

AD 2 AERODROMES

RJCK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJCK - KUSHIRO

RJCK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	430227N/1441135E 158°/1.25km from RWY 17 THR
2	Direction and distance from (city)	9nm WNW from Kushiro city
3	Elevation/ Reference temperature	311ft / 23°C(2004-2008)
4	Geoid undulation at AD ELEV PSN	Nil
5	MAG VAR/ Annual change	9° W(2009) / 2'E
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Hokkaido Airports Co.,Ltd. Kushiro Airport Office Post:2-260 Tsuruoka, Kushiro-city, Hokkaido Tel:0154-57-8880 Fax:0154-57-8881
7	Types of traffic permitted(IFR/VFR)	IFR/VFR
8	Remarks	Nil

RJCK AD 2.3 OPERATIONAL HOURS

1	AD Administration	2300 - 1200
2	Customs and immigration	On request Customs: 0154-22-3730 Immigration: 0154-22-2430
3	Health and sanitation	On request Quarantine(human): 0154-23-3340 Quarantine(animal): 0123-24-6080 Quarantine(plant): 0154-22-4291
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (NEW CHITOSE)
7	ATS	2300 - 1200
8	Fuelling	2300 - 1100
9	Handling	2245 - 1000
10	Security	2300 - 1130
11	De-icing	Nil
12	Remarks	Nil

RJCK AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	All the modern institutions that deal with the weight thing to B767 type.
2	Fuel/ oil types	JET A-1
3	Fuelling facilities/ capacity	Fuel Truck Refuelling
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJCK AD 2.5 PASSENGER FACILITIES

1	Hotels	Nil
2	Restaurants	At Airport
3	Transportation	Buses, Taxi
4	Medical facilities	Hospital in Kushiro city 10km
5	Bank and Post Office	Nil
6	Tourist Office	Nil
7	Remarks	Nil

RJCK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 8
2	Rescue equipment	3 Chemical fire fighting trucks, 1 Water-supply truck, 1 Lighting power supply truck, 1 Emergency medical equipments conveyance truck.
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

RJCK AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow remove equipments: 4 Snow plows, 2 Rotaries, 4 Snow sweeper, 1 Urea sprinkler equipment
2	Clearance priorities	(1) RWY 17/35, TWY T1 and T7, P1-P6, APRON (2) TWY T2-T6 APRON
3	Remarks	Seasonal availability: All seasons

RJCK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Spot NR1, 2, 3, 5, 6 and 7 Surface : Concrete Strength: PCN 74/R/B/X/T
2	Taxiway width, surface and strength	WIDTH & STRENGTH T1,T7,P6 : 26.5m PCN 106/F/C/X/T T2,T3,T4,T5,T6 : 30m PCN 106/F/C/X/T P1,P2,P3,P4,P5 : 23m PCN 106/F/C/X/T
3	ACL and elevation	Not Available
4	VOR checkpoints	Not Available
5	INS checkpoints	(Spot NR) 1: 430247.60N1441141.22E 2: 430246.01N1441142.06E 3: 430244.19N1441143.01E 5: 430242.23N1441144.04E 6: 430240.11N1441145.15E 7: 430237.35N1441145.22E
6	Remarks	Nil

RJCK 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	Aircraft stand ID sign:Spot NR1, 2, 3, 5, 6, 7, A, B
2	RWY and TWY markings and LGT	RWY:17/35 (Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY17), WBAR(RWY17), RWY DIST marker LGT TWY:T1-T7 (Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction marking (LGT) TWY edge LGT, TWY CL LGT, Stop bar LGT, RWY guard LGT, Taxiing guidance sign TWY:P1-P6 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign
3	Stop bars	Stop bar LGT: TWY T1 - T7 Stop bar LGT operations; 1) Stop bar LGT are installed at each taxi-holding position associated with RWY 17/35. 2) Stop bar LGT will be operated when the visibility or the lowest RVR of RWY 17/35 is at or less than 600m. 3) Stop bar LGT on TWY T1 and T7 are controlled individually by ATC. 4) Stop bar LGT on TWY T2 through T6 are not controlled individually by ATC. 5) During the period stop bar LGT are operated, TWY T2 through T6 are not available for the departing aircraft.
4	Remarks	(Marking) Overrun area (LGT) Apron flood LGT

RJCK AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

In Area3 To be developed

RJCK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	NEW CHITOSE
2	Hours of service MET Office outside hours	H24 (NEW CHITOSE)
3	Office responsible for TAF preparation Periods of validity	NEW CHITOSE 30 Hours
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at NEW CHITOSE
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

RJCK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) 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
17	158.96°	2500×45	PCN 106/F/C/X/T Asphalt Concrete	430305.30N1441114.92E	THR ELEV:322.5ft TDZ ELEV:325.1ft
35	338.96°	2500×45		430149.68N1441154.58E	THR ELEV:290ft
Slope of RWY		Strip Dimensions(M)		RESA(Overrun) Dimensions(M)	Remarks
7		10		11	14
See AD 2.24 AD Chart		2620×300		192×(MNM:95 MAX:283)	
		2620×300		90×(MNM:90 MAX:300)* *For detail, ask airport administrator	
				RWY Grooving 2500×45m	

RJCK AD 2.13 DECLARED DISTANCES

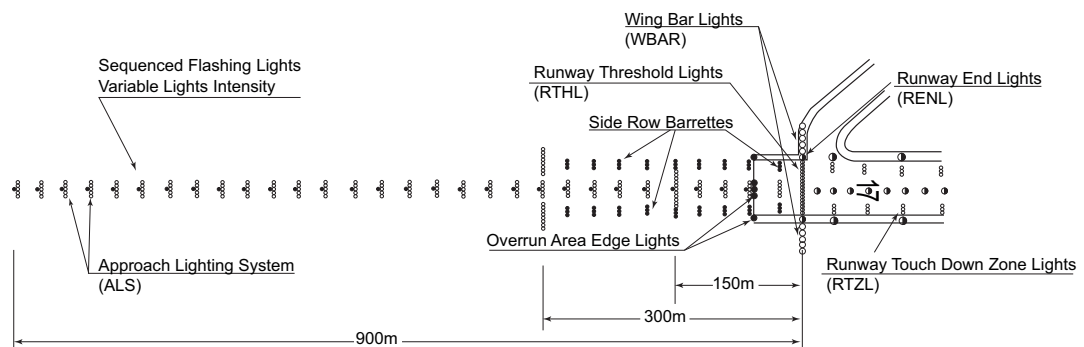
RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
17	2500	2500	2500	2500	Nil
35	2500	2500	2500	2500	Nil

RJCK 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
17	PALS (CAT III) 900m LIH	Green Green	PAPI 3.0°/LEFT 400m 66ft	900m	2500m 15m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil(*1)
35	SALS 420m LIH	Green -	PAPI 3.0°/LEFT 425m 74ft	Nil	2500m 15m Coded color (White/Red) LIH	2500m 60m Coded color (White/Yellow) LIH	Red	Nil(*1)
Remarks								
10								
Overrun area edge LGT(LEN:60m Color:Red) (*1) RWY THR ID LGT for RWY 35 THR (Color: White)								

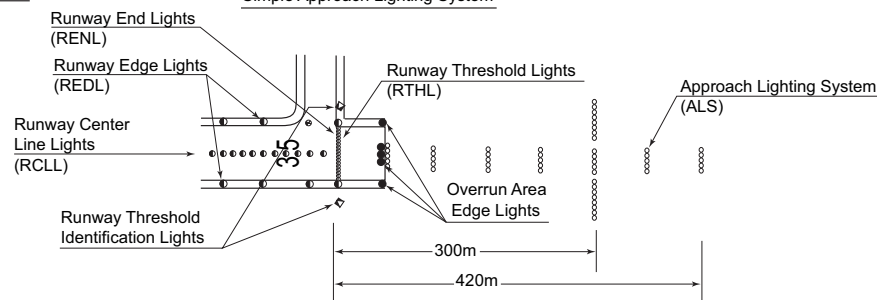
RUNWAY 17

Precision Approach Lighting System



RUNWAY 35

Simple Approach Lighting System



RJCK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 430247N/1441143E, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometer : RWY 17 : 295.5m from RWY 17 THR, LGTD RWY 35 : 341.1m from RWY 35 THR, LGTD
3	TWY edge and centerline lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 1sec: PALS, REDL, RENL, RTHL, WBAR, RCLL, RTZL, Overrun area edge LGT, Stop bar LGT, RWY guard LGT, TWY centerline LGT Within 15sec: other LGT
5	Remarks	WDI LGT

RJCK AD 2.16 HELICOPTER LANDING AREA

Nil

RJCK 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
Kushiro CTR	Area within a radius of 9km(5NM) of ARP (430227N/1441135E)	3,000 or below	D	Kushiro Tower En	
Hidaka ACA	See RJEC attached chart		E	Hidaka APP En	

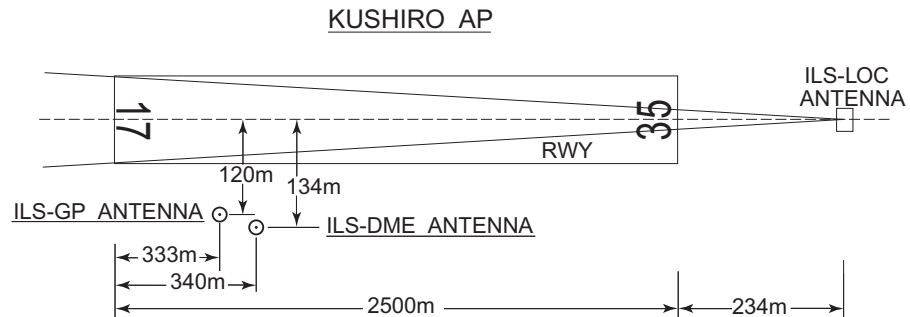
RJCK AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Hidaka Approach	128.325MHz 246.1MHz 134.55MHz	2230 - 1200	
TWR	Kushiro Tower	118.05MHz(1) 126.2MHz	2300 - 1200	(1)Primary

RJCK 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 (9°W/2022)	TCE	111.0MHz	H24	430209.78N/1441202.72E		
DME	TCE	1008MHz (CH-47X)	H24	430209.78N/1441202.72E	342ft	DME unusable: 300°-310° beyond 35NM BLW 5000ft. 340°-350° beyond 35NM BLW 7000ft.
ILS-LOC 17	IKS	108.9MHz	2300 - 1200	430142.60N/1441158.28E		LOC: 234m (768ft) away FM RWY 35 THR, BRG (MAG) 168.15°
ILS-GP 17	-	329.3MHz (CH-26X)	2300 - 1200	430253.79N/1441115.22E		GP: 333m (1093ft) inside FM RWY17 THR, 120m (394ft) W of RCL. HGT of ILS REF datum 16.7m (55ft). GP angle 3.0°
ILS-DME 17	IKS	987MHz (CH-26X)	2300 - 1200	430253.40N/1441114.78E	333ft	DME: 340m (1115ft) inside FM RWY17 THR, 134m (440ft) W of RCL
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

ILS



REMARKS : 1 . LOC beam BRG(MAG) 168.15°
2 . HGT of ILS REF datum 16.7m(55ft)
3 . GP Angle 3.0°
4 . ELEV of ILS-DME 101.4m(333ft)

RJCK AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

PPR

Prior permission is required for transient aircraft except scheduled and/or emergency flight.
Tel : Hokkaido Airports Co.,Ltd. Kushiro Airport Office 0154-57-8880

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

1. Wing tip clearance at the TWY intersection (REF AD1.1.6.8)

Wing tip clearance at the TWY intersection between the aircraft holding at the stop marking on the TWY and the other aircraft taxiing behind it are as follows.

(1)When B763 holding at the stop marking on TWY T5 or T6

wing span (WS) of ACFT taxiing on TWY P4-P6	WS ≤23m	23m <WS ≤40m	WS >40m
wing tip clearance	*A	*B	*C

(2)When MD90 holding at the stop marking on TWY T2

wing span (WS) of ACFT taxiing on TWY P1-P2	WS ≤47m	47m <WS ≤64m	WS >64m
wing tip clearance	*A	*B	*C

Legend:

*A : wing tip clearance ≥ 15m

*B : 6.5m ≤ wing tip clearance < 15m

*C : wing tip clearance < 6.5m

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

RJCK AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJCK 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	17/35	A,B,C	400m *200m **150m	400m *200m	400m *250m	400m *250m	-	500m
		D	400m *250m **200m	400m *250m	400m *300m	400m *300m	-	500m
OTHER	17/35	A,B,C,D	AVBL LDG MINIMA					

* APPLICABLE WHEN LVP/LVPD IN FORCE.

** APPLICABLE WHEN LVP/LVPD IN FORCE and MULTIPLE RVRs AVAILABLE.

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

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

- (I)
 - 1. Contact Kushiro Tower.
 - 2. If unable, proceed in accordance with visual flight rules.
 - 3. If unable, proceed to KUSHIRO VOR/DME at last assigned altitude or 3,500 feet whichever is higher, and execute instrument approach.
- (II) Procedures other than above will be issued when situation requires.

3. ILS Category III Operations at Kushiro Airport

1) Facilities

The following facilities are available:

RWY 17
(1) ILS RWY 17 - CAT III
(2) Lighting system RWY 17 - CAT III
(3) RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the RWY)

2) Conditions

A. The following systems must be operative:

For ILS RWY17 approach (CAT III)
(1) ILS comprising; <ul style="list-style-type: none"> • ILS-LOC17 with standby transmitter (including far field monitor) • ILS-GP17 with standby transmitter (When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.) • ILS-DME17
(2) Lighting systems comprising; <ul style="list-style-type: none"> • PALS 17 (including side row barrettes) • High INTST REDL • High INTST RTHL • RCLL and RTZL
(3) Secondary power supply
(4) RVR by forward-scatter meters at the touchdown zone, the mid-point and stop-end of the RWY.

B. The following information must be currently available:

- Surface wind speed and direction
- RVR

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

3) Operating Minimum

Approach minima stated in AD2.24(Instrument Approach Chart) are observed.

4) LVP

LVP will be available when the following conditions are met;

- Ceiling is at or less than 400ft and/or RVR is at or less than 1,000m.
- Facilities listed 1) above are operational.
- ILS Critical Area is protected.

In order to protect ILS Critical Area for the succeeding arrival aircraft, an arrival aircraft may be given the following instruction by ATC :

"REPORT OUT OF ILS CRITICAL AREA"

The exit TWY centerline LGT are fixed alternate green and yellow inside the ILS Critical Area. If an aircraft is given the above instruction, she is expected to advise the ATC when the TWY centerline LGT change from alternate green and yellow to steady green.

5) Approval for CAT III Operations

Operators must obtain operational approval from the State of Registry or the State of Operator, as appropriate, to conduct CAT III Operations. (See GEN1.5)

6) TWY available for CAT III Operations

Exit taxiway: T1, T5, T6, T7 and the parallel TWY.

4. LVTO at Kushiro Airport

1) Facilities

The following facilities are available:

RWY 17	RWY 35
<ul style="list-style-type: none">• Lighting system RWY 17 for LVTO• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)	<ul style="list-style-type: none">• Lighting system RWY 35 for LVTO• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)

2) Conditions

A. The following systems must be operative:

For LVTO
(1) Lighting system comprising; <ul style="list-style-type: none">• High INTST REDL• High INTST RENL• RCLL
(2) Secondary power supply

B. The following information must be currently available:

- a) Surface wind speed and direction.
- b) RVR or VIS

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

3) Operating Minima

Take-off minima stated in AD2.22(TAKE-OFF MINIMA) are observed.

4) LVP/LVPD

(1)LVP/LVPD will be available when the following conditions are met:

- a)RVR is at or less than 1000m.
- b)Facilities listed 1) above are operational.

(2)Taxiway available for LVTO

Entering taxiway: T1 and T7

RJCK AD 2.23 ADDITIONAL INFORMATION

Nil

RJCK AD 2.24 CHARTS RELATED TO AN AERODROME

<p>Aerodrome/Heliport Chart Precision Approach Terrain Chart (precision approach CAT II and III runways) Standard Departure Chart - Instrument (KUSHIRO REVERSAL) Standard Departure Chart - Instrument (TANCHO - RNAV) Standard Departure Chart - Instrument (HIDAKA - RNAV) Standard Departure Chart - Instrument (RUGMO - RNAV) Standard Departure Chart - Instrument (ENTOD - RNAV) Standard Arrival Chart - Instrument (MARNY - RNAV) Standard Arrival Chart - Instrument (AKESI, IGAMO-N, RUGMO-N, RUNPA-N - RNAV) Standard Arrival Chart - Instrument (IGAMO-S, RUGMO-S, RUNPA-S - RNAV) Standard Arrival Chart - Instrument (LEKUP-N/S - RNAV) Instrument Approach Chart (ILS Z or LOC Z RWY17 (CAT III)) Instrument Approach Chart (ILS Y or LOC Y RWY17 (CAT III)) Instrument Approach Chart (ILS X RWY17 (CAT III)) Instrument Approach Chart (VOR RWY17) Instrument Approach Chart (VOR RWY35) Instrument Approach Chart (RNP Z RWY17(AR)) Instrument Approach Chart (RNP Y RWY17(AR)) Instrument Approach Chart (RNP X RWY17) Instrument Approach Chart (RNP RWY35) Other Chart (VISUAL REP) Other Chart (MVA CHART)</p>

LONGITUDINAL PROFILE OF RWY 35

Station (m)	Elevation (m)	Slope (%)
0	322.5	0.53%
100	324.1	0.23%
200	324.9	0.05%
300	325.1	0.05%
400	324.8	0.56%
500	323.5	0.50%
600	320.1	0.49%
700	318.5	0.53%
800	315.0	0.55%
900	313.2	0.57%
1000	311.4	0.46%
1100	309.8	0.56%
1200	308.0	0.53%
1300	302.8	0.50%
1400	301.2	0.56%
1500	296.4	0.52%
1600	292.3	0.39%
1700	291.1	0.30%
1800	290.1	

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RJCK/KUSHIRO

PRECISION APPROACH TERRAIN CHART – ICAO



STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO

SID

KUSHIRO REVERSAL FIVE DEPARTURE

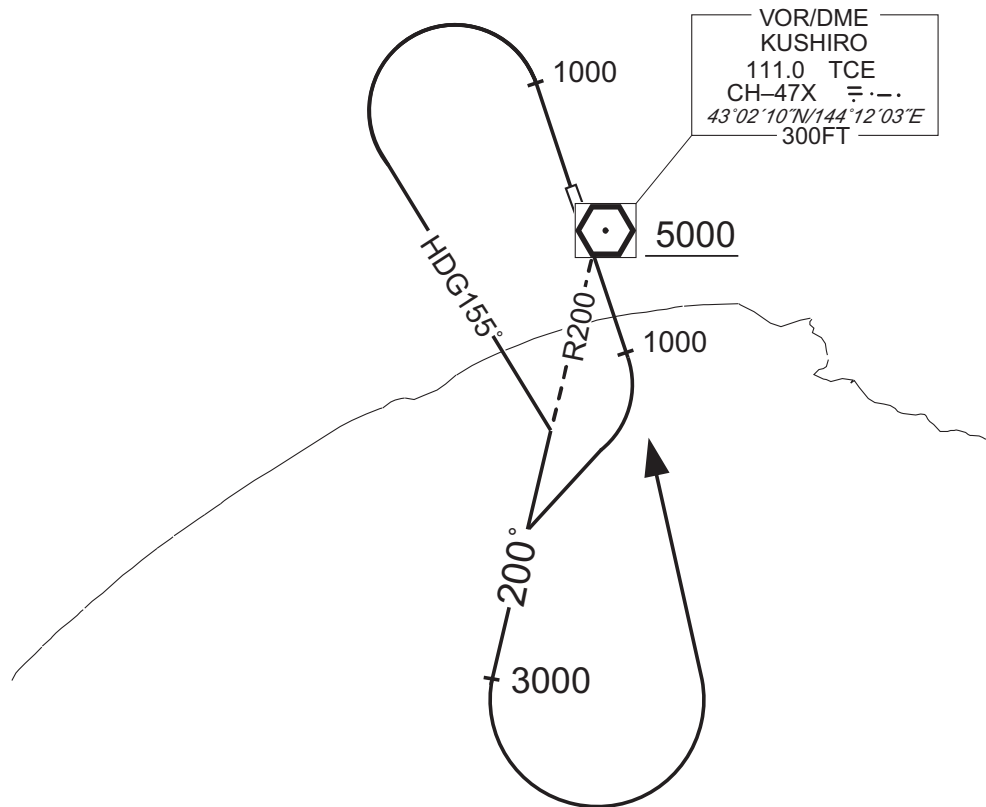
RWY17 : Climb RWY HDG to 1000FT, turn right...

RWY35 : Climb RWY HDG to 1000FT, turn left HDG155°...

...to intercept and proceed via TCE R200 to 3000FT, turn left, direct to
TCE VOR/DME.

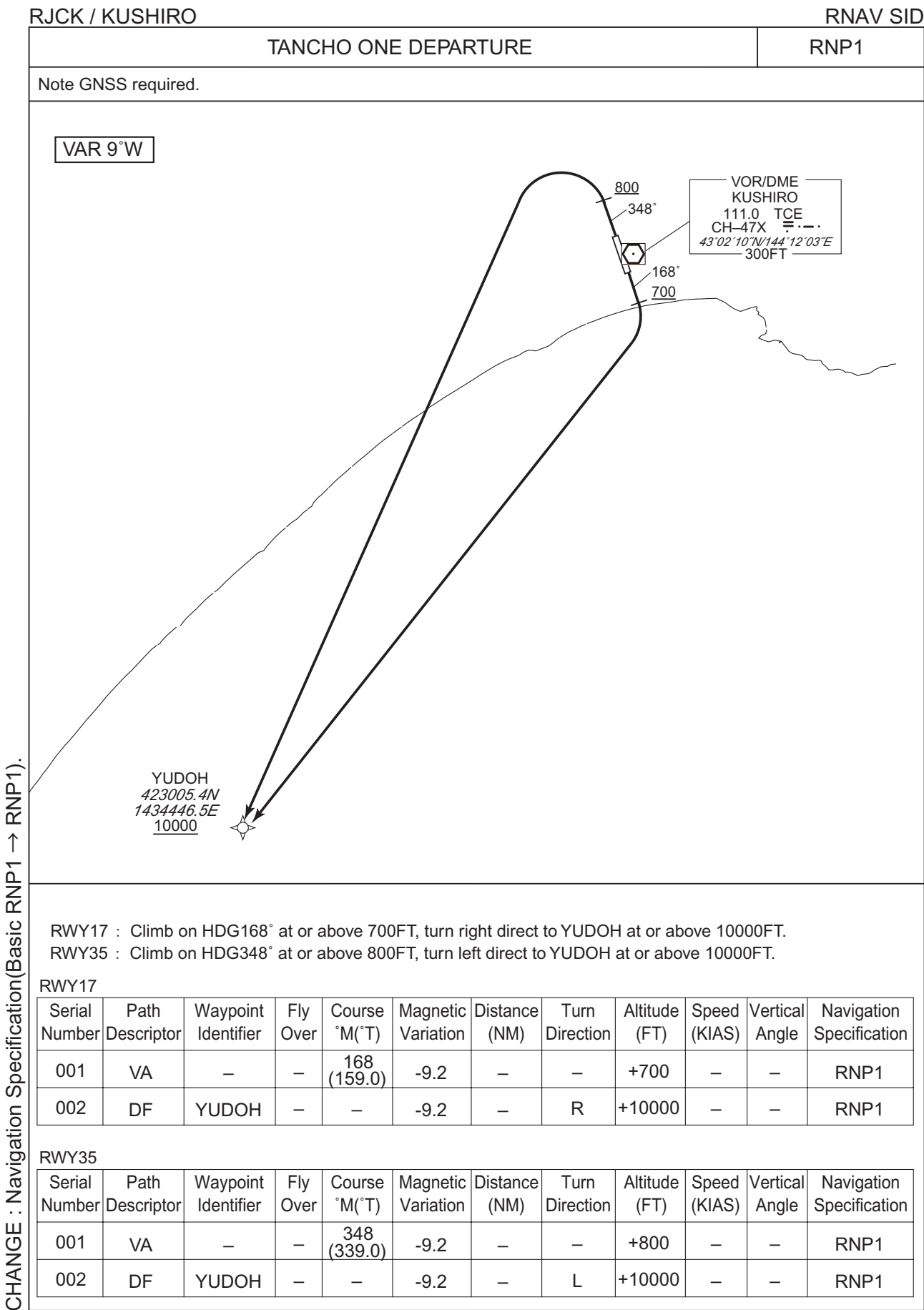
Cross TCE VOR/DME at or above 5000FT.

Note : No turn before DER.

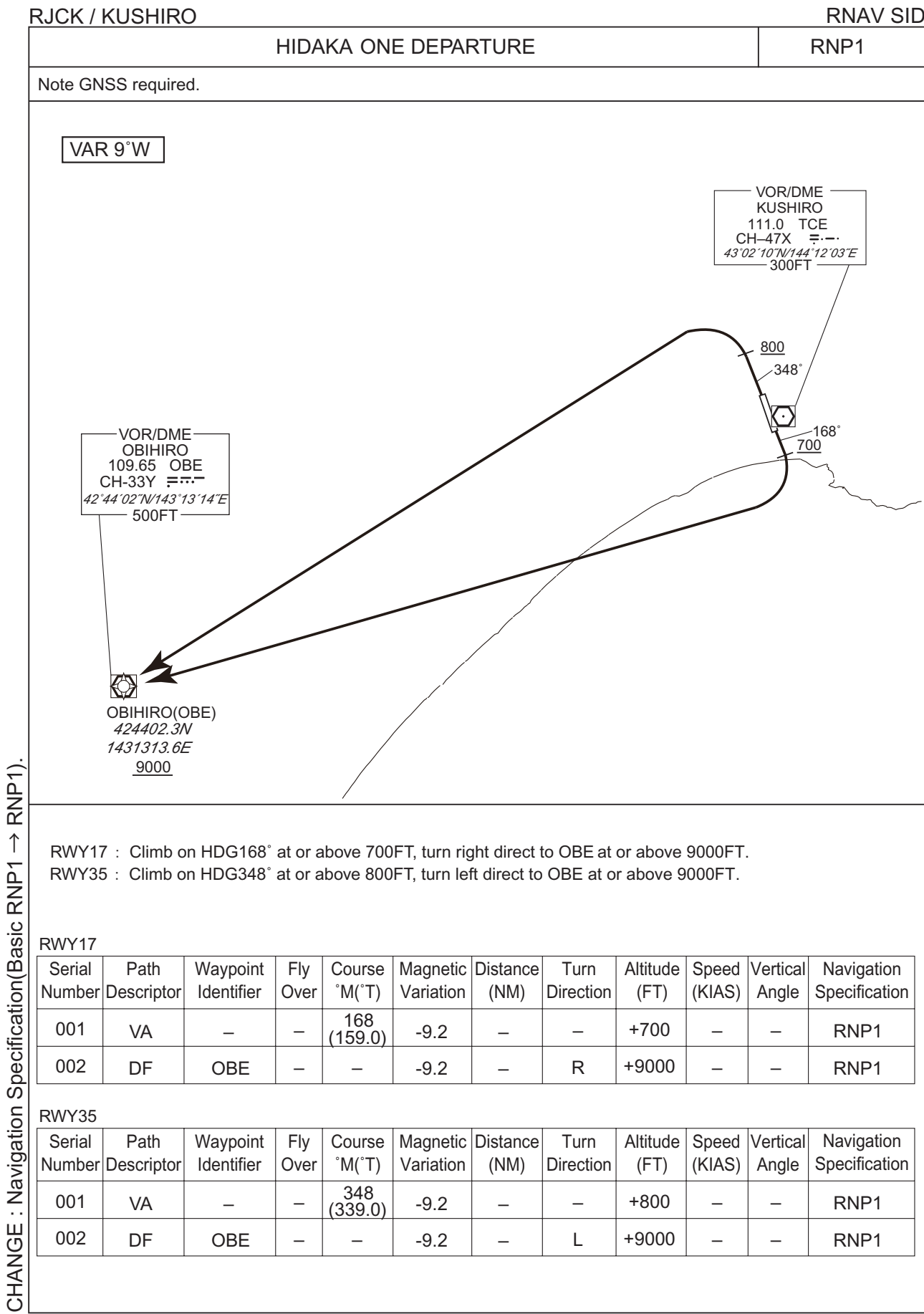


CHANGE : PROC abolished(ALICE THREE DEPARTURE, ERIMO FOUR DEPARTURE, OBIHIRO THREE DEPARTURE, YUDOH TWO DEPARTURE, EATAK ONE DEPARTURE).
PROC renamed. KUSHIRO VOR/DME relocated(KSE→TCE).

STANDARD DEPARTURE CHART -INSTRUMENT



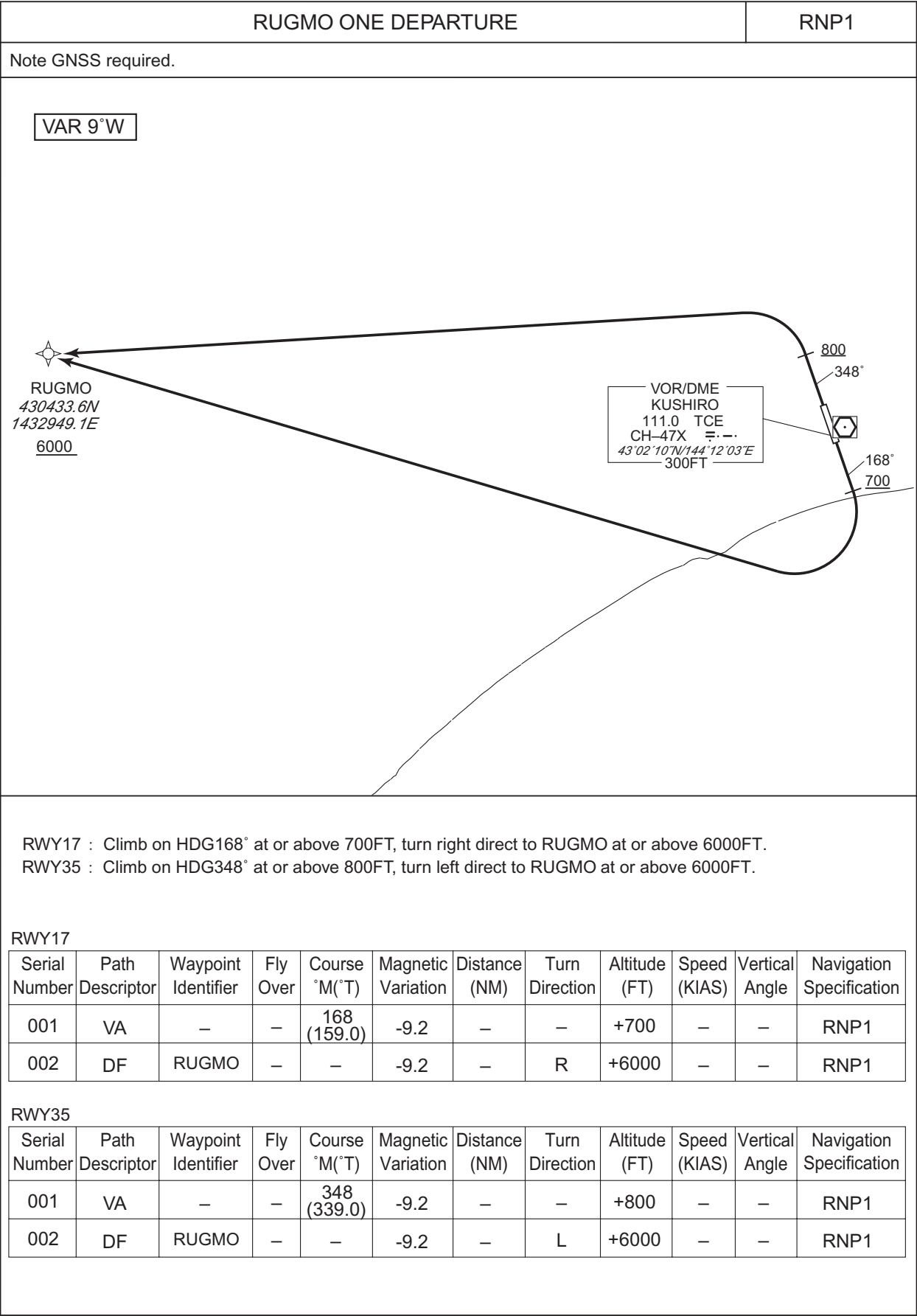
STANDARD DEPARTURE CHART -INSTRUMENT



STANDARD DEPARTURE CHART -INSTRUMENT

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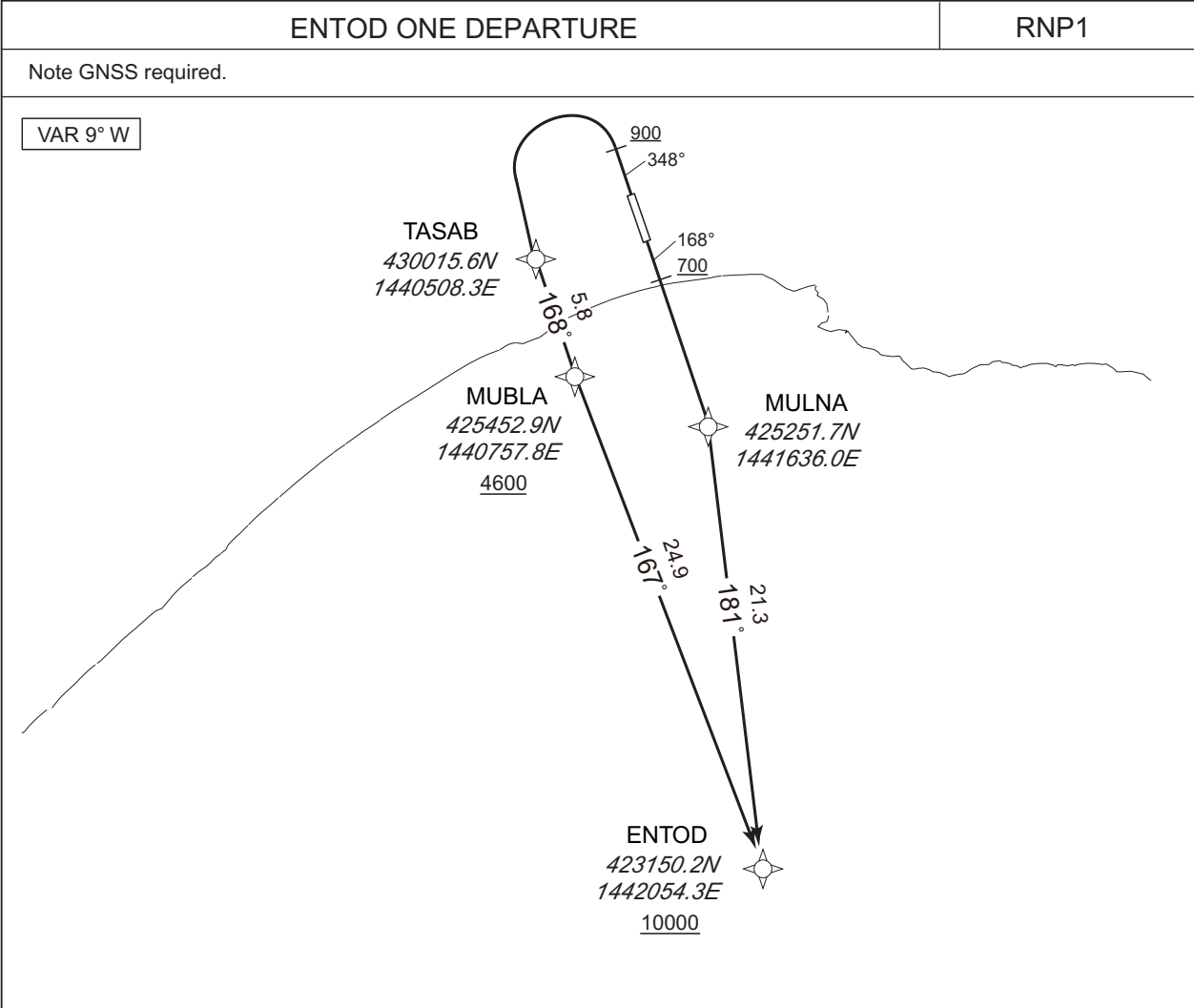


CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT

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RWY17 : Climb on HDG168° at or above 700FT, direct to MULNA, to ENTOD at or above 10000FT.
RWY35 : Climb on HDG348° at or above 900FT, turn left direct to TASAB, to MUBLA at or above 4600FT, to ENTOD at or above 10000FT.

RWY17

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	—	—	168 (159.0)	-9.3	—	—	+700	—	—	RNP1
002	DF	MULNA	—	—	-9.3	—	—	—	—	—	RNP1
003	TF	ENTOD	—	181 (171.4)	-9.3	21.3	—	+10000	—	—	RNP1

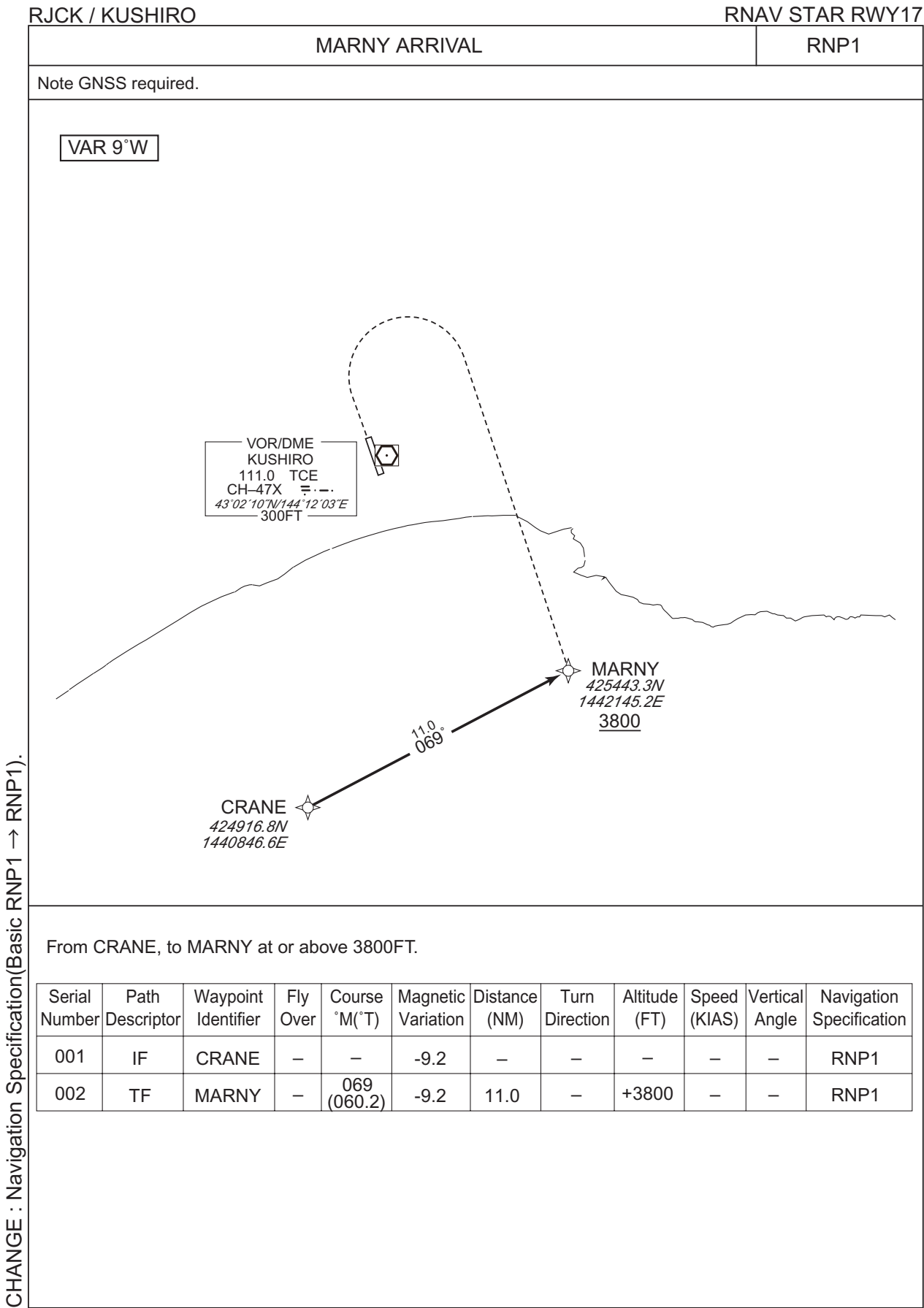
RWY35

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	—	—	348 (339.0)	-9.3	—	—	+900	—	—	RNP1
002	DF	TASAB	—	—	-9.3	—	L	—	—	—	RNP1
003	TF	MUBLA	—	168 (159.0)	-9.3	5.8	—	+4600	—	—	RNP1
004	TF	ENTOD	—	167 (157.5)	-9.3	24.9	—	+10000	—	—	RNP1

CHANGE : New PROC.

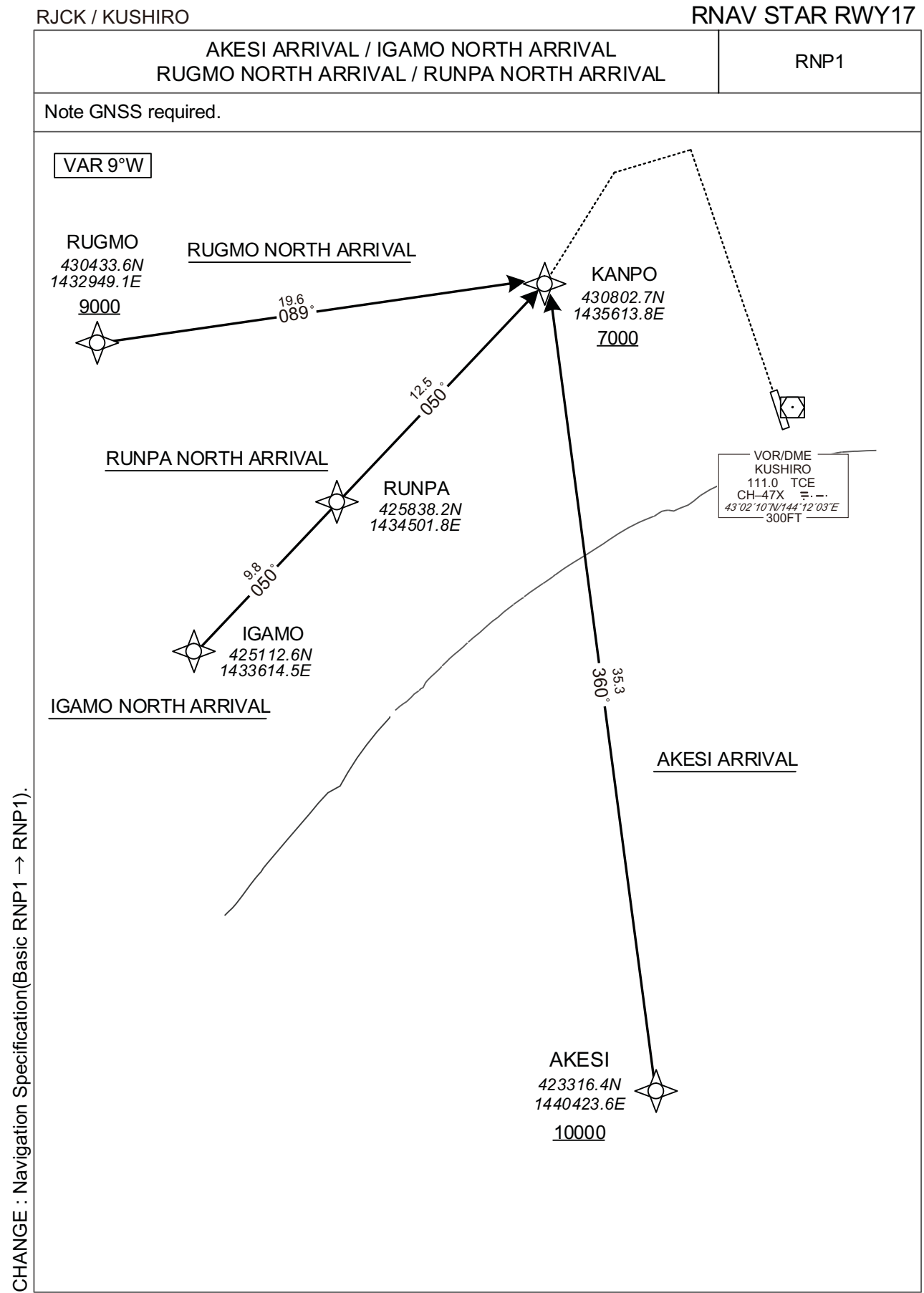
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STANDARD ARRIVAL CHART -INSTRUMENT



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RJCK / KUSHIRO

RNAV STAR RWY17

AKESI ARRIVAL

From AKESI at or above 10000FT, to KANPO at or above 7000FT.

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	AKESI	-	-	-9.2	-	-	+10000	-	-	RNP1
002	TF	KANPO	-	360 (350.3)	-9.2	35.3	-	+7000	-	-	RNP1

IGAMO NORTH ARRIVAL

From IGAMO, to RUNPA, to KANPO at or above 7000FT.

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	IGAMO	-	-	-9.2	-	-	-	-	-	RNP1
002	TF	RUNPA	-	050 (040.9)	-9.2	9.8	-	-	-	-	RNP1
003	TF	KANPO	-	050 (041.0)	-9.2	12.5	-	+7000	-	-	RNP1

RUGMO NORTH ARRIVAL

From RUGMO at or above 9000FT, to KANPO at or above 7000FT.

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	RUGMO	-	-	-9.2	-	-	+9000	-	-	RNP1
002	TF	KANPO	-	089 (079.6)	-9.2	19.6	-	+7000	-	-	RNP1

RUNPA NORTH ARRIVAL

From RUNPA, to KANPO at or above 7000FT.

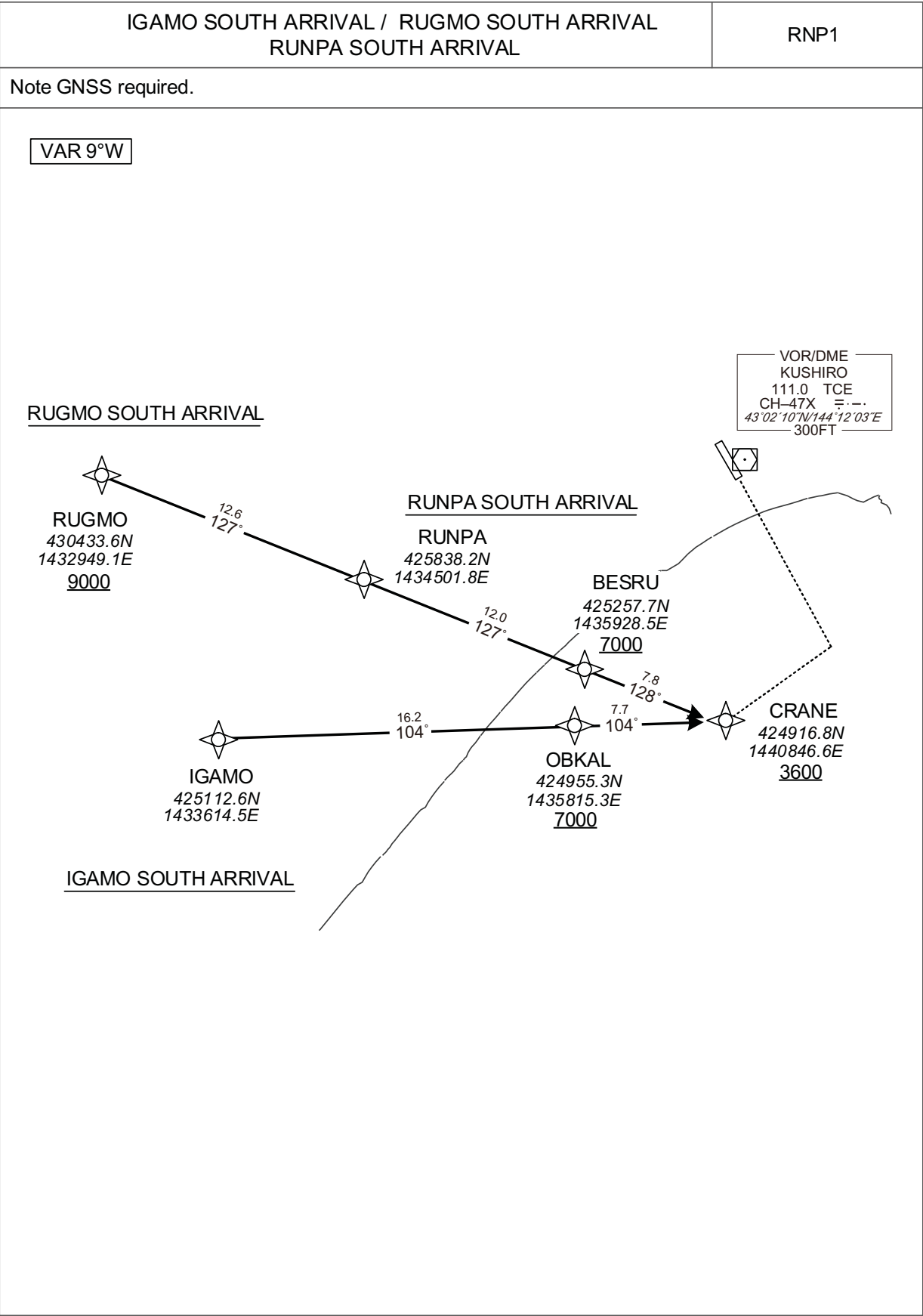
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	RUNPA	-	-	-9.2	-	-	-	-	-	RNP1
002	TF	KANPO	-	050 (041.0)	-9.2	12.5	-	+7000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV STAR RWY35



STANDARD ARRIVAL CHART -INSTRUMENT

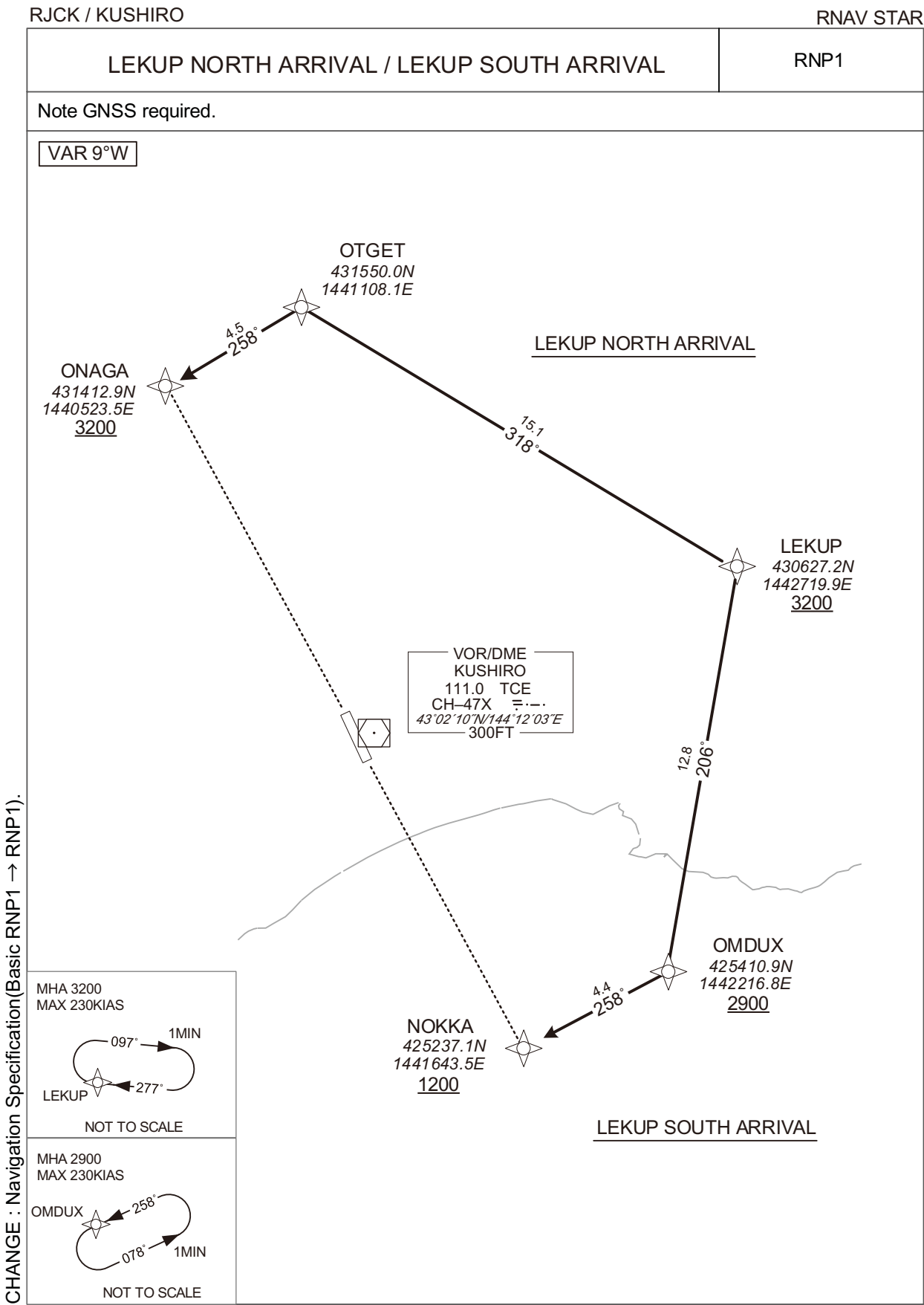
RJCK / KUSHIRO

RNAV STAR RWY35

<div>IGAMO SOUTH ARRIVAL</div> <div>From IGAMO, to OBKAL at or above 7000FT, to CRANE at or above 3600FT.</div> <table><tr><th>Serial Number</th><th>Path Descriptor</th><th>Waypoint Identifier</th><th>Fly Over</th><th>Course °M(°T)</th><th>Magnetic Variation</th><th>Distance (NM)</th><th>Turn Direction</th><th>Altitude (FT)</th><th>Speed (KIAS)</th><th>Vertical Angle</th><th>Navigation Specification</th></tr><tr><td>001</td><td>IF</td><td>IGAMO</td><td>-</td><td>-</td><td>-9.2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>002</td><td>TF</td><td>OBKAL</td><td>-</td><td>104 (094.4)</td><td>-9.2</td><td>16.2</td><td>-</td><td>+7000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>003</td><td>TF</td><td>CRANE</td><td>-</td><td>104 (094.7)</td><td>-9.2</td><td>7.7</td><td>-</td><td>+3600</td><td>-</td><td>-</td><td>RNP1</td></tr></table>												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	IGAMO	-	-	-9.2	-	-	-	-	-	RNP1	002	TF	OBKAL	-	104 (094.4)	-9.2	16.2	-	+7000	-	-	RNP1	003	TF	CRANE	-	104 (094.7)	-9.2	7.7	-	+3600	-	-	RNP1												
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	IGAMO	-	-	-9.2	-	-	-	-	-	RNP1																																																												
002	TF	OBKAL	-	104 (094.4)	-9.2	16.2	-	+7000	-	-	RNP1																																																												
003	TF	CRANE	-	104 (094.7)	-9.2	7.7	-	+3600	-	-	RNP1																																																												
<div>RUGMO SOUTH ARRIVAL</div> <div>From RUGMO at or above 9000FT, to RUNPA, to BESRU at or above 7000FT, to CRANE at or above 3600FT.</div> <table><tr><th>Serial Number</th><th>Path Descriptor</th><th>Waypoint Identifier</th><th>Fly Over</th><th>Course °M(°T)</th><th>Magnetic Variation</th><th>Distance (NM)</th><th>Turn Direction</th><th>Altitude (FT)</th><th>Speed (KIAS)</th><th>Vertical Angle</th><th>Navigation Specification</th></tr><tr><td>001</td><td>IF</td><td>RUGMO</td><td>-</td><td>-</td><td>-9.2</td><td>-</td><td>-</td><td>+9000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>002</td><td>TF</td><td>RUNPA</td><td>-</td><td>127 (118.0)</td><td>-9.2</td><td>12.6</td><td>-</td><td>-</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>003</td><td>TF</td><td>BESRU</td><td>-</td><td>127 (118.1)</td><td>-9.2</td><td>12.0</td><td>-</td><td>+7000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>004</td><td>TF</td><td>CRANE</td><td>-</td><td>128 (118.3)</td><td>-9.2</td><td>7.8</td><td>-</td><td>+3600</td><td>-</td><td>-</td><td>RNP1</td></tr></table>												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	RUGMO	-	-	-9.2	-	-	+9000	-	-	RNP1	002	TF	RUNPA	-	127 (118.0)	-9.2	12.6	-	-	-	-	RNP1	003	TF	BESRU	-	127 (118.1)	-9.2	12.0	-	+7000	-	-	RNP1	004	TF	CRANE	-	128 (118.3)	-9.2	7.8	-	+3600	-	-	RNP1
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	RUGMO	-	-	-9.2	-	-	+9000	-	-	RNP1																																																												
002	TF	RUNPA	-	127 (118.0)	-9.2	12.6	-	-	-	-	RNP1																																																												
003	TF	BESRU	-	127 (118.1)	-9.2	12.0	-	+7000	-	-	RNP1																																																												
004	TF	CRANE	-	128 (118.3)	-9.2	7.8	-	+3600	-	-	RNP1																																																												
<div>RUNPA SOUTH ARRIVAL</div> <div>From RUNPA, to BESRU at or above 7000FT, to CRANE at or above 3600FT.</div> <table><tr><th>Serial Number</th><th>Path Descriptor</th><th>Waypoint Identifier</th><th>Fly Over</th><th>Course °M(°T)</th><th>Magnetic Variation</th><th>Distance (NM)</th><th>Turn Direction</th><th>Altitude (FT)</th><th>Speed (KIAS)</th><th>Vertical Angle</th><th>Navigation Specification</th></tr><tr><td>001</td><td>IF</td><td>RUNPA</td><td>-</td><td>-</td><td>-9.2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>002</td><td>TF</td><td>BESRU</td><td>-</td><td>127 (118.1)</td><td>-9.2</td><td>12.0</td><td>-</td><td>+7000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>003</td><td>TF</td><td>CRANE</td><td>-</td><td>128 (118.3)</td><td>-9.2</td><td>7.8</td><td>-</td><td>+3600</td><td>-</td><td>-</td><td>RNP1</td></tr></table>												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	RUNPA	-	-	-9.2	-	-	-	-	-	RNP1	002	TF	BESRU	-	127 (118.1)	-9.2	12.0	-	+7000	-	-	RNP1	003	TF	CRANE	-	128 (118.3)	-9.2	7.8	-	+3600	-	-	RNP1												
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	RUNPA	-	-	-9.2	-	-	-	-	-	RNP1																																																												
002	TF	BESRU	-	127 (118.1)	-9.2	12.0	-	+7000	-	-	RNP1																																																												
003	TF	CRANE	-	128 (118.3)	-9.2	7.8	-	+3600	-	-	RNP1																																																												

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT



STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV STAR

LEKUP NORTH ARRIVAL

From LEKUP at or above 3200FT, to OTGET, to ONAGA at or above 3200FT.

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	LEKUP	-	-	-9.2	-	-	+3200	-	-	RNP1
002	TF	OTGET	-	318 (308.5)	-9.2	15.1	-	-	-	-	RNP1
003	TF	ONAGA	-	258 (248.9)	-9.2	4.5	-	+3200	-	-	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	LEKUP	277 (268.1)	-9.2	1.0(-14000)	R	3200	FL140	-230(-14000)	RNP1

LEKUP SOUTH ARRIVAL

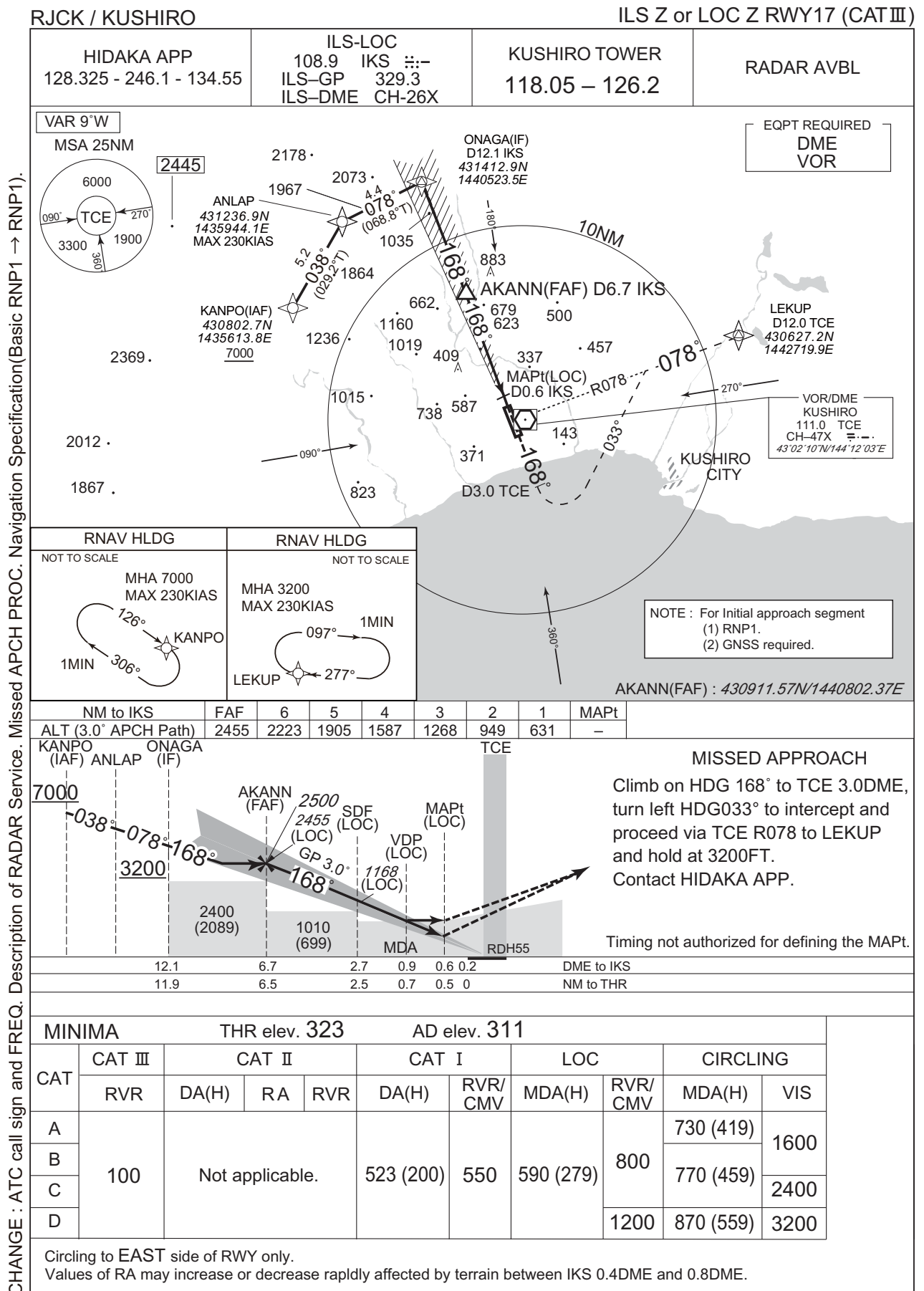
From LEKUP at or above 3200FT, to OMDUX at or above 2900FT, to NOKKA at or above 1200FT.

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	LEKUP	-	-	-9.2	-	-	+3200	-	-	RNP1
002	TF	OMDUX	-	206 (196.8)	-9.2	12.8	-	+2900	-	-	RNP1
003	TF	NOKKA	-	258 (249.0)	-9.2	4.4	-	+1200	-	-	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	LEKUP	277 (268.1)	-9.2	1.0(-14000)	R	3200	FL140	-230(-14000)	RNP1
Hold	OMDUX	258 (249.0)	-9.2	1.0(-14000)	L	2900	FL140	-230(-14000)	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

INSTRUMENT APPROACH CHART



RJCK / KUSHIRO

HIDAKA APP
128.325 - 246.1 - 134.55

ILS-LOC
108.9 IKS :-
ILS-GP 329.3
ILS-DME CH-26X

KUSHIRO TOWER
118.05 – 126.2

RADAR AVBL

VAR 9°W

MSA 25NM
6000
ARP
ARP : 430227N/1441135E 1236

RNAV HLDG
MHA 4500
MAX 230KIAS
VAVLO
186°
1MIN
NOT TO SCALE

RNAV HLDG
NOT TO SCALE
MHA 3200
MAX 230KIAS
LEKUP
097°
1MIN
NOT TO SCALE

MISSED APPROACH
Direct to CK763, turn left direct to CK767, to LEKUP and hold at 3200FT.
Contact HIDAKA APP.

CAT	CAT III	CAT II		CAT I		CIRCLING		
	RVR	DA(H)	RA	RVR	DA(H)	RVR/ CMV	MDA(H) VIS	
A	100	Not applicable.			523 (200)	550	730 (419)	1600
B							770 (459)	
C							2400	
D							870 (559)	

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to EAST side of RWY only.
Values of RA may increase or decrease rapidly affected by terrain between IKS 0.4DME and 0.8DME.

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

ILS X RWY17(CATⅢ)

Coding Table

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	AKESI	—	—	-9.3	—	—	+10000	—	—	RNP1
002	TF	VAVLO	—	006 (357.1)	-9.3	28.8	—	+4500	—	—	RNP1
003	TF	CK764	—	006 (357.0)	-9.3	5.0	—	+2400	-200	—	RNP1
004	RF Center: CKRF3 r=2.51NM	CK765	—	—	-9.3	3.5	R	+2000	—	—	RNP1
005	RF Center: CKRF3 r=2.51NM	CK766	—	—	-9.3	3.5	R	1600	—	—	RNP1
001	DF	CK763	Y	—	-9.3	—	—	—	—	—	RNP1
002	DF	CK767	—	—	-9.3	—	L	—	—	—	RNP1
003	TF	LEKUP	—	056 (046.9)	-9.3	5.1	—	3200	—	—	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	VAVLO	006 (357.0)	-9.3	1.0(-14000)	L	4500	FL140	-230(-14000)	RNP1
Hold	LEKUP	277 (268.1)	-9.3	1.0(-14000)	R	3200	FL140	-230(-14000)	RNP1

Waypoint Coordinates

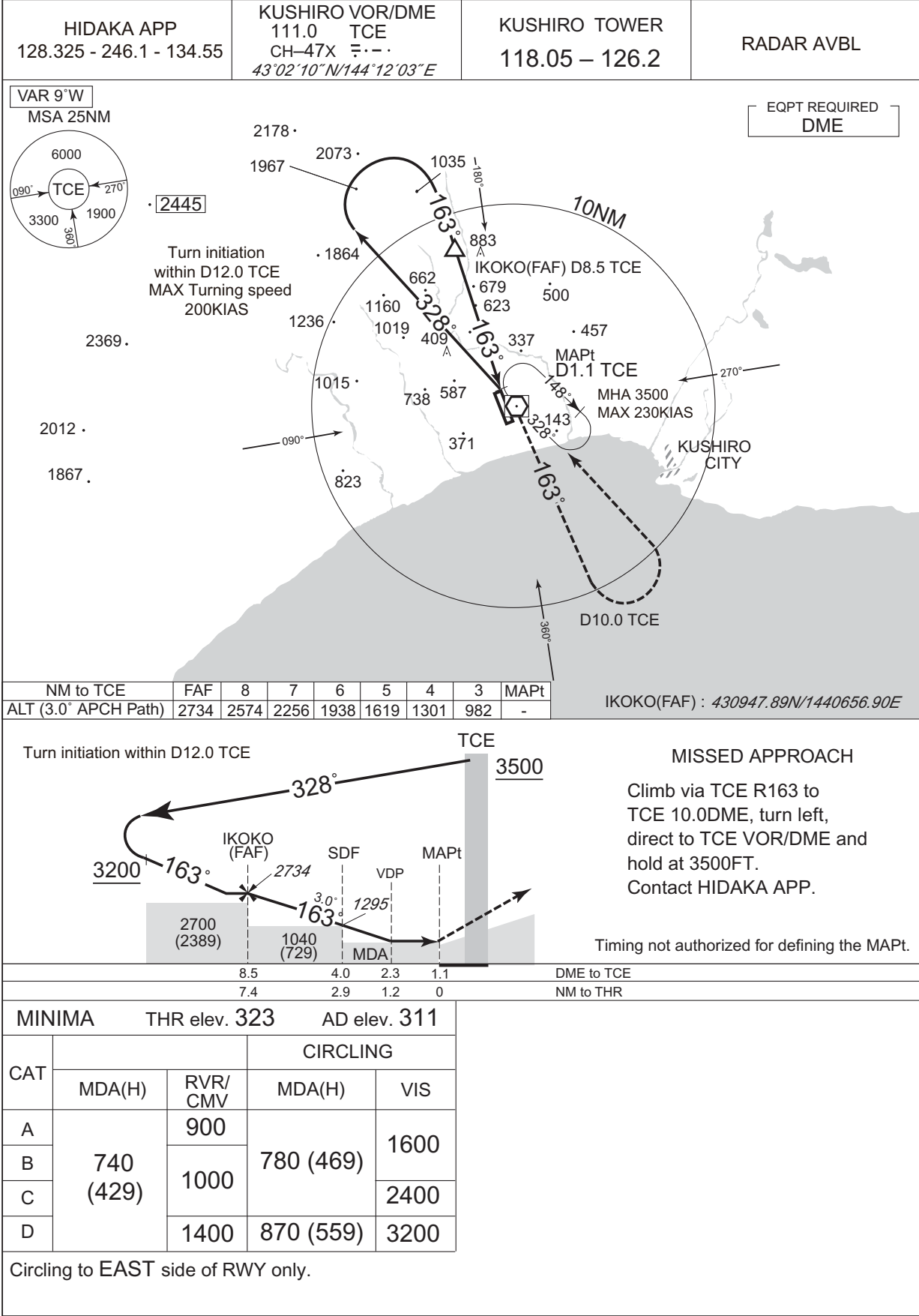
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
AKESI	423316.40N / 1440423.57E	CKRF3	430707.83N / 1440527.18E
VAVLO	430200.49N / 1440223.10E		
CK764	430700.07N / 1440201.89E		
CK765	430935.11N / 1440444.33E		
CK766	430802.03N / 1440839.00E		
CK763	430017.29N / 1441242.98E		
CK767	430257.41N / 1442212.36E		
LEKUP	430627.23N / 1442719.94E		

CHANGE : New PROC.

INSTRUMENT APPROACH CHART

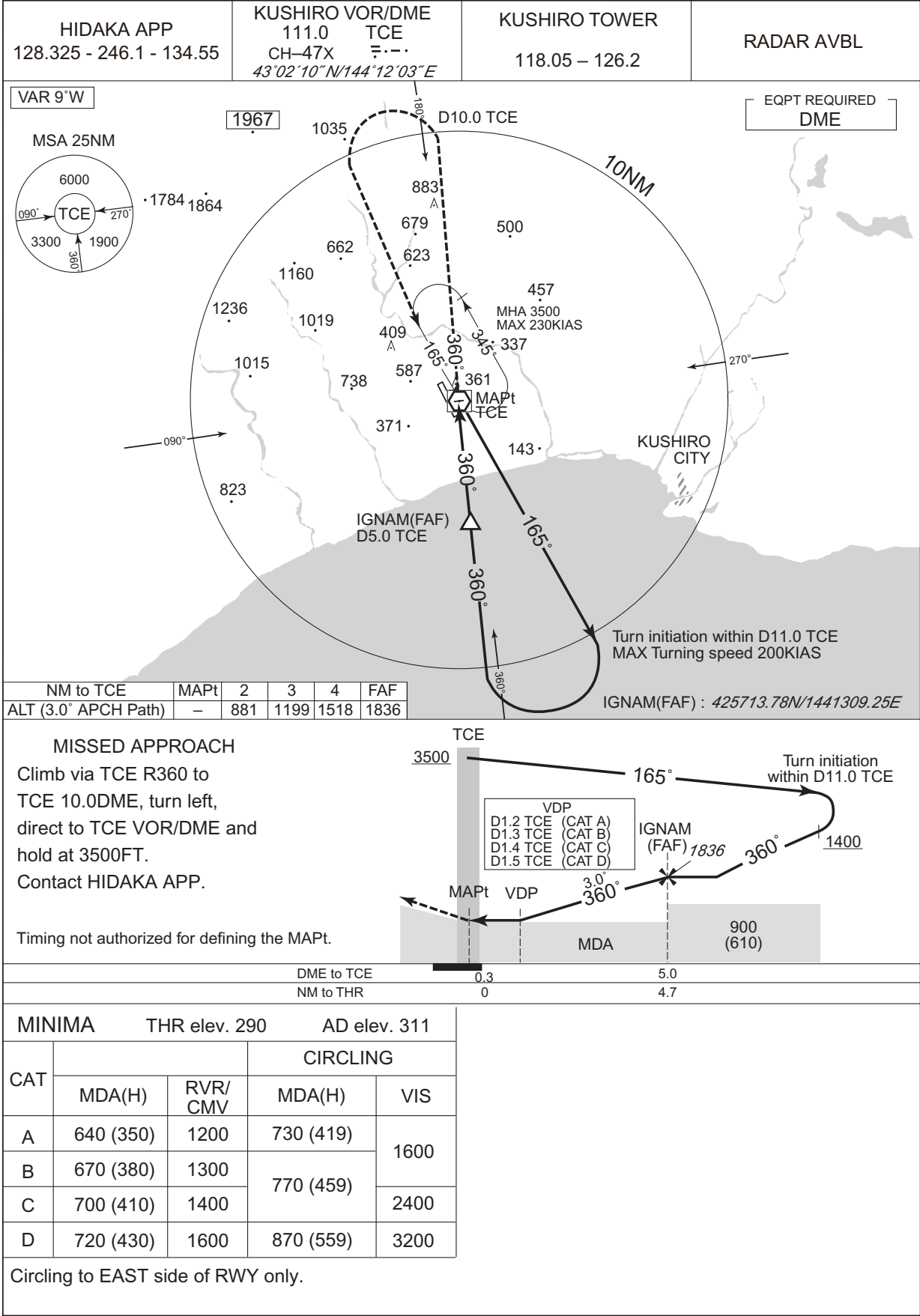
RJCK / KUSHIRO

VOR RWY17



INSTRUMENT APPROACH CHART

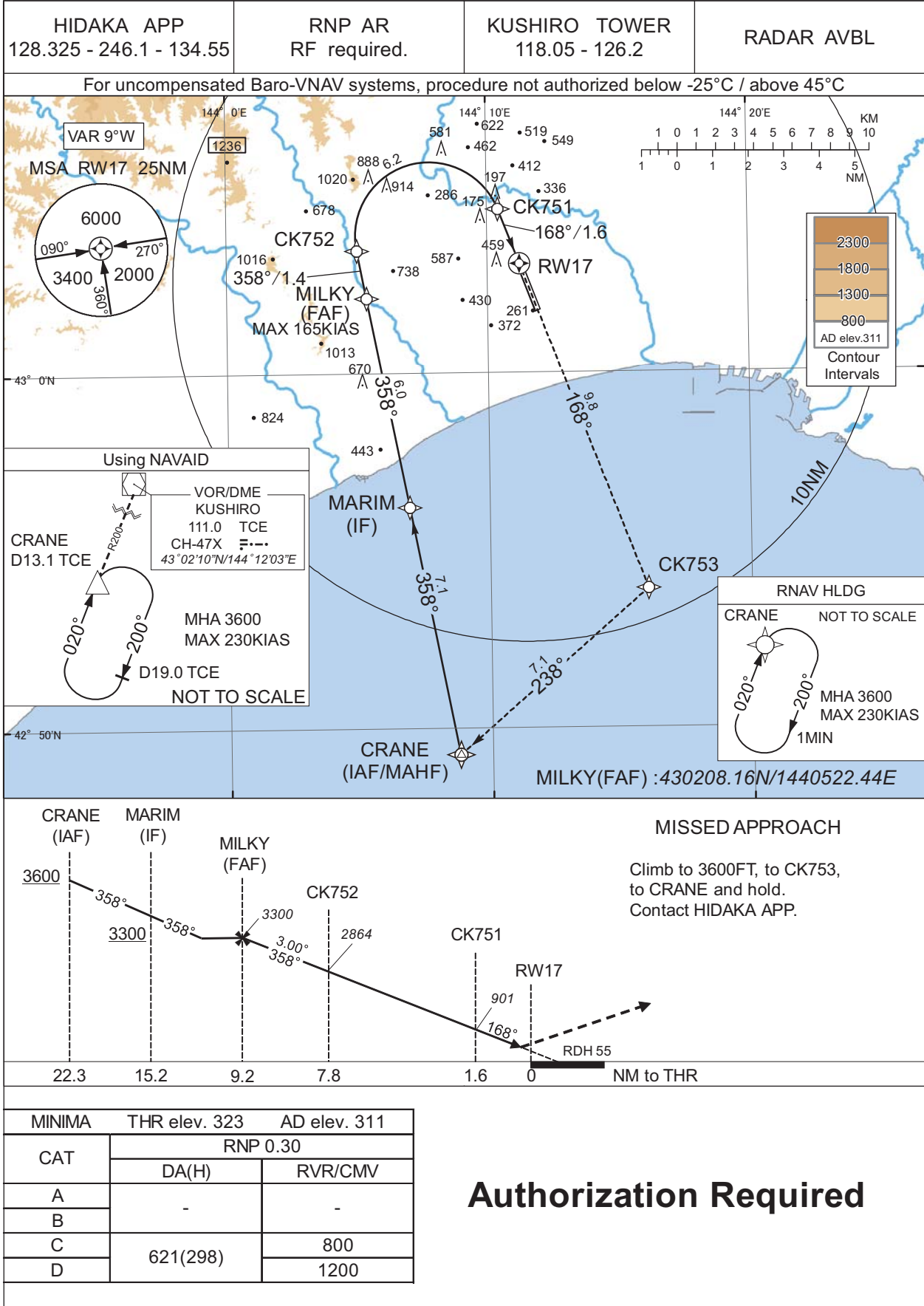
RJCK / KUSHIROVOR RWY35



INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP Z RWY17(AR)



INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP Z RWY17(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	CRANE	—	—	-9.2	—	—	+3600	—	—	—
002	TF	MARIM	—	358 (349.1)	-9.2	7.1	—	+3300	—	—	1.0
003	TF	MILKY	—	358 (349.0)	-9.2	6.0	—	3300	-165	—	1.0
004	TF	CK752	—	358 (349.0)	-9.2	1.4	—	2864	—	-3.00	0.3
005	RF Center: CKRF1 r=2.08NM	CK751	—	—	-9.2	6.2	R	901	—	-3.00	0.3
006	TF	RW17	Y	168 (159.0)	-9.2	1.6	—	378	—	-3.00/55	0.3
007	TF	CK753	—	168 (159.0)	-9.2	9.8	—	—	—	—	1.0
008	TF	CRANE	—	238 (229.0)	-9.2	7.1	—	3600	—	—	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	CRANE	020 (010.5)	-9.2	1.0(-14000)	R	3600	FL140	-230(-14000)	1.0

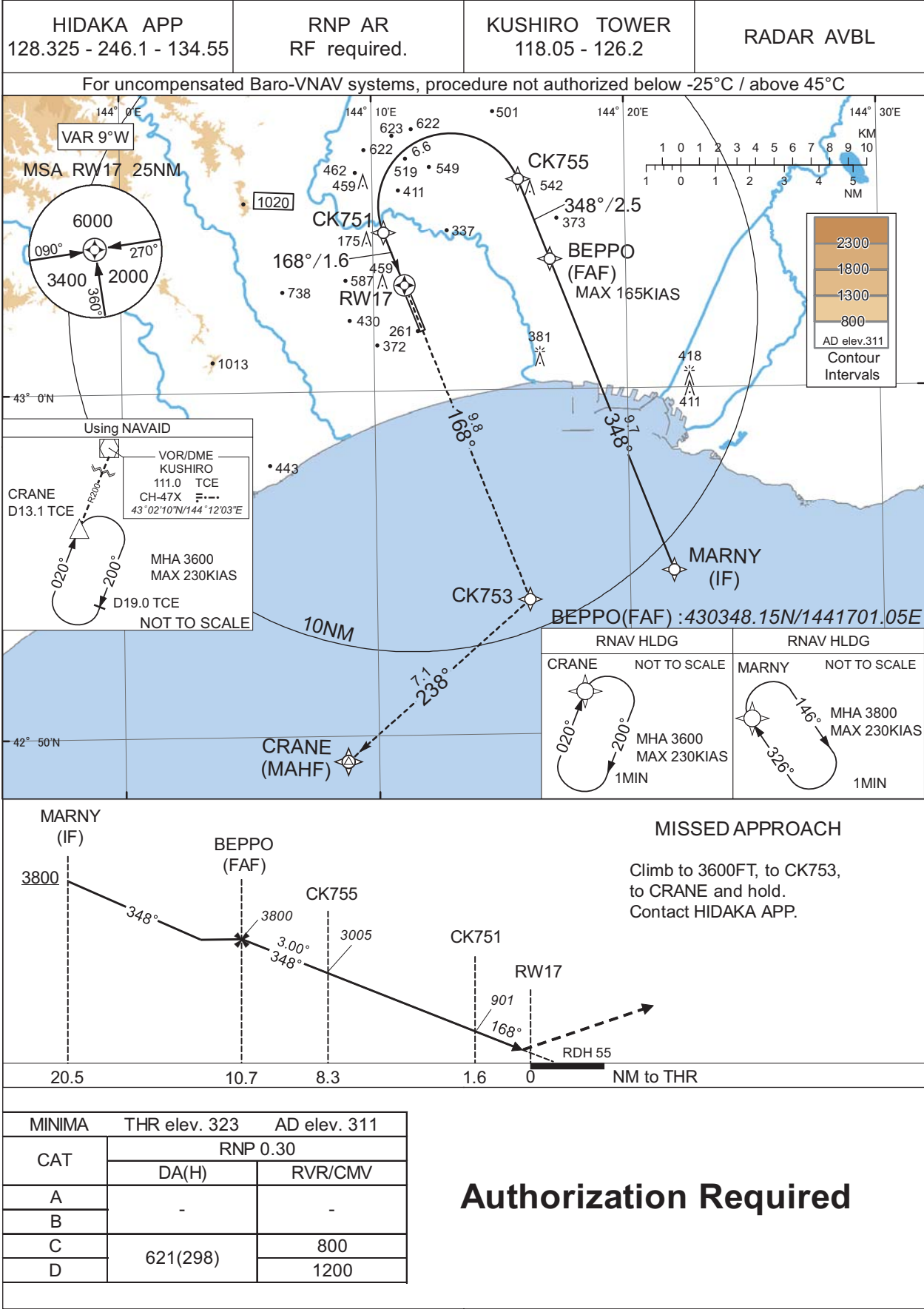
Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
CRANE	424916.84N / 1440846.59E	CKRF1	430352.65N / 1440747.87E
MARIM	425614.81N / 1440656.16E		
MILKY	430208.16N / 1440522.44E		
CK752	430328.83N / 1440501.00E		
CK751	430437.47N / 1441026.54E		
RW17	430305.30N / 1441114.92E		
CK753	425355.48N / 1441602.58E		

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP Y RWY17(AR)



INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP Y RWY17(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	MARNY	—	—	-9.2	—	—	+3800	—	—	—
002	TF	BEPP0	—	348 (339.1)	-9.2	9.7	—	3800	-165	—	1.0
003	TF	CK755	—	348 (339.1)	-9.2	2.5	—	3005	—	-3.00	0.3
004	RF Center: CKRF2 r=2.10NM	CK751	—	—	-9.2	6.6	L	901	—	-3.00	0.3
005	TF	RW17	Y	168 (159.0)	-9.2	1.6	—	378	—	-3.00/55	0.3
006	TF	CK753	—	168 (159.0)	-9.2	9.8	—	—	—	—	1.0
007	TF	CRANE	—	238 (229.0)	-9.2	7.1	—	3600	—	—	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	CRANE	020 (010.5)	-9.2	1.0(-14000)	R	3600	FL140	-230(-14000)	1.0
Hold	MARNY	326 (316.4)	-9.2	1.0(-14000)	R	3800	FL140	-230(-14000)	1.0

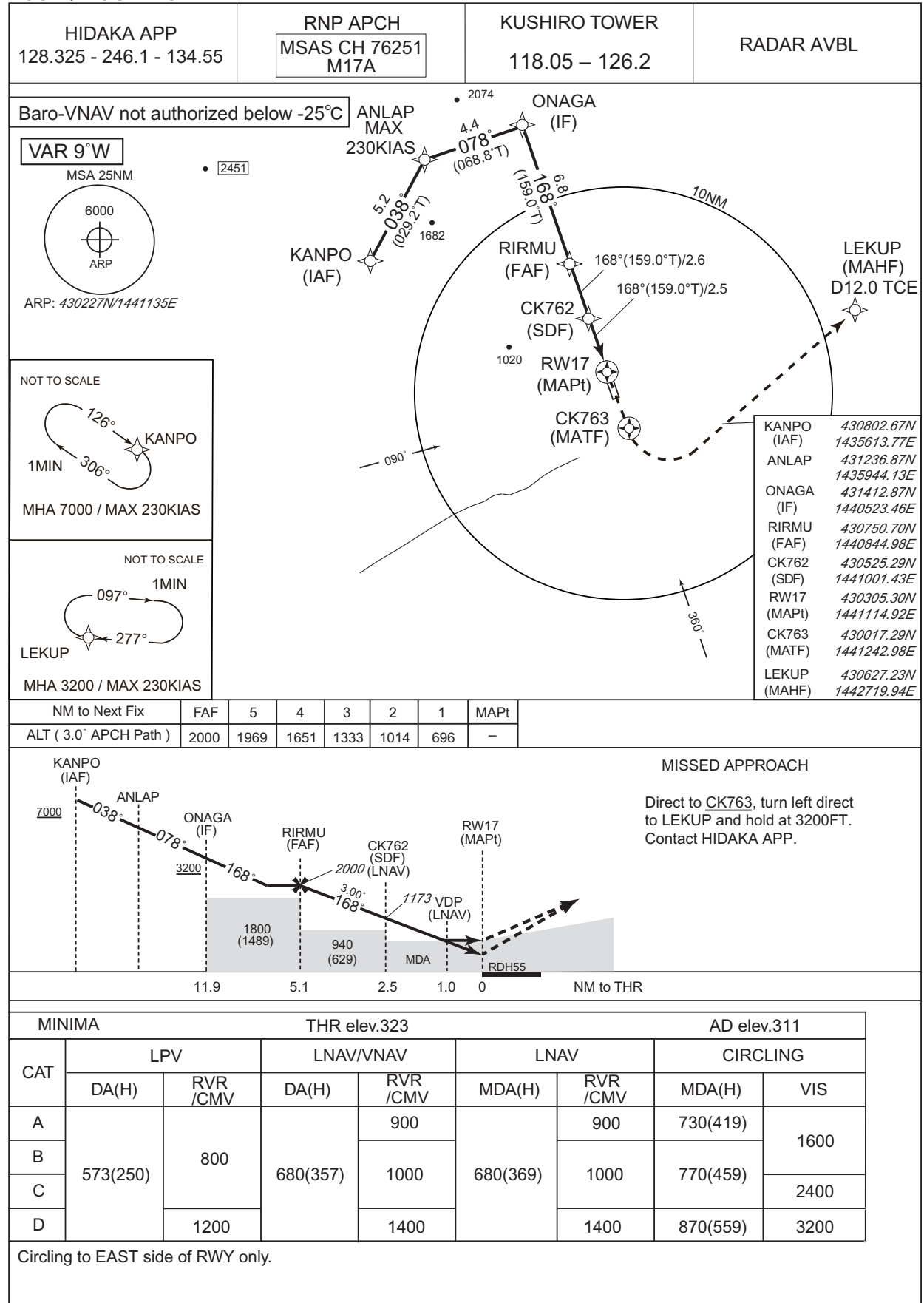
Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
MARNY	425443.27N / 1442145.22E	CKRF2	430522.76N / 1441307.17E
BEPP0	430348.15N / 1441701.05E		
CK755	430607.99N / 1441547.87E		
CK751	430437.47N / 1441026.54E		
RW17	430305.30N / 1441114.92E		
CK753	425355.48N / 1441602.58E		
CRANE	424916.84N / 1440846.59E		

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP X RWY17



INSTRUMENT APPROACH CHART

RJCK /KUSHIRO

RNP X RWY17

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+01279
SBAS service provider identifier	2	FPAP latitude	430149.6680N
Airport identifier	RJCK	FPAP longitude	1441154.5465E
Runway	17	Threshold crossing height	00016.7
Approach performance designator	0	TCH units selector	1
Route indicator	X	Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M17A	∠ length offset	0000
LTP/FTP latitude	430305.2840N	HAL	40.0
LTP/FTP longitude	1441114.8770E	VAL	50.0
CRC remainder	A0B919FD		

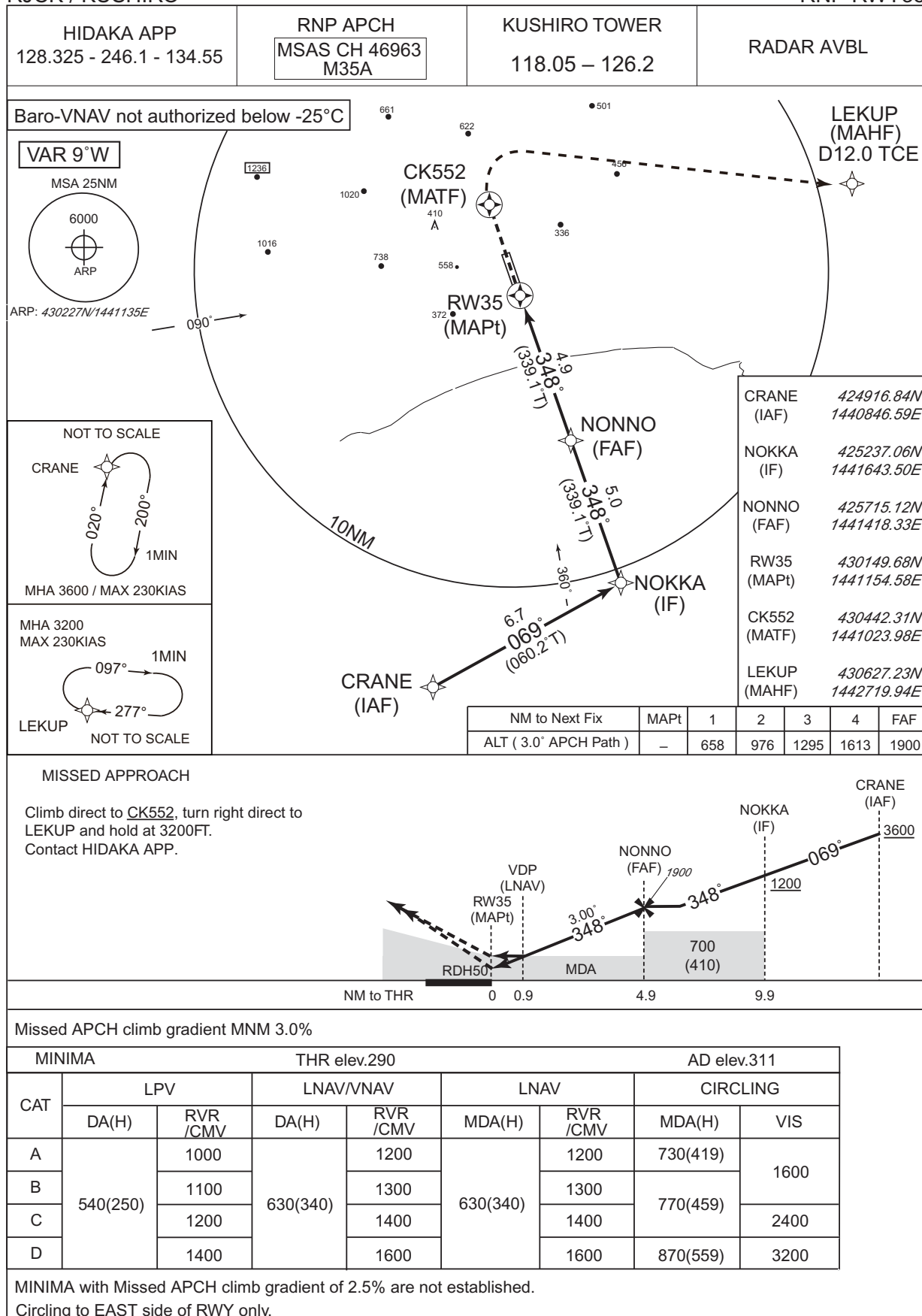
Required additional data

LTP/FTP orthometric height	98.0
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INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP RWY35



INSTRUMENT APPROACH CHART

RJCK /KUSHIRORNP RWY35

FAS DATA BLOCK

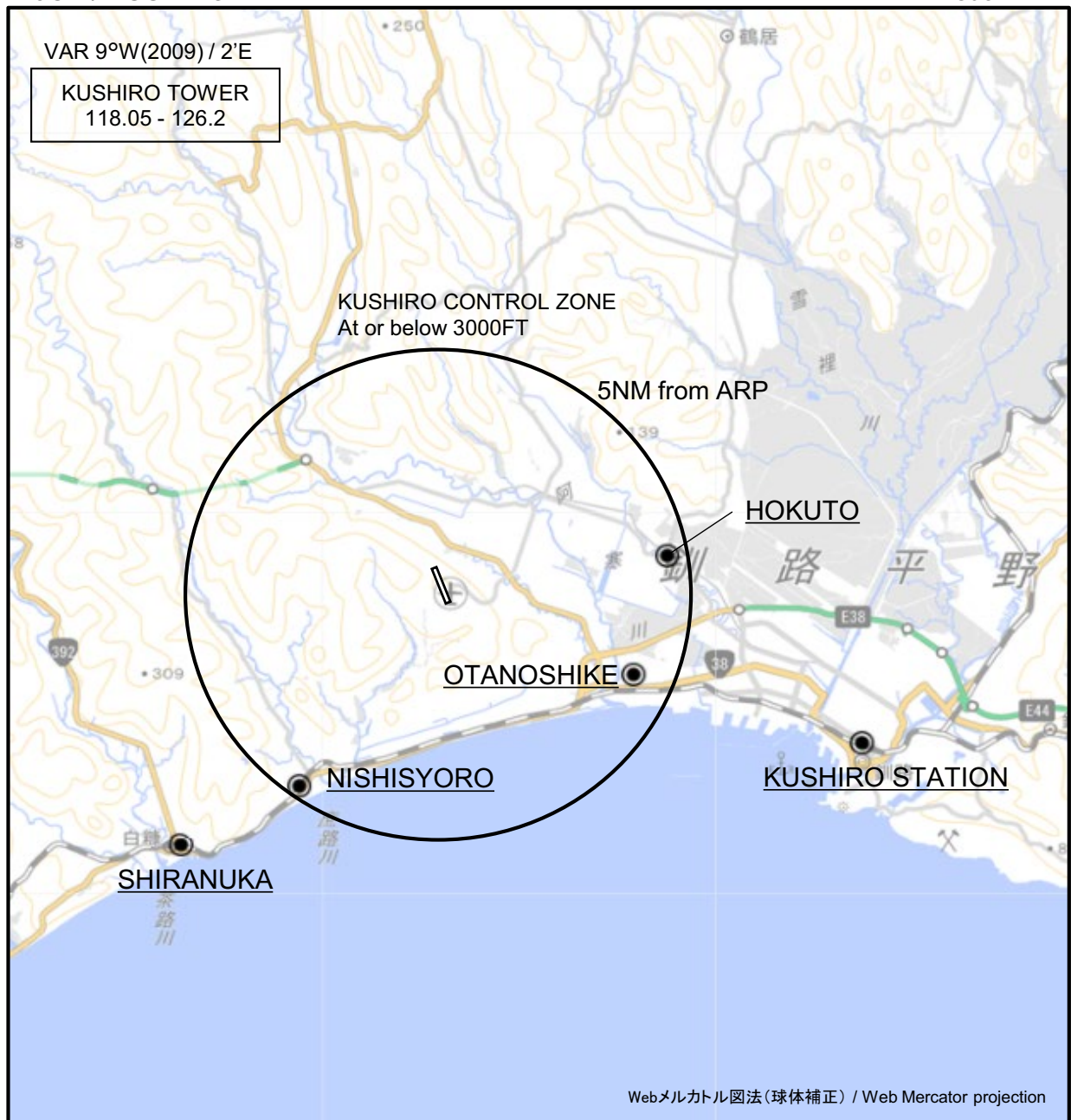
Operation type	0	LTP/FTP ellipsoidal height	+01179
SBAS service provider identifier	2	FPAP latitude	430305.2840N
Airport identifier	RJCK	FPAP longitude	1441114.8770E
Runway	35	Threshold crossing height	00015.0
Approach performance designator	0	TCH units selector	1
Route indicator		Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M35A	∠ length offset	0000
LTP/FTP latitude	430149.6680N	HAL	40.0
LTP/FTP longitude	1441154.5465E	VAL	50.0
CRC remainder	F9C3454C		

Required additional data

LTP/FTP orthometric height	88.1
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RJCK / KUSHIRO

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).

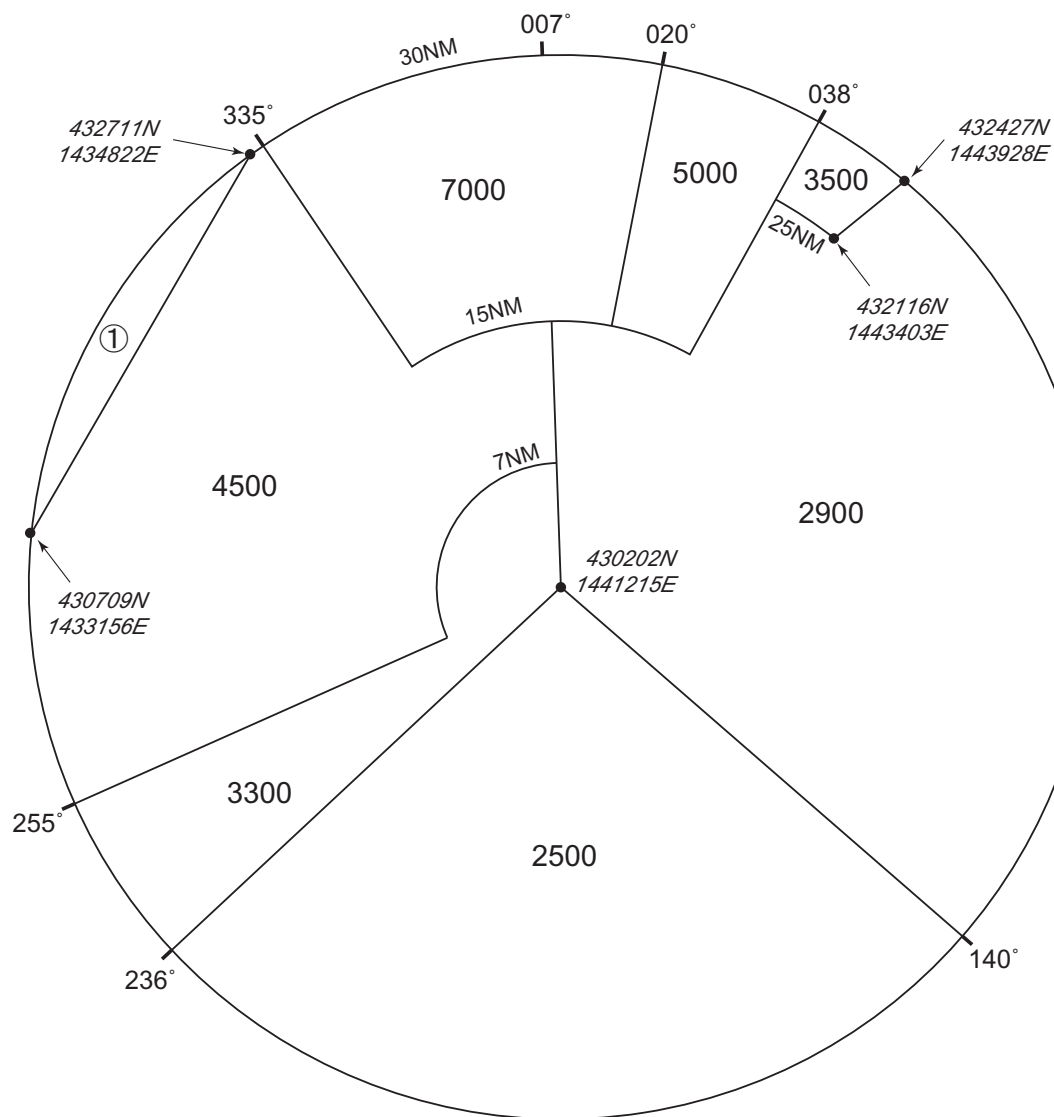
Call sign	BRG / DIST from ARP	Remarks
北斗 Hokuto	080°T / 4.6NM	T字路交差点 Intersection
大楽毛 Otanoshike	113°T / 4.2NM	製紙工場煙突群 Chimneys
釧路ステーション Kushiro Station	110°T / 8.8NM	JR駅 Station
西庶路 Nishisyoro	215°T / 4.7NM	JR駅 Station
白糖 Shiranuka	225°T / 7.2NM	JR駅 Station

CHANGE : Map updated. BRG/DIST from ARP.

RJCK / KUSHIRO

Minimum Vectoring Altitude CHART

VAR 9°W (2007)



CHANGE : KSE deleted.