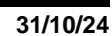


AD CHART



INTENTIONALLY LEFT BLANK

STANDARD DEPARTURE CHART -INSTRUMENT

RJSK / AKITA

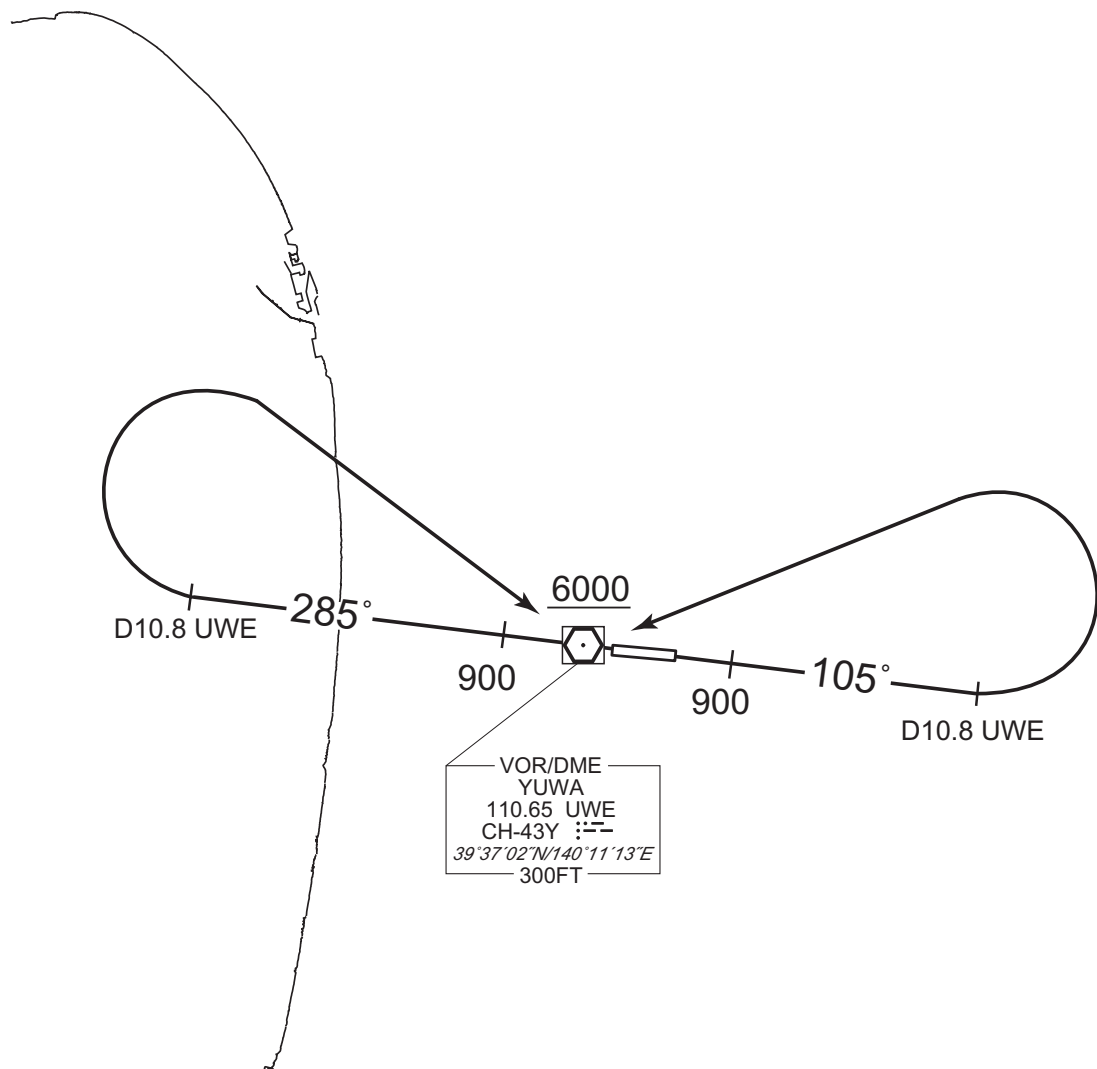
SID

YUWA REVERSAL SEVEN DEPARTURE

RWY 10 : Climb RWY HDG to 900FT, via UWE R105 to 10.8DME, turn left,...
 RWY 28 : Climb RWY HDG to 900FT, via UWE R285 to 10.8DME turn right,...
 ...direct to UWE VOR/DME.
 Cross UWE VOR/DME at or above 6000FT.

Note RWY10 : 5.0% climb gradient required up to 3300FT.
 OBST ALT 3543FT located at 13.8NM 071° FM end of RWY10.

CHANGE : PROC course. PROC renamed. Note added.



STANDARD DEPARTURE CHART -INSTRUMENT

RJSK / AKITA

RNAV SID

MUTSU THREE DEPARTURE

RNP1

Note GNSS required.

CHANGE : PROC course. PROC renamed. Navigation Specification(Basic RNP1→RNP1). SUGUT, NUPLI, IRNOG established. SK002 abolished.



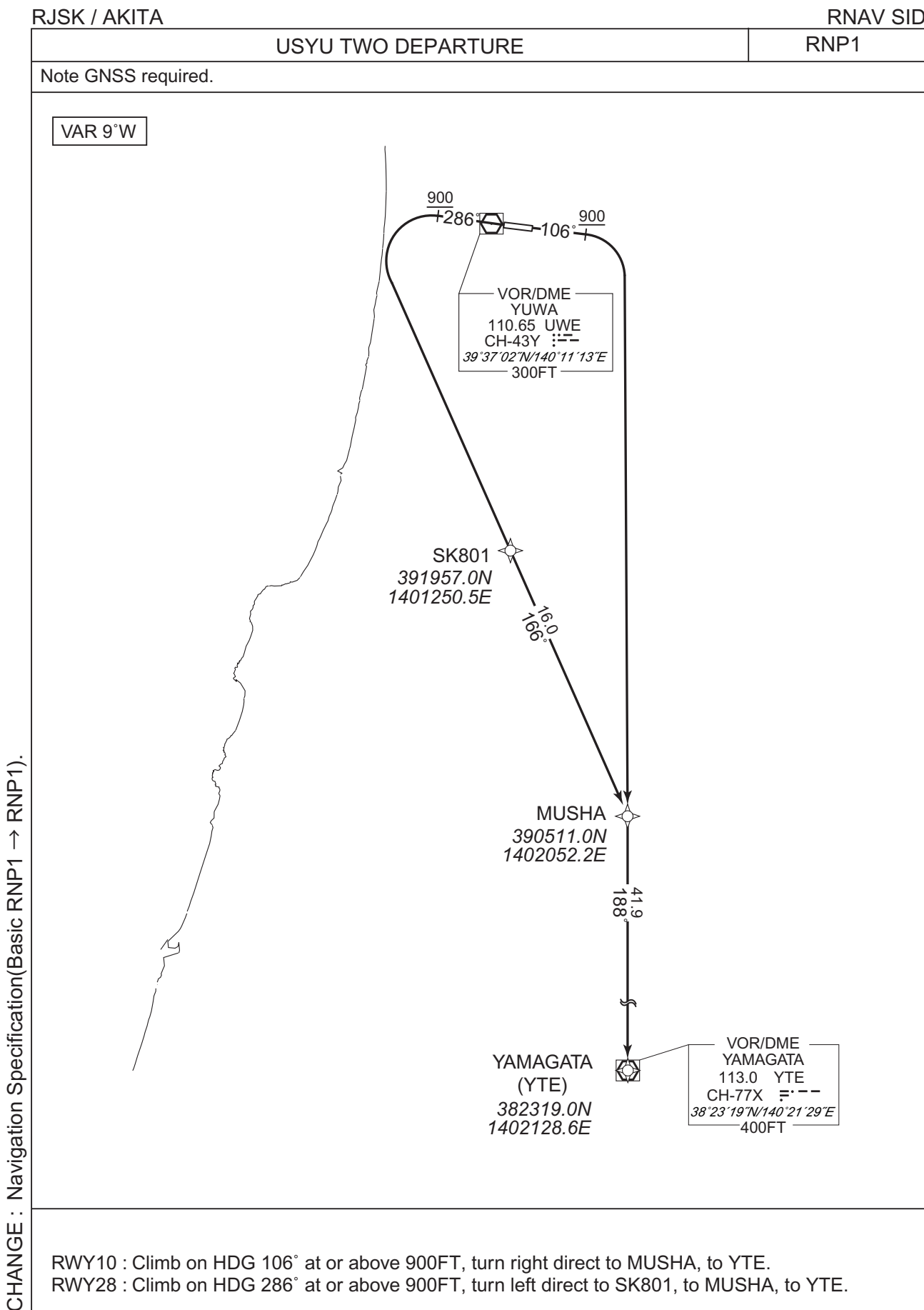
RWY10 : Climb on HDG106° at or above 900FT, turn left direct to SUGUT, to IRNOG, to MRE.
 RWY28 : Climb on HDG286° at or above 900FT, turn right direct to NUPLI, to MRE.

Note RWY10 : 5.0% climb gradient required up to 3800FT.
 OBST ALT 3937FT located at 15.3NM 039° FM end of RWY10.

STANDARD DEPARTURE CHART -INSTRUMENT

CHANGE : PROC course. PROC renamed. Navigation Specification(Basic RNP1 → RNP1). SUGUT, NUPLI, IRNOG established. SK002 abolished.	RJSK / AKITA										RNAV SID
	MUTSU THREE DEPARTURE										
	RWY10										
	Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Navigation Specification
	001	VA	-	-	106 (096.6)	-9.1	-	-	+900	-	RNP1
	002	DF	SUGUT	-	-	-9.1	-	L	-	-	RNP1
	003	TF	IRNOG	-	016 (006.4)	-9.1	40.3	-	-	-	RNP1
	004	TF	MRE	-	032 (023.2)	-9.1	22.5	-	-	-	RNP1
	RWY28										
	Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Navigation Specification
	001	VA	-	-	286 (276.6)	-9.1	-	-	+900	-	RNP1
	002	DF	NUPLI	-	-	-9.1	-	R	-	-	RNP1
	003	TF	MRE	-	032 (023.0)	-9.1	60.9	-	-	-	RNP1

STANDARD DEPARTURE CHART -INSTRUMENT



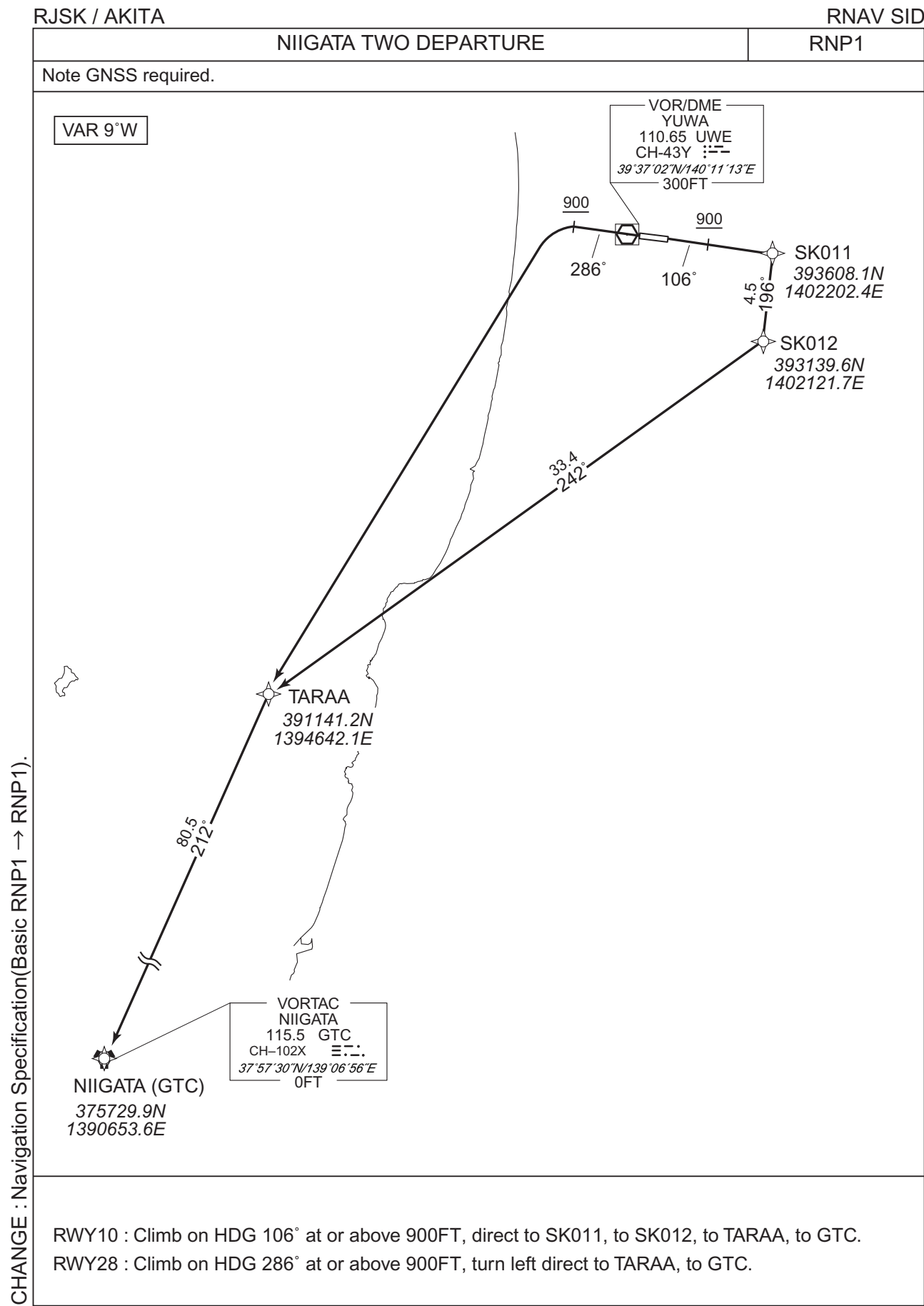
STANDARD DEPARTURE CHART -INSTRUMENT

RJSK / AKITA

RNAV SID

USYU TWO DEPARTURE											
RWY10											
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	106 (096.6)	-8.9	-	-	+900	-	-	RNP1
002	DF	MUSHA	-	-	-8.9	-	R	-	-	-	RNP1
003	TF	YTE	-	188 (179.3)	-8.9	41.9	-	-	-	-	RNP1
RWY28											
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	286 (276.6)	-8.9	-	-	+900	-	-	RNP1
002	DF	SK801	-	-	-8.9	-	L	-	-	-	RNP1
003	TF	MUSHA	-	166 (157.1)	-8.9	16.0	-	-	-	-	RNP1
004	TF	YTE	-	188 (179.3)	-8.9	41.9	-	-	-	-	RNP1
CHANGE : Navigation Specification(Basic RNP1 → RNP1).											

STANDARD DEPARTURE CHART -INSTRUMENT



STANDARD DEPARTURE CHART -INSTRUMENT

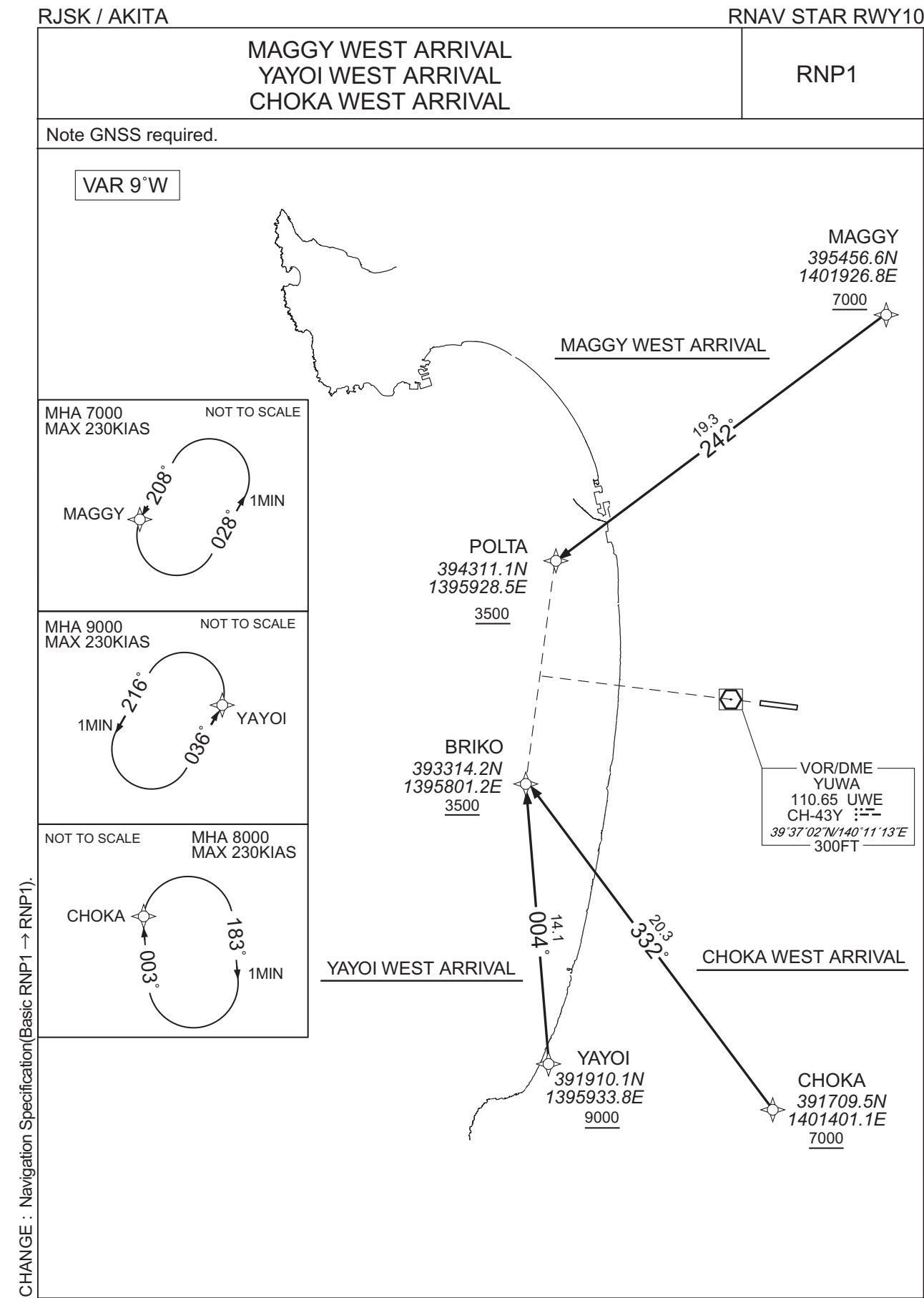
RJSK / AKITA

RNAV SID

NIIGATA TWO DEPARTURE											
RWY10											
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	106 (096.6)	-8.9	-	-	+900	-	-	RNP1
002	DF	SK011	-	-	-8.9	-	-	-	-	-	RNP1
003	TF	SK012	-	196 (186.7)	-8.9	4.5	-	-	-	-	RNP1
004	TF	TARAA	-	242 (233.5)	-8.9	33.4	-	-	-	-	RNP1
005	TF	GTC	-	212 (203.0)	-8.9	80.5	-	-	-	-	RNP1
RWY28											
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	286 (276.6)	-8.9	-	-	+900	-	-	RNP1
002	DF	TARAA	-	-	-8.9	-	-	-	-	-	RNP1
003	TF	GTC	-	212 (203.0)	-8.9	80.5	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJSK / AKITA

RNAV STAR RWY10

MAGGY WEST ARRIVAL

From MAGGY at or above 7000FT, to POLTA at or above 3500FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	MAGGY	-	-	-9.0	-	-	+7000	-	-	RNP1
002	TF	POLTA	-	242 (232.6)	-9.0	19.3	-	+3500	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	MAGGY	208 (199.5)	-9.0	1.0(-14000)	L	7000	FL140	-230(-14000)	RNP1

YAYOI WEST ARRIVAL

From YAYOI at or above 9000FT, to BRIKO at or above 3500FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	YAYOI	-	-	-9.0	-	-	+9000	-	-	RNP1
002	TF	BRIKO	-	004 (355.2)	-9.0	14.1	-	+3500	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	YAYOI	036 (026.6)	-9.0	1.0(-14000)	L	9000	FL140	-230(-14000)	RNP1

CHOKA WEST ARRIVAL

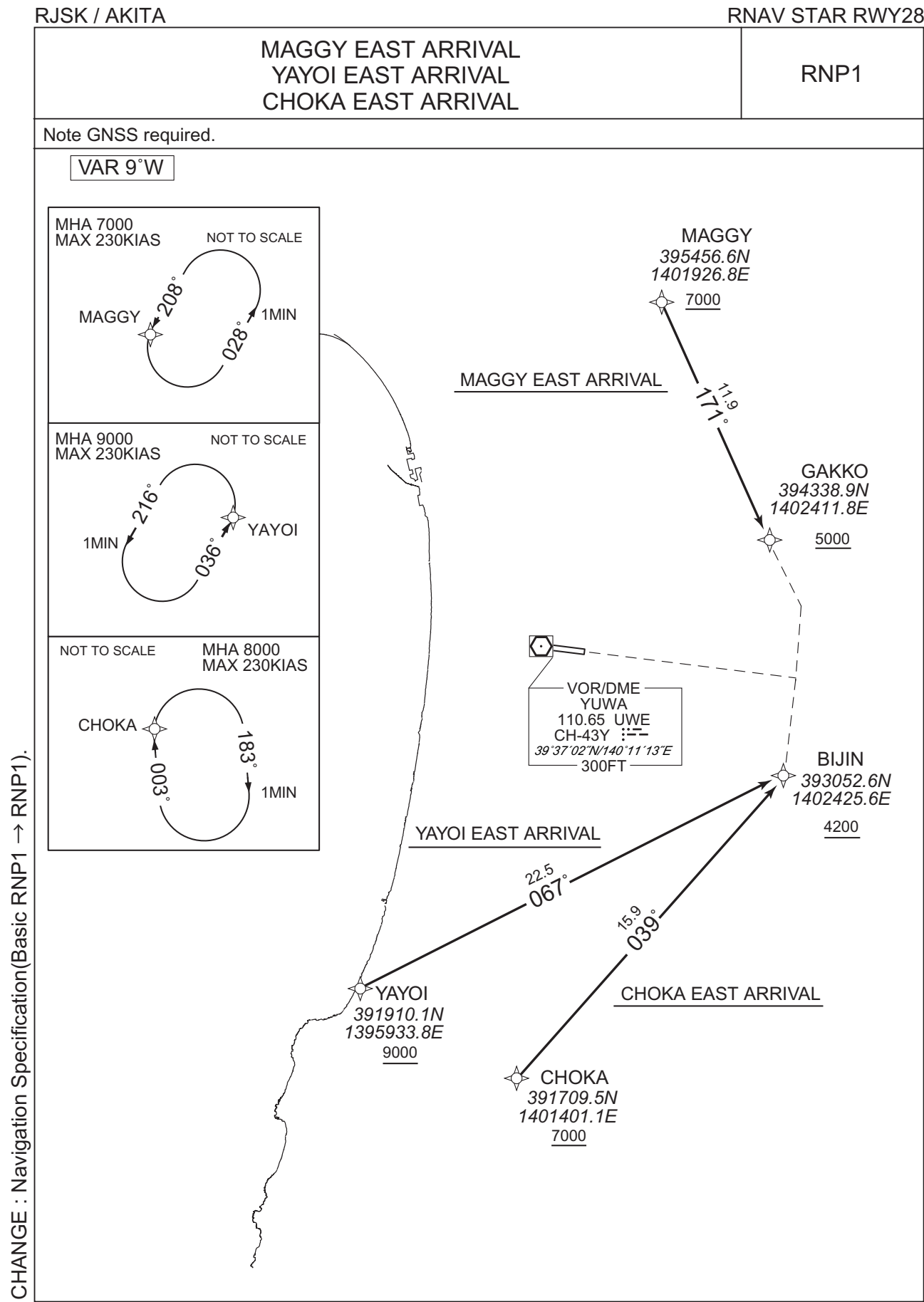
From CHOKA at or above 7000FT, to BRIKO at or above 3500FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	CHOKA	-	-	-9.0	-	-	+7000	-	-	RNP1
002	TF	BRIKO	-	332 (322.5)	-9.0	20.3	-	+3500	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	CHOKA	003 (353.8)	-9.0	1.0(-14000)	R	8000	FL140	-230(-14000)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJSK / AKITA

RNAV STAR RWY28

MAGGY EAST ARRIVAL

From MAGGY at or above 7000FT, to GAKKO at or above 5000FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	MAGGY	-	-	-9.0	-	-	+7000	-	-	RNP1
002	TF	GAKKO	-	171 (162.1)	-9.0	11.9	-	+5000	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	MAGGY	208 (199.5)	-9.0	1.0(-14000)	L	7000	FL140	-230(-14000)	RNP1

YAYOI EAST ARRIVAL

From YAYOI at or above 9000FT, to BIJIN at or above 4200FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	YAYOI	-	-	-9.0	-	-	+9000	-	-	RNP1
002	TF	BIJIN	-	067 (058.5)	-9.0	22.5	-	+4200	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	YAYOI	036 (026.6)	-9.0	1.0(-14000)	L	9000	FL140	-230(-14000)	RNP1

CHOKA EAST ARRIVAL

From CHOKA at or above 7000FT, to BIJIN at or above 4200FT.

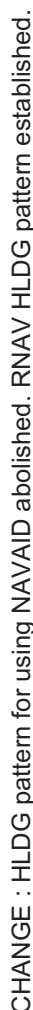
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	CHOKA	-	-	-9.0	-	-	+7000	-	-	RNP1
002	TF	BIJIN	-	039 (030.3)	-9.0	15.9	-	+4200	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	CHOKA	003 (353.8)	-9.0	1.0(-14000)	R	8000	FL140	-230(-14000)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

RJSK / AKITA

ILS Z or LOC Z RWY28

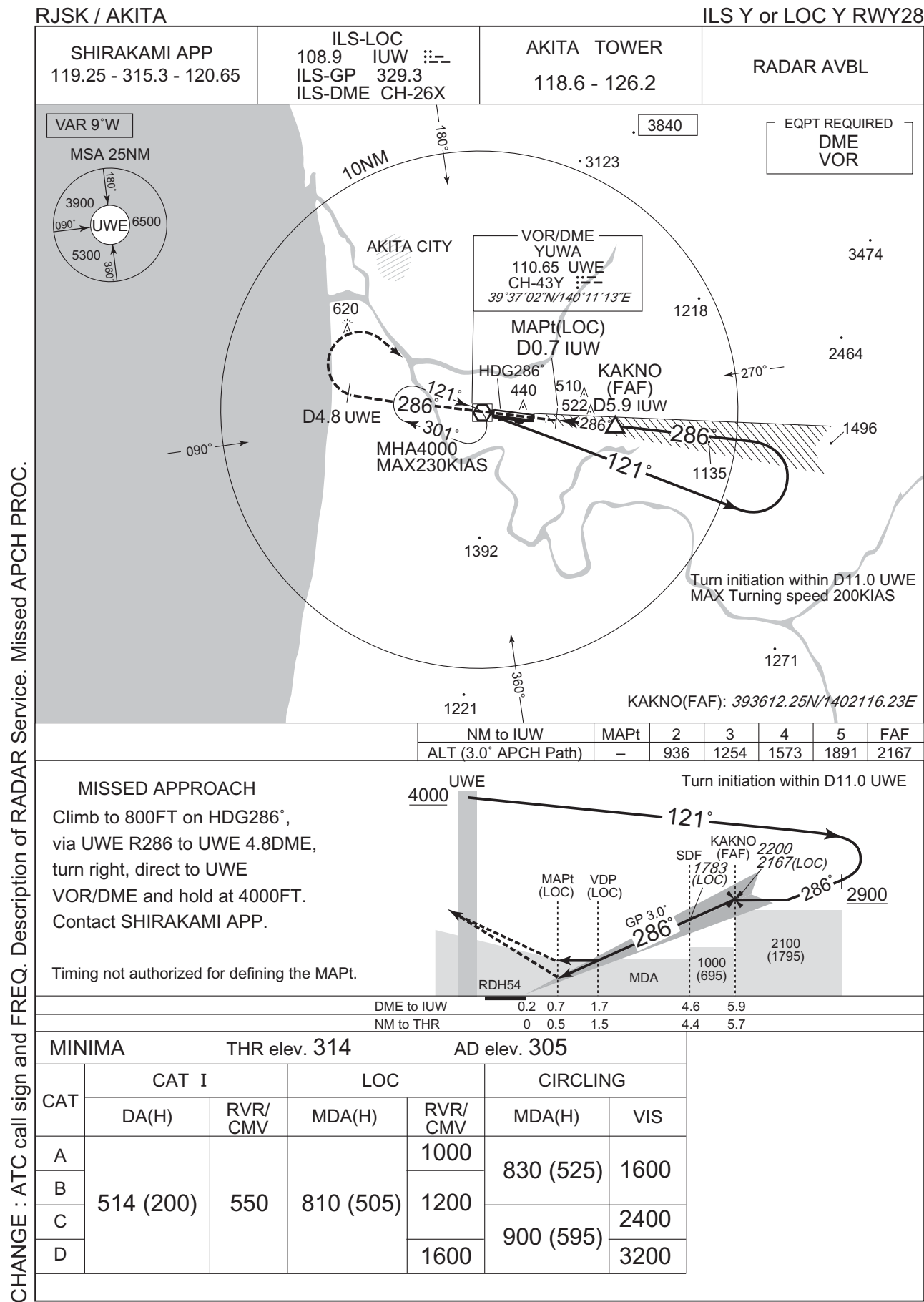


The graph plots UWE (Unemployment Weighted Employment) on the Y-axis against the GDP growth rate (GP 3.0°) on the X-axis. The X-axis has two scales: the top scale ranges from 0.2 to 8.9, and the bottom scale ranges from 0 to 8.7. The Y-axis has a scale from 0 to 2600. A solid line represents the trend, and a dashed line represents the RDH54 model. Key points on the graph include MAPt VDP (LOC), KYOWA (FAF), SDF, and KENDI (IF). The graph shows a general upward trend with some fluctuations, particularly a sharp drop around 1980 followed by a recovery.

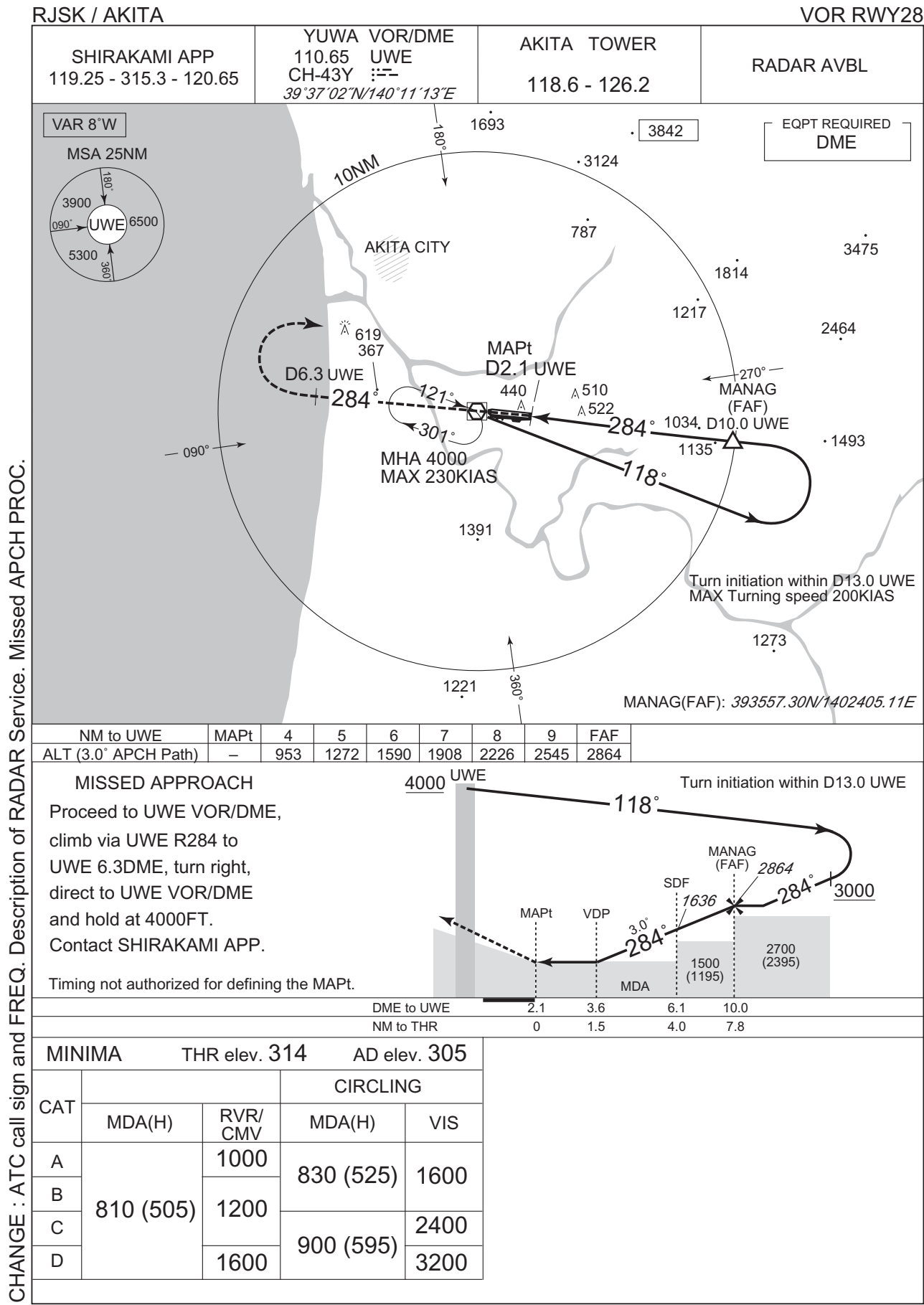
Point	GP 3.0° (Top Scale)	GP 3.0° (Bottom Scale)	UWE (Approx.)
MAPt VDP (LOC)	0.7	0.5	~1000
KYOWA (FAF)	3.7	3.5	~1500
SDF	6.1	5.9	~1700
KENDI (IF)	8.9	8.7	~2600

MINIMA		THR elev. 314		AD elev. 305		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	514 (200)	550	810 (505)	1000	830 (525)	1600
B				1200		
C					900 (595)	2400
D						

INSTRUMENT APPROACH CHART



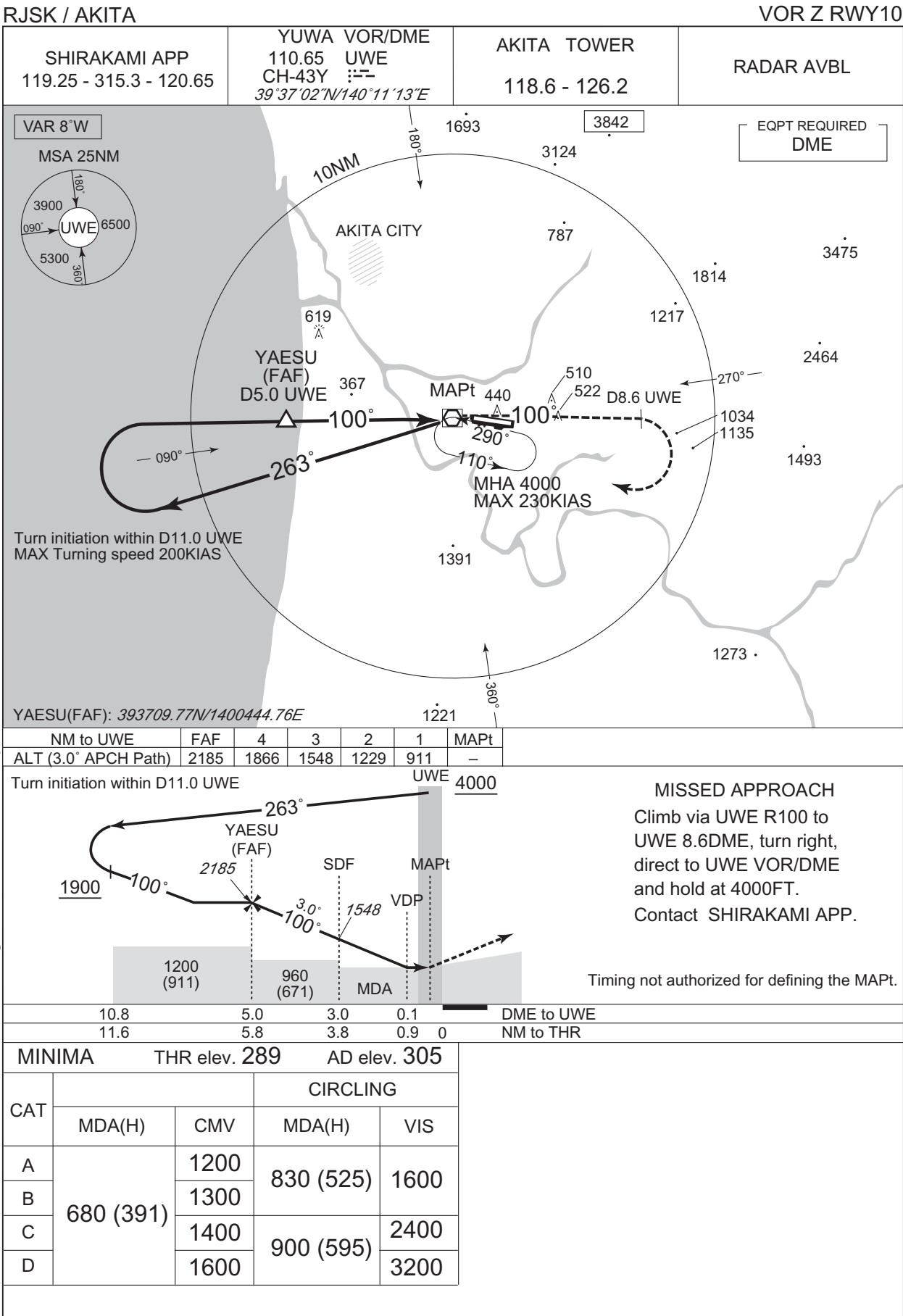
INSTRUMENT APPROACH CHART



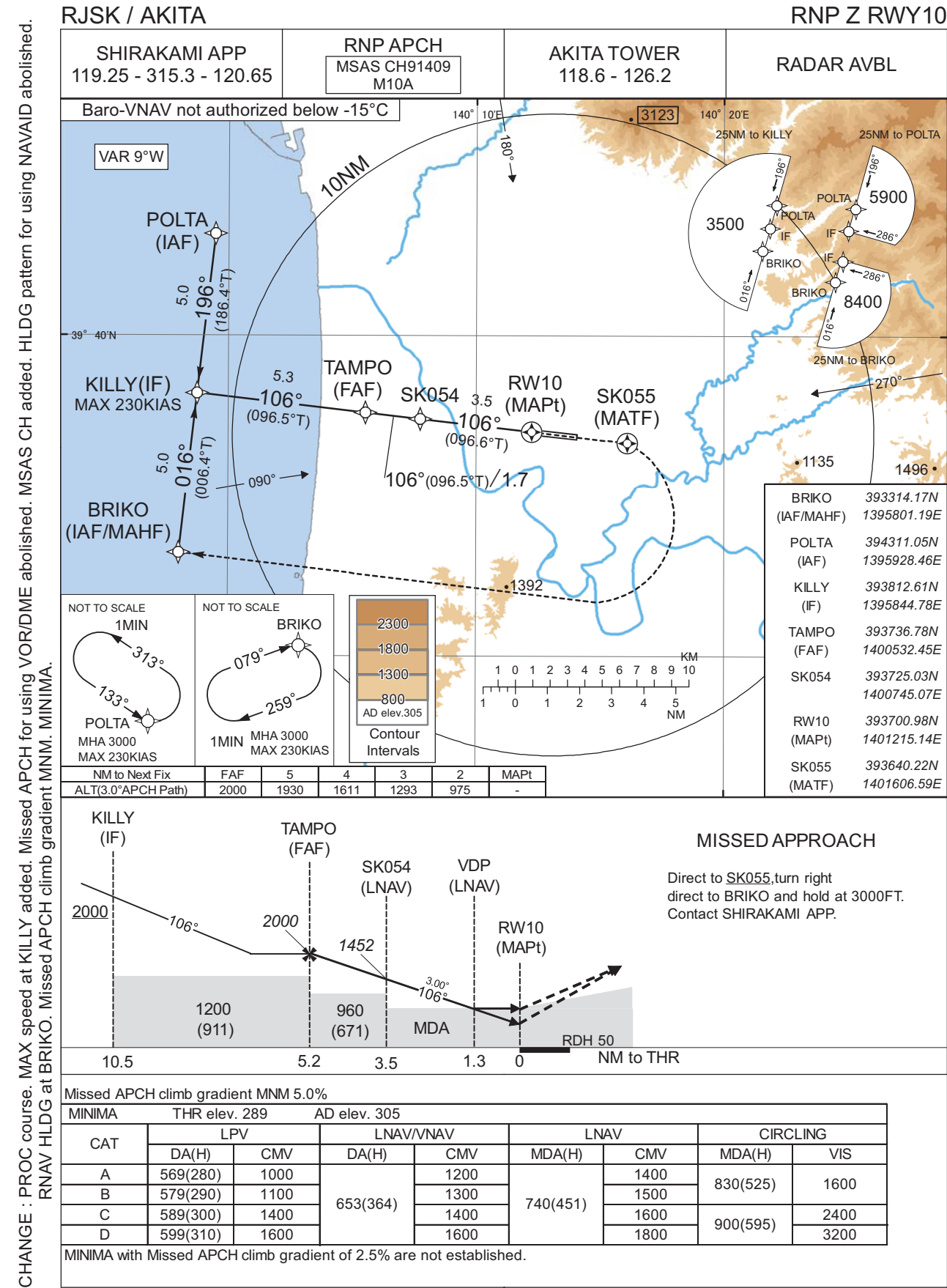
CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

INSTRUMENT APPROACH CHART

CHANGE : PROC renamed. ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.



INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJSK / AKITA

RNP Z RWY10

FAS DATA BLOCK

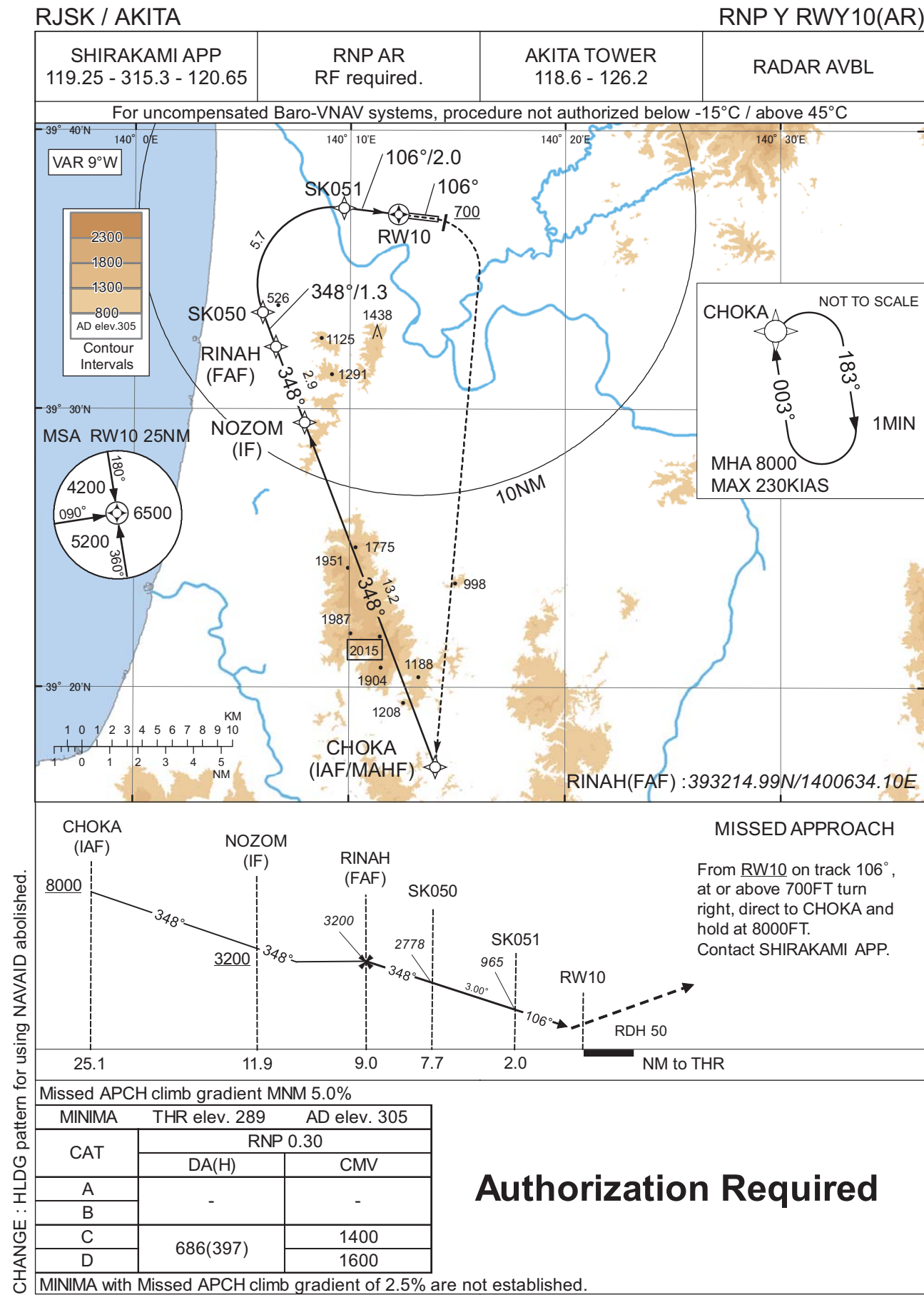
Operation type	0	LTP/FTP ellipsoidal height	+01268
SBAS service provider identifier	2	FPAP latitude	393651.6070N
Airport identifier	RJSK	FPAP longitude	1401359.3150E
Runway	10	Threshold crossing height	00015.0
Approach performance designator	0	TCH units selector	1
Route indicator	Z	Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M10A	∠ length offset	0000
LTP/FTP latitude	393700.9295N	HAL	40.0
LTP/FTP longitude	1401215.1950E	VAL	50.0
CRC remainder	884983FD		

Required additional data

LTP/FTP orthometric height	87.9
----------------------------	------

CHANGE : FAS DATA BLOCK; Required additional data established.

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJSK / AKITA

RNP Y RWY10(AR)

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	CHOKA	-	-	-9.0	-	-	+8000	-	-	-
002	TF	NOZOM	-	348 (339.2)	-9.0	13.2	-	+3200	-	-	1.0
003	TF	RINAH	-	348 (339.1)	-9.0	2.9	-	3200	-	-	1.0
004	TF	SK050	-	348 (339.1)	-9.0	1.3	-	2778	-	-3.00	0.3
005	RF Center: SKRF1 r=2.78NM	SK051	-	-	-9.0	5.7	R	965	-	-3.00	0.3
006	TF	RW10	Y	106 (096.6)	-9.0	2.0	-	339	-	-3.00/50	0.3
007	FA	-	-	106 (096.6)	-9.0	-	-	+700	-	-	1.0
008	DF	CHOKA	-	-	-9.0	-	R	8000	-	-	1.0

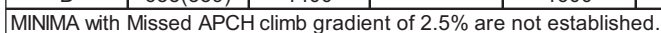
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	RNP Value
Hold	CHOKA	003 (353.8)	-9.0	1.0 (-14000)	R	8000	FL140	-230 (-14000)	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
CHOKA	391709.51N / 1401401.06E	SKRF1	393428.91N / 1400918.43E
NOZOM	392931.83N / 1400754.90E		
RINAH	393214.99N / 1400634.10E		
SK050	393329.21N / 1400557.30E		
SK051	393714.55N / 1400943.07E		
RW10	393700.98N / 1401215.14E		

RJSK / AKITA

RNP Z RWY28



CHANGE : New PROC.

INSTRUMENT APPROACH CHART

RJSK / AKITA

RNP Z RWY28

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+01346
SBAS service provider identifier	2	FPAP latitude	393700.9295N
Airport identifier	RJSK	FPAP longitude	1401215.1950E
Runway	28	Threshold crossing height	00016.5
Approach performance designator	0	TCH units selector	1
Route indicator	Z	Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M28A	∟ length offset	0000
LTP/FTP latitude	393651.6070N	HAL	40.0
LTP/FTP longitude	1401359.3150E	VAL	50.0
CRC remainder	CA86C5B4		

Required additional data

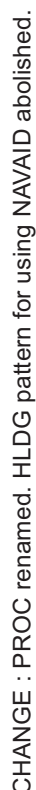
LTP/FTP orthometric height	95.6
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CHANGE : New PROC.

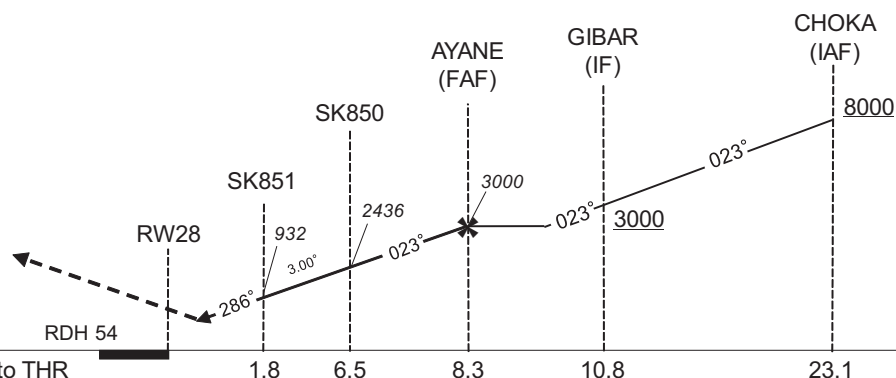
RJSK / AKITA

RNP Y RWY28(AR)

For uncompensated Baro-VNAV systems, procedure not authorized below -15°C / above 45°C



From RW28 on track 286°,
at or above 800FT turn left,
direct to CHOKA and hold
at 8000FT.
Contact SHIRAKAMI APP.



Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 314	AD elev. 305
CAT	RNP 0.30	
	DA(H)	RVR/CMV
A	-	-
B		
C	653(339)	1000
D		1400

MINIMA with Missed APCH climb gradient of 2.5% are not established.

Authorization Required

INSTRUMENT APPROACH CHART

RJSK / AKITA

RNP Y RWY28(AR)

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	CHOKA	-	-	-9.0	-	-	+8000	-	-	-
002	TF	GIBAR	-	023 (014.3)	-9.0	12.3	-	+3000	-	-	1.0
003	TF	AYANE	-	023 (014.3)	-9.0	2.5	-	3000	-	-	1.0
004	TF	SK850	-	023 (014.3)	-9.0	1.8	-	2436	-	-3.00	0.3
005	RF Center: SKRF2 r=2.77NM	SK851	-	-	-9.0	4.7	L	932	-	-3.00	0.3
006	TF	RW28	Y	286 (276.7)	-9.0	1.8	-	368	-	-3.00/54	0.3
007	FA	-	-	286 (276.7)	-9.0	-	-	+800	-	-	1.0
008	DF	CHOKA	-	-	-9.0	-	L	8000	-	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	RNP Value
Hold	CHOKA	003 (353.8)	-9.0	1.0 (-14000)	R	8000	FL140	-230 (-14000)	1.0

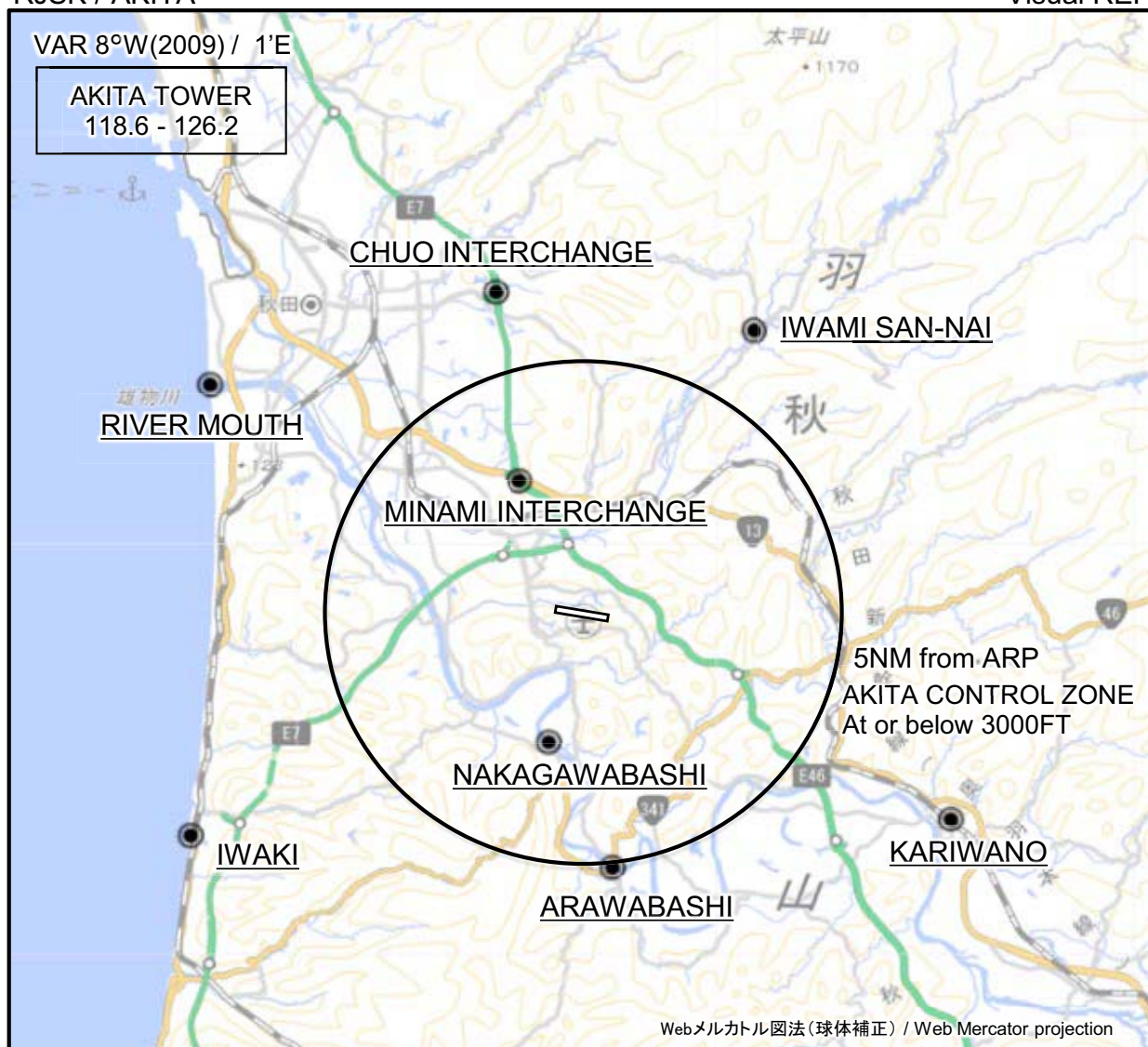
Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
CHOKA	391709.51N / 1401401.06E	SKRF2	393354.17N / 1401551.05E
GIBAR	392905.47N / 1401757.27E		
AYANE	393129.80N / 1401845.05E		
SK850	393312.87N / 1401919.21E		
SK851	393639.39N / 1401615.88E		
RW28	393651.66N / 1401359.25E		

CHANGE : PROC renamed.

RJSK / AKITA

Visual REP



※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

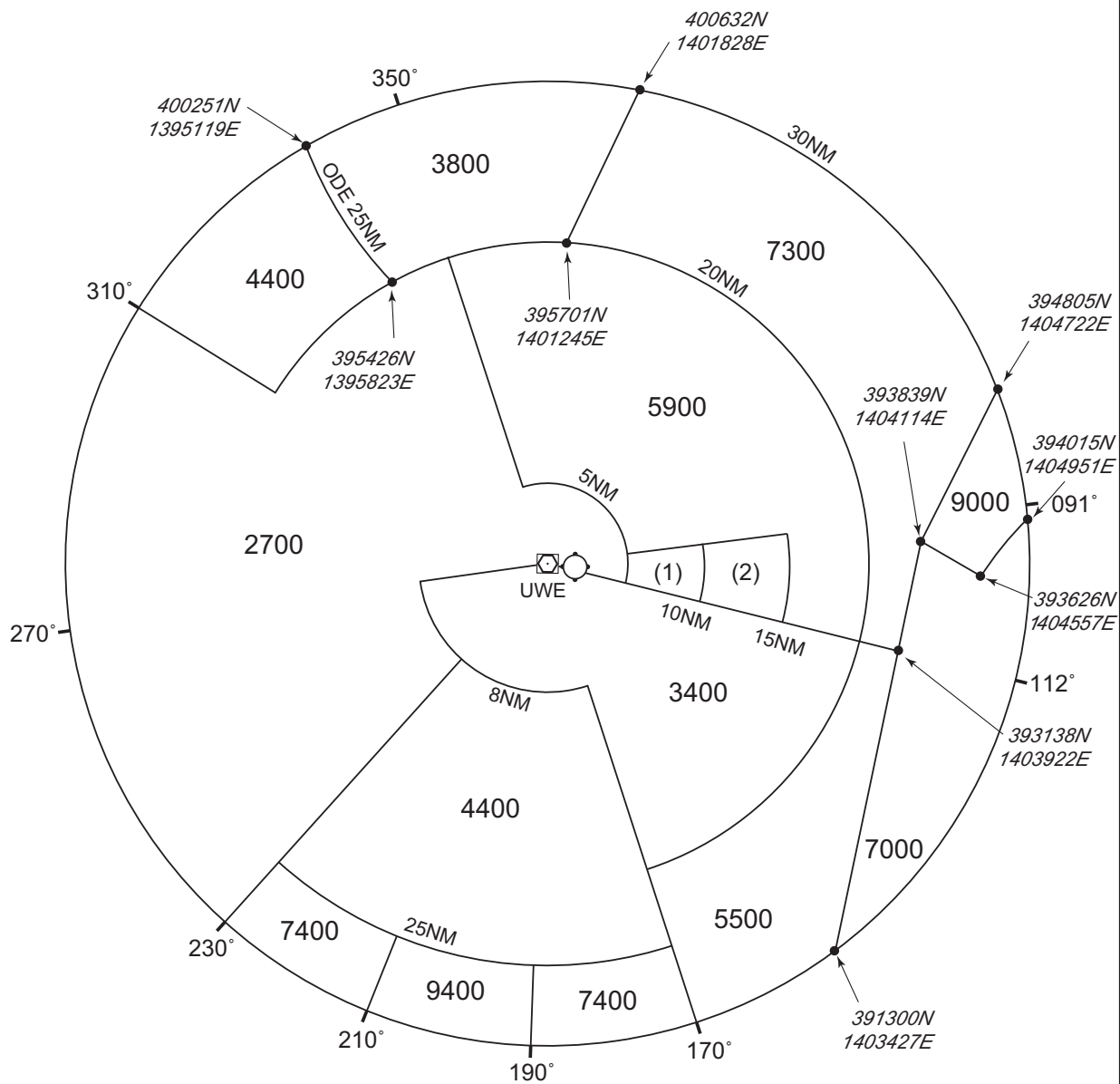
CHANGE : Map updated. BRG/DIST from ARP.

Call sign	BRG / DIST from ARP	Remarks
中央インターチェンジ Chuo Interchange	345°T / 6.6NM	秋田中央インターチェンジ(秋田自動車道) Akita Chuo Interchange
岩見三内 Iwami San-nai	030°T / 6.5NM	岩見川と三内川の合流点 Merging point of Iwamigawa River and San-naigawa River
リバーマウス River Mouth	302°T / 8.6NM	雄物川河口 Omonogawa River Mouth
南インターチェンジ Minami Interchange	334°T / 3.0NM	秋田南インターチェンジ(秋田自動車道) Akita Minami Interchange
中川橋 Nakagawabashi	196°T / 2.6NM	中川橋(雄物川) Nakagawabashi
刈和野 Kariwano	120°T / 8.2NM	JR刈和野駅 JR Kariwano Station
岩城 Iwaki	240°T / 8.8NM	道の駅岩城 Michinoeki (Road Station) Iwaki
新波橋 Arawabashi	174°T / 5.0NM	新波橋(雄物川) Arawabashi

RJSK / AKITA

Minimum Vectoring Altitude CHART

VAR 9°W (2024)



(1) : 4500
(2) : 5500

CENTER : 393702N/1401113E (UWE VOR/DME)

CHANGE : Update.