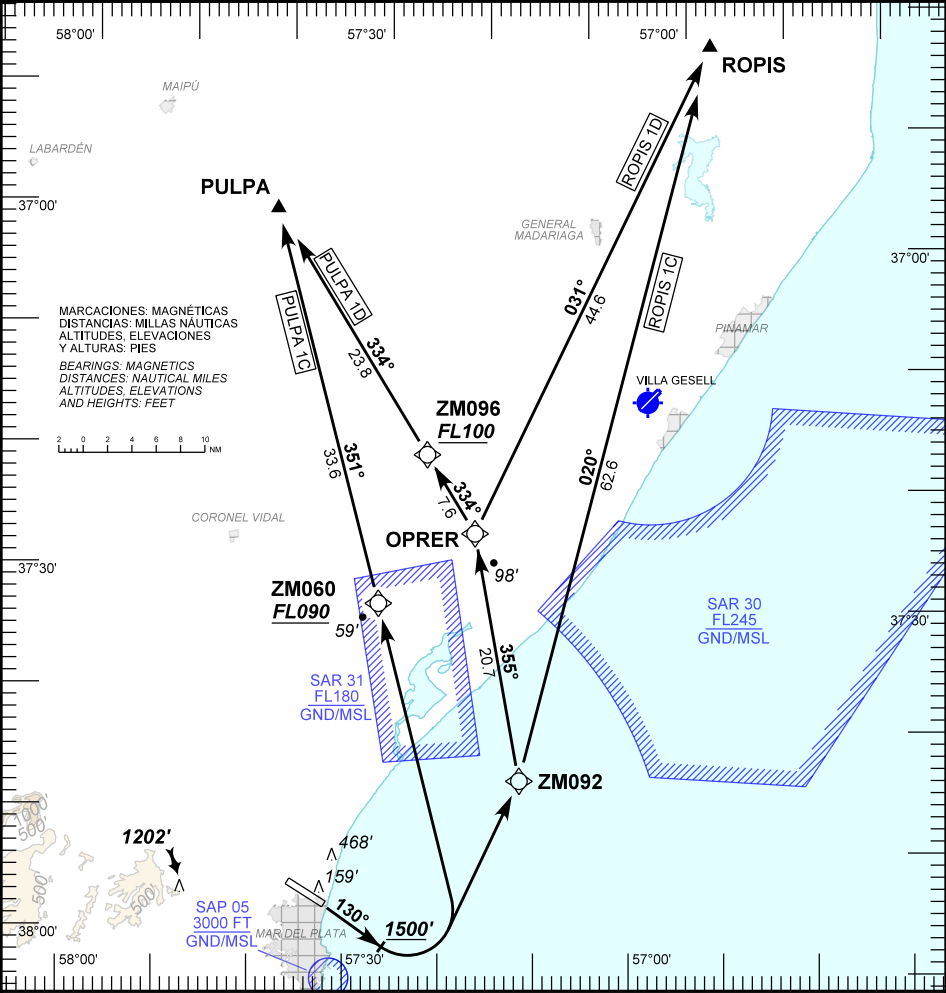


ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

SID RNP RWY 13
PULPA 1C - PULPA 1D - ROPIS 1C - ROPIS 1D

Requiere Certificación Certification required			AD ELEV	71'
RNP 1 / RNAV 1 GNSS			TRANS ALT	3000'
MAR DEL PLATA GND	MAR DEL PLATA TWR	MAR DEL PLATA APP	MAR DEL PLATA CTL	EMERG
121.70	118.75 118.20	118.75 118.20	118.75 118.20	121.50
NOTA: NIL		RMK: NIL		MSA 25NM ARP



Se requiere pendiente minima de ascenso debido a restricciones del espacio aéreo únicamente.
PULPA 1C: Pendiente minima de ascenso 4.0% hasta ZM060 (MNM FL090).

The following climb limitations are required due to airspace restrictions only.
PULPA 1C: Minimum climb gradient 4.0% until ZM060 (MNM FL090).

ASTOR PIAZZOLLA (SAZM) SID RNP RWY 13 PULPA 1C – PULPA 1D- ROPIS 1C – ROPIS 1D	
FIX IDENT	COORDINATES
ROPIS	S 36°44'30.00" W 56°57'30.00"
ZM092	S 37°45'55.90" W 57°12'50.80"
OPRER	S 37°25'44.28" W 57°18'47.83"
ZM060	S 37°31'54.26" W 57°28'24.77"
PULPA	S 36°59'43.00" W 57°40'51.00"
ZM096	S 37°19'26.17" W 57°24'10.00"

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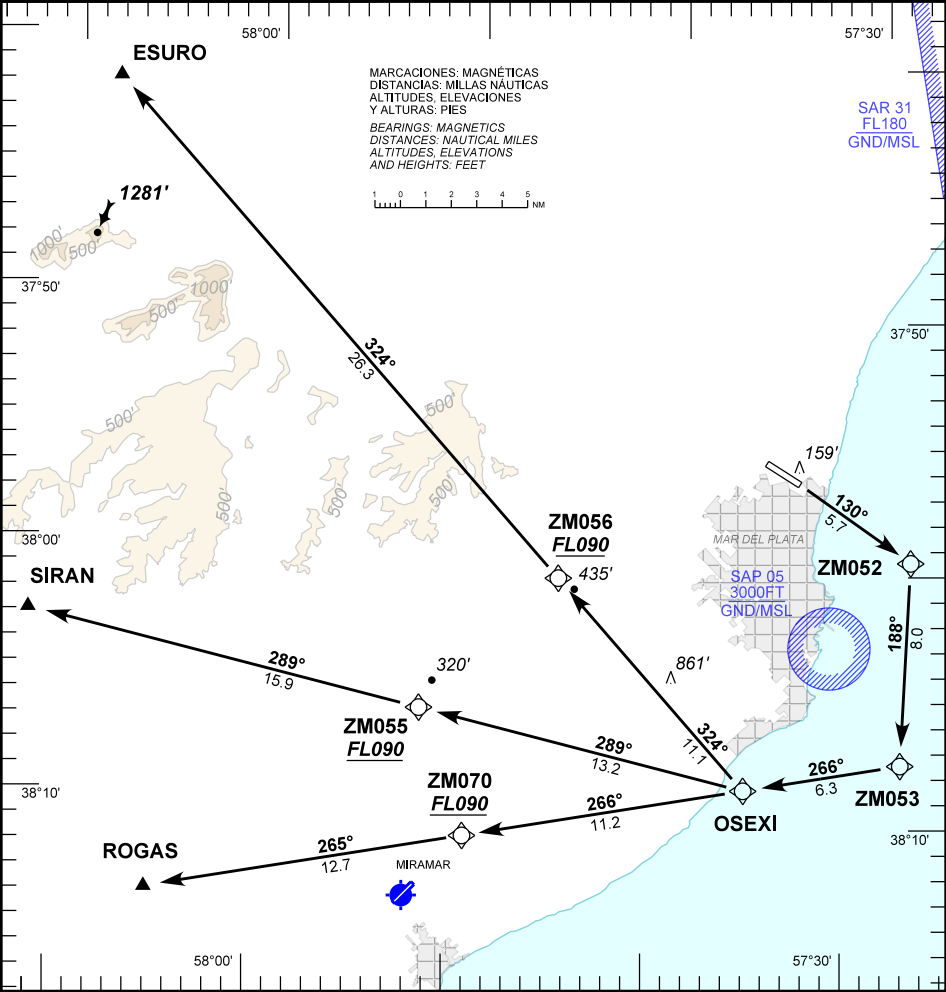
ASTOR PIAZZOLLA (SAZM) SID RNP RWY 13 PULPA 1C – PULPA 1D – ROPIS 1C – ROPIS 1D												
Seq Num	Fix Ident	Path Terminator	Fly Over	Distance (NM)	Course M°(T°)	Turn	Altitude (ft/FL)	Altitude Description	Speed Limit (Kt)	Navigation Specification	RNP	Dec (ARP 2018)
010	N/A	CA	N	N/A	130 (122.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ZM092	DF	N	N/A	N/A	L	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
030	ROPIS	TF	N	62.6	020 (011.2)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	130 (122.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ZM092	DF	N	N/A	N/A	L	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
030	OPRER	TF	N	20.7	355 (346.8)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
040	ROPIS	TF	N	44.6	031 (022.4)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	130 (122.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ZM060	DF	N	N/A	N/A	L	FL 090	+	N/A	RNAV 1 or RNP1	1.0	8 W
030	PULPA	TF	N	33.6	351 (342.9)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	130 (122.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ZM092	DF	N	N/A	N/A	L	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
030	OPRER	TF	N	20.7	355 (346.8)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
040	ZM096	TF	N	7.6	334 (325.8)	N/A	FL 100	+	N/A	RNAV 1 or RNP1	1.0	8 W
050	PULPA	TF	N	23.8	334 (326.0)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W

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ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

SID RNP RWY 13
ESURO 1C - ROGAS 1C - SIRAN 1C

Requiere Certificación Certification required				AD ELEV 71'		08° W (2018)  3000' MSA 25NM ARP
RNP 1 / RNAV 1 GNSS				TRANS ALT 3000'		
MAR DEL PLATA GND 121.70	MAR DEL PLATA TWR 118.75 118.20	MAR DEL PLATA APP 118.75 118.20	MAR DEL PLATA CTL 118.75 118.20	EMERG 121.50		
NOTA: NIL.		RMK: NIL.				



DISEÑO EANA S.E. - NAVEGACIÓN AEREA ARGENTINA

DIRECCIÓN REGULACIÓN NORMAS Y PROCEDIMIENTOS - DINA

Changes: VAR.

Cambios: VAR.

PANS OPS

Se requiere pendiente mínima de ascenso debido a restricciones del espacio aéreo únicamente.

- ESURO 1C: Pendiente mínima de ascenso 5,0% hasta ZM056 (MNM FL090).
- ROGAS 1C: Pendiente mínima de ascenso 5,0% hasta ZM070 (MNM FL090).
- SIRAN 1C: Pendiente mínima de ascenso 5,0% hasta ZM055 (MNM FL090).

The following climb limitations are required due to airspace restrictions only.

- ESURO 1C: Minimum climb gradient 5.0% until ZM056 (MNM FL090).
- ROGAS 1C: Minimum climb gradient 5.0% until ZM070 (MNM FL090).
- SIRAN 1C: Minimum climb gradient 5.0% until ZM055 (MNM FL090).

ASTOR PIAZZOLLA (SAZM) SID RNP RWY 13 ESURO 1C – ROGAS 1C – SIRAN 1C	
FIX IDENT	COORDINATES
ZM052	S 37°59'27.28" W 57°27'41.19"
ZM053	S 38°07'27.81" W 57°27'41.19"
OSEXI	S 38°08'46.14" W 57°35'28.22"
ZM070	S 38°11'04.84" W 57°49'23.50"
ROGAS	S 38°13'40.00" W 58°05'11.00"
ZM055	S 38°06'06.62" W 57°51'50.63"
SIRAN	S 38°02'51.00" W 58°11'35.00"
ZM056	S 38°00'44.91" W 57°45'12.92"
ESURO	S 37°41'43.00" W 58°08'08.00"

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ASTOR PIAZZOLLA (SAZM) SID RNP RWY 13 ESURO 1C – ROGAS 1C – SIRAN 1C												
Seq Num	Fix Ident	Path Terminator	Fly Over	Distance (NM)	Course M°(T°)	Turn	Altitude (ft/FL)	Altitude Description	Speed Limit (Kt)	Navigation Specification	RNP	Dec (ARP 2018)
010	ZM052	CF	N	5.7	130 (122.6)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
020	ZM053	TF	N	8.0	188 (180.0)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
030	OSEXI	TF	N	6.3	266 (258.1)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
040	ZM070	TF	N	11.2	266 (258.2)	N/A	FL 090	+	N/A	RNAV 1 or RNP 1	1.0	8 W
050	ROGAS	TF	N	12.7	265 (258.4)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
010	ZM052	CF	N	5.7	130 (122.6)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
020	ZM053	TF	N	8.0	188 (180.0)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
030	OSEXI	TF	N	6.3	266 (258.1)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
040	ZM055	TF	N	13.2	289 (281.7)	N/A	FL 090	+	N/A	RNAV 1 or RNP 1	1.0	8 W
050	SIRAN	TF	N	15.9	289 (281.9)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
010	ZM052	CF	N	5.7	130 (122.6)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
020	ZM053	TF	N	8.0	188 (180.0)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
030	OSEXI	TF	N	6.3	266 (258.1)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W
040	ZM056	TF	N	11.1	324 (316.2)	N/A	FL 090	+	N/A	RNAV 1 or RNP 1	1.0	8 W
050	ESURO	TF	N	26.3	324 (316.4)	N/A	N/A	N/A	N/A	RNAV 1 or RNP 1	1.0	8 W

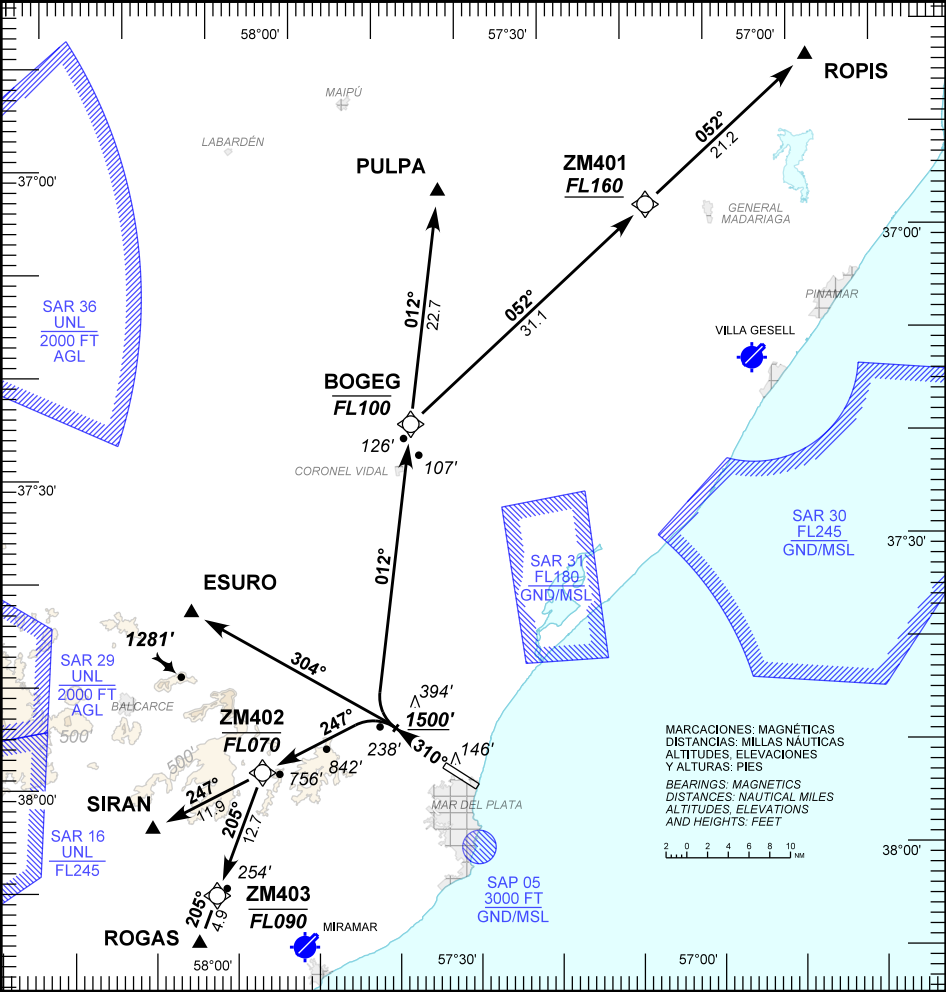
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ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

ESURO 1G - PULPA 1G - ROGAS 1G - ROPIS 1G - SIRAN 1G

SID RNP RWY 31

Requiere Certificación Certification required				AD ELEV 71'		08° W (2018) 3000' MSA 25NM ARP
RNP 1 / RNAV 1 GNSS				TRANS ALT 3000'		
MAR DEL PLATA GND 121.70	MAR DEL PLATA TWR 118.75 118.20	MAR DEL PLATA APP 118.75 118.20	MAR DEL PLATA CTL 118.75 118.20	EMERG 121.50		
NOTA: NIL		RMK: NIL				



Se requieren las siguientes limitaciones de ascenso debido a restricciones del espacio aéreo únicamente.
SID ROPIS1G: Pendiente mínima de ascenso 4,5% hasta BOGEG (MAX FL100) luego 3,3%, ZM401 (MNM FL160).

The following climb limitations are required due to airspace restrictions only.
ROPIS1G: Minimum climb gradient 4.5% until BOGEG (MAX FL100) then 3.3%, ZM401 (MNM FL160).

ASTOR PIAZZOLLA (SAZM) SID RNP RWY 31 SIRA1G - ROGA1G - PULP1G - ROP11G - ESUR1G	
FIX IDENT	COORDINATES
ZM402	S 37°56'53.77" W 57°58'30.66"
SIRAN	S 38°02'51.00" W 58°11'35.00"
ZM403	S 38°08'59.78" W 58°03'19.19"
ROGAS	S 38°13'40.00" W 58°05'11.00"
PULPA	S 36°59'43.00" W 57°40'51.00"
BOGEG	S 37°22'25.98" W 57°42'37.24"
ZM401	S 36°59'54.26" W 57°15'41.49"
ROPIS	S 36°44'30.00" W 56°57'30.00"
ESURO	S 37°41'43.00" W 58°08'08.00"

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ASTOR PIAZZOLLA (SAZM) SID RNP RWY 31 SIRA1G - ROGA1G - PULP1G - ROPI1G - ESUR1G												
Seq Num	Fix Ident	Path Terminator	Fly Over	Distance (NM)	Course M° (T°)	Turn	Altitude (ft/FL)	Altitude Description	Speed Limit (Kt)	Navigation Specification	RNP	Dec (ARP 2018)
010	N/A	CA	N	N/A	310 (302.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ZM402	CF	N	N/A	247 (240.0)	N/A	FL 070	-	N/A	RNAV 1 or RNP1	1.0	8 W
030	SIRAN	TF	N	11.9	247 (240.1)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	310 (302.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ZM402	CF	N	N/A	247 (240.0)	N/A	FL 070	-	N/A	RNAV 1 or RNP1	1.0	8 W
030	ZM403	TF	N	12.7	205 (197.5)	N/A	FL 090	-	N/A	RNAV 1 or RNP1	1.0	8 W
040	ROGAS	TF	N	4.9	205 (197.5)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	310 (302.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	BOGEG	CF	N	N/A	012 (003.6)	N/A	FL 100	-	N/A	RNAV 1 or RNP1	1.0	8 W
030	PULPA	TF	N	22.7	012 (003.6)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	310 (302.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	BOGEG	CF	N	N/A	012 (003.6)	N/A	FL 100	-	N/A	RNAV 1 or RNP1	1.0	8 W
030	ZM401	TF	N	31.1	052 (043.6)	N/A	FL 160	+	N/A	RNAV 1 or RNP1	1.0	8 W
040	ROPIS	TF	N	21.2	052 (043.4)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W
010	N/A	CA	N	N/A	310 (302.6)	N/A	1500	+	N/A	RNAV 1 or RNP1	1.0	8 W
020	ESURO	CF	N	N/A	304 (296.5)	N/A	N/A	N/A	N/A	RNAV 1 or RNP1	1.0	8 W

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