



RJSK / AKITA SID

### YUWA REVERSAL SEVEN DEPARTURE

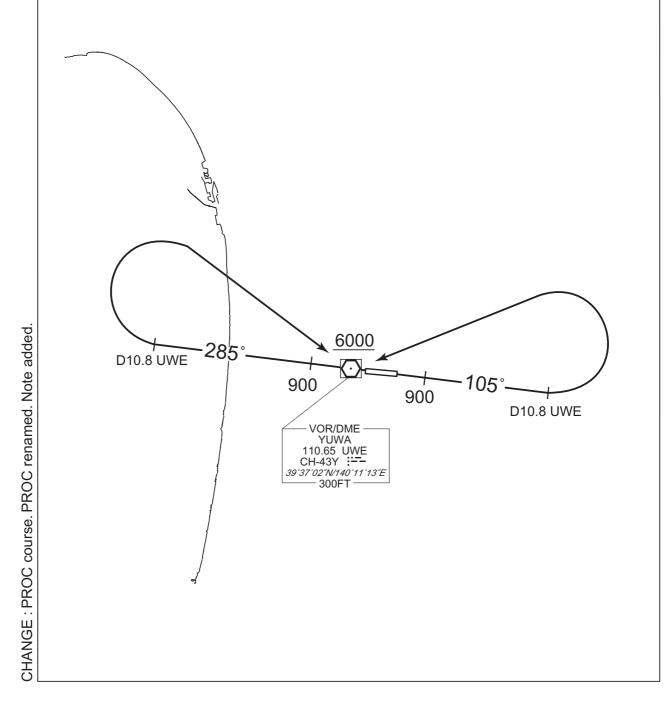
RWY 10: Climb RWY HDG to 900FT, via UWE R105 to 10.8DME, turn left,... RWY 28: Climb RWY HDG to 900FT, via UWE R285 to 10.8DME turn right,...

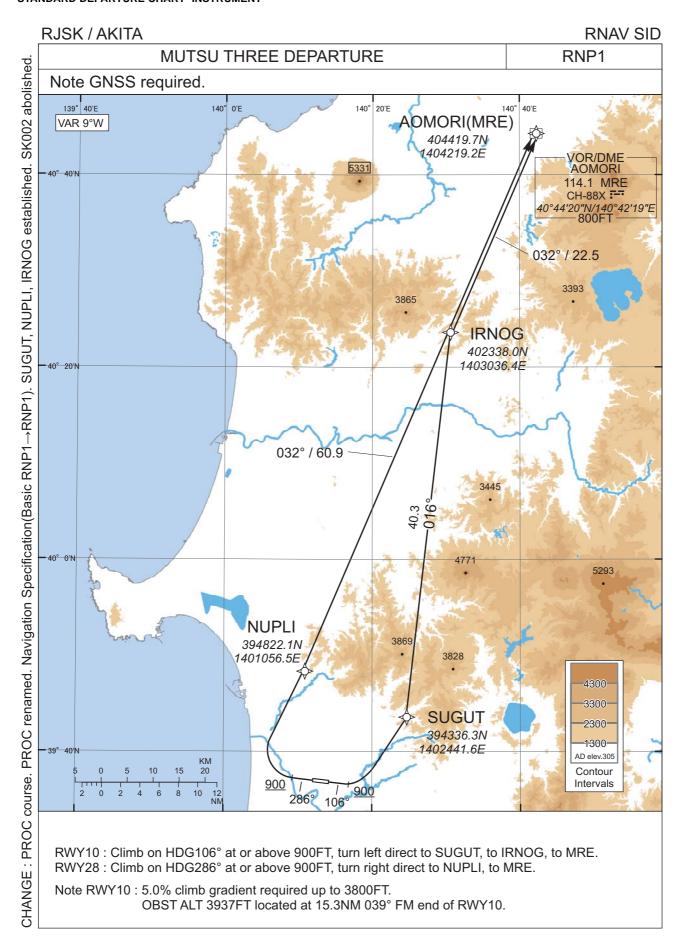
...direct to UWE VOR/DME.

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.





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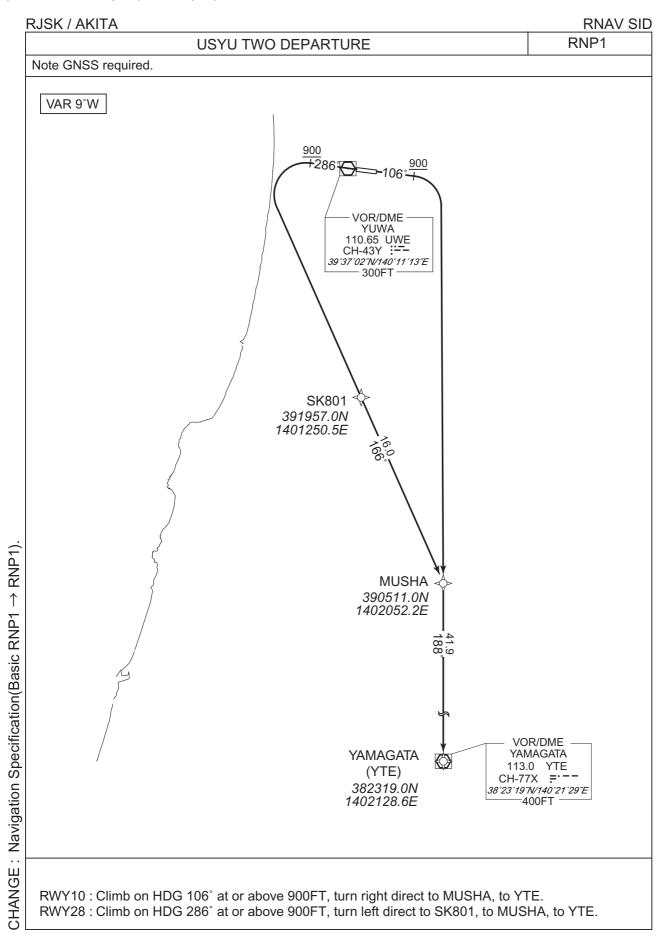
### MUTSU THREE DEPARTURE

# RWY10

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	ı	ı	106 (096.6)	-9.1	-	1	+900	ı	-	RNP1
002	DF	SUGUT	ı	ı	-9.1	-	L	i	1	-	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)	Vertical Angle	Navigation Specification
001	VA	1	ı	286 (276.6)	-9.1	ı	1	+900	ı	ı	RNP1
002	DF	NUPLI	1	ı	-9.1	ı	R	ı	1	1	RNP1
003	TF	MRE	1	032 (023.0)	-9.1	60.9	1	-	-	-	RNP1



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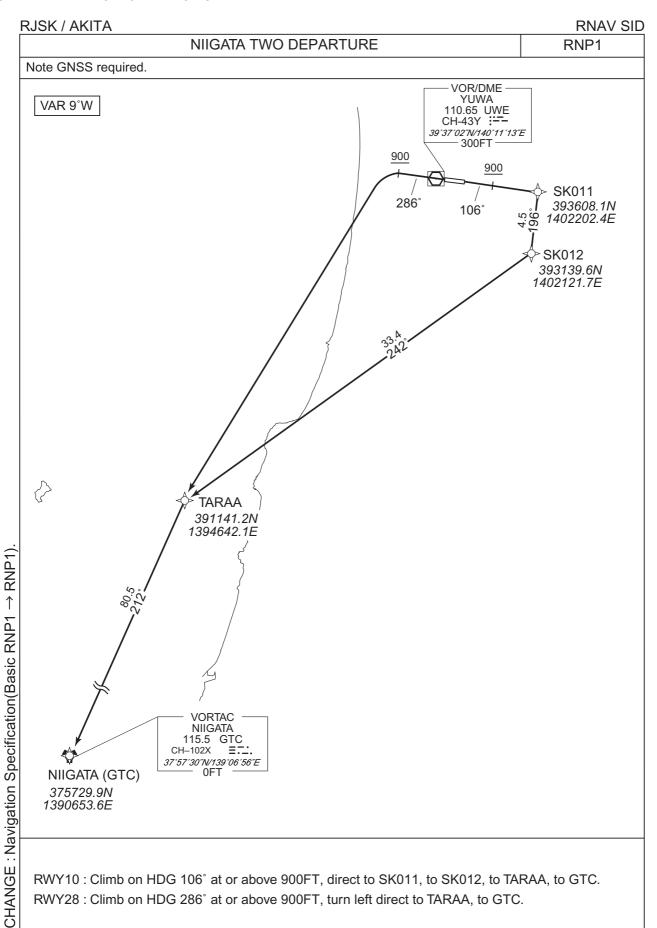
# **USYU TWO DEPARTURE**

### 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	1	-	106 (096.6)	-8.9	-	ı	+900	ı	-	RNP1
002	DF	MUSHA	-	1	-8.9	-	R	1	1	1	RNP1
003	TF	YTE	-	188 (179.3)	-8.9	41.9	-	-	-	-	RNP1

### RWY28

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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	-	1	-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	1	-	-		RNP1



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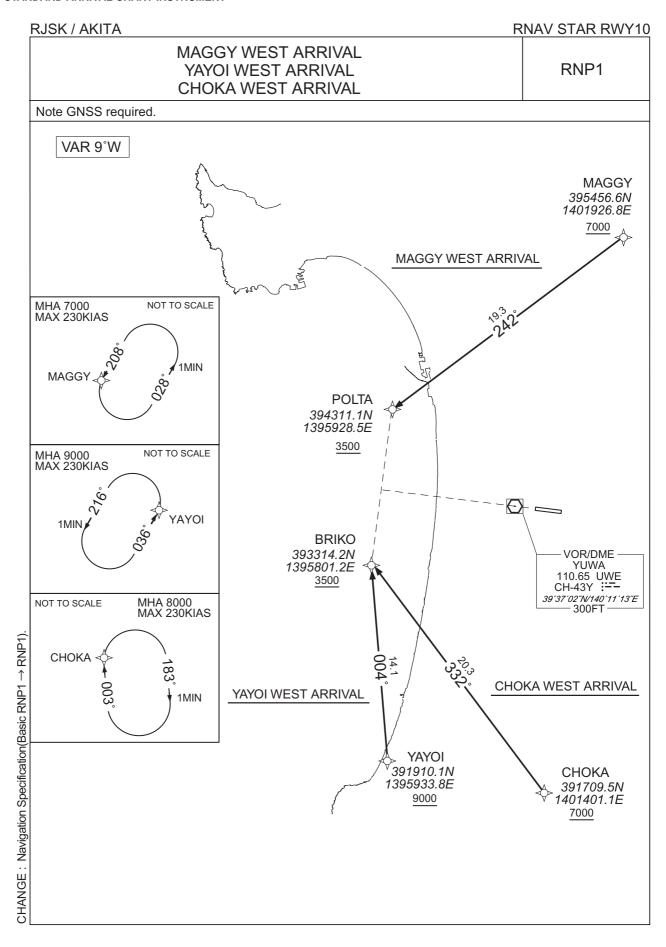
# NIIGATA TWO DEPARTURE

### 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	-	1	106 (096.6)	-8.9	1	-	+900	ı	1	RNP1
002	DF	SK011	1	ı	-8.9	1	-	1	ı	1	RNP1
003	TF	SK012	1	196 (186.7)	-8.9	4.5	-	1	ı	1	RNP1
004	TF	TARAA	1	242 (233.5)	-8.9	33.4	-	1	ı	1	RNP1
005	TF	GTC	-	212 (203.0)	-8.9	80.5	-	-	-	1	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	1	ı	286 (276.6)	-8.9	-	ı	+900	1	1	RNP1
002	DF	TARAA	ı	1	-8.9	-	1	ı	1	1	RNP1
003	TF	GTC	-	212 (203.0)	-8.9	80.5	-	-	-	-	RNP1



#### 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	1	1	-9.0	-	1	+7000	1	1	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 Numbe	Path r 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	1	-	-9.0	1	1	+9000	-	,	RNP1
002	TF	BRIKO	-	004 (355.2)	-9.0	14.1	-	+3500	-	-	RNP1

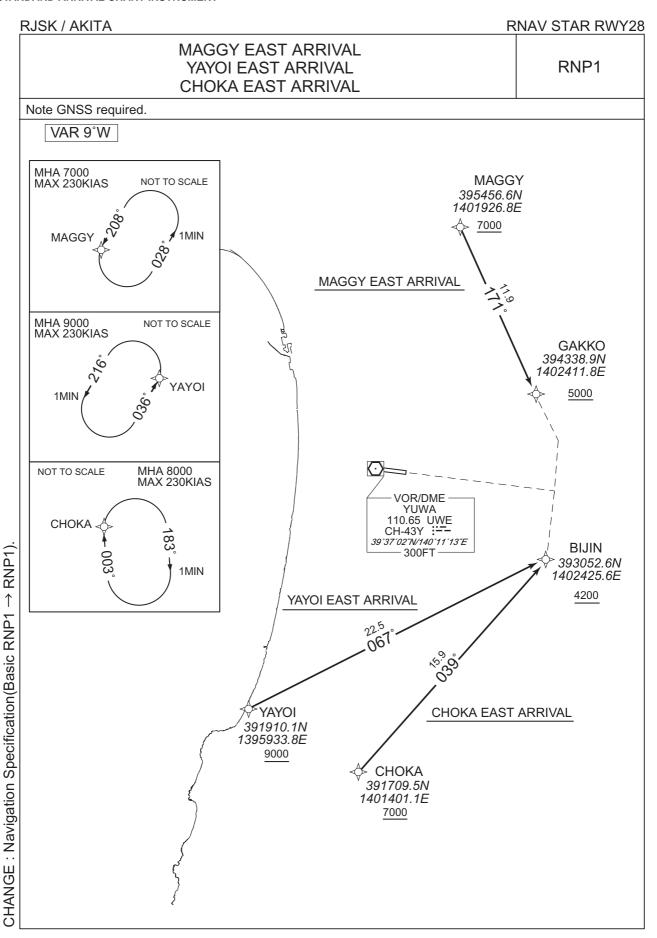
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	YAYOI	036 (026.6)	-9.0	1.0(-14000)	L	9000	FL140	-230(-14000)	RNP1

### **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	СНОКА	1	-	-9.0	-	1	+7000	1	1	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	СНОКА	003 (353.8)	-9.0	1.0(-14000)	R	8000	FL140	-230(-14000)	RNP1



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#### **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	1	-	-9.0	-	1	+7000	-	1	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	1	1	-9.0	-	-	+9000	-	1	RNP1
002	TF	BIJIN	1	067 (058.5)	-9.0	22.5	1	+4200	1	1	RNP1

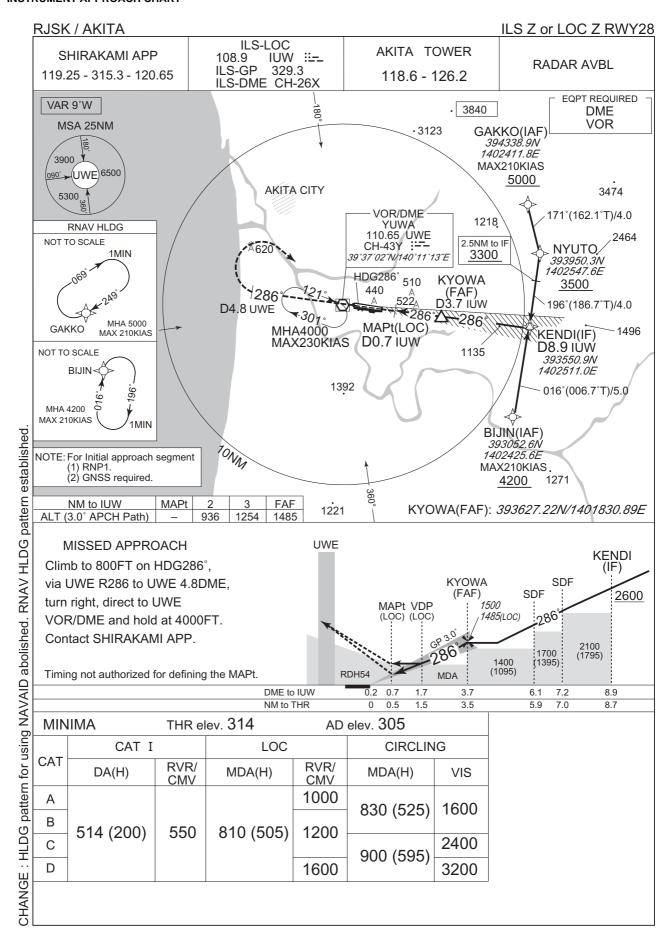
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	YAYOI	036 (026.6)	-9.0	1.0(-14000)	L	9000	FL140	-230(-14000)	RNP1

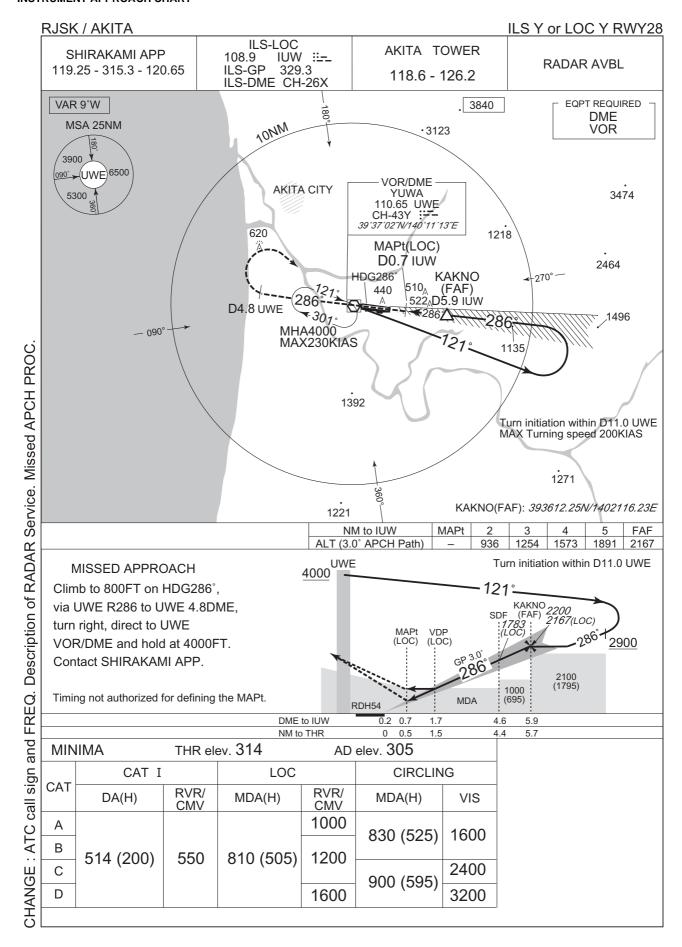
### **CHOKA EAST ARRIVAL**

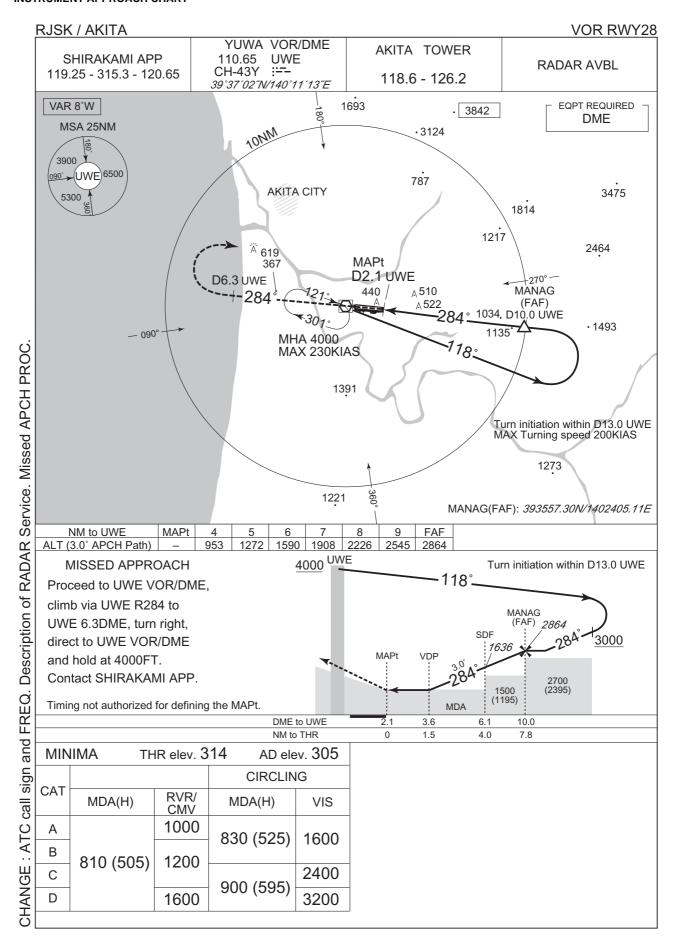
From CHOKA at or above 7000FT, to BIJIN at or above 4200FT.

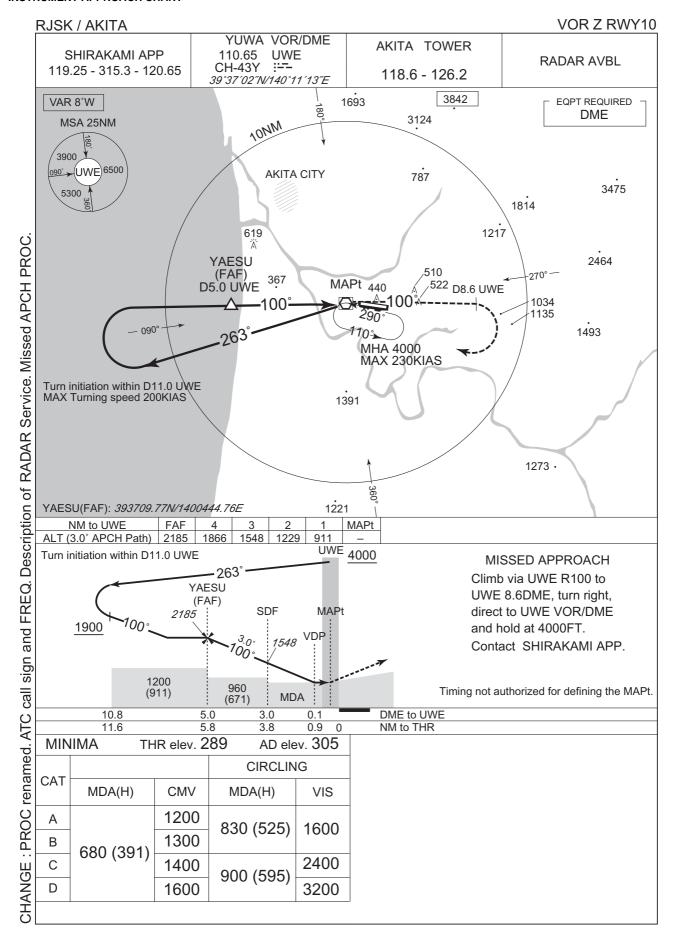
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	СНОКА	1	-	-9.0	-	-	+7000	-	-	RNP1
002	TF	BIJIN	-	039 (030.3)	-9.0	15.9	-	+4200	ı	-	RNP1

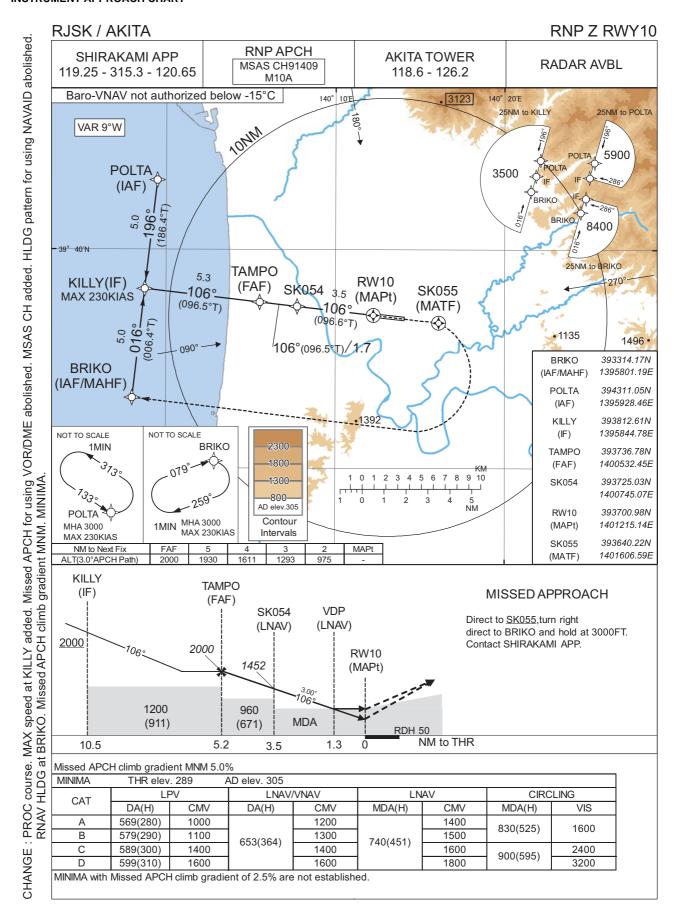
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	СНОКА	003 (353.8)	-9.0	1.0(-14000)	R	8000	FL140	-230(-14000)	RNP1









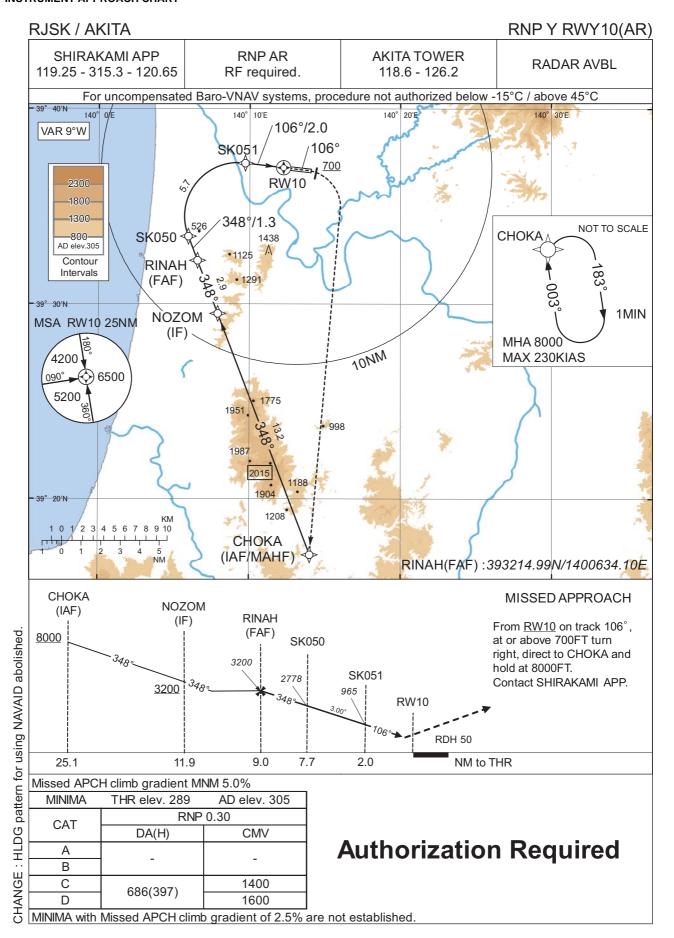


RJSK / AKITA RNP Z RWY10

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

Roquirea additional data									
LTP/FTP orthometric height	87.9								



# RJSK / AKITA

# RNP Y RWY10(AR)

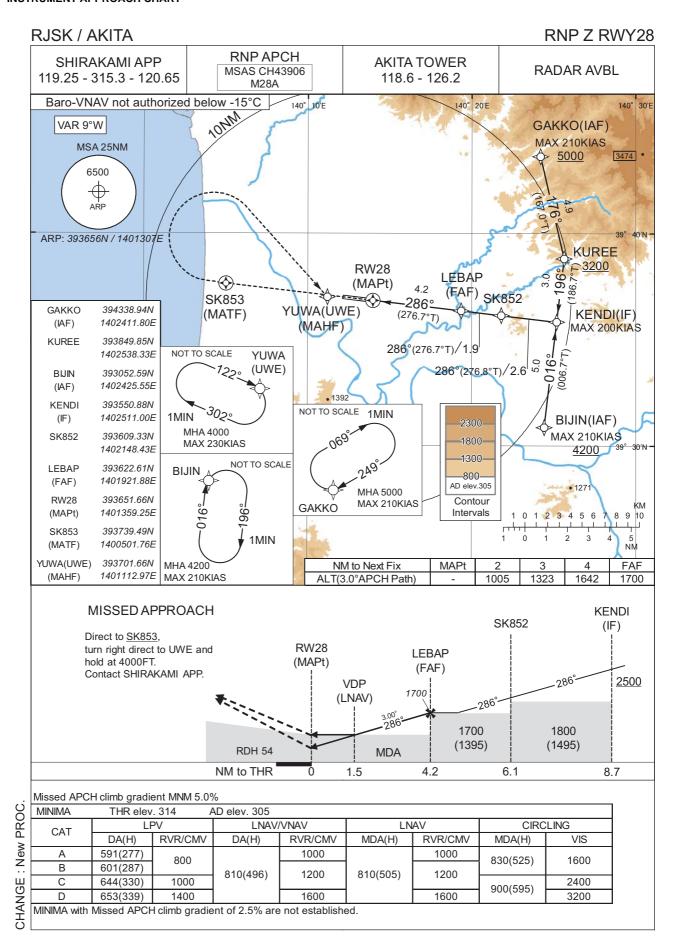
# Coding Table

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	СНОКА	,	-	-9.0	-	-	+8000	1	-	-
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	1	348 (339.1)	-9.0	1.3	1	2778	1	-3.00	0.3
005	RF Center: SKRF1 r=2.78NM	SK051	-	ı	-9.0	5.7	R	965	ı	-3.00	0.3
006	TF	RW10	Υ	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	СНОКА	-	-	-9.0	-	R	8000	-	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Altitude	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		

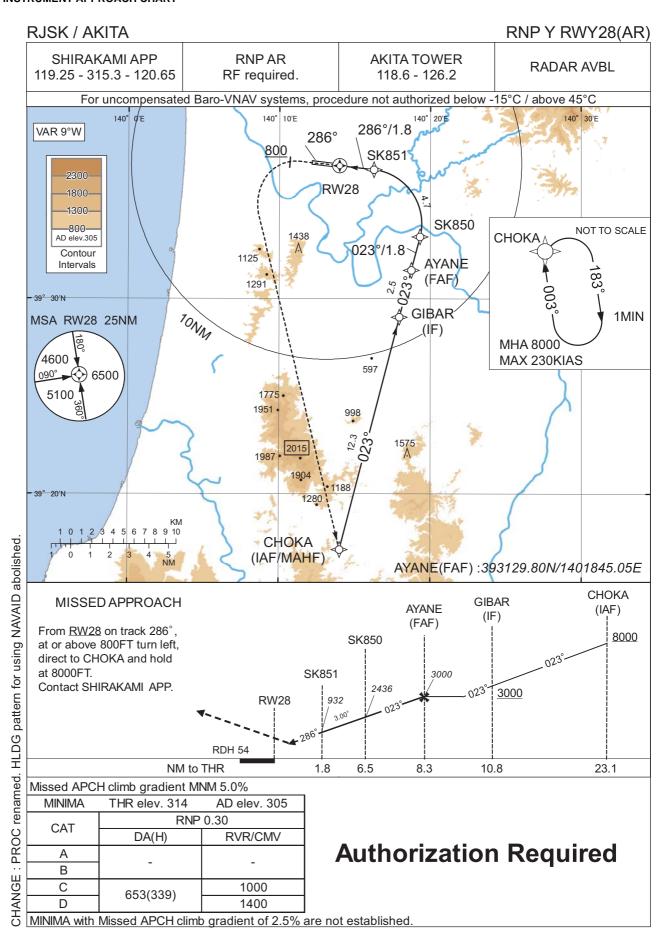


RJSK / AKITA RNP Z RWY28

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					



# 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	СНОКА	1	-	-9.0	-	-	+8000	1	-	-
002	TF	GIBAR	1	023 (014.3)	-9.0	12.3	-	+3000	-	-	1.0
003	TF	AYANE	1	023 (014.3)	-9.0	2.5	-	3000	-	-	1.0
004	TF	SK850	1	023 (014.3)	-9.0	1.8	-	2436	1	-3.00	0.3
005	RF Center: SKRF2 r=2.77NM	SK851	ı	ı	-9.0	4.7	L	932	ı	-3.00	0.3
006	TF	RW28	Υ	286 (276.7)	-9.0	1.8	-	368	-	-3.00/54	0.3
007	FA	-	1	286 (276.7)	-9.0	-	-	+800	-	-	1.0
800	DF	СНОКА	1	-	-9.0	-	L	8000	-	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Lime	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	RNP Value
Hold	СНОКА	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		



※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).

	Call sign	BRG / DIST from ARP	Remarks		
ARP.	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		
from	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		
BRG/DIST	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		
IGE : Map updated.	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		
CHANGE	新波橋 Arawabashi	174°T / 5.0NM	新波橋(雄物川) Arawabashi		

