

SCALE 1:250.000



FIS	Milano Information	124.925
APP	Milano Radar	CH 125.630 (CH 132.705)
TWR	Malpensa TWR	128.350
TWR	Malpensa TWR	(123.600)
ATIS	Malpensa Arrival Information	120.025
ATIS	Malpensa Departure Information	121.625

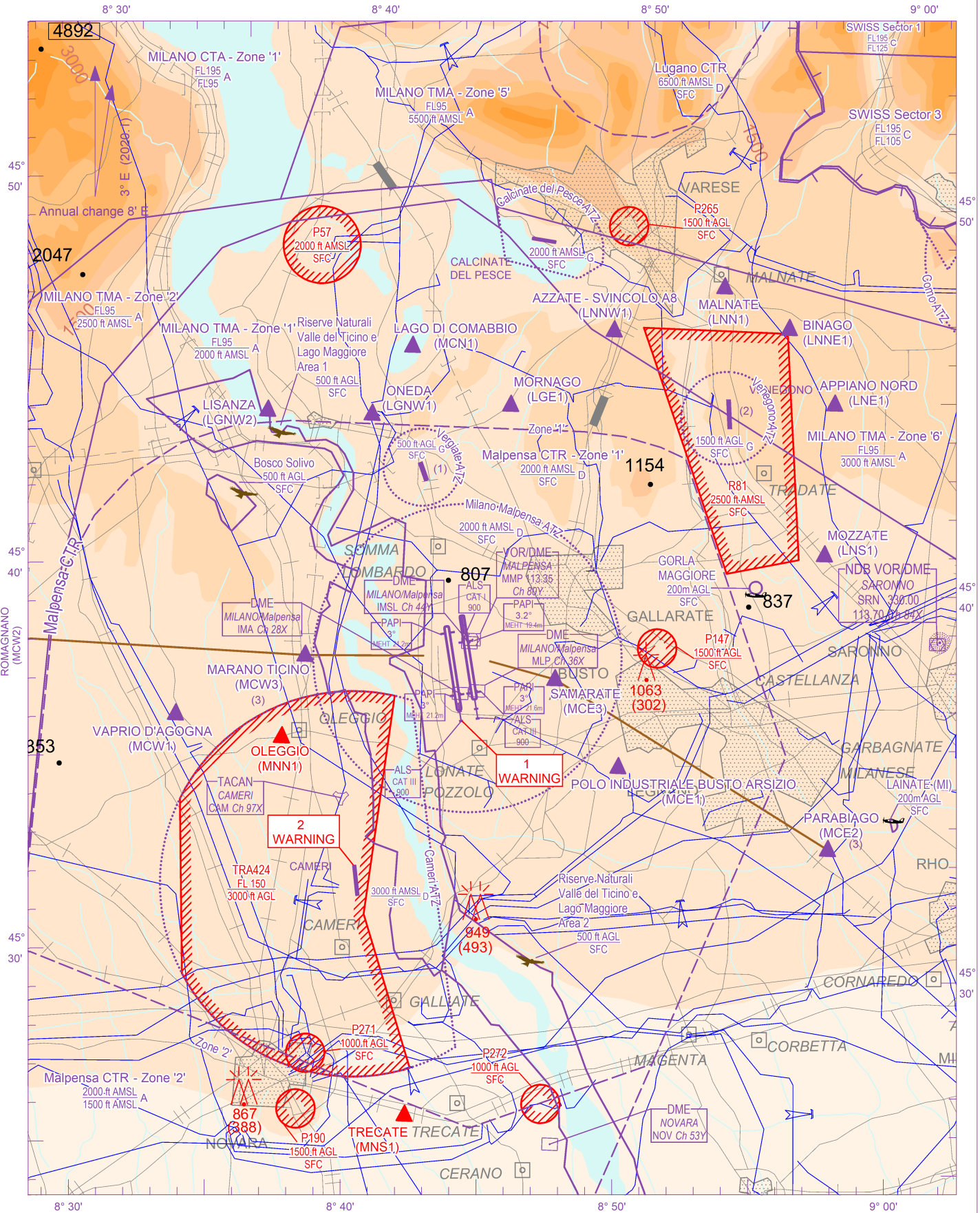
AD ELEV

768

L  
I  
M  
C

MILANO/MALPENSA

CHANGE: NEW VISUAL REPORTING POINTS FOR THE APPROACH TO VENEGONO ATZ AND UPDATED CHART



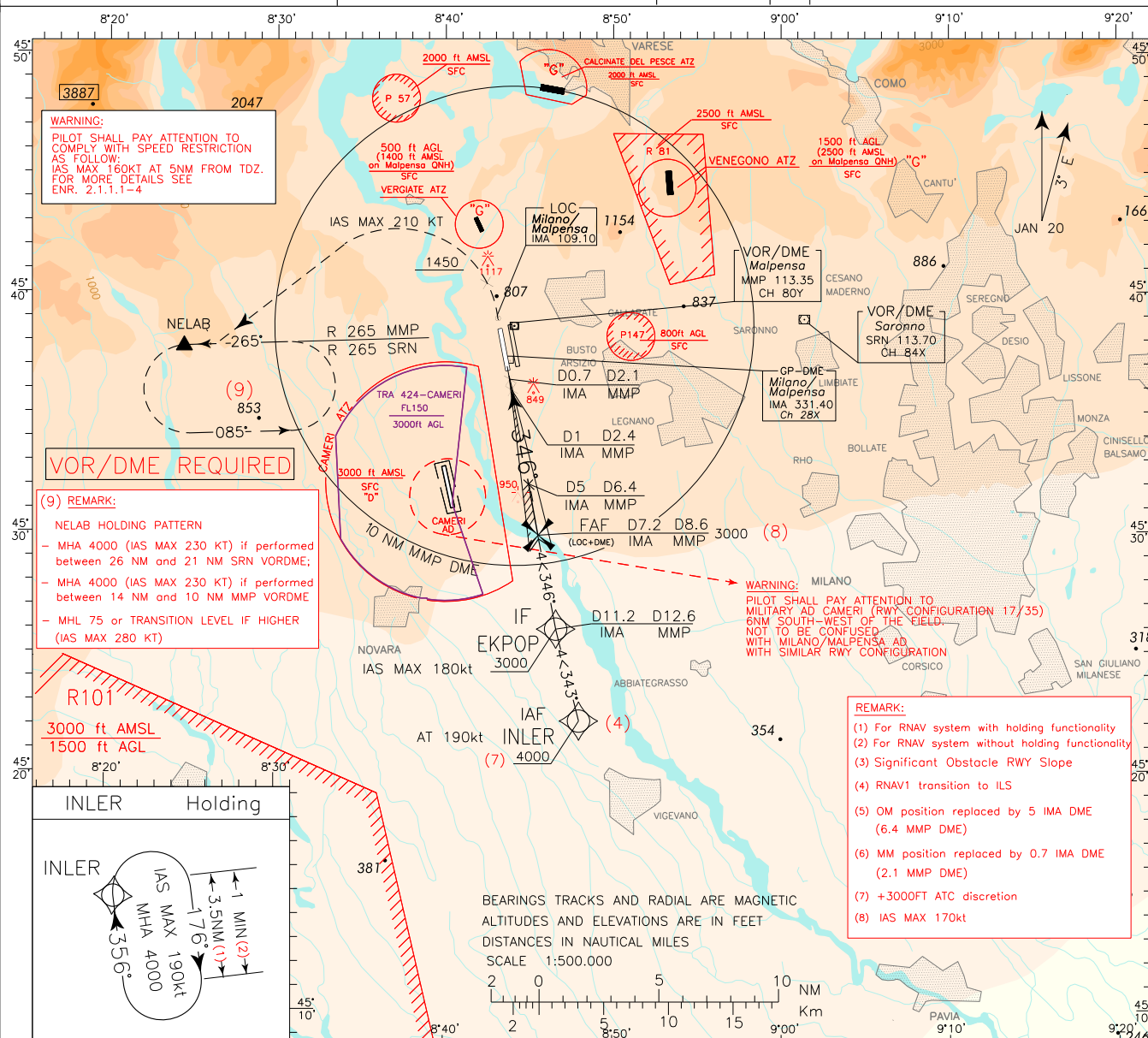
AIRSPACE CLASSIFICATION See AIP ENR 1.4
TRANSITION ALT 6000 FT
ELEV AND ALT IN FT IF NOT OTHERWISE INDICATED

<b>REMARK</b>
(1) Vergiate ATZ upper vertical limit: 1400 ft AMSL on Malpensa QNH
(2) Venegono ATZ upper vertical limit: 2500 ft AMSL on Malpensa QNH
(3) Entry points MARANO TICINO (MCW3) and PARABIAGO (MCE2) night VFR allowed for helicopters only

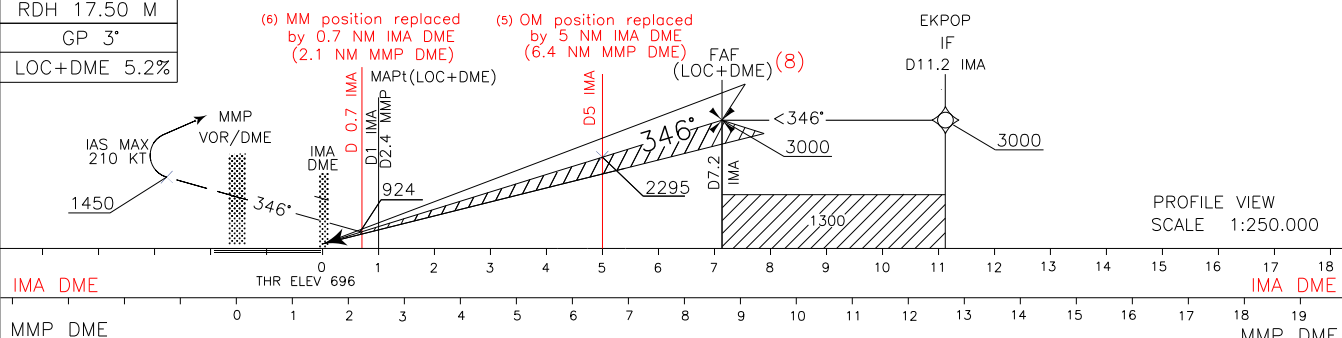
<b>WARNING</b>
① Aircraft taxiing independently on TWY H underneath short final RWY 35L
② Military AD Cameri with RWY configuration 17/35. Not to be confused with Milano/Malpensa AD with similar RWY configuration

DOC 8168 ED 6 2014 AMDT 8  
CHANGE: MAGNETIC VARIATION UPDATED – MSA MODIFIED

<b>WARNINGS:</b> Some users on ILS APCH reported false LOC captures. Pilot attention is drawn to pay max caution. See AIP ENR 1.3 Aircraft taxiing independently on TWY H underneath short final RWY 35L.	APP <i>Milano Radar</i>	CH 125.630 (CH 132.705)	AD ELEV 768	L I M C MILANO/MALPENSA ILS or LOC-Z RWY 35L
	TWR <i>Malpensa TWR</i>	128.350		
	ATIS <i>Malpensa Arrival Information</i>	120.025		



TRANSITION ALT 6000  
**MISSED APPROACH:** Proceed on track 346° climbing to 4000 ft. At 1450 ft turn left (IAS MAX 210 kt) to intercept and follow RDL 265 SRN/MMP VOR direct to NELAB holding pattern.  
**REMARK:** Missed approach obstacle clearance is provided by 2.5% gradient; 5% gradient until 2000 ft is required to overfly Vergiate ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G".



STRAIGHT IN APPROACH	OCA (OCH)	A B C D				CIRCLING SECTORS	FT PER MIN	GS	FAP-D5 D5-D0.7		DME IMA	ALT (HGT)	MNM SECT ALT 25NM FROM ARP or MMP VOR/DME										
		THR ELEV 696							2.23 NM	4.46 NM				1	2								
CAT.I (3)	858 (162)	873 (177)	888 (192)	898 (202)	NOT ALLOWED	850	160	0 : 50	1 : 40	1	1074 (378)	10300 (10)											
													CAT.II (1)	762 (66)	777 (81)	787 (91)	807 (111)	740	140	0 : 57	1 : 54	2	1392 (696)
CIRCLING	1450 (682)	1650 (882)	1710 (942)	NOT ALLOWED	425	80	1 : 39	3 : 20	4	2029 (1333)	5	2348 (1652)											
													10300 (10)										

## TABULAR DESCRIPTION

## ILS Z RWY35L – RNAV TRANSITION TO ILS APPROACH

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA/TCH	Navigation Specification
010	IF	INLER	-	-	-	-	-	+4000 (1)	AT 190	-	RNAV 1
020	TF	EKPOP	-	343 (345.9)	-	4.0	-	+3000	-180	-	RNAV 1

(1) +3000ft ATC discretion

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min.)/ Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1.0/ -	R	+4000	-	-190	3	RNAV1

(1) RNAV system with holding functionality

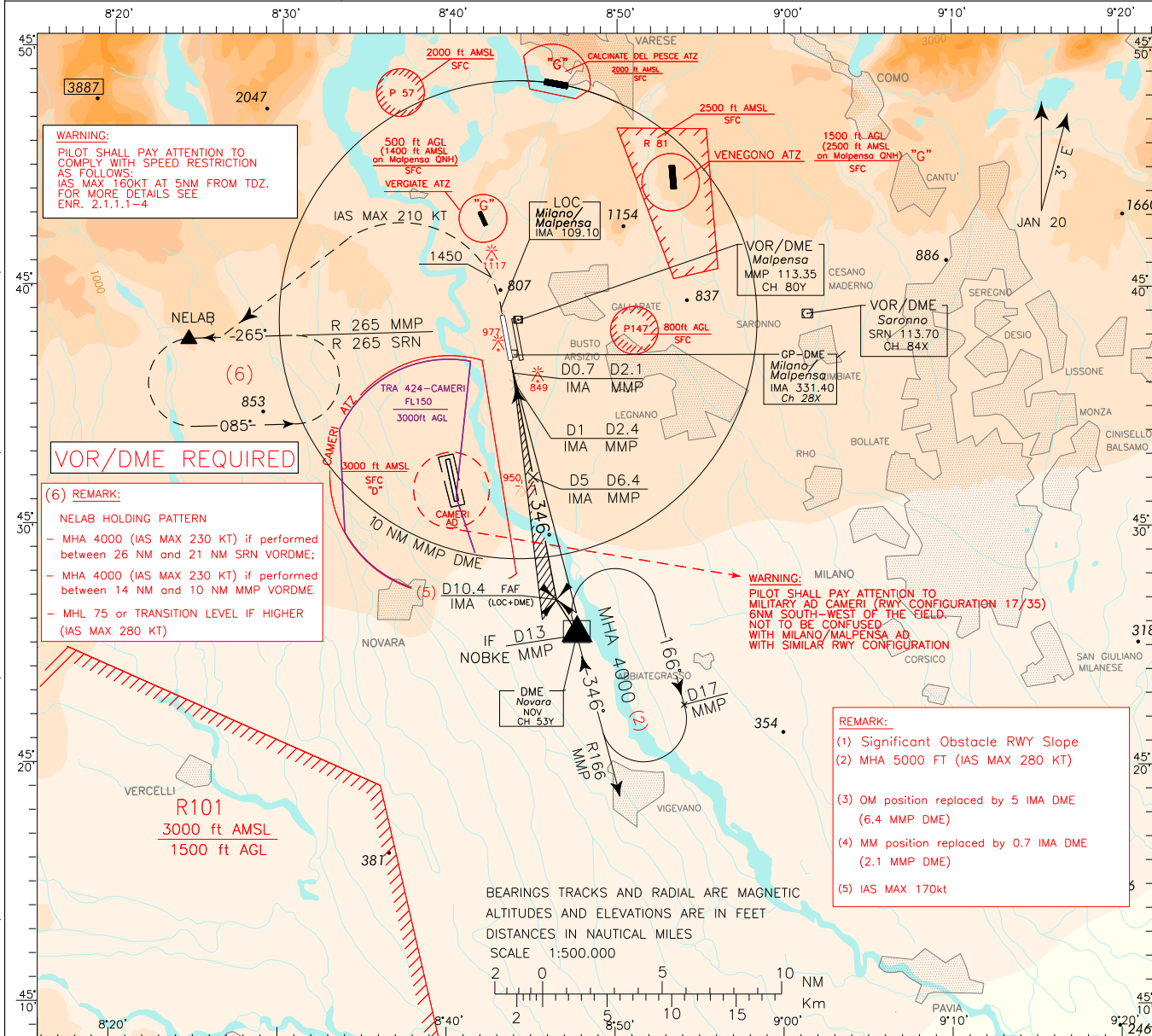
(2) RNAV system without holding functionality

# ICAO – INSTRUMENT APPROACH CHART

AD 2 LIMC 5-5

DOC 8168 ED 6 2014 AMDT 8  
 CHANGE: NOV NDB DISMISSED; NOV HOLDING WITHDRAWN; TRACK IF-FAF UPDATED; REMARKS UPDATED;

<b>WARNINGS:</b> -Some users on ILS APCH reported false LOC captures. Pilot attention is drawn to pay max caution. See AIP ENR 1.3 -Aircraft taxiing independently on TWY H underneath short final RWY 35L.	APP <i>Milano Radar</i>	CH 125.630 (CH 132.705)	AD ELEV	L I M C	MILANO/ MALPENSA  ILS or LOC-Y RWY 35L
	TWR <i>Malpensa TWR</i>	128.350	768		
	ATIS <i>Malpensa Arrival Information</i>	120.025			



**WARNING:**  
PILOT SHALL PAY ATTENTION TO COMPLY WITH SPEED RESTRICTION AS FOLLOWS:  
IAS MAX 160KT AT 5NM FROM TDZ.  
FOR MORE DETAILS SEE ENR. 2.1.1.1-4

**VOR/DME REQUIRED**

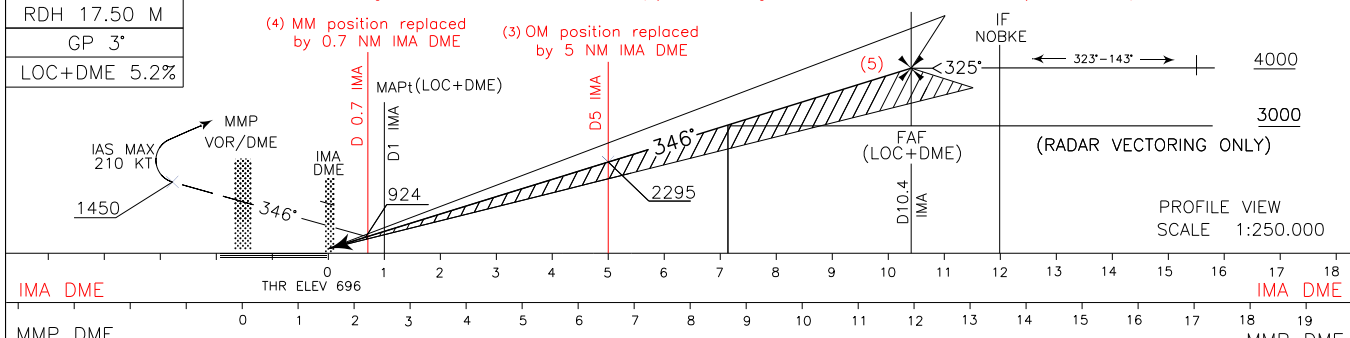
(6) **REMARK:**  
NELAB HOLDING PATTERN  
- MHA 4000 (IAS MAX 230 KT) if performed between 26 NM and 21 NM SRN VORDME;  
- MHA 4000 (IAS MAX 230 KT) if performed between 14 NM and 10 NM MMP VORDME  
- MHL 75 or TRANSITION LEVEL IF HIGHER (IAS MAX 280 KT)

**WARNING:**  
PILOT SHALL PAY ATTENTION TO MILITARY AD CAMERI (RWY CONFIGURATION 17/35) 5NM SOUTH-WEST OF THE FIELD. NOT TO BE CONFUSED WITH MILANO/MALPENSA AD WITH SIMILAR RWY CONFIGURATION

**REMARK:**  
(1) Significant Obstacle RWY Slope  
(2) MHA 5000 FT (IAS MAX 280 KT)  
(3) OM position replaced by 5 IMA DME (6.4 MMP DME)  
(4) MM position replaced by 0.7 IMA DME (2.1 MMP DME)  
(5) IAS MAX 170kt

BEARINGS TRACKS AND RADIAL ARE MAGNETIC  
ALTITUDES AND ELEVATIONS ARE IN FEET  
DISTANCES IN NAUTICAL MILES  
SCALE 1:500,000

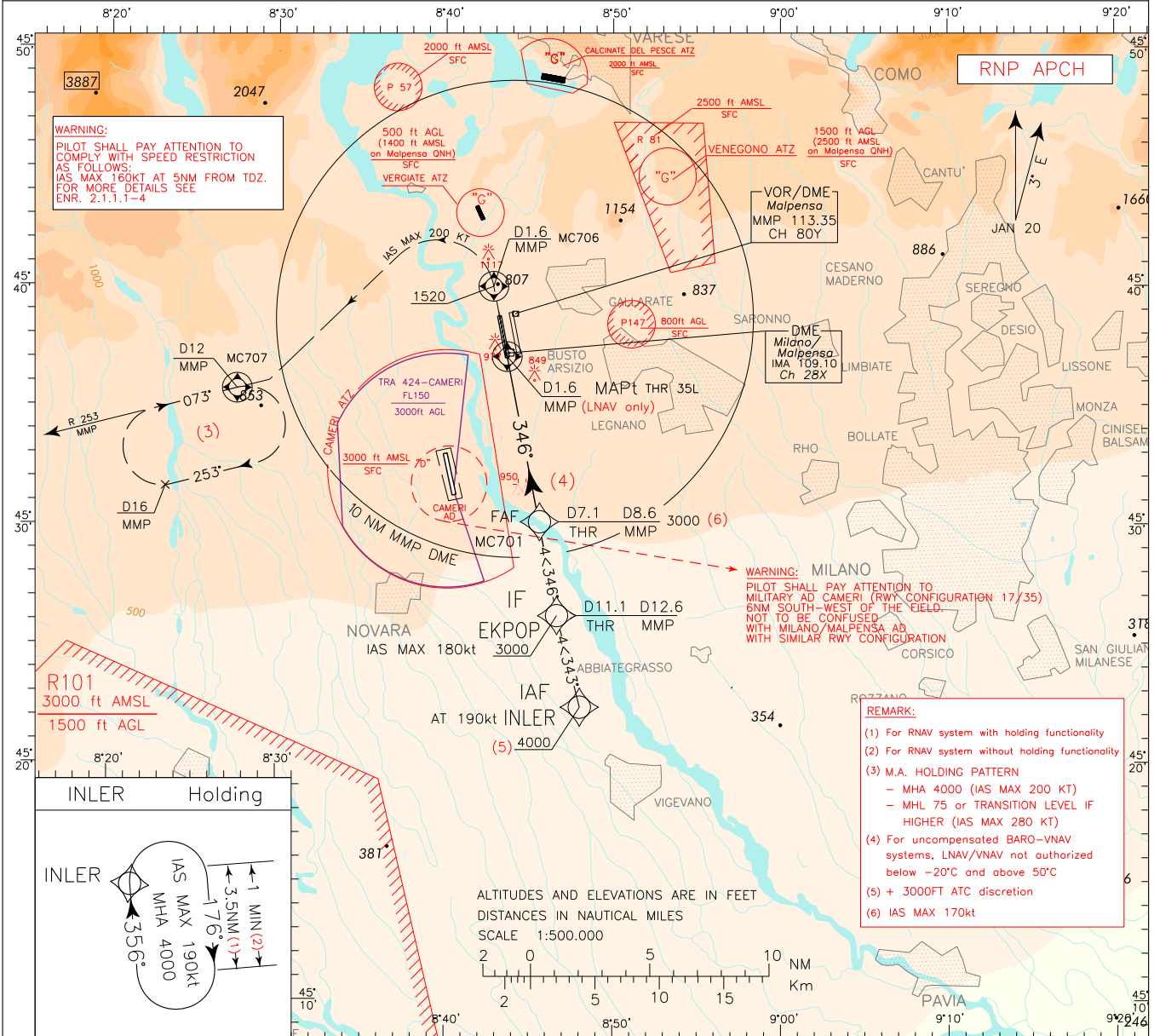
TRANSITION ALT 6000  
MISSED APPROACH: Proceed on track 346° climbing to 4000 ft. At 1450 ft turn left (IAS MAX 210 kt) to intercept and follow RDL 265° SRN/MMP VOR direct to NELAB holding pattern.  
**REMARK:** Missed approach obstacle clearance is provided by 2.5% gradient; 5% gradient until 2000 ft is required to overfly Vergiate ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G".



OCA (OCH)				CIRCLING SECTORS 	FT PER MIN	GS	FAP-D5 5.19 NM	D5-D0.7 4.46 NM	DME IMA	ALT (HGT)	MNM SECT ALT MMP	VOR/DME											
STRAIGHT IN APPROACH	CAT.I (1)	858 (162)	873 (177)										888 (192)	898 (202)	1	1074 (378)							
	CAT.II (1)	762 (66)	777 (81)										787 (91)	807 (111)	2	1392 (696)							
	LOC+DME	1140 (444)											3	1711 (1015)									
CIRCLING	1450 (682)		1650 (882)	1710 (942)	4	2029 (1333)																	
<table border="1"> <tr> <td>5</td> <td>2348 (1652)</td> </tr> <tr> <td>6</td> <td>2666 (1970)</td> </tr> <tr> <td>7</td> <td>2983 (2287)</td> </tr> <tr> <td>8</td> <td>3303 (2607)</td> </tr> <tr> <td>9</td> <td>3621 (2925)</td> </tr> <tr> <td>10</td> <td></td> </tr> </table>												5	2348 (1652)	6	2666 (1970)	7	2983 (2287)	8	3303 (2607)	9	3621 (2925)	10	
5	2348 (1652)																						
6	2666 (1970)																						
7	2983 (2287)																						
8	3303 (2607)																						
9	3621 (2925)																						
10																							

DOC 8168 ED 6 2014 AMDT 8

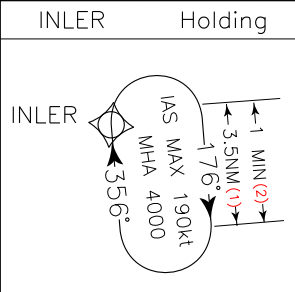
- Aircraft taxiing independently on TWY H underneath short final RWY 35L.	EGNOS	APP <i>Milano Radar</i>	CH 125.630 (CH 132.705)	AD ELEV 768	L I M C	MILANO/ MALPENSA RNP RWY 35L
	CH 65551	TWR <i>Malpensa TWR</i>	128.350			
	E35E	ATIS <i>Malpensa Arrival Information</i>	120.025			



**WARNING:**  
PILOT SHALL PAY ATTENTION TO COMPLY WITH SPEED RESTRICTION AS FOLLOWS:  
IAS MAX 160KT AT 5NM FROM TDZ.  
FOR MORE DETAILS SEE ENR. 2.1.1.1-4

**WARNING:** MILANO  
PILOT SHALL PAY ATTENTION TO MILITARY AD CAMERI (RWY CONFIGURATION 17/35) 6NM SOUTH-WEST OF THE FIELD. NOT TO BE CONFUSED WITH MILANO/MALPENSA AD WITH SIMILAR RWY CONFIGURATION

- REMARK:**
- (1) For RNAV system with holding functionality
  - (2) For RNAV system without holding functionality
  - (3) M.A. HOLDING PATTERN  
- MHA 4000 (IAS MAX 200 KT)  
- MHL 75 or TRANSITION LEVEL IF HIGHER (IAS MAX 280 KT)
  - (4) For uncompensated BARO-VNAV systems, LNAV/VNAV not authorized below -20°C and above 50°C
  - (5) + 3000FT ATC discretion
  - (6) IAS MAX 170kt

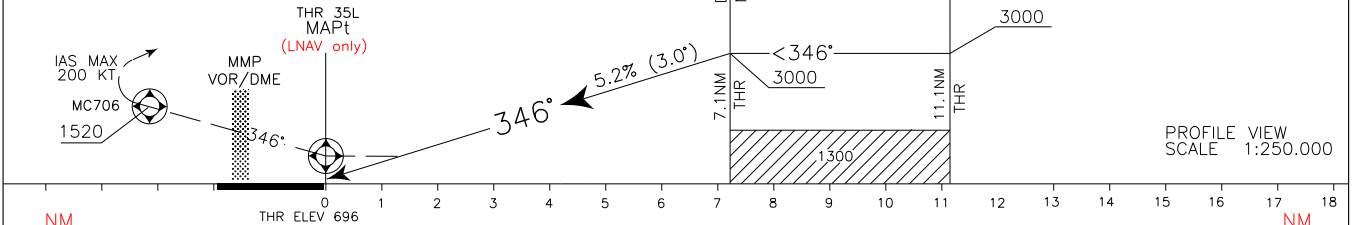


ALTITUDES AND ELEVATIONS ARE IN FEET  
DISTANCES IN NAUTICAL MILES  
SCALE 1:500,000



TRANSITION ALT 6000 MISSED APPROACH: Proceed on TR 346° climbing to 4000 ft. At MC706 (D1.6 MMP DME)(MCA 1520ft) turn left (IAS MAX 200kt) to join RDL 253 MMP VOR to Missed Approach holding pattern. Hold on RDL 253 MMP VOR (inbound TR 073°) between 12NM and 16NM MMP DME with right turns.

**REMARK:** Missed approach obstacle clearance is provided by 2.5% gradient; 5% gradient until 2000 ft is required to overfly Vergiate ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G".



NM 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

MMP DME 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

STRAIGHT IN APPROACH	OCA (OCH)				CIRCLING SECTORS	FT PER MIN	GS	FAP-THR 7.08 NM	DIST THR 35L	ALT (HGT)	MNM SECT ALT 25 NM ARP	
	A	B	C	D								
LPV	1120 (424)	1132 (436)	1140 (444)	1151 (455)		850	160	2 : 39	7	2977 (2281)		
	LNNAV/VNAV (4)	1120 (424)	1132 (436)	1140 (444)		1151 (455)	740	140	3 : 02	6		2658 (1962)
		1250 (554)				635	120	3 : 32	5	2340 (1644)		
LNNAV	1250 (554)					635	120	3 : 32	4	2022 (1326)		
	1450 (682)					530	100	4 : 15	3	1703 (1007)		
CIRCLING	1650 (882)				425	80	5 : 19	2	1385 (689)			

## TABULAR DESCRIPTION

## RNP RWY35L – Instrument Approach Procedure

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA (°)/TCH (m)	Navigation Specification
010	IF	INLER	-	-			-	+4000 (1)	AT190	-	RNAV 1
020	TF	EKPOP	-	343 (345.9)	-	4.0	-	+3000	180	-	RNAV 1
030	TF	MC701	-	346 (349.0)	-	4.0	-	+3000	170	-	RNP APCH
040	TF	RWY35L	Y	346 (349.0)	-	7.1	-	@745(2)	-	3.0/15.0	RNP APCH
050	CF	MC706	Y	346 (349.0)	3	-	-	+1520	200	-	RNP APCH
060	CF	MC707	-	253 (256.0)	3	-	L	+4000	200	-	RNAV 1

(1) +3000FT ATC discretion

(2) THR Altitude plus TCH; for MA transition the value is according to the minima LNAV or LNAV/VNAV

## HOLDING IAF - RNAV 1

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min./Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1.0/ -	R	+4000	-	190	3	RNAV1

(1) RNAV system with holding functionality

(2) RNAV system without holding functionality

## HOLDING MISSED APPROACH - CONVENTIONAL

Path Terminator	Waypoint (FIX)	Inbound Course °M (°T)	Navaid	Outbound leg	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Performance
HM	MC707 (RDL253/12NM)	073 (076.0)	MMP VOR/DME	Not exceed 16NM DME	R	+4000 (1)	-	200 (1)	1.0	Conventional

(1) MHL 75 or TRANSITION LEVEL IF HIGHER (IAS MAX 280 KT)

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC701	45°29'54.70" N 008°45'33.29" E
MC706	45°39'48.60" N 008°42'49.44" E
MC707	45°35'31.53" N 008°27'31.18" E

**SBAS FAS DATA BLOCK LIMC RNP RWY35L**

<b>INPUT DATA</b>	
<b>PARAMETERS</b>	<b>VALUES</b>
Operation Type	0
SBAS Provider	1
Airport Identifier	LIMC
Runway	35
Runway Direction	3
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	E35E
LTP/FTP Latitude	453651.8645N
LTP/FTP Longitude	0084338.3045E
LTP/FTP Ellipsoidal Height (metres)	257.4
FPAP Latitude	453843.6325N
Delta FPAP Latitude (seconds)	111.7680
FPAP Longitude	0084307.4120E
Delta FPAP Longitude (seconds)	-30.8925
Threshold Crossing Height	50.0
TCH Units Selector	0
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	50.0

<b>OUTPUT DATA</b>	
Data Block	10 03 0D 09 0C E3 00 00 05 35 33 05 31 59 93 13 81 CF BE 03 0E 1E 30 69 03 A7 0E FF F4 01 2C 01 64 00 C8 FA D9 24 74 E9
Calculated CRC Value	D92474E9

<b>REQUIRED ADDITIONAL DATA (NOT CRC WRAPPED)</b>	
These additional data are not required for CRC calculation, but they need to be provided to datahouses for procedure coding in ARINC 424 records.	
ICAO Code	LI
LTP/FTP Orthometric Height (metres)	212.2
FPAP Orthometric Height (metres)	232.9

Intenzionalmente bianca

*Intentionally left blank*

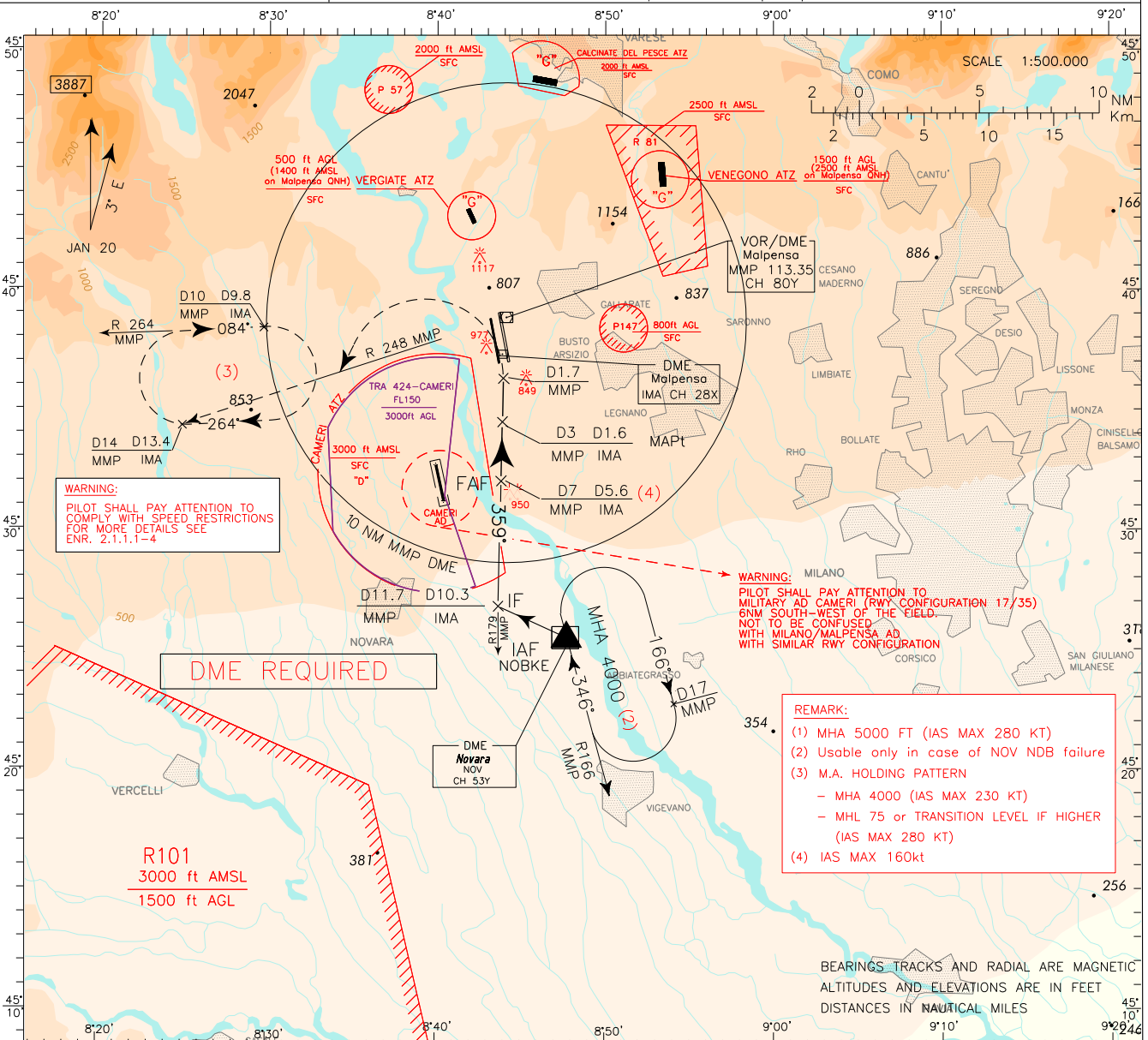


ICAO - INSTRUMENT APPROACH CHART

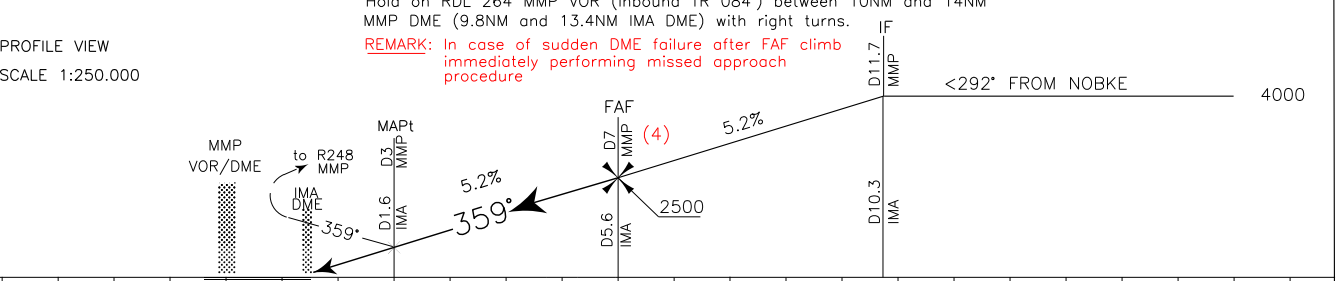
AD 2 LIMC 5-11

DOC 8168 ED 6 2014 AMDT 8  
CHANGE: NOV NDB DISMISSED - NOV HOLDING WITHDRAWN

<b>WARNING:</b> Final approach track offset by 12.9° from RWY center line. RWY center line intercepted 2265 m before THR RWY 35L	APP <i>Milano Radar</i> TWR <i>Malpensa TWR</i> ATIS <i>Malpensa Arrival Information</i>	CH 125.630 (CH 132.705) 128.350 120.025	AD ELEV 768	L M C	MILANO/ MALPENSA VOR RWY 35L
---	--	--	----------------	-------------	---------------------------------

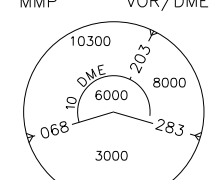


**TRANSITION ALT 6000**  
**MISSED APPROACH:** Proceed on TR 359° climbing to 4000 ft. At 1.7 NM before MMP DME turn left to intercept and follow RDL 248 MMP VOR to join Missed Approach holding pattern.  
 Hold on RDL 264 MMP VOR (inbound TR 084°) between 10NM and 14NM  
 MMP DME (9.8NM and 13.4NM IMA DME) with right turns.  
**REMARK:** In case of sudden DME failure after FAF climb immediately performing missed approach procedure.



MMP DME	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	MMP DME
IMA DME																			IMA DME

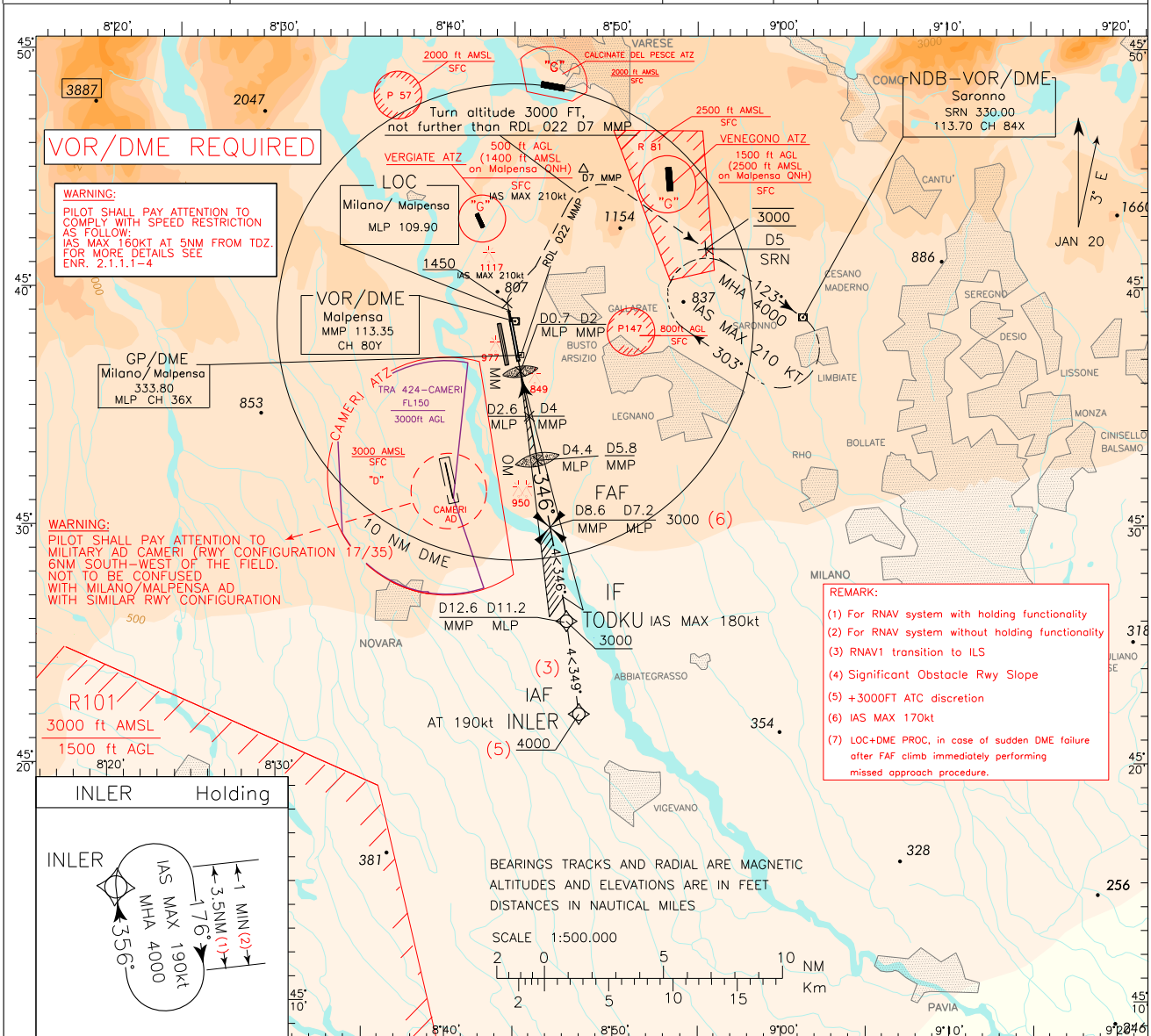
		OCA (OCH)	A	B	C	D	CIRCLING SECTORS 	FT PER MIN	GS	DIST MMP	ALT (HGT)	MNM SECT ALT MMP	VOR/DME
STRAIGHT IN APPROACH													
VOR			1200 (504)							7 DME	2500 (1804)		
								850	160	6 DME	2160 (1464)		
								740	140	5 DME	1840 (1144)		
								635	120	4 DME	1520 (824)		
CIRCLING			1450 (682)		1650 (882)	1710 (942)		530	100	3 DME	1200 (504)		



DOC 8168 ED 6 2014 AMDT 8

CHANGE: TWR FREQ UPDATED

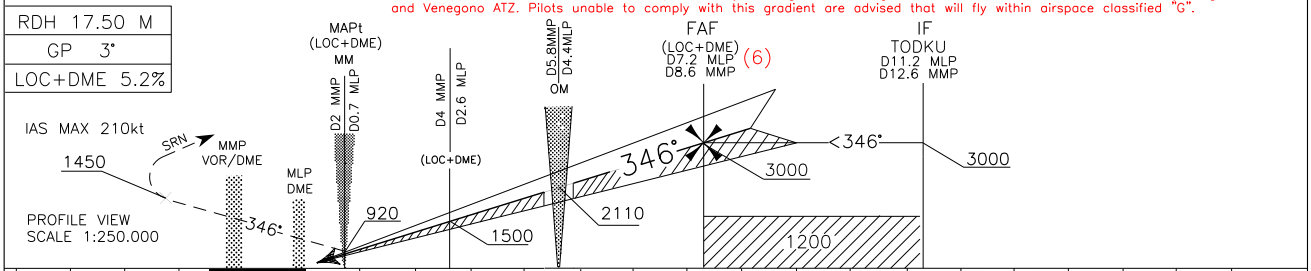
<b>WARNING:</b> Some errors on ILS APCH reported false LOC captures. Pilot attention is drawn to pay max caution. See AIP ENR 1.3	APP <i>Milano Radar</i>	CH 125.630 (CH 132.705) 123.600 (128.350)	AD ELEV 768	L M C	MILANO/MALPENSA ILS or LOC-Z RWY 35R
	TWR <i>Malpensa TWR</i>				
	ATIS <i>Milano Arrival Information</i>	120.025			



**TRANSITION ALT 6000**

**MISSED APPROACH:** Proceed on track 346° climbing to 1450 ft. At 1450 ft turn right as soon as possible (IAS MAX 210KT) to join RDL 022 MMP VOR climbing to 3000 ft. At 3000 ft steady, not further than RDL 022/7 NM MMP VOR/DME, turn right (IAS MAX 210KT) to SRN VOR/DME NDB. Maintain 3000 ft until 5 NM SRN DME, then climb to 4000 ft.

**REMARK:** Missed approach obstacle clearance is provided by 2.5% gradient; 5% gradient until 3000 ft is required to overfly Vergiate and Venegono ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G".



STRAIGHT IN APPROACH	CAT. I (4)	845 (154)	855 (164)	870 (179)	880 (189)	CIRCLING SECTORS 	FT PER MIN	GS	FAP-OM 2.80 NM	OM-MM 3.73 NM	MLP DME	ALT (HGT)	MNM SECT ALT 25NM FROM ARP or VOR/DME MMP  (10) 10300 in case of MMF VOR/DME unavailability
	CAT. II (4)	754 (63)	767 (76)	778 (87)	796 (105)		850	160	1 : 03	1 : 23	D 7	2924 (2233)	
	LOC+DME (7)	1140 (449)					635	120	1 : 24	1 : 51	D 6	2605 (1914)	
CIRCLING		1450 (682)	1650 (882)	1710 (942)		530	100	1 : 41	2 : 13	D 4	1970 (1279)		
						425	80	2 : 06	2 : 46	D 2	1335 (644)		

## TABULAR DESCRIPTION

## ILS Z RWY35R – RNAV TRANSITION TO ILS APPROACH

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA/TCH	Navigation Specification
010	IF	INLER	-	-	-	-	-	+4000 (1)	AT 190	-	RNAV 1
020	TF	TODKU	-	349 (351.9)	-	4.0	-	+3000	180	-	RNAV 1

(1) +3000ft ATC discretion

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min.)/ Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1.0/ -	R	+4000	-	190	3	RNAV1

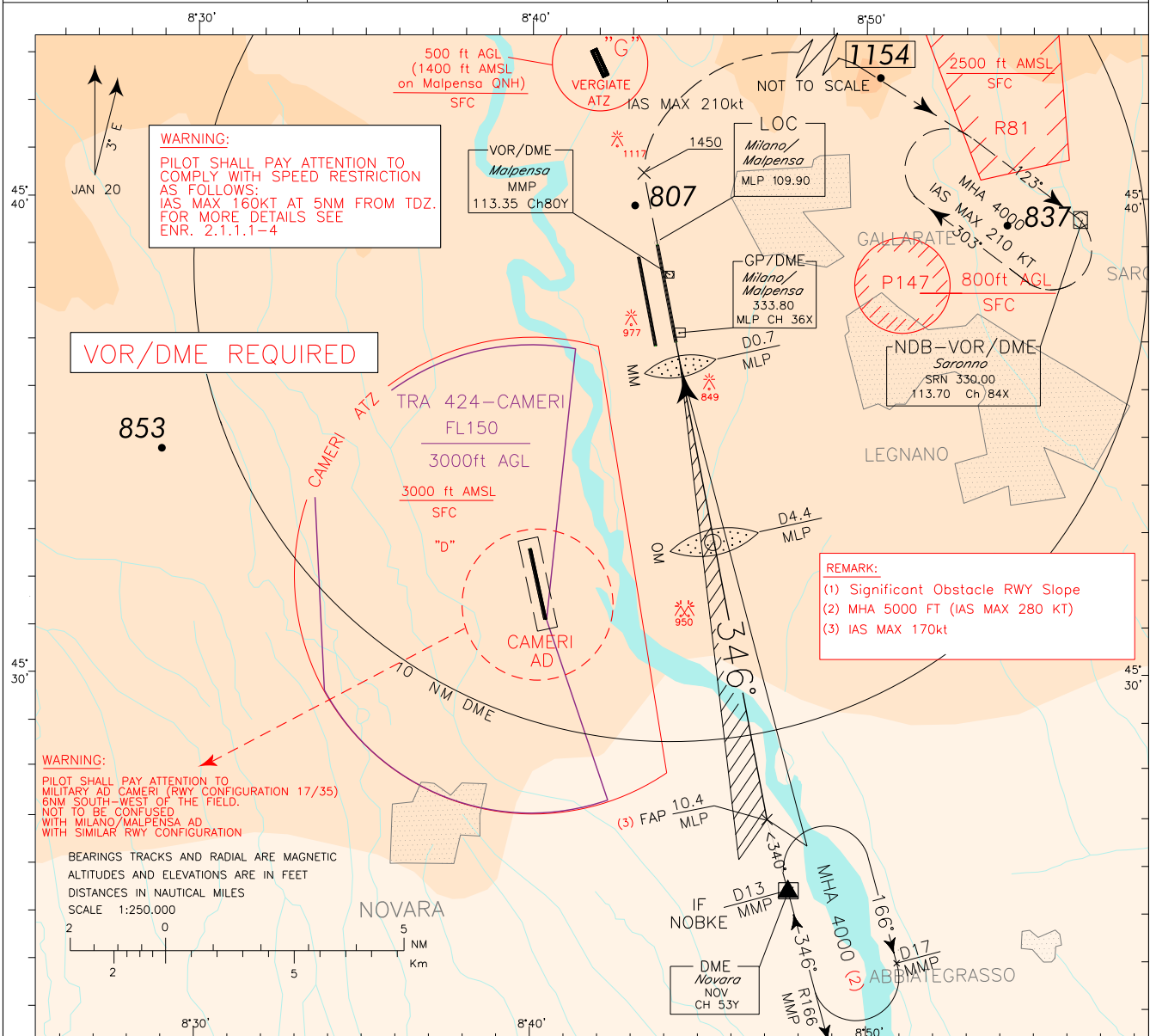
(1) RNAV system with holding functionality

(2) RNAV system without holding functionality

DOC. 8168 ED. 6 2014 AMDT 8

CHANGE: TWR FREQ UPDATED

<b>WARNING:</b> Some users on ILS APCH reported false LOC captures. Pilot attention is drawn to pay max caution. See AIP ENR 1.3		APP <i>Milano Radar</i>	CH 125.630 (CH 132.705)	AD ELEV	L I M C	MILANO/MALPENSA
TWR <i>Malpensa TWR</i>	123.600 (128.350)	768			ILS-Y	RWY 35R
ATIS <i>Malpensa Arrival Information</i>	120.025					



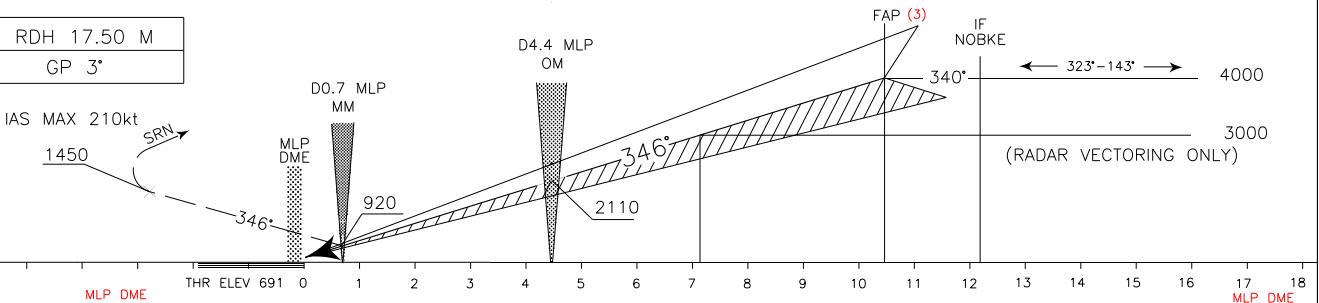
**WARNING:**  
PILOT SHALL PAY ATTENTION TO COMPLY WITH SPEED RESTRICTION AS FOLLOWS:  
IAS MAX 160KT AT 5NM FROM TDZ.  
FOR MORE DETAILS SEE ENR. 2.1.1.1-4

**WARNING:**  
PILOT SHALL PAY ATTENTION TO MILITARY AD CAMERI (RWY CONFIGURATION 17/35) 6NM SOUTH-WEST OF THE FIELD.  
NOT TO BE CONFUSED WITH MILANO/MALPENSA AD WITH SIMILAR RWY CONFIGURATION

**REMARK:**  
(1) Significant Obstacle RWY Slope  
(2) MHA 5000 FT (IAS MAX 280 KT)  
(3) IAS MAX 170kt

BEARINGS TRACKS AND RADIAL ARE MAGNETIC  
ALTITUDES AND ELEVATIONS ARE IN FEET  
DISTANCES IN NAUTICAL MILES  
SCALE 1:250,000

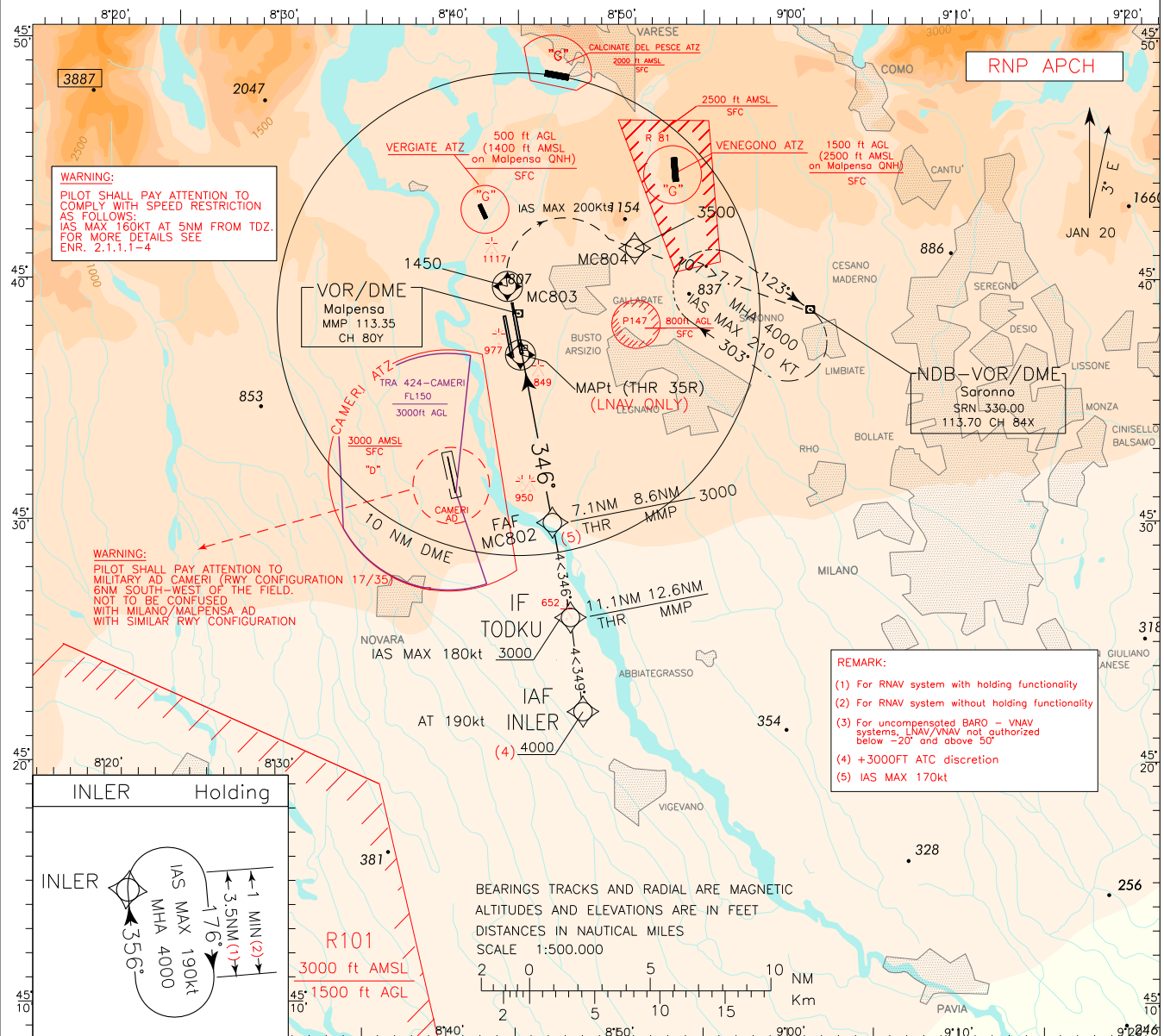
TRANSITION ALT 6000  
MISSED APPROACH: Proceed on track 346° climbing to 4000 ft. At 1450 ft turn right (IAS MAX 210KT) to SRN VOR DME/NDB Holding Pattern.  
**REMARK:** Missed approach obstacle clearance is provided by 2.5% gradient; 5% gradient until 3000 ft is required to overfly Vergiate and Venegono ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G"



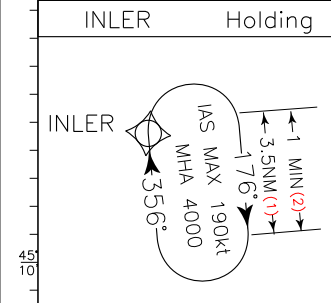
OCA (OCH)		A	B	C	D	CIRCLING SECTORS 	FT PER MIN	GS	FAP-OM	OM-MM	MLP DME	ALT (HGT)	MNM SECT ALT MMP VOR/DME 
STRAIGHT IN APPROACH													
CAT.I (1)	845 (154)	855 (164)	870 (179)	880 (189)		850	160	2 : 14	1 : 23				
CAT.II (1)	754 (63)	767 (76)	778 (87)	796 (105)		740	140	2 : 33	1 : 35	D 8	3240 (2549)		
						635	120	2 : 58	1 : 51	D 6	2605 (1914)		
						530	100	3 : 34	2 : 13	D 4	1970 (1279)		
CIRCLING		1450 (682)	1650 (882)	1710 (942)		425	80	4 : 28	2 : 46	D 2	1335 (644)		

DOC 8168 ED.6 – 2014 – AMDT 8

EGNOS CH 72492 E35A	APP <i>Milano Radar</i> TWR <i>Malpensa TWR</i> ATIS <i>Malpensa Arrival Information</i>	CH 125.630 (CH 132.705) 123.600 (128.350) (120.025)	AD ELEV 768	L I M C	MILANO/MALPENSA RNP RWY 35R
---------------------------	--	--	----------------	------------------	--------------------------------

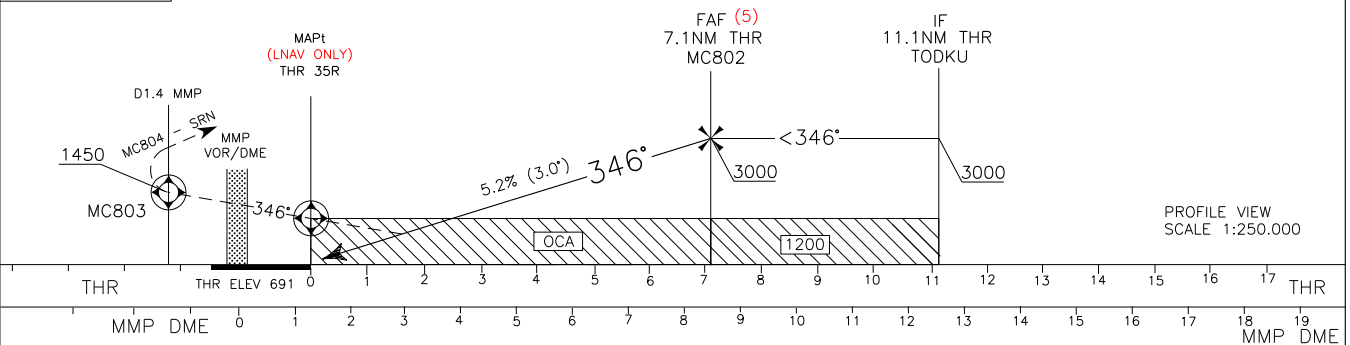


CHANGE: TWR FREQ UPDATED



TRANSITION ALT 6000  
TCH 17.50 M

MISSED APPROACH: Proceed on track 346° climbing to 4000 ft. At MC803 (D1.4 MMP DME) (MCA 1450 ft) turn right (IAS MAX 200Kts) on track 107° to MC804 (MCA 3500ft) then SRN VOR/DME NDB.  
REMARK: Missed approach obstacle clearance is provided by 2.5% gradient; 5% gradient until 3000 ft is required to overfly Vergiate and Venegono ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G".



STRAIGHT IN APPROACH	OCA (OCH)	A				CIRCLING SECTORS	FT PER MIN	GS	FAF - THR	DIST THR	ALT (HGT)	MINM SECT ALT 25NM	ARP
		A	B	C	D								
LPV	969 (278)	981 (290)	989 (298)	1000 (309)	NO ALLOWED	850	160	7.07 NM	D 7	2981 (2290)	10300		
LNAV/VNAV (3)	1120 (429)	1132 (441)	1140 (449)	1151 (460)		740	140	3 : 02	D 6	2662 (1971)			
LNAV	1200 (509)					635	120	3 : 33	D 4	2024 (1333)			
CIRCLING	1450 (682)	1650 (882)	1710 (942)			530	100	4 : 15	D 3	1705 (1014)			
					425	80	5 : 19	D 2	1386 (695)				

## TABULAR DESCRIPTION

## RNP RWY35R – Instrument Approach Procedure

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA/TCH	Navigation Specification
010	IF	INLER	-	-			-	+4000 (1)	AT 190	-	RNAV 1
020	TF	TODKU	-	349 (352.3)		4.0	-	+3000	180	-	RNAV 1
030	TF	MC802	-	346 (349.1)		4.0	-	+3000	170	-	RNP APCH
040	TF	RWY35R	Y	346 (349.0)		7.1	-	@748(2)	-	3.0/17.5	RNP APCH
050	CF	MC803	Y	346 (349.0)	3	-	-	+1450	200	-	RNP APCH
060	CF	MC804	-	107 (110.0)	3	-	R	+3500	200	-	RNAV 1
070	TF	SRN	-	107 (109.8)		-	-	+4000	-	-	RNAV 1

(1) +3000FT ATC discretion

(2) THR Altitude plus TCH; for MA transition the value is according to the minima LNAV or LNAV/VNAV

## HOLDING IAF - RNAV 1

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min./Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1.0/ -	R	+4000	-	190	3	RNAV1

(1) RNAV system with holding functionality

(2) RNAV system without holding functionality

## HOLDING MISSED APPROACH - CONVENTIONAL

Path Terminator	Waypoint (FIX)	Inbound Course °M (°T)	Navaid	Outbound leg	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Performance
HM	SRN VOR NDB/DME	123 (126.0)	SRN VOR NDB/DME	-	R	+4000	-	210	3	Conventional

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC802	45°30'00.08" N 008°46'09.78" E
MC803	45°39'47.19" N 008°43'27.87" E
MC804	45°41'22.61" N 008°50'59.08" E

**SBAS FAS DATA BLOCK LIMC RNP RWY35R**

<b>Parameters</b>		<b>Values</b>
Operation Type		0
SBAS Provider		1
Airport Identifier		LIMC
Runway		35
Runway Direction		1
Approach Performance Designator		0
Route Indicator		
Reference Path Data Selector		0
Reference Path Identifier		E35A
LTP/FTP Latitude		453656.7015N
LTP/FTP Longitude		0084414.9860E
LTP/FTP Ellipsoidal Height (metres)		255.8
FPAP Latitude		453901.3310N
Delta FPAP Latitude (seconds)		124.6295
FPAP Longitude		0084340.5460E
Delta FPAP Longitude (seconds)		-34.4400
Threshold Crossing Height		17.50
TCH Units Selector		1
Glidepath Angle (degrees)		3.00
Course Width (metres)		105.00
Length Offset (metres)		0
HAL (metres)		40.0
VAL (metres)		50.0

<b>Output Data</b>	
Data Block	10 03 0D 09 0C 63 00 00 01 35 33 05 FB 7E 93 13 14 EE BF 03 FE 1D AB CD 03 F0 F2 FE 5E 81 2C 01 64 00 C8 FA E2 6F 15 D3
Calculated CRC Value	E26F15D3

**Required Additional Data (not CRC wrapped)**

These additional data are not required for CRC calculation, but they need to be provided to datahouses for procedure coding in ARINC 424 records.

<b>Parameters</b>	<b>Values</b>
ICAO Code	LI
LTP/FTP Orthometric Height (metres)	210.6
FPAP Orthometric Height (metres)	234.1

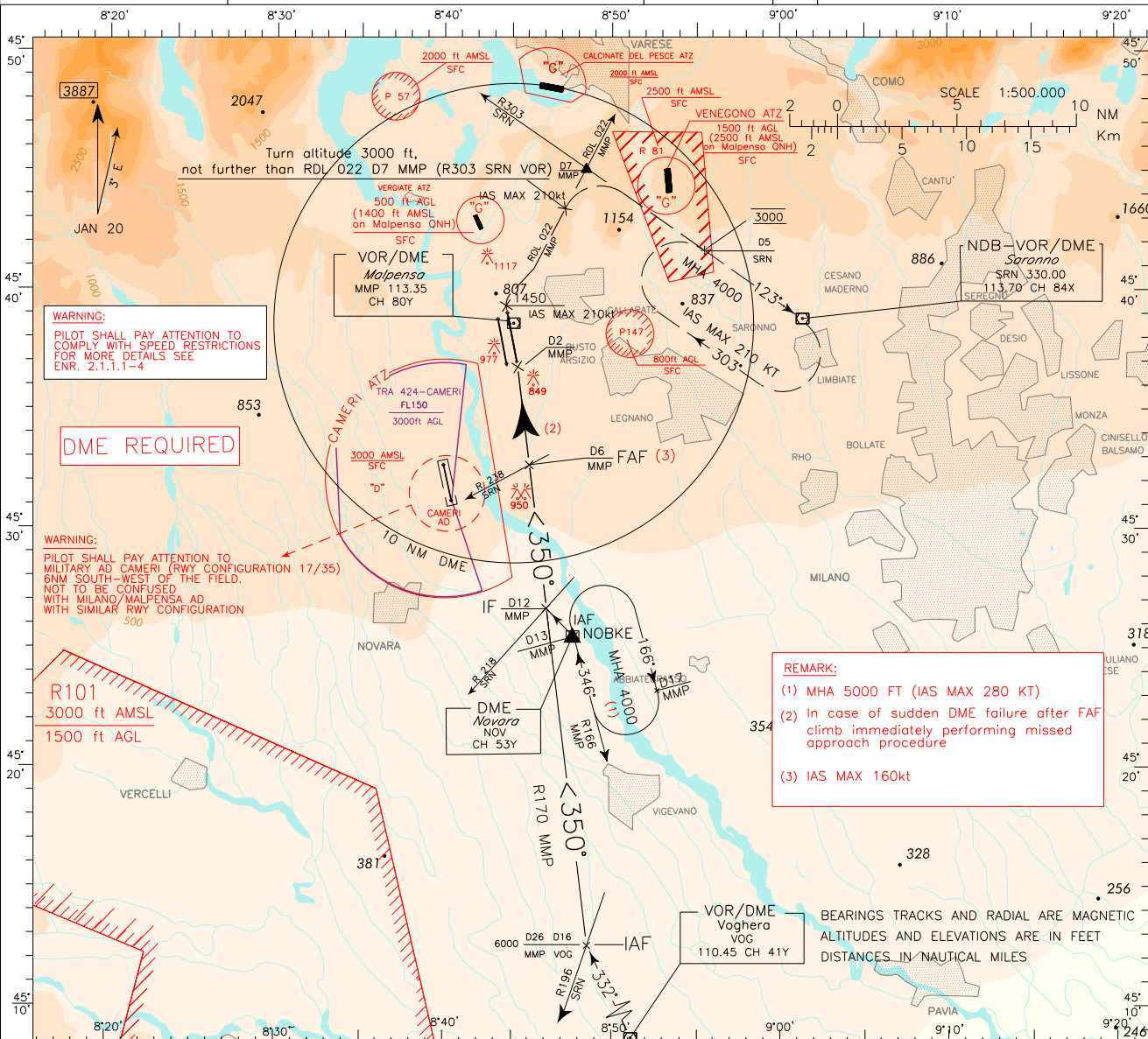
Intenzionalmente bianca

*Intentionally left blank*



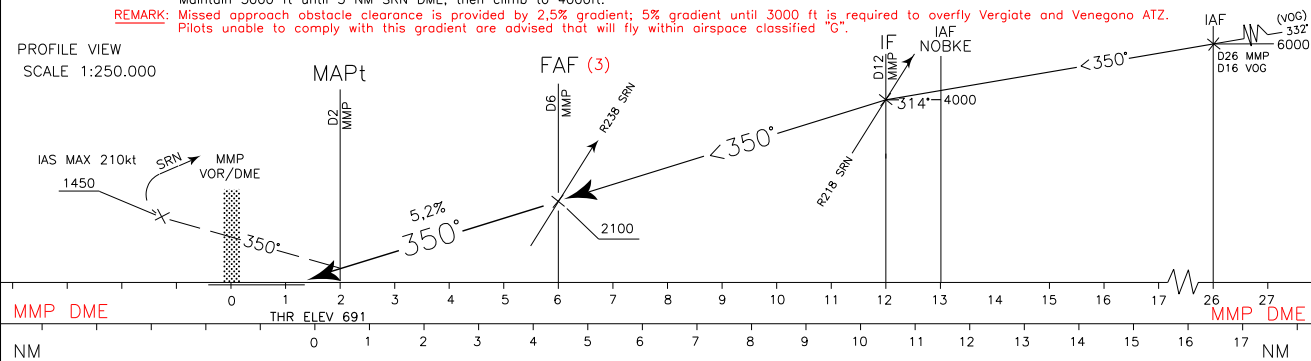
AMDT 8  
 DOC 8168 ED 6 - 2014  
 CHANGE: TWR FREQ UPDATED

APP	Milano Radar	CH 125.630 (CH 132.705)	AD ELEV	768	L M C	MILANO/ MALPENSA	
TWR	Malpensa TWR	123.600 (128.350)				VOR	RWY 35R
ATIS	Malpensa Arrival Information	120.025					



MISSION APPROACH: Proceed on track 350° climbing to 1450 ft. At 1450 ft turn right as soon as possible (IAS MAX 210KT) to join RDL 022/7 NM MMP VOR/DME, turn right (IAS MAX 210KT) to SRN VOR/DME NDB. Maintain 3000 ft until 5 NM SRN DME, then climb to 4000ft.

REMARK: Missed approach obstacle clearance is provided by 2,5% gradient; 5% gradient until 3000 ft is required to overfly Vergiate and Venegono ATZ. Pilots unable to comply with this gradient are advised that will fly within airspace classified "G".



MMP DME		NM																	MMP DME										
THR ELEV 691		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
STRAIGHT IN APPROACH	OCA (OCH)	A	B	C	D	CIRCLING SECTORS 	FT PER MIN	GS	DIST	ALT (HGT)	MNM SECT ALT																		
	VOR	1150 (459)					850	160	6 DME	2100 (1409)	MMP	VOR/DME																	
	CIRCLING	1450 (682)	1650 (882)	1710 (942)	425		80				10300	203																	

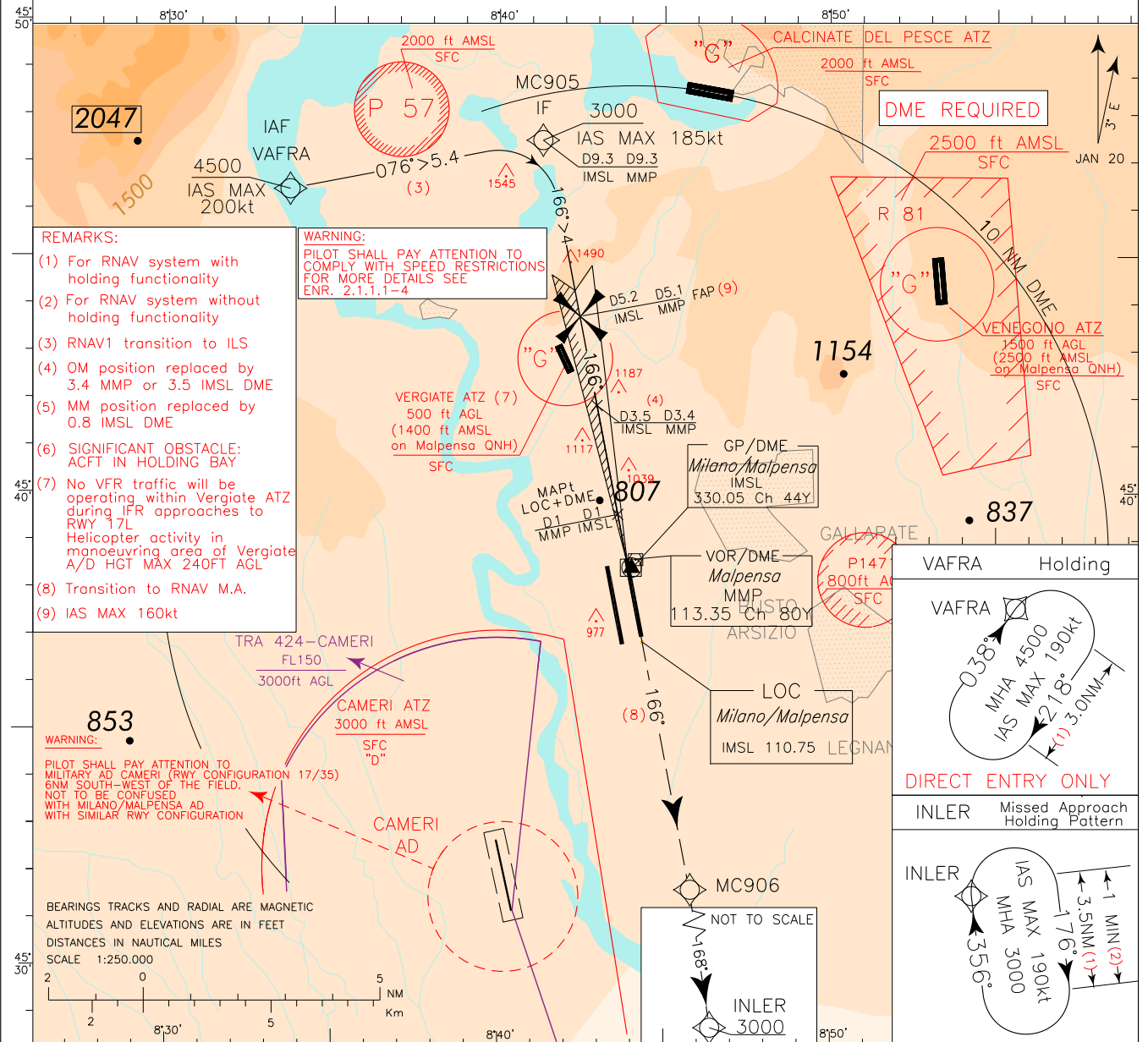
DOC 8168 ED 6 – 2014 AMDT 8

CHANGE: TWR FREQ UPDATED

APP *Milano Radar* CH 125.630 (CH 132.705)  
 TWR *Malpensa TWR* 123.600 (128.350)  
 ATIS *Malpensa Arrival Information* 120.025

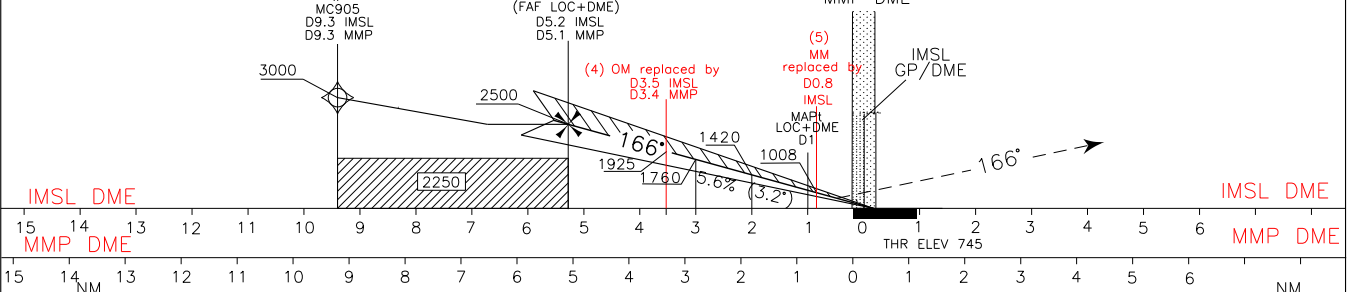
AD ELEV 768  
 LIMC

MILANO/MALPENSA  
 ILS or LOC-Z RWY 17L



TRANSITION ALT 6000 MISSED APPROACH: Climbing to 3000 ft, continue on track 166° to MC906, then proceed on track 168° to INLER to join M.A. Holding.

RDH 16 M  
 GP 3.2°



OCA (OCH)	A	B	C	D	GS	FT PER MIN	FAP-D0.8	DO.8-THR	IMSL DME	ALT (HGT)	MNM SECT ALT 25NM FROM ARP MMP VOR/DME 	
							4.39 NM	0.68 NM				
STRAIGHT IN APPROACH	ILS CAT I (6)				160	906	1:39	0:15	5	2440 (1695)		10300 8000 (10) 6000 (10) 3000 (10)
	LOC+DME				140	793	1:53	0:18	4	2100 (1355)		
CIRCLING	1450 (682)		1650 (882)	1710 (942)	100	566	2:12	0:20	3	1760 (1015)	(10) 10300 in case of MMP VOR/DME unavailability	
	REMARK: Circling allowed only to RWY 17R				80	453	3:18	0:31				

## TABULAR DESCRIPTION

## RNAV TO ILS APPROACH RWY17L TRANSITION

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA/TCH	Navigation Specification
010	IF	VAFRA	-	-	-	-	-	+4500	200	-	RNAV 1
020	TF	MC905	-	076 (078.9)	-	5.4	-	+3000	185	-	RNAV 1

## TRANSITION TO RNAV MISSED APPROACH

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA/TCH	Navigation Specification
010	CF	MC906	-	166 (169.0)	3	-	-	-	-	-	RNAV 1
020	TF	INLER	-	168 (170.4)	-	9.6	-	+3000	-	-	RNAV 1

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min.)/ Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM (3)	VAFRA	038 (041.0)	3.0	-/-	R	+4500	-	190	3	RNAV1
HM	INLER	356 (359.0)	3.5	1.0/-	R	+3000	-	190	3	RNAV1

(1) RNAV system with holding functionality

(2) RNAV system without holding functionality

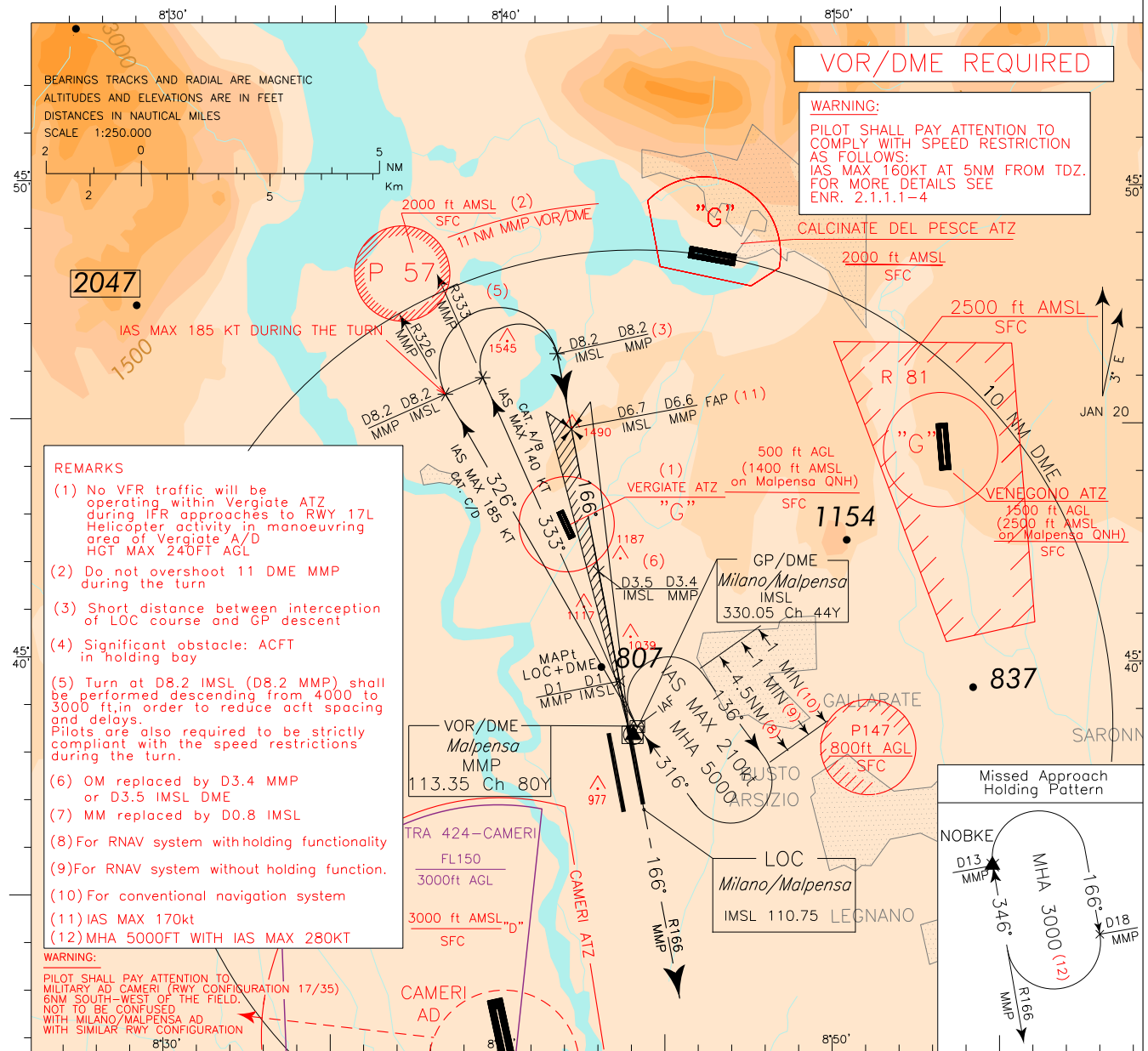
(3) Direct Entry Only

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC905	45°47'30.48" N 008°41'19.29" E
MC906	45°31'40.95" N 008°45'42.02" E

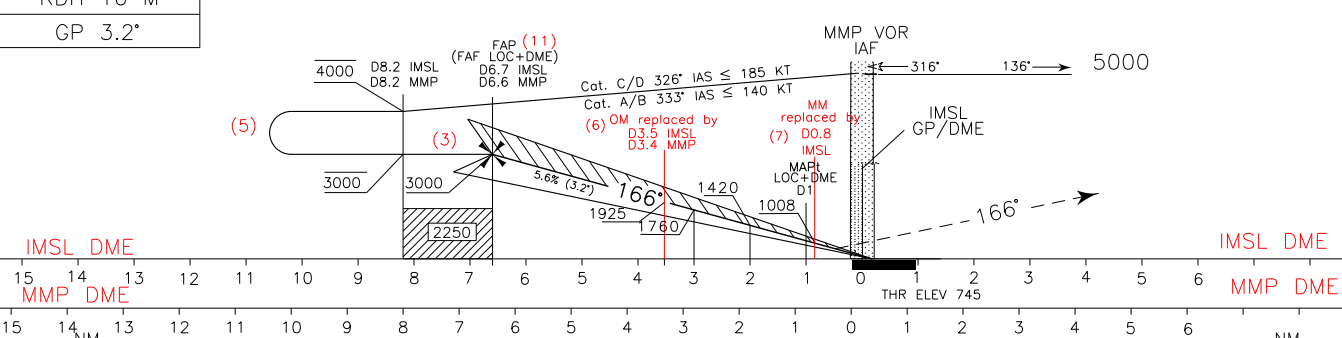
DOC 8168 ED 6 – 2014 AMDT 8

APP	Milano Radar	CH 125.630 (CH 132.705)	AD ELEV	768	L I M C	MILANO/MALPENSA
TWR	Malpensa TWR	123.600 (128.350)				ILS or LOC-X RWY 17L
ATIS	Malpensa Arrival Information	120.025				



CHANGE: TWR FREQ UPDATED

**TRANSITION ALT 6000** MISSED APPROACH: Proceed on track 166° (RDL 166 MMP) and climb to 3000 ft to NOBKE missed approach holding pattern. Hold on RDL 166 MMP VOR (inbound track 346°) between 13 NM and 17 NM MMP DME, with right turns.



IMSL DME MMP DME

STRAIGHT IN APPROACH	ILS CAT I (4)	LOC+DME	OCA (OCH)				GS	FT PER MIN	FAP-D0.8		D0.8-THR	IMSL DME	ALT (HGT)	MNM SECT ALT	
			A	B	C	D			5.87 NM	0.68 NM				MMP	VOR/DME
STRAIGHT IN APPROACH	ILS CAT I (4)	LOC+DME	945 (200)				160	906	2:12	0:15	6	2780 (2035)	10300 203 8000 283 3000		
			1300 (555)				140	793	2:31	0:18	5	2440 (1695)			
			1450 (682) 1650 (882) 1710 (942)				120	679	2:56	0:20	4	2100 (1355)			
CIRCLING							100	566	3:32	0:24	3	1760 (1015)			
REMARK: Circling allowed only to RWY 17R							80	453	4:24	0:31	2	1420 (675)			

DOC 8168 ED 6-2014 AMDT 8

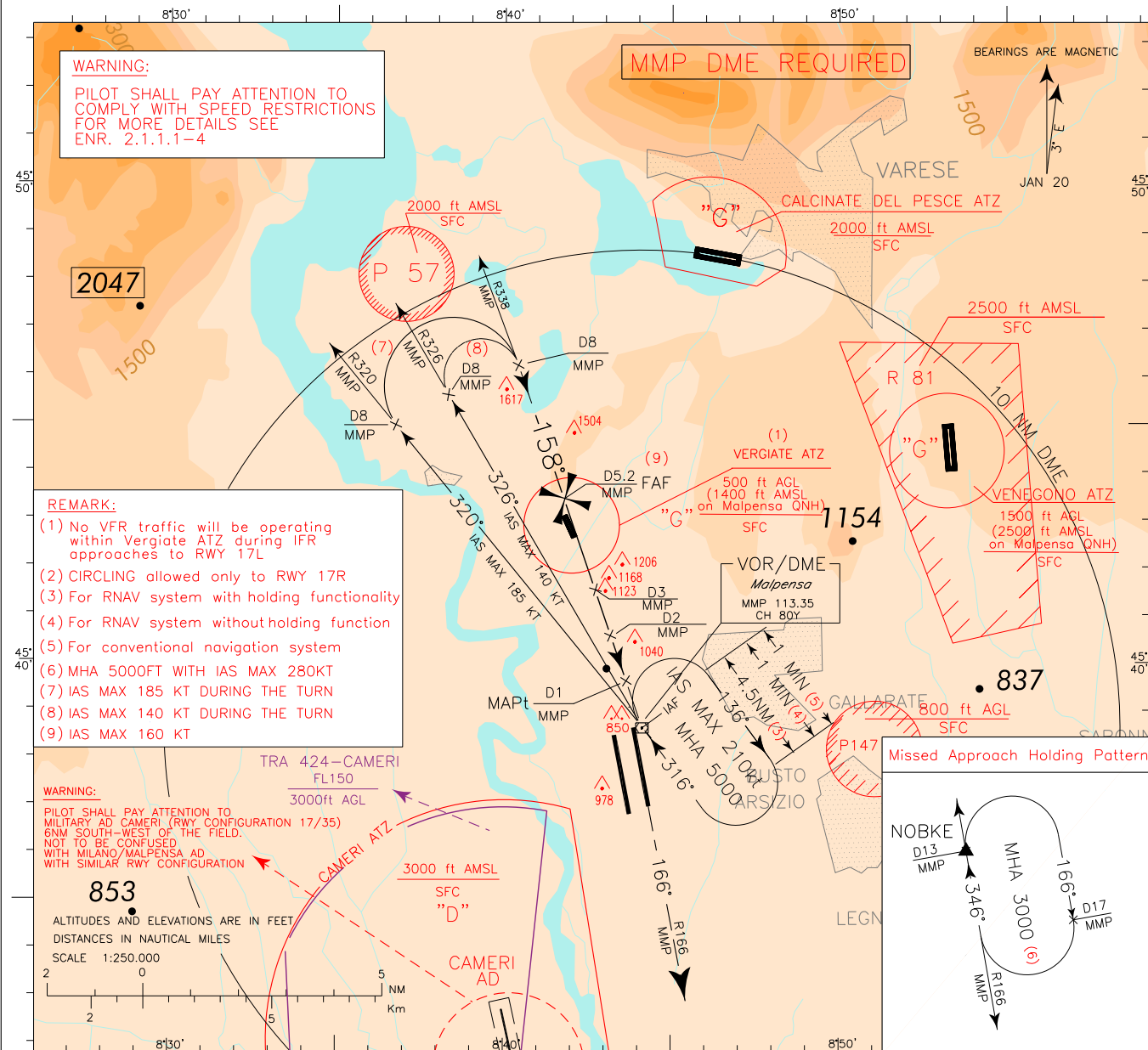
CHANGE: TWR FREQ UPDATED

APP *Milano Radar* CH 125.630 (CH 132.705)  
 TWR *Malpensa TWR* 123.600 (128.350)  
 ATIS *Malpensa Arrival Information* 120.025

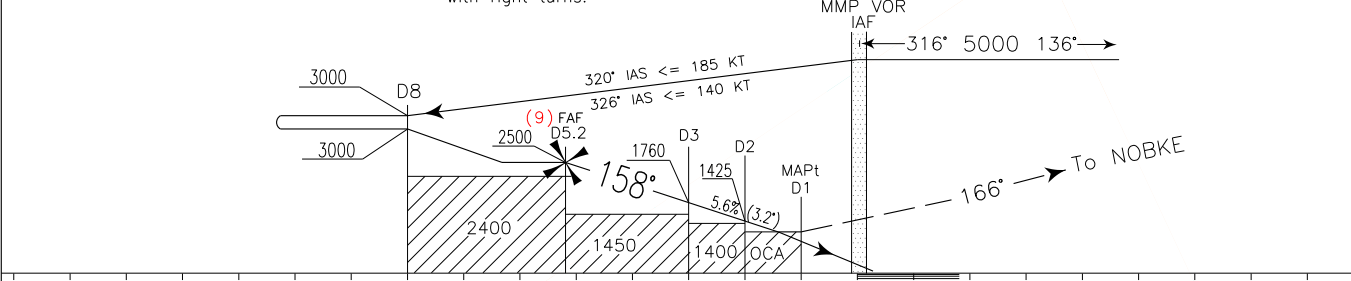
AD ELEV  
768

L  
I  
M  
C

MILANO/MALPENSA  
 VOR RWY 17L

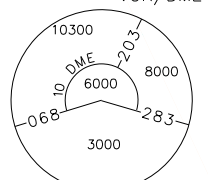


TRANSITION ALT 6000 MISSED APPROACH: Proceed on track 166° (RDL 166 MMP) and climb to 3000 ft to NOBKE missed approach holding pattern. Hold on RDL 166 MMP VOR (inbound track 346°) between 13 NM and 17 NM MMP DME, with right turns.



MMP DME	12	11	10	9	8	7	6	5	4	3	2	1	0	THR ELEV 745	MMP DME
NM	12	11	10	9	8	7	6	5	4	3	2	1	0		NM

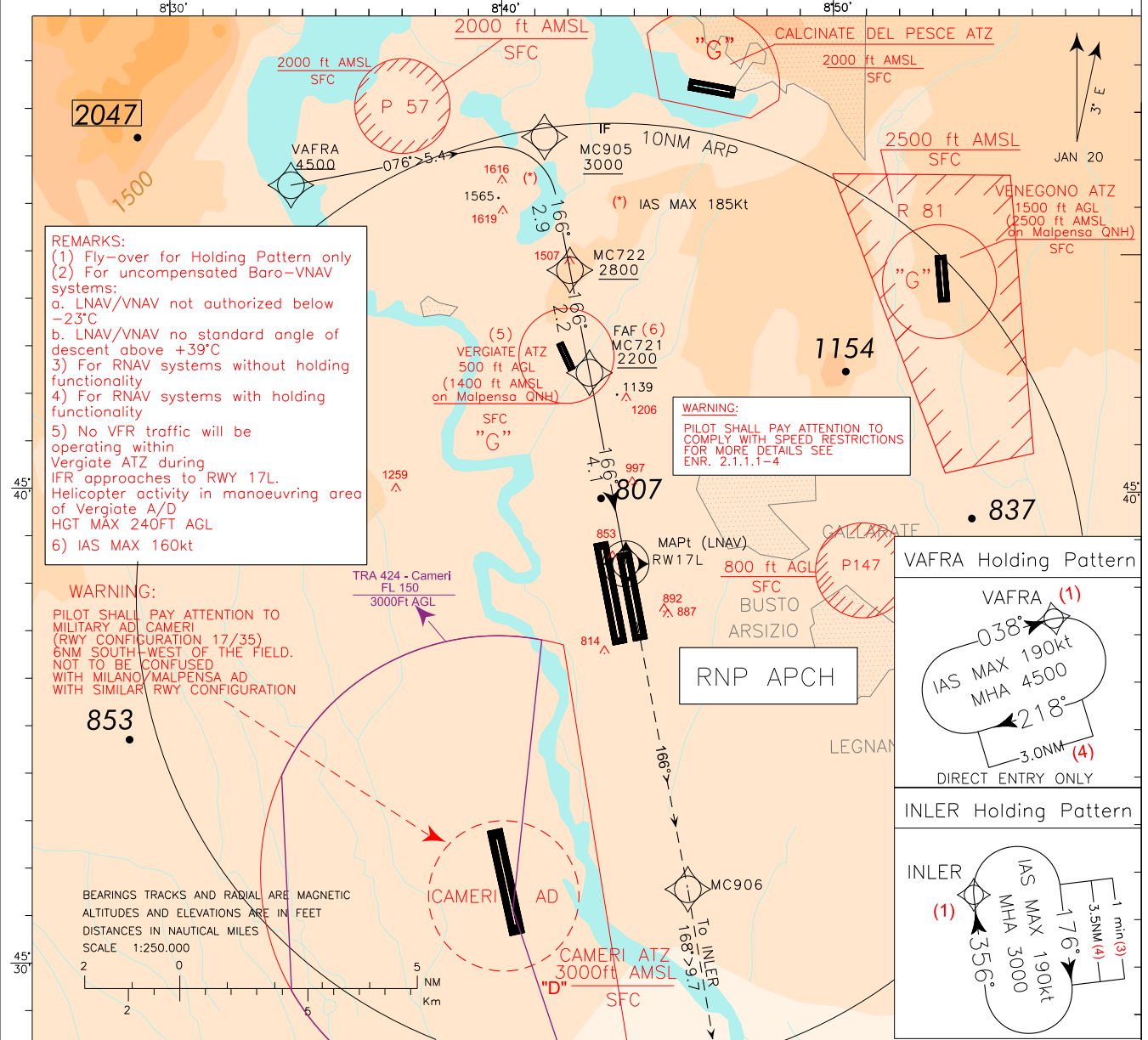
STRAIGHT IN APPROACH	OCA (OCH)				FT PER MIN	GS	DIST MMP	ALT (HGT)	MNM SECT ALT	
	A	B	C	D					MMP	VOR/DME
VOR+DME	1300 (555)				848	160	5 DME	2435 (1690)	10300	2203
					742	140	4 DME	2095 (1350)	8000	
					636	120	3 DME	1760 (1015)	6000	
					530	100	2 DME	1425 (680)	3000	
CIRCLING (2)	1450 (682)	1650 (882)	1710 (942)		424	80				



<b>FIX/POINT</b>	<b>Coordinates (WGS84)</b>
IAF (MMP VOR)	45°25'27"N 008°44'05"E
INT RDL320/08 NM MMP VOR/DME	45°44'46.40"N 008°37'07.18"E
INT RDL326/08 NM MMP VOR/DME	45°45'18.74"N 008°38'14.77"E
INT RDL338/08 NM MMP VOR/DME	45°46'00.33"N 008°40'22.27"E
FAF (INT RDL338/5.2 NM MMP VOR/DME)	45°43'21.52"N 008°41'40.54"E
INT RDL338/03 NM MMP VOR/DME	45°41'16.89"N 008°42'41.85"E
INT RDL338/02 NM MMP VOR/DME	45°40'20.25"N 008°43'09.69"E
MAPt (INT RDL338/01 NM MMP VOR/DME)	45°39'23.46"N 008°43'37.59"E

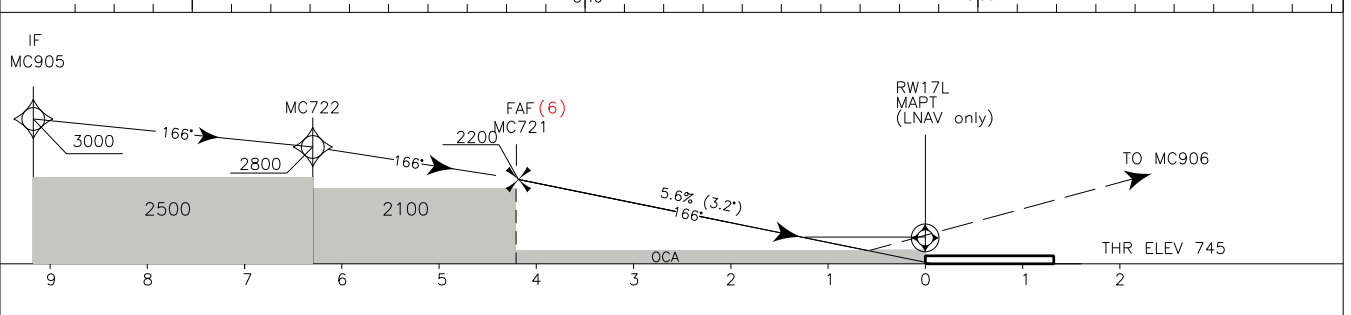
EGNOS CH 56010 E17A	APP Milano Radar CH 125.630 (CH 132.705) TWR Malpensa TWR 123.600 (128.350) ATIS Malpensa Arrival Information 120.025	AD ELEV 768 LIMC	MILANO/MALPENSA RNP Z RWY 17L
------------------------	---	---------------------	----------------------------------

DOC 8168 - ED 6 2014 - AMDT 8



CHANGE: TWR FREQ UPDATED

TRANSITION ALT 6000  
 TCH 15 M  
 MISSED APPROACH: Climbing to 3000FT, continue on course 166° to MC906 then proceed to INLER to join Missed Approach Holding Pattern



STRAIGHT-IN APPROACH	OCA (OCH)	A	B	C	D	REMARK (7) Circling allowed only to RWY 17R  (8) Significant obstacle: ACFT in holding bay	FT PER MIN	GS	FAF - MAPt	RWY17L DIST.	ALT (HGT)	MNM SECT ALT 25NM ARP  10300
		LPV (8)	LNAV/VNAV	LNAV	CIRCLING (7)		4.1 NM	3.0	2156 (1411)			
		955 (210)	965 (220)	975 (230)	985 (240)		1010	180	1 : 22	4.0	1816 (1071)	
		1124 (379)	1135 (390)	1147 (402)	1158 (413)		900	160	1 : 32	2.0	1476 (731)	
		1470 (725)					780	140	1 : 46	1.0	1136 (391)	
		1470 (702)		1650 (882)	1710 (942)		670	120	2 : 03			
							560	100	2 : 40			
							450	80	3 : 05			

## TABULAR DESCRIPTION

## RNP Z RWY 17L - Instrument Approach Procedure

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)/Bank Angle	VPA/TCH	Navigation Specification
010	IF	VAFRA	-	-	-	-	-	+4500	200	-	RNP APCH
020	TF	MC905	-	076 (078.9)	-	5.4	-	+3000	185	-	RNP APCH
030	TF	MC722	-	166 (169.0)	-	2.9	R	+2800	185	-	RNP APCH
040	TF	MC721	-	166 (169.0)	-	2.2	-	+2200	160	-	RNP APCH
050	TF	RW17L	Y	166 (169.0)	-	4.1	-	-	-	3.2°/ 50Ft	RNP APCH
060	CF	MC906	-	166 (169.0)	3	-	-	-	-	-	RNP APCH
070	TF	INLER	-	168 (170.4)	-	9.7	-	+3000	190	-	RNP APCH

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min.)/ Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1/-	R	+3000	-	190	3	RNAV1
HM (3)	VAFRA	038 (041.0)	3.0	N.A.	R	+4500	-	190	3	RNAV1

(1) RNAV system with holding functionality

(2) RNAV system without holding functionality

(3) Direct Entry Only

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC905	45°47'30.48" N – 008°41'19.29" E
MC722	45°44'42.3" 3N – 008°42'06.13" E
MC721	45°42'34.54" N – 008°42'41.54" E
MC906	45°31'40.95" N – 008°45'42.02" E



## SBAS FAS DATA BLOCK LIMC RNP Z RWY 17L

**Input data**

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	LIMC
Runway	17
Runway Letter	3 (Left)
Approach Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E17A
LTP/FTP Latitude	453831.3335N
LTP/FTP Longitude	0084348.8470E
LTP/FTP Ellipsoidal Height (metres)	272.6
FPAP Latitude	453656.6995N
Delta FPAP Latitude (seconds)	-94.6340
FPAP Longitude	0084414.9855E
Delta FPAP Longitude (seconds)	26.1385
Threshold Crossing Height	15.0
TCH Units Selector	1 (meters)
Glidepath Angle (degrees)	3.20
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

**Output data**

Data Block	10 03 0D 09 0C D1 D0 00 01 37 31 05 4B 62 96 13 DE 21 BF 03 A6 1E AC 1C FD 35 CC 00 2C 81 40 01 64 00 C8 AF C6 16 C6 94
Calculated CRC Value	C616C694

**Required Additional Data**

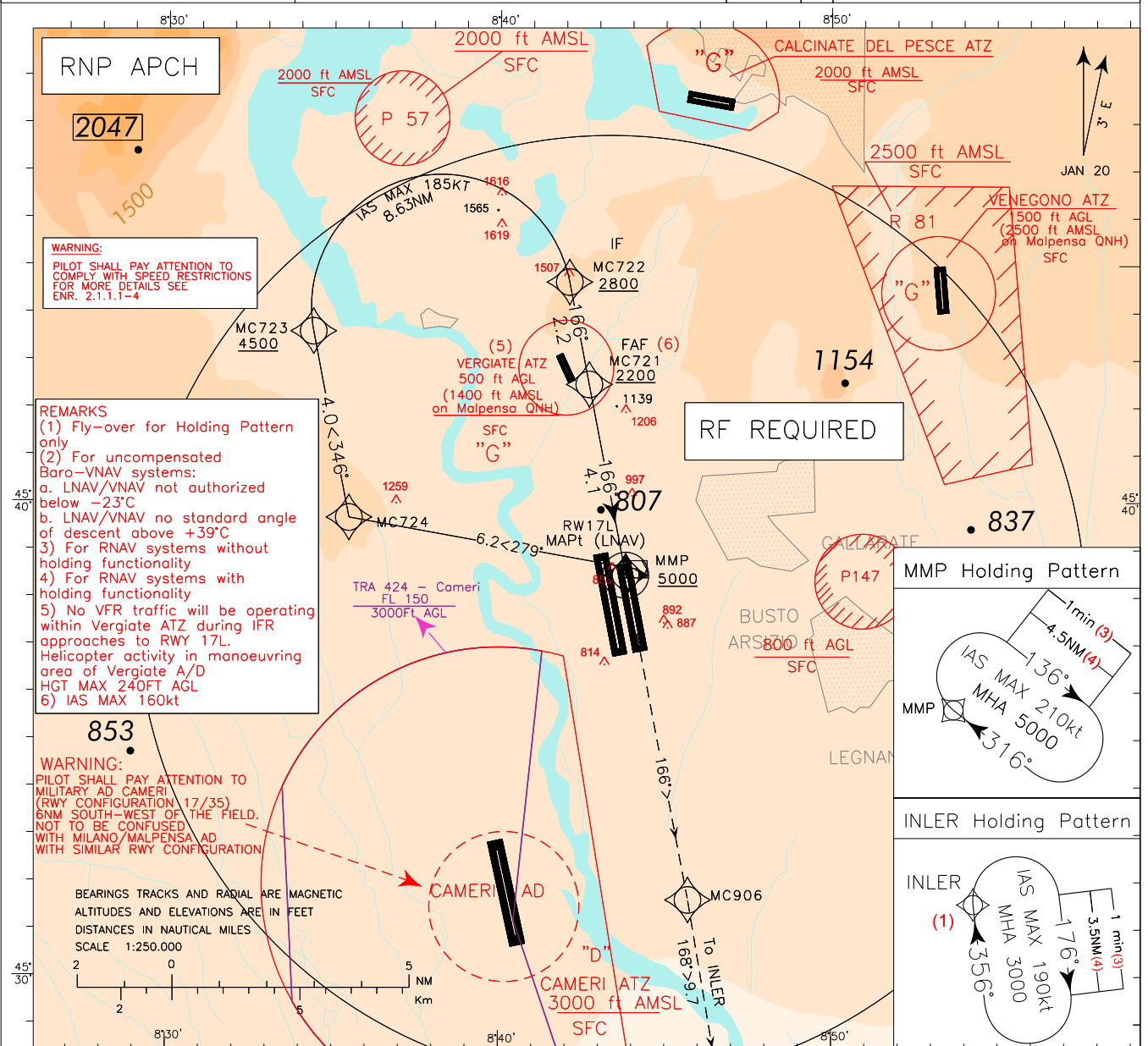
ICAO Code	LI
LTP/FTP Orthometric Height (metres)	227.0

Intenzionalmente bianca

*Intentionally left blank*

DOC 8168 - ED 6 2014 - AMDT 8

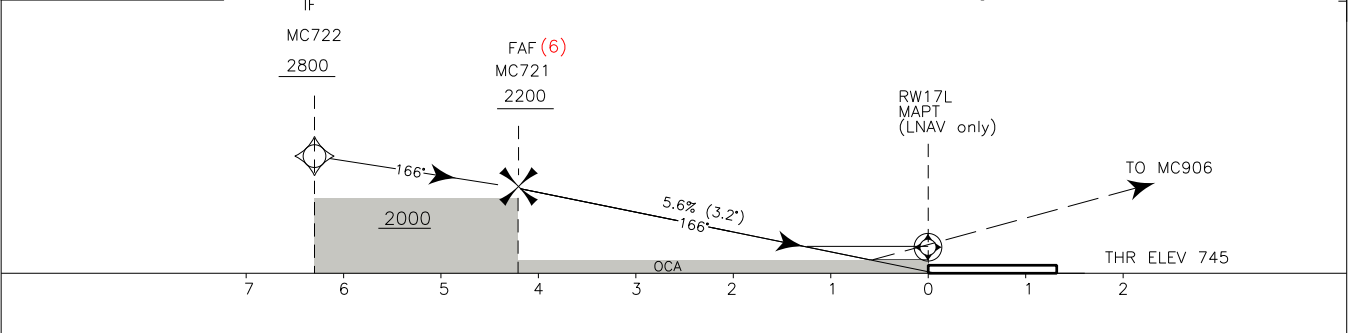
EGNOS CH 98079 E17B	APP	Milano Radar	CH 125.630 (CH 132.705)	AD ELEV	768	L I M C	MILANO/MALPENSA RNP Y RWY 17L
	TWR	Malpensa TWR	123.600 (128.350)				
	ATIS	Malpensa Arrival Information	120.025				



CHANGE: TWR FREQ UPDATED

TRANSITION ALT 6000  
TCH 15 M

MISSED APPROACH: Climbing to 3000FT, continue on course 166° to MC906 then proceed to INLER to join Missed Approach Holding Pattern



STRAIGHT IN APPROACH	OCA (OCH)				REMARK (7) Circling allowed only to RWY 17R (8) Significant obstacle: ACFT in holding bay	FT PER MIN	GS	FAF - MAPt	RWY17L DIST.	ALT (HGT)	MNM SECT ALT 25NM ARP
	A	B	C	D							
LPV (8)	955 (210)	965 (220)	975 (230)	985 (240)		1010	180	1 : 22	4.0	2156 (1411)	10300
LNAV/VNAV	1124 (379)	1135 (390)	1147 (402)	1158 (413)		900	160	1 : 32	3.0	1816 (1071)	
LNAV	1470 (725)					900	160	1 : 32	2.0	1476 (731)	
						780	140	1 : 46	1.0	1136 (391)	
						670	120	2 : 03			
						560	100	2 : 40			
CIRCLING (7)	1470 (702)		1650 (882)	1710 (942)		450	80	3 : 05			

## TABULAR DESCRIPTION

## RNP Y RWY 17L - Instrument Approach Procedure

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA/TCH	Navigation Specification
010	IF	MMP	-	-	-	/	-	+5000	210	-	RNP APCH
020	TF	MC724	-	279 (282.0)	-	6.2	-	-	-	-	RNP APCH
030	TF	MC723	-	346 (349.0)	-	4.0	-	+4500	185	-	RNP APCH
040	RF Centre:MC005 r=2.75NM	MC722	-	-	-	-	R	+2800	185	-	RNP APCH
050	TF	MC721	-	166 (169.0)	-	2.2	-	+2200	160	-	RNP APCH
060	TF	RW17L	Y	166 (169.0)	-	4.1	-	-	-	3.2°/ 50Ft	RNP APCH
070	CF	MC906	-	166 (169.0)	3	-	-	-	-	-	RNP APCH
080	TF	INLER	-	168 (170.4)	-	9.7	-	+3000	190	-	RNP APCH

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min.)/ Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1/-	R	+3000	-	190	3	RNAV1
HM	MMP	316 (319.0)	4.5	1/-	R	+5000	-	210	3	RNAV1

- (1) RNAV system with holding functionality  
(2) RNAV system without holding functionality

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC724	45°39'43.72" N – 008°35':28.77" E
MC723	45°43'39.29" N – 008°34'23.65" E
MC722	45°44'42.33" N – 008°42'06.13" E
MC721	45°42'34.54" N – 008°42'41.54"E
MC906	45°31'40.95" N – 008°45'42.02"
RF Arc Centre Identifier	Coordinates
MC005	45°44'10.61" N – 008°38'14.93" E

## SBAS FAS DATA BLOCK LIMC RNP Y RWY 17L

## Input data

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	LIMC
Runway	17
Runway Letter	3 (Left)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E17B
LTP/FTP Latitude	453831.3335N
LTP/FTP Longitude	0084348.8470E
LTP/FTP Ellipsoidal Height (metres)	272.6
FPAP Latitude	453656.6995N
Delta FPAP Latitude (seconds)	-94.6340
FPAP Longitude	0084414.9855E
Delta FPAP Longitude (seconds)	26.1385
Threshold Crossing Height	15.0
TCH Units Selector	1 (meters)
Glidepath Angle (degrees)	3.20
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

## Output data

Data Block	10 03 0D 09 0C D1 C8 00 02 37 31 05 4B 62 96 13 DE 21 BF 03 A6 1E AC 1C FD 35 CC 00 2C 81 40 01 64 00 C8 AF 9E 26 7A D3
Calculated CRC Value	9E267AD3

## Required Additional Data

ICAO Code	LI
LTP/FTP Orthometric Height (metres)	227.0

Intenzionalmente bianca

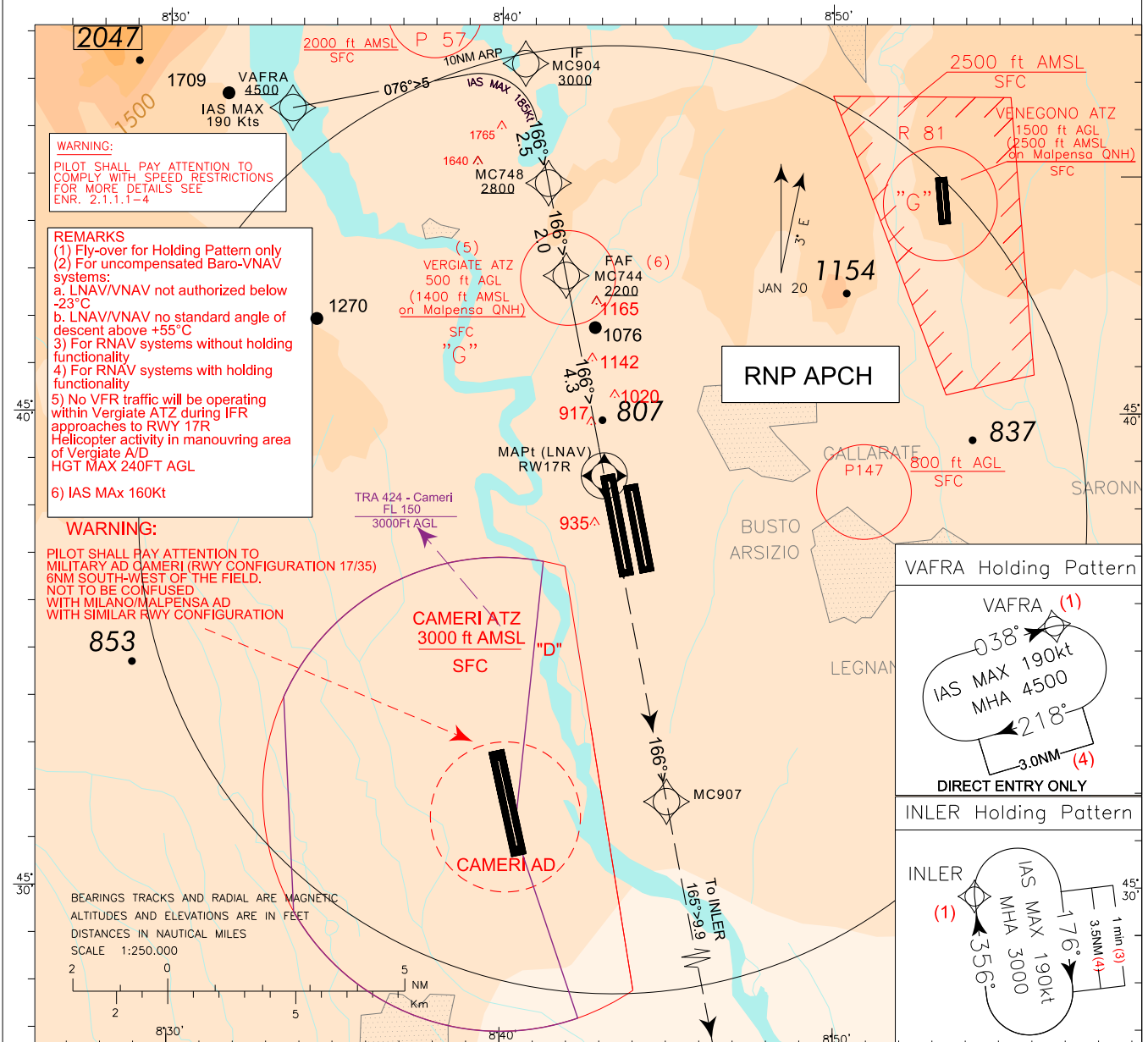
*Intentionally left blank*

# ICAO - INSTRUMENT APPROACH CHART

AD 2 LIMC 5-37

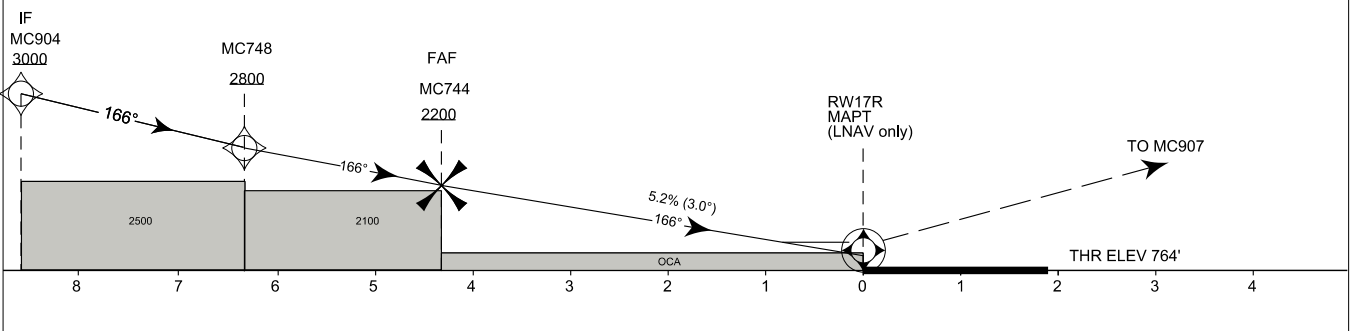
EGNOS CH 47169 E17D	APP	Milano Radar	CH 125.630 (CH 132.705)	AD ELEV	LIMC 768	MILANO/MALPENSA RNP Z RWY 17R
	TWR	Malpensa TWR		128.350		
	ATIS	Malpensa Arrival Information		120.025		

DOC 8168 - ED 6 2014 - AMD 8



CHANGE: MAGNETIC VARIATION UPDATED

TRANSITION ALT 6000	<b>MISSED APPROACH:</b> Climbing to 3000FT, continue to MC907 on course 166° then proceed to INLER on track 165° to join Missed Approach Holding Pattern
TCH 15 M	



STRAIGHT IN APPROACH	OCA (OCH)	A	B	C	D	FT PER MIN	GS	FAF - MAPt	RWY17R DIST.	ALT (HGT)	MNM SECT ALT 25NM ARP
								4.3 NM	4.0	2090 (1326)	
LPV	1047 (283)	1059 (295)	1067 (303)	1078 (314)		1000	180	1 : 26	3.0	1770 (1006)	10300
LNAV/VNAV	1150 (386)	1162 (398)	1170 (406)	1181 (417)		880	160	1 : 37	2.0	1450 (686)	
LNAV	1420 (646)					770	140	1 : 51	1.0	1130 (366)	
						660	120	2 : 09			
						550	100	2 : 34			
						440	80	3 : 14			

ENAV - Roma

AIRAC effective date 27 JAN 2022 (A13/21)

## TABULAR DESCRIPTION

## RNP Z RWY 17R - Instrument Approach Procedure

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA (°)/TCH (m)	Navigation Specification
010	IF	VAFRA	-	-	-	-	-	+4500	190	-	RNP APCH
020	TF	MC904	-	076 (079.0)	-	5	-	+3000	185	-	RNP APCH
030	TF	MC748	-	166 (169.0)	-	2.5	R	+2800	185	-	RNP APCH
040	TF	MC744	-	166 (169.0)	-	2.0	-	+2200	160	-	RNP APCH
050	TF	RW17R	Y	166 (169.0)	-	4.3	-	-	-	3.0/ 15.0	RNP APCH
060	CF	MC907	-	166 (169.0)	3	/	-	-	-	-	RNP APCH
070	TF	INLER	-	165 (167.8)	-	9.9	-	+3000	190	-	RNP APCH

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min.)/Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1/-	R	+3000	-	190	3	RNAV1
HM (3)	VAFRA	038 (041.0)	3	N.A.	R	+4500	-	190	3	RNAV1

- (1) RNAV system with holding functionality  
(2) RNAV system without holding functionality  
(3) Direct Entry Only

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC904	45°47'25.04"N – 008°40'42.82"E
MC748	45°44'55.73"N – 008°41':24.31"E
MC744	45°42'57.96"N – 008°41'57.01"E
MC907	45°31'51.42"N – 008°45'01.41"E



## SBAS FAS DATA BLOCK LIMC RNP Z RWY 17R

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	LIMC
Runway	17
Runway Letter	1 (Right)
Approach Performance Designator	0
Route Indicator	Z
Reference Path Data Selector	0
Reference Path Identifier	E17D
LTP/FTP Latitude	453843.6325N
LTP/FTP Longitude	0084307.4120E
LTP/FTP Ellipsoidal Height (metres)	278.5
FPAP Latitude	453638.9885N
Delta FPAP Latitude (seconds)	-124.6440
FPAP Longitude	0084341.8485E
Delta FPAP Longitude (seconds)	34.4365
Threshold Crossing Height	15.0
TCH Units Selector	1 (meters)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

## Output data

Data Block	10 03 0D 09 0C 51 D0 00 04 37 31 05 61 C2 96 13 28 DE BD 03 E1 1E 38 32 FC 09 0D 01 2C 81 2C 01 64 00 C8 AF 45 B6 4C C5
Calculated CRC Value	45B64CC5

## Required Additional Data

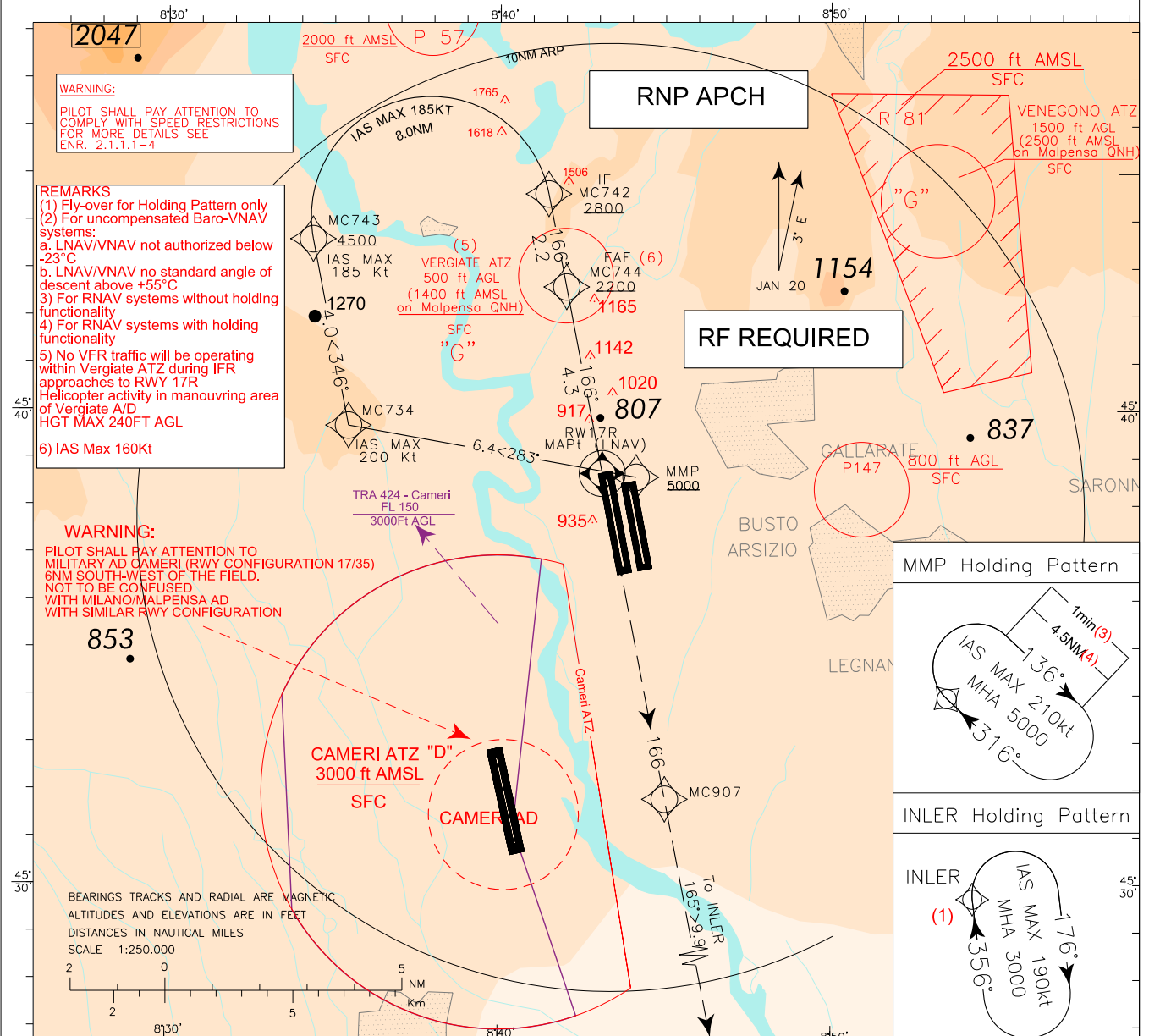
ICAO Code	LI
LTP/FTP Orthometric Height (metres)	233.0

Intenzionalmente bianca

*Intentionally left blank*

DOC 8168 - ED 6 2014 AMD 8

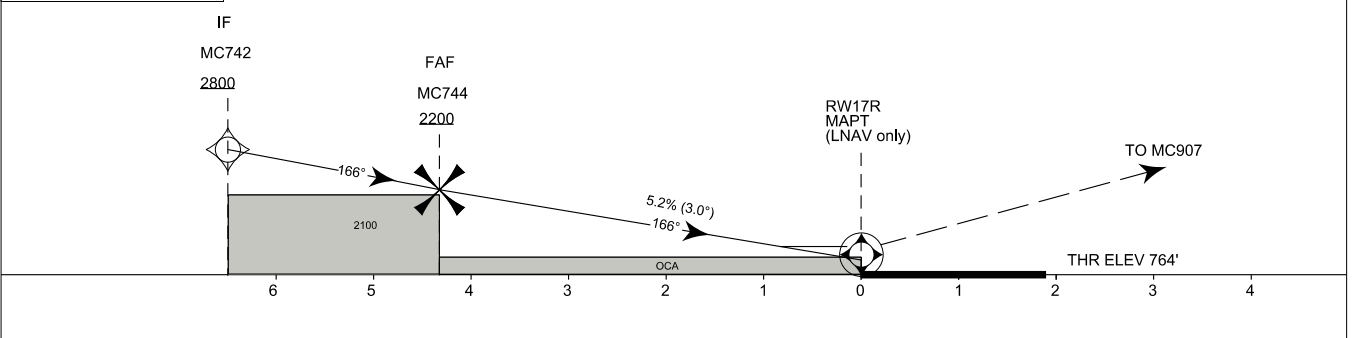
EGNOS CH 83095 E17E	APP	Milano Radar	CH 125.630 (CH 132.705)	AD ELEV	768	LIMC MILANO/MALPENSA RNP Y RWY 17R
	TWR	Malpensa TWR				
	ATIS	Malpensa Arrival Information				



CHANGE: MAGNETIC VARIATION UPDATED

TRANSITION ALT 6000  
TCH 15 M

**MISSED APPROACH:** Climbing to 3000FT, continue to MC907 on course 166° then proceed to INLER to join Missed Approach Holding Pattern



STRAIGHT IN APPROACH	OCA (OCH)				FT PER MIN	GS	FAF - MAPt	RWY17R DIST.	ALT (HGT)	MNM SECT ALT 25NM ARP
	A	B	C	D						
LPV	1047 (283)	1059 (295)	1067 (303)	1078 (314)	1000	180	1 : 26	4.0	2090 (1326)	10300
LNAV/VNAV	1150 (386)	1162 (398)	1170 (406)	1181 (417)	880	160	1 : 37	3.0	1770 (1006)	
LNAV	1420 (646)				770	140	1 : 51	2.0	1450 (686)	
					660	120	2 : 09	1.0	1130 (366)	
					550	100	2 : 34			
					440	80	3 : 14			

## TABULAR DESCRIPTION

## RNP Y RWY 17R - Instrument Approach Procedure

Serial Number	Path Terminator	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	VPA (°)/TCH (m)	Navigation Specification
010	IF	MMP	-	-	-	-	-	+5000	-	-	RNP APCH
020	TF	MC734	-	283 (286.2)	-	6.4	-	-	200	-	RNP APCH
030	TF	MC743	-	346 (349.0)	-	4.0	-	+4500	185	-	RNP APCH
040	RF Centre: MC003 R=2.53NM	MC742	-	-	-	-	R	+2800	185	-	RNP APCH
050	TF	MC744	-	166 (169.0)	-	2.2	-	+2200	160	-	RNP APCH
060	-	RW17R	Y	166 (169.0)	-	4.3	-	-	-	3.0/ 15.0	RNP APCH
070	CF	MC907	-	166 (169.0)	3	-	-	-	-	-	RNP APCH
080	TF	INLER	-	165 (167.8)	-	9.9	-	+3000	190	-	RNP APCH

Path Terminator	Waypoint Identifier	Inbound Course °M (°T)	Leg Distance (NM) (1)	Timing(min./Waypoint Distance (NM) (2)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FL)	Speed Limit (kt)	Magnetic Variation (°)	Navigation Specification
HM	INLER	356 (359.0)	3.5	1/-	R	+3000	-	190	3	RNAV1
HM	MMP	316 (319.0)	4.5	1/-	R	+5000	-	210	3	RNAV1

(1) RNAV system with holding functionality

(2) RNAV system without holding functionality

## WAYPOINT LIST

Waypoint Identifier	Coordinates
MC734	45°40'13.17"N – 008°35'20.63"E
MC743	45°44'08.73"N – 008°34'15.48"E
MC742	45°45'06.77"N – 008°41':21.24"E
MC744	45°42':57.96"N – 008°41'57.01"E
MC907	45°31':51.42"N – 008°45'01.41"E
Arc Centre Identifier	Coordinates
MC003	45°44'37.82"N – 008°37'48.45"E

## SBAS FAS DATA BLOCK LIMC RNP Y RWY 17R

## Input data

Operation Type	0
SBAS Provider	1 (EGNOS)
Airport Identifier	LIMC
Runway	17
Runway Letter	1 (Right)
Approach Performance Designator	0
Route Indicator	Y
Reference Path Data Selector	0
Reference Path Identifier	E17E
LTP/FTP Latitude	453843.6325N
LTP/FTP Longitude	0084307.4120E
LTP/FTP Ellipsoidal Height (metres)	278.5
FPAP Latitude	453638.9885N
Delta FPAP Latitude (seconds)	-124.6440
FPAP Longitude	0084341.8485E
Delta FPAP Longitude (seconds)	34.4365
Threshold Crossing Height	15.0
TCH Units Selector	1 (meters)
Glidepath Angle (degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
HAL (metres)	40.0
VAL (metres)	35.0

## Output data

Data Block	10 03 0D 09 0C 51 C8 00 05 37 31 05 61 C2 96 13 28 DE BD 03 E1 1E 38 32 FC 09 0D 01 2C 81 2C 01 64 00 C8 AF C8 76 17 5A
Calculated CRC Value	C876175A

## Required Additional Data

ICAO Code	LI
LTP/FTP Orthometric Height (metres)	233.0

Intenzionalmente bianca

*Intentionally left blank*