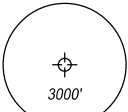
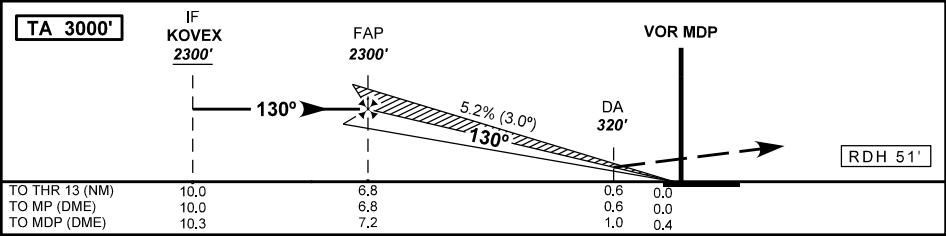
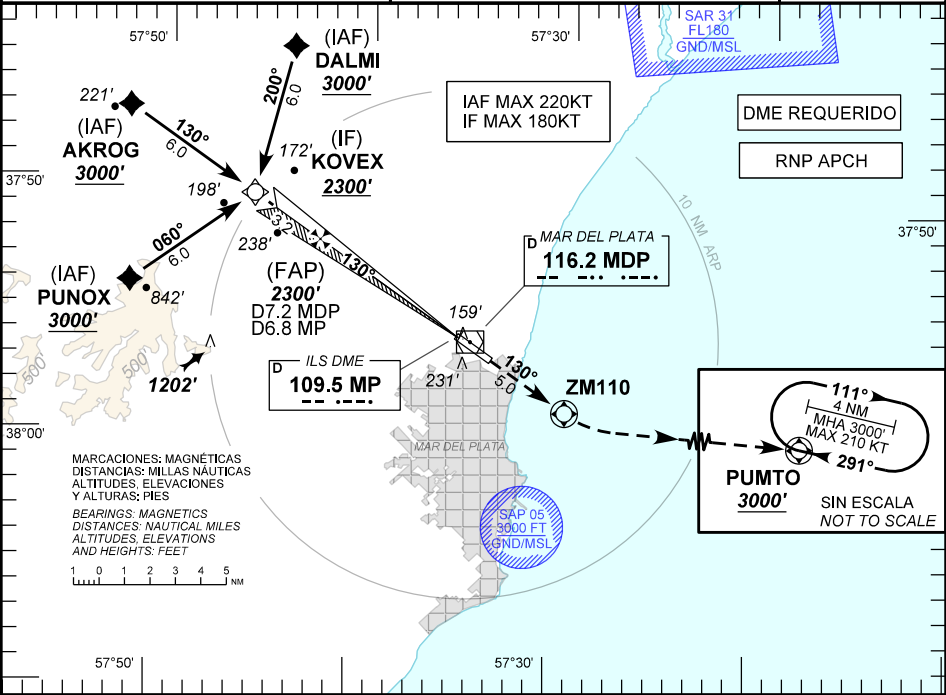


ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

Carta de aproximación por instrumentos
Instrument approach chart

ILS Z RWY 13

MAR DEL PLATA CTL 118.75 118.20		MAR DEL PLATA APP 118.75 118.20		MAR DEL PLATA TWR 118.75 118.20		MAR DEL PLATA GND 121.70	EMERG 121.50
LOC MP 109.5	FINAL APCH CRS 130°	ALTITUD MNM FAP 2300' (2229')	ILS DA(H) 320' (249')	AD Elev 71'	THR Elev 71'	08° W (2018)	
Aproximación frustrada: ASC para 3000 ft con curso 130° hasta ZM110, luego viraje por izquierda DCT PUMTO HLDG y seguir instrucciones del ATC. Missed approach: Climb to 3000 ft on track 130° to ZM110, then turn left DCT to PUMTO HLDG or as directed by ATC.							
NOTA: Circulación visual sólo al NORTE del aeródromo.				RMK: Circle to land only NORTH of the aerodrome.			MSA 25NM ARP



DIRECTA RWY 13 / <i>Straight in RWY 13</i>										Circulación Visual <i>Circle to land</i>			
CAT	ILS				LOC/DME								
	DA 320'		DH 249'		N.A.								
	VIS ALS		VIS SIN ALS										
A	800 M RVR 800 M		1300 M										
B													
C													
D													
GS KT	90	110	130	150	170	DIST to THR	6.8	5	4	2	0.6		
FAP - THR 6,8 NM	4:32	3:43	3:08	2:43	2:24	ALT	2300	1714	1396	759	320		
FPM	480	590	690	800	910	HGT	(2229)	(1643)	(1325)	(688)	(249)		

ASTOR PIAZZOLLA (SAZM) IAC ILS Z RWY 13	
FIX IDENT	COORDINATES
AKROG	S 37°47'03.70" W 57°52'00.93"
KOVEX	S 37°50'19.05" W 57°45'39.17"
DALMI	S 37°44'27.57" W 57°43'58.69"
PUNOX	S 37°53'56.85" W 57°51'41.40"
FAP	S 37°52'01.78" W 57°42'17.89"
RW13	S 37°55'43.88" W 57°35'01.65"
ZM110	S 37°58'25.93" W 57°29'42.31"
PUMTO	S 37°59'28.57" W 57°14'14.96"

31 ENERO 2019

ASTOR PIAZZOLLA (SAZM) IAC ILS Z RWY 13												
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	AKROG	IF	N	N/A	N/A	N/A	3000	+	-220	RNP APCH	1.0	8 W
020	KOVEX	TF	N	6.0	129.6 (122.8)	N/A	2300	+	-180	RNP APCH	1.0	8 W
010	DALMI	IF	N	N/A	N/A	N/A	3000	+	-220	RNP APCH	1.0	8 W
020	KOVEX	TF	N	6.0	199.6 (192.8)	N/A	2300	+	-180	RNP APCH	1.0	8 W
010	PUNOX	IF	N	N/A	N/A	N/A	3000	+	-220	RNP APCH	1.0	8 W
020	KOVEX	TF	N	6.0	059.6 (052.8)	N/A	2300	+	-180	RNP APCH	1.0	8 W
010	KOVEX	IF	N	N/A	N/A	N/A	2300	+	-180	RNP APCH	1.0	8 W
020	FAP	CF	N	3.2	129.6 (122.7)	N/A	2300	@	N/A	N/A	N/A	8 W
030	RW13	CF	Y	6.8	129.6 (122.7)	N/A	122	@	N/A	N/A	N/A	8 W
040	ZM110	CF	Y	5.0	129.6 (122.6)	N/A	N/A	N/A	N/A	RNP APCH	1.0	8 W
050	PUMTO	DF	Y	N/A	N/A	N/A	3000	+	N/A	RNP APCH	1.0	8 W
060	PUMTO	HM	Y	4.0	290.0 (282.8)	R	3000	+	-210	RNP APCH	1.0	8 W

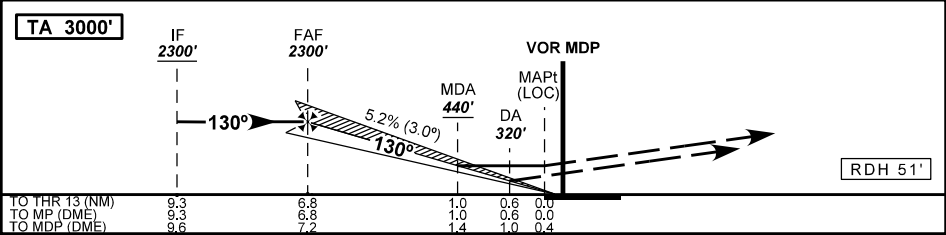
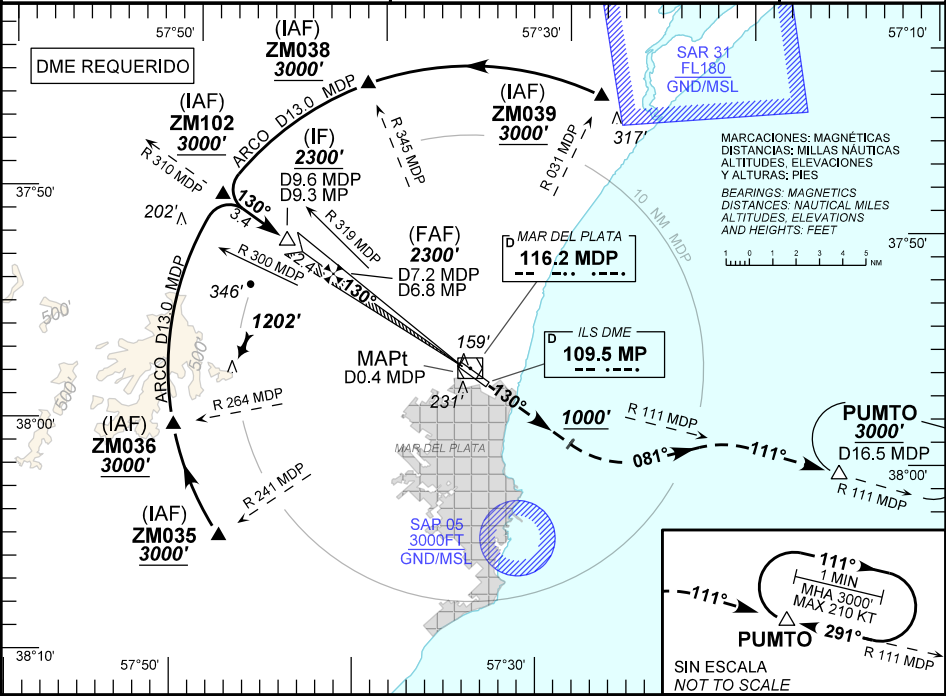
31 ENERO 2019

ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

Carta de aproximación por instrumentos
Instrument approach chart

ILS Y RWY 13

MAR DEL PLATA CTL 118.75 118.20		MAR DEL PLATA APP 118.75 118.20		MAR DEL PLATA TWR 118.75 118.20		MAR DEL PLATA GND 121.70		EMERG 121.50	
LOC MP 109.5	FINAL APCH CRS 130°	ALTITUD MNM FAF 2300' (2229')		ILS DA(H) 320' (249')		AD Elev THR Elev		71' 71'	
Aproximación frustrada: ASC para 1000 ft HDG 130°, virar por izquierda HDG 081° luego interceptar R 111 MDP para 3000 ft hasta PUMTO, HLDG y seguir instrucciones del ATC. Missed approach: Climb to 1000 ft HDG 130°, turn left HDG 081° then intercept MDP R 111 to 3000 ft until PUMTO, HLDG or as directed by ATC.								3000'	
NOTA: Circulación visual sólo al NORTE del aeródromo.				RMK: Circle to land only NORTH of the aerodrome.					
								MSA 25NM MDP	



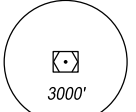
DIRECTA RWY 13 / <i>Straight in RWY 13</i>										Circulación Visual <i>Circle to land</i>			
CAT	ILS					LOC/DME							
	DA 320'		DH 249'			MDA 440'		MDH 369'		CAT	MDA	MDH	VIS
	VIS ALS		VIS SIN ALS			VIS ALS		VIS SIN ALS					
	A	800 M		1300 M			1500 M		1900 M				
B	1700 M						2100 M		B	570'	499'	2800 M	
C									C	870'	799'	3700 M	
D	RVR 800 M									D	870'	799'	4600 M
GS KT		90	110	130	150	170	DIST to MAPt		6.8	5	4	2	1
FAF - MAPt 6.8 NM		4:32	3:43	3:08	2:43	2:24	ALT		2300	1714	1396	759	440
FPM		480	590	690	800	910	HGT		(2229)	(1643)	(1325)	(688)	(369)

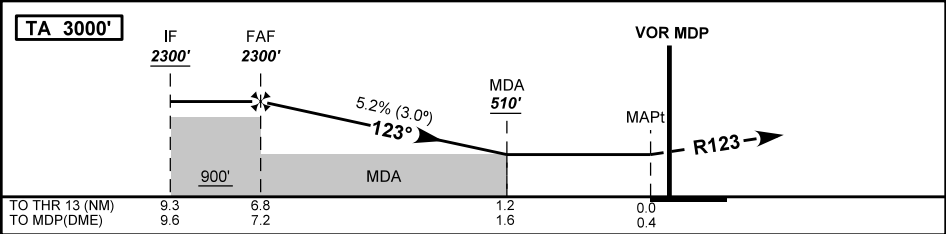
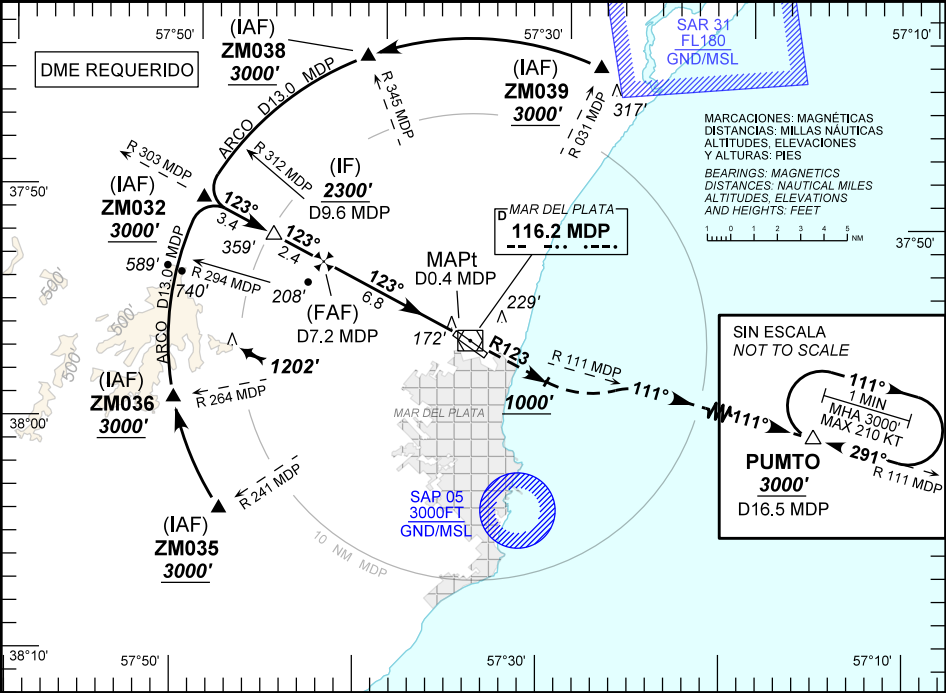
31 ENERO 2019

ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

Carta de aproximación por instrumentos
Instrument approach chart

VOR Z RWY 13

MAR DEL PLATA CTL		MAR DEL PLATA APP		MAR DEL PLATA TWR		MAR DEL PLATA GND	EMERG
118.75 118.20		118.75 118.20		118.75 118.20		121.70	121.50
VOR MDP	FINAL APCH CRS	ALTITUD MNM FAF	MDA (H)	AD Elev	THR Elev	08° W (2018)	
116.2	123°	2300' (2229')	510' (439')	71'	71'		
Aproximación frustrada: ASC para 1000 ft sobre R 123 MDP, viraje por izquierda, luego interceptar R 111 MDP para 3000 ft DCT PUMTO, HLDG y seguir instrucciones del ATC. Missed approach: Climb to 1000 ft on R 123 MDP, turn left then intercept R 111 MDP to 3000 ft DCT PUMTO, HLDG or as directed by ATC.							
NOTA: Circulación visual sólo al NORTE del aeródromo.				RMK: Circle to land only NORTH of the aerodrome.			MSA 25NM MDP



DIRECTA RWY 13 / <i>Straight in RWY 13</i>										Circulación Visual <i>Circle to land</i>			
CAT	VOR/DME												
	MDA 510'					MDH 439'							
	VIS ALS				VIS SIN ALS					CAT	MDA	MDH	VIS
A	1800 M				2200 M					A	620'	549'	2200 M
B										B	620'	549'	2800 M
C	2000 M				2400 M					C	870'	799'	3700 M
D										D	870'	799'	4600 M
GS KT	90	110	130	150	160	DIST to MAPt	6.8	4	3	2	1.2		
FAF - MAPt 6.8 NM	4:32	3:43	3:08	2:43	2:33	ALT	2300	1396	1077	759	510		
FPM	480	590	690	800	850	HGT	(2229)	(1325)	(1006)	(688)	(439)		

31 ENERO 2019

Changes: VAR.

Cambios: VAR.

PANS OPS

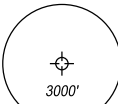
DISEÑO EANA S.E. - NAVEGACIÓN AEREA ARGENTINA

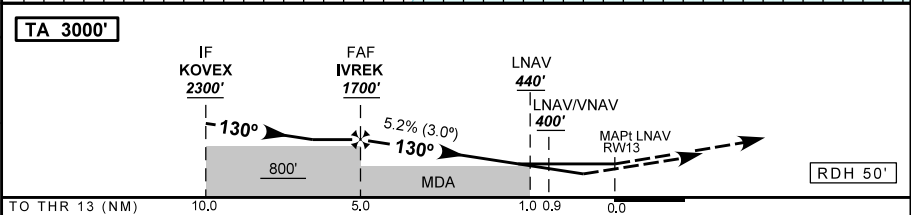
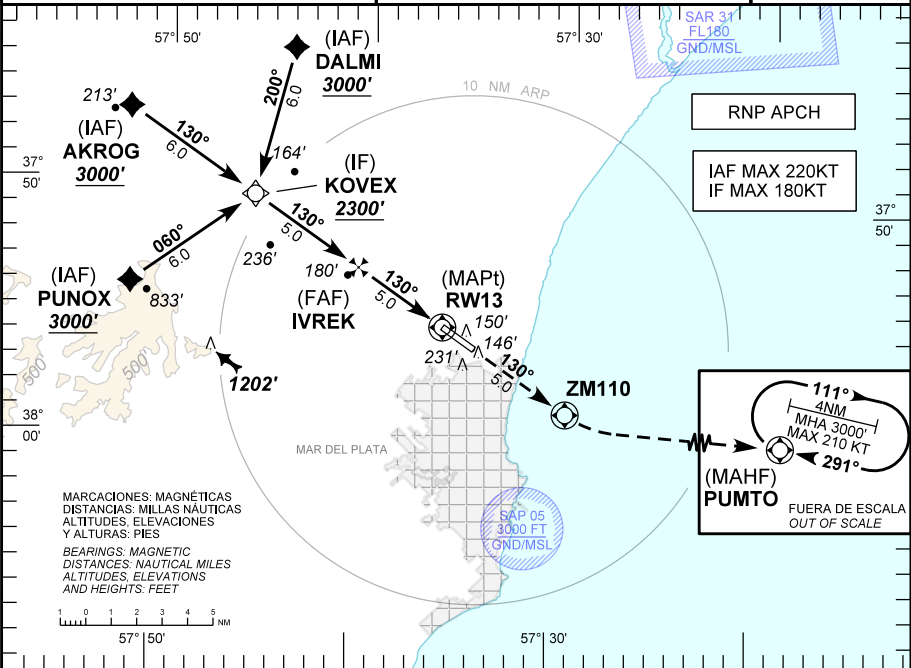
DIRECCIÓN REGULACIÓN NORMAS Y PROCEDIMIENTOS - DNINA

ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

Carta de aproximación por instrumentos
Instrument approach chart

RNP RWY 13

MAR DEL PLATA CTL 118.75 118.20		MAR DEL PLATA APP 118.75 118.20		MAR DEL PLATA TWR 118.75 118.20		MAR DEL PLATA GND 121.70		EMERG 121.50	
RNP	FINAL APCH CRS 130°	ALTITUD MNM IVREK 1700' (1629')		LNAV / VNAV DA(H) 400' (329')		AD Elev 71' THR Elev 71'		08° W (2018)  3000' MSA 25 NM ARP	
Aproximación frustrada: ASC sobre curso 130° hasta ZM110, virar a la izquierda DCT PUMTO alcanzando 3000 ft, HLDG y seguir instrucciones del ATC. Missed approach: Climb on track 130° to ZM110, turn left DCT to PUMTO reaching 3000 ft, HLDG and proceed as directed by ATC.									
NOTA: Para sistemas Baro VNAV no compensado, debajo de -10°C o superior a 50°C N.A. .				NOTE: For uncompensated Baro VNAV systems N.A. below -10° C or above 50° C.					



DIRECTA RWY 13 / <i>Straight in RWY 13</i>										Circulación Visual <i>Circle to land</i>			
CAT	LNAV / VNAV				LNAV								
	DA 400'		DH 329'		MDA 440'		MDH 369'						
	VIS ALS		VIS SIN ALS		VIS ALS		VIS SIN ALS						
A	1100 M		1500 M		1500 M		1900 M			CAT	MDA	MDH	VIS
B										A	Circulación Visual N.A. <i>Circle to land N.A.</i>		
C					B								
D					C								
RVR 1100 M		RVR 1500 M		1700 M		2100 M			D				
GS KT		90	110	130	150	160	DIST to MAPt		5.0	4.0	3.0	2.0	1.0
FAF - MAPt 5.0 NM		3:20	2:44	2:18	2:00	1:52	ALT		1700	1400	1080	760	440
FPM		470	580	680	790	840	HGT		(1629)	(1329)	(1009)	(689)	(369)

ASTOR PIAZZOLLA (SAZM) RNP RWY 13	
FIX IDENT	COORDINATES
AKROG	37°47'03.70" S 057°52'00.93" W
KOVEX	37°50'19.05" S 057°45'39.17" W
DALMI	37°44'27.57" S 057°43'58.69" W
PUNOX	37°53'56.85" S 057°51'41.40" W
IVREK	37°53'02.92" S 057°40'17.99" W
RW13	37°55'43.88" S 057°35'01.65" W
ZM110	37°58'25.93" S 057°29'42.31" W
PUMTO	37°59'28.57" S 057°14'14.96" W

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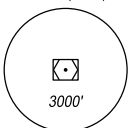
ASTOR PIAZZOLLA (SAZM) RNP RWY 13											
Seq Num	Fix Ident	Path Terminator	Fly Over	Distance (NM)	Course M° (T°)	Turn	Altitude (ft/FL)	Speed Limit (Kt)	Navigation Specification	RNP	Dec (ARP 2018)
010	AKROG	IF	N	N/A	N/A	N/A	+3000	-220	RNP APCH	1.0	8 W
020	KOVEX	TF	N	6.0	130 (122.8)	N/A	+2300	-180	RNP APCH	1.0	8 W
010	DALMI	IF	N	N/A	N/A	N/A	+3000	-220	RNP APCH	1.0	8 W
020	KOVEX	TF	N	6.0	200 (192.8)	N/A	+2300	-180	RNP APCH	1.0	8 W
010	PUNOX	IF	N	N/A	N/A	N/A	+3000	-220	RNP APCH	1.0	8 W
020	KOVEX	TF	N	6.0	060 (052.8)	N/A	+2300	-180	RNP APCH	1.0	8 W
010	KOVEX	IF	N	N/A	N/A	N/A	+2300	-180	RNP APCH	1.0	8 W
020	IVREK	TF	N	5.0	130 (122.7)	N/A	+1700	N/A	RNP APCH	1.0	8 W
030	RW13	TF	Y	5.0	130 (122.7)	N/A	@121	N/A	RNP APCH	0.3	8 W
040	ZM110	TF	Y	5.0	130 (122.6)	N/A	N/A	N/A	RNP APCH	1.0	8 W
050	PUMTO	DF	N	N/A	N/A	L	+3000	N/A	RNP APCH	1.0	8 W
060	PUMTO	HM	Y	4.0	291 (282.8)	R	+3000	- 210	RNP APCH	1.0	8 W

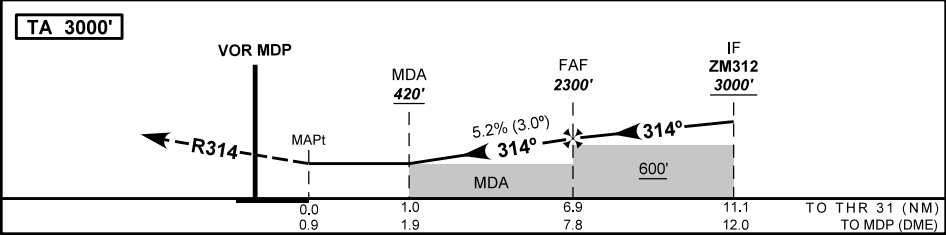
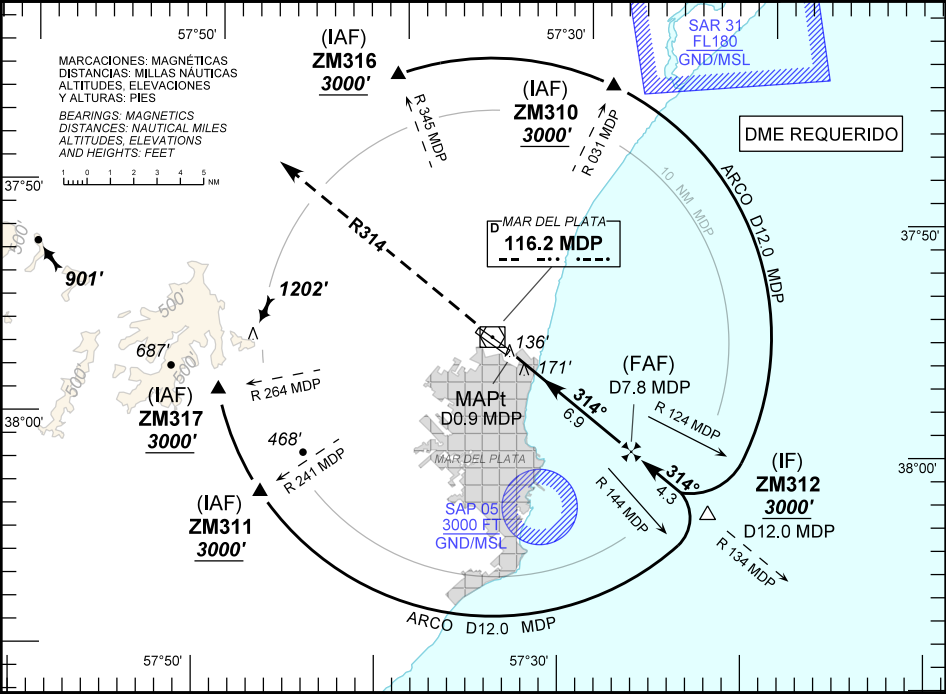
21 ABRIL 2022

ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

Carta de aproximación por instrumentos
Instrument approach chart

VOR Z RWY 31

MAR DEL PLATA CTL 118.75 118.20		MAR DEL PLATA APP 118.75 118.20		MAR DEL PLATA TWR 118.75 118.20		MAR DEL PLATA GND 121.70	EMERG 121.50
VOR MDP 116.2	FINAL APCH CRS 314°	ALTITUD MNM FAF 2300' (2238')	MDA (H) 420' (358')	AD Elev 71'	THR Elev 62'	08° W (2018)	
Aproximación frustrada: ASC sobre R 314 MDP para 3000 ft y seguir instrucciones del ATC. Missed approach: Climb on R 314 to 3000 ft or as directed by ATC.							
NOTA: NIL				RMK: NIL		MSA 25NM MDP	



DIRECTA RWY 31 / Straight in RWY 31										Circulación Visual			
VOR/DME										Circle to land			
CAT	MDA 420'									CAT	MDA	MDH	VIS
A										A	Circulación Visual N.A. Circle to land N.A.		
B										B			
C										C			
D										D			
GS KT	90	110	130	150	160	DIST to MAPt	6.9	4	3	2	1		
FAF - MAPt 6.9 NM	4:36	3:46	3:11	2:46	2:35	ALT	2300	1386	1067	749	420		
FPM	480	590	690	790	850	HGT	(2238)	(1324)	(1005)	(687)	(358)		

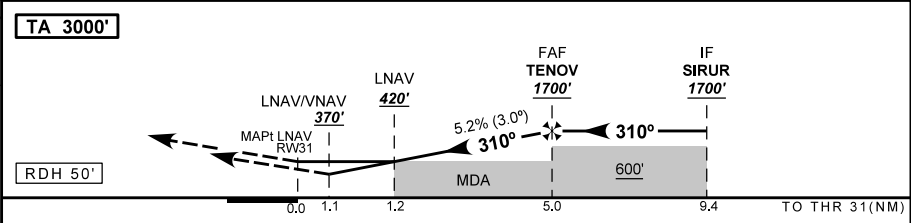
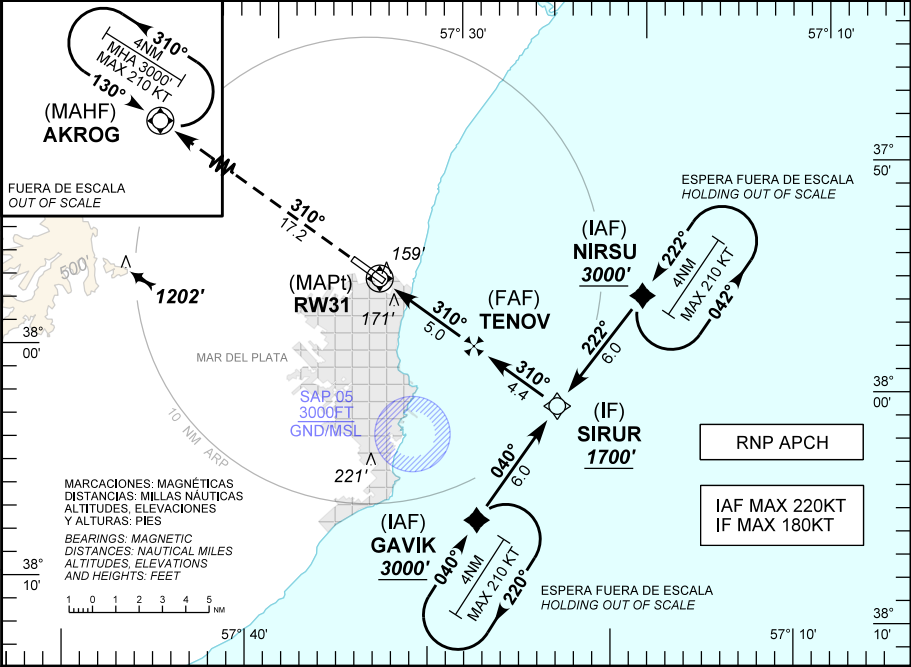
31 ENERO 2019

ASTOR PIAZZOLLA (SAZM)
MAR DEL PLATA

Carta de aproximación por instrumentos
Instrument approach chart

RNP RWY 31

MAR DEL PLATA CTL 118.75 118.20		MAR DEL PLATA APP 118.75 118.20		MAR DEL PLATA TWR 118.75 118.20		MAR DEL PLATA GND 121.70		EMERG 121.50
RNP	FINAL APCH CRS 310°	ALTITUD MNM TENOV 1700' (1638')	LNAV / VNAV DA(H) 370' (308')	AD Elev 71'	THR Elev 62'	08° W (2018) 3000' MSA 25 NM ARP		
Aproximación frustrada: ASC sobre curso 310° hasta AKROG alcanzando 3000 ft, HLDG y seguir instrucciones del ATC. <i>Missed approach: Climb on track 310° to AKROG reaching 3000 ft, HLDG and proceed as directed by ATC.</i>								
NOTA: Para sistemas Baro VNAV no compensados, debajo de -10°C o superior a 50°C N.A.			NOTE: For uncompensated Baro-VNAV systems, N.A. below -10°C or above 50°C.					



DIRECTA RWY 31 / <i>Straight in RWY 31</i>										Circulación Visual <i>Circle to land</i>			
CAT	LNAV / VNAV					LNAV							
	DA 370'		DH 308'		MDA 420'		MDH 358'						
	VIS					VIS							
A	1400 M					1800 M				CAT	MDA	MDH	VIS
B										A	Circulación Visual N.A. <i>Circle to land N.A.</i>		
C										B			
D										C			
GS KT		90	110	130	150	160	DIST to MAPt	5.0	4.0	3.0	2.0	1.2	
FAF - MAPt 5.0 NM		3:20	2:44	2:18	2:00	1:52	ALT	1700	1390	1070	750	420	
FPM		470	580	690	790	850	HGT	(1638)	(1328)	(1008)	(688)	(358)	

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ASTOR PIAZZOLLA (SAZM) RNP RWY 31	
FIX IDENT	COORDINATES
SIRUR	38°01'26.75" S 057°23'44.96" W
AKROG	37°47'03.70" S 057°52'00.93" W
TENOV	37°59'03.96" S 057°28'27.24" W
NIRSU	37°56'29.68" S 057°19'26.66" W
RW31	37°56'22.40" S 057°33'45.82" W
GAVIK	38°06'31.96" S 057°27'47.41" W

21 ABRIL 2022

ASTOR PIAZZOLLA (SAZM) RNP RWY 31											
Seq Num	Fix Ident	Path Terminator	Fly Over	Distance (NM)	Course M° (T°)	Turn	Altitude (ft/FL)	Speed Limit (kt)	Navigation Specification	RNP	Dec (ARP 2018)
010	NIRSU	IF	N	N/A	N/A	N/A	+3000	-220	RNP APCH	1.0	8 W
020	SIRUR	TF	N	6.0	222 (214.6)	N/A	+1700	-180	RNP APCH	1.0	8 W
010	GAVIK	IF	N	N/A	N/A	N/A	+3000	-220	RNP APCH	1.0	8 W
020	SIRUR	TF	N	6.0	040 (032.1)	N/A	+1700	-180	RNP APCH	1.0	8 W
010	SIRUR	IF	N	N/A	N/A	N/A	+1700	-180	RNP APCH	1.0	8 W
020	TENOV	TF	N	4.4	310 (302.6)	N/A	+1700	N/A	RNP APCH	1.0	8 W
030	RW31	TF	Y	5.0	310 (302.7)	N/A	@112	N/A	RNP APCH	0.3	8 W
040	AKROG	TF	Y	17.2	310 (302.9)	N/A	+3000	N/A	RNP APCH	1.0	8 W
050	AKROG	HM	Y	4.0	130 (122.8)	L	+3000	-210	RNP APCH	1.0	8 W

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