

ARTCC ARGENTINO AD 2.SAZS

NO VALIDO PARA NAVEGACION REAL. ADAPTADO PARA SU UTILIZACION EN UN AMBITO VIRTUAL
SAZS – SAN CARLOS DE BARILOCHE

AD 2.17 ESPACIO AEREO ATC

Zona de Control:

- | | | |
|-------------------------------------|---|--------|
| 1. Designación: | Zona de Control San Carlos de Bariloche | |
| 2. Límites verticales: | <u>7500 FT</u>
GND | |
| 3. Clasificación del espacio aéreo: | C | |
| 4. Distintivo de llamada: | BARILOCHE TORRE | |
| 5. Altitud de transición: | 8000 FT. | |
| 6. Nivel de transición: | QNH de 977 a 994 | FL 100 |
| | QNH de 995 a 1013 | FL 095 |
| | QNH de 1014 a 1031 | FL 090 |
| | QNH de 1032 a 1050 | FL 085 |

Area de Control Terminal:

- | | |
|-------------------------------------|---|
| 1. Designación: | Area de Control Terminal San Carlos de Bariloche |
| 2. Límites verticales: | <u>FL 245</u>
2000 FT |
| 3. Clasificación del espacio aéreo: | A: FL 245 / FL 195
B: FL 195 / FL 145
C: FL 145 / 2000 FT |
| 4. Distintivo de llamada: | BARILOCHE TORRE |

AD 2.18 INSTALACIONES DE COMUNICACIONES ATS

SERVICIO	DISTINTIVO DE LLAMADA	FRECUENCIA	OBSERVACIONES
ATIS	ATIS Bariloche	127.900	-
APP	Bariloche Control	119.100	-

AD 2.19 CARTAS AERONAUTICAS

- | | |
|-----------------------|--|
| - Plano de aeródromo: | SAZS.APT
SAZS.APT PARKING SPOTS |
| - Cartas IAC: | SAZS.IAC NO.1
SAZS.IAC NO.2
SAZS.IAC NO.3
SAZS.IAC NO.4 |
| - Cartas SID: | SAZS.SID GEMOB4A (RWY 29)
SAZS.SID KOVAK4A (RWY 11)
SAZS.SID MIMAK1 (RWY 29) |
| - Cartas STAR: | SAZS.STAR ILRAM2 (RWY 29)
SAZS.STAR VULON1 (RNAV-RWY 29) |

(DEJADO EN BLANCO INTENCIONALMENTE)

AD 2.20 REGLAMENTACION DE TRANSITO LOCALES

NORMAS PARA EL MOVIMIENTO Y ESTACIONAMIENTO DE AERONAVES EN LA PLATAFORMA

ESTACIONAMIENTO

La posición 1 y 3, aeronaves hasta 18 mts. de envergadura.

La posición 2, aeronaves hasta 20 mts. de envergadura.

La posición 4 y 10, aeronaves tipo B737/500, similar o menor porte.

La posición 5, 6 y 7, aeronaves tipo B737/700, MD80, similar o menor porte.

La posición 5B, aeronaves tipo A330, similar o menor porte, penalizando las posiciones 4, 5 y 6.

La posición 5C, aeronaves tipo B747, similar o menor porte, penalizando las posiciones 4, 5 y 6.

La posición 8, aeronaves tipo MD11, similar o menor porte, penalizando las posiciones 7 y 9.

La posición 9, presenta dos alternativas:

a) con proa a la nueva Aerostación: admite aeronaves tipo MD80, B737/500, similar o menor porte;

b) sobre la recta de ingreso, previo a la barra de viraje para aeronaves tipo MD-80, en cuyo caso admite aeronave B757/200, similar o menor porte. En ésta configuración la posición 7 admite el ingreso y salida de aeronaves tipo B737/500, similar o menor porte.

EXCEPCIONES

La circulación de aeronaves tipo MD11 o similar porte (categoría D) por calle de rodaje paralela a pista en su ingreso a plataforma, penaliza la presencia de una aeronave tipo B737/500 o similar porte en la posición 10.

INGRESOS

En la posición 5C en caso que el ingreso se produzca desde la calle de rodaje paralela a pista, la posición 10 no podrá estar ocupada por ningún tipo de aeronave.

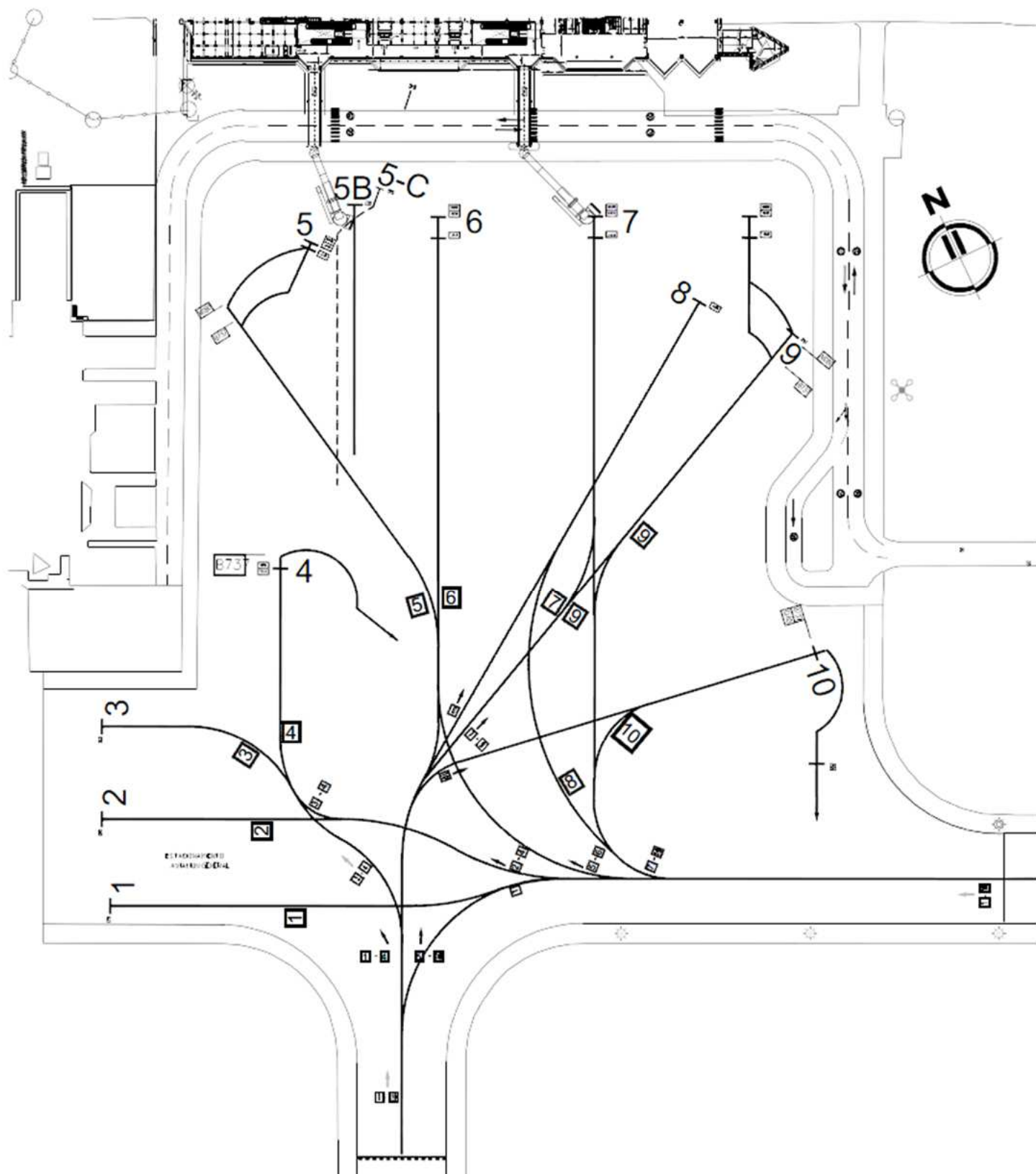
EGRESOS

Las aeronaves en las posiciones 1, 2, 3 y 9 serán deberán hacer con maniobra de push-back, excepto en el caso de aeronaves categoría B que dispongan de la posición lateral Libre y se cuente con la correspondiente autorización de la Torre de Control de San Carlos de Bariloche.

La salida de las aeronaves estacionadas en posición 5C será efectuada con push-back hasta la intersección de las calles de rodaje, atendiendo la dirección de salida hacia la cabecera en uso. Para el caso de que el destino de cabecera sea 29, queda restringido el estacionamiento de aeronaves en posición 10.

Para las salidas hacia pista por calle de rodaje central, las operaciones push-back, deberán realizarse con precaución debido a la proximidad de la aeronave que se encuentre en la posición 10.

(DEJADO EN BLANCO INTENCIONALMENTE)



(DEJADO EN BLANCO INTENCIONALMENTE)

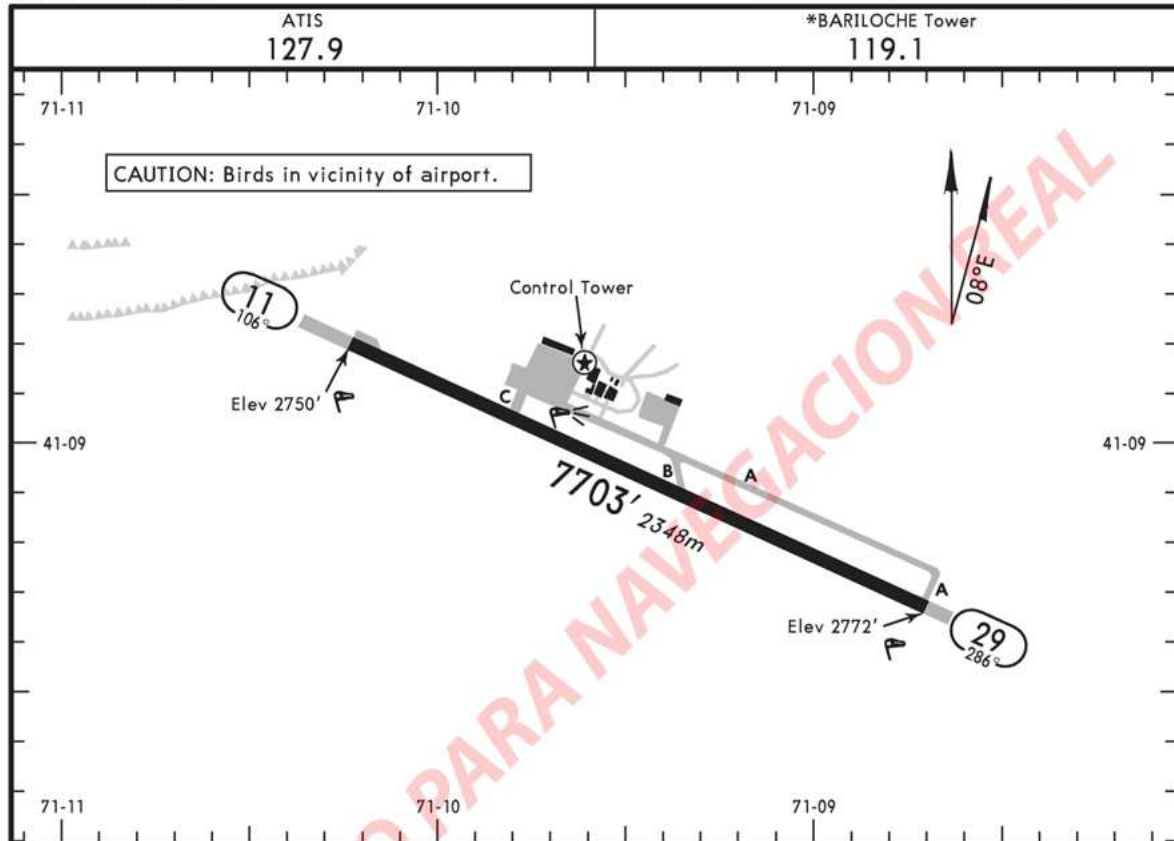
APT

SAZS

Apt Elev **2774'**

S41 09.1 W071 09.5

S. C. DE BARILOCHE,
ARGENTINA
SAN CARLOS DE BARILOCHE

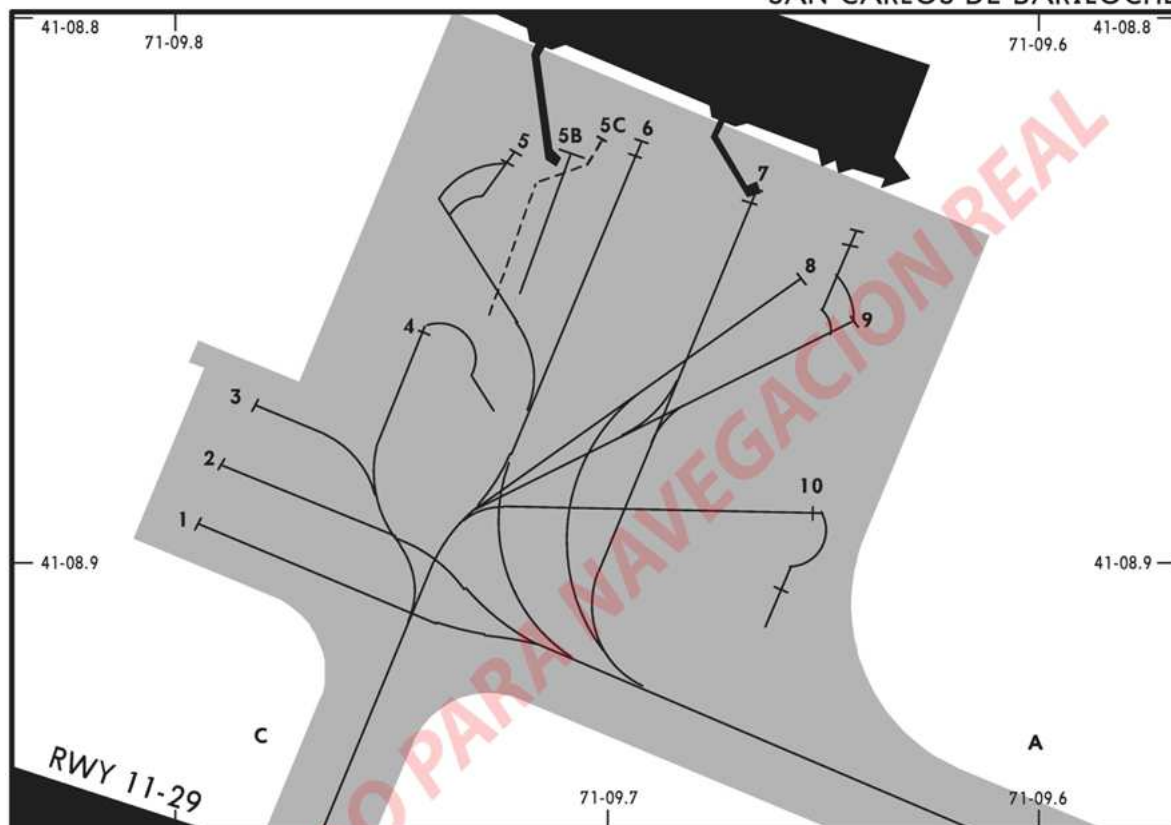


ADDITIONAL RUNWAY INFORMATION

RWY		USABLE LENGTHS		TAKE-OFF	WIDTH
		Threshold	Landing Beyond Glide Slope		
11	HIRL PAPI-L (angle 3.0°)				157'
29	RL ALS PAPI-L (angle 3.0°)				48m

SAZS

APT PARKING SPOTS

S. C. DE BARILOCHE,
ARGENTINA
SAN CARLOS DE BARILOCHE

PARKING SPOT COORDINATES

SPOT NO.	COORDINATES	AIRCRAFT
1, 3	S41 08.9 W071 09.8	wingspan up to 59' (18m)
2	S41 08.9 W071 09.8	wingspan up to 66' (20m)
4, 10	S41 08.9 W071 09.7	up to B737/200
5, 6, 7	S41 08.8 W071 09.7	up to B737/700 or MD88
5B	S41 08.8 W071 09.7	up to A330 ①
5C	S41 08.8 W071 09.7	up to B747-200 ②
8	S41 08.8 W071 09.7	up to MD11 ③
9	S41 08.9 W071 09.6	④

① Penalizing positions 4, 5 and 6.

② Restricting the use of positions 4, 5 and 6.

③ Penalizing positions 7 and 9.

④ a) When parked facing terminal building: available for aircraft up to MD-80, B737-200 or similar.

b) On the centerline before the MD80 turn, position available for aircraft up to B757-200 or similar.

In this configuration, position 7 is available for arrivals and departures of aircraft up to B737-200 or similar, with a marshal located at the tail of B757 parked in position 9.

MOVING ON APRON: No movement shall be initiated from a position in the apron without Bariloche control tower authorization. In order to keep appropriate separation margin between aircraft, the nose wheel should follow the taxiway and parking lines at a reduced speed in all cases.

EXCEPTIONS: The circulation of aircraft type MD11 or similar (CAT D) arriving the apron on taxiway parallel to the runway, penalizes the presence of aircraft type B737-200 or similar on position 10. Tower may authorize arrivals, parking and departures of aircraft that differ from previously established, with the help of marshals or other available means to attend operations security, whenever AA200 Operations finds it necessary or convenient.

ARRIVALS: Arrivals to apron positions can be done utilizing the aircraft's power plants in all cases and under the assistance of a marshal. For position 5C, entering the ramp can be done by using the Acft's own power plant. In case the arrival occurs from the twy parallel to the Rwy, position 10 should not be occupied by any aircraft.

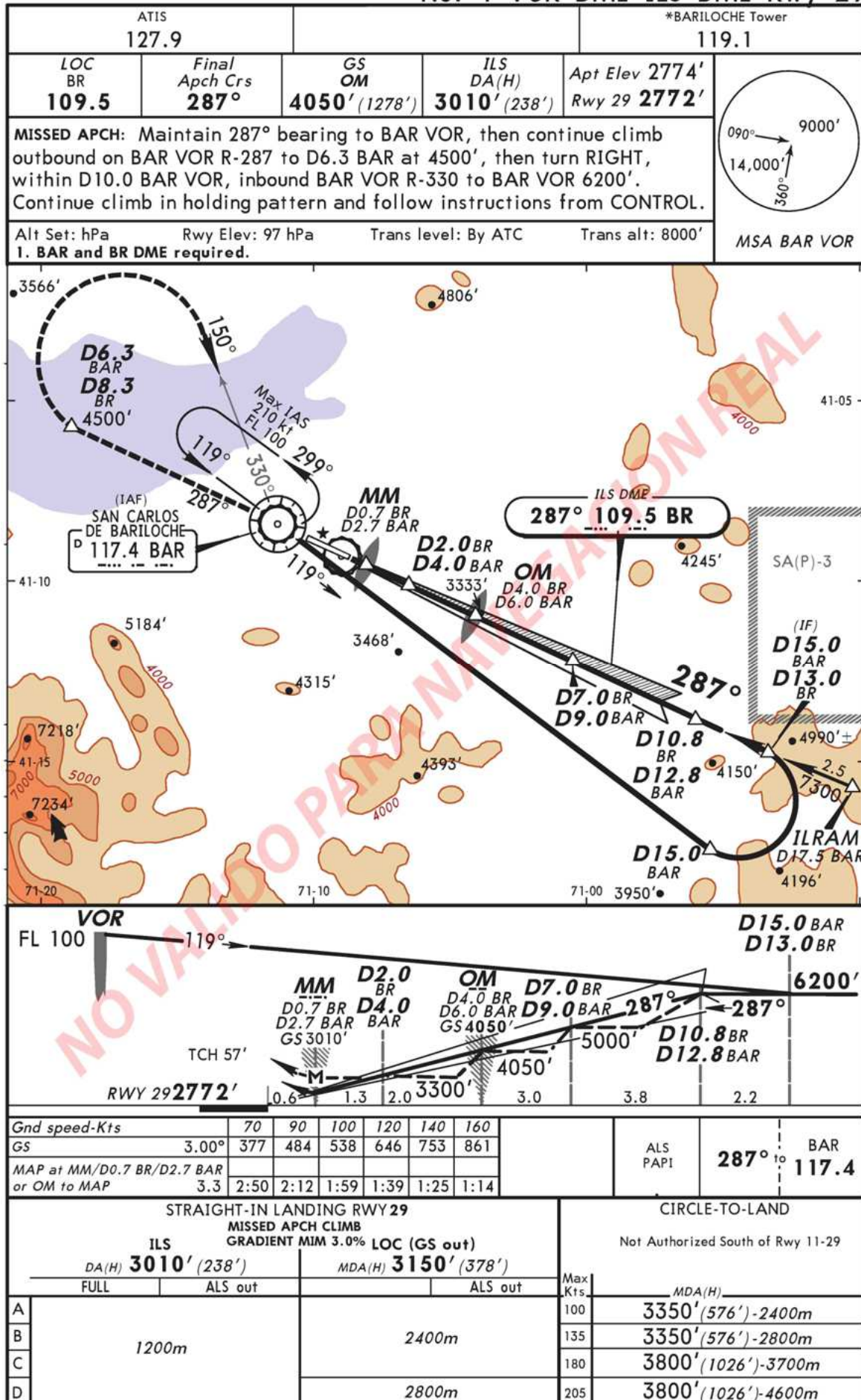
DEPARTURES: Aircraft parked in positions 1,2,3 and 9 will be pushed back to abandon position, except for CAT B aircraft with no parking position on the sides occupied and with proper Bariloche Tower authorization. Aircraft parked in positions 4 and 10 may initiate taxiing utilizing its own power plants (autonomous). Aircraft parked in positions 5,6,7,8 and 9 (in any of its alternatives) will be pushed back until autonomous movement possible, taking into account the established separation margins for each aircraft type. Aircraft parked in position 5C will be pushed back with marshal assistance to the Twy intersection, following the departure direction to the necessary Rwy. In the case Thr Rwy 29 is the destination, position 10 will be restricted to parking. Departing to the Rwy on the central twy, the push back ops should be realized with caution due to the proximity of acft parked in position 10.

PRECAUTIONS: When initiating taxiing maneuvers, cautiously beware of surrounding surface traffic and people on the ramp.

SAZS

S. C. DE BARILOCHE,
MISSED APCH CLIMB
GRADIENT MIM 3.0% ARGENTINA
No. 1 VOR DME ILS DME Rwy 29

SAN CARLOS DE BARILOCHE



SAZS

S. C. DE BARILOCHE,

**MISSED APCH CLIMB
GRADIENT MIN 3.0%**

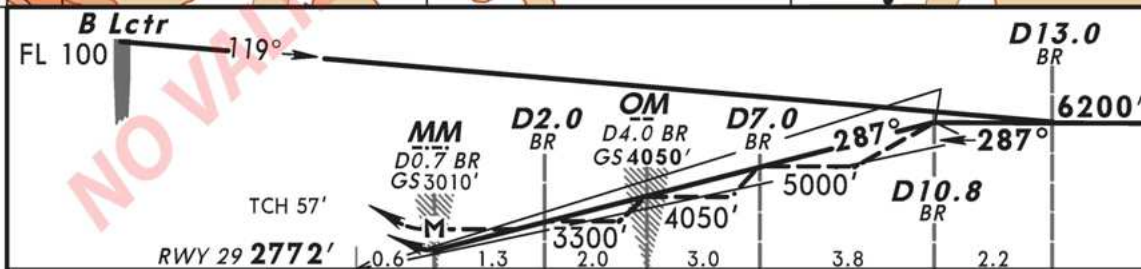
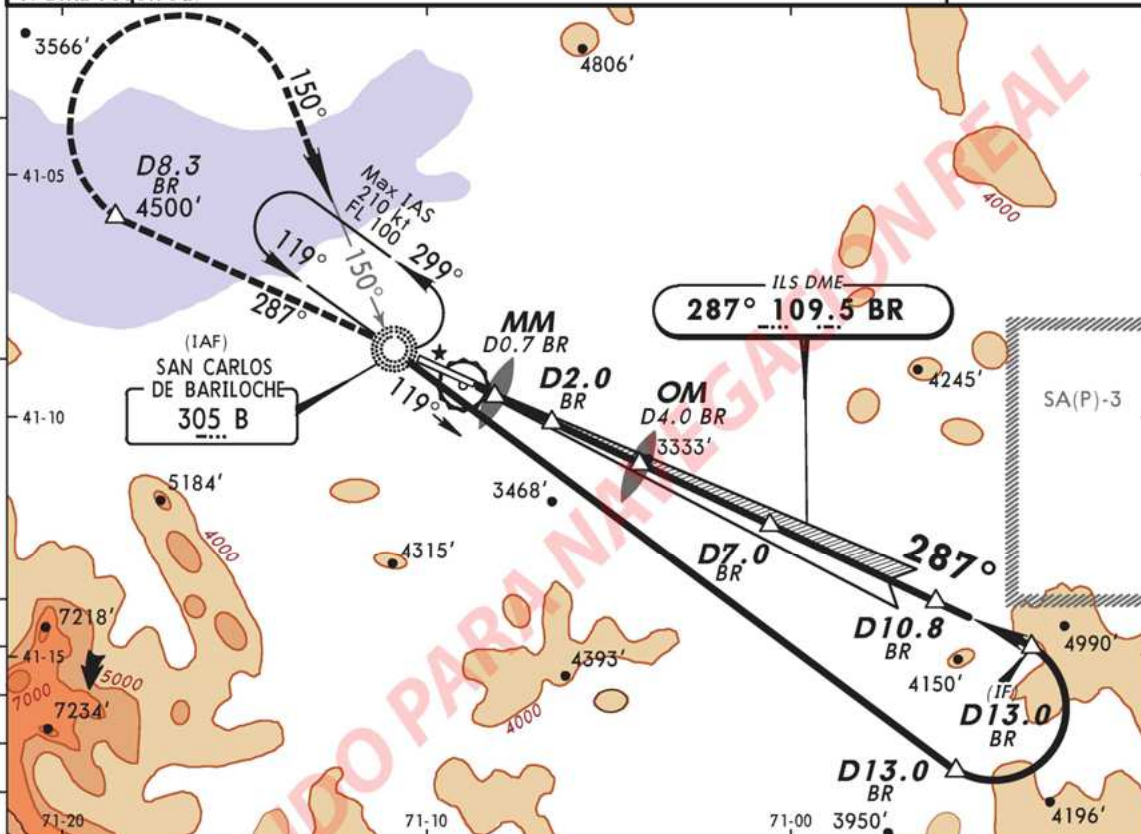
ARGENTINA

SAN CARLOS DE BARILOCHE

No. 2 LCTR ILS DME Rwy 29

ATIS 127.9				*BARILOCHE Tower 119.1	
LOC BR 109.5	Final Apch Crs 287°	GS OM 4050' (1278')	ILS DA(H) 3010' (238')	Apt Elev 2774' Rwy 29 2772'	
<p>MISSED APCH: Maintain 287° bearing to B LCTR, then continue climb on 287° from B LCTR to D8.3 BR at 4500'. Then turn RIGHT, within D12.0 BR, to 150° bearing returning to B LCTR at 6200'. Continue climb in holding pattern, and follow instructions from CONTROL (MAX IAS 210 kts).</p>					
Alt Set: hPa 1. DME required.		Rwy Elev: 97 hPa	Trans level: By ATC		Trans alt: 8000'

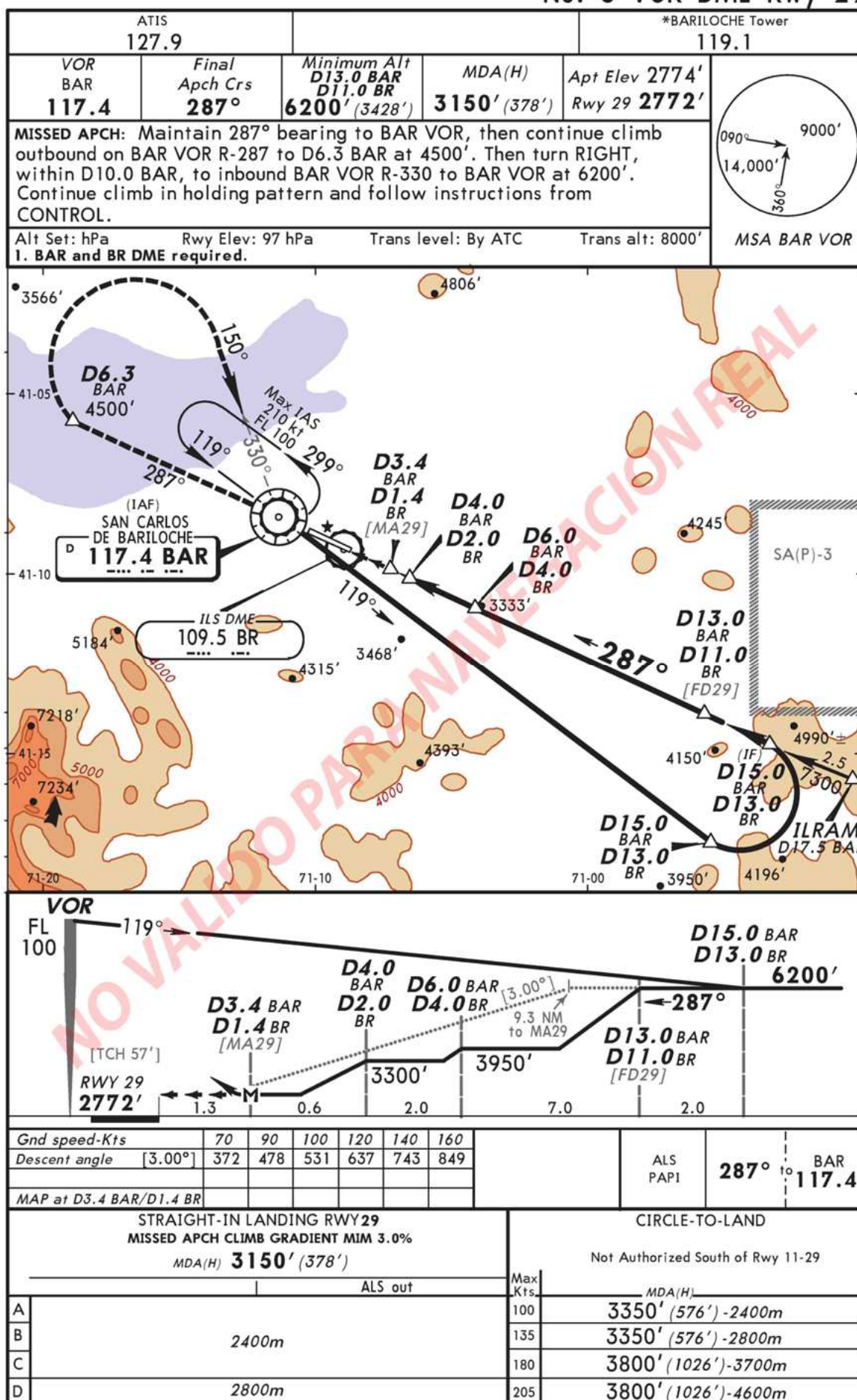
MSA B Lctr



Gnd speed-Kts		70	90	100	120	140	160		ALS PAPI	287° to 305	B LCTR
GS 3.00°		377	484	538	646	753	861				
MAP at MM/D0.7 BR or											
OM to MAP 3.3		2:50	2:12	1:59	1:39	1:25	1:14				
STRAIGHT-IN LANDING RWY29								CIRCLE-TO-LAND			
ILS MISSED APCH CLIMB LOC (GS out) GRADIENT MIM 3.0%								Not Authorized South of Rwy 11-29			
DA(H) 3010' (238')				MDA(H) 3150' (378')							
FULL		ALS out				ALS out		Max Kts	MDA(H)		
A	1200m			2400m			100	3350' (576') -2400m			
B							135	3350' (576') -2800m			
C							180	3800' (1026') -3700m			
D							205	3800' (1026') -4600m			
				2800m							

SAN CARLOS DE BARILOCHE

S. C. DE BARILOCHE/
MISSED APCH CLIMB ARGENTINA
GRADIENT MIM 3.0%
No. 3 VOR DME Rwy 29



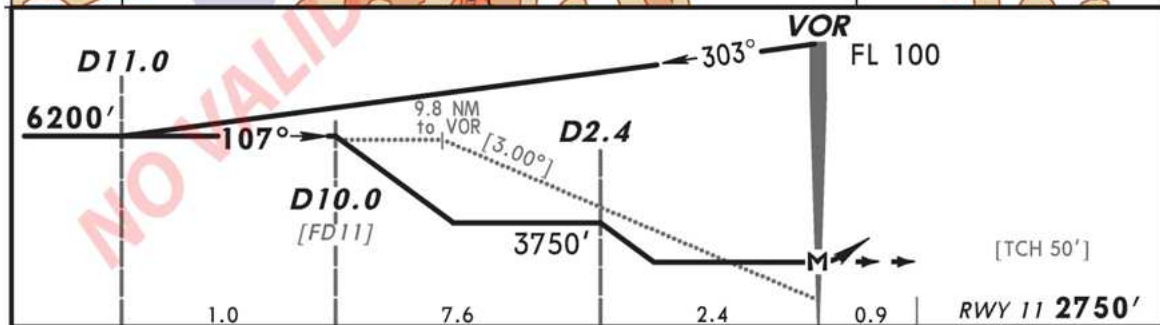
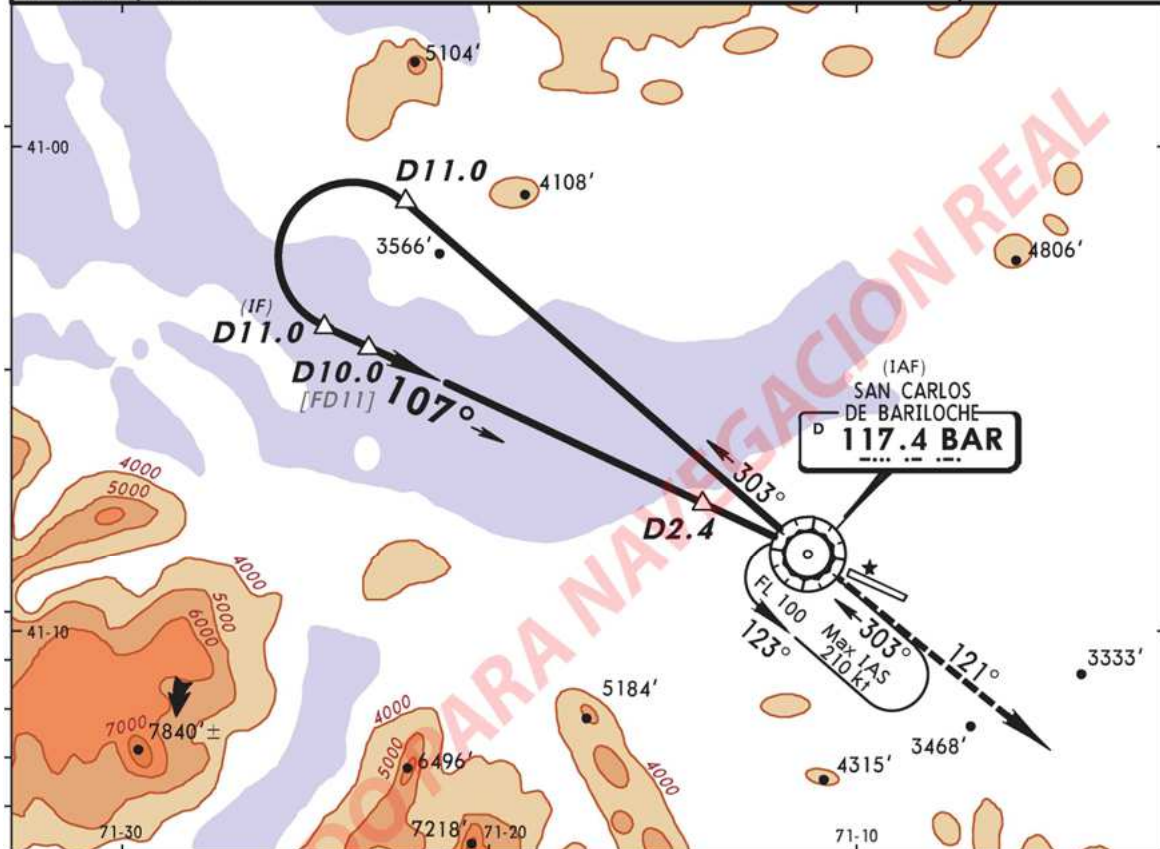
SAZS

S. C. DE BARILOCHE,
ARGENTINA

SAN CARLOS DE BARILOCHE

MISSED APCH CLIMB
GRADIENT MIM 3.5% No. 4 VOR DME Rwy 11

ATIS 127.9		*BARILOCHE Tower 119.1		
VOR BAR 117.4	Final Apch Crs 107°	Minimum Alt D10.0 6200' (3450')	MDA(H) 3130' (380')	Apt Elev 2774' Rwy 11 2750'
MISSED APCH: Climbing RIGHT turn to intercept and maintain BAR VOR R-121 reaching 5800' minimum by 12 NM and follow instructions from Control.				
Alt Set: hPa 1. DME required.	Rwy Elev: 97 hPa	Trans level: By ATC	Trans alt: 8000'	MSA BAR VOR



Gnd speed-Kts	70	90	100	120	140	160			
Descent angle [3.00°]	372	478	531	637	743	849			
MAP at VOR									

STRAIGHT-IN LANDING RWY11				CIRCLE-TO-LAND			
MISSED APCH CLIMB GRADIENT MIM 3.5% MDA(H) 3130' (380')				Not Authorized South of Rwy 11-29			
A				Max Kts	MDA(H)		
B	2000m			100	3350' (576') -2400m		
C	2400m			135	3350' (576') -2800m		
D	2800m			180	3800' (1026') -3700m		
				205	3800' (1026') -4600m		

SID GEMOB4A (RWY 29)

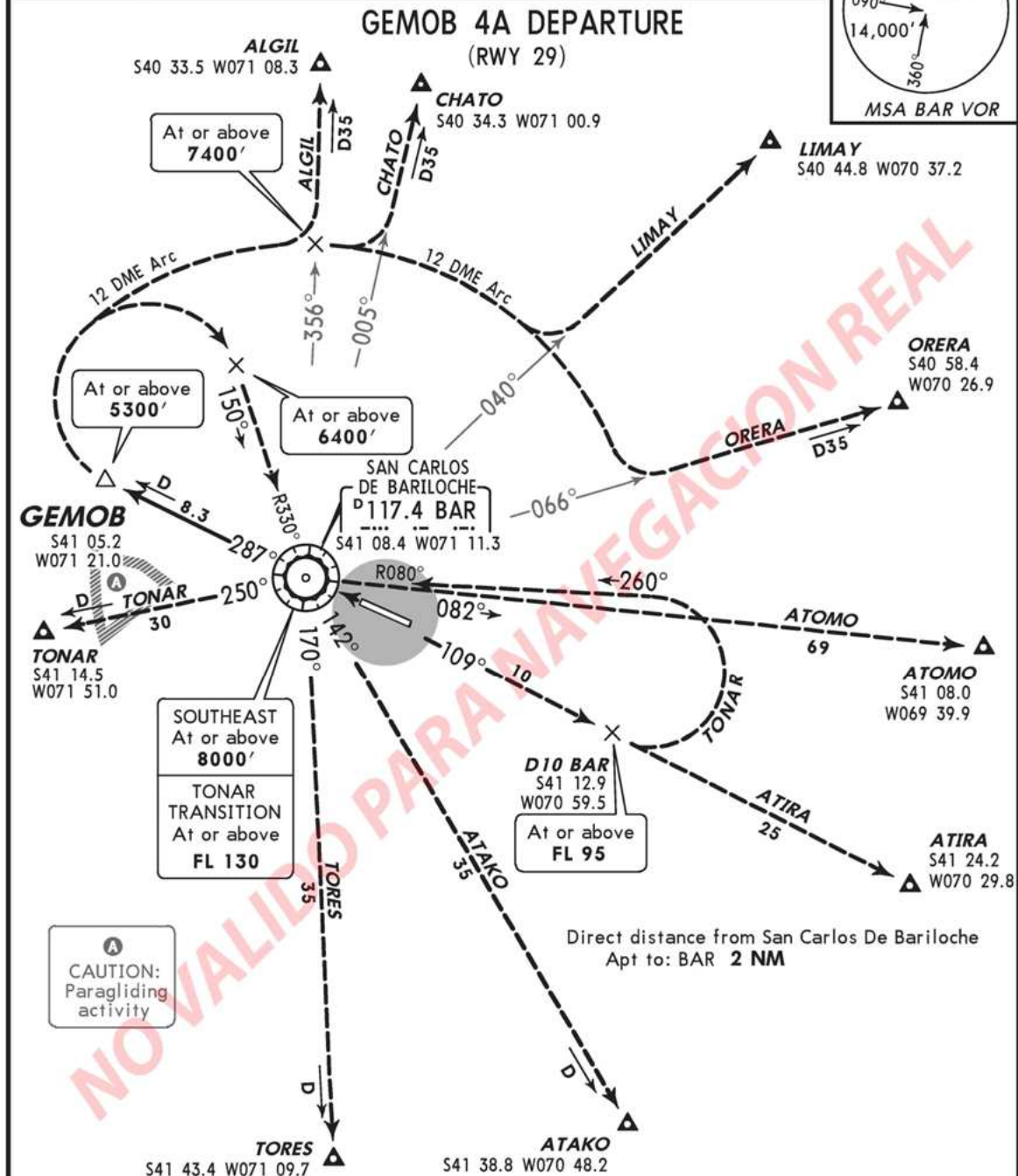
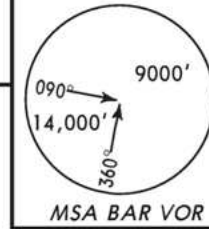
S.C. DE BARILOCHE,
ARGENTINA

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SAN CARLOS DE BARILOCHE

SID

Apt Elev
2774'

Trans level: By ATC Trans alt: 8000'
Not authorized without VOR/DME.



This SID requires the following climb gradients:
Initial climb, ATAKO, ATIRA, ATOMO
and TORES transitions: 4.5%.
ALGIL, CHATO, LIMAY, and ORERA transitions:
4.5% until 7400', then 3.5%.

Gnd speed-KT	75	100	150	200	250	300
3.5% V/V (fpm)	266	354	532	709	886	1063
4.5% V/V (fpm)	342	456	684	911	1139	1367

INITIAL CLIMB

MAINTAIN runway heading to BAR, then fly outbound on BAR R-287 to GEMOB.

TRANSITIONS

ALGIL, CHATO, LIMAY, ORERA	RIGHT climbing turn to intercept BAR 12 DME Arc.
ATAKO, ATIRA, ATOMO, TORES	RIGHT climbing turn to return to BAR heading 150° (BAR R-330).
TONAR	From BAR fly outbound on BAR R-109 to D10 BAR, then LEFT turn to BAR.

SID KOVAK4A (RWY 11)

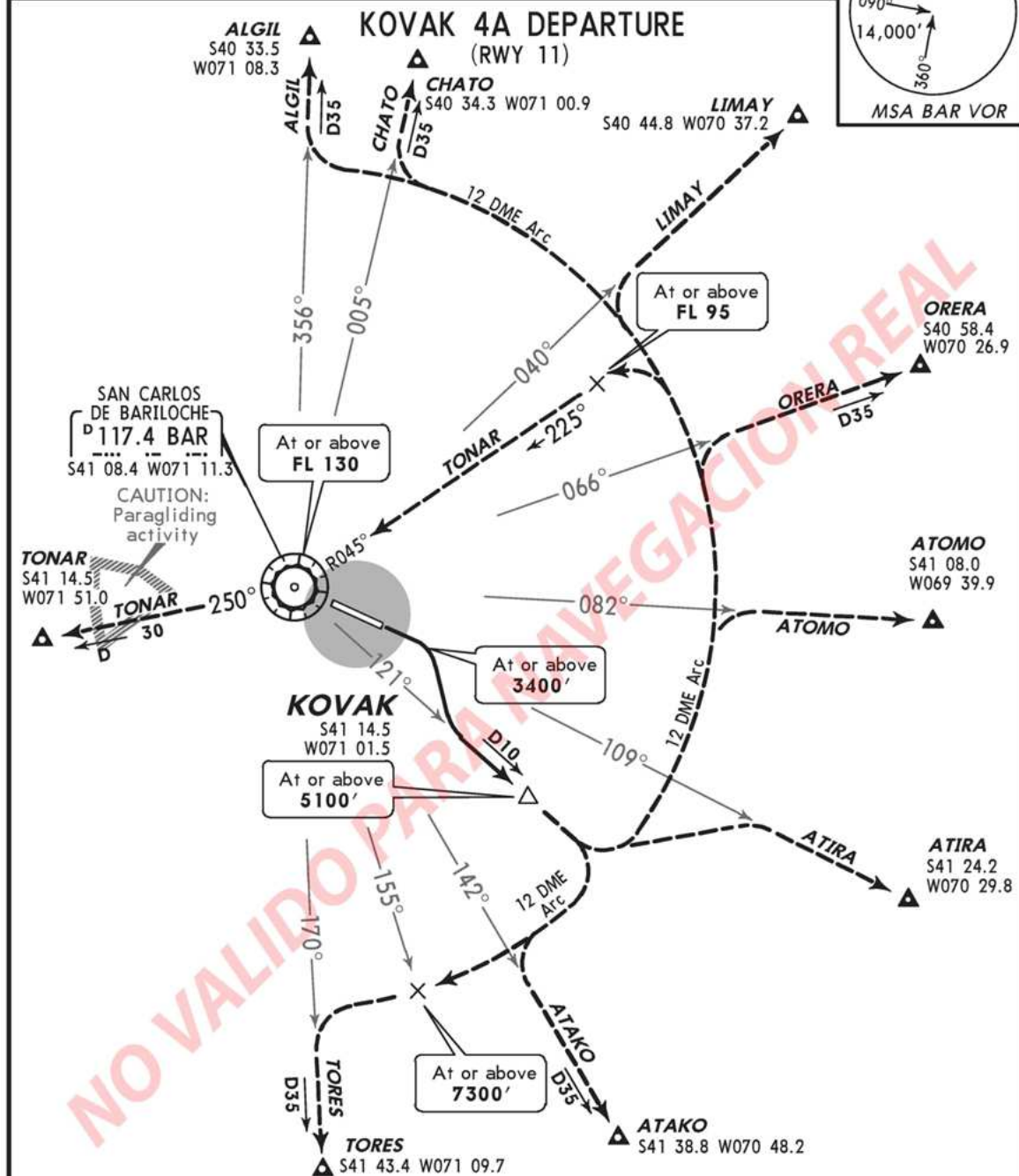
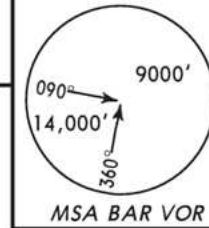
S.C. DE BARILOCHE,
ARGENTINA

SAZS
SAN CARLOS DE BARILOCHE

SID

Apt Elev
2774'

Trans level: By ATC Trans alt: 8000'
Not authorized without VOR/DME.



This SID requires the following climb gradients:
Initial climb and TONAR transition: 5.0%.
ATAKO and TORES transitions: 5.0% until 7300', then 3.5%.
ATIRA, ATOMO, ALGIL, CHATO, LIMAY and ORERA transitions: 3.5%.

Gnd speed-KT	75	100	150	200	250	300
3.5% V/V (fpm)	266	354	532	709	886	1063
5.0% V/V (fpm)	380	506	760	1013	1266	1519

INITIAL CLIMB

Climb on runway heading to 3400', then RIGHT climbing turn to intercept BAR R-121 to KOVAK.

TRANSITIONS

ATAKO, TORES	RIGHT climbing turn to intercept BAR 12 DME Arc.
ATIRA, ATOMO, ALGIL, CHATO, LIMAY, ORERA	LEFT climbing turn.
TONAR	Return to BAR.

SID MIMAK1 (RWY 29)

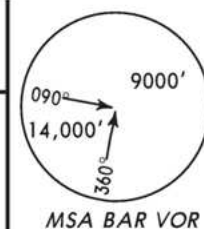
S.C. DE BARILOCHE,
ARGENTINA

SAZS
SAN CARLOS DE BARILOCHE

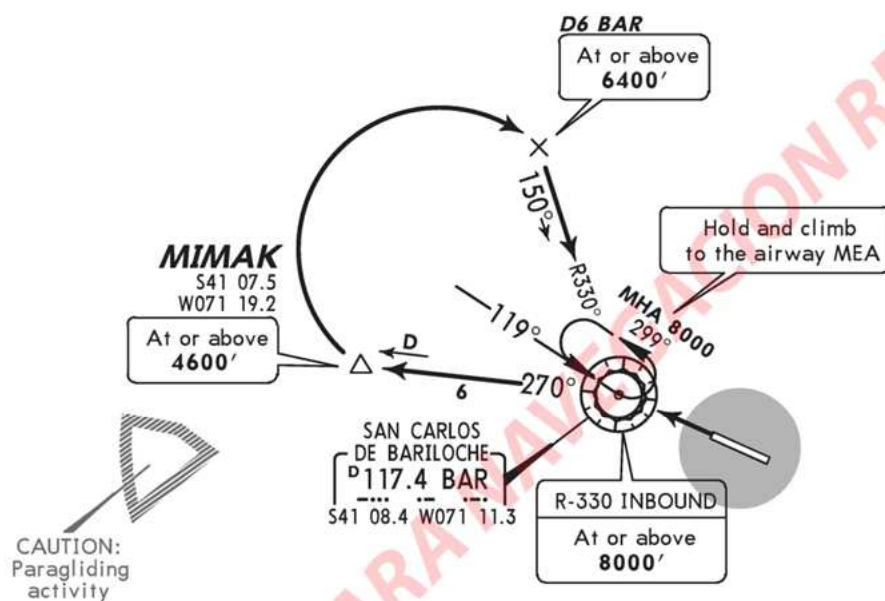
SID

Apt Elev
2774'

Trans level: By ATC Trans alt: 8000'
Not authorized without VOR/DME.



MIMAK 1 DEPARTURE (RWY 29)



Direct distance from San Carlos De Bariloche
Apt to: BAR 2 NM

This SID requires a minimum climb
gradient of 4.5%.

Gnd speed-KT	75	100	150	200	250	300
4.5% V/V (fpm)	342	456	684	911	1139	1367

INITIAL CLIMB

MAINTAIN runway heading to BAR, then fly outbound on BAR R-270 to MIMAK. Then RIGHT climbing turn to return to BAR heading 150° (BAR R-330) to hold and climb to the airway MEA.

STAR ILRAM2 (RWY 29)

S.C. DE BARILOCHE,
ARGENTINA

SAZS

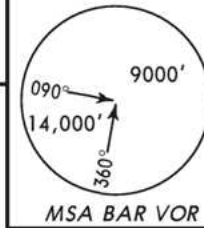
SAN CARLOS DE BARILOCHE

STAR

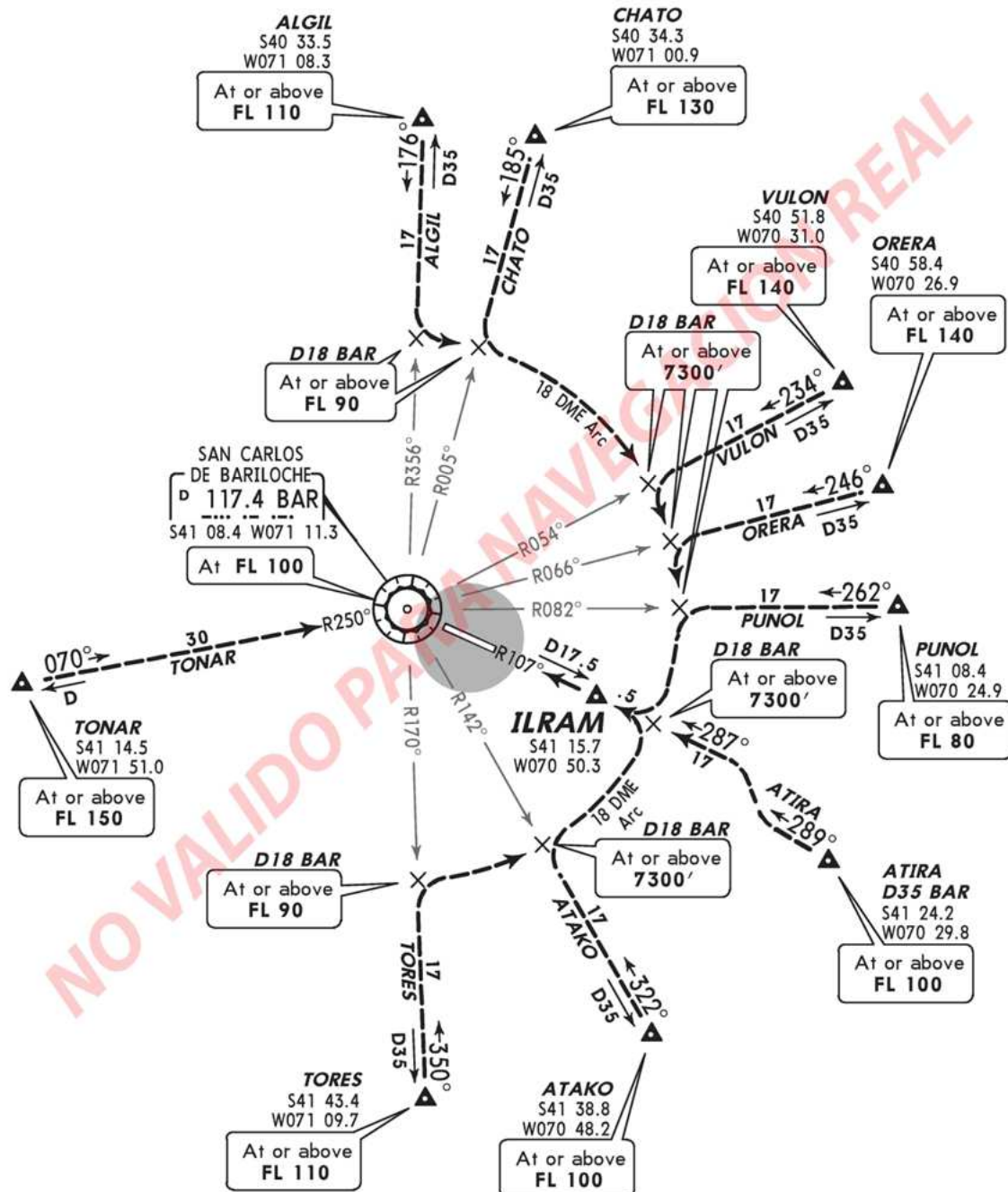
*ATIS
127.9

Apt Elev
2774'

Alt Set: hPa
Trans level: By ATC Trans alt: 8000'
Not authorized without VOR/DME.



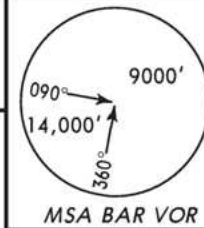
ILRAM 2 ARRIVAL
(RWY 29)



SAZS

SAN CARLOS DE BARILOCHE

RNAV STAR

*ATIS
127.9Apt Elev
2774'Alt Set: hPa
Trans level: By ATC Trans alt: 8000'
1. RNP 1 required. 2. GNSS required.
3. No RADAR required.VULON 1 ARRIVAL (VULO1)
(RWY 29)