

FREQUENCIES		
TWR	Torino TWR	118.500
APP	Torino APP/Radar	129.275 (121.100)
ATIS	Torino Terminal Information CH	120.480

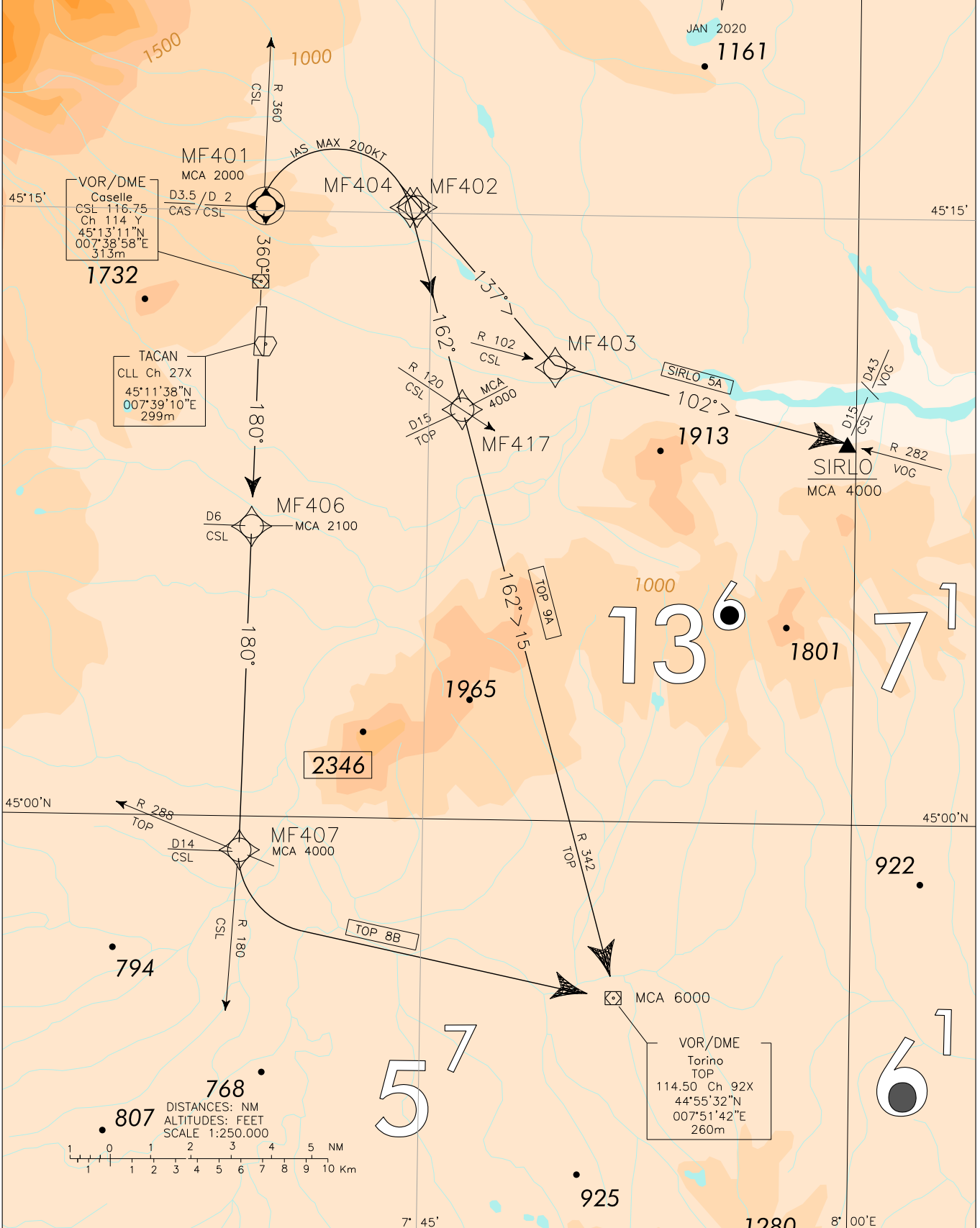
INITIAL CLIMB PROCEDURES & SIDs

RWY 18/36

TORINO/ CASELLE
TRANSITION ALT 6000

REMARK
CLOSE-IN OBSTACLES PENETRATING OIS 2.5% EXIST BUT WERE NOT CONSIDERED FOR THE PUBLISHED PROCEDURE DESIGN GRADIENT

CHANGE: BOX FREQ; 'CAS' TACAN RENAMED IN CLL AND CHANNEL FREQ UPDATED



Noise abatement procedures

Provision of Italian Civil Authority reported in ENR 1.5 apply.

ICP DESCRIPTION RWY 36

After take-off join RDL 360 CSL VOR (TR 360°). At 2NM CSL DME (3.5 NM CAS TACAN), to be crossed at 2000FT or above.

REMARK

Close-in obstacles penetrating OIS 2.5% exist but were not considered for the published procedure design gradient

SID DESCRIPTION RWY 36**General requirements**

- Minimum climb gradient: 475 ft/NM (7,8%) until leaving 4000 ft.
- IAS MAX 200 kt during turn due to ATC reason.
- As an additional help to navigation the ARINC 424 Path Terminator sequence for RNAV1 equipped aircraft is reported for procedures storage purposes inside on board database in order to tailor as much as possible to the nominal path.

Initial climb procedure executed:

TOP 9A

Turn right and proceed on TR 162° (RDL 342 TOP VOR) bound to TOP VOR.

MCA: RDL 360/2NM CSL VOR/DME, 2000 FT; RDL 342/15NM TOP VOR/DME (INT RDL 342 TOP VOR/RDL 120 CSL VOR), 4000 FT; TOP VOR, 6000 FT

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
CA	-	-	358 (000.6)	-	-	-	+1400	-	Conventional/ RNAV 1
CF	MF401	Y	360 (000.6)	2.0	-	-	+2000	200	Conventional/ RNAV 1
DF	MF404	-	-	-	-	R	-	-	Conventional/ RNAV 1
TF	MF417	-	162 (164.8)	-	5.4	-	+4000	-	Conventional/ RNAV 1
TF	TOP	-	162 (164.8)	-	14.9	-	+6000	-	Conventional/ RNAV 1

SIRLO 5A

Turn right and proceed on TR 137° until joining RDL 102 CSL VOR bound to SIRLO (RDL 102/15NM CSL VOR/DME – RDL 282/43NM VOG VOR/DME).

MCA: RDL 360/2NM CSL VOR/DME, 2000 FT; SIRLO, 4000 FT

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
CA	-	-	358 (000.6)	-	-	-	+1400	-	Conventional/ RNAV 1
CF	MF401	Y	360 (000.6)	2.0	-	-	+2000	200	Conventional/ RNAV 1
DF	MF402	-	-	-	-	R	-	-	Conventional/ RNAV 1
TF	MF403	-	137 (139.7)	-	5.4	-	-	-	Conventional/ RNAV 1
TF	SIRLO	-	102 (104.8)	-	7.2	-	+4000	-	Conventional/ RNAV 1

SIDs RWY 18**General requirements**

Minimum climb gradient: 330 ft/NM (5,4%) until leaving 3000 ft.

REMARK

Close-in obstacles penetrating OIS 2.5% exist but were not considered for the published procedure design gradient

TOP 8B

After take-off join RDL 180 CSL VOR (TR 180°), crossing point RDL 180/6NM CSL VOR/DME at 2100 ft or above.

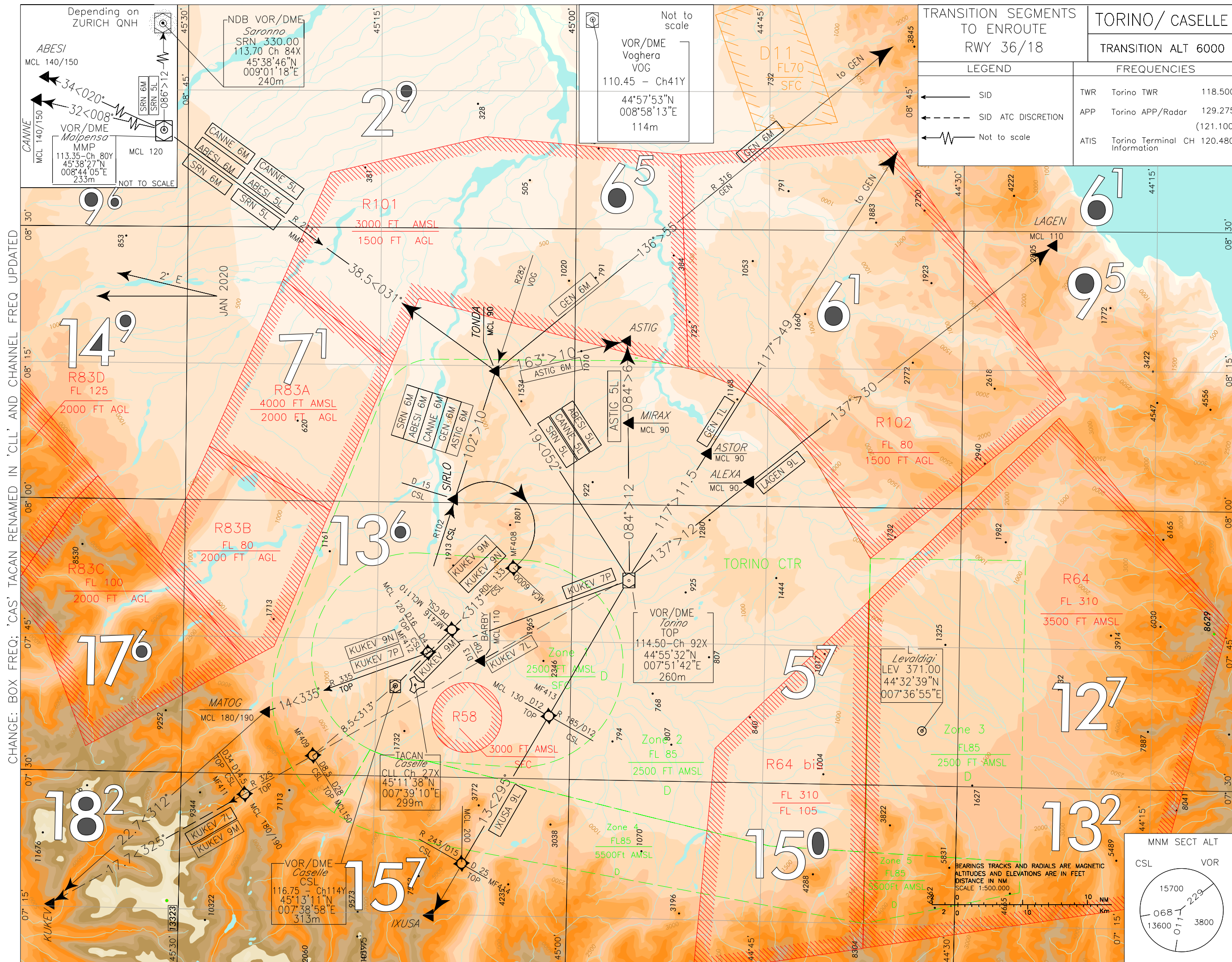
Passing 4000 ft, anyway not further than point RDL 180/14NM CSL VOR/DME (or RDL 288 TOP VOR) turn left bound to TOP VOR.

MCA: RDL 180/6NM CSL VOR/DME, 2100 FT; RDL 180/14NM CSL VOR/DME (INT RDL 180 CSL VOR/RDL 288 TOP VOR), 4000 FT;
TOP VOR, 6000 FT

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
CA	-	-	180 (182.6)	-	-	-	+1350	-	Conventional/ RNAV 1
CF	MF406	-	180 (182.6)	2.0	-	-	+2100	-	Conventional/ RNAV 1
TF	MF407	-	180 (182.6)	-	8.0	-	+4000	-	Conventional/ RNAV 1
TF	TOP	-	108 (110.7)	-	10.3	-	+6000	-	Conventional/ RNAV 1

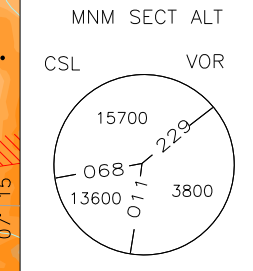
WAYPOINT LIST

Waypoint Identifier	Coordinates
MF401	45°15'10.96" N 007°39'04.38" E
MF402	45°15'15.16" N 007°44'44.45" E
MF403	45°11'08.13" N 007°49'40.66" E
MF404	45°15'10.00" N 007°44'12.05" E
MF406	45°07'11.47" N 007°38'35.24" E
MF407	44°59'1202" N 007°38'04.42" E
MF417	45°09'54.05" N 007°46'13.10" E



CHANGE: BOX FREQ: 'CAS' TACAN RENAMED IN 'CLL' AND CHANNEL FREQ UPDATED

TRANSITION SEGMENTS TO ENROUTE RWY 36/18		TORINO/ CASELLE	
LEGEND		FREQUENCIES	
←	SID	TWR	Torino TWR 118.500
← - - -	SID ATC DISCRETION	APP	Torino APP/Radar 129.275 (121.100)
⚡	Not to scale	ATIS	Torino Terminal Information CH 120.480



SIDs DESCRIPTION (TRANSITION ROUTES)

REMARKS

- (1) Depending on Geneva QNH
- (2) Depending on Zurich QNH
- (3) Depending on the following enroute segment

KUKEV 9M (ATC discretion)

Over SIRLO turn right until joining RDL 133 CSL VOR bound to CSL VOR. Leave CSL VOR on RDL 313 until joining RDL 325 TOP VOR, then proceed to KUKEV.

MCA/MCL: end of turn (INT RDL 133 CSL VOR): 6000 FT; RDL 133/6NM CSL VOR/DME: FL 110;
RDL 313/8.5NM CSL VOR/DME (RDL 325/28NM TOP VOR/DME): FL 150;
RDL 325/34NM TOP VOR/DME (RDL 325 TOP VOR/14.5NM CSL DME): FL 180/190 depending on Geneva QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-	-	-	-	+4000	240	Conventional/ RNAV1
DF	MF408	-	-	-	-	R	+6000	240	Conventional/ RNAV1
TF	MF416	-	313 (315.7)	-	7.1		+FL 110	-	Conventional/ RNAV1
TF	MF409	-	313 (315.7)	-	14.6		+FL 150	-	Conventional/ RNAV1
TF	MF411	-	325 (327.6)	-	6.0		+FL 180/FL 190 (1)	-	Conventional/ RNAV1
TF	KUKEV	-	325 (327.6)	-	17.6		-	-	Conventional/ RNAV1

KUKEV 7L (ATC discretion)

Over TOP VOR proceed on RDL 325 via BARBY – KUKEV.

MCL: BARBY: FL110; RDL 325/28NM TOP VOR/DME (RDL 325 TOP VOR/8.5NM CSL DME): FL150;
RDL 325/34NM TOP VOR/DME (RDL 325 TOP VOR/14.5NM CSL DME): FL180/190 depending on Geneva QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-	-	-	-	+6000		Conventional/ RNAV1
TF	BARBY	-	325 (327.8)	-	13.0	-	+FL110		Conventional/ RNAV1
TF	MF409	-	325 (327.8)	-	15.1	-	+FL150	-	Conventional/ RNAV1
TF	MF411	-	325 (327.8)	-	6.0	-	+FL 180/FL 190 (1)	-	Conventional/ RNAV1
TF	KUKEV	-	325 (327.8)	-	17.6	-	-	-	Conventional/ RNAV1

KUKEV 9N

Over SIRLO turn right until joining RDL 133 CSL VOR until 4NM CSL DME, then turn right until joining RDL 335 TOP VOR bound to MATOG, then turn left on track 312° bound to KUKEV.

MCA/MCL: end of turn (INT RDL 133 CSL VOR): 6000 FT; RDL 133/4NM CSL VOR/DME: FL 120;
MATOG (RDL 335/30NM TOP VOR/DME): FL 180/190 depending on Geneva QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-	-	-	-	+4000	240	Conventional/ RNAV1
DF	MF408	-	-	-	-	R	+6000	240	Conventional/ RNAV1
TF	MF412	-	313 (315.7)	-	9.0	-	+FL 120	-	Conventional/ RNAV1
TF	MATOG	-	335 (337.3)	-	14.0	-	+FL 180/FL 190 (1)	-	Conventional/ RNAV1
TF	KUKEV	-	312 (314.9)	-	22.7	-	-	-	Conventional/ RNAV1

KUKEV 7P

Proceed via TOP VOR – MATOG – KUKEV.

MCL: RDL 335/16NM TOP VOR/DME (RDL 335 TOP VOR/4NM CSL DME): FL 120;
MATOG (RDL 335/30NM TOP VOR/DME): FL 180/190 depending on Geneva QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-	-	-	-	+6000	-	Conventional/ RNAV1
TF	MF412	-	335 (337.3)	-	15.9	-	+FL 120	-	Conventional/ RNAV1
TF	MATOG	-	335 (337.3)	-	14.0	-	+FL 180/FL 190 (1)	-	Conventional/ RNAV1
TF	KUKEV	-	312 (314.9)	-	22.7	-	-	-	Conventional/ RNAV1

CANNE 6M

Proceed on RDL 102 CSL VOR (RDL 282 VOG VOR) until TONDA, then turn left until joining RDL 211 MMP VOR (TR 031°) bound to MMP VOR. Leave MMP VOR on RDL 008 bound to CANNE.

MCL: TONDA: FL90; MMP VOR: FL120; CANNE: FL140/150 depending on Zurich QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-	-	-	-	+4000	-	Conventional/ RNAV1
TF	TONDA	-	102 (104.9)	-	10.4	-	+FL 90	-	Conventional/ RNAV1
TF	MMP	-	031 (033.5)	-	38.5	-	+FL 120	-	Conventional/ RNAV1
TF	CANNE	-	008 (010.7)	-	32.1	-	+FL 140/FL 150 (2)	-	Conventional/ RNAV1

CANNE 5L

Proceed via TOP VOR – TONDA – MMP VOR – CANNE.

MCL: TONDA: FL 90; MMP VOR: FL 120; CANNE: FL 140/150 depending on Zurich QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-			-	+6000	-	Conventional/ RNAV1
TF	TONDA	-	052 (054.7)		19.2	L	+FL 90	-	Conventional/ RNAV1
TF	MMP	-	031 (033.5)		38.5	-	+FL 120	-	Conventional/ RNAV1
TF	CANNE	-	008 (010.7)		32.1	-	+FL 140/ FL 150 (2)	-	Conventional/ RNAV1

ABESI 6M

Proceed on RDL 102 CSL VOR (RDL 282 VOG VOR) until TONDA, then turn left until joining RDL 211 MMP VOR (TR 031°) bound to MMP VOR. Leave MMP VOR on RDL 020 bound to ABESI.

MCL: TONDA: FL 90; MMP VOR: FL 120; ABESI: FL140/150 depending on Zurich QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-			-	+4000	-	Conventional/ RNAV1
TF	TONDA	-	102 (104.9)		10.4	-	+FL 90	-	Conventional/ RNAV1
TF	MMP	-	031 (033.5)		38.5	-	+FL 120	-	Conventional/ RNAV1
TF	ABESI	-	020 (022.1)		33.7	-	+FL 140/FL 150 (2)	-	Conventional/ RNAV1

ABESI 5L

Proceed via TOP VOR – TONDA – MMP VOR – ABESI.

MCL: TONDA: FL90; MMP VOR: FL 120; ABESI: FL 140/150 depending on Zurich QNH.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-			-	+6000 ft	-	Conventional/ RNAV1
TF	TONDA	-	052 (054.7)		19.2	L	+FL 90	-	Conventional/ RNAV1
TF	MMP	-	031 (033.5)		38.5	-	+FL 120	-	Conventional/ RNAV1
TF	ABESI	-	020 (022.1)		33.7	-	+FL 140/ FL 150 (2)	-	Conventional/ RNAV1

SRN 6M

Proceed on RDL 102 CSL VOR (RDL 282 VOG VOR) until TONDA, then turn left until joining RDL 211 MMP VOR (TR 031°) bound to MMP VOR. Leave MMP VOR on RDL 086 bound to SRN VOR.

MCL: TONDA: FL 90; MMP VOR: FL 120.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-			-	+4000	-	Conventional/ RNAV1
TF	TONDA	-	102 (104.9)		10.4	-	+FL 90	-	Conventional/ RNAV1
TF	MMP	-	031 (033.5)		38.5	-	+FL 120	-	Conventional/ RNAV1
TF	SRN	-	086 (088.2)		12.1	-	-	-	Conventional/ RNAV1

SRN 5L

Proceed via TOP VOR – TONDA – MMP VOR – SRN VOR.

MCL: TONDA: FL90; MMP VOR: FL 120.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-			-	+6000	-	Conventional/ RNAV1
TF	TONDA	-	052 (054.7)		19.2	L	+FL 90	-	Conventional/ RNAV1
TF	MMP	-	031 (033.5)		38.5	-	+FL 120	-	Conventional/ RNAV1
TF	SRN	-	086 (088.2)		12.1	-	-	-	Conventional/ RNAV1

GEN 6M

Proceed on RDL 102 CSL VOR (RDL 282 VOG VOR) until TONDA, then turn right until joining RDL 316 GEN VOR (TR 136°) bound to GEN VOR.

MCL: TONDA: FL 90; GEN VOR/: as for following enroute segment.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-			-	+4000	-	Conventional/ RNAV1
TF	TONDA	-	102 (104.9)		10.4	-	+FL 90	-	Conventional/ RNAV1
TF	GEN	-	136 (138.0)		54.9	-	(3)	-	Conventional/ RNAV1

GEN 1L

Proceed via TOP VOR/DME – GEN VOR.

MCL: ASTOR: FL 90; GEN VOR: as for following enroute segment.

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-	-	-	-	+6000	-	Conventional/ RNAV1
TF	ASTOR	-	117 (119.4)	-	11.5	-	+FL 90	-	Conventional/ RNAV1
TF	GEN	-	117 (119.4)	-	48.7	-	(3)	-	Conventional/ RNAV1

LAGEN 9L

Proceed via TOP VOR – LAGEN (RDL 138/42NM TOP VOR/DME).

MCL: ALEXA: FL 90; LAGEN: FL 110

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-	-	-	-	+6000	-	Conventional/ RNAV1
TF	ALEXA	-	137 (139.2)	-	12.1	-	+FL 90	-	Conventional/ RNAV1
TF	LAGEN	-	137 (139.2)	-	29.9	-	+FL 110	-	Conventional/ RNAV1

IXUSA 9L

Proceed via TOP VOR/DME – IXUSA.

MCL: RDL 295/12NM TOP VOR/DME (RDL 185/12NM CSL VOR/DME): FL 130;

RDL 295/25NM TOP VO/DME (RDL 243/15NM CSL VOR/DME): FL 200

*L in case of departure via TOP 8B

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-	-	-	-	+6000	-	Conventional/ RNAV1
TF	MF413	-	295 (297.8)	-	12.0	R*	+FL 130	-	Conventional/ RNAV1
TF	MF414	-	295 (297.8)	-	13.0	-	+FL 200	-	Conventional/ RNAV1
TF	IXUSA	-	295 (297.8)	-	5.0	-	-	-	Conventional/ RNAV1

ASTIG 6M

Proceed on RDL 102 CSL VOR (RDL 282 VOG VOR) bound to TONDA, then turn right on TR 163° bound to ASTIG.

MCL: TONDA: FL 90

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-			-	+4000	-	Conventional/ RNAV1
TF	TONDA	-	102 (104.9)		10.4	-	+FL 90	-	Conventional/ RNAV1
TF	ASTIG	-	163 (165.5)		10.4	-	-	-	RNAV1

ASTIG 5L

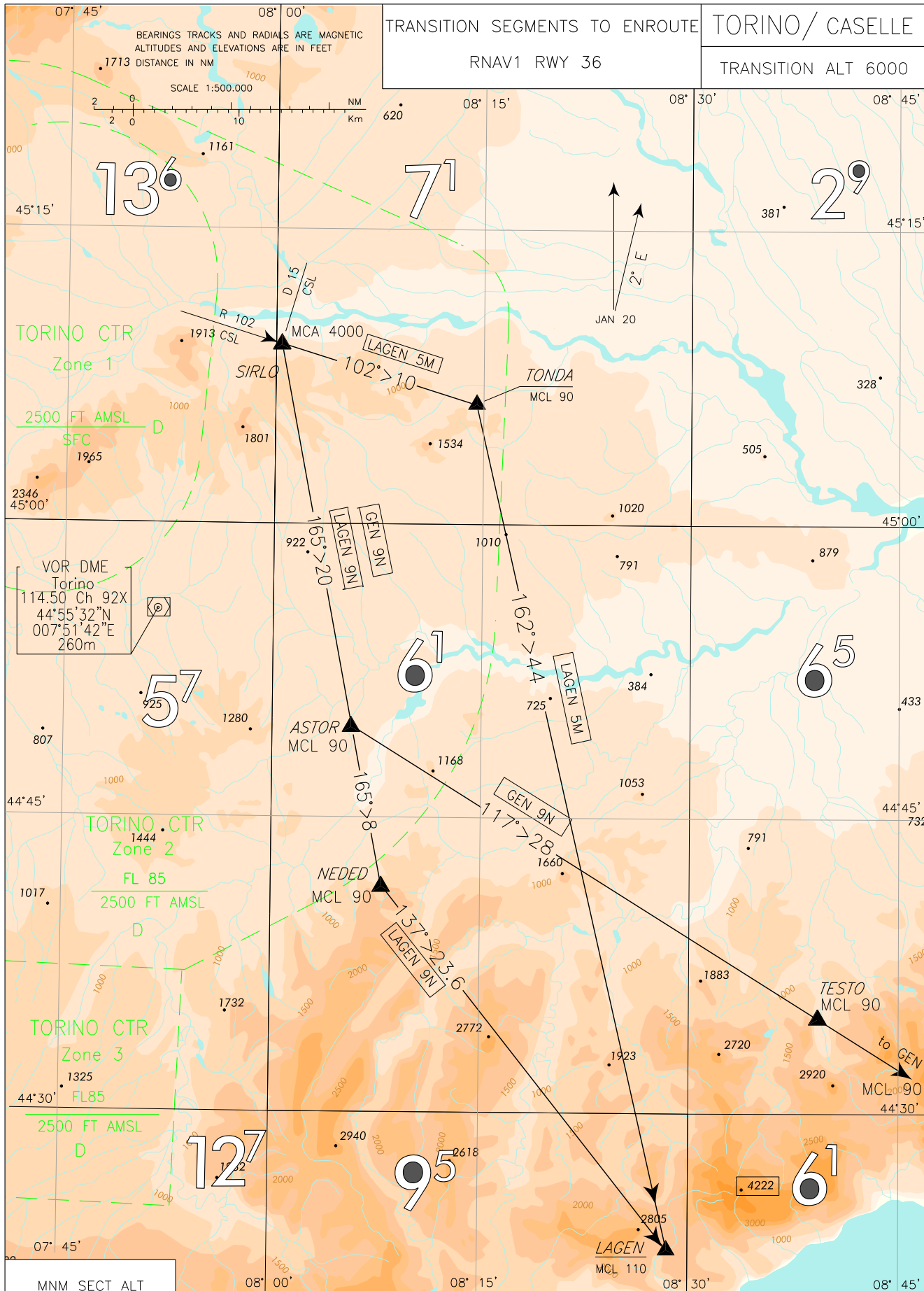
Proceed via TOP VOR – MIRAX – ASTIG.

MCL: MIRAX: FL 90

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	TOP	-	-			-	+6000	-	Conventional/ RNAV1
TF	MIRAX		084 (086.7)		12.0		+FL 90	-	Conventional/ RNAV1
TF	ASTIG	-	084 (086.7)		6.3	-	-	-	Conventional/ RNAV1

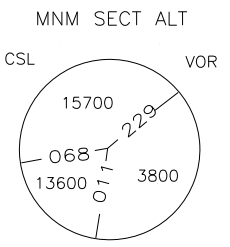
WAYPOINT LIST

Waypoint Identifier	Coordinates
MF408	45°03'49.37" N 007°51'52.86" E
MF409	45°19'18.05" N 007°30'29.01" E
MF411	45°24'21.90" N 007°25'55.08" E
MF412	45°10'14.22" N 007°43'02.94" E
MF413	45°01'07.18" N 007°36'44.46" E
MF414	45°07'08.62" N 007°20'28.92" E
MF416	45°08'53.54" N 007°44'54.28" E



CHANGE: BOX FREQ UPDATED

TRANSITION SEGMENTS TO ENROUTE	TORINO/ CASELLE
RNAV1 RWY 36	TRANSITION ALT 6000



REMARKS	LEGEND	FREQUENCIES
	←—— SID	TWR Torino TWR 118.500
	←—— SID ATC DISCRETION	APP Torino APP/Radar 129.275 (121.100)
	←⚡ Not to scale	ATIS Torino Terminal Information CH 120.480

Torino/Caselle – TSE RNAV1 RWY 36

GEN 9N

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-	-	-	R	+4000	-	RNAV1
TF	ASTOR	-	165 (167.0)	-	19.9	L	+FL 90	-	RNAV1
TF	TESTO	-	117 (119.6)	-	28.1	-	+FL 90	-	RNAV1
TF	GEN	-	117 (119.6)	-	20.7	-	+FL 90	-	RNAV1

LAGEN 9N

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-	-	-	R	+4000	-	RNAV1
TF	ASTOR	-	165 (167.0)	-	19.9	-	+FL 90	-	RNAV1
TF	NEDED	-	165 (167.0)	-	8.4	L	+FL 90	-	RNAV1
TF	LAGEN	-	137 (139.3)	-	23.6	-	+FL 110	-	RNAV1

LAGEN 5M

Path Terminator	Waypoint Identifier	Fly Over	Course °M (°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (ft)	Speed Limit (kt)	Navigation Performance
IF	SIRLO	-	-	-	-	-	+4000	-	RNAV1
TF	TONDA	-	102 (104.9)	-	10.4	R	+FL 90	-	RNAV1
TF	LAGEN	-	162 (164.8)	-	44.4	-	+FL 110	-	RNAV1

Intenzionalmente bianca

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