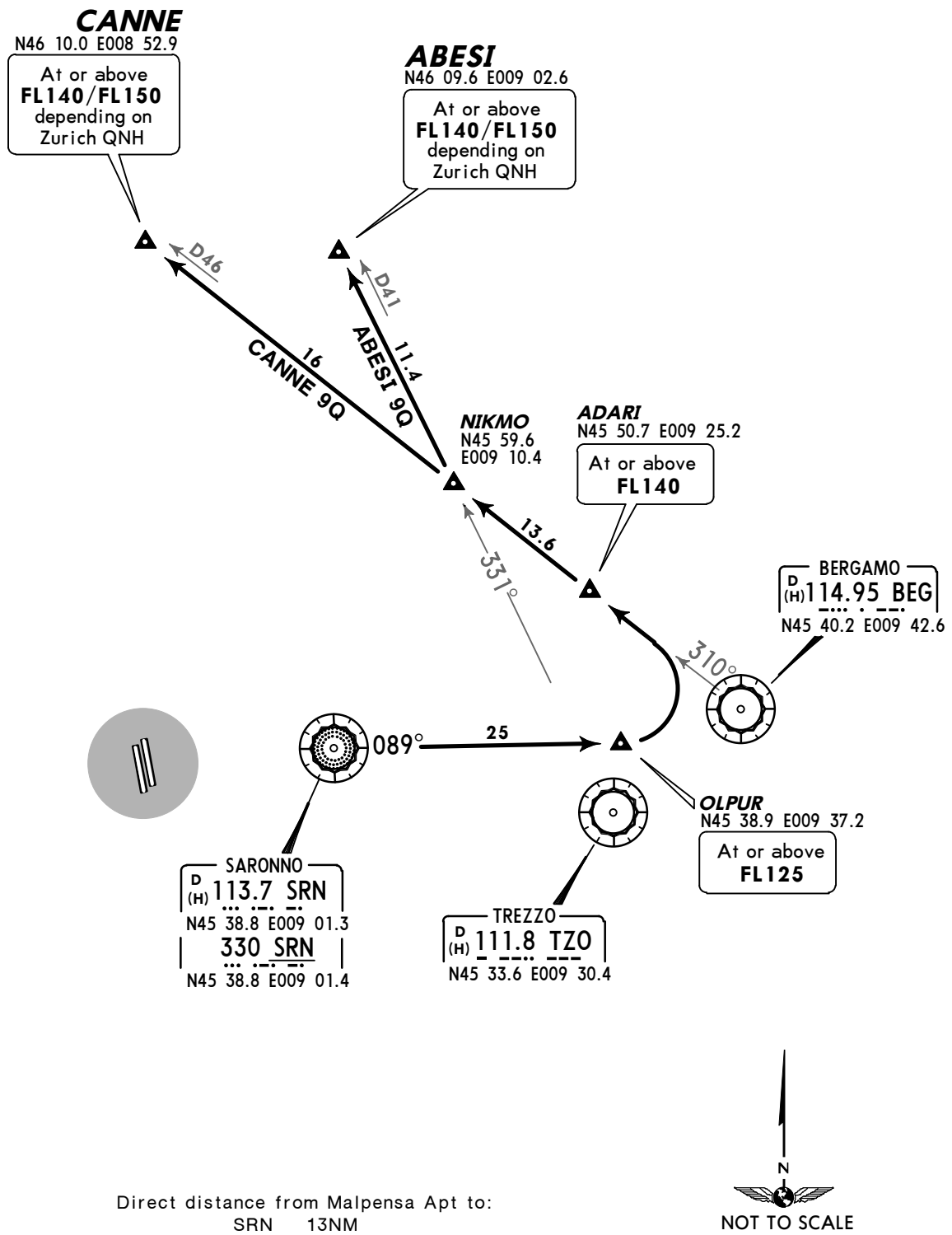
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′ |
|---|---|

# ABESI 9Q *[ABE9Q]*, CANNE 9Q *[CAN9Q]*
## RWYS 17L/R, 35R TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM SRN




Direct distance from Malpensa Apt to:
SRN 13NM

| TRANSITION | ROUTING |
|---|---|
| **ABESI 9Q** | At SRN proceed to OLPUR, turn LEFT, intercept BEG R-310 via ADARI to NIKMO, turn RIGHT, intercept TZO R-331 to ABESI. |
| **CANNE 9Q** | At SRN proceed to OLPUR, turn LEFT, intercept BEG R-310 via ADARI and NIKMO to CANNE. |

*CHANGES:* Chart reindexed.

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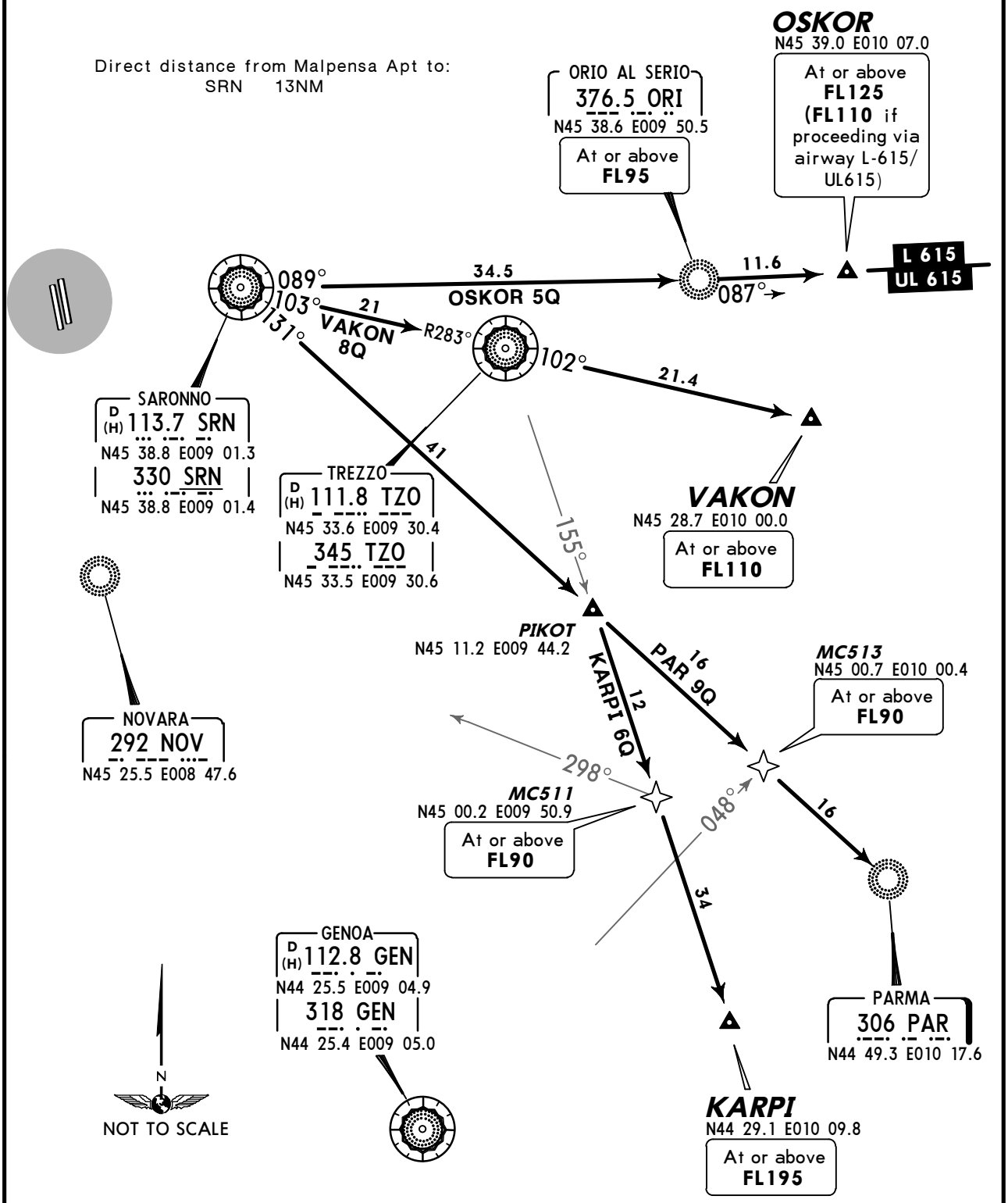
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′ |
|---|---|

# KARPI 6Q *[KAR6Q]*, OSKOR 5Q *[OSK5Q]*
# PAR 9Q, VAKON 8Q *[VAK8Q]*
# RWYS 17L/R, 35R TRANSITIONS
## CONVENTIONAL/P-RNAV (OVERLAY)
## FROM SRN




| TRANSITION | RWY | ROUTING |
|---|---|---|
| KARPI 6Q | 35R | At SRN, SRN R-131 to PIKOT, intercept TZO R-155 to KARPI. |
| OSKOR 5Q | 17L/R, 35R | At SRN proceed via ORI to OSKOR. |
| PAR 9Q | 35R | At SRN proceed to PAR. |
| VAKON 8Q | 17L/R, 35R | At SRN proceed via TZO to VAKON. |

*CHANGES:* Transitions revised; chart reindexed.

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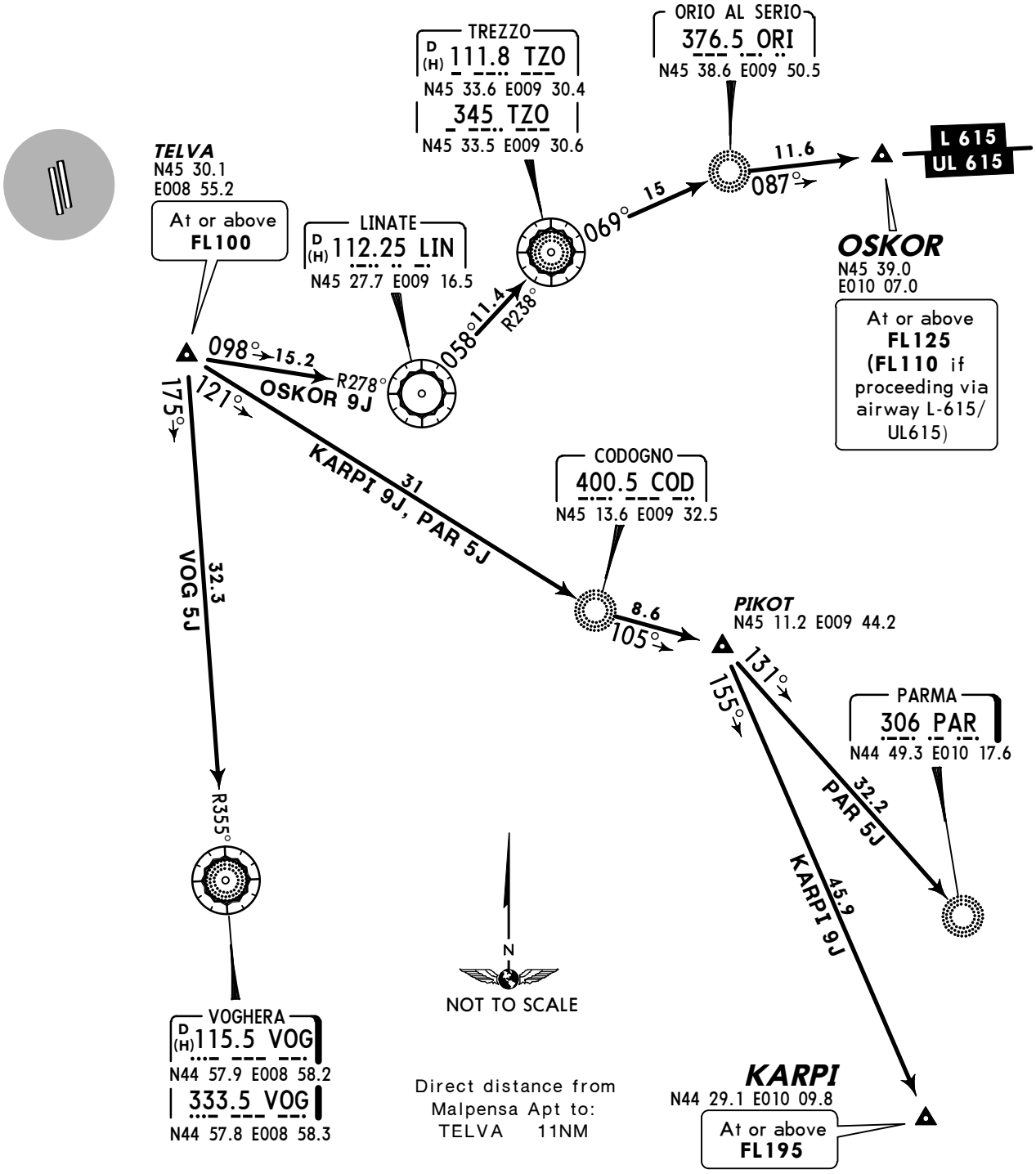
Apt Elev 768′

Trans level: By ATC  Trans alt: 6000′

# KARPI 9J *[KAR9J]*, OSKOR 9J *[OSK9J]*
# PAR 5J, VOG 5J
# RWY 35R TRANSITIONS
## CONVENTIONAL/P-RNAV (OVERLAY)
## FROM TELVA
## BY ATC




| TRANSITION | ROUTING |
|---|---|
| KARPI 9J | At TELVA, intercept 121° bearing to COD, then to PIKOT, then to KARPI. |
| OSKOR 9J | At TELVA, intercept LIN R-278 inbound to LIN, turn LEFT to TZO, then to ORI, then to OSKOR. |
| PAR 5J | At TELVA, intercept 121° bearing to COD, then to PIKOT, then to PAR. |
| VOG 5J | At TELVA, intercept VOG R-355 inbound to VOG. |

*CHANGES:* Availability; chart reindexed.

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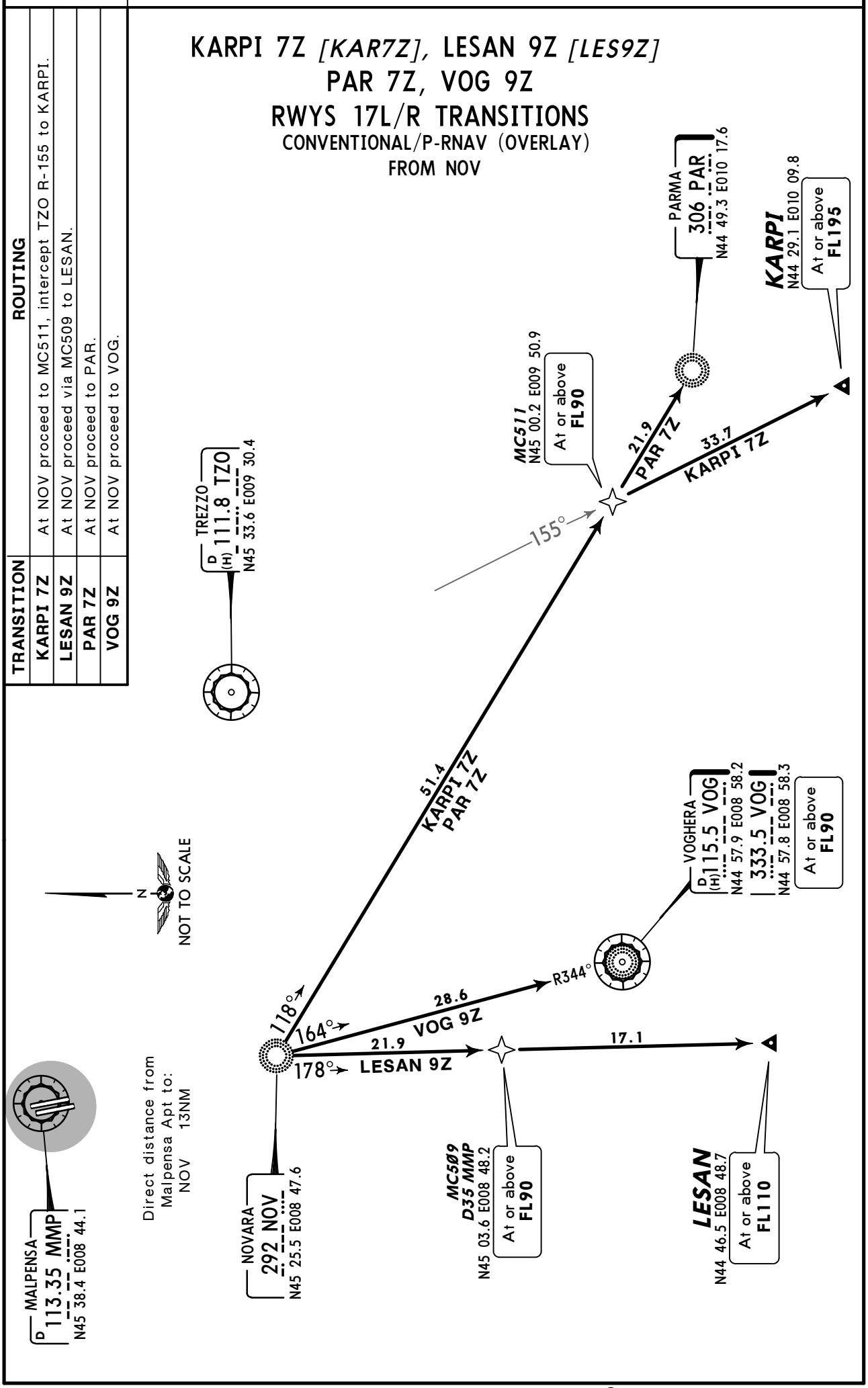
Apt Elev
768′

Trans level: By ATC  Trans alt: 6000′

# KARPI 7Z *[KAR7Z]*, LESAN 9Z *[LES9Z]*
# PAR 7Z, VOG 9Z
# RWYS 17L/R TRANSITIONS
## CONVENTIONAL/P-RNAV (OVERLAY)
## FROM NOV

| TRANSITION | ROUTING |
|---|---|
| KARPI 7Z | At NOV proceed to MC511, intercept TZO R-155 to KARPI. |
| LESAN 9Z | At NOV proceed via MC509 to LESAN. |
| PAR 7Z | At NOV proceed to PAR. |
| VOG 9Z | At NOV proceed to VOG. |




*CHANGES:* Transitions completely revised.

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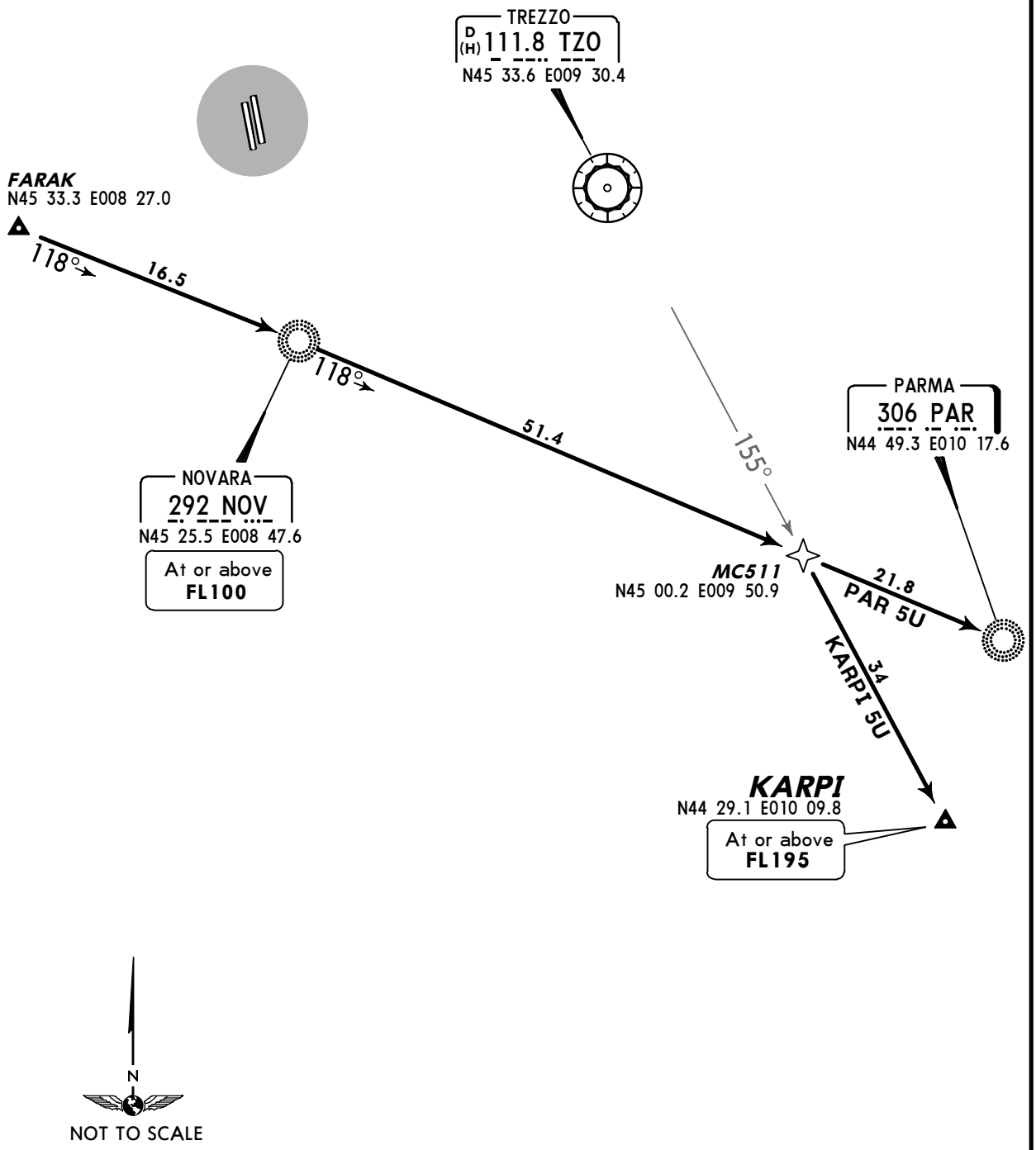
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# KARPI 5U *[KAR5U]*, PAR 5U
## RWY 35L TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM FARAK

Direct distance from Malpensa Apt to:
FARAK 12NM




| TRANSITION | ROUTING |
|---|---|
| KARPI 5U | At FARAK proceed to NOV, 118° bearing, intercept TZO R-155 to KARPI. |
| PAR 5U | At FARAK proceed to PAR. |

*CHANGES:* Transitions completely revised.

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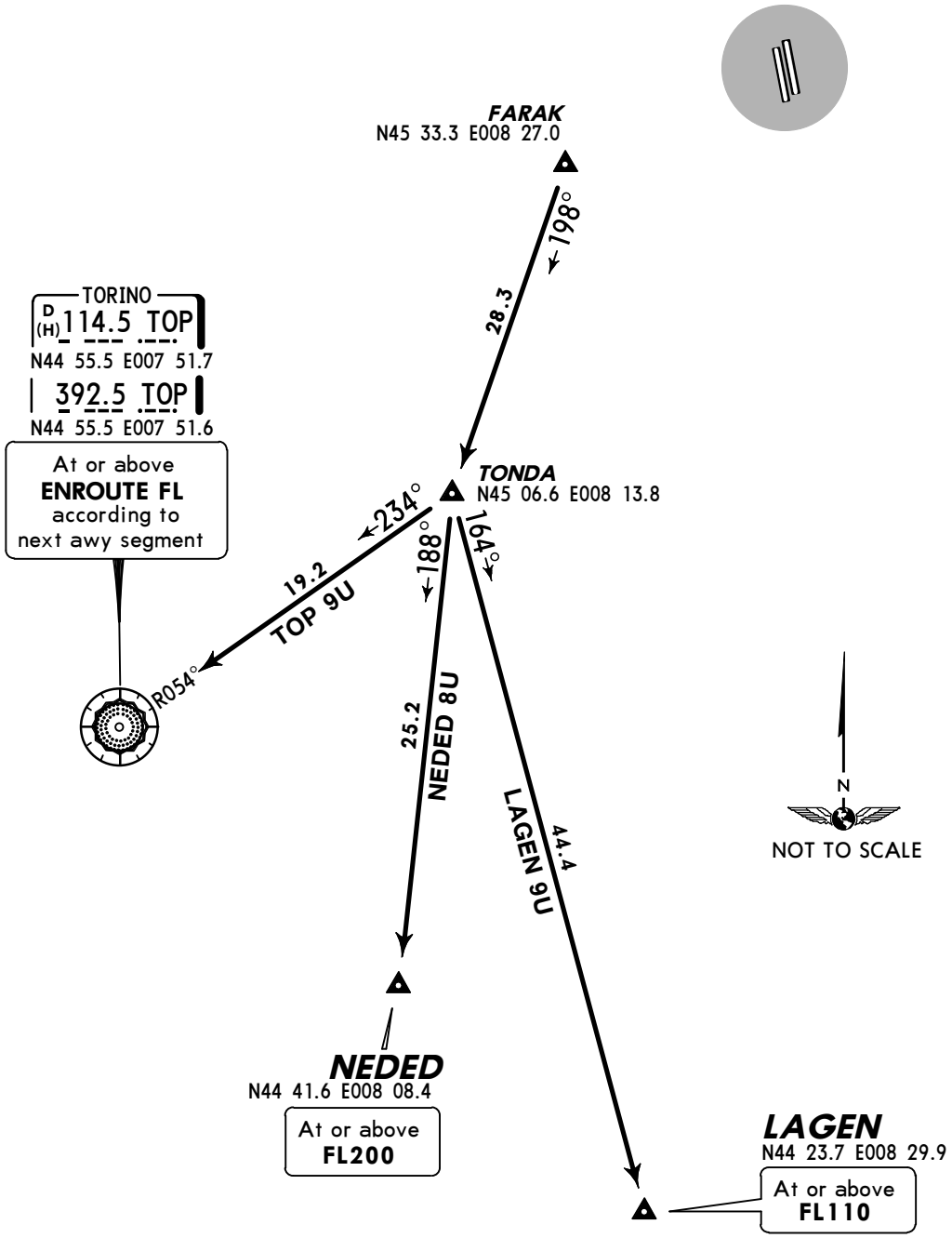
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′ |
|---|---|

# LAGEN 9U *[LAG9U]*, NEDED 8U *[NED8U]*, TOP 9U
## RWYS 17L/R, 35L TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM FARAK

Direct distance from Malpensa Apt to:
FARAK 12NM




| TRANSITION | ROUTING |
|---|---|
| LAGEN 9U | At FARAK proceed to TONDA, then to LAGEN. |
| NEDED 8U | At FARAK proceed to TONDA, then to NEDED. |
| TOP 9U | At FARAK proceed to TONDA, then to TOP. |

*CHANGES:* Chart reindexed.

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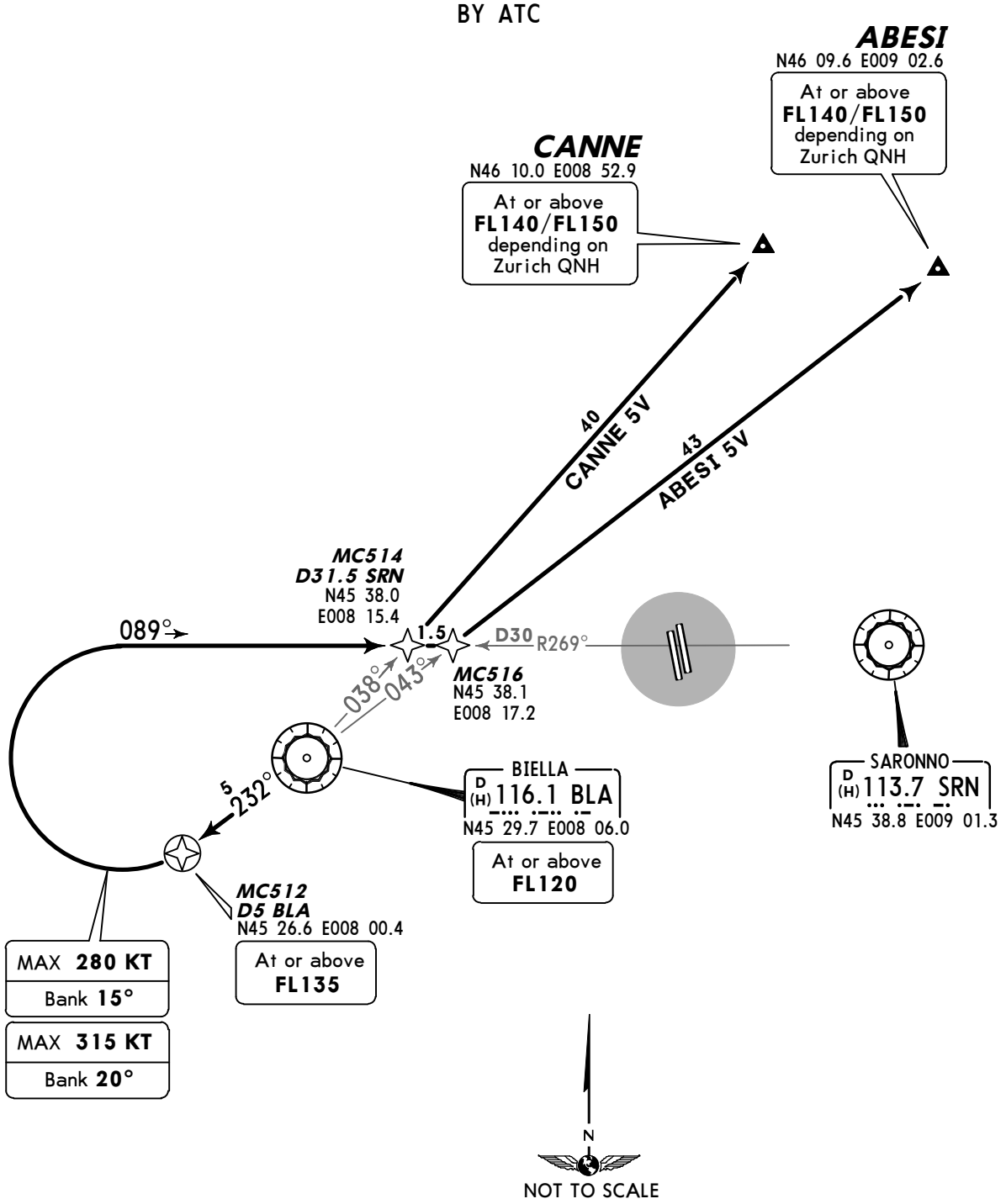
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# ABESI 5V *[ABE5V]*
# CANNE 5V *[CAN5V]*
# RWY 35L TRANSITIONS
## CONVENTIONAL/P-RNAV (OVERLAY)
## FROM BLA
## BY ATC




Direct distance from Malpensa Apt to:
BLA 27NM

| TRANSITION | ROUTING |
|---|---|
| **ABESI 5V** | At BLA, intercept BLA R-232 to MC512, turn RIGHT, intercept SRN R-269 inbound, intercept BLA R-043 to ABESI. |
| **CANNE 5V** | At BLA, intercept BLA R-232 to MC512, turn RIGHT, intercept SRN R-269 inbound, intercept BLA R-038 to CANNE. |

*CHANGES:* None.

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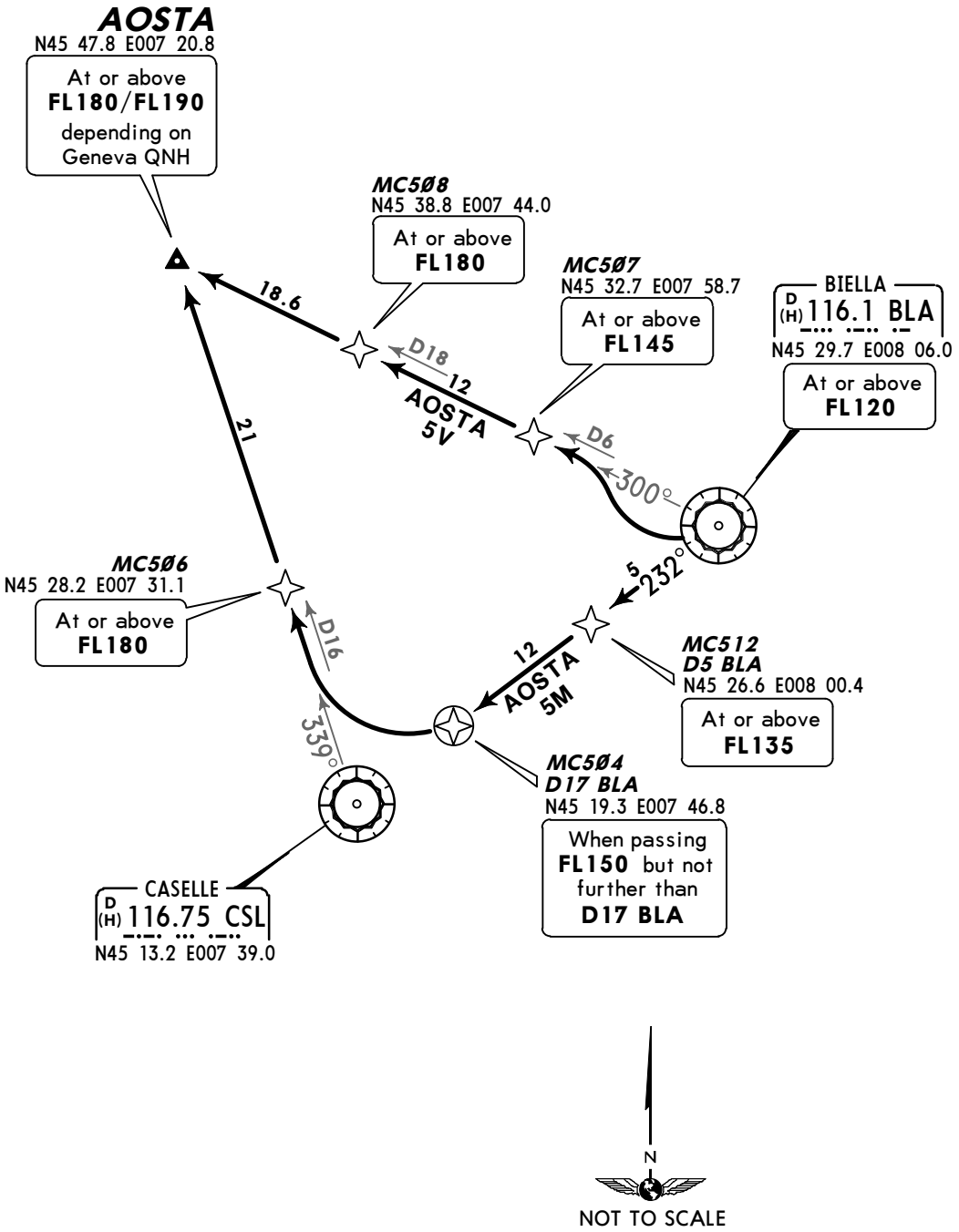
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# AOSTA 5M[AOS5M]
# AOSTA 5V[AOS5V]
## RWYYS 17L/R, 35L TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM BLA




Direct distance from Malpensa Apt to:
BLA 27NM

| TRANSITION | ROUTING |
|---|---|
| **AOSTA 5M** | At BLA turn LEFT, BLA R-232 until passing FL150, but not further than D17 BLA, turn RIGHT, intercept CSL R-339 to AOSTA. |
| **AOSTA 5V** | At BLA proceed to MC507, then via MC508 to AOSTA. |

*CHANGES:* Crossings revised.

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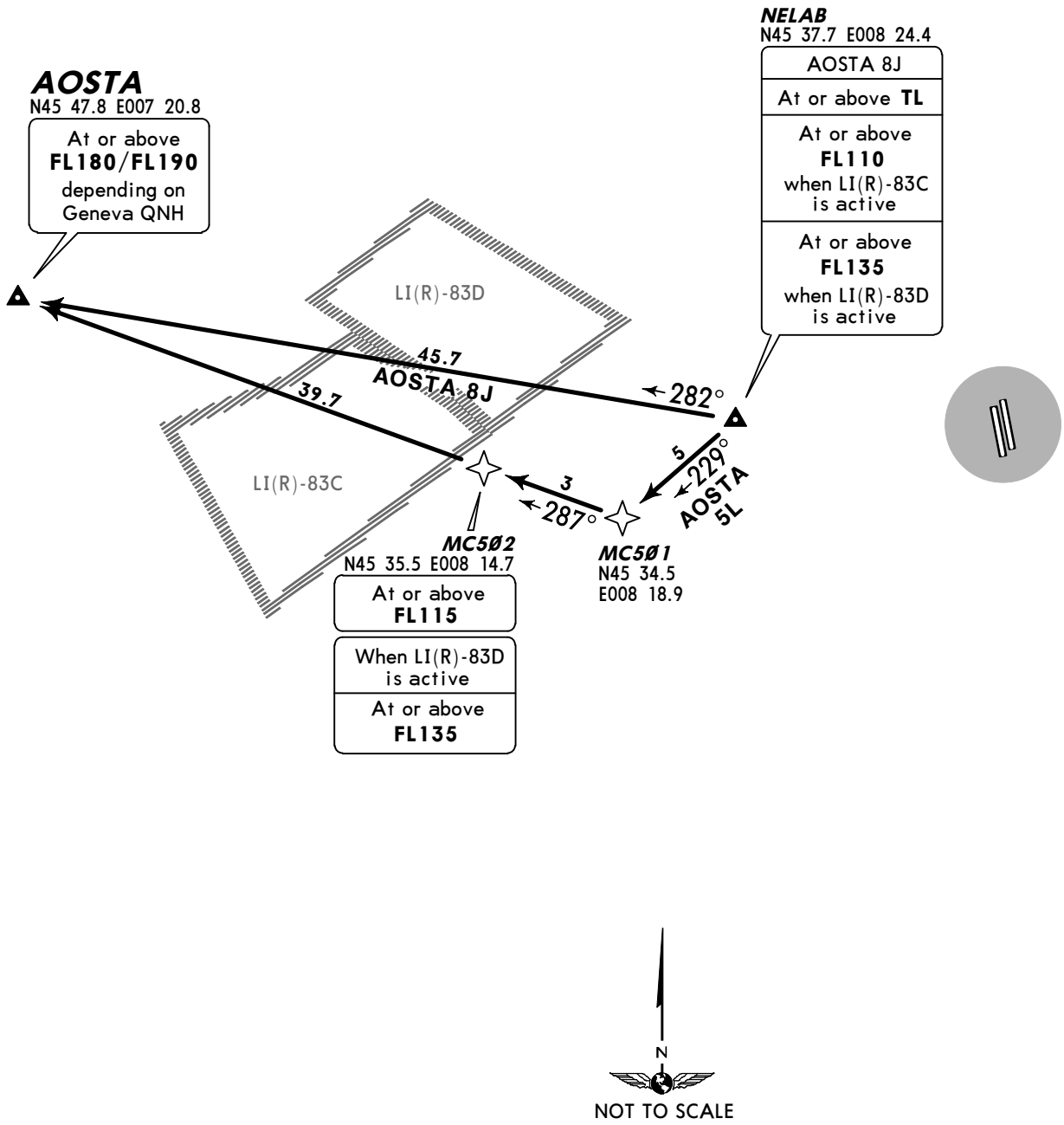
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# AOSTA 8J *[AOS8J]*, AOSTA 5L *[AOS5L]*
## RWYS 17L/R, 35L TRANSITIONS
### FROM NELAB

Direct distance from Malpensa Apt to:
NELAB 13NM




| TRANSITION | RWY | ROUTING |
|---|---|---|
| **AOSTA 8J** CONVENTIONAL/ P-RNAV (OVERLAY) | **17L/R** | At NELAB proceed to AOSTA. |
| **AOSTA 5L** P-RNAV | **35L** | At NELAB proceed to MC501, then via MC502 to AOSTA. |

*CHANGES:* Transitions completely revised.

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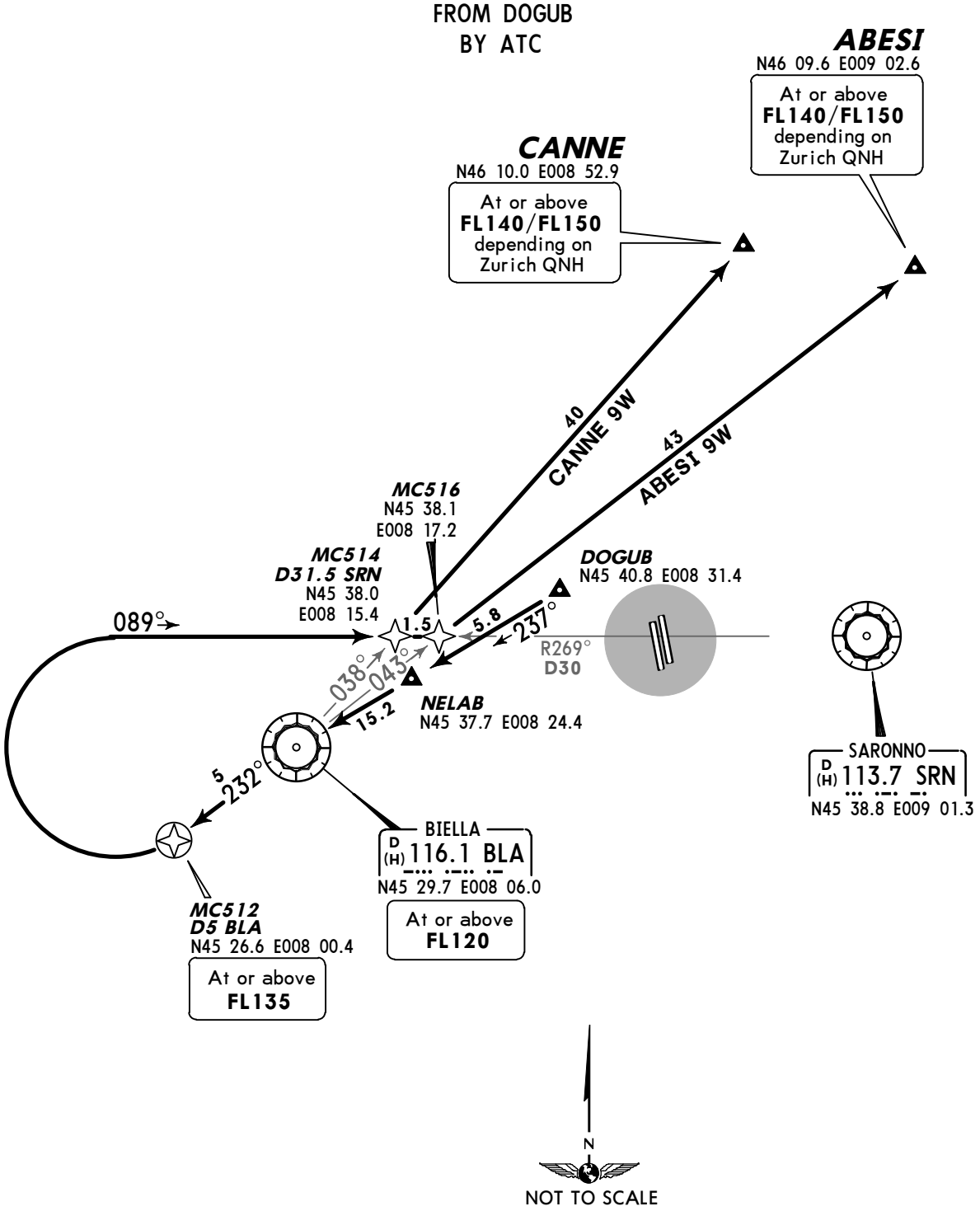
| Apt Elev 768′ | Trans level: By ATC Trans alt: 6000′ |
|---|---|

# ABESI 9W *[ABE9W]*
# CANNE 9W *[CAN9W]*
# RWY 35R TRANSITIONS
## CONVENTIONAL/P-RNAV (OVERLAY)
## FROM DOGUB
## BY ATC




Direct distance from Malpensa Apt to:
DOGUB 9NM

| TRANSITION | ROUTING |
|---|---|
| **ABESI 9W** | At DOGUB proceed via NELAB to BLA, BLA R-232 to MC512, turn RIGHT intercept SRN R-269 inbound, intercept BLA R-043 to ABESI. |
| **CANNE 9W** | At DOGUB proceed via NELAB to BLA, BLA R-232 to MC512, turn RIGHT, intercept SRN R-269 inbound, intercept BLA R-038 to CANNE. |

*CHANGES:* Transitions completely revised.

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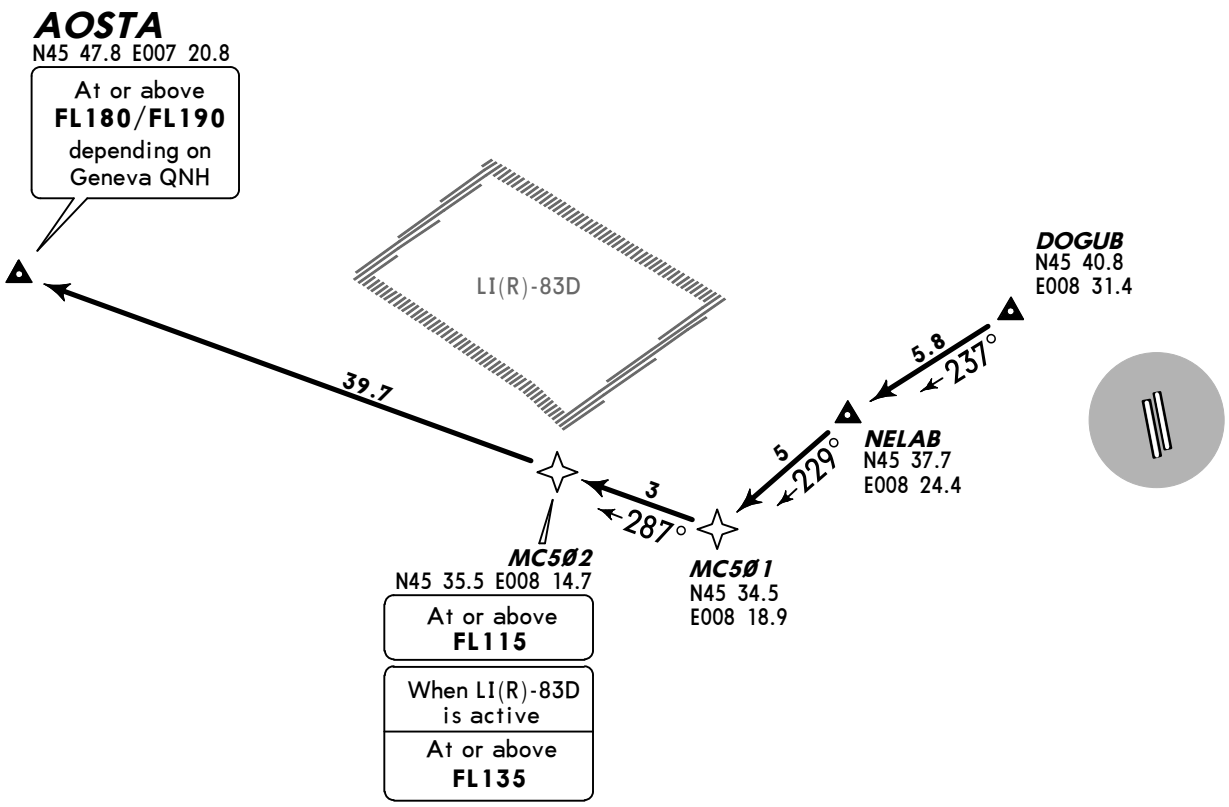
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# AOSTA 7W[AOS7W]
## RWY 35R TRANSITION
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM DOGUB



NOT TO SCALE

Direct distance from Malpensa Apt to:
DOGUB 9NM

**ROUTING**

At DOGUB proceed via NELAB to MC501, then via MC502 to AOSTA.

*CHANGES:* None.

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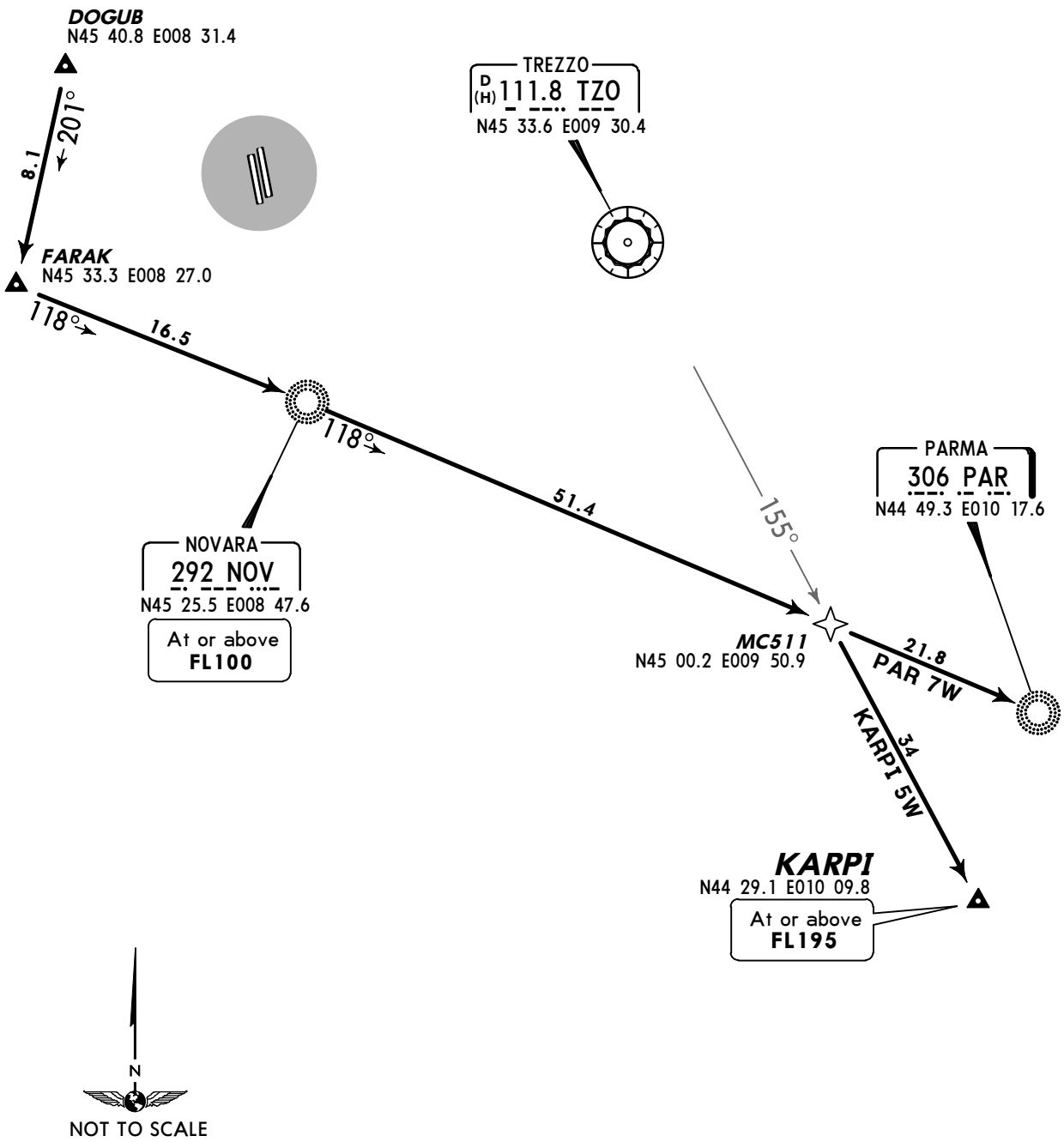
| Apt Elev 768′ | Trans level: By ATC  Trans alt: 6000′ |
|---|---|

# KARPI 5W *[KAR5W]*, PAR 7W
## RWY 35R TRANSITIONS
### CONVENTIONAL/P-RNAV (OVERLAY)
### FROM DOGUB
### BY ATC

Direct distance from Malpensa Apt to:
DOGUB 9NM




| TRANSITION | ROUTING |
|---|---|
| **KARPI 5W** | At DOGUB proceed to FARAK, then to NOV, 118° bearing, intercept TZO R-155 to KARPI. |
| **PAR 7W** | At DOGUB proceed to FARAK, then via NOV to PAR. |

*CHANGES:* Transition KARPI 5W availability.

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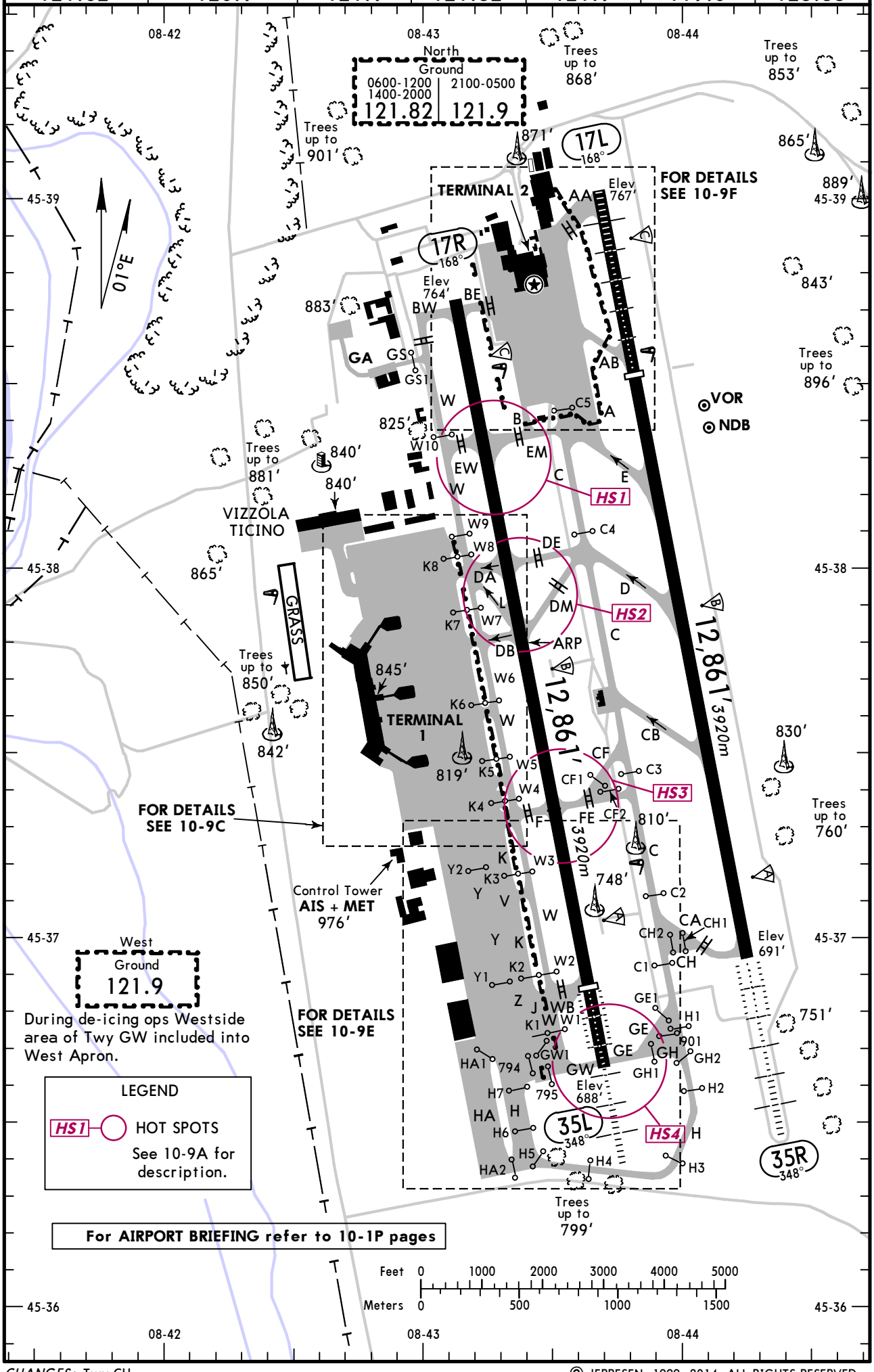
| ATIS Departure | *MALPENSA Delivery | Ground West | Ground North 0600-1200 1400-2000 | Ground North 2100-0500 | Tower Rwy 17L/35R | Tower Rwy 17R/35L |
|---|---|---|---|---|---|---|
| 121.62 | 120.9 | 121.9 | 121.82 | 121.9 | 119.0 | 128.35 |




CHANGES: Twy CH.

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ADDITIONAL RUNWAY INFORMATION

| RWY | | USABLE LENGTHS LANDING BEYOND Threshold | Glide Slope | TAKE-OFF | WIDTH |
|---|---|---|---|---|---|
| 17L | HIRL *(60m)* CL *(15m)* HIALS PAPI (3.0°) RVR | 9767′ *2977m* | 8716′ *2657m* | ❷ | 197′ *60m* |
| 35R | HIRL *(60m)* CL *(15m)* HIALS-II SFL TDZ ❶ RVR | | 11,857′ *3614m* | | |

❶ PAPI (3.0°), HST-D
❷ TAKE-OFF RUN AVAILABLE
RWY 17L: From rwy head 12,861′ (3920m)
twy AB int 9744′ (2970m)

| | | | | | |
|---|---|---|---|---|---|
| 17R | HIRL *(60m)* CL *(15m)* REIL PAPI (3.0°) RVR | | | ❹ | 197′ *60m* |
| 35L | HIRL *(60m)* CL *(15m)* HIALS-II SFL TDZ ❸ RVR | 11,532′ *3515m* | 10,505′ *3202m* | | |

❸ PAPI (3.0°), HST-L
❹ TAKE-OFF RUN AVAILABLE
RWY 17R: From rwy head 12,861′ (3920m)
twy EW/EM int 9859′ (3005m)
RWY 35L: From rwy head 12,861′ (3920m)
twy WB int 11,532′ (3515m)
twy F/FE int 8366′ (2550m)

## HOT SPOTS

(For information only, not to be construed as ATC instructions.)

**HS1** Rwy crossing must be cleared by Tower.

**HS2** When on twy DE or DM rwy crossing must be cleared by Tower.
On rollout do not use Twy DE or DM to vacate the rwy unless instructed by ATC.

**HS3** Rwy crossing must be cleared by Tower.
On rollout do not use Twy F or FE to vacate the rwy unless instructed by ATC.

**HS4** Unified CAT I/II/III holding position located 155m from rwy centerline.

**Standard** TAKE-OFF [1]

| | LVP must be in Force | | | | | |
|---|---|---|---|---|---|---|
| | [2] Approved Operators HIRL, CL & mult. RVR req | RL, CL & mult. RVR req | RL & CL | RCLM (DAY only) or RL | RCLM (DAY only) or RL | NIL (DAY only) |
| A | *125m* | *150m* | *200m* | *250m* | *400m* | *500m* |
| B | | | | | | |
| C | | | | | | |
| D | *150m* | *200m* | *250m* | *300m* | | |

[1] Operators applying U.S. Ops Specs: CL required below 300m; approved HUD required below 150m.
[2] With approved guidance system: Rwys 35L/35R ABCD 75m.

*CHANGES:* None.

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# LIMC/MXP
MALPENSA

**RVR 550m or Less**

JEPPESEN

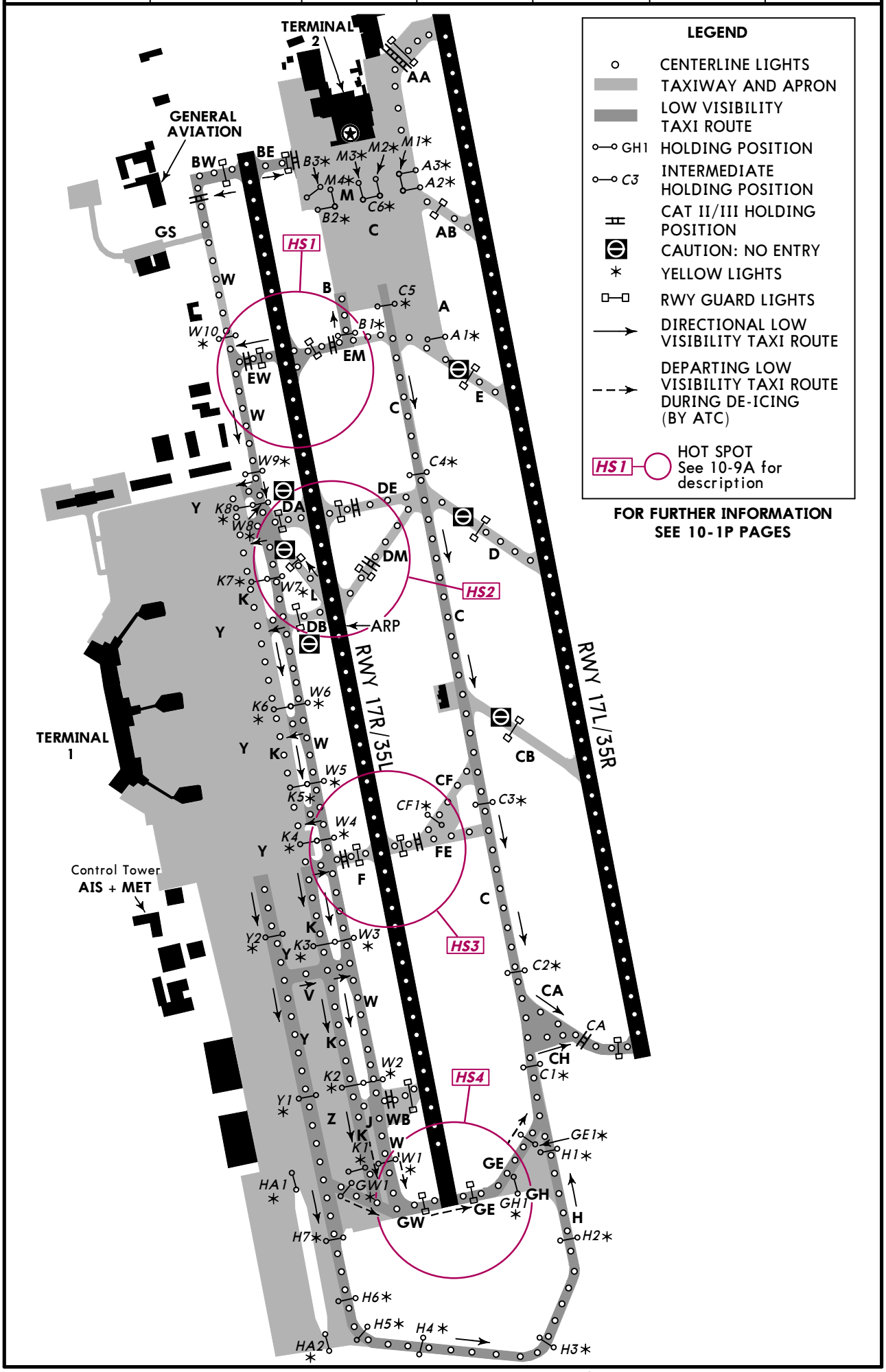
18 APR 14

**Eff 1 May**

10-9B

# MILAN, ITALY
## LOW VISIBILITY TAXI ROUTES

| ATIS Departure | *MALPENSA Delivery | Ground West | Ground North 0600-1200 1400-2000 | Ground North 2100-0500 | Tower Rwy 17L/35R | Tower Rwy 17R/35L |
|---|---|---|---|---|---|---|
| 121.62 | 120.9 | 121.9 | 121.82 | 121.9 | 119.0 | 128.35 |




*CHANGES:* Twy CH.

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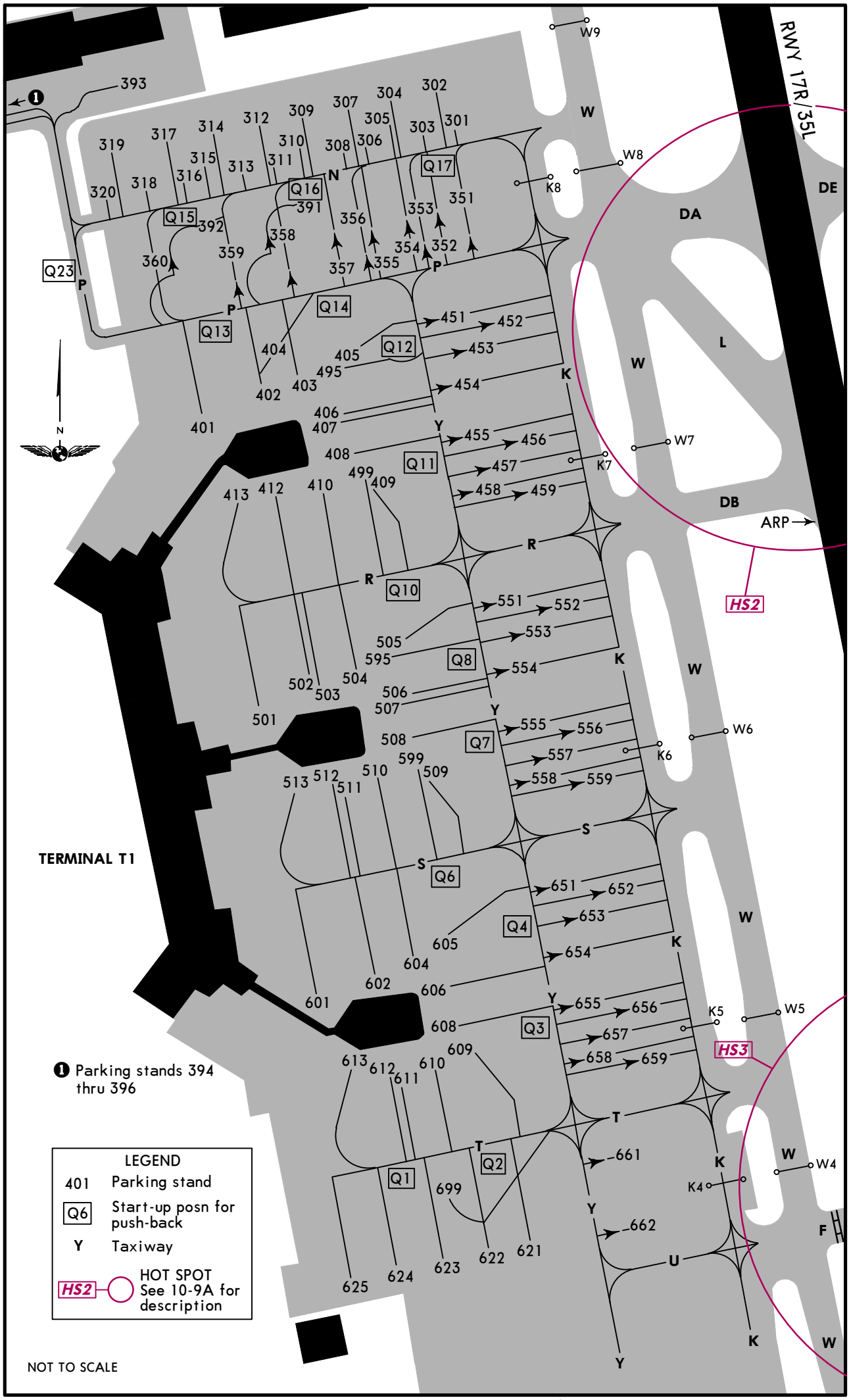


CHANGES: None.

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## INS COORDINATES

| STAND No. | COORDINATES | STAND No. | COORDINATES |
|---|---|---|---|
| 301 thru 305 | N45 38.1 E008 43.0 | 511 thru 513 | N45 37.6 E008 42.9 |
| 306 thru 312 | N45 38.1 E008 42.9 | 551 | N45 37.8 E008 43.1 |
| 313 thru 318 | N45 38.1 E008 42.8 | 552 | N45 37.7 E008 43.1 |
| 319 | N45 38.1 E008 42.7 | 553 | N45 37.8 E008 43.1 |
| 320 | N45 38.0 E008 42.7 | 554, 555 | N45 37.7 E008 43.1 |
| 351 thru 355 | N45 38.0 E008 43.0 | 556, 557 | N45 37.7 E008 43.2 |
| 356 thru 359 | N45 38.0 E008 42.9 | 558, 559 | N45 37.6 E008 43.2 |
| 360 thru 365 | N45 38.0 E008 42.8 | 595 | N45 37.7 E008 43.0 |
| 392 | N45 38.1 E008 42.7 | 599 | N45 37.6 E008 43.0 |
| 394 | N45 38.1 E008 42.5 | 601 | N45 37.5 E008 42.9 |
| 395 | N45 38.1 E008 42.6 | 602 thru 606 | N45 37.5 E008 43.0 |
| 396 | N45 38.1 E008 42.5 | 608, 609 | N45 37.5 E008 43.1 |
| 401 | N45 37.9 E008 42.8 | 610 thru 612 | N45 37.4 E008 43.0 |
| 402 thru 407 | N45 37.9 E008 42.9 | 613 | N45 37.4 E008 42.9 |
| 408 | N45 37.8 E008 42.9 | 621, 622 | N45 37.3 E008 43.1 |
| 409 | N45 37.8 E008 43.0 | 623 thru 625 | N45 37.3 E008 43.0 |
| 410, 412 | N45 37.8 E008 42.9 | 651, 652 | N45 37.6 E008 43.2 |
| 413 | N45 37.8 E008 42.8 | 653 thru 658 | N45 37.5 E008 43.2 |
| 451 thru 456 | N45 37.9 E008 43.1 | 659 thru 662 | N45 37.4 E008 43.2 |
| 457 thru 459 | N45 37.8 E008 43.1 | 699 | N45 37.4 E008 43.0 |
| 495 | N45 37.9 E008 42.9 | | |
| 499 | N45 37.8 E008 43.0 | | |
| 501 thru 503 | N45 37.7 E008 42.9 | | |
| 504 thru 508 | N45 37.7 E008 43.0 | | |
| 509, 510 | N45 37.6 E008 43.0 | | |

*CHANGES:* None.

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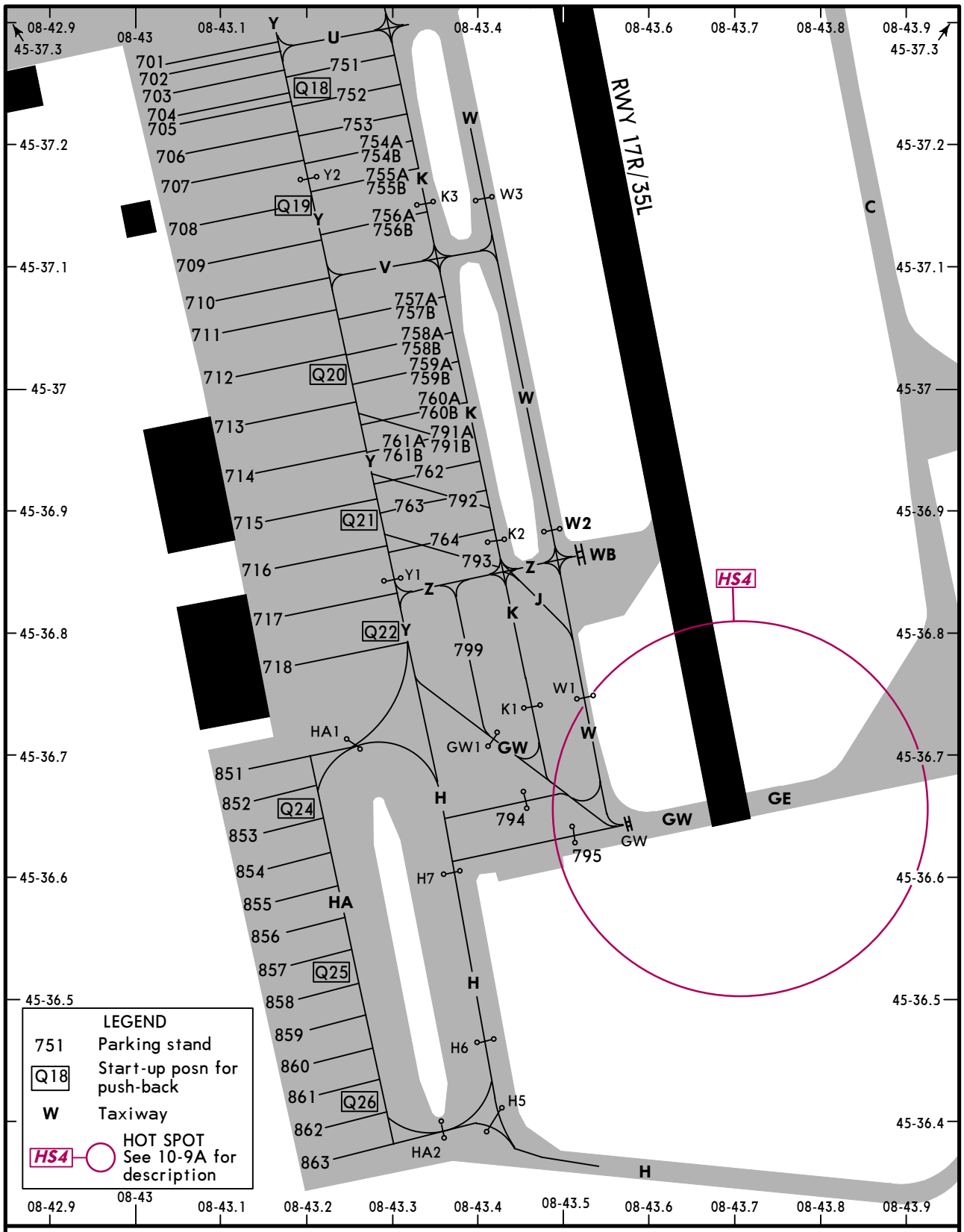


## INS COORDINATES

| STAND No. | COORDINATES | STAND No. | COORDINATES |
|---|---|---|---|
| 701 thru 703 | N45 37.3 E008 43.1 | 758A thru 761B | N45 37.0 E008 43.3 |
| 704 thru 707 | N45 37.2 E008 43.1 | 762 thru 764 | N45 36.9 E008 43.4 |
| 708 thru 710 | N45 37.1 E008 43.1 | 791A, 791B | N45 37.0 E008 43.3 |
| 711 | N45 37.0 E008 43.1 | 792, 793 | N45 36.9 E008 43.4 |
| 712, 713 | N45 37.0 E008 43.2 | 799 | N45 36.8 E008 43.4 |
| 714 thru 716 | N45 36.9 E008 43.2 | 851 | N45 36.7 E008 43.2 |
| 717, 718 | N45 36.8 E008 43.2 | 852 thru 855 | N45 36.6 E008 43.2 |
| 751, 752 | N45 37.3 E008 43.3 | 856 thru 859 | N45 36.5 E008 43.2 |
| 753 thru 755B | N45 37.2 E008 43.3 | 860 thru 863 | N45 36.4 E008 43.3 |
| 756A thru 757B | N45 37.1 E008 43.3 | | |

*CHANGES:* Stand 799 established.

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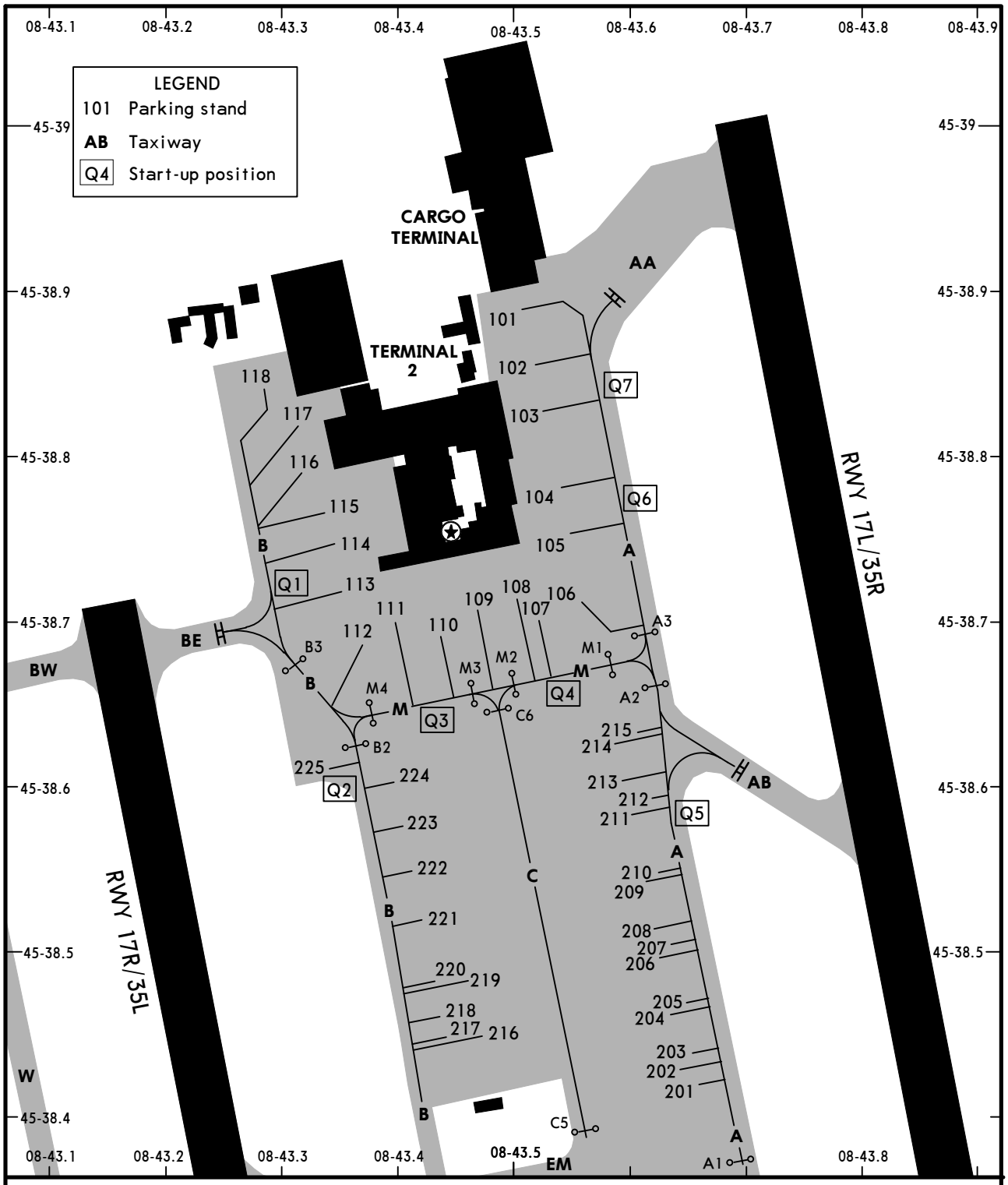


## INS COORDINATES

| STAND No. | COORDINATES | | |
|---|---|---|---|
| 101, 102 | N45 38.9 E008 43.5 | | |
| 103 thru 105 | N45 38.8 E008 43.5 | | |
| 106 thru 108 | N45 38.7 E008 43.5 | | |
| 109 thru 111 | N45 38.7 E008 43.4 | | |
| 112, 113 | N45 38.7 E008 43.3 | | |
| 114 thru 117 | N45 38.8 E008 43.3 | | |
| 118 | N45 38.9 E008 43.2 | | |
| 201 thru 203 | N45 38.4 E008 43.6 | | |
| 204 thru 210 | N45 38.5 E008 43.5 | | |
| 211 thru 215 | N45 38.6 E008 43.5 | | |
| 216 thru 221 | N45 38.5 E008 43.5 | | |
| 222 thru 224 | N45 38.6 E008 43.4 | | |
| 225 | N45 38.6 E008 43.3 | | |

*CHANGES:* Holding positions. Coordinates.

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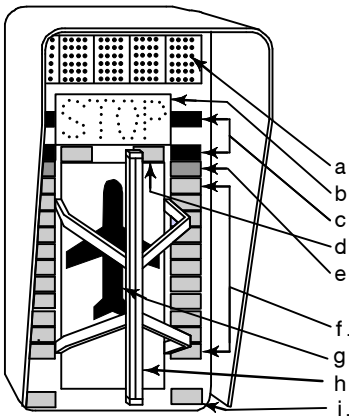
# VISUAL DOCKING GUIDANCE SYSTEM (SAFEGATE)

## A. SYSTEM DESCRIPTION

The docking system consists of a display unit in front of parking position and a number of sensors in the apron surface. **On the display the left-hand pilot gets the correct alignment as well as the closing-rate and stop information.**




a. Display indicating: Aircraft type. OK. TOO FAR. STOP SHORT.
b. Display for STOP command.
c. Two pairs of red lights = STOP position reached.
d. Pair of green lights indicating the stop position reference.
e. Pair of yellow lights indicating the aircraft is 10′ (3m) before the STOP position.
f. 11 pairs of green closing-rate information lights.
g. Aircraft symbol
h. Centerline bar
i. Pair of green lights = permission to enter Gate .

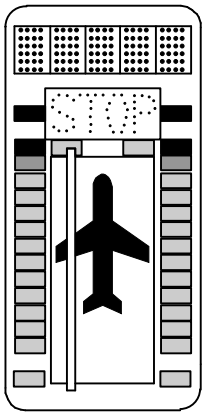
## B. ACTIVATED SYSTEM

1. The system is ready when:
 - the bottom pair of green lights are blinking
 - the aircraft type is shown (blinking) on the upper information block
 - the stopbarlights are shown

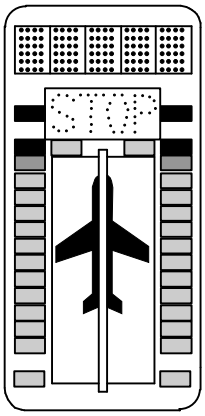
2. The pilot should be aware that the correct type of aircraft is shown before using the system.

## C. CENTERLINE GUIDANCE

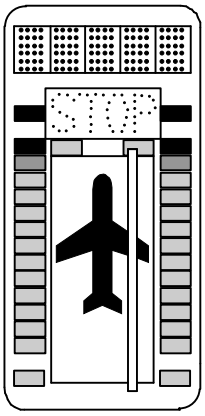
Centerline guidance is obtained by means of an illuminated bar in front of an aircraft symbol. The aircraft is on centerline when bar and symbol overlap each other.




TURN LEFT




ON CENTERLINE




TURN RIGHT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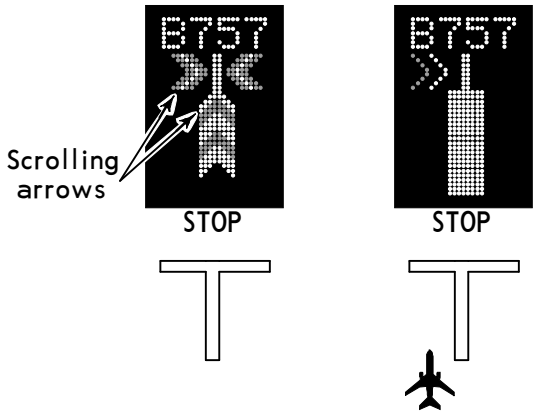
## VISUAL DOCKING GUIDANCE SYSTEM (SAFEDOCK Type 3)

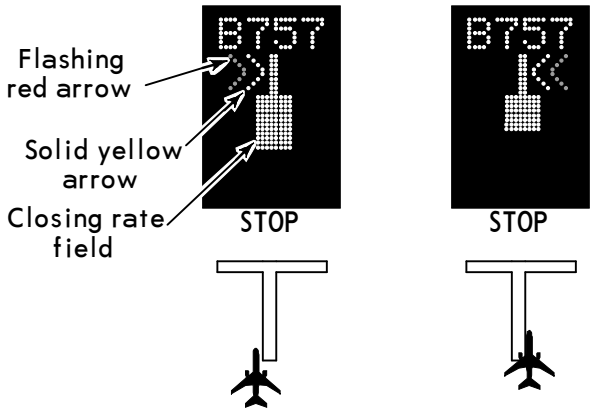
Check that the correct aircraft type is displayed. The scrolling arrows indicate that the system is activated.

Follow the lead-in line.

When the solid yellow closing rate field appears, the aircraft has been caught by the scanning unit. The scanning unit checks the correct aircraft type and the display provides azimuth guidance information.

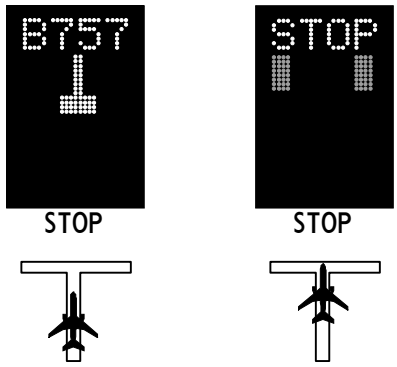



The flashing red and solid yellow arrows provide azimuth guidance information. The flashing red arrow shows the direction to steer, while the solid yellow arrow indicates how far the aircraft is off of the centerline.



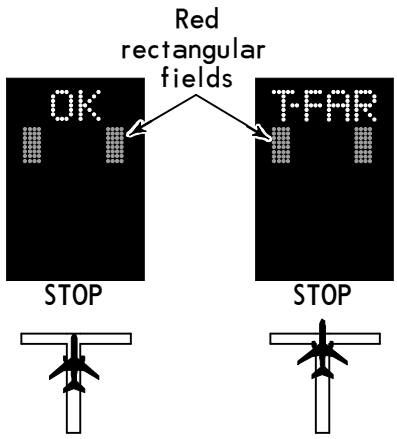

39'/12m from the stop-position the closing rate field starts the indication of "Distance to go" by turning off one row of LEDs for each one half meter the aircraft advances towards the stop-position.

When the correct stop-position ist reached all yellow closing rate field LEDs will be off, "STOP" and two red rectangular fields will appear on the display.

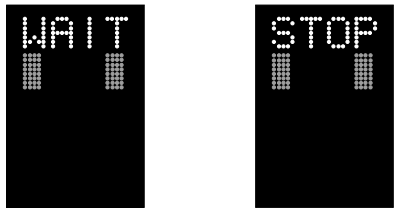



When the aircraft is correctly parked "OK" will be displayed after a few seconds.

If the aircraft has overshot the stop-position "T-FAR" (too far) will be displayed.




The aircraft must be verified at least 39'/12m before the correct stop position. If this does not occur, the system displays "STOP" with two red, rectangular fields being lit in the azimuth guidance area of the display. While the aircraft is stopped, the system will attempt to verify it. If successful, the docking procedure will continue. If an unverified object is found in the scanning area during docking, the system will show "WAIT". When the object has disappeared the procedure will be resumed.




*CHANGES:* Chart reindexed.

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BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | | 121.9 |

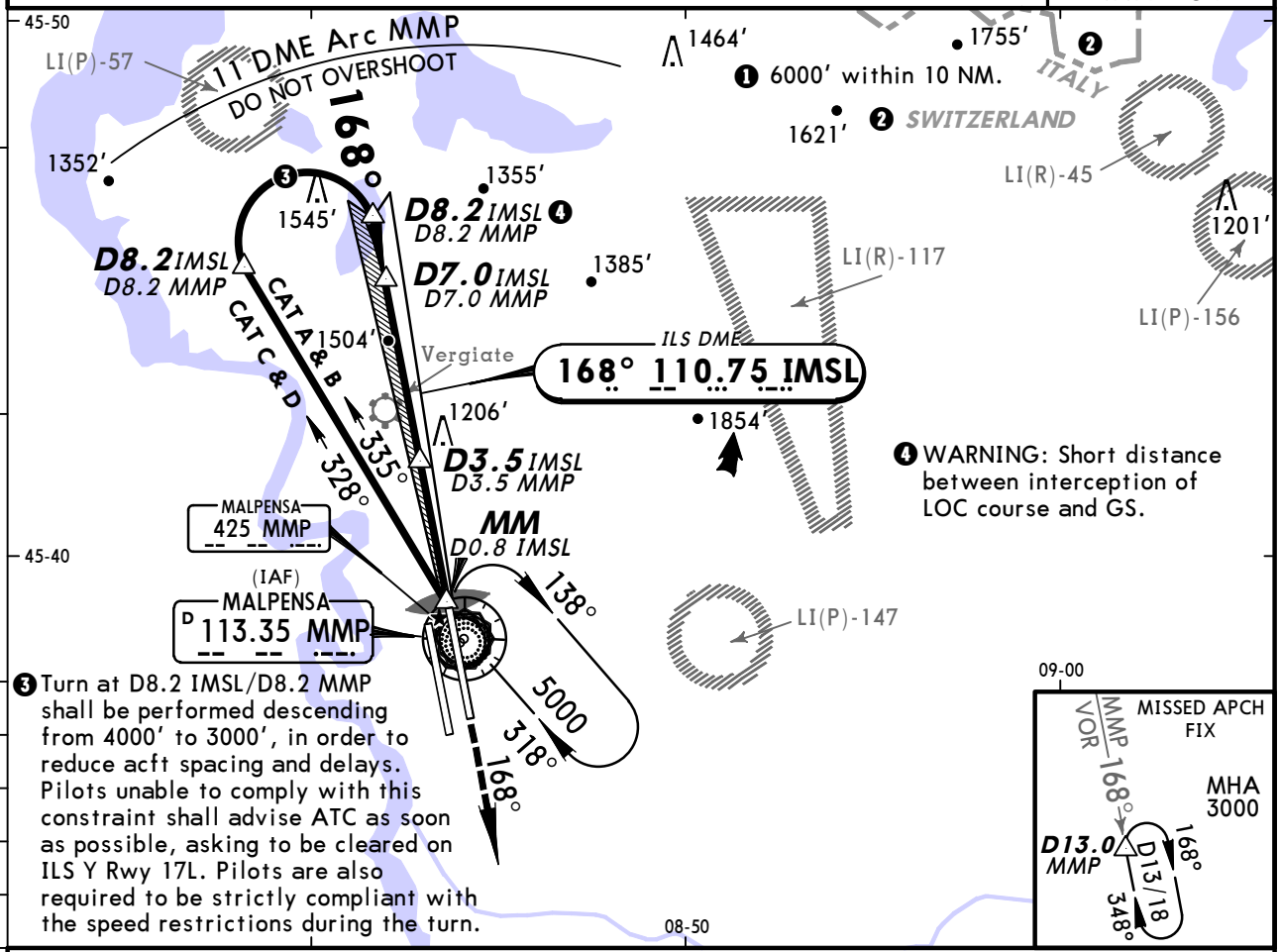
| LOC IMSL | Final Apch Crs | GS | ILS DA(H) | Apt Elev 768' |
|---|---|---|---|---|
| 110.75 | 168° | D3.5 IMSL 1846'(1101') | Refer to Minimums | RWY 745' |

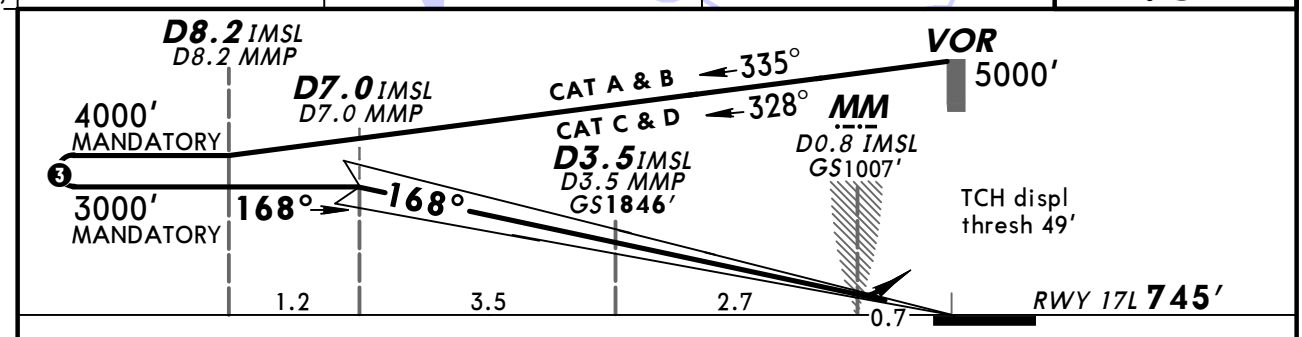
**MISSED APCH:** Proceed on track 168° to 3000' and hold between D13.0/R-168 MMP and D18.0 MMP.

Alt Set: hPa  Rwy Elev: 27 hPa  Trans level: By ATC  Trans alt: 6000'

1. **MMP VOR DME REQUIRED.** 2. Procedure MAX 185 KT.

MSA MMP VOR: 10,000' (205°–070°), 8000' (205°–285°), 3000'




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| ILS GS | 3.00° | 377 | 484 | 538 | 646 | 753 | 861 |

HIALS, PAPI, PAPI — 3000' on 168°

**Standard** STRAIGHT-IN LANDING RWY 17L

| | ILS | | | LOC (GS out) |
|---|---|---|---|---|
| DA(H) | A: 955' (210') C: 975' (230') B: 965' (220') D: 985' (240') | | | |
| | FULL | Limited | ALS out | |
| A | RVR 550m | RVR 750m | RVR 1200m | NOT APPLICABLE |
| B | | | | |
| C | | | | |
| D | | | | |

CIRCLE-TO-LAND TO RWY 17R

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450' (682') | 1500m |
| 135 | 1450' (682') | 1600m |
| 180 | 1650' (882') | 2400m |
| 205 | 1690' (922') | 3600m |

PANS OPS 4

*CHANGES:* Communications.

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BRIEFING STRIP ™

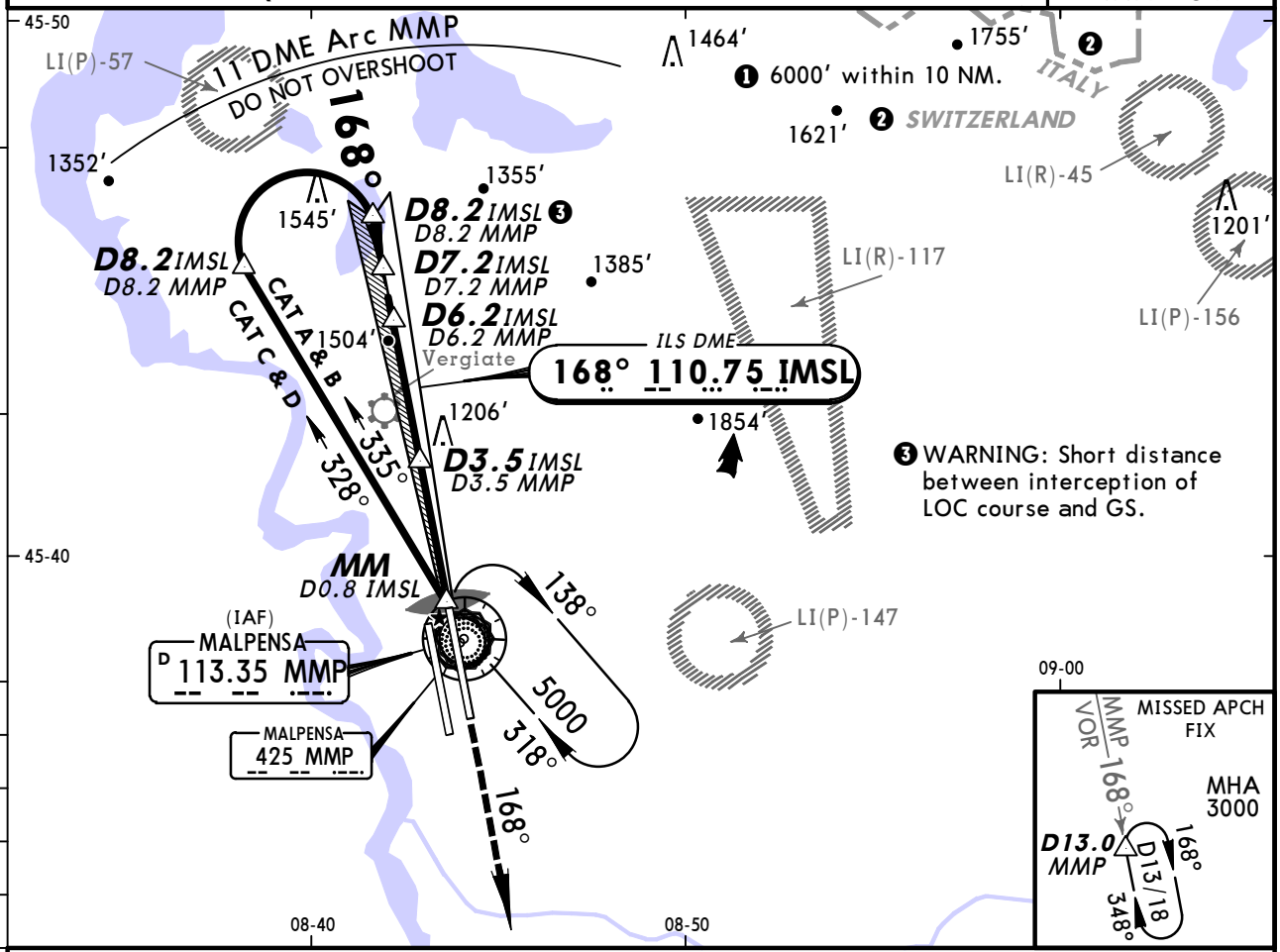
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | | 121.9 |

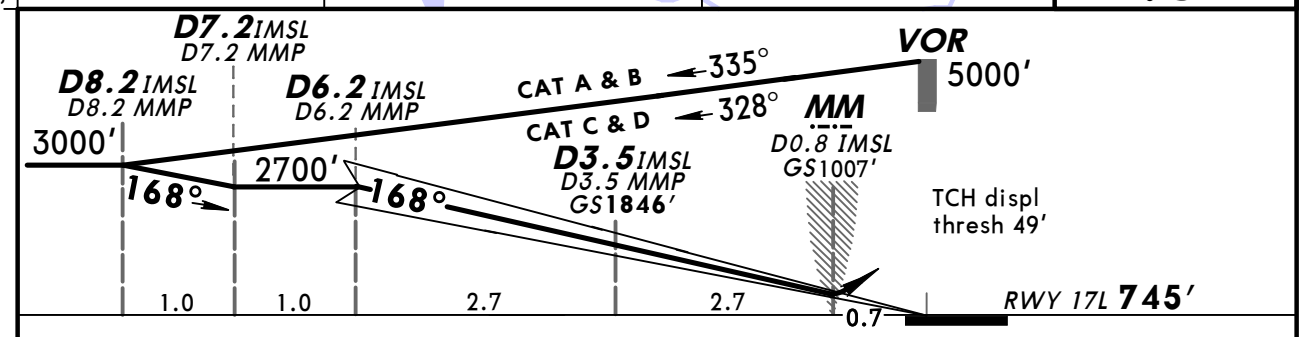
| LOC IMSL | Final Apch Crs | GS D3.5 IMSL | ILS DA(H) | Apt Elev 768' |
|---|---|---|---|---|
| 110.75 | 168° | 1846'(1101') | Refer to Minimums | RWY 745' |

**MISSED APCH:** Proceed on track 168° to 3000' and hold between D13.0/R-168 MMP and D18.0 MMP.

Alt Set: hPa  Rwy Elev: 27 hPa  Trans level: By ATC  Trans alt: 6000'
1. **MMP VOR DME REQUIRED.** 2. Procedure MAX 185 KT.

MSA MMP VOR: 10,000' (205°–070°), 8000' (205°–285°), 3000'




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| ILS GS | 3.00° | 377 | 484 | 538 | 646 | 753 | 861 |

HIALS
PAPI PAPI
3000' on 168°

**Standard** STRAIGHT-IN LANDING RWY 17L

| | ILS FULL | ILS Limited | ILS ALS out | LOC (GS out) |
|---|---|---|---|---|
| DA(H) | A: 955' (210') C: 975' (230') B: 965' (220') D: 985' (240') | | | |
| A | RVR 550m | RVR 750m | RVR 1200m | NOT APPLICABLE |
| B | | | | |
| C | | | | |
| D | | | | |

CIRCLE-TO-LAND TO RWY 17R

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450' (682') | 1500m |
| 135 | 1450' (682') | 1600m |
| 180 | 1650' (882') | 2400m |
| 205 | 1690' (922') | 3600m |

PANS OPS 4

*CHANGES:* Communications.

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BRIEFING STRIP TM

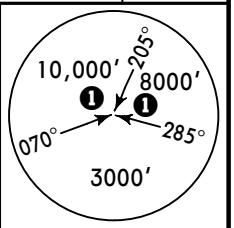
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | 121.9 |

| LOC IMSL | Final Apch Crs | Minimum Alt D5.0 IMSL | DA(H) | Apt Elev 768′ / RWY 745′ |
|---|---|---|---|---|
| 110.75 | 168° | 2360′ (1615′) | 1300′ (555′) | |

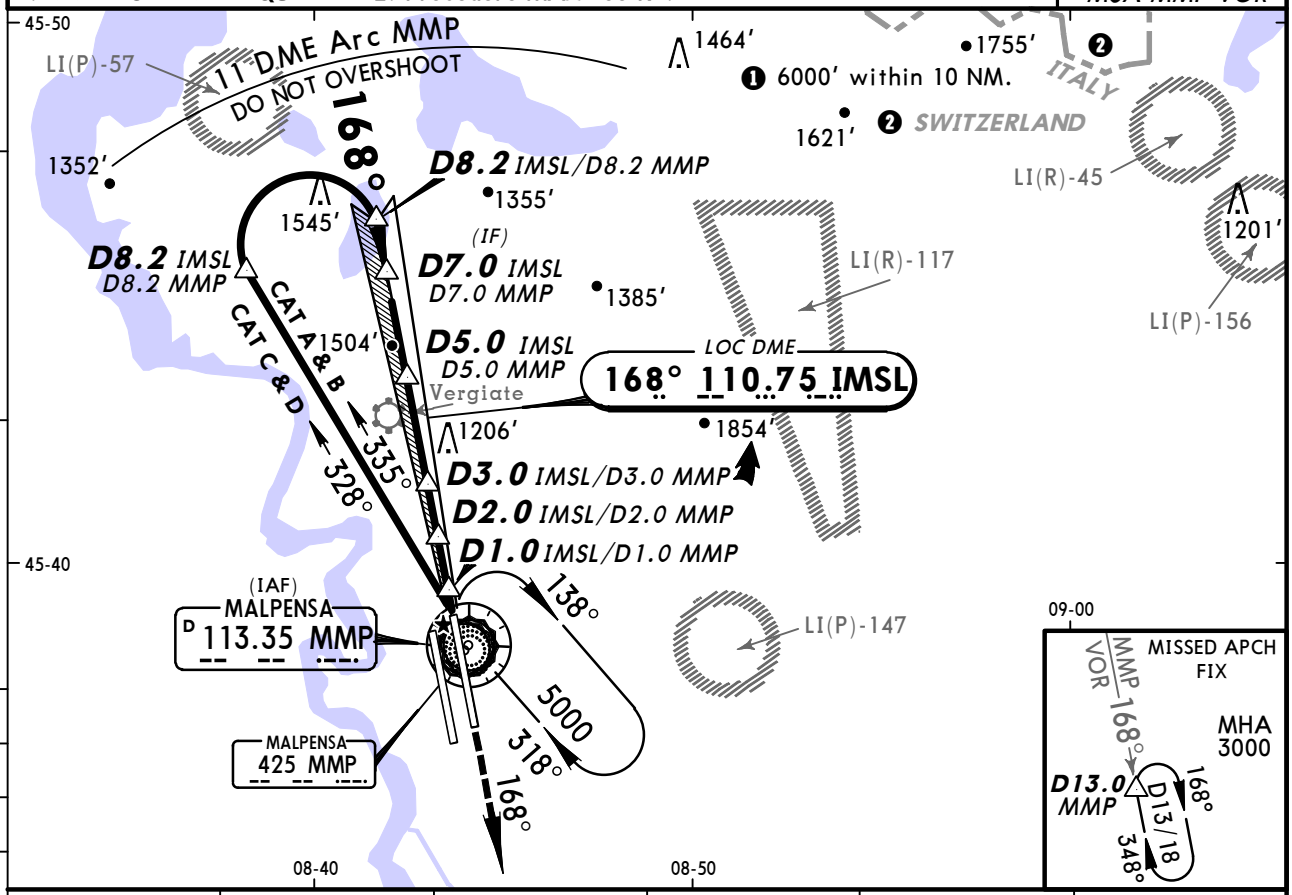
**MISSED APCH:** Proceed on track 168° to 3000′ and hold between D13.0/R-168 MMP and D18.0 MMP.

Alt Set: hPa  Rwy Elev: 27 hPa  Trans level: By ATC  Trans alt: 6000′

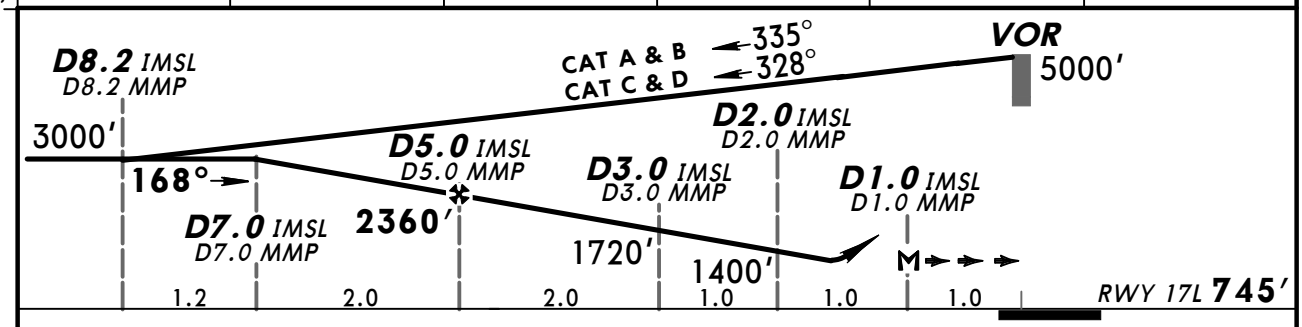
1. **MMP VOR DME REQUIRED.** 2. Procedure MAX 185 KT.




MSA MMP VOR




| MMP DME | 5.0 | 4.0 | 3.0 | 2.0 | 1.0 |
|---|---|---|---|---|---|
| ALTITUDE | 2360′ | 2040′ | 1720′ | 1400′ | 1080′ |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| Descent Angle | 3.00° | 369 | 474 | 527 | 632 | 737 | 843 |
| MAP at D1.0 IMSL/D1.0 MMP | | | | | | | |

HIALS
PAPI PAPI
3000′ on 168°

**Standard** STRAIGHT-IN LANDING RWY 17L

DA(H) 1300′(555′)

| | | ALS out |
|---|---|---|
| A | RVR 1500m | |
| B | | |
| C | RVR 1800m | CMV 2400m |
| D | | |

CIRCLE-TO-LAND TO RWY 17R

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

PANS OPS 4

*CHANGES:* Communications.

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BRIEFING STRIP

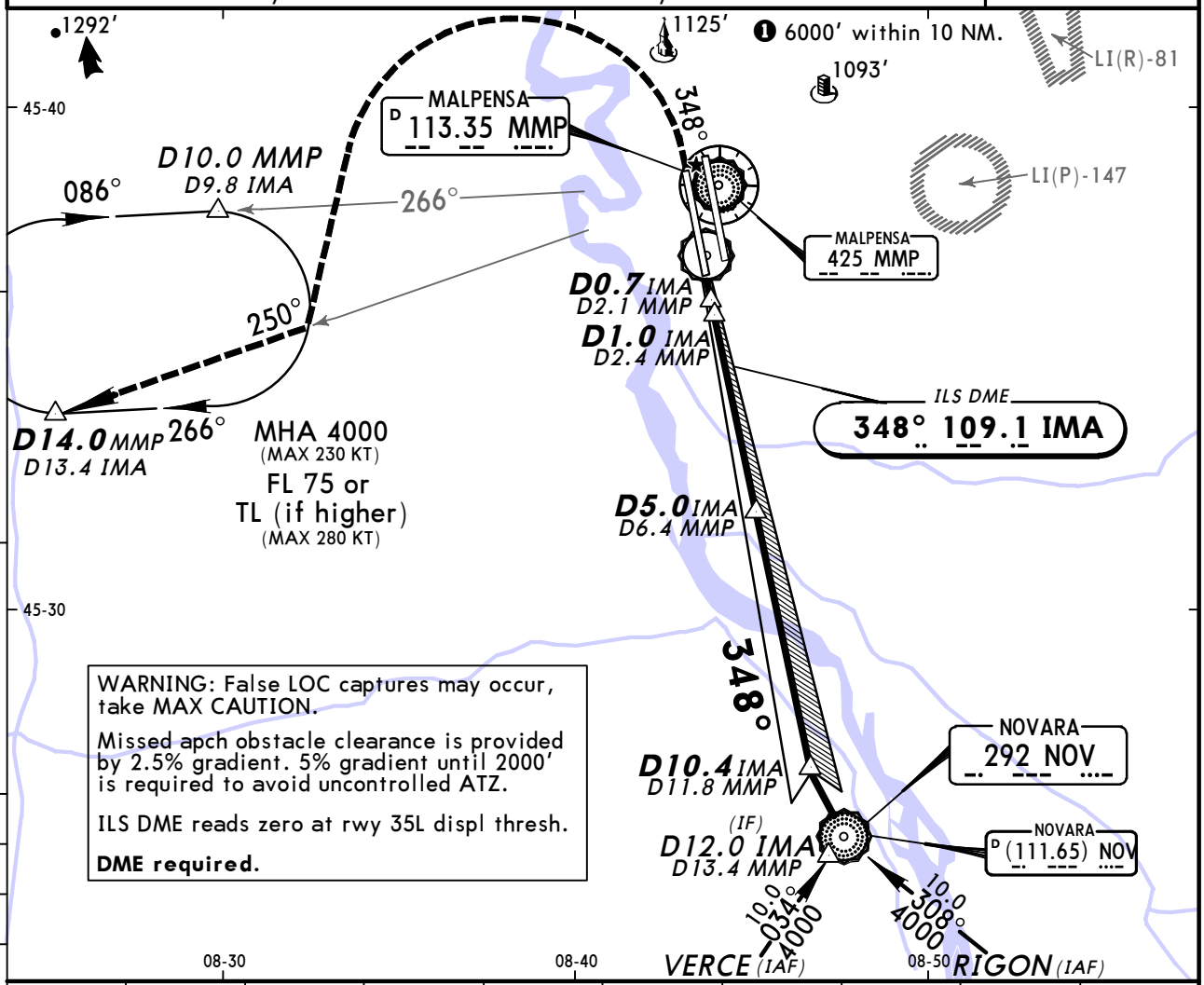
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

| LOC IMA | Final Apch Crs | GS | ILS DA(H) | Apt Elev 768' |
|---|---|---|---|---|
| 109.1 | 348° | D5.0 IMA 2295' (1599') | Refer to Minimums | RWY 696' |

**MISSED APCH:** Climb on 348° to 1450', then turn LEFT to intercept R-250 MMP and join holding at 4000'.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000'

MSA MMP VOR: 10,000' (205°–070°), 8000' (205°–285°), 3000'



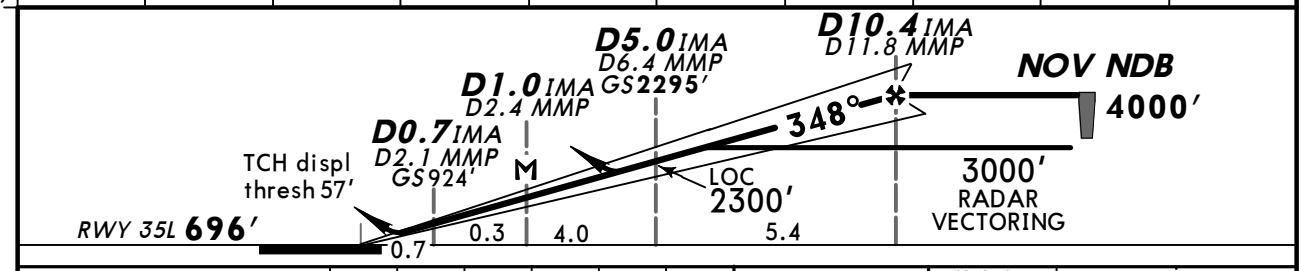

WARNING: False LOC captures may occur, take MAX CAUTION.

Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 2000' is required to avoid uncontrolled ATZ.

ILS DME reads zero at rwy 35L displ thresh.

**DME required.**

| LOC (GS out) | IMA DME | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 |
|---|---|---|---|---|---|---|---|---|---|
| | ALTITUDE | 1400' | 1720' | 2030' | 2350' | 2670' | 2990' | 3310' | 3630' |




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS or LOC Descent Angle 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |
| MAP at D1.0 IMA/D2.1 MMP | | | | | | |

HIALS-II
PAPI PAPI
1450' on 348°

**Standard** STRAIGHT-IN LANDING RWY 35L

| | ILS DA(H) | LOC (GS out) DA(H) |
|---|---|---|
| | ABC: 896' (200') | 1140' (444') |
| | D: 898' (202') | |

| | FULL | Limited | ALS out | | ALS out |
|---|---|---|---|---|---|
| A | RVR 550m | RVR 750m | RVR 1200m | RVR 1400m | RVR 1500m |
| B | | | | | |
| C | | | | | CMV 2100m |
| D | | | | | |

CIRCLE-TO-LAND
Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450' (682') | 1500m |
| 135 | 1450' (682') | 1600m |
| 180 | 1650' (882') | 2400m |
| 205 | 1690' (922') | 3600m |

PANS OPS 4

CHANGES: Procedure.

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# MILAN, ITALY
# CAT II/III ILS Z Rwy 35L

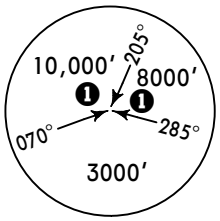
BRIEFING STRIP ™

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

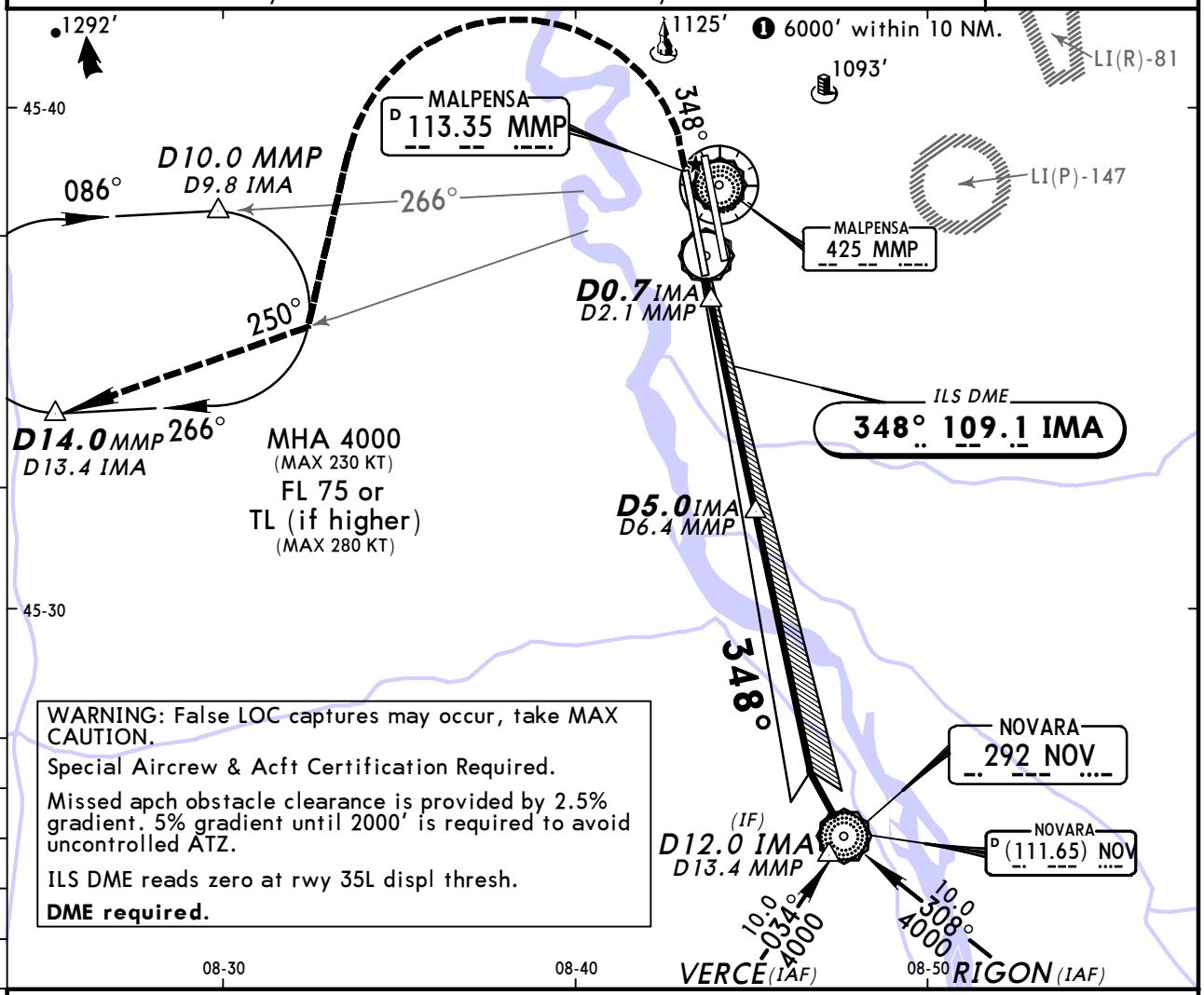
| LOC | Final | GS | CAT II/IIIA ILS | |
|---|---|---|---|---|
| IMA 109.1 | Apch Crs 348° | D5.0 IMA 2295′ (1599′) | Refer to Minimums | Apt Elev 768′ RWY 696′ |

**MISSED APCH:** Climb on 348° to 1450′, then turn LEFT to intercept R-250 MMP and join holding at 4000′.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000′




MSA
MMP VOR



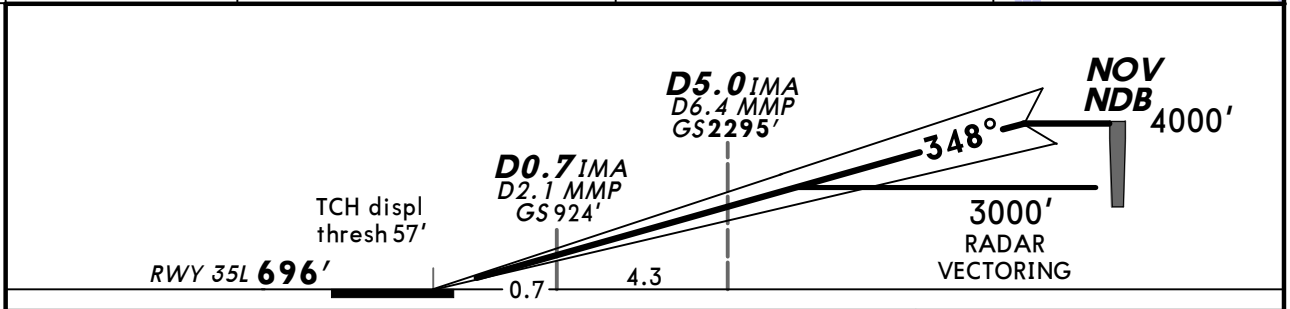

WARNING: False LOC captures may occur, take MAX CAUTION.

Special Aircrew & Acft Certification Required.

Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 2000′ is required to avoid uncontrolled ATZ.

ILS DME reads zero at rwy 35L displ thresh.

**DME required.**




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| GS | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II
PAPI PAPI

1450′ on 348°

**Standard**

STRAIGHT-IN LANDING RWY 35L

| CAT IIIA ILS | CAT II ILS ABC | CAT II ILS D |
|---|---|---|
| DH 50′ | RA 105′ DA(H) 796′ (100′) | RA 118′ DA(H) 807′ (111′) |
| RVR 200m | RVR 300m [1] | |

[1] Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

*CHANGES:* Procedure. Minimums.

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BRIEFING STRIP ™

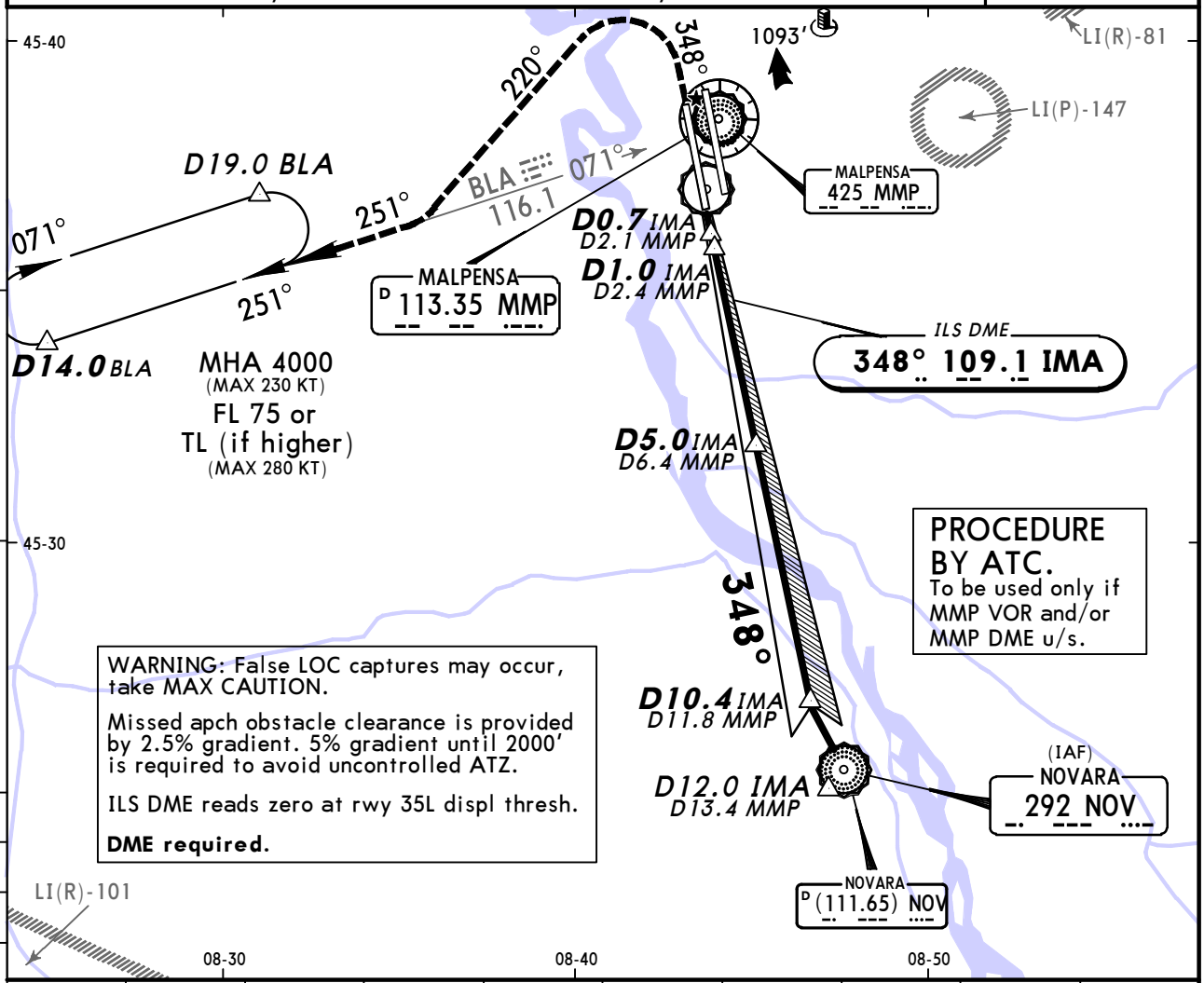
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | 121.9 |

| LOC IMA | Final Apch Crs | GS | ILS DA(H) | Apt Elev 768' |
|---|---|---|---|---|
| 109.1 | 348° | D5.0 IMA 2295' (1599') | Refer to Minimums | RWY 696' |

**MISSED APCH:** Climb on 348° to 1450', then turn LEFT onto 220° to intercept R-071 BLA inbound and join holding at 4000'.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000'

MSA NOV NDB: 7000' (070°–205°), 6000' (205°–285°), 3000' (285°–070°)




PROCEDURE BY ATC.
To be used only if MMP VOR and/or MMP DME u/s.

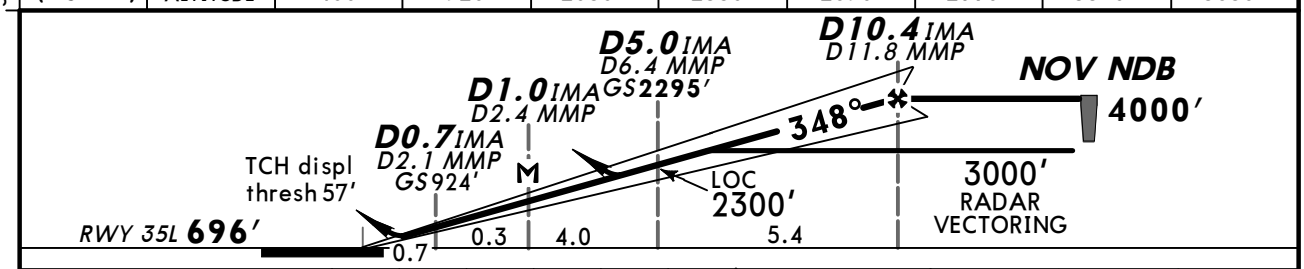
WARNING: False LOC captures may occur, take MAX CAUTION.

Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 2000' is required to avoid uncontrolled ATZ.

ILS DME reads zero at rwy 35L displ thresh.

**DME required.**

| LOC (GS out) | IMA DME | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 |
|---|---|---|---|---|---|---|---|---|---|
| | ALTITUDE | 1400' | 1720' | 2030' | 2350' | 2670' | 2990' | 3310' | 3630' |




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS or LOC Descent Angle 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |
| MAP at D1.0 IMA/D2.1 MMP | | | | | | |

HIALS-II
PAPI PAPI
1450' on 348°

**Standard** STRAIGHT-IN LANDING RWY 35L

| | ILS DA(H) ABC: 896' (200') D: 898' (202') | | | LOC (GS out) DA(H) 1140' (444') | |
|---|---|---|---|---|---|
| | FULL | Limited | ALS out | | ALS out |
| A | RVR 550m | RVR 750m | RVR 1200m | RVR 1400m | RVR 1500m |
| B | | | | | |
| C | | | | | CMV 2100m |
| D | | | | | |

CIRCLE-TO-LAND
Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450' (682') | 1500m |
| 135 | 1450' (682') | 1600m |
| 180 | 1650' (882') | 2400m |
| 205 | 1690' (922') | 3600m |

PANS OPS 4

*CHANGES:* Chart reindexed. Procedure.

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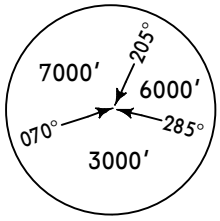
BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

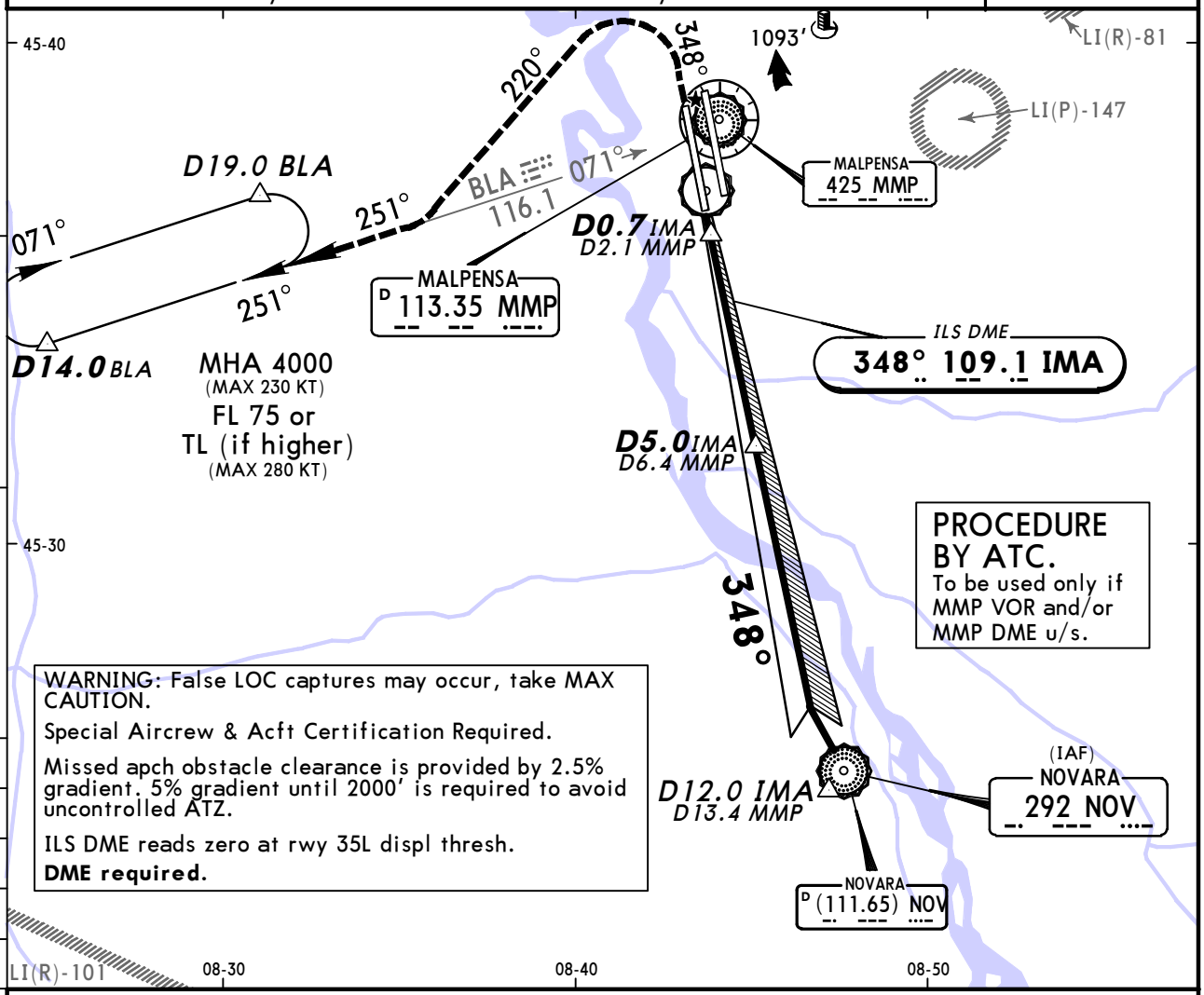
| LOC IMA | Final Apch Crs | GS | CAT II/IIIA ILS | Apt Elev 768′ |
|---|---|---|---|---|
| 109.1 | 348° | D5.0 IMA 2295′ (1599′) | Refer to Minimums | RWY 696′ |

**MISSED APCH:** Climb on 348° to 1450′, then turn LEFT onto 220° to intercept R-071 BLA inbound and join holding at 4000′.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000′




MSA
NOV NDB



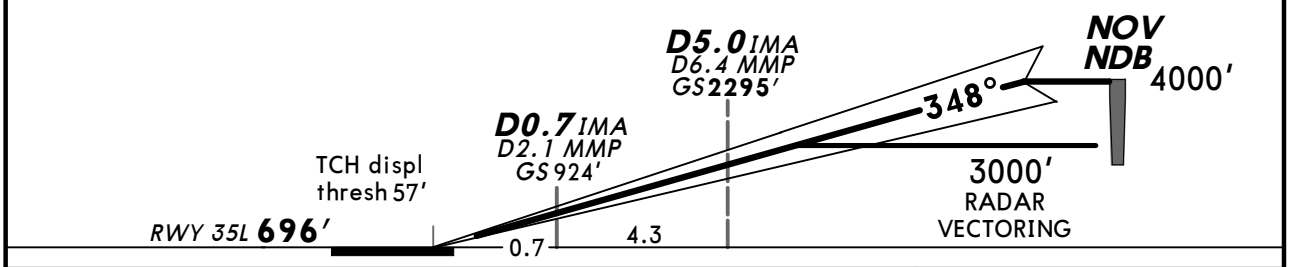

WARNING: False LOC captures may occur, take MAX CAUTION.

Special Aircrew & Acft Certification Required.

Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 2000′ is required to avoid uncontrolled ATZ.

ILS DME reads zero at rwy 35L displ thresh.

**DME required.**




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| GS | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II
PAPI PAPI

1450′ on 348°

**Standard** STRAIGHT-IN LANDING RWY 35L

| CAT IIIA ILS | CAT II ILS ABC | CAT II ILS D |
|---|---|---|
| DH 50′ | RA 105′ DA(H) 796′ (100′) | RA 118′ DA(H) 807′ (111′) |
| RVR 200m | RVR 300m [1] | |

[1] Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

*CHANGES:* Chart reindexed. Procedure. Minimums.

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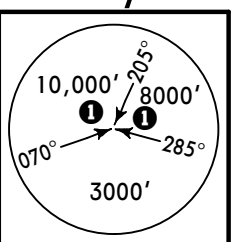
BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | 121.9 |

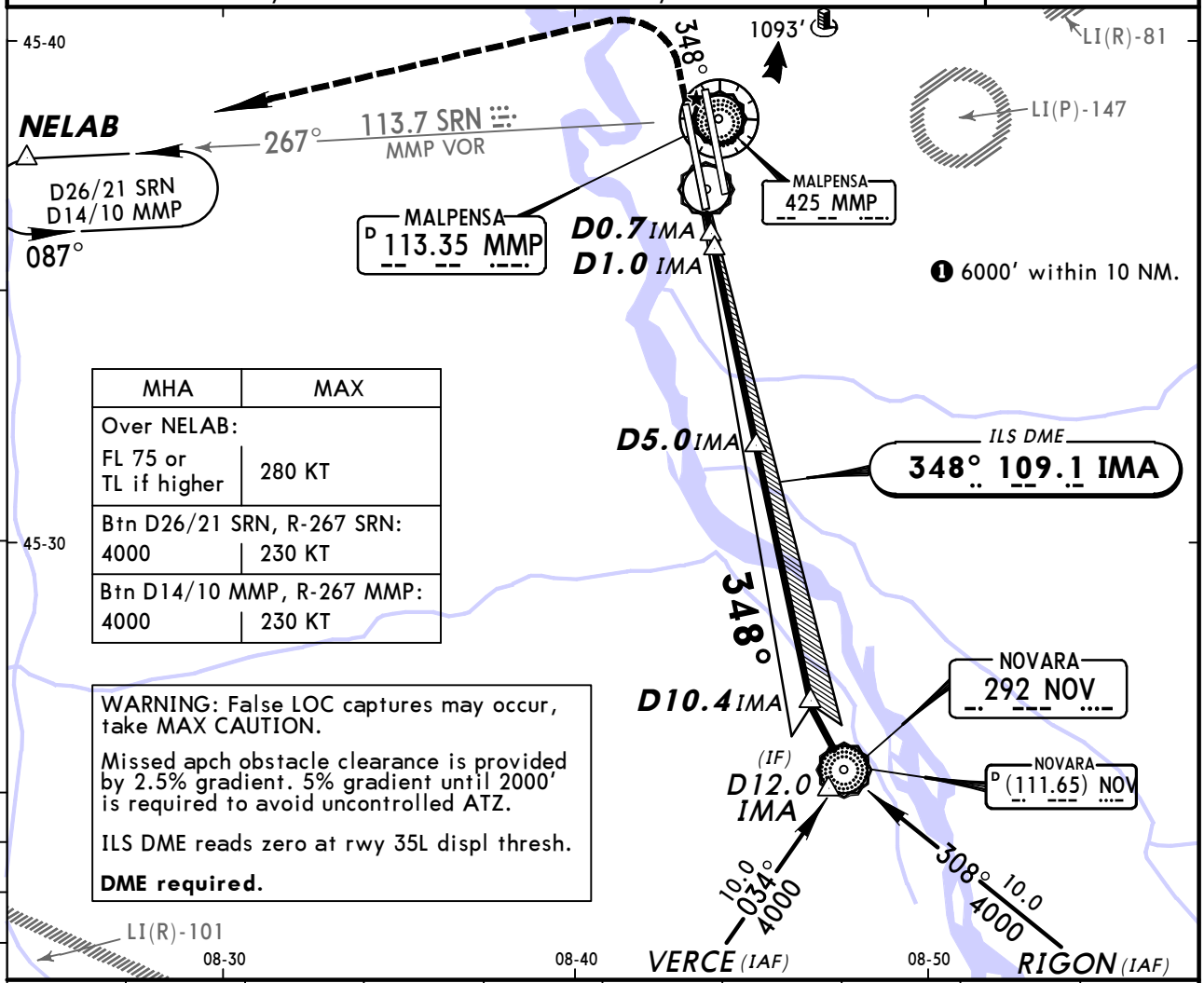
| LOC IMA | Final Apch Crs | GS | ILS DA(H) | Apt Elev 768' |
|---|---|---|---|---|
| 109.1 | 348° | D5.0 IMA 2295' (1599') | Refer to Minimums | RWY 696' |

**MISSED APCH:** Climb on 348° to 1450', then turn LEFT to intercept and follow R-267 SRN/MMP direct to NELAB climbing to 4000'.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000'




MSA
MMP VOR




| MHA | MAX |
|---|---|
| Over NELAB: FL 75 or TL if higher | 280 KT |
| Btn D26/21 SRN, R-267 SRN: 4000 | 230 KT |
| Btn D14/10 MMP, R-267 MMP: 4000 | 230 KT |

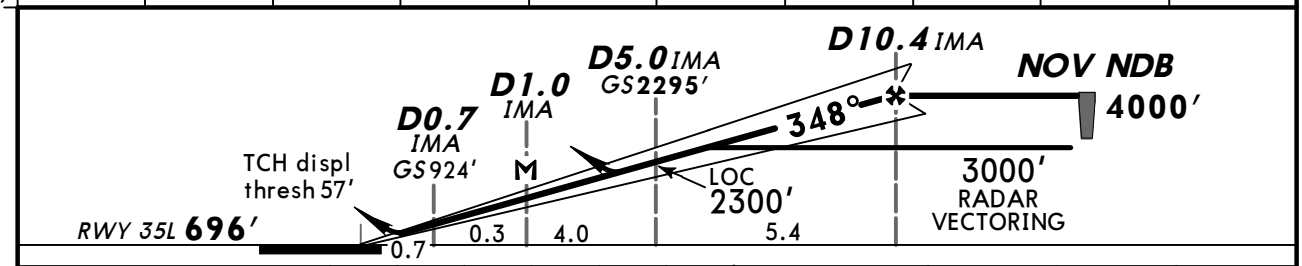
WARNING: False LOC captures may occur, take MAX CAUTION.

Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 2000' is required to avoid uncontrolled ATZ.

ILS DME reads zero at rwy 35L displ thresh.

**DME required.**

| LOC (GS out) | IMA DME | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 |
|---|---|---|---|---|---|---|---|---|---|
| | ALTITUDE | 1400' | 1720' | 2030' | 2350' | 2670' | 2990' | 3310' | 3630' |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| ILS GS or LOC Descent Angle | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |
| MAP at D1.0 IMA | | | | | | | |

HIALS-II
PAPI PAPI

1450' on 348°

**Standard** STRAIGHT-IN LANDING RWY 35L

ILS DA(H) ABC: 896' (200') D: 898' (202')

LOC (GS out) DA(H) 1140' (444')

| | FULL | Limited | ALS out | | ALS out |
|---|---|---|---|---|---|
| A | RVR 550m | RVR 750m | RVR 1200m | RVR 1400m | RVR 1500m |
| B | | | | | |
| C | | | | | CMV 2100m |
| D | | | | | |

CIRCLE-TO-LAND

Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450' (682') | 1500m |
| 135 | 1450' (682') | 1600m |
| 180 | 1650' (882') | 2400m |
| 205 | 1690' (922') | 3600m |

PANS OPS

*CHANGES:* RMG Lctr replaced by NELAB. Holding information.

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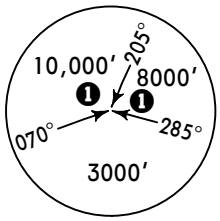
BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

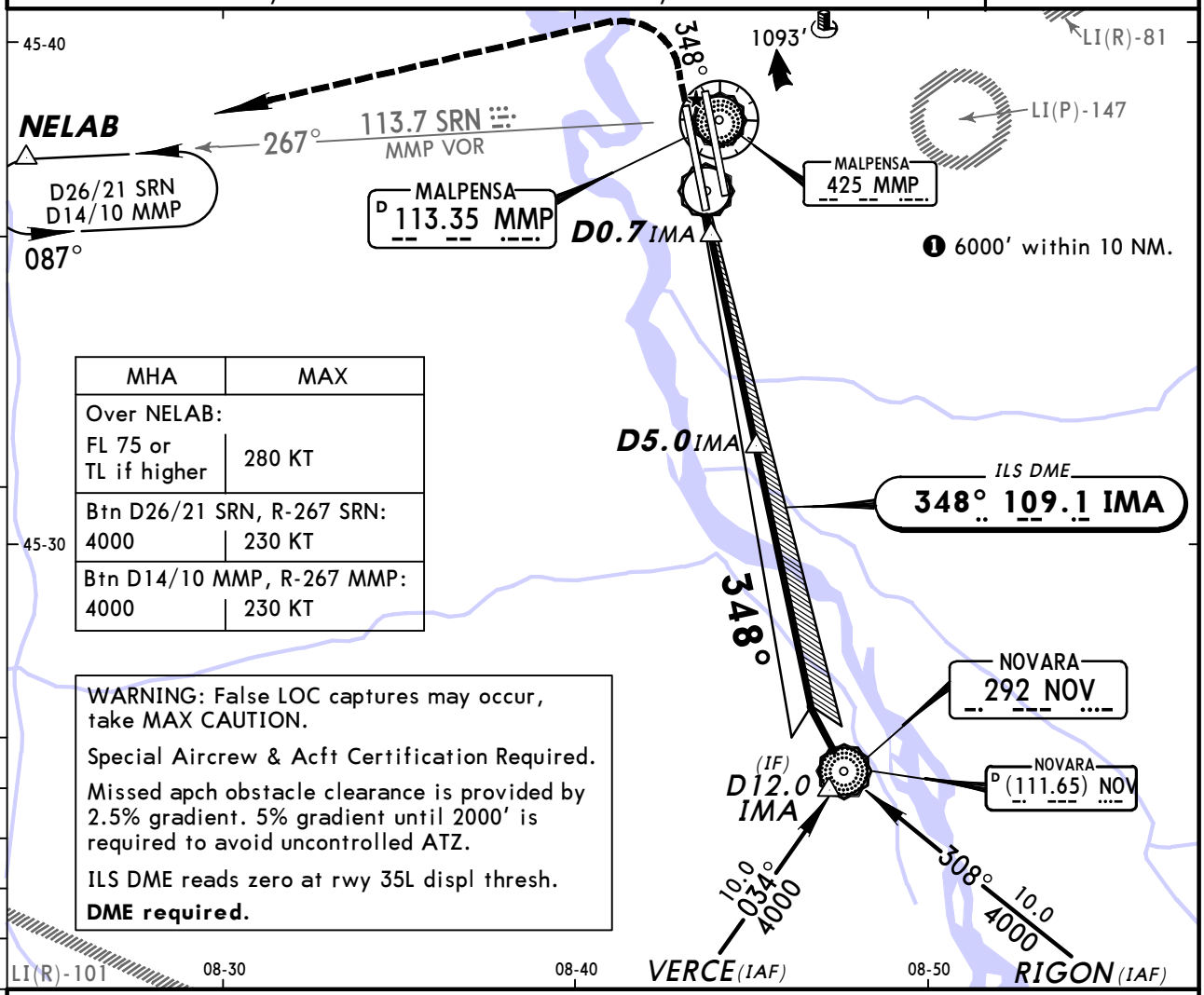
| LOC IMA | Final Apch Crs | GS | CAT II/IIIA ILS | Apt Elev 768′ |
|---|---|---|---|---|
| 109.1 | 348° | D5.0 IMA 2295′ (1599′) | Refer to Minimums | RWY 696′ |

**MISSED APCH:** Climb on 348° to 1450′, then turn LEFT to intercept and follow R-267 SRN/MMP direct to NELAB climbing to 4000′.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000′




MSA
MMP VOR




| MHA | MAX |
|---|---|
| Over NELAB: FL 75 or TL if higher | 280 KT |
| Btn D26/21 SRN, R-267 SRN: 4000 | 230 KT |
| Btn D14/10 MMP, R-267 MMP: 4000 | 230 KT |

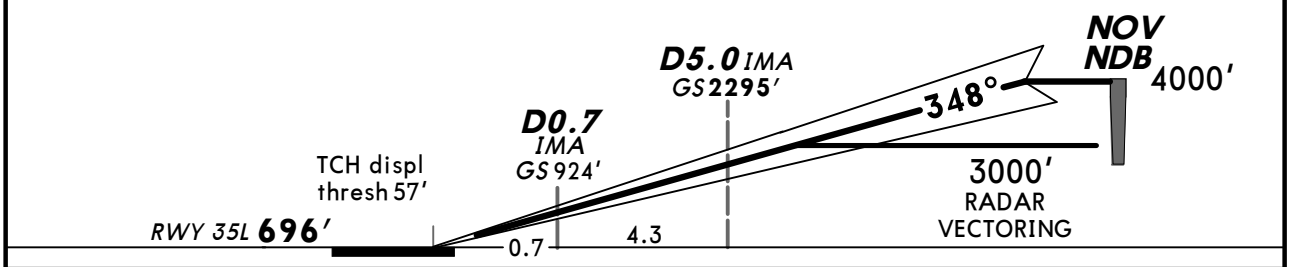
WARNING: False LOC captures may occur, take MAX CAUTION.

Special Aircrew & Acft Certification Required.

Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 2000′ is required to avoid uncontrolled ATZ.

ILS DME reads zero at rwy 35L displ thresh.

**DME required.**




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| GS | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II
PAPI PAPI

1450′ on 348°

**Standard**

STRAIGHT-IN LANDING RWY 35L

| CAT IIIA ILS | CAT II ILS ABC | CAT II ILS D |
|---|---|---|
| DH 50′ | RA 105′ DA(H) 796′ (100′) | RA 118′ DA(H) 807′ (111′) |
| RVR 200m | RVR 300m [1] | |

PANS OPS

[1] Operators applying U.S. Ops Specs: Autoland or HUD required below RVR 350m.

*CHANGES:* RMG Lctr replaced by NELAB. Holding information.

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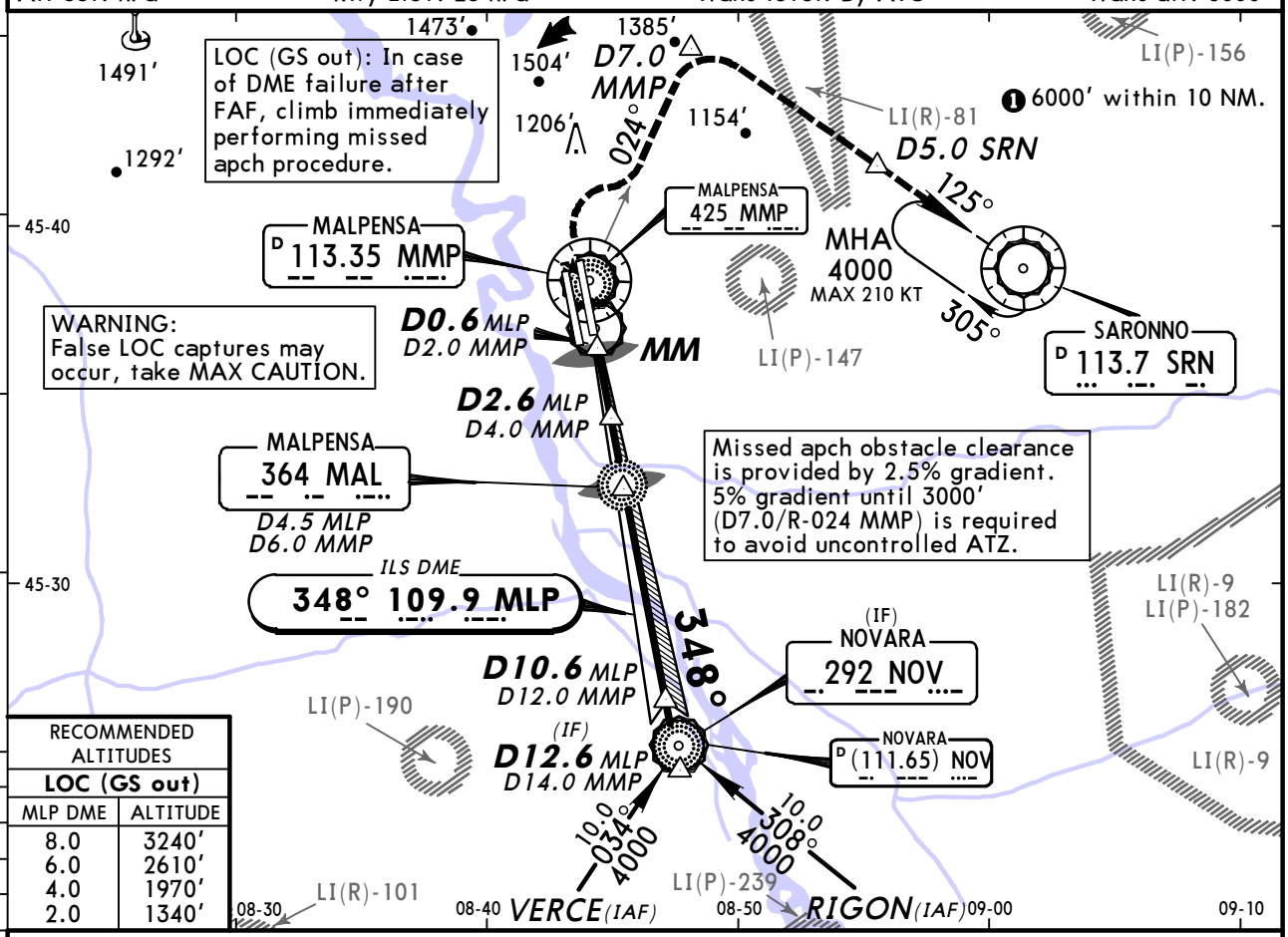
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 / 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | 121.9 |

| LOC MLP | Final Apch Crs | GS LOM | ILS DA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| 109.9 | 348° | 2110′ (1419′) | 891′ (200′) | Apt Elev 768′ / RWY 691′ |

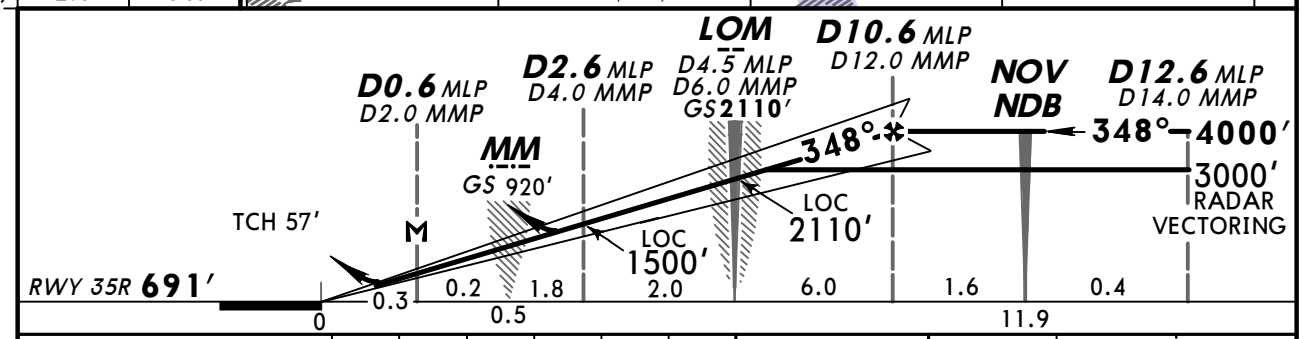
**MISSED APCH:** Climb on 348° to 1450′, then turn RIGHT as soon as possible to join R-024 MMP climbing to 3000′. At 3000′, not further than D7.0/R-024 MMP, turn RIGHT to SRN VOR. Maintain 3000′ until D5.0 SRN, then climb to 4000′.

MSA MMP VOR: 10,000′ (205°–070°), 8000′ (205°–285°), 3000′

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000′




| RECOMMENDED ALTITUDES LOC (GS out) | |
|---|---|
| MLP DME | ALTITUDE |
| 8.0 | 3240′ |
| 6.0 | 2610′ |
| 4.0 | 1970′ |
| 2.0 | 1340′ |




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS or LOC Descent Angle 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |
| MAP at D0.6 MLP/D2.0 MMP | | | | | | |

HIALS-II
PAPI PAPI
1450′ on 348°

**Standard** STRAIGHT-IN LANDING RWY 35R

| | ILS DA(H) 891′ (200′) FULL | ILS Limited | ILS ALS out | LOC (GS out) DA(H) 1140′ (449′) | LOC (GS out) ALS out |
|---|---|---|---|---|---|
| A | RVR 550m | RVR 750m | RVR 1200m | RVR 1400m | RVR 1500m |
| B | | | | | |
| C | | | | | CMV 2100m |
| D | | | | | |

CIRCLE-TO-LAND
Not authorized West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

PANS OPS 4

*CHANGES:* Chart reindexed.

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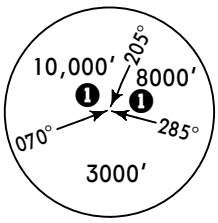
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | | 121.9 |

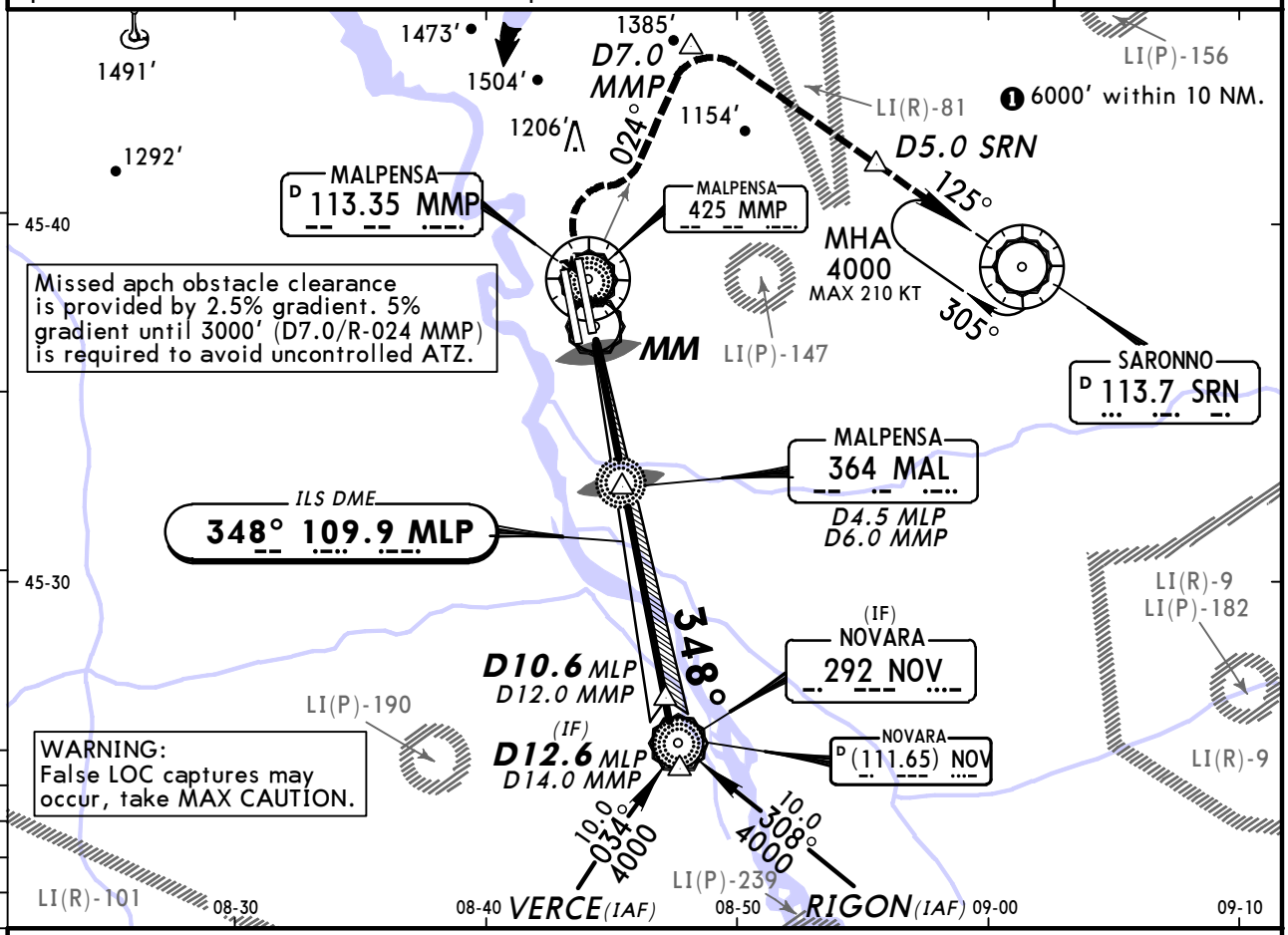
| LOC MLP | Final Apch Crs | GS LOM | CAT II/IIIA ILS | Apt Elev / RWY |
|---|---|---|---|---|
| 109.9 | 348° | 2110′ (1419′) | Refer to Minimums | Apt Elev 768′ RWY 691′ |

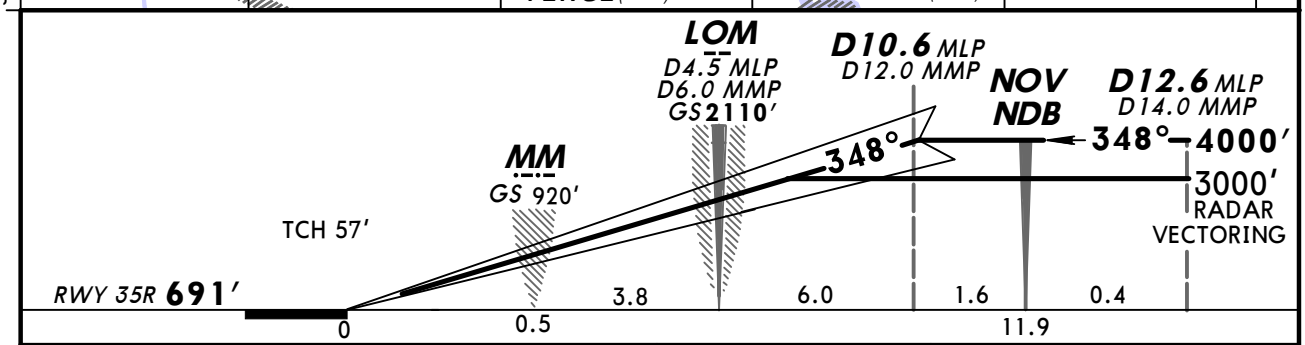
**MISSED APCH:** Climb on 348° to 1450′, then turn RIGHT as soon as possible to join R-024 MMP climbing to 3000′. At 3000′, not further than D7.0/R-024 MMP, turn RIGHT to SRN VOR. Maintain 3000′ until D5.0 SRN, then climb to 4000′.

Alt Set: hPa Rwy Elev: 25 hPa Trans level: By ATC Trans alt: 6000′
Special Aircrew & Acft Certification Required.




MSA
MMP VOR




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| GS | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II
PAPI PAPI

1450′ on 348°

**Standard** STRAIGHT-IN LANDING RWY 35R

| CAT IIIA ILS | CAT II ILS ABC | CAT II ILS D |
|---|---|---|
| DH 50′ | RA 105′ DA(H) 791′ (100′) | RA 110′ DA(H) 796′ (105′) |
| RVR 200m | RVR 300m [1] | |

[1] Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

*CHANGES:* Chart reindexed. Minimums.

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# LIMC/MXP
## MALPENSA

JEPPESEN

22 APR 11 (11-8) **Eff 5 May**

# MILAN, ITALY
## ILS Y Rwy 35R

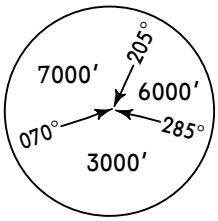
BRIEFING STRIP ™

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

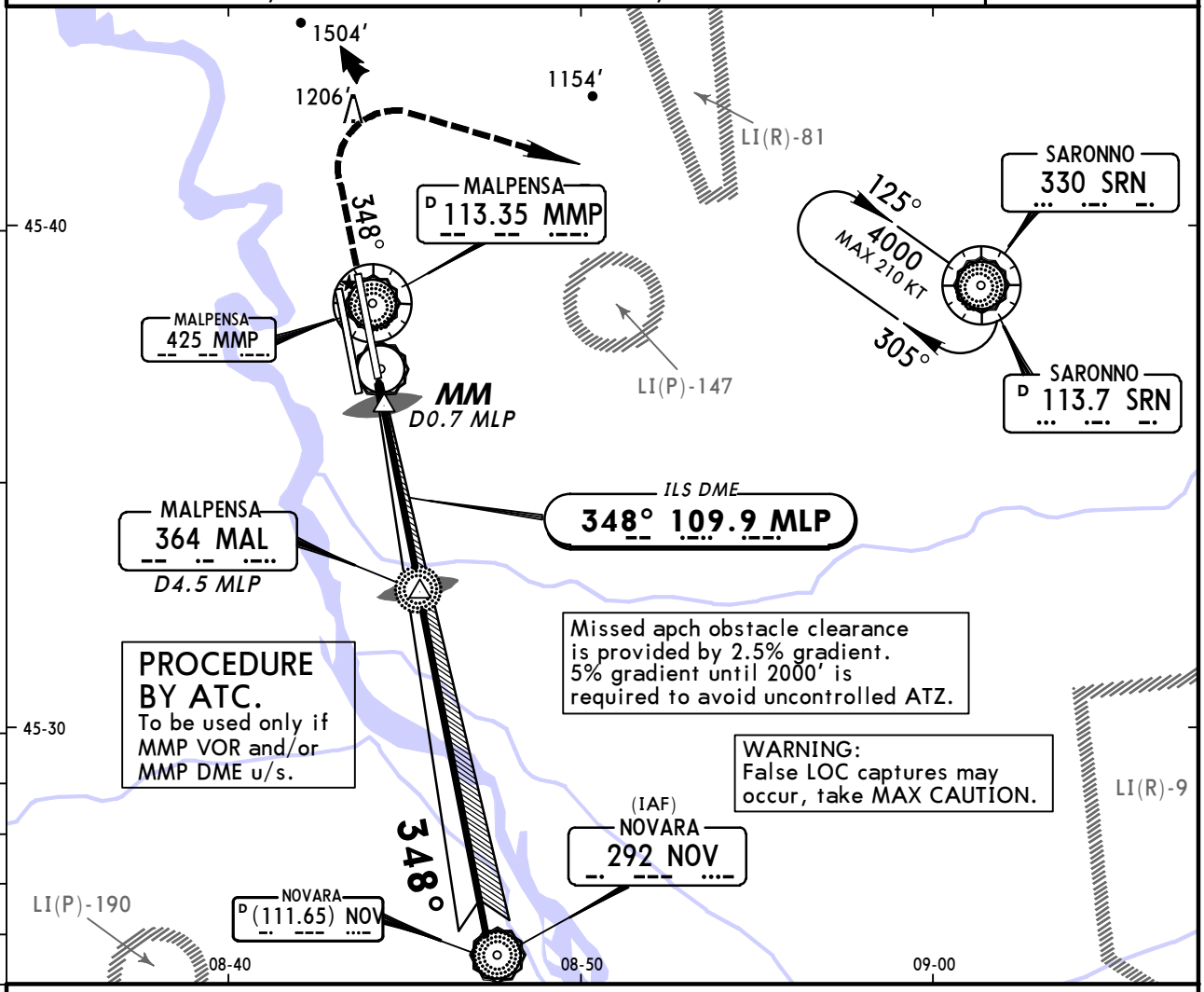
| LOC MLP | Final Apch Crs | GS LOM | ILS DA(H) | Apt Elev 768′ |
|---|---|---|---|---|
| 109.9 | 348° | 2110′ (1419′) | 891′ (200′) | RWY 691′ |

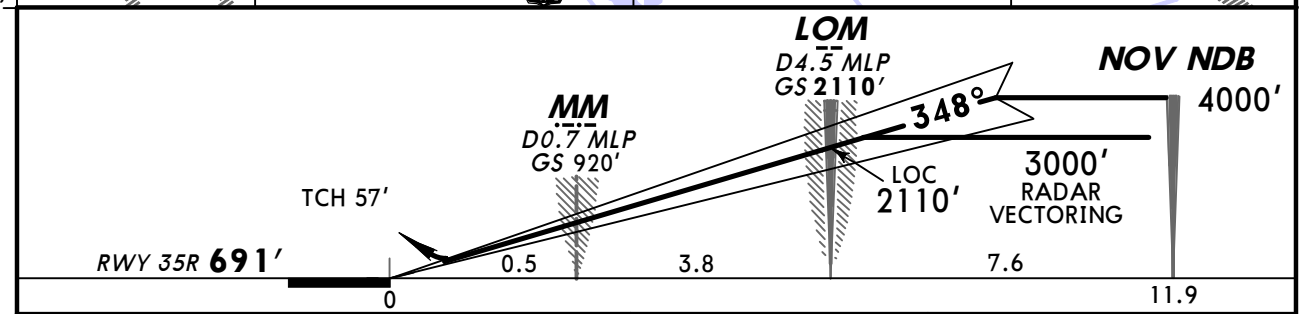
**MISSED APCH:** Climb on 348° to 1450′, then turn RIGHT to SRN VOR/Lctr climbing to 4000′.

Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000′




MSA
NOV NDB




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II
PAPI PAPI

1450′ on 348°

**Standard** STRAIGHT-IN LANDING RWY **35R**

| | ILS DA(H) 891′ (200′) FULL | Limited | ALS out | LOC (GS out) |
|---|---|---|---|---|
| A | RVR 550m | RVR 750m | RVR 1200m | NOT APPLICABLE |
| B | | | | |
| C | | | | |
| D | | | | |

CIRCLE-TO-LAND
Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

PANS OPS 4

*CHANGES:* Chart reindexed.

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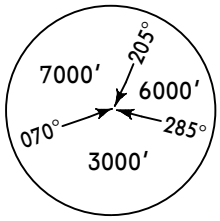
BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

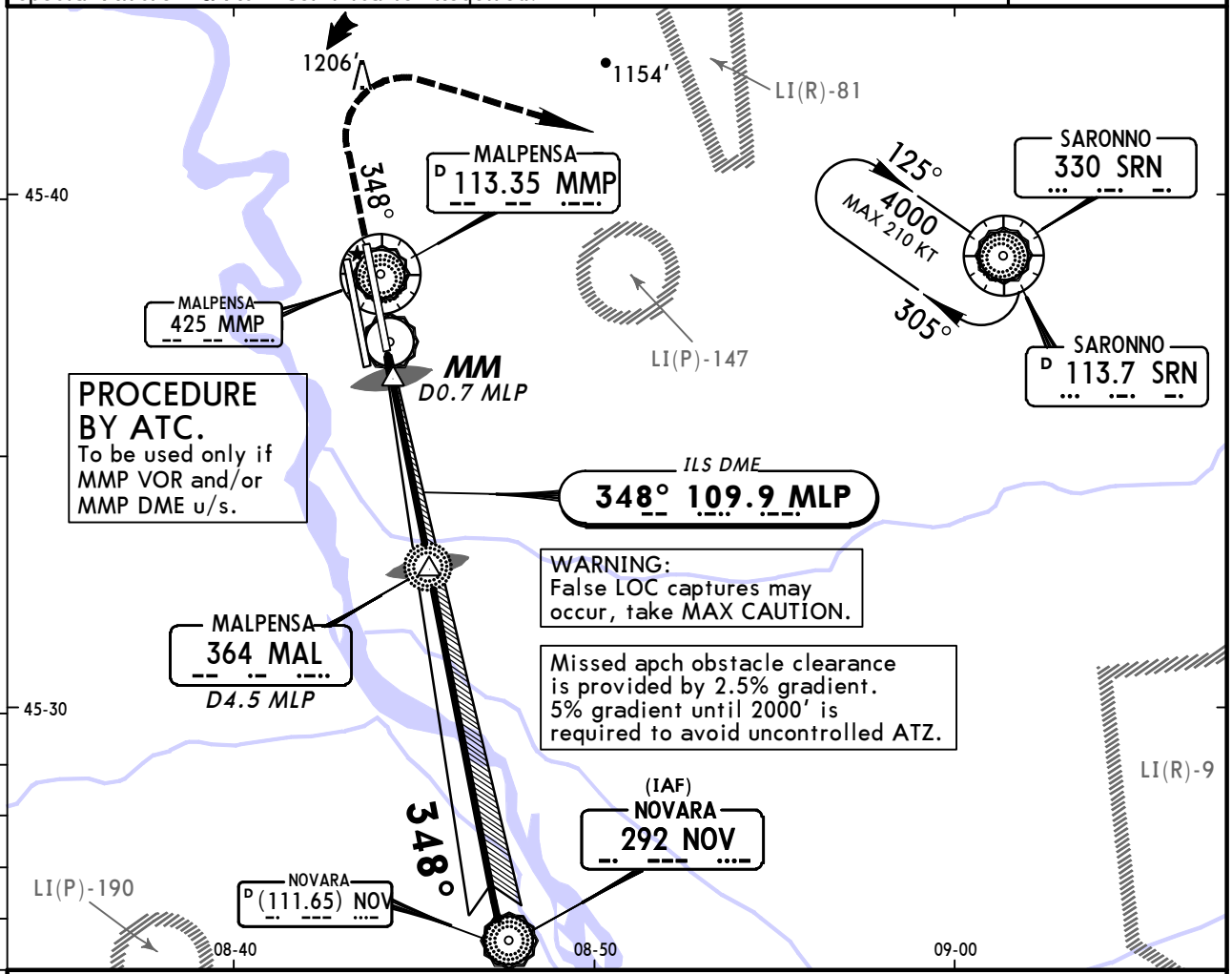
| LOC MLP | Final Apch Crs | GS LOM | CAT II/IIIA ILS | Apt Elev / RWY |
|---|---|---|---|---|
| 109.9 | 348° | 2110′ (1419′) | Refer to Minimums | 768′ / 691′ |

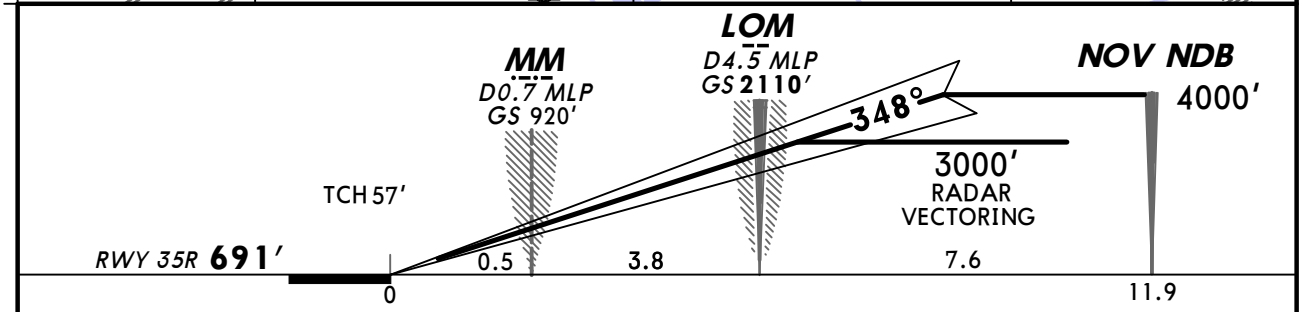
**MISSED APCH:** Climb on 348° to 1450′, then turn RIGHT to SRN VOR/Lctr climbing to 4000′.

Alt Set: hPa  Rwy Elev: 25 hPa  Trans level: By ATC  Trans alt: 6000′
Special Aircrew & Acft Certification Required.




MSA
NOV NDB




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| GS 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II
PAPI PAPI

1450′ on 348°

**Standard**

STRAIGHT-IN LANDING RWY 35R

| CAT IIIA ILS | CAT II ILS ABC | CAT II ILS D |
|---|---|---|
| DH 50′ | RA 105′ DA(H) 791′ (100′) | RA 110′ DA(H) 796′ (105′) |
| RVR 200m | RVR 300m [1] | |

[1] Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

*CHANGES:* Chart reindexed. Minimums.

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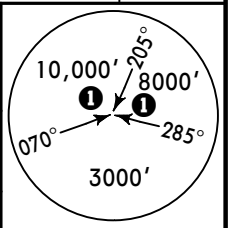
BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | 1400-2000 | 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | | 121.9 | 121.82 | | 121.9 |

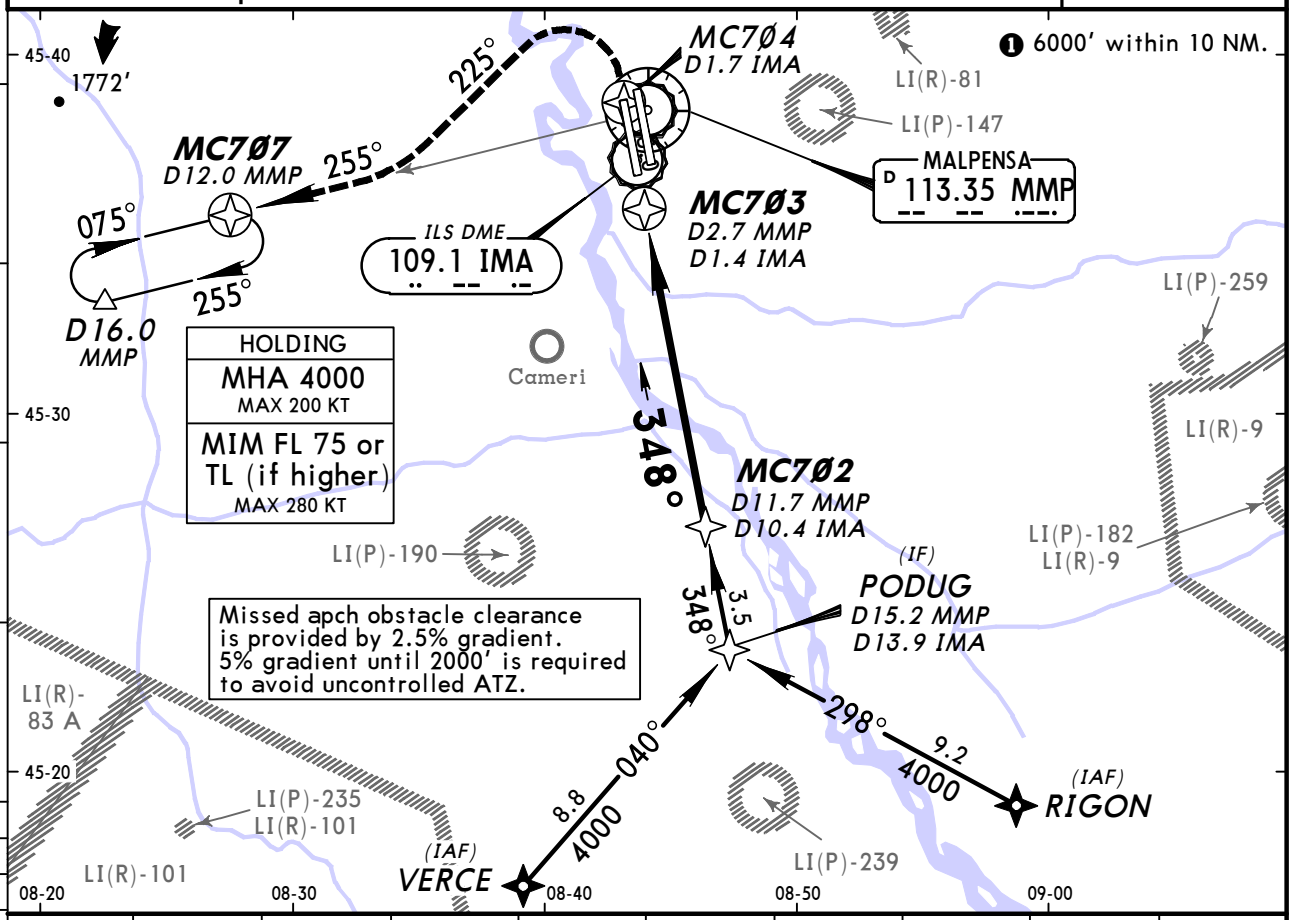
| RNAV | Final Apch Crs | Minimum Alt | DA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| | 348° | MC7Ø2 4000′ (3304′) | 1200′ (504′) | Apt Elev 768′ / RWY 696′ |

**MISSED APCH:** Climb on 348° to 1470′. At D1.7 IMA (ABEAM VOR) turn LEFT onto 225° to intercept R-255 and join holding at 4000′ .

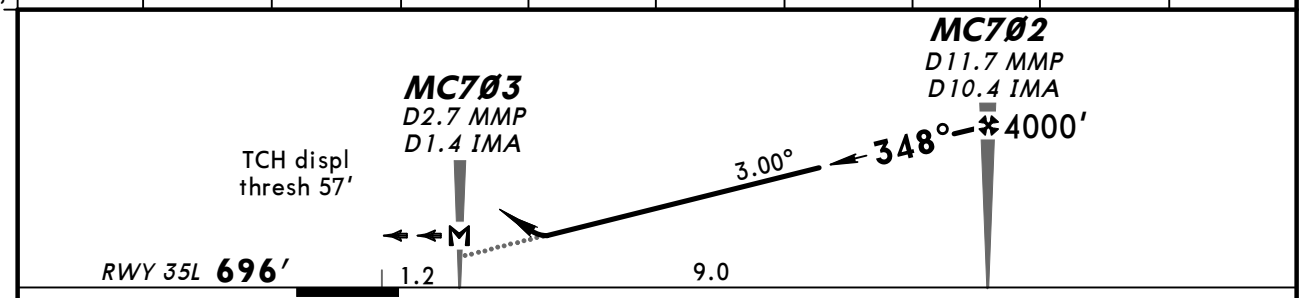
Alt Set: hPa  Rwy Elev: 25 hPa  Trans level: By ATC  Trans alt: 6000′
**MMP VOR DME required.**



MSA MMP VOR




| DIST to THR | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 |
|---|---|---|---|---|---|---|---|---|---|
| ALTITUDE | 1385′ | 1703′ | 2022′ | 2340′ | 2658′ | 2977′ | 3295′ | 3614′ | 3932′ |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| Descent Angle | 3.00° | 372 | 478 | 531 | 637 | 743 | 649 |
| MAP at MC7Ø3 | | | | | | | |

HIALS-II
PAPI PAPI
1470′ on 348°

PANS OPS

**Standard** STRAIGHT-IN LANDING RWY 35L

DA(H) 1200′ (504′)

| | | ALS out |
|---|---|---|
| A | RVR 1500m | |
| B | | |
| C | RVR 1600m | CMV 2400m |
| D | | |

CIRCLE-TO-LAND
Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

*CHANGES:* Missed approach.

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BRIEFING STRIP

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | Ground North 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | | 121.9 |

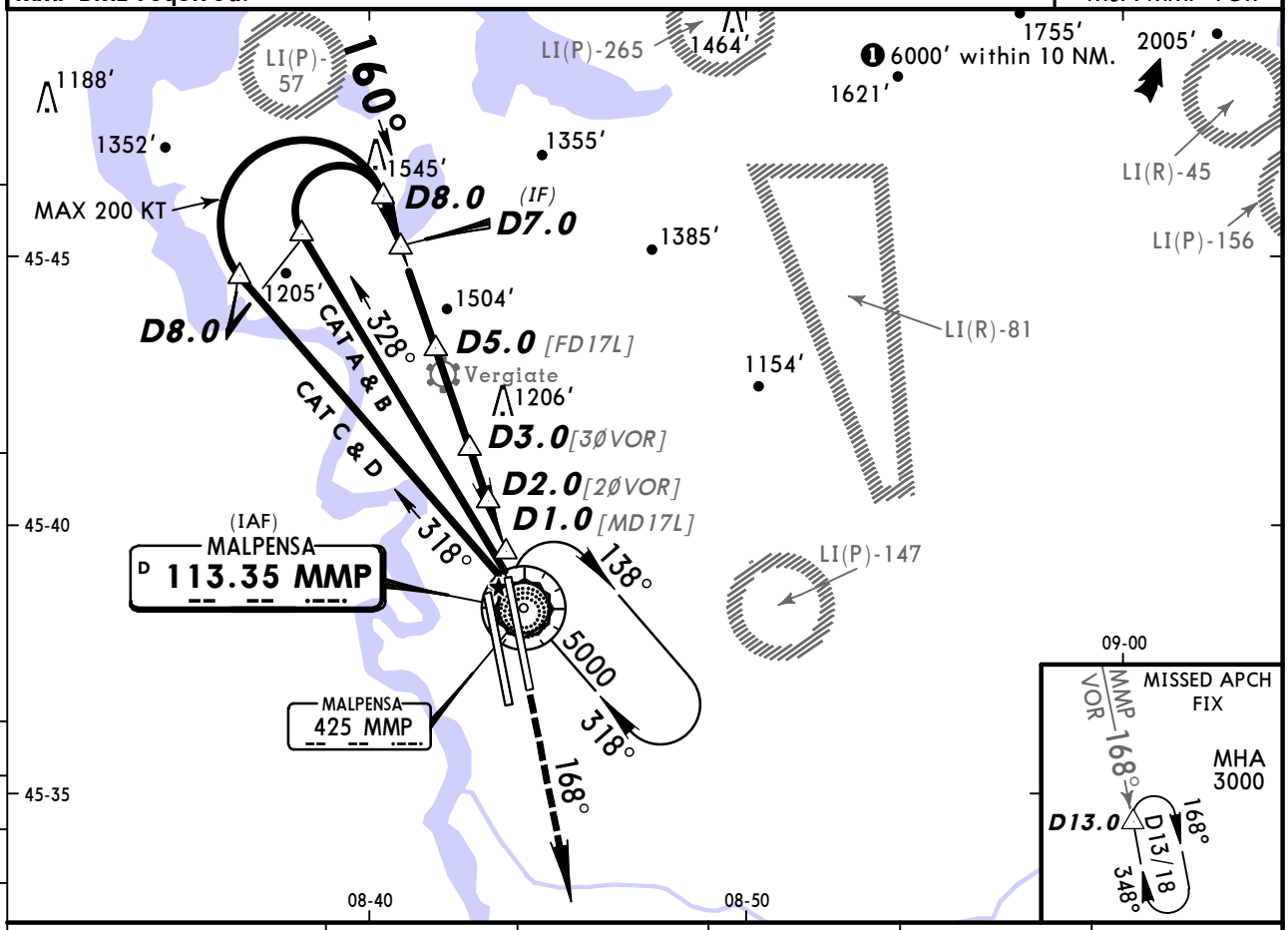
| VOR MMP | Final Apch Crs | Minimum Alt D5.0 | DA(H) | Apt Elev 768′ |
|---|---|---|---|---|
| 113.35 | 160° | 2360′ (1615′) | 1300′ (555′) | RWY 745′ |

**MISSED APCH:** Proceed on 168° to 3000′ and hold between D13.0/R-168 and D18.0.

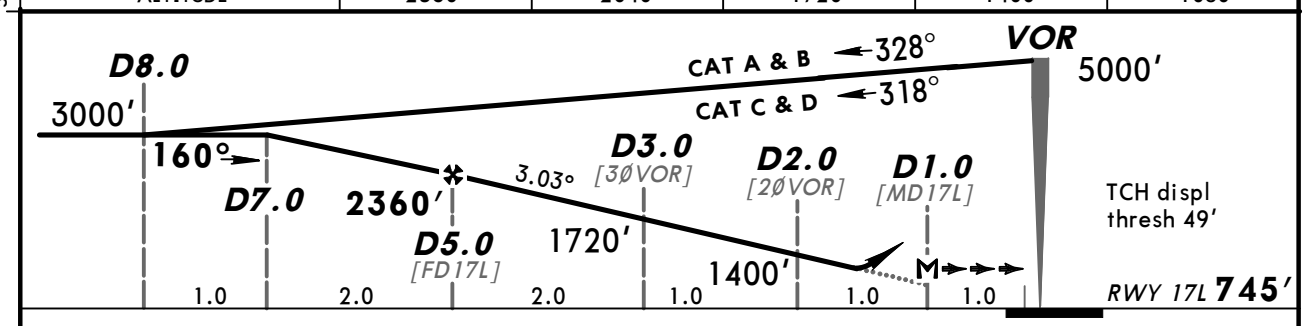
Alt Set: hPa  Rwy Elev: 27 hPa  Trans level: By ATC  Trans alt: 6000′

**MMP DME required.**

MSA MMP VOR: 10,000′ (205°–070°), 8000′ (205°–285°), 3000′




| MMP DME | 5.0 | 4.0 | 3.0 | 2.0 | 1.0 |
|---|---|---|---|---|---|
| ALTITUDE | 2360′ | 2040′ | 1720′ | 1400′ | 1080′ |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| Descent Angle | 3.03° | 375 | 482 | 536 | 643 | 750 | 858 |
| MAP at D1.0 | | | | | | | |

HIALS; PAPI PAPI

3000′ on 168°

PANS OPS

**Standard** STRAIGHT-IN LANDING RWY **17L**

DA(H) **1300′** (555′)

| | | ALS out |
|---|---|---|
| A | RVR 1500m | |
| B | RVR 1500m | |
| C | RVR 1800m | CMV 2500m |
| D | RVR 1800m | CMV 2500m |

CIRCLE-TO-LAND TO RWY 17R

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

*CHANGES:* None.

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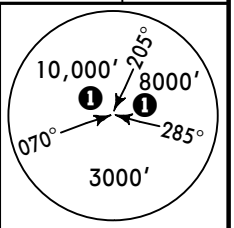
BRIEFING STRIP ™

| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 | 1400-2000 | 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 128.35 | 121.9 | 121.82 | | 121.9 |

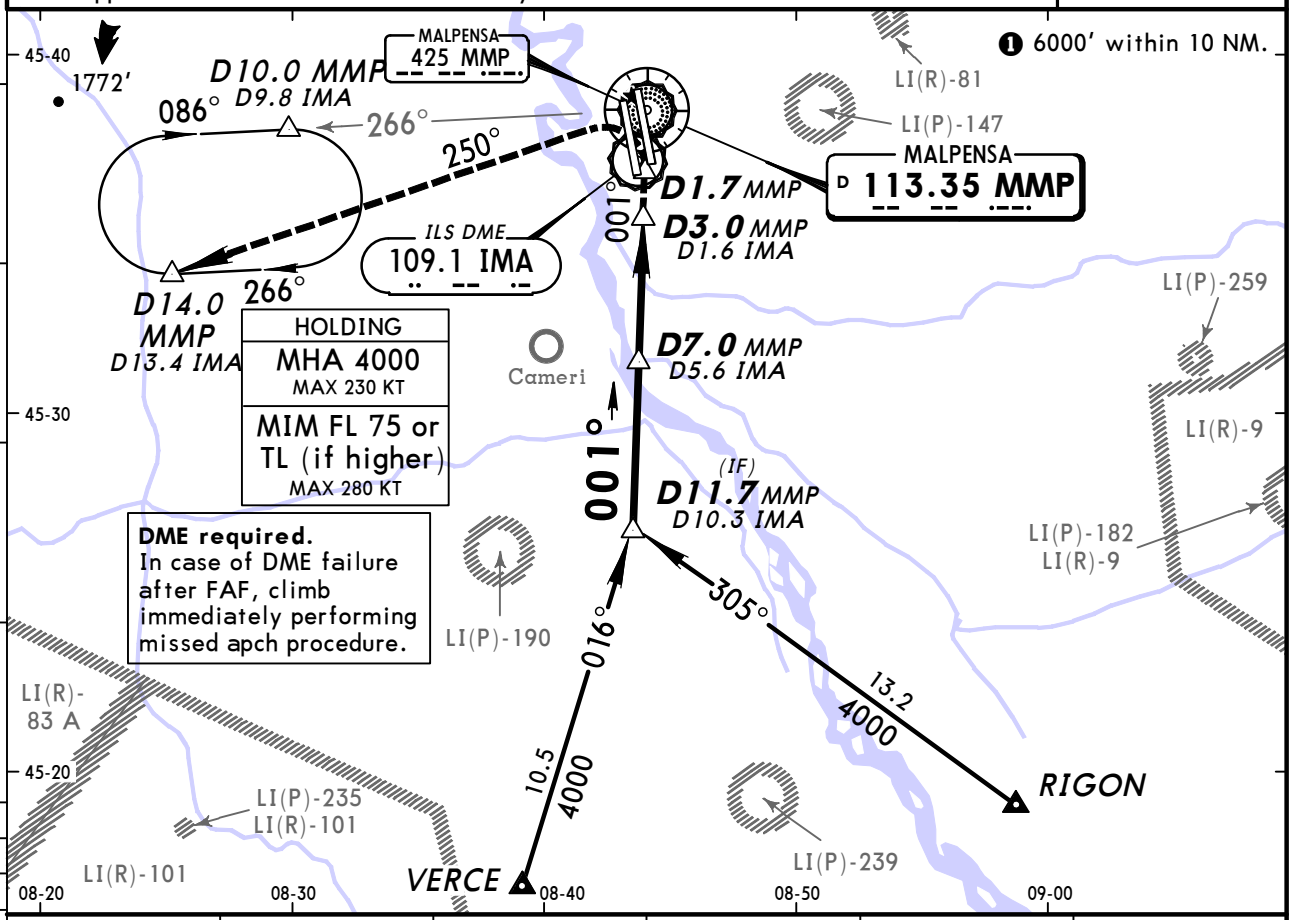
| VOR | Final Apch Crs | Minimum Alt | DA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| MMP 113.35 | 001° | D7.0 MMP 2500′ (1804′) | 1200′ (504′) | Apt Elev 768′ / RWY 696′ |

**MISSED APCH:** Climb on 001° to 4000′. At D1.7 before MMP turn LEFT to intercept R-250 and join holding.

Alt Set: hPa  Rwy Elev: 25 hPa  Trans level: By ATC  Trans alt: 6000′
Final approach track offset 13° from runway centerline.



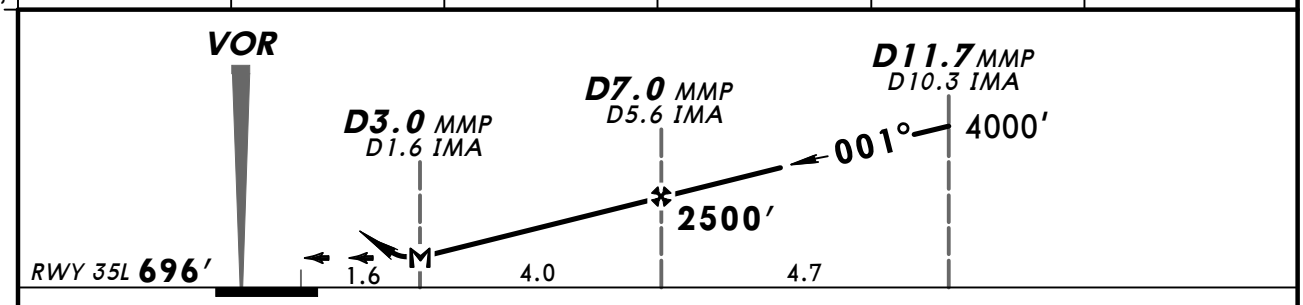
MSA MMP VOR




HOLDING
MHA 4000
MAX 230 KT
MIM FL 75 or TL (if higher)
MAX 280 KT

**DME required.**
In case of DME failure after FAF, climb immediately performing missed apch procedure.

| MMP DME | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 |
|---|---|---|---|---|---|
| ALTITUDE | 1200′ | 1520′ | 1840′ | 2160′ | 2500′ |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| Descent Angle | 2.98° | 369 | 474 | 527 | 633 | 738 | 843 |
| MAP at D3.0 MMP/D1.6 IMA | | | | | | | |

HIALS-II
PAPI PAPI
4000′ on 001°

PANS OPS

**Standard** STRAIGHT-IN LANDING RWY 35L

DA(H) 1200′ (504′)

| | | ALS out |
|---|---|---|
| A | RVR 1500m | |
| B | | |
| C | RVR 1600m | CMV 2400m |
| D | | |

CIRCLE-TO-LAND
Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

*CHANGES:* New procedure.

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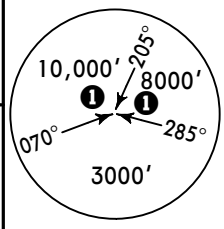
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | West | Ground North 0600-1200 | 1400-2000 | 2100-0500 |
|---|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | | 121.9 |

BRIEFING STRIP™

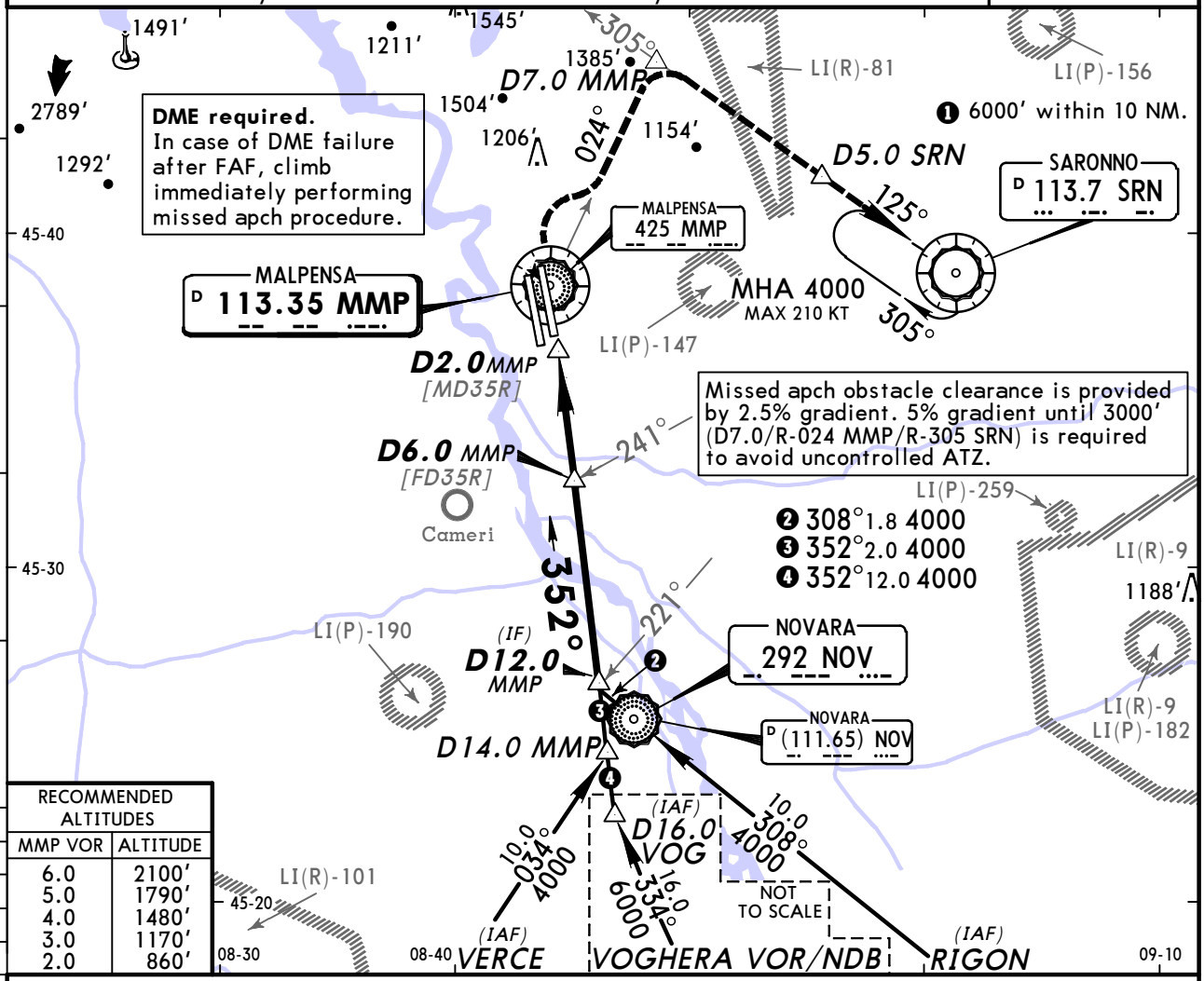
| VOR MMP | Final Apch Crs | Minimum Alt D6.0 MMP | DA(H) | Apt Elev 768′ |
|---|---|---|---|---|
| 113.35 | 352° | 2100′ (1409′) | 1150′ (459′) | RWY 691′ |

**MISSED APCH:** Climb on track 352° to 1450′, then turn RIGHT as soon as possible to join R-024 MMP climbing to 3000′. At 3000′, not further than D7.0 MMP, turn RIGHT to SRN VOR. Maintain 3000′ until D5.0 SRN, then climb to 4000′.

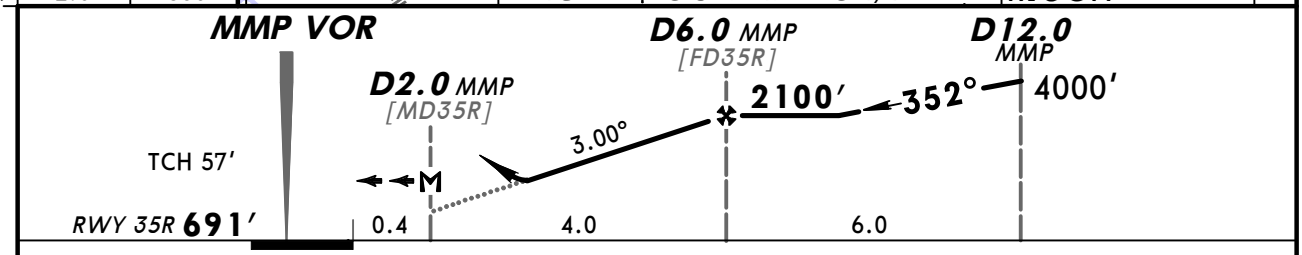
Alt Set: hPa | Rwy Elev: 25 hPa | Trans level: By ATC | Trans alt: 6000′




MSA
MMP VOR




| RECOMMENDED ALTITUDES | |
|---|---|
| MMP VOR | ALTITUDE |
| 6.0 | 2100′ |
| 5.0 | 1790′ |
| 4.0 | 1480′ |
| 3.0 | 1170′ |
| 2.0 | 860′ |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| Descent Angle | 3.00° | 372 | 478 | 531 | 637 | 743 | 849 |
| MAP at D2.0 MMP | | | | | | | |

HIALS-II
PAPI PAPI
1450′ on 352°

PANS OPS

**Standard** STRAIGHT-IN LANDING RWY **35R**

DA(H) **1150′** (459′)

| | | ALS out |
|---|---|---|
| A | RVR 1400m | RVR 1500m |
| B | | |
| C | | CMV 2100m |
| D | | |

CIRCLE-TO-LAND
Not authorized
West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1450′ (682′) | 1500m |
| 135 | 1450′ (682′) | 1600m |
| 180 | 1650′ (882′) | 2400m |
| 205 | 1690′ (922′) | 3600m |

*CHANGES:* Chart reindexed.

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BRIEFING STRIP ™

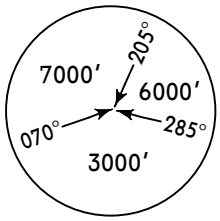
| ATIS Arrival | MILAN Radar (APP) | | | MALPENSA Tower | Ground West | Ground North 0600-1200 1400-2000 | Ground North 2100-0500 |
|---|---|---|---|---|---|---|---|
| 120.02 | 125.62 | 126.75 | 134.17 | 119.0 | 121.9 | 121.82 | 121.9 |

| Lctr MAL | Final Apch Crs | Minimum Alt MAL Lctr | DA(H) (CONDITIONAL) | Apt Elev 768′ |
|---|---|---|---|---|
| 364 | 348° | 2100′ (1409′) | 1150′ (459′) | RWY 691′ |

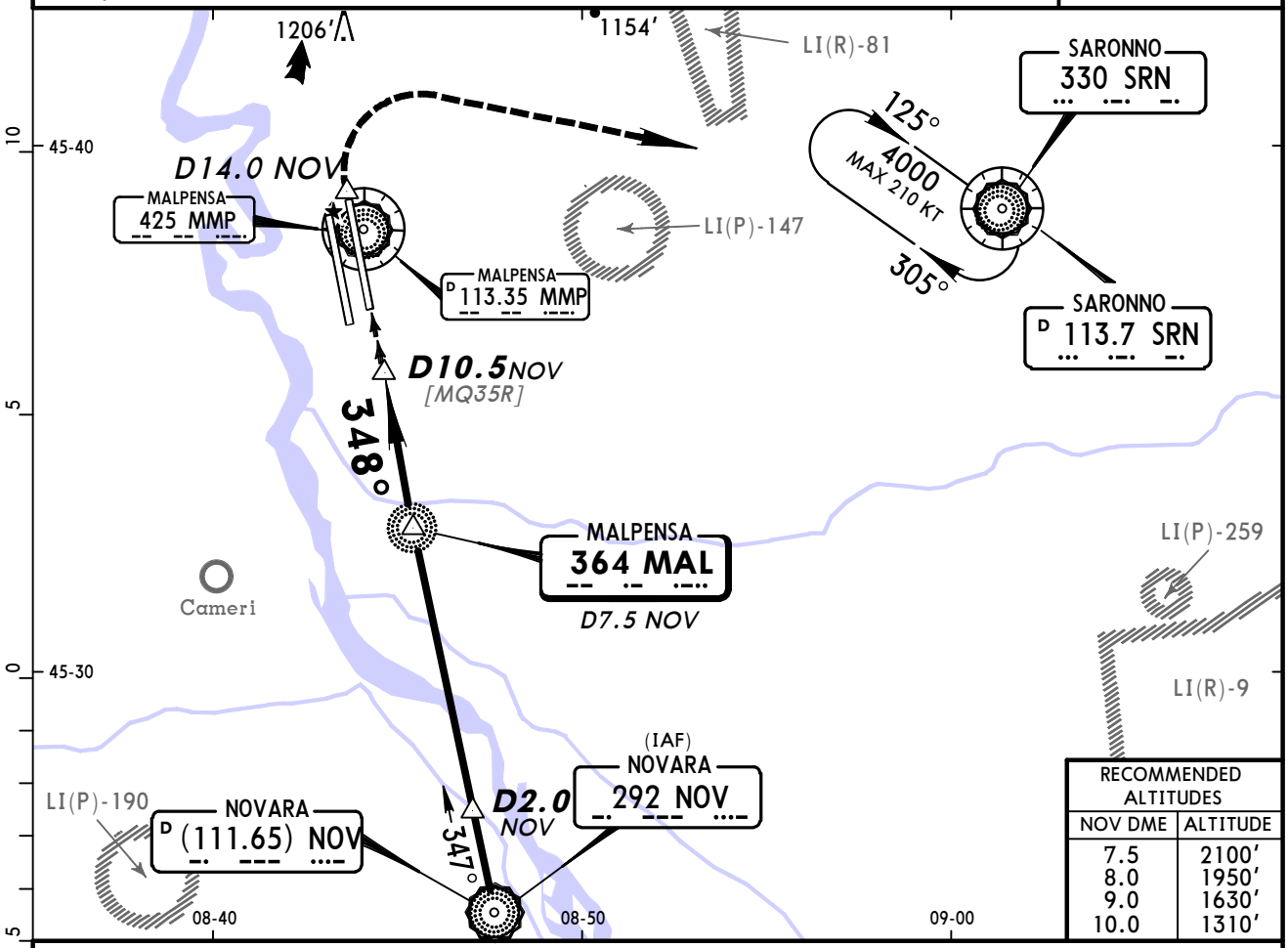
**MISSED APCH:** Climb on track 348° to 1450′/D14.0 NOV, then turn RIGHT to SRN VOR/Lctr climbing to 4000′.

Alt Set: hPa  Rwy Elev: 25 hPa  Trans level: By ATC  Trans alt: 6000′

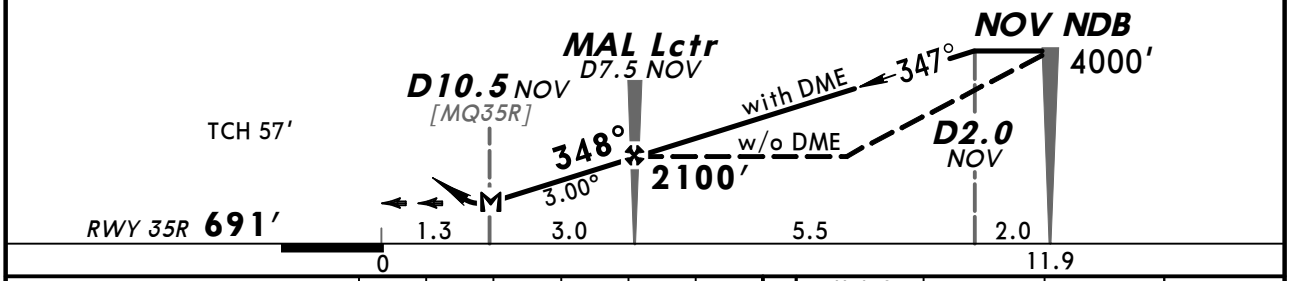
Missed apch obstacle clearance is provided by 2.5% gradient. 5% gradient until 3000′ is required to avoid uncontrolled ATZ.




MSA
NOV NDB




| RECOMMENDED ALTITUDES | |
|---|---|
| NOV DME | ALTITUDE |
| 7.5 | 2100′ |
| 8.0 | 1950′ |
| 9.0 | 1630′ |
| 10.0 | 1310′ |




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| Descent Angle | 3.00° | 372 | 478 | 531 | 637 | 743 | 849 |
| With DME: MAP at D10.5 NOV | | | | | | | |
| W/o DME: MAL Lctr to MAP | 3.0 | 2:34 | 2:00 | 1:48 | 1:30 | 1:17 | 1:08 |

HIALS
PAPI PAPI

348° ↑

D14.0 NOV or 1450′

**Standard** STRAIGHT-IN LANDING RWY 35R

| | With DME DA(H) 1150′ (459′) | | W/o DME DA(H) 1300′ (609′) | |
|---|---|---|---|---|
| | | ALS out | | ALS out |
| A | RVR 1400m | RVR 1500m | RVR 1500m | |
| B | | | | |
| C | | CMV 2100m | CMV 2100m | CMV 2400m |
| D | | | | |

CIRCLE-TO-LAND

Not authorized West of airport

| Max Kts | MDA(H) | VIS |
|---|---|---|
| 100 | 1380′ (612′) | 1500m |
| 135 | 1420′ (652′) | 1600m |
| 180 | 1600′ (832′) | 2400m |
| 205 | 1670′ (902′) | 3600m |

PANS OPS

CHANGES: None.

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# Chart changes since cycle 12-2014

ADD = added chart, REV = revised chart, DEL = deleted chart.

| ACT | PROCEDURE IDENT | INDEX | REV DATE | EFF DATE |
|---|---|---|---|---|
| **MILAN, (MALPENSA - LIMC)** | | | | |
| REV | AIRPORT BRIEFING (DEP CON... | 10-1P12 | 13 Jun 2014 | 26 Jun 2014 |
| REV | AIRPORT BRIEFING (GEN CON... | 10-1P4 | 13 Jun 2014 | 26 Jun 2014 |
| REV | AIRPORT BRIEFING (GEN CON... | 10-1P5 | 13 Jun 2014 | 26 Jun 2014 |
| REV | AIRPORT BRIEFING (ARR CON... | 10-1P6 | 13 Jun 2014 | 26 Jun 2014 |
| REV | AIRPORT BRIEFING (ARR CON... | 10-1P7 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | RNAV SID DESIGNATION INDE... | 10-3A1 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | BLA 5L RNAV DEP (TEMP) | 10-3A2 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | BLA 5M & 5S RNAV DEPS (TE... | 10-3C1 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | FARAK 5L RNAV DEP (TEMP) | 10-3C2 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | FARAK 5M & 5S RNAV DEPS (... | 10-3E1 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | IRKED 5T & NELAB 5L RNAV ... | 10-3E2 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | NELAB 5M & 5S RNAV DEPS (... | 10-3E3 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | DOGUB 5T, MMP 5L & 5M RNA... | 10-3G1 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | MMP 5S RNAV DEP (TEMP) | 10-3G2 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | SRN 5L & 5M RNAV DEPS (TE... | 10-3J1 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | SRN 5S RNAV DEP (TEMP) | 10-3J2 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | TELVA 5L & 5M RNAV DEPS (... | 10-3J3 | 13 Jun 2014 | 26 Jun 2014 |
| ADD | TELVA 5S RNAV DEP (TEMP) | 10-3J4 | 13 Jun 2014 | 26 Jun 2014 |
| REV | ILS Z RWY 35L | 11-4 | 13 Jun 2014 | 26 Jun 2014 |
| REV | CAT II/III ILS Z RWY 35L | 11-4A | 13 Jun 2014 | 26 Jun 2014 |
| REV | ILS Y RWY 35L | 11-5 | 13 Jun 2014 | 26 Jun 2014 |
| REV | CAT II/III ILS Y RWY 35L | 11-5A | 13 Jun 2014 | 26 Jun 2014 |
| REV | ILS X RWY 35L | 11-6 | 13 Jun 2014 | 26 Jun 2014 |
| REV | CAT II/III ILS X RWY 35L | 11-6A | 13 Jun 2014 | 26 Jun 2014 |
| REV | RNAV (GNSS) RWY 35L | 12-1 | 13 Jun 2014 | 26 Jun 2014 |

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# TERMINAL CHART CHANGE NOTICES

## No Chart Change Notices for Airport LIMC