

AD 2 AERODROMES

RJSK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJSK - AKITA

RJSK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	393656N 1401307E 278° / 1.25km from RWY28 THR.
2	Direction and distance from (city)	334° / 13.3km(7.2NM) Akita station 310° / 16.1km(8.7NM) Omono Rivermouth in Akita City
3	Elevation/ Reference temperature	305ft / 30°C(2004 -2008)
4	Geoid undulation at AD ELEV PSN	127FT
5	MAG VAR/ Annual change	8° W (2009) / 1'E
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Akita Airport Administration Office (Akita prefectural government) 49 Yuwa Tsubakigawa-aza Yamagomori, Akita City Tel:018-886-3362 Fax:018-886-3365
7	Types of traffic permitted(IFR/ VFR)	IFR/VFR
8	Remarks	Akita Airport Radio Facility Office(Civil Aviation Bureau) 49 Yuwa Tsubakigawa-aza Yamagomori, Akita City Tel:018-886-3161 Fax:018-886-3163

RJSK AD 2.3 OPERATIONAL HOURS

1	AD Administration	2200 - 1300
2	Customs and immigration	INTL SKED FLT hours only
3	Health and sanitation	INTL SKED FLT hours only
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24(TOKYO)
7	ATS	2200 - 1300
8	Fuelling	JET A-1 : 2200 - 1300 Avgas100 : 0100 - 0600 and On request (Tel : 018-886-3133)
9	Handling	2100 - 1300
10	Security	2100 - 1140
11	De-icing	Nil
12	Remarks	Nil

RJSK AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	All the modern institutions that deal with the weight thing to a Boeing 747 type passenger plane.
2	Fuel/ oil types	JET A-1 , Avgas100
3	Fuelling facilities/ capacity	Fuel truck refueling
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJSK AD 2.5 PASSENGER FACILITIES

1	Hotels	Nil
2	Restaurants	At Airport
3	Transportation	Buses and Taxi
4	Medical facilities	Nil
5	Bank and Post Office	Bank: ATM at airport
6	Tourist Office	Nil
7	Remarks	Nil

RJSK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 9
2	Rescue equipment	Chemical fire fighting truck x 3, Emergency medical equipments conveyance truck
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

RJSK AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow Removal Equipments : motor graders x 1 , rotary x 5 , dozer x 3 ,snow ploughs x 11 , snow sweeper x 7 , anti-freezing-agent spreaders x 2
2	Clearance priorities	1.RWY , TWY (T1, T4, T5 ,P1 ,P2 ,P3 and P4) 2.TWY (T2, T3), Apron
3	Remarks	Nil

RJSK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	APRON Surface : Concrete, Strength : PCR 794/R/A/W/T EAST-APRON Surface: Asphalt and Concrete Strength: Asphalt: PCR 248/F/D/X/T Concrete: PCR 315/R/C/W/T
2	Taxiway width, surface and strength	TWY P1-P4 Width:30m, Surface:asphalt, Strength:PCR 977/F/A/X/T TWY T1,T5 Width:32m, Surface:asphalt, Strength:PCR 977/F/A/X/T TWY T2,T3,T4 Width:34m, Surface:asphalt, Strength:PCR 977/F/A/X/T TWY E Width:18m, Surface:asphalt, Strength:PCR 248/F/D/X/T
3	ACL and elevation	Not available
4	VOR checkpoints	Not available
5	INS checkpoints	Spot Nr 1: 393644.22N 1401316.77E 11: 393644.44N 1401318.54E 2: 393644.10N 1401314.33E 12: 393645.82N 1401318.74E 3: 393644.35N 1401311.94E 13: 393647.03N 1401318.78E 5: 393644.58N 1401309.02E 14: 393643.87N 1401320.88E 6: 393644.84N 1401306.10E 15: 393644.71N 1401321.01E 16: 393645.54N 1401321.13E 17: 393646.33N 1401321.42E
6	Remarks	Nil

RJSK AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands	Nil
2	RWY and TWY markings and LGT	RWY:10/28 (Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY28), WBAR, RWY DIST marker LGT TWY:ALL TWY (Marking) TWY CL, RWY HLDG PSN, TWY side stripe (LGT) TWY edge LGT TWY:T1-T5 (LGT) TWY CL LGT, RWY guard LGT, Taxiing guidance sign TWY:P1-P4 (LGT) TWY CL LGT TWY:P2 (LGT) Taxiing guidance sign
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area (LGT) Apron flood LGT

RJSK AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

Other obstacles

OBST ID/ designation	Obstacle type	Coordinates	Elevation	Markings/ LGT	Remarks
RJSK1	Tower	393717N/1401350E	440ft	Nil	Under horizontal SFC
RJSK2	Antenna	393727N/1401337E	443ft	Nil	Under horizontal SFC
RJSK3	Antenna	393727N/1401334E	442ft	Nil	Under horizontal SFC

In Area3 To be developed

RJSK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	TOKYO
2	Hours of service MET Office outside hours	H24(TOKYO)
3	Office responsible for TAF preparation Periods of validity	TOKYO 30 Hours
4	Trend forecast Interval of issuance	Nil.
5	Briefing/ consultation provided	Briefing is available upon inquiry at TOKYO
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	S ₆ , U ₈₅ , U ₇ , U ₅ , U ₃ , U ₂₅ , U ₂ /T _r , P _S , P ₅ , P ₃ , P ₂₅ , P _{SWE} , P _{SWF} , P _{SWG} , P _{SWI} , P _{SWM} , P _{SW} (domestic), E, C, W _E , W _F , W _G , W _I , W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR
10	Additional information(limitation of service, etc.)	Nil

RJSK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCR) and Surface of RWY	THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
10	096.61°	2500x60	PCR 1013/F/A/X/T Asphalt Concrete	393700.98N1401215.14E 127FT	THR ELEV: 288.5ft
28	276.61°	2500x60	PCR 1013/F/A/X/T Asphalt Concrete	393651.66N1401359.25E 127.3FT	THR ELEV: 313.6ft TDZ ELEV: 312.2ft
Slope of RWY		Strip Dimensions (M)	RESA (Overrun) Dimensions(M)		Remarks
7		10	11		14
See AD2.24 AD CHART		2620x300	40 x (MNM:280 MAX:300)*		RWY Grooving:2500x60m
		2620x300	185 x (MNM:125 MAX:300)* *For detail, ask airport administrator		

RJSK AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
10	2500	2500	2500	2500	Nil
TWY:T4	1985	1985	1985		Nil
28	2500	2500	2500	2500	Nil
TWY:T2	1800	1800	1800		Nil

誘導路の TORA, TODA 及び ASDA は、誘導路中心線と滑走路中心線の交点から滑走路末端までの距離を示す。
(TORA, TODA and ASDA for TWY indicate distances BTN the point where TWY CL meets RWY CL and RWY THR.)

RJSK AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
10	SALS (*1) 420m LIH	Green Green	PAPI 3.0°/Left 420m 74ft	Nil	2500m 30m Coded color (White/red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
28	PALS (CAT I) 840m LIH	Green Green	PAPI 3.0°/Left 429m 66ft	900m	2500m 30m Coded color (White/red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
Remarks								
10								
SALS with APCH LGT beacon (550m and 890m FM RWY THR) (*1) Overrun area edge LGT(LEN60m color:Red) (*2)								

RJSK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 393641N/1401302E, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI:Nil Anemometer: RWY10:117°/350m from RWY10 THR, LGTD RWY28:263°/457m from RWY28 THR, LGTD
3	TWY edge and center line lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 1sec: REDL, RCLL, RTHL, RENL, WBAR, Overrun area edge LGT Within 15sec: Other LGT
5	Remarks	WDI LGT

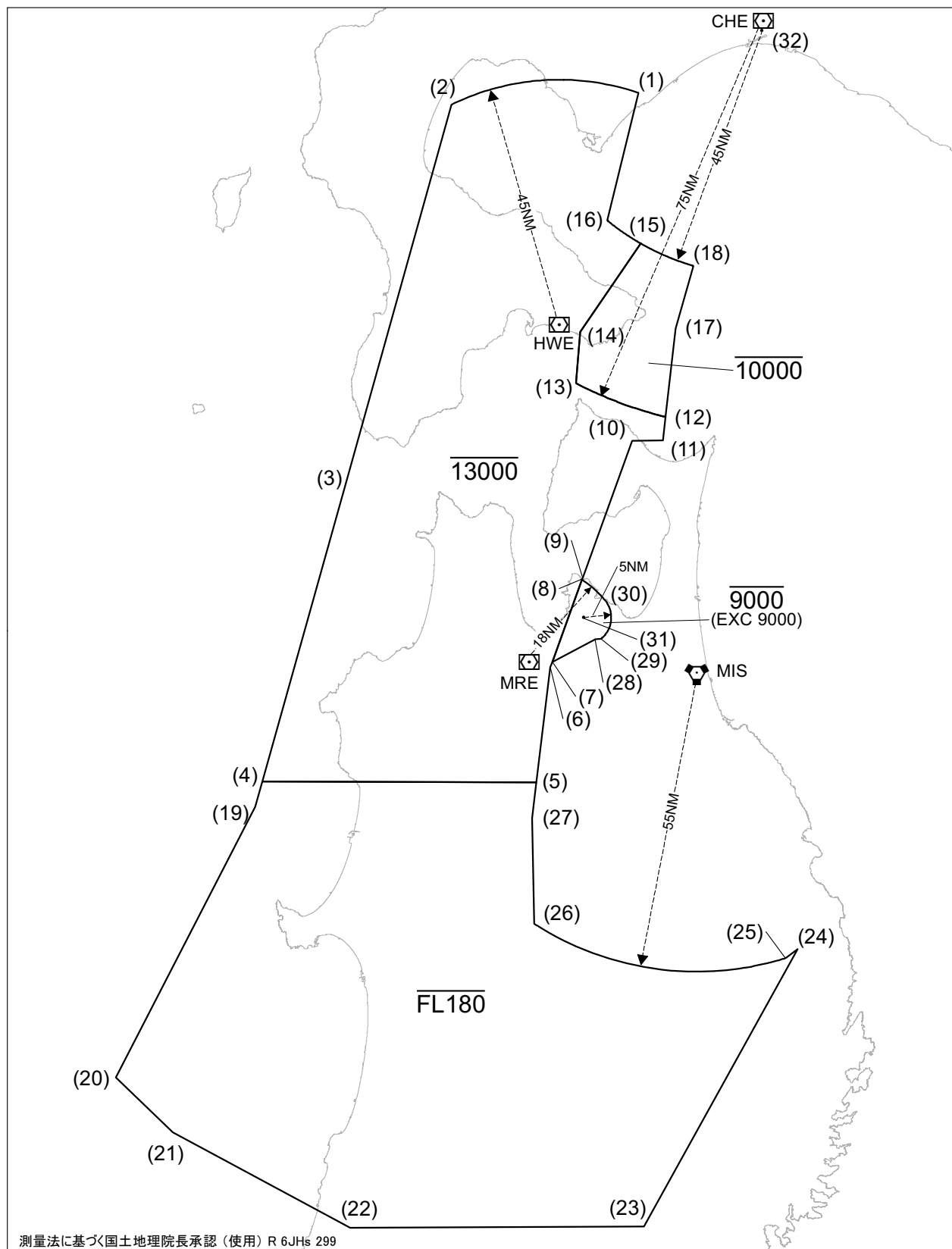
RJSK AD 2.16 HELICOPTER LANDING AREA

1	Coordinates TLOF or THR of FATO Geoid undulation	HELIPAD P-2: 393648.31N/1401329.22E, Nil HELIPAD P-3: 393652.49N/1401242.58E, Nil HELIPAD P-4: 393654.02N/1401225.50E, Nil
2	TLOF and/or FATO elevation	HELIPAD P-2: 302ft HELIPAD P-3: 290ft HELIPAD P-4: 285ft
3	TLOF and FATO area dimensions, surface, strength, marking	TLOF and FATO area dimensions: 37m×22m Surface: Asphalt Strength: 23ton Marking: TDZ, See AIP AD2.24 AD chart
4	True BRG of FATO	096.99°/276.99°
5	Declared distance available	Nil
6	APCH and FATO lighting	Nil
7	Remarks	HELIPAD P-2: • MAX helicopter type: H47 • only available for operators who obtain the prior permission • daytime use only HELIPAD P-3, HELIPAD P-4: • MAX helicopter type: H47 • only available to specific operators, other operators are required to obtain the prior permission • daytime use only

RJSK AD 2.17 ATS AIRSPACE

Designation and lateral limits		Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
1		2	3	4	6
Akita CTR	Area within a radius of 5nm(9km) of Akita ARP (39° 37'N 140° 13'E)	3,000 or below	D	Akita Tower En	
Shirakami ACA	See attached chart		E	Shirakami APP En	

白神進入管制区
Shirakami Approach Control Area



(1) 422858N 1410950E	(11) 412500N 1411512E	(21) 391725N 1391738E	(31) 405230N 1405541E
(2) 422654N 1402321E	(12) 412920N 1411553E	(22) 390010N 1395948E	(32) 424008N 1414046E
(3) 411552N 1395713E	(13) 413540N 1405357E	(23) 390021N 1410906E	
(4) 402212N 1393805E	(14) 414503N 1405508E	(24) 395103N 1414622E	
(5) 402212N 1404403E	(15) 420117N 1411004E	(25) 394929N 1414329E	
(6) 404323N 1404728E	(16) 420533N 1410152E	(26) 395611N 1404325E	
(7) 404419N 1404755E	(17) 414537N 1411830E	(27) 401534N 1404259E	
(8) 405927N 1405513E	(18) 415704N 1412303E	(28) 404832N 1405824E	
(9) 410000N 1405529E	(19) 401728N 1393625E	(29) 404834N 1405945E	
(10) 412500N 1410740E	(20) 392719N 1390356E	(30) 405524N 1410102E	

RJSK AD 2.18 ATS COMMUNICATION FACILITIES

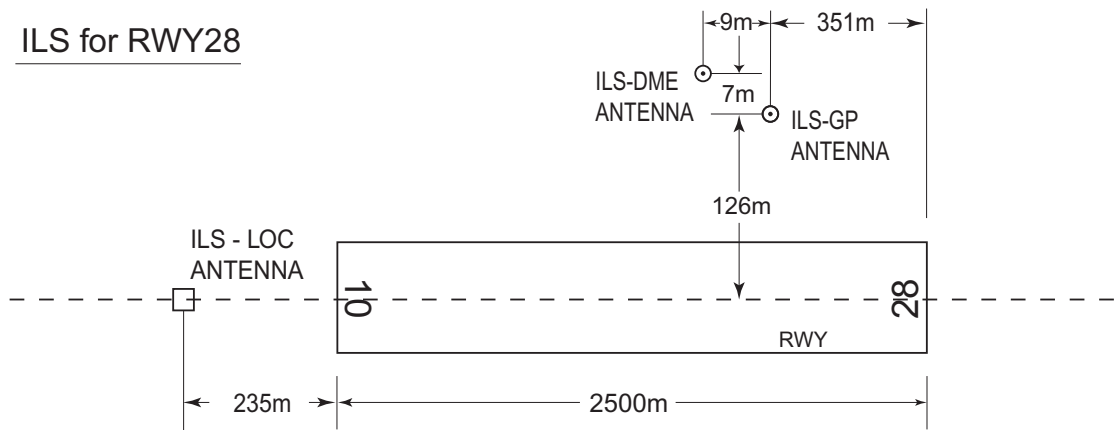
Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Shirakami Approach	119.25MHz 315.3MHz 120.65MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
TWR	Akita Tower	118.6MHz(1) 126.2MHz 243.0MHz(E)	2200 - 1300	(1) Primary

RJSK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (8°W/2013)	UWE	110.65MHz	H24	393701.66N 1401112.97E		
DME	UWE	1130MHz (CH-43Y)	H24	393701.66N 1401112.97E	286ft	
ILS-LOC 28	IUW	108.9MHZ	2200-1300	393701.85N 1401205.32E		LOC: 235m(771ft) away FM RWY 10 THR. BRG (MAG) 285.60°
ILS-GP 28		329.3MHZ	2200-1300	393656.99N 1401345.24E		GP: 351m(1152ft) inside FM RWY 28 THR, 126m(413ft) N of RCL. GP angle 3.0° HGT of ILS Ref datum 16.5m(54ft).
ILS-DME 28	IUW	987MHZ (CH-26X)	2200-1300	393657.33N 1401344.53E	324ft	DME: 360m(1181ft) inside FM RWY 28 THR, 133m(436ft) N of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

AKITA AP

ILS for RWY28



REMARKS : 1 LOC beam BRG(MAG) 285.60°
2 HGT of ILS REF datum 16.5m(54ft)
3 GP Angle 3.0°
4 ELEV of ILS-DME 98.8m(324ft)

RJSK AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

Nil

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Nil

7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

RJSK AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJSK AD 2.22 FLIGHT PROCEDURES**1. TAKE OFF MINIMA**

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP FILED	10	A,B,C,D	-	400m	-	400m	-	500m
	28	A,B,C,D	400m	400m	400m	400m	-	500m
OTHER	10	A,B,C,D	AVBL LDG MINIMA					
	28	A,B,C,D						

2. Lost communication procedures for arrival aircraft under radar navigational guidance

If radio communications with Shirakami Approach are lost for 1 minute, squawk Mode A/3 Code 7600 and;

- (I) 1. Contact Akita Tower.
 2. If unable, proceed in accordance with visual flight rules.
 3. If unable, proceed to YUWA VOR/DME at last assigned altitude or 4,000 feet whichever is higher,
 and execute instrument approach.
 (II) Procedures other than above will be issued when situation requires.

RJSK AD 2.23 ADDITIONAL INFORMATION

HELIPAD Location: On PARL TWY

HELIPAD P2 at the intersection with TWY T2

HELIPAD P3 on TWY P3 at the intersection with AK TWY

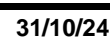
HELIPAD P4 on TWY P4 at the point of intersection with JSDF-A TWY

RJSK AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
 Standard Departure Chart - Instrument (YUWA REVERSAL)
 Standard Departure Chart - Instrument (MUTSU-RNAV)
 Standard Departure Chart - Instrument (USYU-RNAV)
 Standard Departure Chart - Instrument (NIIGATA-RNAV)
 Standard Arrival Chart - Instrument (MAGGY,YAYOI,CHOKA WEST-RNAV)
 Standard Arrival Chart - Instrument (MAGGY,YAYOI,CHOKA EAST-RNAV)
 Instrument Approach Chart (ILS Z or LOC Z RWY28)
 Instrument Approach Chart (ILS Y or LOC Y RWY28)
 Instrument Approach Chart (VOR RWY28)
 Instrument Approach Chart (VOR RWY10)
 Instrument Approach Chart (RNP Z RWY10)
 Instrument Approach Chart (RNP Y RWY10 (AR))
 Instrument Approach Chart (RNP Z RWY28)
 Instrument Approach Chart (RNP Y RWY28 (AR))
 Other Chart (Visual REP)
 Other Chart (MVA CHART)

INTENTIONALLY LEFT BLANK

AD CHART



INTENTIONALLY LEFT BLANK

STANDARD DEPARTURE CHART -INSTRUMENT

RJSK / AKITA

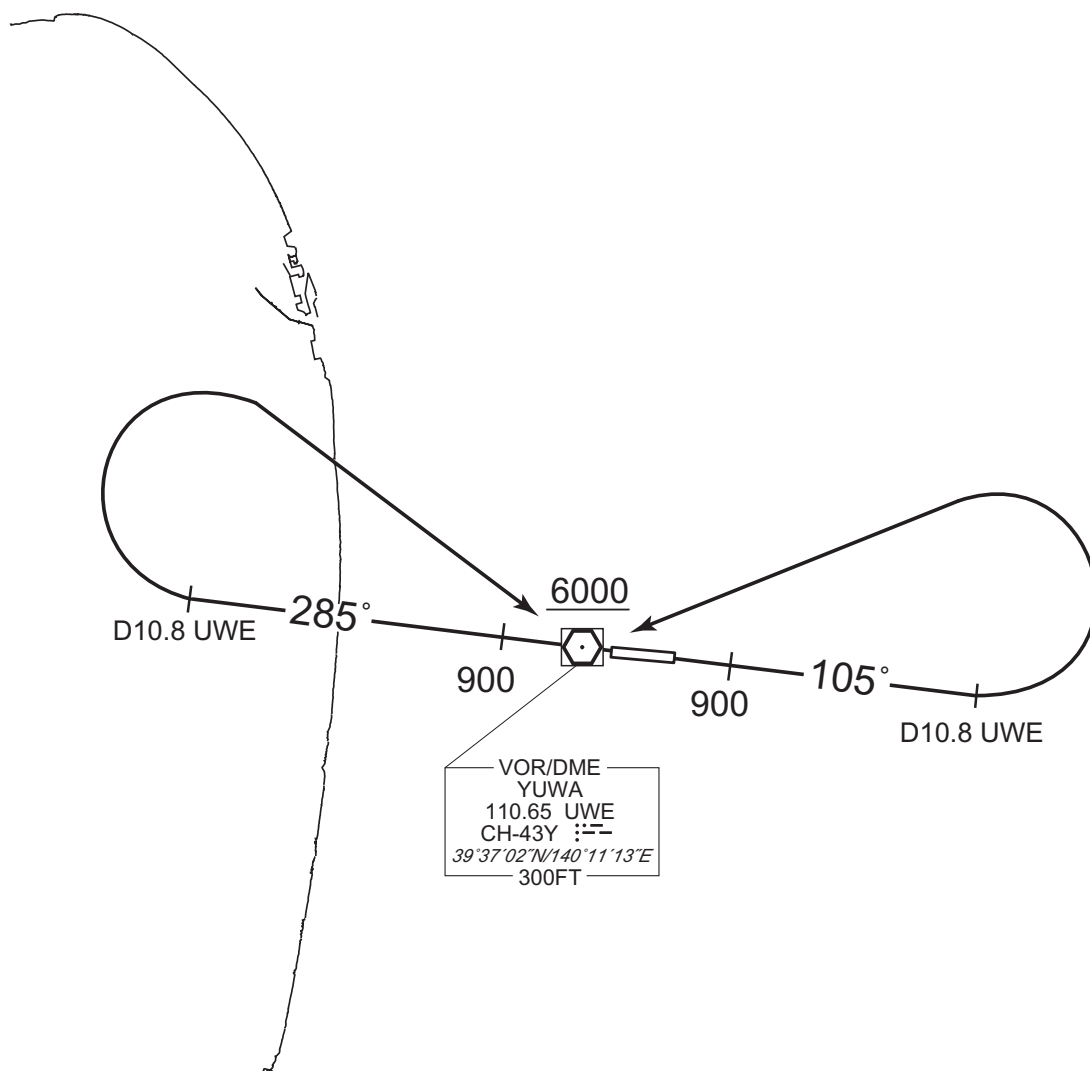
SID

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 : Description of latitude and longitude.

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

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)	Vertical Angle	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)	Vertical Angle	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

Waypoint Coordinates

Waypoint Identifier	Coordinates
SUGUT	394336.3N / 1402441.6E
IRNOG	402338.0N / 1403036.4E
NUPLI	394822.1N / 1401056.5E
MRE	404419.7N / 1404219.2E

CHANGE : Waypoint Coordinates added.

STANDARD DEPARTURE CHART -INSTRUMENT

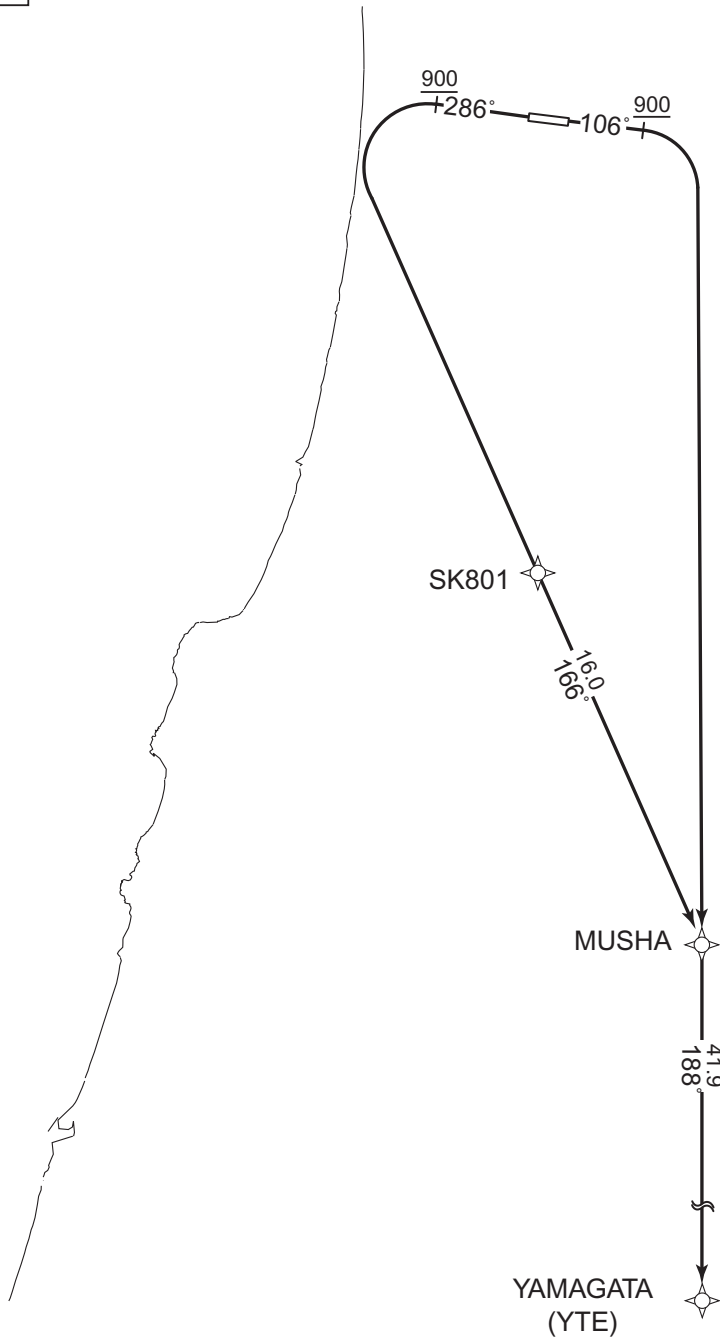
RJSK / AKITA

USYU TWO DEPARTURE

RNAV SID
RNP1

Note GNSS required.

VAR 9°W



RWY10 : Climb on HDG 106° at or above 900FT, turn right direct to MUSHA, to YTE.
RWY28 : Climb on HDG 286° at or above 900FT, turn left direct to SK801, to MUSHA, to YTE.

CHANGE : Description of latitude and longitude.

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

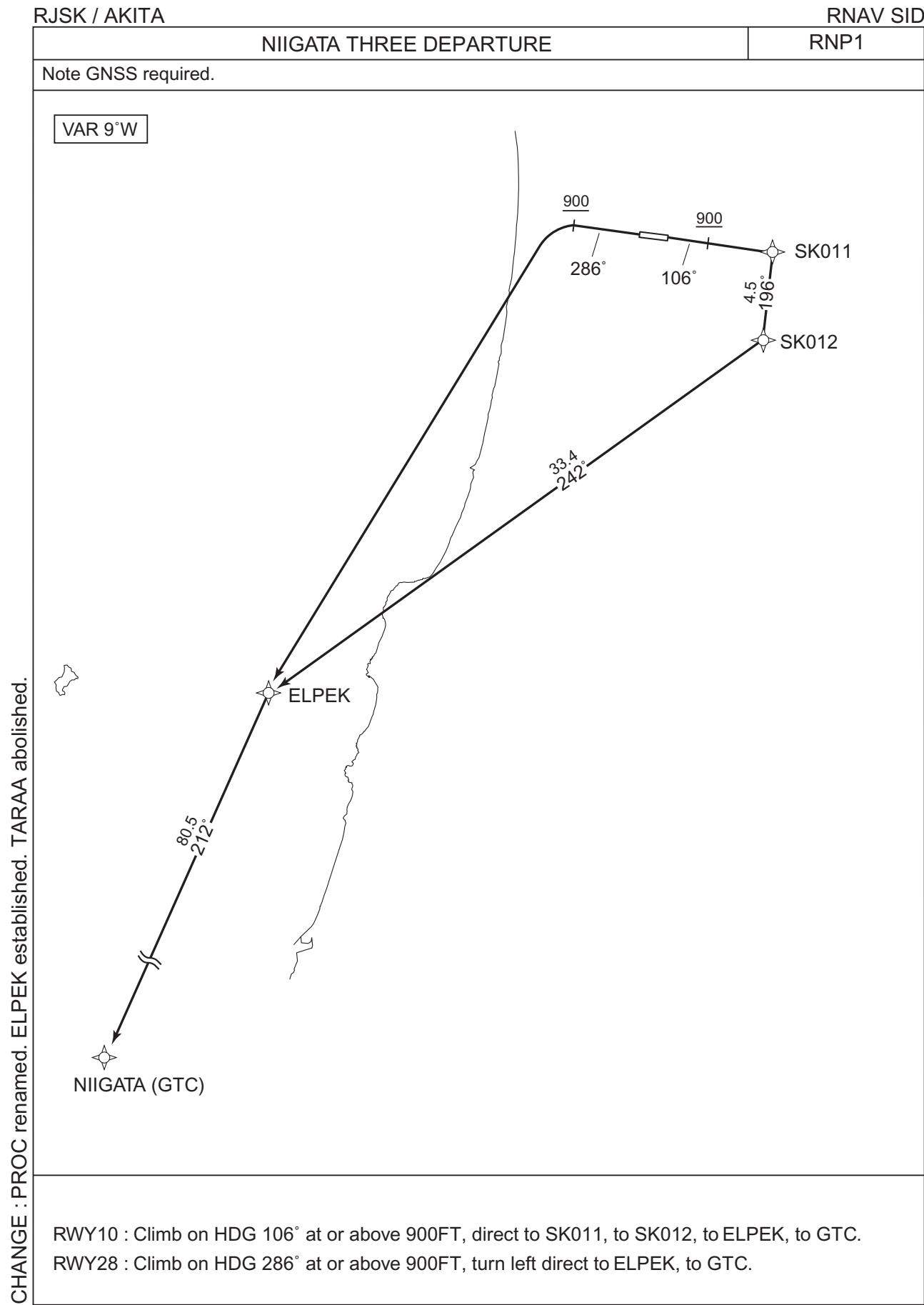
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	286 (276.6)	-8.9	-	-	+900	-	-	RNP1
002	DF	SK801	-	-	-8.9	-	L	-	-	-	RNP1
003	TF	MUSHA	-	166 (157.1)	-8.9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

Waypoint Coordinates

Waypoint Identifier	Coordinates
SK801	391957.0N / 1401250.5E
MUSHA	390511.0N / 1402052.2E
YTE	382319.0N / 1402128.6E

CHANGE : Waypoint Coordinates added.

STANDARD DEPARTURE CHART -INSTRUMENT



STANDARD DEPARTURE CHART -INSTRUMENT

RJSK / AKITA

RNAV SID

NIIGATA 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	-	-	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	ELPEK	-	242 (233.5)	-8.9	33.4	-	-	-	-	RNP1
005	TF	GTC	-	212 (203.0)	-8.9	80.5	-	-	-	-	RNP1

RWY28

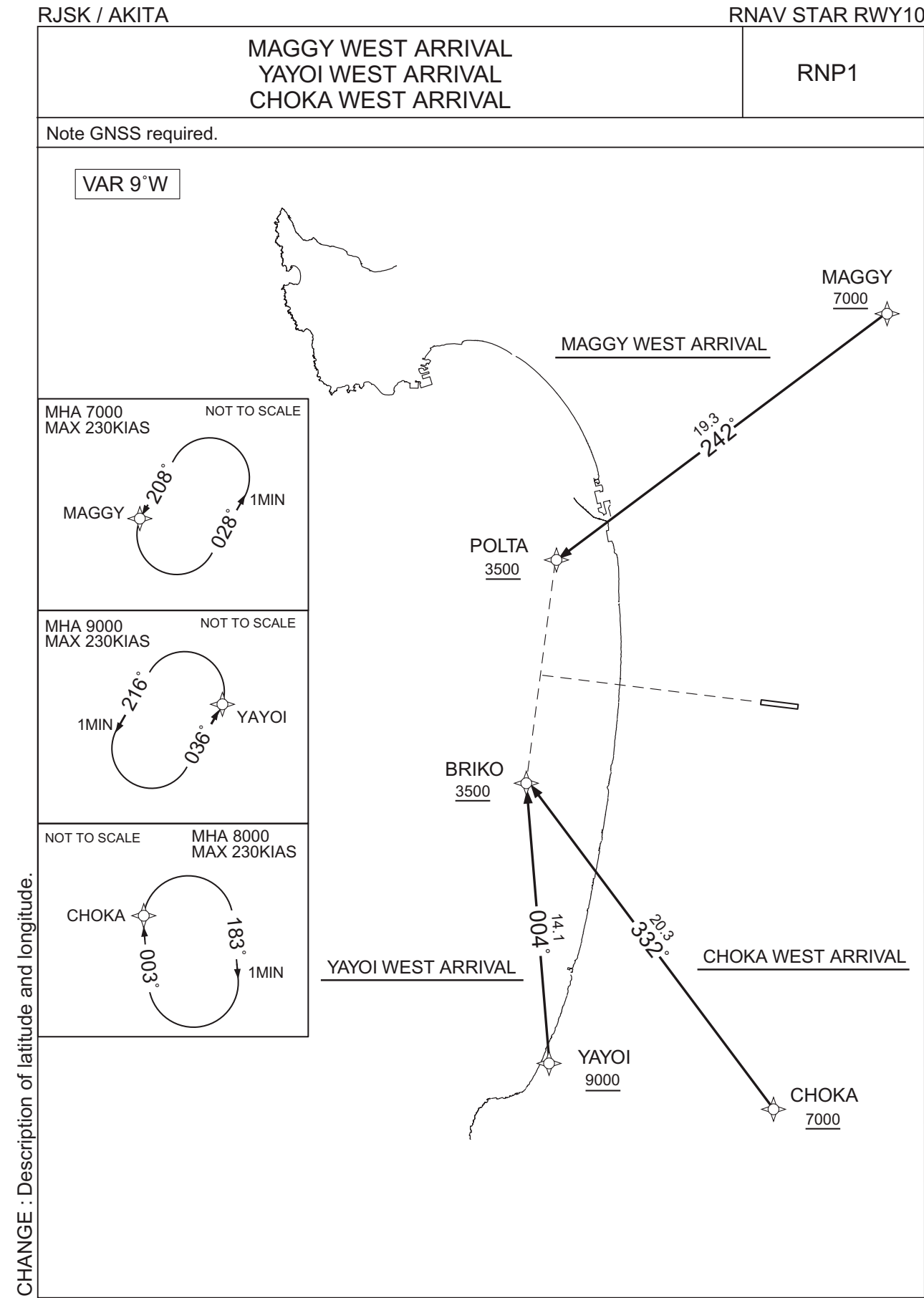
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	286 (276.6)	-8.9	-	-	+900	-	-	RNP1
002	DF	ELPEK	-	-	-8.9	-	-	-	-	-	RNP1
003	TF	GTC	-	212 (203.0)	-8.9	80.5	-	-	-	-	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates
SK011	393608.1N / 1402202.4E
SK012	393139.6N / 1402121.7E
ELPEK	391141.2N / 1394642.1E
GTC	375729.9N / 1390653.6E

CHANGE : PROC renamed. ELPEK established. TARA abolished. Waypoint Coordinates added.

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

RJSK / AKITA

RNAV STAR RWY10

Waypoint Coordinates

Waypoint Identifier	Coordinates
MAGGY	395456.6N / 1401926.8E
POLTA	394311.1N / 1395928.5E
YAYOI	391910.1N / 1395933.8E
CHOKA	391709.5N / 1401401.1E
BRIKO	393314.2N / 1395801.2E

CHANGE : Waypoint Coordinates added.

STANDARD ARRIVAL CHART-INSTRUMENT

RJSK / AKITA

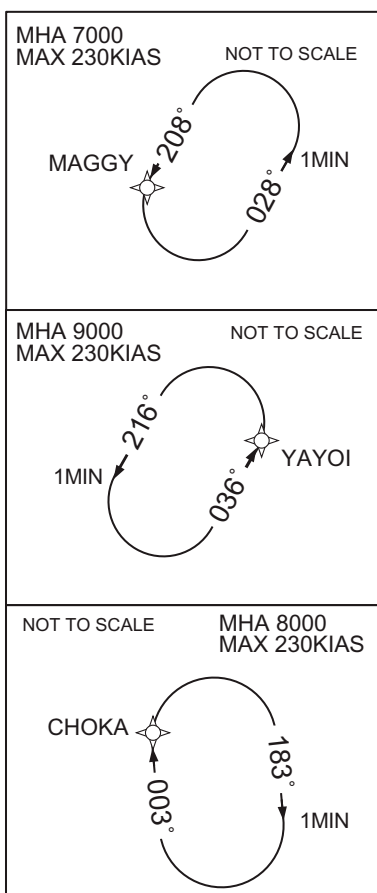
RNAV STAR RWY28

MAGGY EAST ARRIVAL
YAYOI EAST ARRIVAL
CHOKA EAST ARRIVAL

RNP1

Note GNSS required.

VAR 9°W

MAGGY EAST ARRIVALMAGGY
7000

171°

119°

GAKKO
5000BIJIN
4200YAYOI EAST ARRIVALYAYOI
9000

22.5°

067°

15.9°

039°

CHOKA EAST ARRIVALCHOKA
7000

CHANGE : Description of latitude and longitude.

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

STANDARD ARRIVAL CHART-INSTRUMENT

RJSK / AKITA

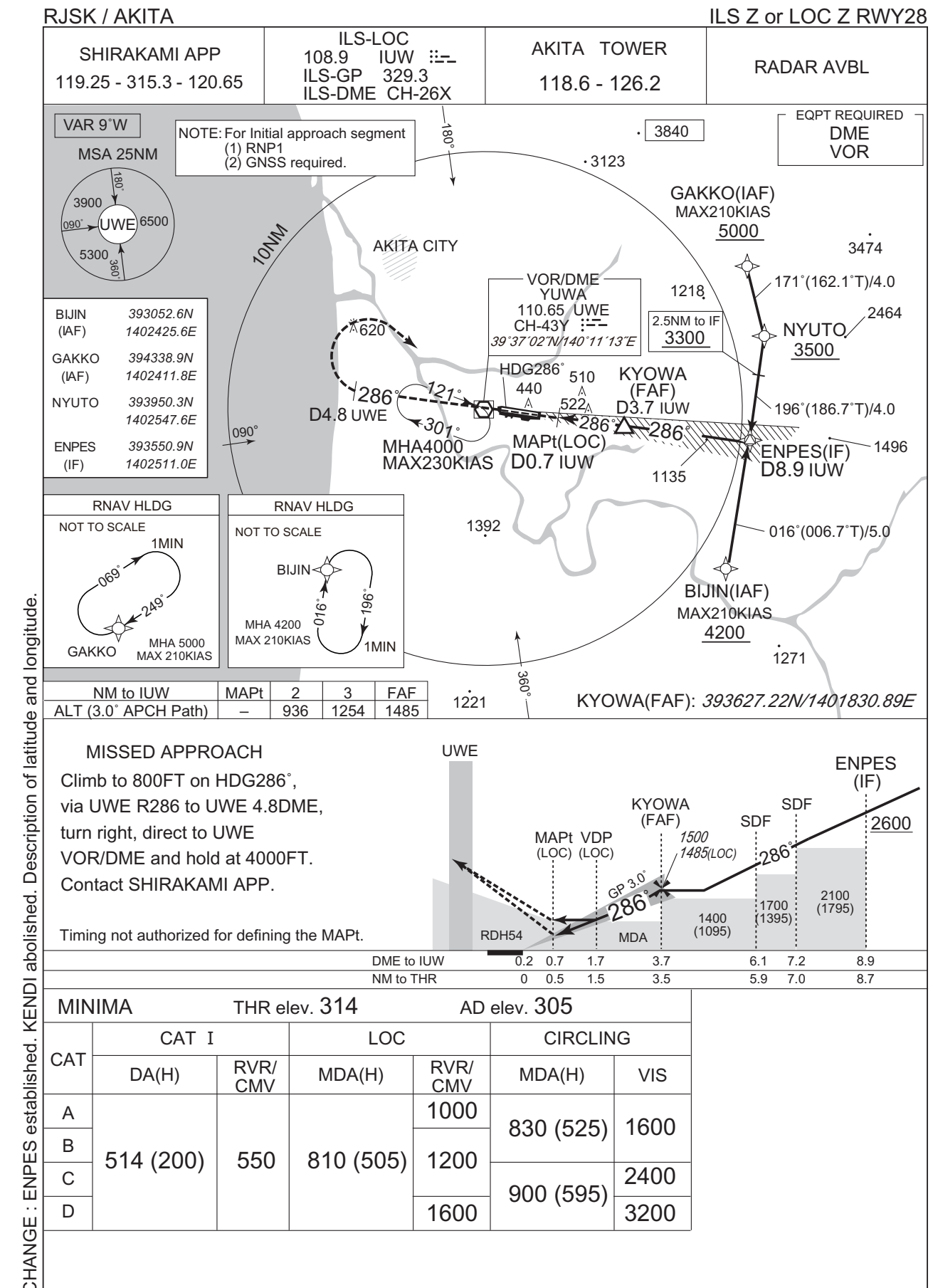
RNAV STAR RWY28

Waypoint Coordinates

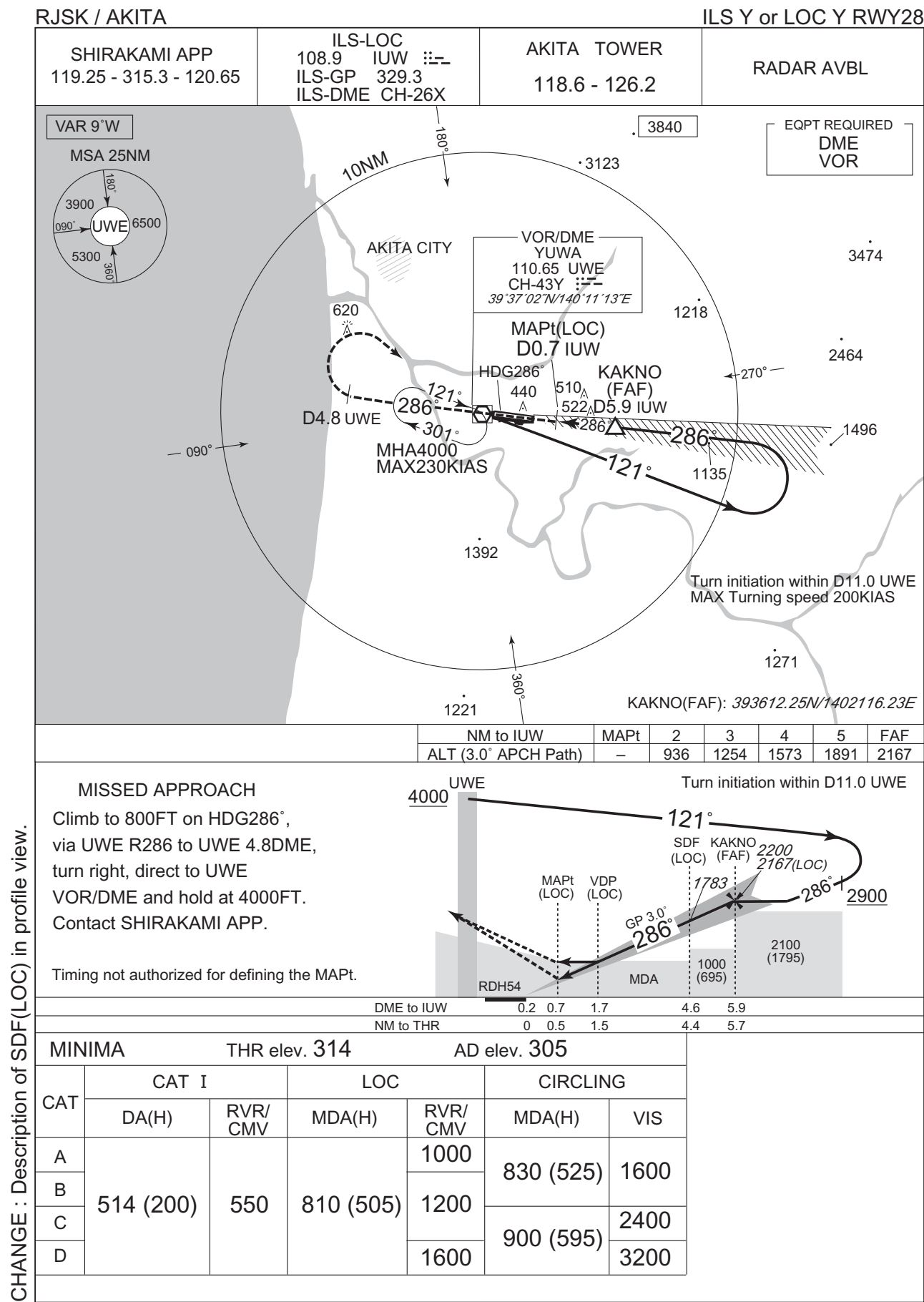
Waypoint Identifier	Coordinates
MAGGY	395456.6N / 1401926.8E
GAKKO	394338.9N / 1402411.8E
YAYOI	391910.1N / 1395933.8E
CHOKA	391709.5N / 1401401.1E
BIJIN	393052.6N / 1402425.6E

CHANGE : Waypoint Coordinates added.

INSTRUMENT APPROACH CHART



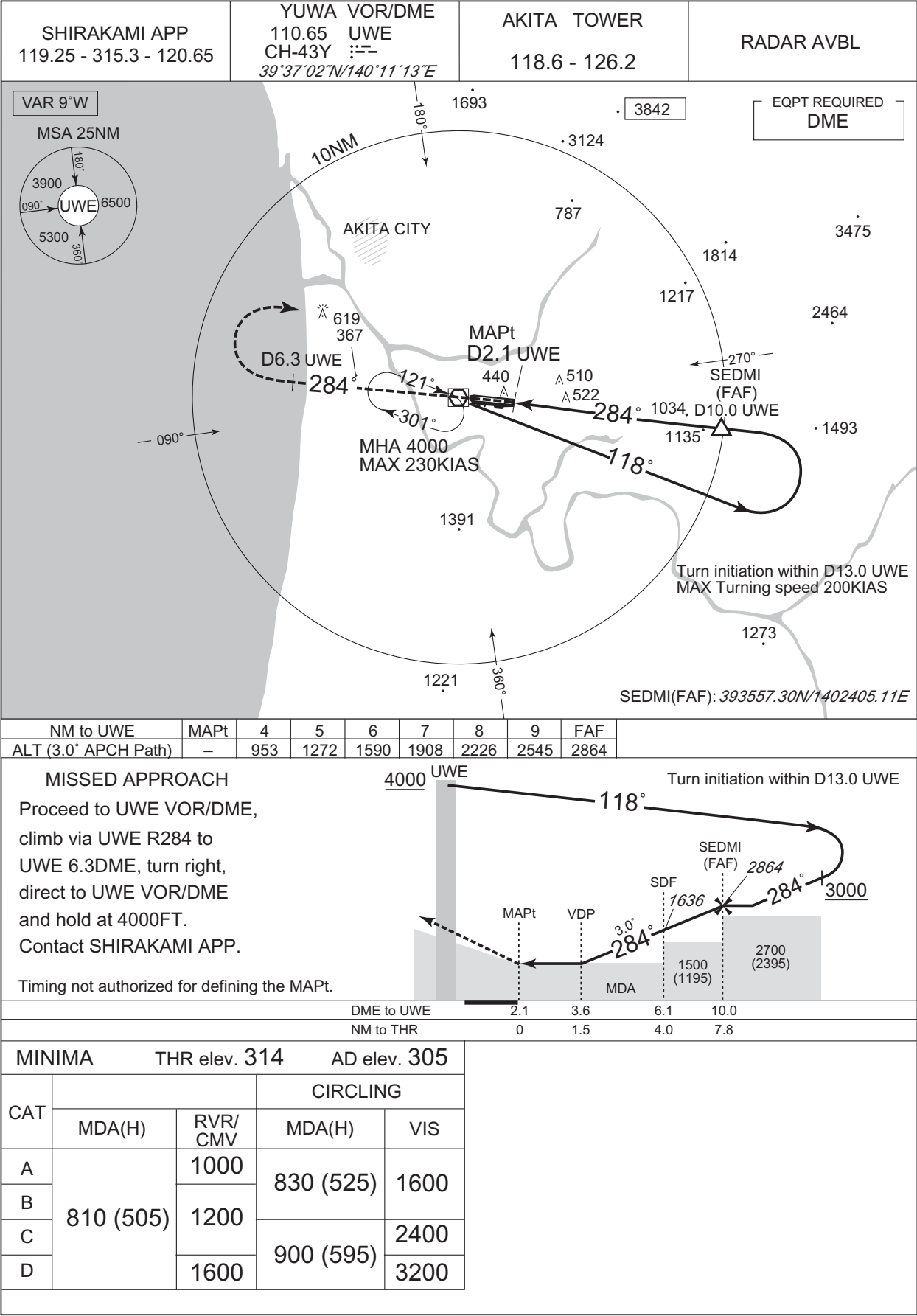
INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJSK / AKITA

VOR RWY28



RJSK / AKITA

SHIRAKAMI APP

119.25 - 315.3 - 120.65

YUWA VOR/DME

110.65 UWE

CH-43Y

39°37'02"N/140°11'13"E

AKITA TOWER

118.6 - 126.2

RADAR AVBL

VAR 9°W

MSA 25NM

3900

6500

5300

360

090°

UWE

180°

EQPT REQUIRED

DME

10NM

180°

1693

3124

3842

787

1814

1217

3475

2464

1493

1273

1221

1391

1034

1135

270°

510

522

D8.6 UWE

110°

290°

MAPt 440

MHA 4000

MAX 230KIAS

360°

263°

100°

090°

AKITA CITY

619

367

YAESU (FAF)

D5.0 UWE

Turn initiation within D11.0 UWE

MAX Turning speed 200KIAS

YAESU(FAF): 393709.77N/1400444.76E

NM to UWE	FAF	4	3	2	1	MAPt
ALT (3.0° APCH Path)	2185	1866	1548	1229	911	-

1900

263°

100°

2185

YAESU (FAF)

1200 (911)

960 (671)

MDA

1548

VDP

MAPt

4000

UWE

Turn initiation within D11.0 UWE

MISSED APPROACH

Climb via UWE R100 to UWE 8.6DME, turn right, direct to UWE VOR/DME and hold at 4000FT.

Contact SHIRAKAMI APP.

Timing not authorized for defining the MAPt.

10.8

11.6

5.0

5.8

3.0

3.8

0.1

0.9

0

DME to UWE

NM to THR

MINIMA

THR elev. 289

AD elev. 305

CAT

MDA(H)

CMV

CIRCLING

MDA(H)

VIS

A

680 (391)

1200

830 (525)

1600

B

680 (391)

1300

900 (595)

2400

C

680 (391)

1400

900 (595)

2400

D

680 (391)

1600

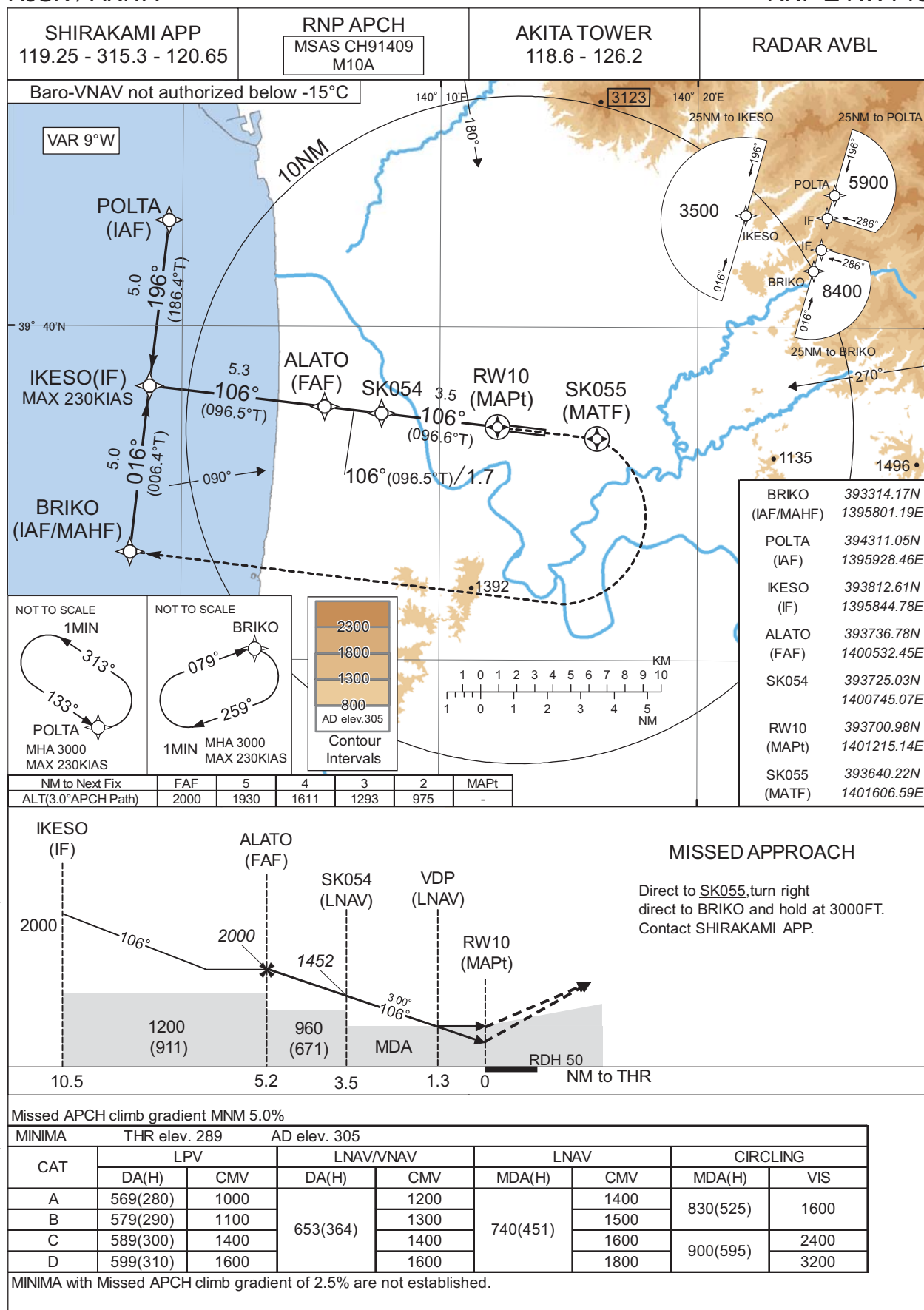
900 (595)

3200

CHANGE : PROC renamed. VAR.

RJSK / AKITA

RNP Z RWY10



CHANGE : IKESO, ALATO established. KILLY, TAMPO abolished.

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		

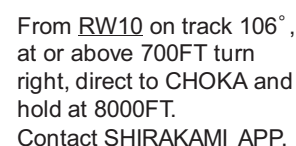
Required additional data

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

CHANGE : FAS DATA BLOCK; Required additional data established.

RJSK / AKITA

RNP Y RWY10(AR)



Authorization Required

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

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

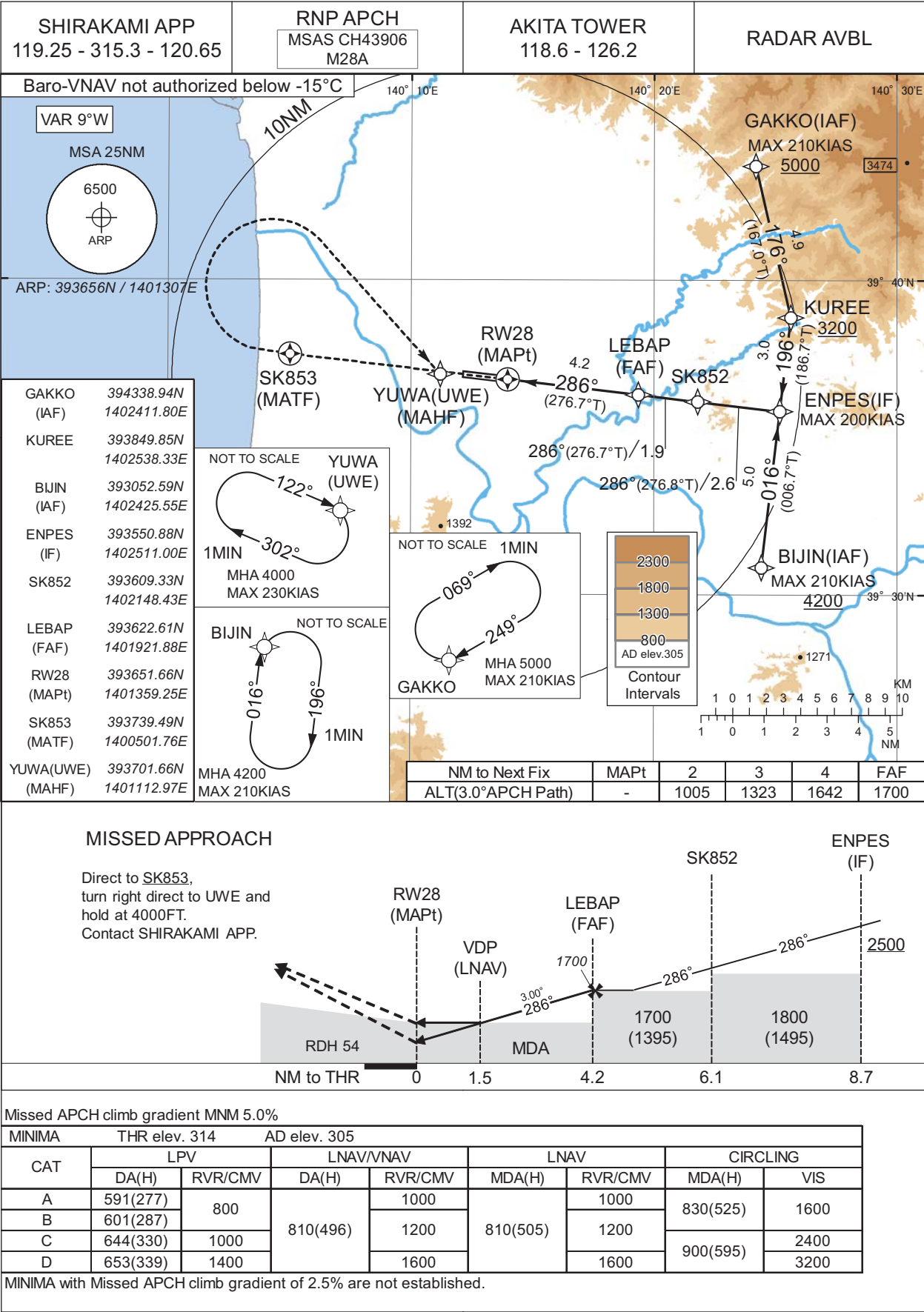
Waypoint Coordinates

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		

INSTRUMENT APPROACH CHART

RJSK / AKITA

RNP Z RWY28



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

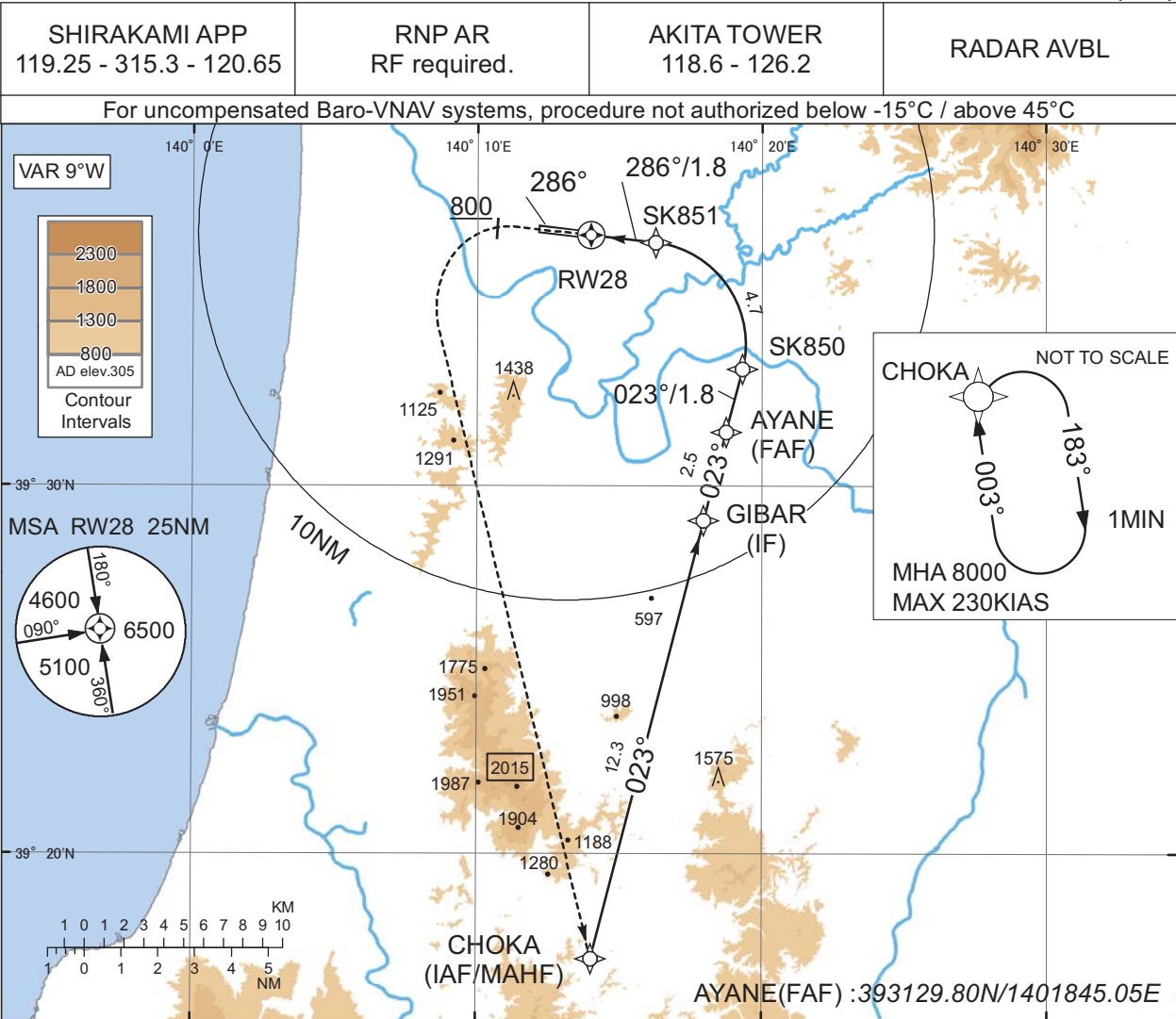
LTP/FTP orthometric height	95.6
----------------------------	------

CHANGE : New PROC.

INSTRUMENT APPROACH CHART

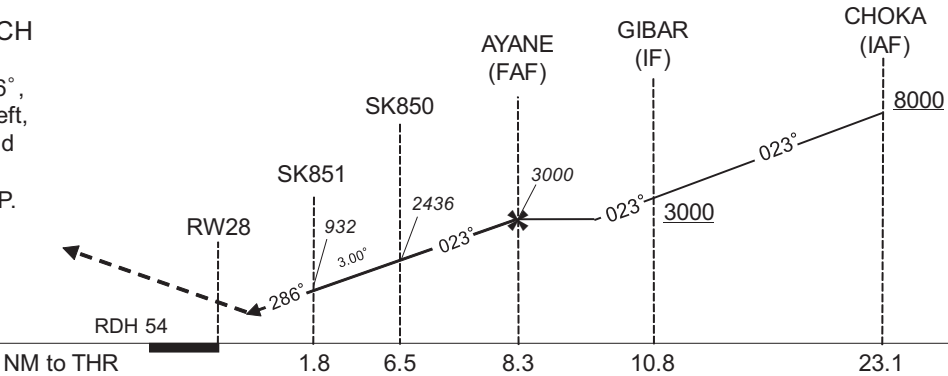
RJSK / AKITA

RNP Y RWY28(AR)



MISSED APPROACH

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

Authorization Required

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

CHANGE : PROC renamed. HLDG pattern for using NAVAID abolished.

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

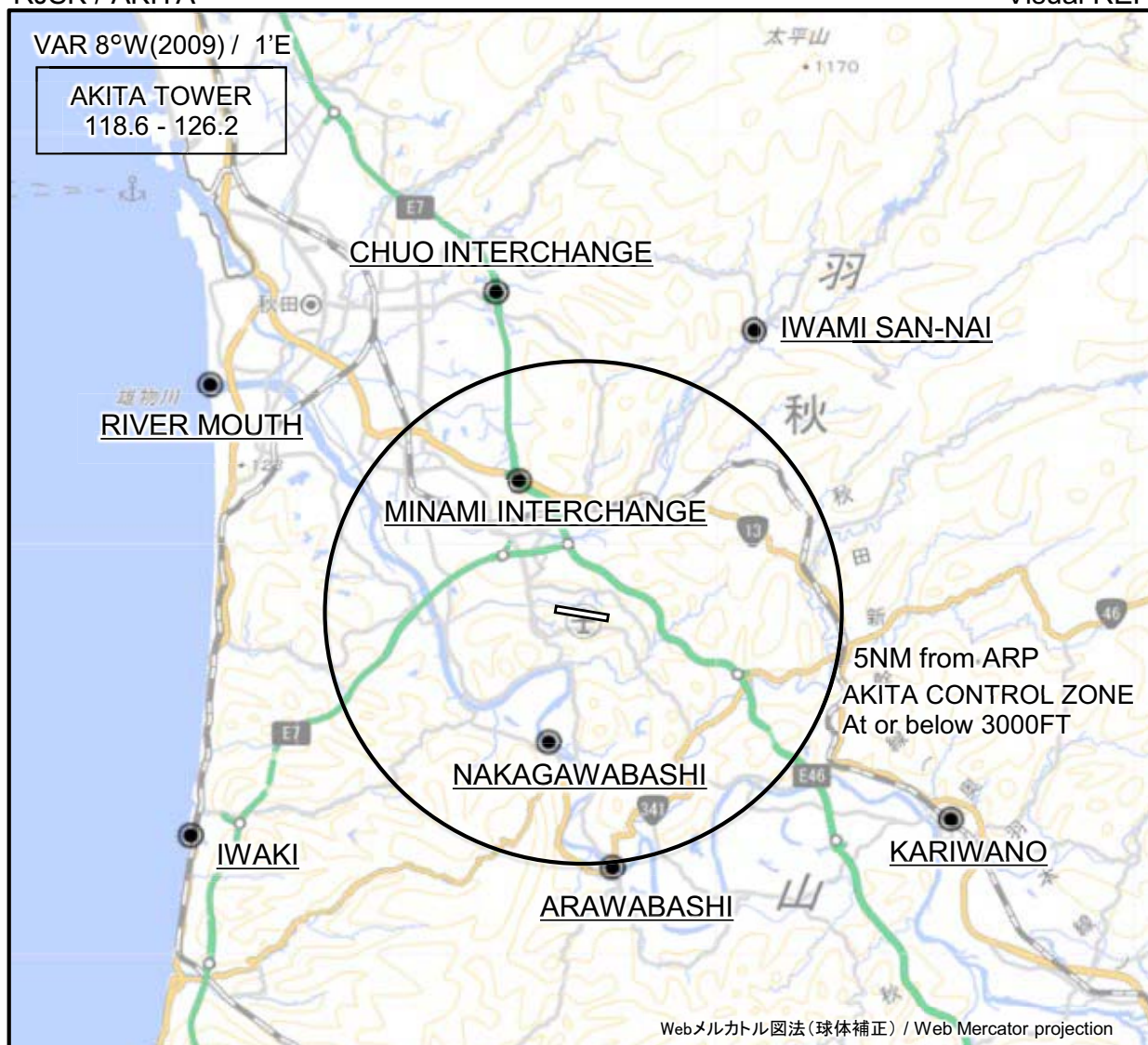
Waypoint Coordinates

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

