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

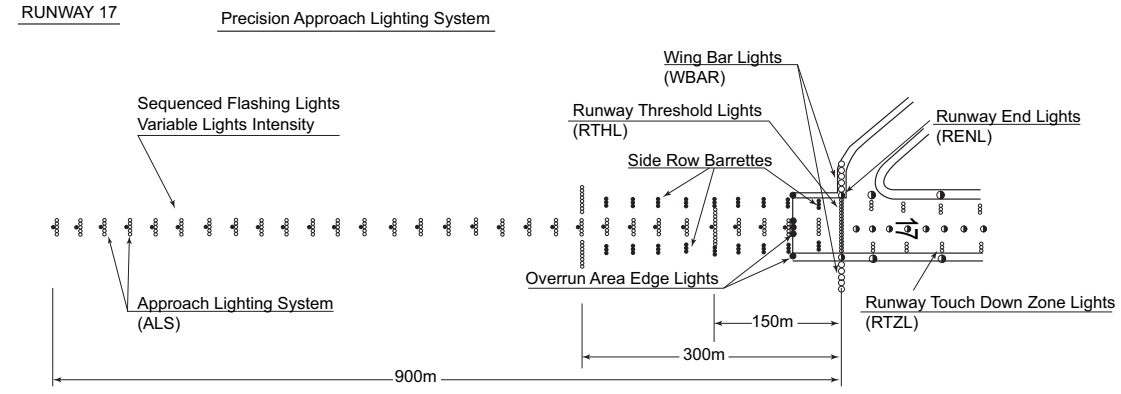
Slope of RWY	Strip Dimensions(M)	RESA(Overrun) Dimensions(M)	Remarks
7	10	11	14
See AD 2.24 AD Chart	2620×300	192×(MNM:95 MAX:283)	RWY Grooving 2500×45m
	2620×300	90×(MNM:90 MAX:300)* *For detail, ask airport administrator	

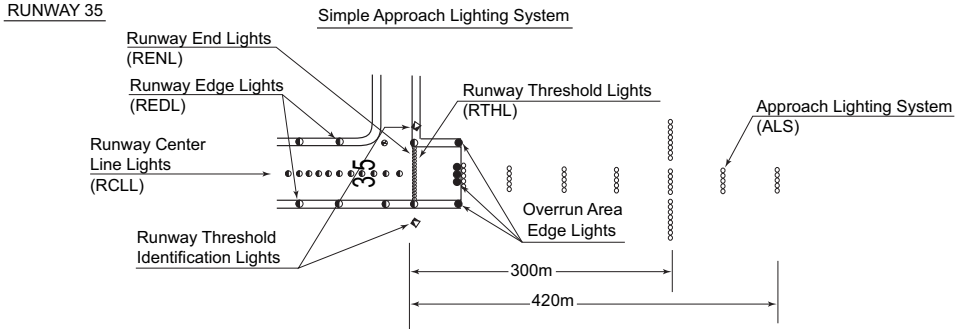
RJCK AD 2.13 DECLARED DISTANCES

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)								





RJCK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: *430237N/1441152E*, 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	

RJCK AD 2.18 ATS COMMUNICATION FACILITIES

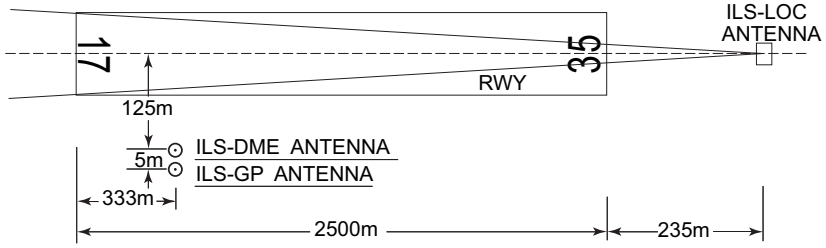
Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	Kushiro Tower	118.05MHz(1) 126.2MHz	2300 - 1200	(1)Primary

RJCK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

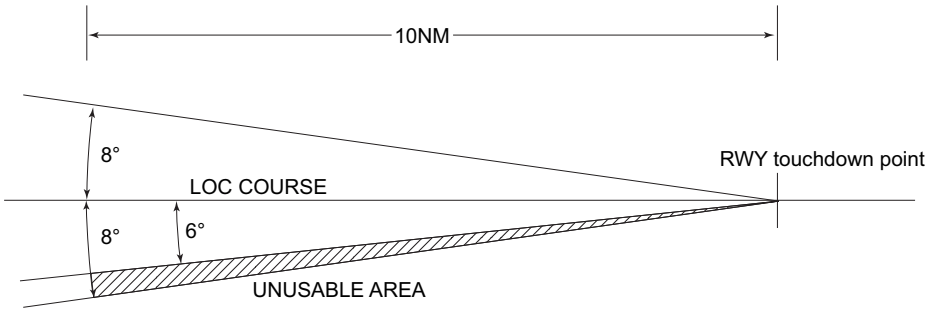
Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (9°W/2007)	KSE	112.5MHz	H24	*430201.69N/1441214.81E*		Unusable: BTN 340 degrees - 350 degrees beyond 35nm BLW 7,000ft.
DME	KSE	1159MHz (CH-72X)	H24	*430201.69N/1441214.81E*	334ft	
ILS-LOC 17	IKS	108.9MHz	2300 - 1200	*430142.57N/1441158.31E*		LOC: 235m (771ft) away FM RWY 35 THR, BRG (MAG) 168 degrees.
ILS-GP 17	-	329.3MHz (CH-26X)	2300 - 1200	*430253.70N/1441114.80E*		GP:333m(1093ft) inside from RWY17 THR, 130m(427ft) W of RCL. HGT of ILS reference datum 16.7m (55ft). GP angle 3.0° GP Unusable in the following area: beyond 6° west side of LOC course.
ILS-DME 17	-	987MHz (CH-26X)	2300 - 1200	*430253.75N/1441115.01E*	319ft	DME: 333m(1039ft) inside from RWY17 THR, 125m(410ft) W of RCL
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

ILS

KUSHIRO AP



REMARKS : 1 . LOC beam BRG(MAG) 168°
2 . HGT of ILS REF datum 16.7m(55ft)
3 . GP Angle 3.0°
4 . ELEV of ILS-DME 97.3m(319ft)



GP unusable in the following area beyond 6° west side of LOC course.

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. 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; • 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; • 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:
(a) Surface wind speed and direction
(b) 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;
(1) Ceiling is at or less than 400ft and/or RVR is at or less than 1,000m.
(2) Facilities listed 1) above are operational.
(3) 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.

3. LVTO at Kushiro Airport

1) Facilities

The following facilities are available:

RWY 17	RWY 35
• Lighting system RWY 17 for LVTO • RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)	• 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; • 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

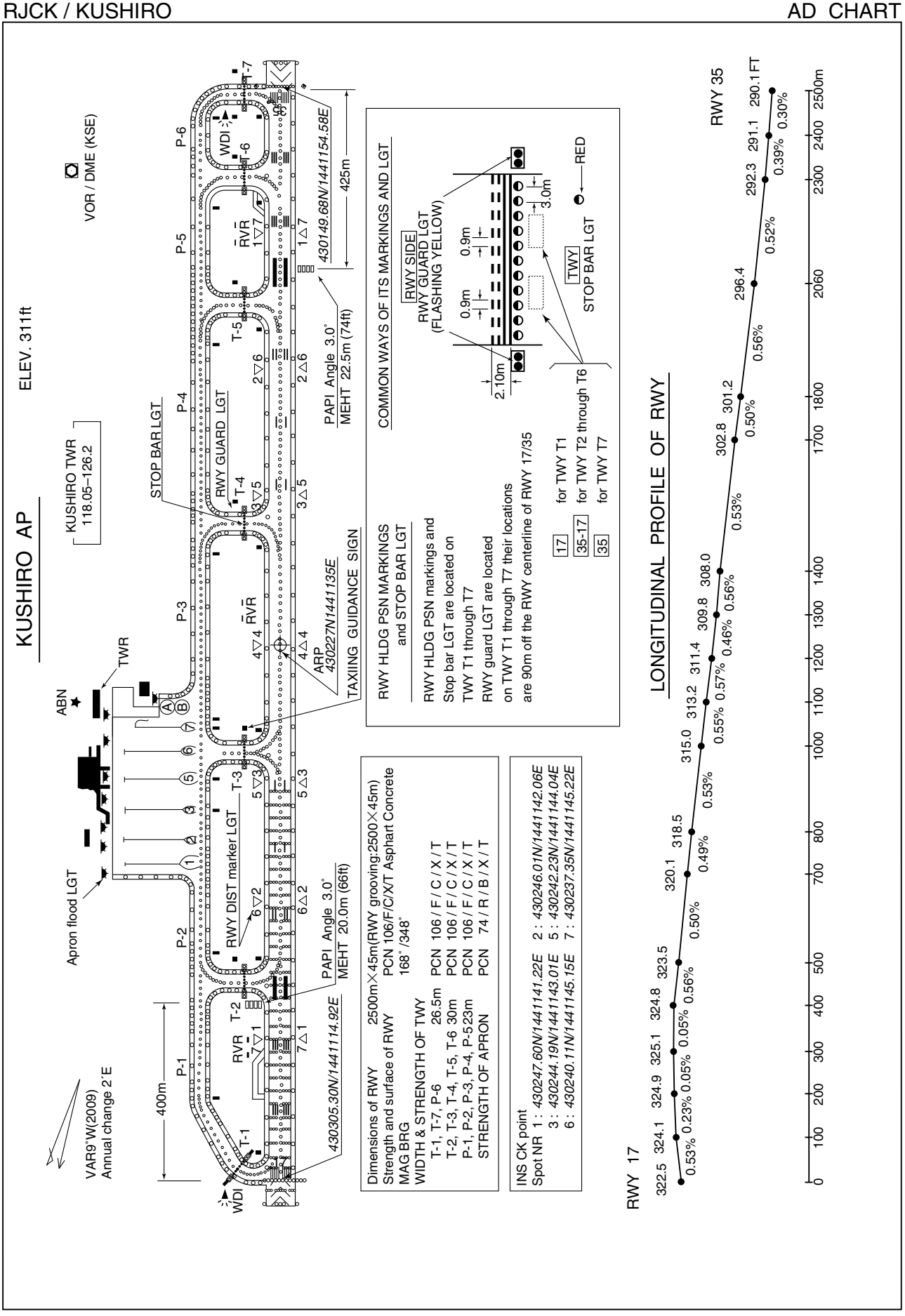
RJCK AD 2.23 ADDITIONAL INFORMATION

Nil

RJCK AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Precision Approach Terrain Chart (precision approach CAT II and III runways)
Standard Departure Chart - Instrument (ALICE, ERIMO, OBIHIRO, KUSHIRO REVERSAL, YUDOH, EATAK)
Standard Departure Chart - Instrument (AKESI, TANCHO, ASHORO - RNAV)
Standard Arrival Chart - Instrument (MENOK ARC)
Standard Arrival Chart - Instrument (KUSSY)
Standard Arrival Chart - Instrument (CRANE ARC)
Standard Arrival Chart - Instrument (MENOK, MARNY - RNAV)
Instrument Approach Chart (ILS or LOC RWY17 (CAT III))
Instrument Approach Chart (VOR RWY17)
Instrument Approach Chart (VOR Z RWY35)
Instrument Approach Chart (VOR Y 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)

RJCK / KUSHIRO AD CHART



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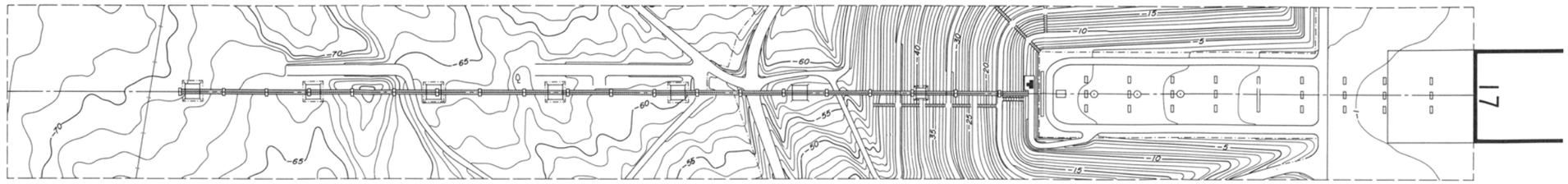
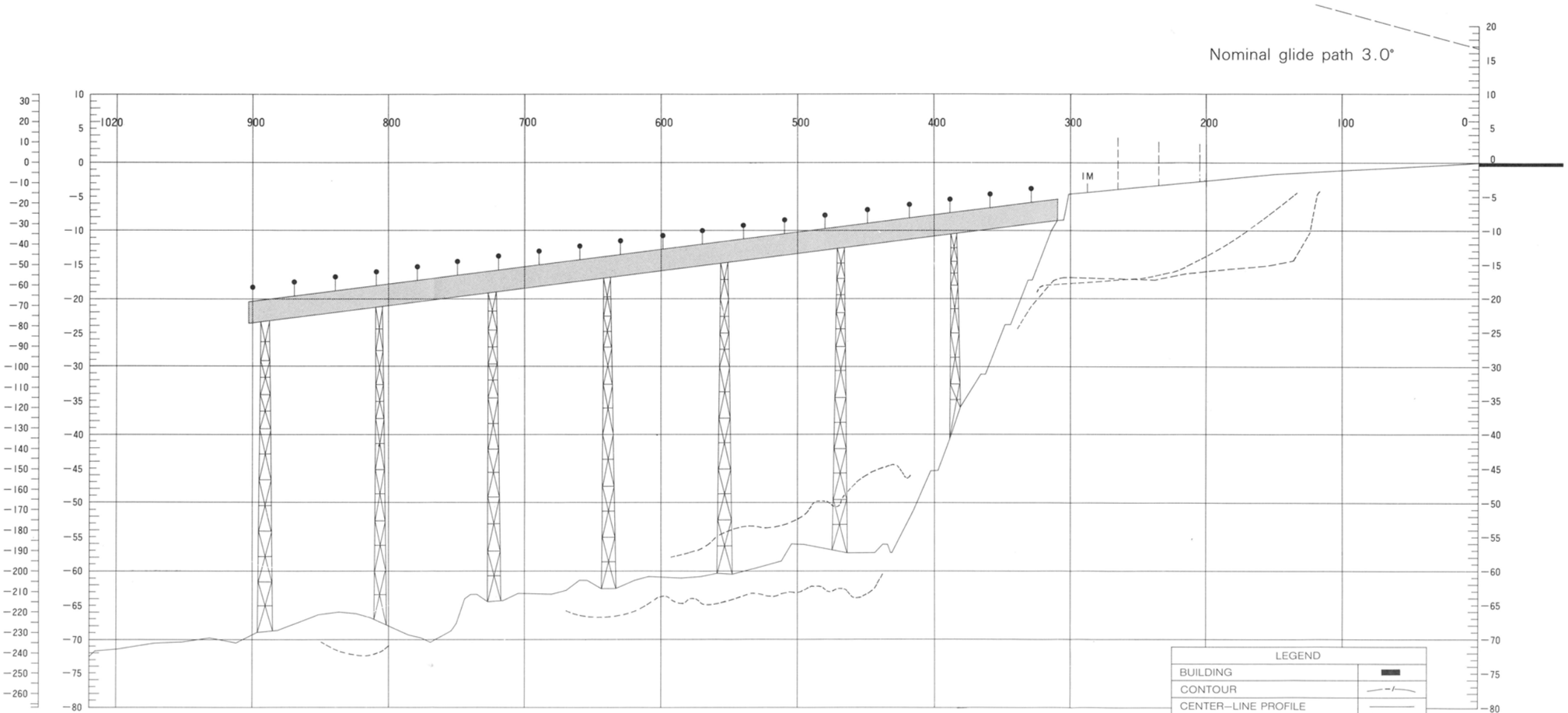
RJCK/KUSHIRO

PRECISION APPROACH TERRAIN CHART－ICAO

DISTANCES AND HEIGHTS IN METERS

RWY 17





HORIZONTAL SCALE 1：2500

VERTICAL SCALE 1：500

CONTOUR AND HEIGHTS ARE RELATED TO ELEVATION OF RWY THR

STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO SID

ALICE THREE DEPARTURE

RWY17 : Climb RWY HDG to 1000FT, turn right...
RWY35 : Climb RWY HDG to 1000FT, turn left HDG155˚...
...to intercept and proceed via KSE R200 to ALICE.
Cross ALICE at assigned altitude.

Note : No turn before DER.

ERIMO FOUR DEPARTURE

RWY17 : Climb RWY HDG to 1000FT, turn left...
RWY35 : Climb RWY HDG to 1000FT, turn left HDG116˚...
...to intercept and proceed via KSE R161, via NSE R218, via KSE R200 to ERIMO.
Cross NSE R218/85.4DME at or above 10000FT.

Note : No turn before DER.

OBIHIRO THREE DEPARTURE

RWY17 : Climb RWY HDG to 1000FT, turn right HDG266˚...
RWY35 : Climb RWY HDG to 1000FT, turn left HDG176˚...
...to intercept and proceed via KSE R221, via OBE R097 to OBE VOR/DME.

Note : No turn before DER.

KUSHIRO REVERSAL FOUR DEPARTURE

RWY17 : Climb RWY HDG to 1000FT, turn right...
RWY35 : Climb RWY HDG to 1000FT, turn left HDG155˚...
...to intercept and proceed via KSE R200 to 3000FT, turn left, direct to KSE VOR/DME.
Cross KSE VOR/DME at or above 5000FT.

Note : No turn before DER.

YUDOH TWO DEPARTURE

RWY17 : Climb RWY HDG to 1000FT, turn right HDG266˚...
RWY35 : Climb RWY HDG to 1000FT, turn left HDG176˚...
...to intercept and proceed via KSE R221 to YUDOH.

Note : No turn before DER.

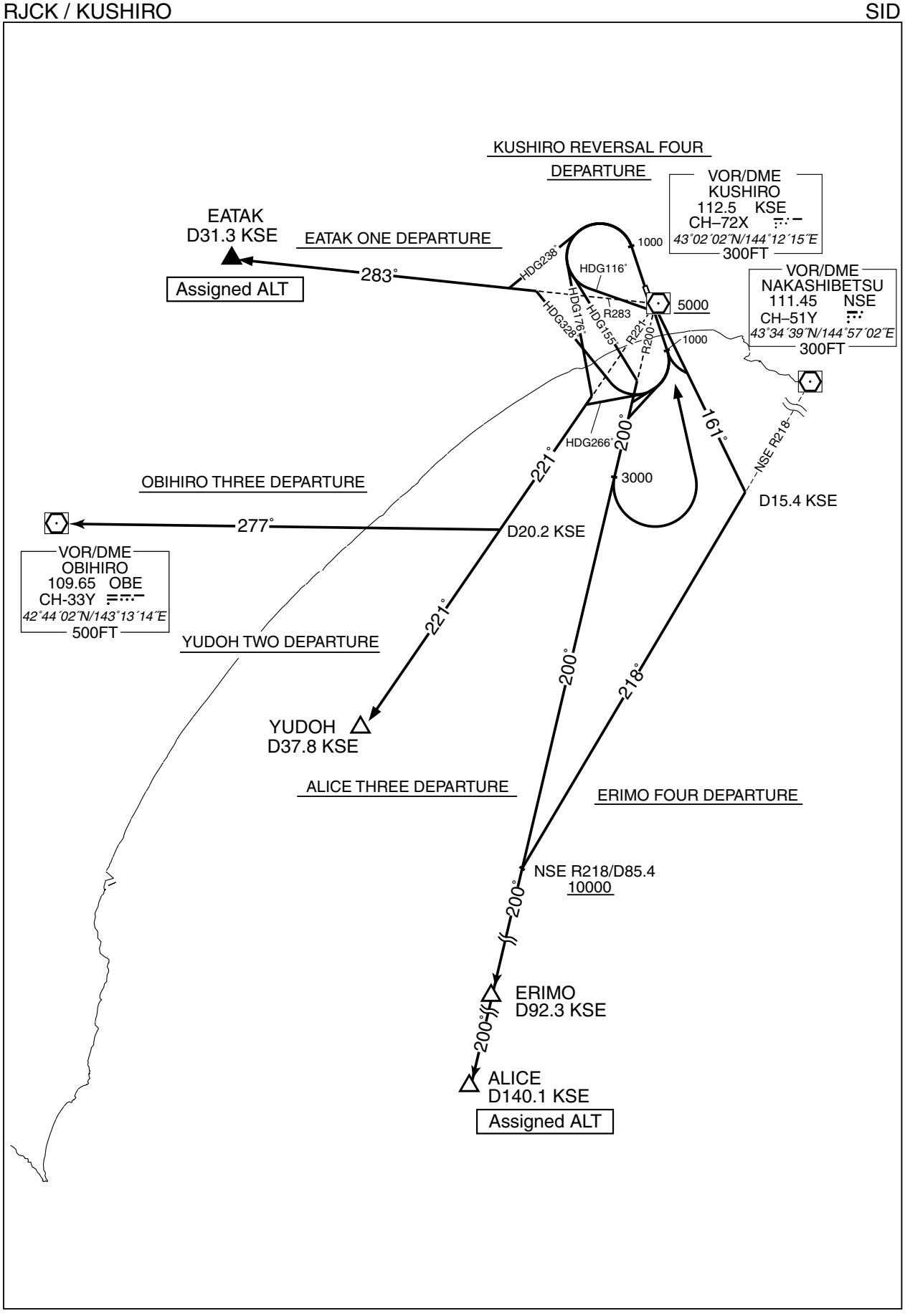
EATAK ONE DEPARTURE

RWY17 : Climb RWY HDG to 1000FT, turn right HDG328˚...
RWY35 : Climb RWY HDG to 1000FT, turn left HDG238˚...
...to intercept and proceed via KSE R283 to EATAK.
Cross EATAK at assigned altitude.

Note : No turn before DER.

STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO SID

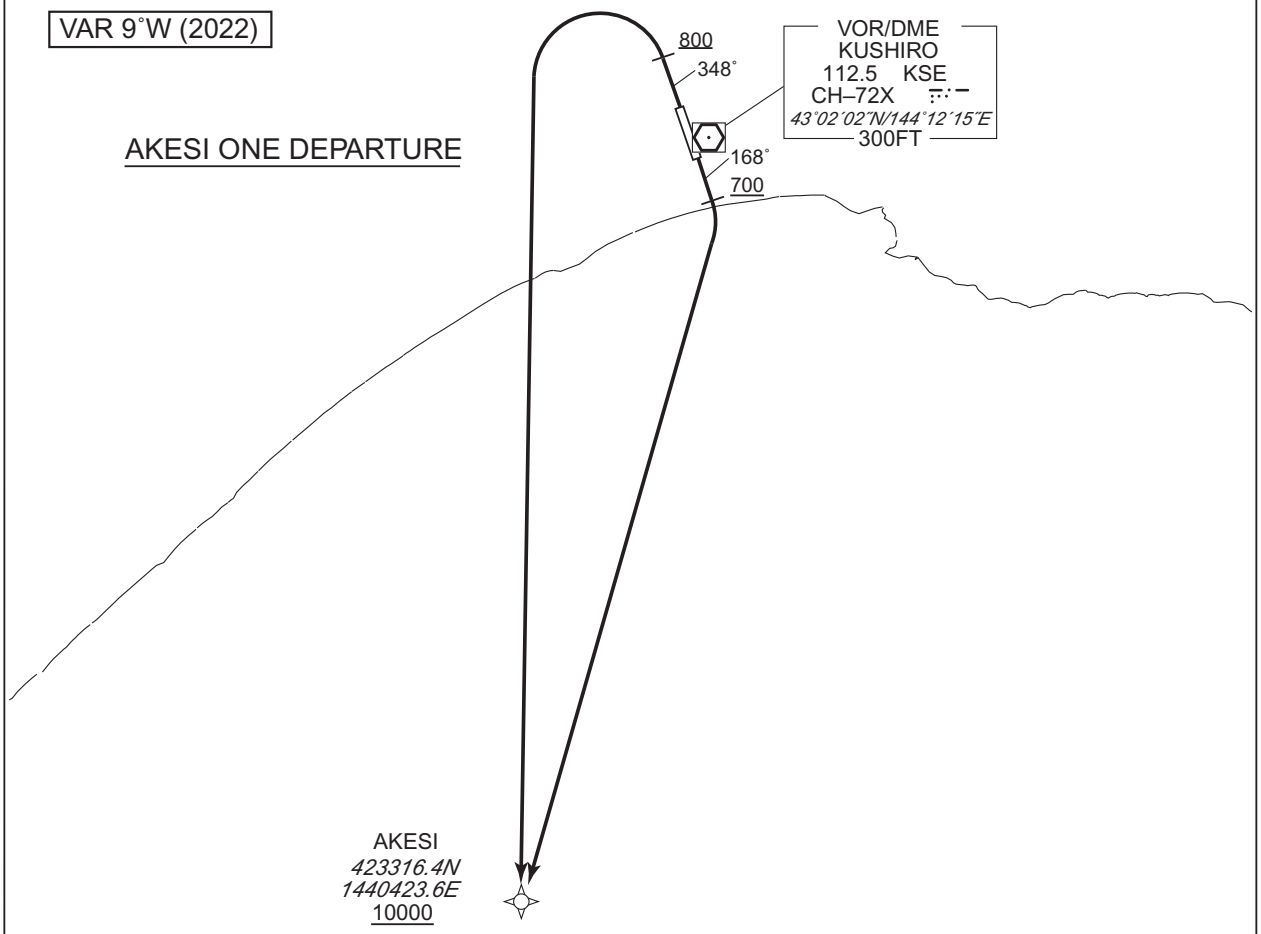


STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO — RNAV SID

AKESI ONE DEPARTURE	Basic RNP1

Note GNSS required.



AKESI ONE DEPARTURE

RWY17 : Climb on HDG168˚ at or above 700FT, turn right direct to AKESI at or above 10000FT.
RWY35 : Climb on HDG348˚ at or above 800FT, turn left direct to AKESI 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)	-9.2	–	–	+700	–	–	Basic RNP1
002	DF	AKESI	–	–	-9.2	–	R	+10000	–	–	Basic 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)	-9.2	–	–	+800	–	–	Basic RNP1
002	DF	AKESI	–	–	-9.2	–	L	+10000	–	–	Basic RNP1

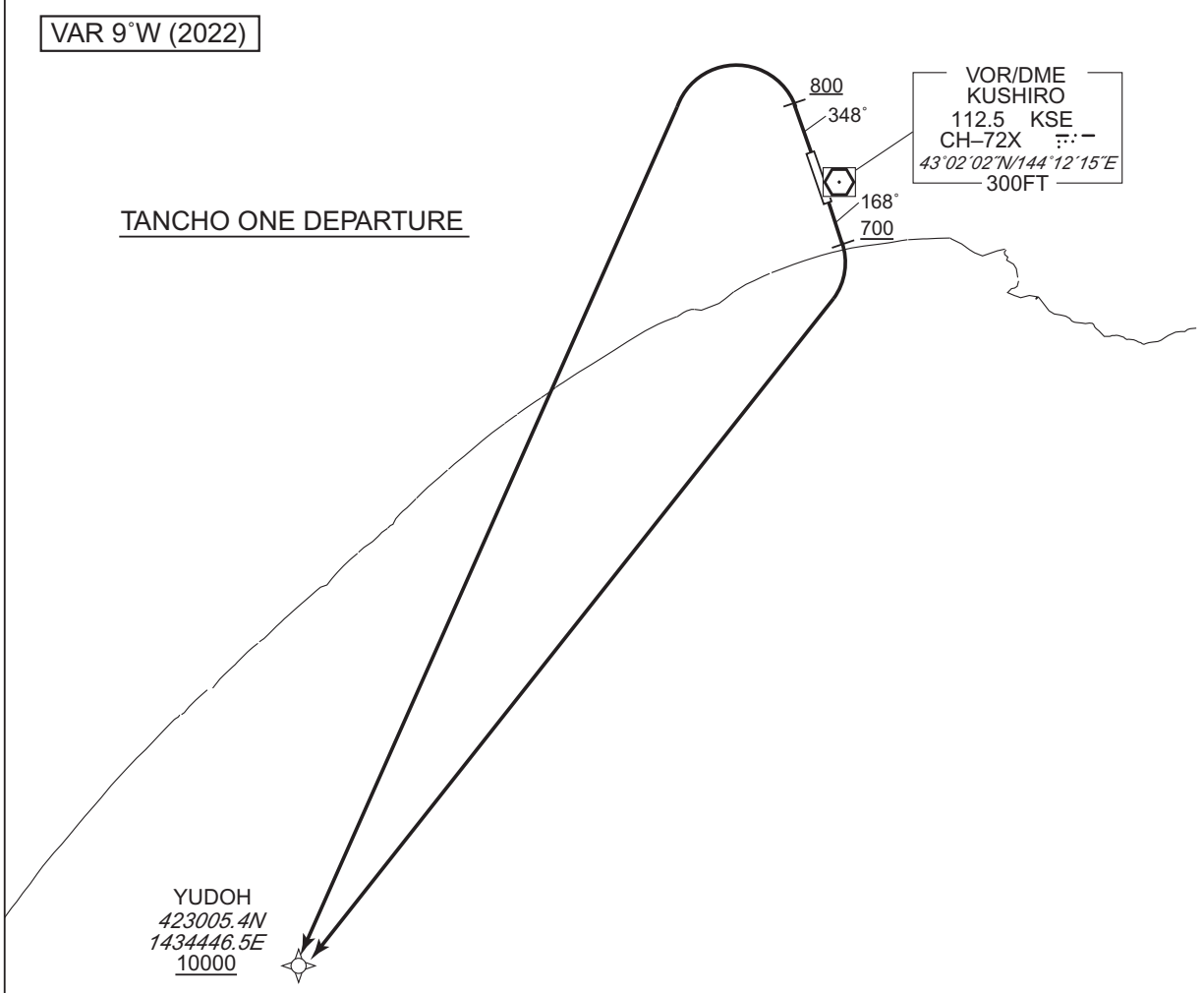
CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO RNAV SID

TANCHO ONE DEPARTURE	Basic RNP1

Note GNSS required.



TANCHO ONE DEPARTURE

RWY17 : Climb on HDG168˚ at or above 700FT, turn right direct to YUDOH at or above 10000FT.
RWY35 : Climb on HDG348˚ at or above 800FT, turn left direct to YUDOH 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)	-9.2	–	–	+700	–	–	Basic RNP1
002	DF	YUDOH	–	–	-9.2	–	R	+10000	–	–	Basic 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)	-9.2	–	–	+800	–	–	Basic RNP1
002	DF	YUDOH	–	–	-9.2	–	L	+10000	–	–	Basic RNP1

CHANGE : VAR.

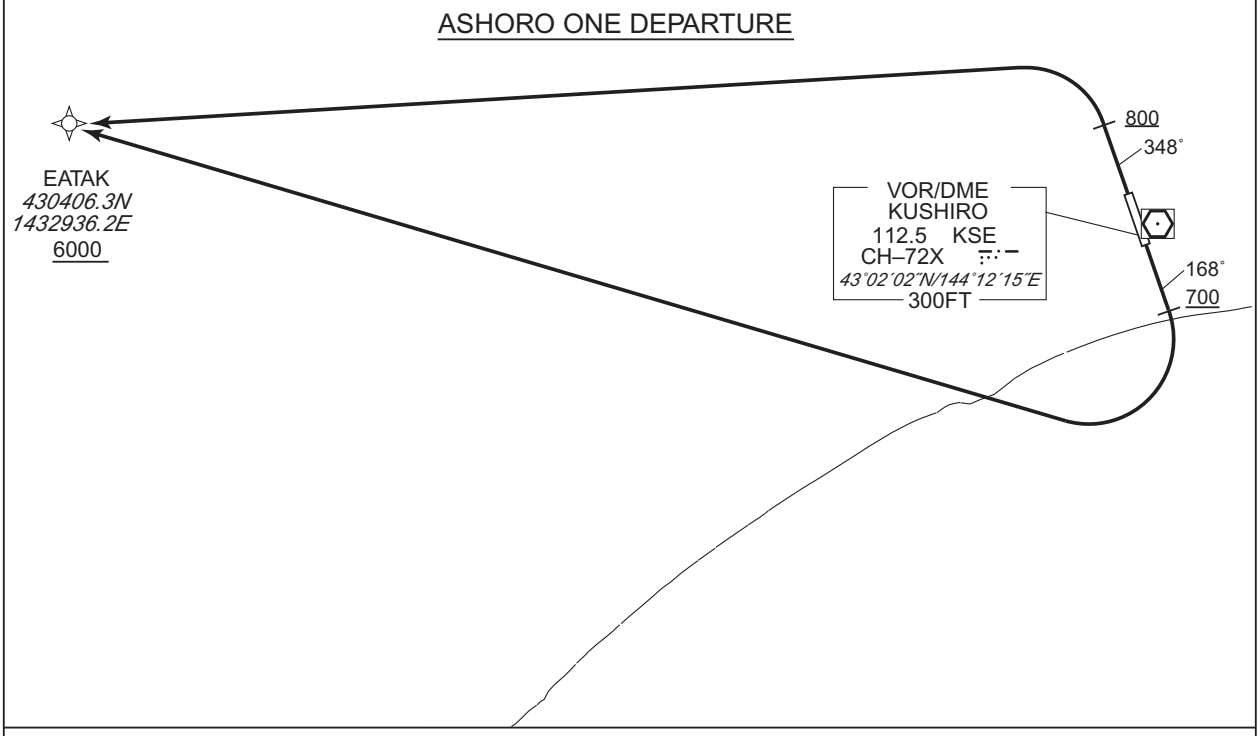
STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO — RNAV SID

ASHORO ONE DEPARTURE	Basic RNP1

Note GNSS required.

VAR 9˚W (2022)



ASHORO ONE DEPARTURE

RWY17 : Climb on HDG168˚ at or above 700FT, turn right direct to EATAK at or above 6000FT.
RWY35 : Climb on HDG348˚ at or above 800FT, turn left direct to EATAK at or above 6000FT.

Note RWY17: No turn before DER.

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)	-9.2	–	–	+700	–	–	Basic RNP1
002	DF	EATAK	–	–	-9.2	–	R	+6000	–	–	Basic 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)	-9.2	–	–	+800	–	–	Basic RNP1
002	DF	EATAK	–	–	-9.2	–	L	+6000	–	–	Basic RNP1

CHANGE : VAR.

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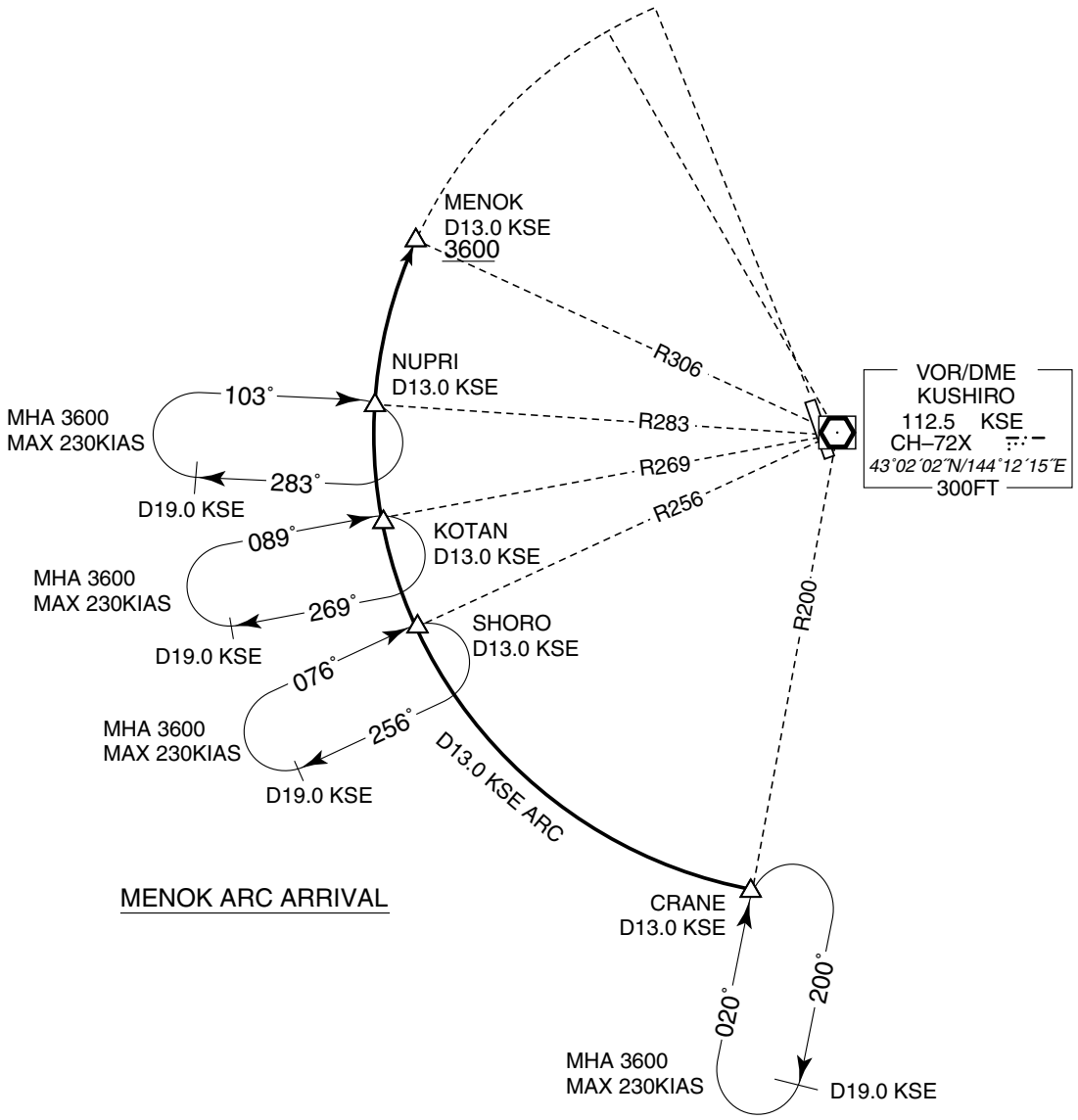
STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO STAR

MENOK ARC ARRIVAL

From over CRANE, SHORO, KOTAN, NUPRI, via KSE 13.0DME clockwise ARC to MENOK.

Cross MENOK at or above 3600FT.



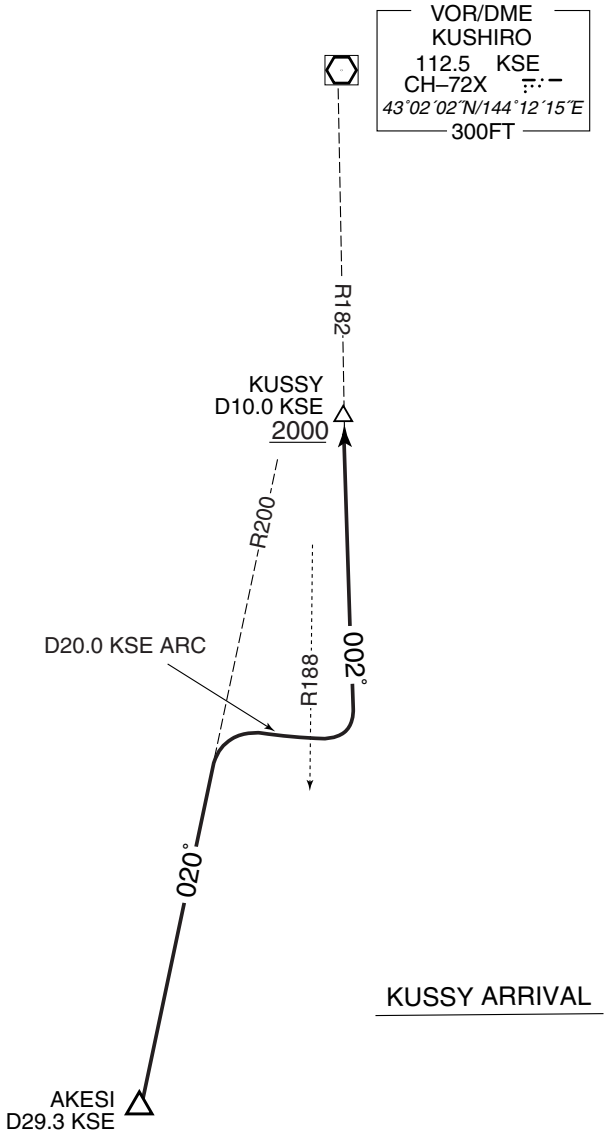
STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO STAR

KUSSY ARRIVAL

From over AKESI, via KSE R200 to intercept and proceed via KSE 20.0DME counterclockwise ARC, via KSE R182 to KUSSY.

Cross KUSSY at or above 2000FT.



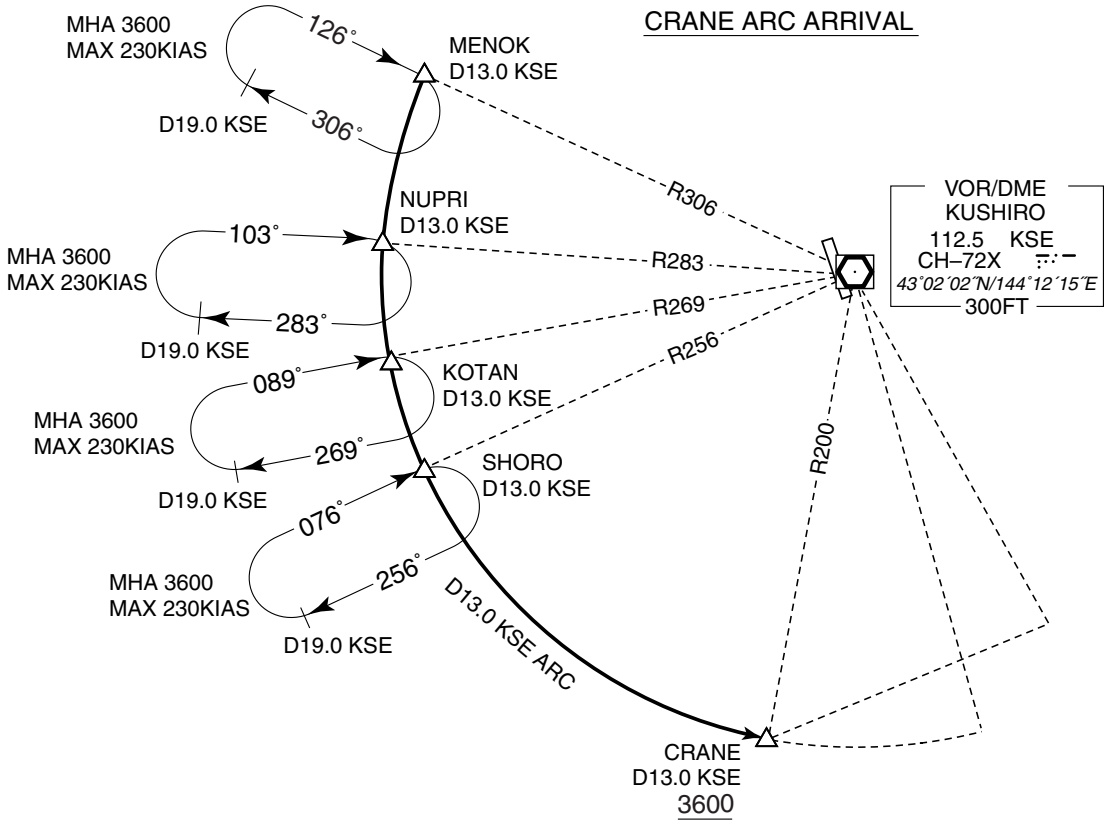
STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO STAR

CRANE ARC ARRIVAL

From over MENOK, NUPRI, KOTAN, SHORO, via KSE 13.0DME counterclockwise ARC to CRANE.

Cross CRANE at or above 3600FT.

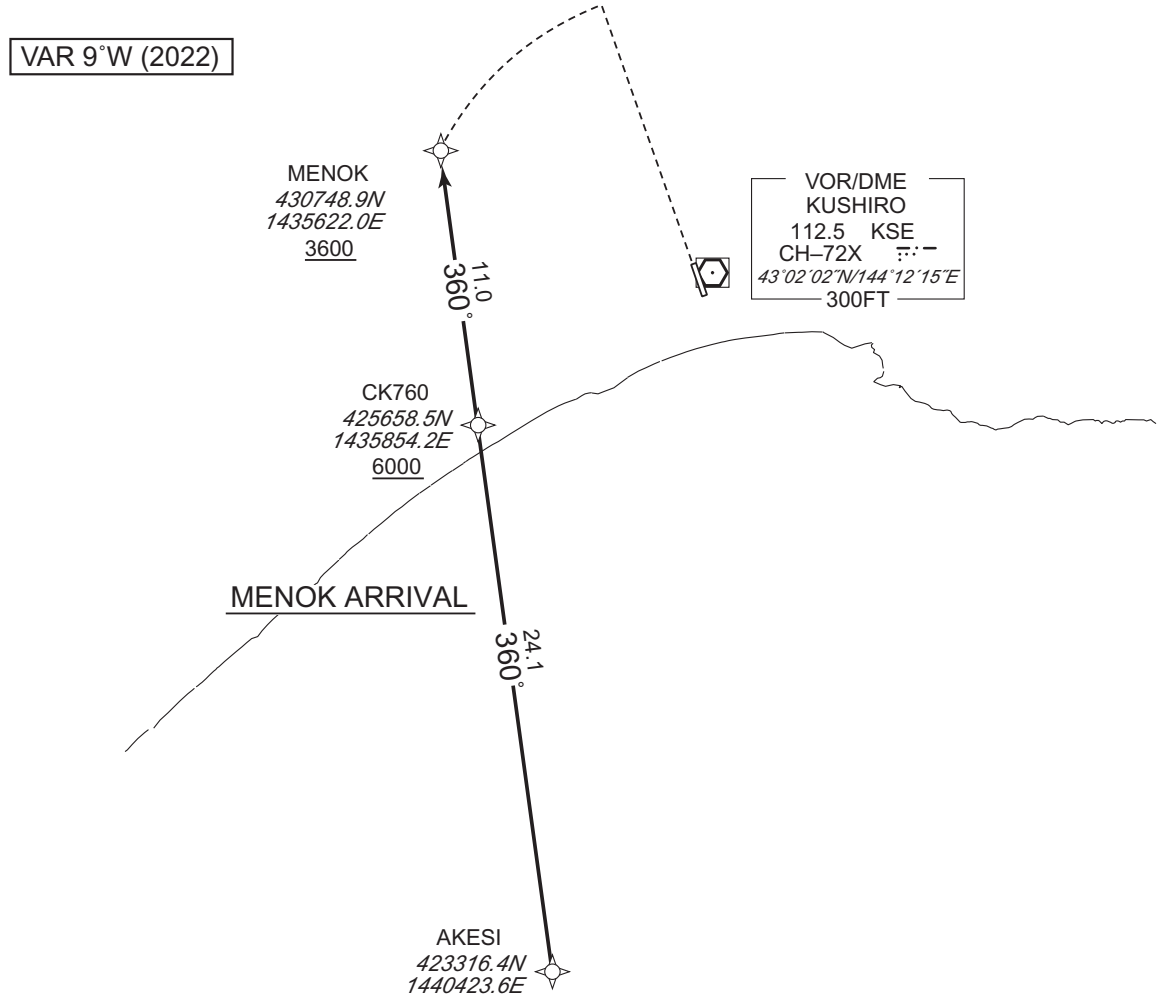


STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO — RNAV STAR RWY17

MENOK ARRIVAL	Basic RNP1

Note GNSS required.



MENOK ARRIVAL

From AKESI, to CK760 at or above 6000FT, to MENOK at or above 3600FT.

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	–	–	–	–	–	Basic RNP1
002	TF	CK760	–	360 (350.4)	-9.2	24.1	–	+6000	–	–	Basic RNP1
003	TF	MENOK	–	360 (350.3)	-9.2	11.0	–	+3600	–	–	Basic RNP1

CHANGE : VAR. PROC course.

STANDARD ARRIVAL CHART -INSTRUMENT

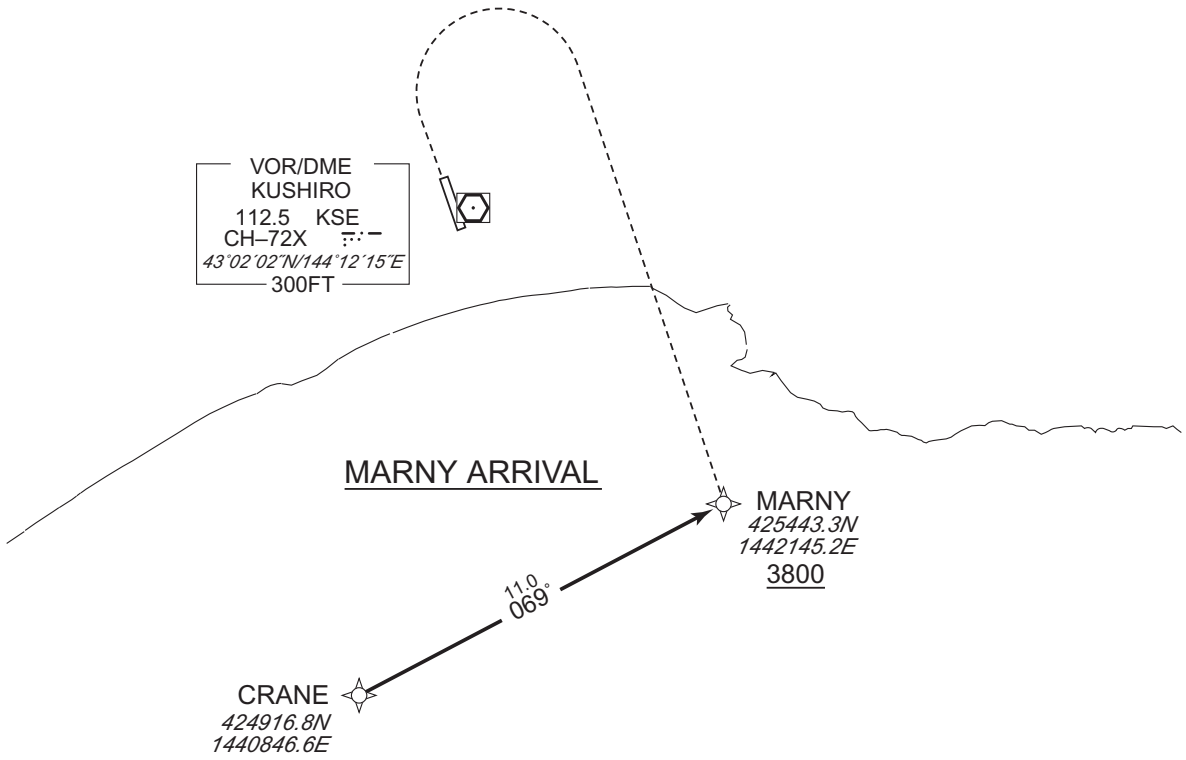
RJCK / KUSHIRO

RNAV STAR RWY17

MARNY ARRIVAL	Basic RNP1

Note GNSS required.

VAR 9˚W (2022)



MARNY ARRIVAL

From CRANE, to MARNY at or above 3800FT.

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	CRANE	–	–	-9.2	–	–	–	–	–	Basic RNP1
002	TF	MARNY	–	069 (060.2)	-9.2	11.0	–	+3800	–	–	Basic RNP1

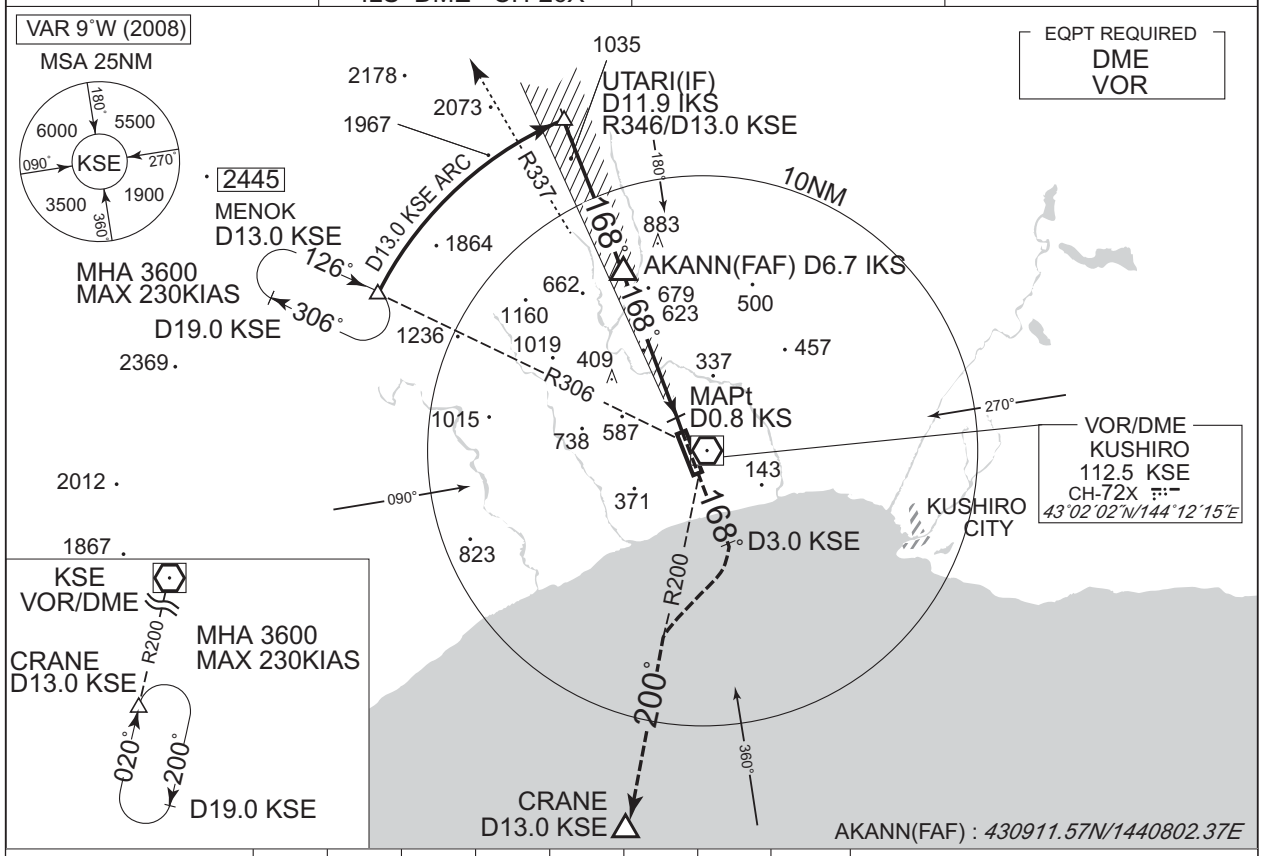
CHANGE : VAR.

INSTRUMENT APPROACH CHART

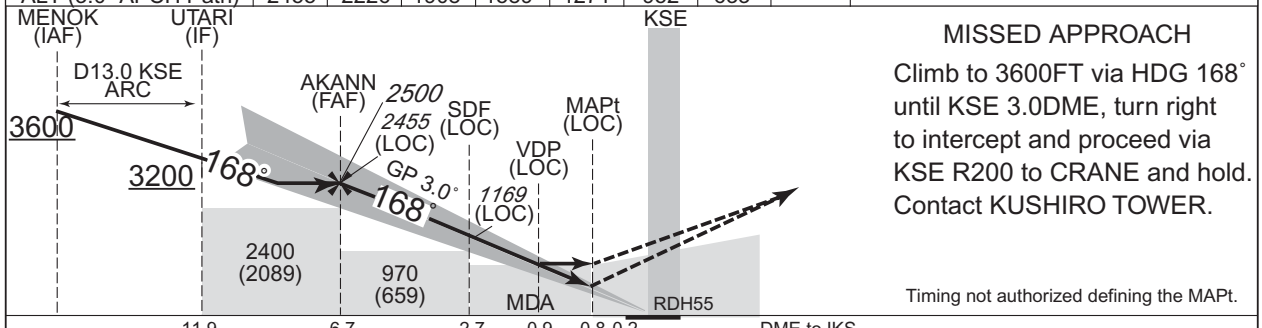
RJCK / KUSHIRO — ILS or LOC RWY17 (CAT Ⅲ)

SAPPORO CONTROL	ILS-LOC	KUSHIRO TOWER	NO RADAR
128.325 – 246.1 134.25 – 260.4	108.9 IKS ILS–GP 329.3 ILS–DME CH-26X	118.05 – 126.2	

CHANGE: OCA/H BTN UTARI and AKANN. ALT(3.0° APCH Path) at FAF added. Description of PROC ALT(SDF).



NM to IKS	FAF	6	5	4	3	2	1	MAPt
ALT (3.0° APCH Path)	2455	2226	1908	1589	1271	952	633	–



11.9	6.7	2.7	0.9	0.8	0.2	DME to IKS
11.7	6.5	2.5	0.7	0.6	0	NM to THR

MISSED APPROACH

Climb to 3600FT via HDG 168° until KSE 3.0DME, turn right to intercept and proceed via KSE R200 to CRANE and hold. Contact KUSHIRO TOWER.

Timing not authorized defining the MAPt.

MINIMA — THR elev. 323 — AD elev. 311

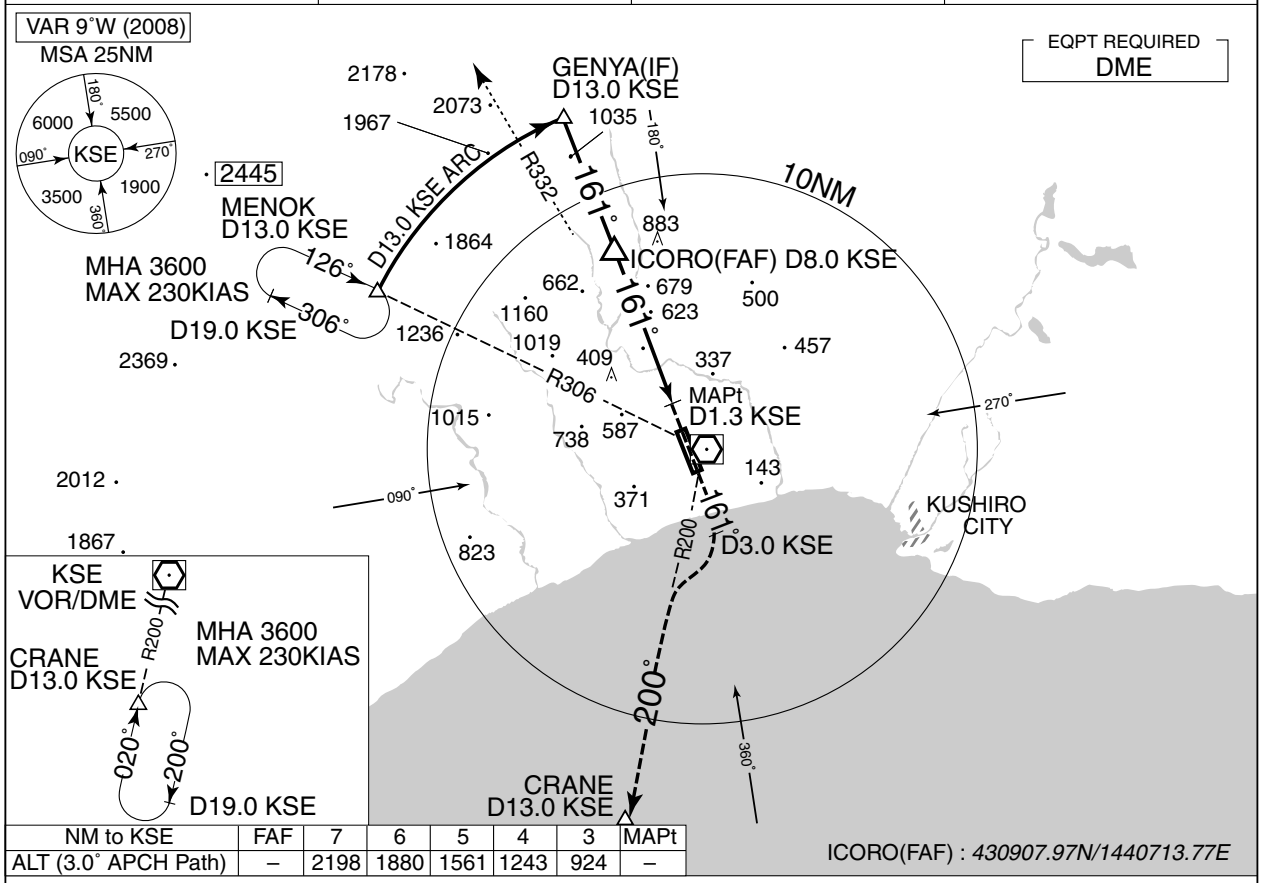
CAT	CAT Ⅲ	CAT Ⅱ			CAT Ⅰ		LOC		CIRCLING	
	RVR	DA(H)	RA	RVR	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	100	Not applicable.			523 (200)	550	590 (279)	800	730 (419)	1600
B									770 (459)	
C										2400
D								1200	870 (559)	3200

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

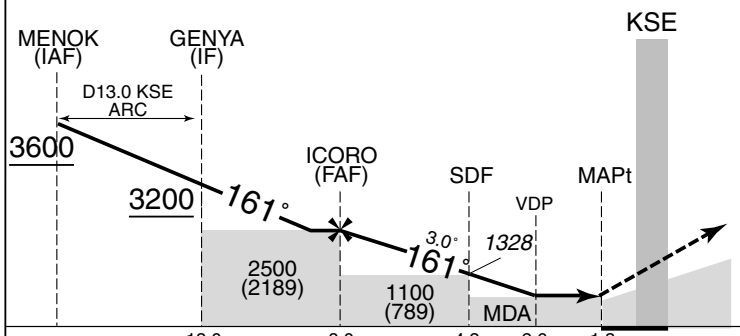
RJCK / KUSHIRO VOR RWY17

SAPPORO CONTROL	KUSHIRO VOR/DME	KUSHIRO TOWER	NO RADAR
128.325 – 246.1 134.25 – 260.4	112.5 KSE CH–72X *43°02′02″N/144°12′15″E*	118.05 – 126.2	



NM to KSE	FAF	7	6	5	4	3	MAPt
ALT (3.0° APCH Path)	–	2198	1880	1561	1243	924	–

ICORO(FAF) : *430907.97N/1440713.77E*



MISSED APPROACH

Climb to 3600FT via KSE R161 to KSE 3.0DME, turn right to intercept and proceed via KSE R200 to CRANE and hold. Contact KUSHIRO TOWER.

Timing not authorized for defining the MAPt.

13.0	8.0	4.3	2.6	1.3		DME to KSE
11.7	6.7	3.0	1.3	0		NM to THR

MINIMA THR elev. 323 AD elev. 311

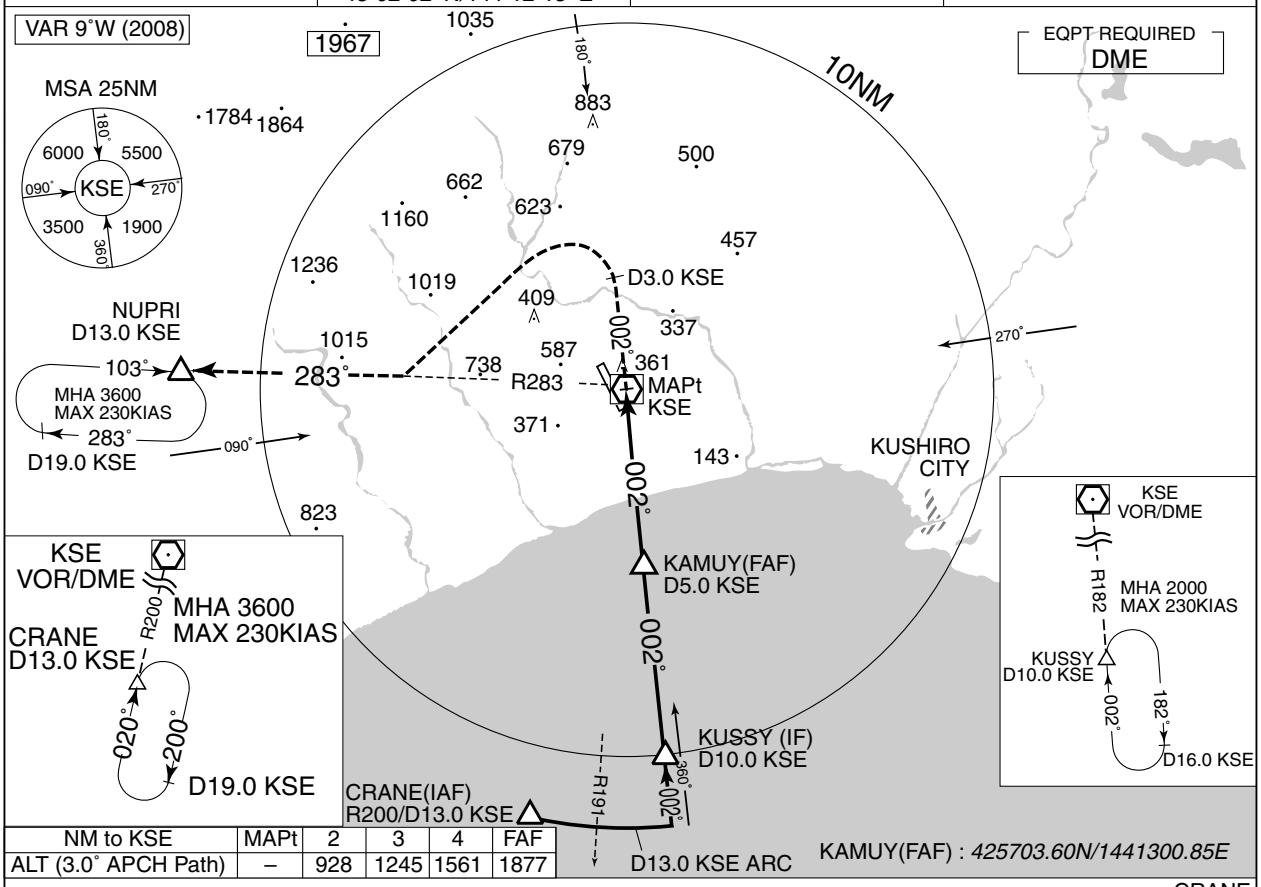
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	780 (469)	1000	780 (469)	1600
B		1200		
C				2400
D		1600	870 (559)	3200

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO VOR Z RWY35

SAPPORO CONTROL	KUSHIRO VOR/DME	KUSHIRO TOWER	NO RADAR
128.325 – 246.1 134.25 – 260.4	112.5 KSE CH–72X *43°02′02″N/144°12′15″E*	118.05 – 126.2	

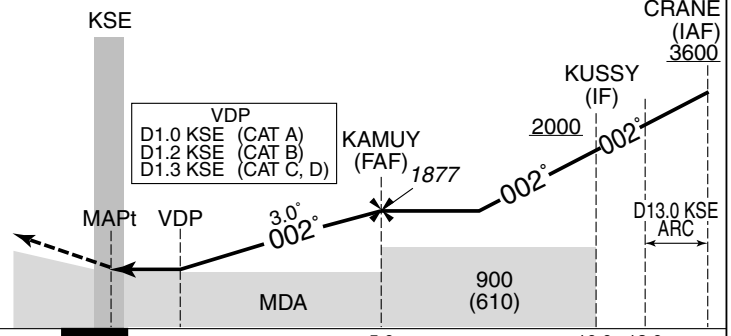


NM to KSE	MAPt	2	3	4	FAF
ALT (3.0° APCH Path)	–	928	1245	1561	1877

KAMUY(FAF) : *425703.60N/1441300.85E*

MISSED APPROACH
Climb to 3600FT via KSE R002 to KSE 3.0DME, turn left to intercept and proceed via KSE R283 to NUPRI and hold.
Contact KUSHIRO TOWER.

Timing not authorized for defining the MAPt.



DME to KSE		0.1	5.0	10.0 13.0
NM to THR		0	4.9	9.9 12.9

MINIMA THR elev. 290 AD elev. 311

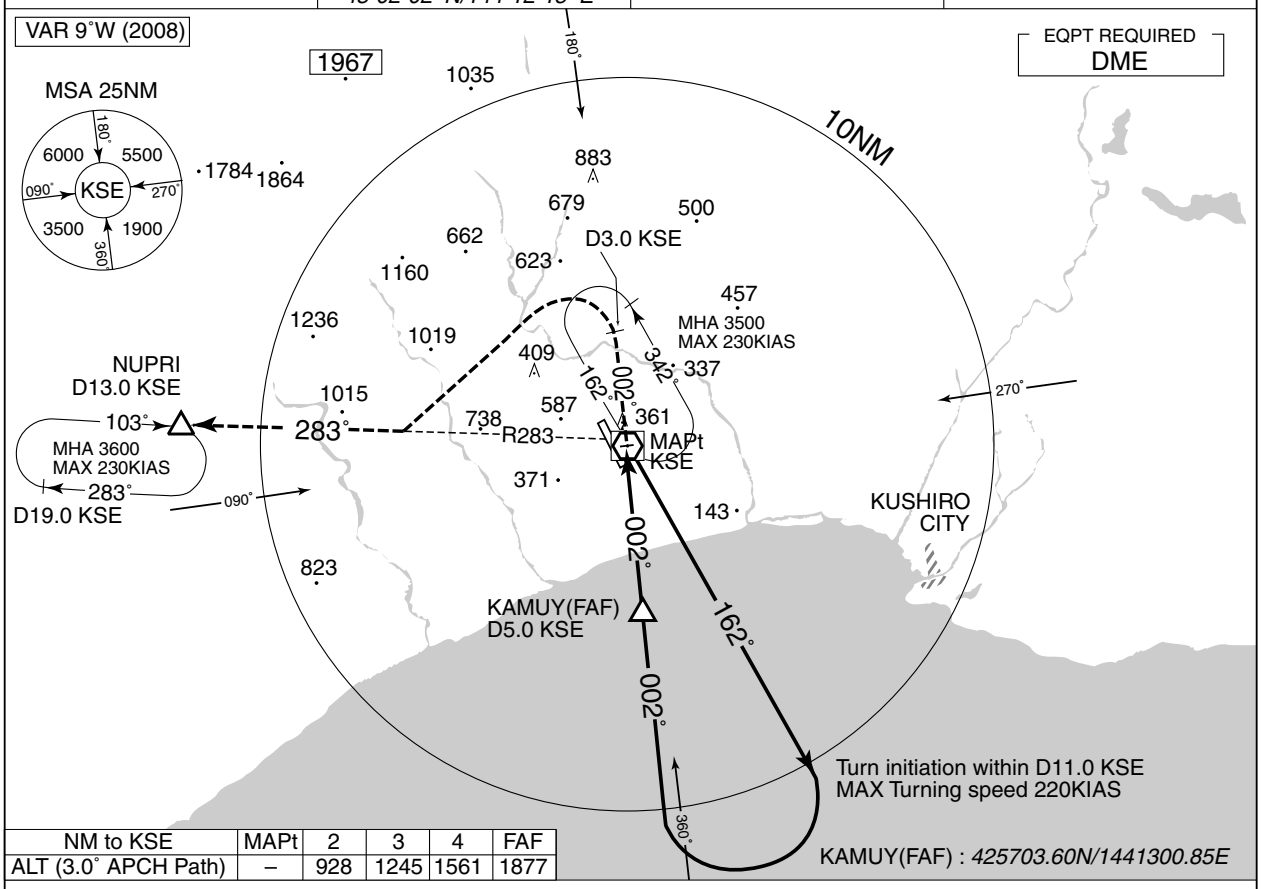
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	640 (350)	1200	730 (419)	1600
B	670 (380)	1300	770 (459)	
C	700 (410)	1400		2400
D	720 (430)	1600	870 (559)	3200

Circling to EAST side of RWY only.

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO VOR Y RWY35

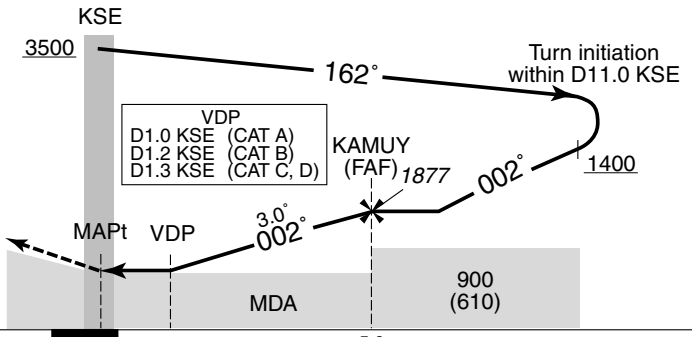
SAPPORO CONTROL	KUSHIRO VOR/DME	KUSHIRO TOWER	NO RADAR
128.325 – 246.1 134.25 – 260.4	112.5 KSE CH–72X *43°02′02″N/144°12′15″E*	118.05 – 126.2	



NM to KSE	MAPt	2	3	4	FAF
ALT (3.0° APCH Path)	–	928	1245	1561	1877

MISSED APPROACH
Climb to 3600FT via KSE R002 to KSE 3.0DME, turn left to intercept and proceed via KSE R283 to NUPRI and hold.
Contact KUSHIRO TOWER.

Timing not authorized for defining the MAPt.



DME to KSE	0.1	5.0
NM to THR	0	4.9

MINIMA THR elev. 290 AD elev. 311

CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	640 (350)	1200	730 (419)	1600
B	670 (380)	1300	770 (459)	
C	700 (410)	1400		2400
D	720 (430)	1600	870 (559)	3200

Circling to EAST side of RWY only.

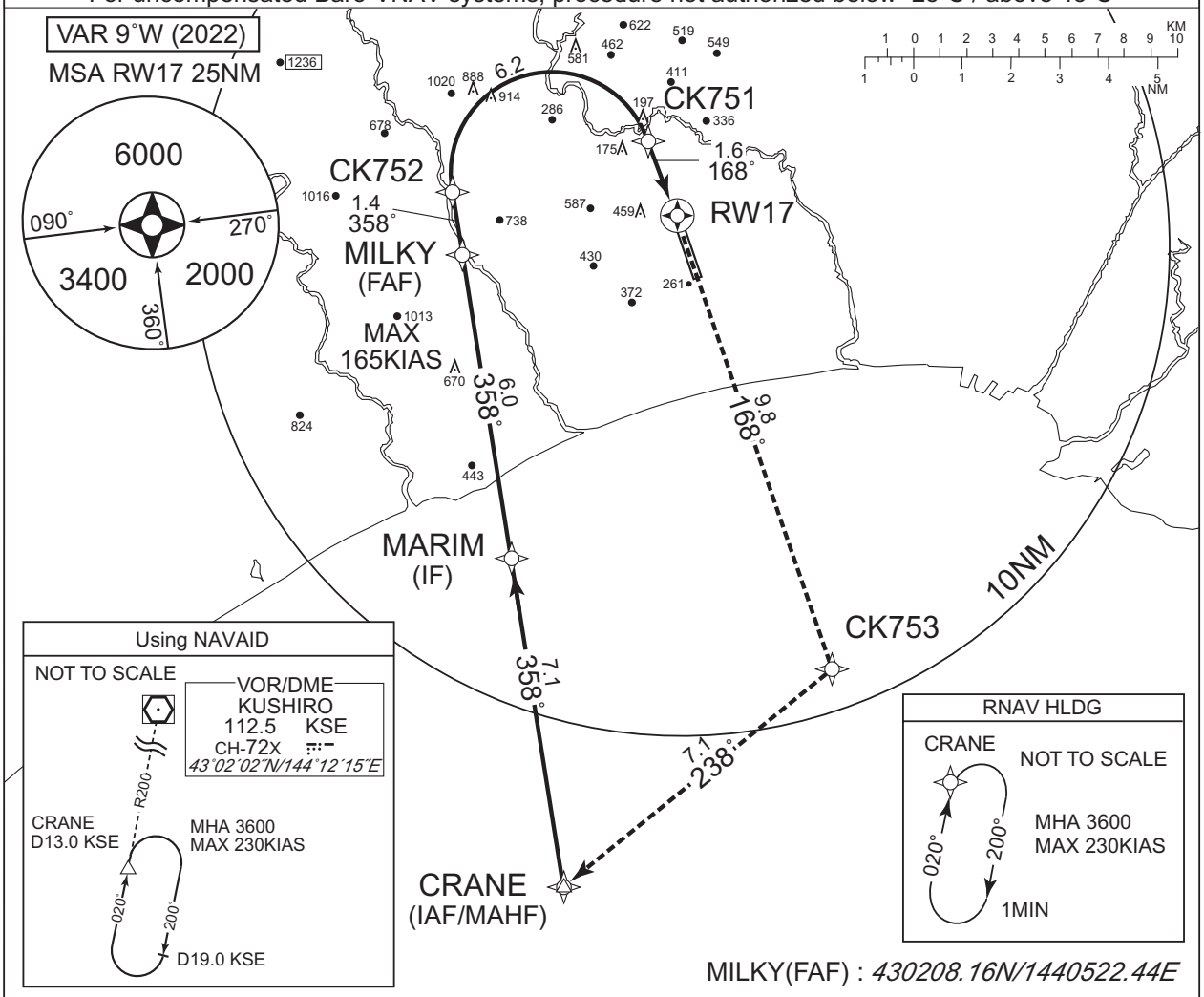
INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

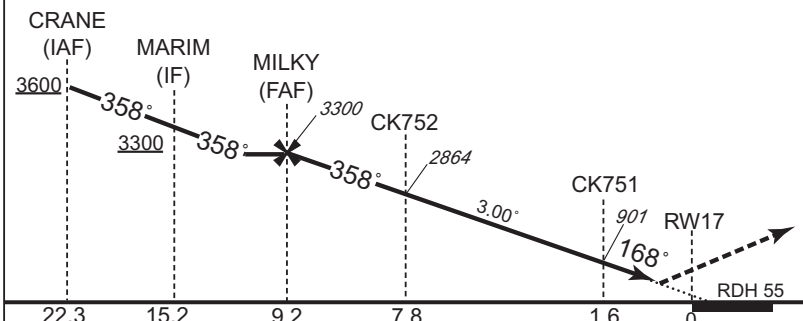
RNP Z RWY17(AR)

SAPPORO CONTROL 128.325 – 246.1 134.25 – 260.4	RNP AR RF required	KUSHIRO TOWER 118.05 – 126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -25˚C / above 45˚C



MILKY(FAF) : *430208.16N/1440522.44E*



MISSED APPROACH

Climb to 3600FT, to CK753,
to CRANE and hold.
Contact KUSHIRO TOWER.

MINIMA THR elev. 323 AD elev. 311

CAT	RNP 0.30	
	DA(H)	RVR/CMV
A	–	–
B		
C	621(298)	800
D		1200

Authorization Required

CHANGE:PROC renamed. Requirement for RNP.

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*		

CHANGE:PROC renamed.

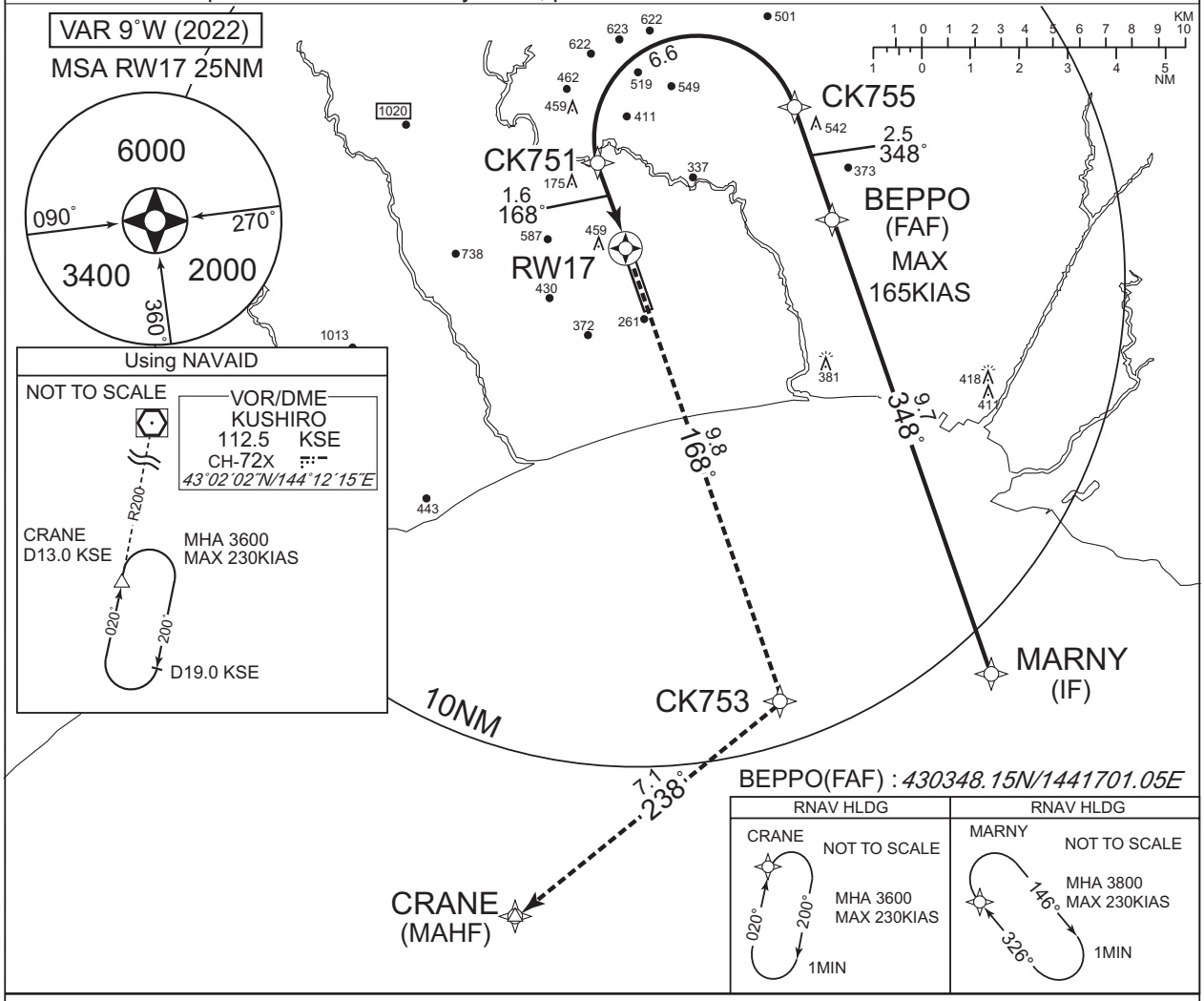
INSTRUMENT APPROACH CHART

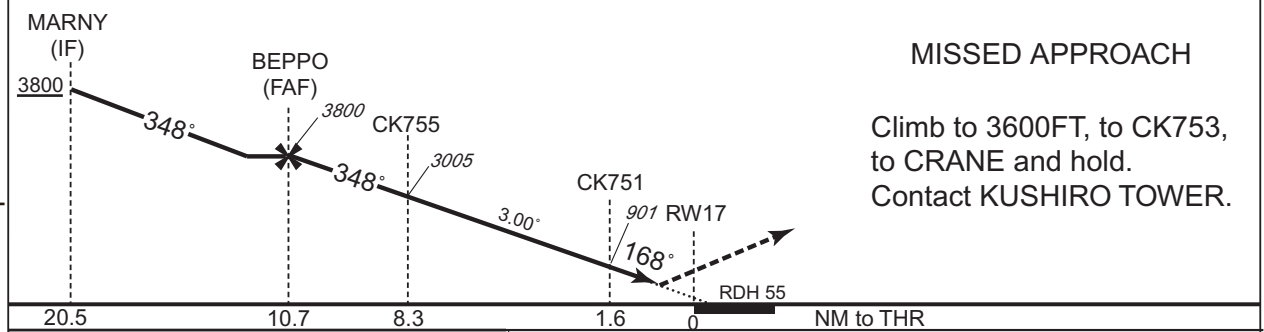
RJCK / KUSHIRO

RNP Y RWY17(AR)

SAPPORO CONTROL 128.325 – 246.1 134.25 – 260.4	RNP AR RF required	KUSHIRO TOWER 118.05 – 126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -25˚C / above 45˚C





MISSED APPROACH

Climb to 3600FT, to CK753,
to CRANE and hold.
Contact KUSHIRO TOWER.

MINIMA THR elev. 323 AD elev. 311

CAT	RNP 0.30	
	DA(H)	RVR/CMV
A	–	–
B		
C	621(298)	800
D		1200

Authorization Required

CHANGE:PROC renamed. Requirement for RNP.

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	BEPPO	—	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*
BEPPO	*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*		

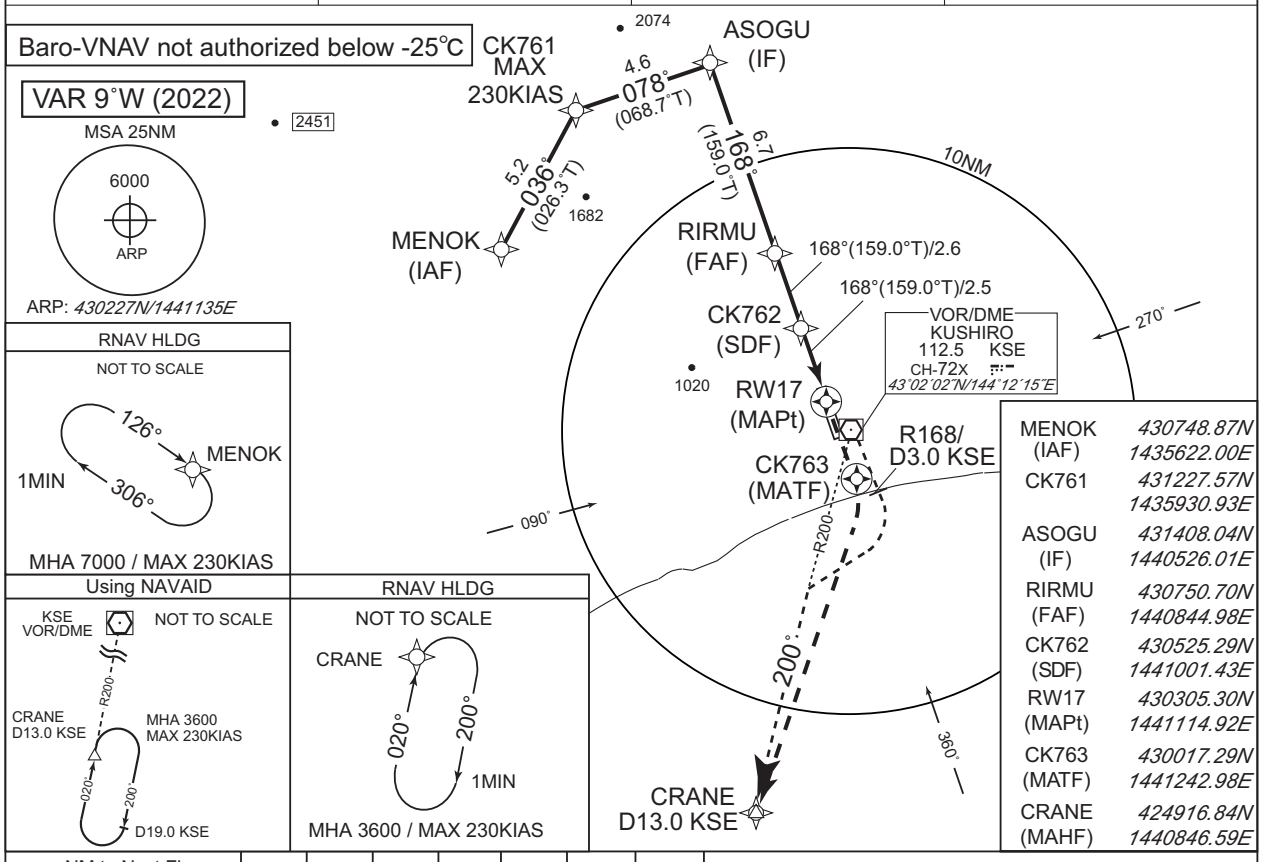
CHANGE:PROC renamed.

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

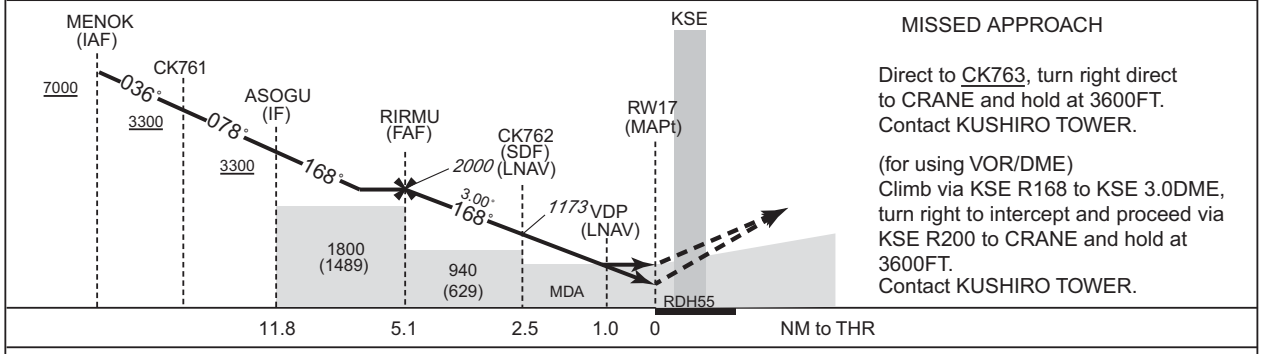
RNP X RWY17

SAPPORO CONTROL	RNP APCH	KUSHIRO TOWER	NO RADAR
128.325 – 246.1 134.25 – 260.4	MSAS CH 76251 M17A	118.05 – 126.2	



MENOK (IAF)	430748.87N 1435622.00E
CK761	431227.57N 1435930.93E
ASOGU (IF)	431408.04N 1440526.01E
RIRMU (FAF)	430750.70N 1440844.98E
CK762 (SDF)	430525.29N 1441001.43E
RW17 (MAPt)	430305.30N 1441114.92E
CK763 (MATF)	430017.29N 1441242.98E
CRANE (MAHF)	424916.84N 1440846.59E

NM to Next Fix	FAF	5	4	3	2	1	MAPt
ALT (3.0˚ APCH Path)	2000	1969	1651	1333	1014	696	–



MISSED APPROACH

Direct to CK763, turn right direct to CRANE and hold at 3600FT.
Contact KUSHIRO TOWER.

(for using VOR/DME)
Climb via KSE R168 to KSE 3.0DME, turn right to intercept and proceed via KSE R200 to CRANE and hold at 3600FT.
Contact KUSHIRO TOWER.

MINIMA THR elev.323 AD elev.311

CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR /CMV	DA(H)	RVR /CMV	MDA(H)	RVR /CMV	MDA(H)	VIS
A	573(250)	800	680(357)	900	680(369)	900	730(419)	1600
B				1000		1000	770(459)	
C								2400
D		1200		1400		1400	870(559)	3200

Circling to EAST side of RWY only.

CHANGE:PROC renamed. Requirement for RNP.

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 reminder	A0B919FD		

Required additional data

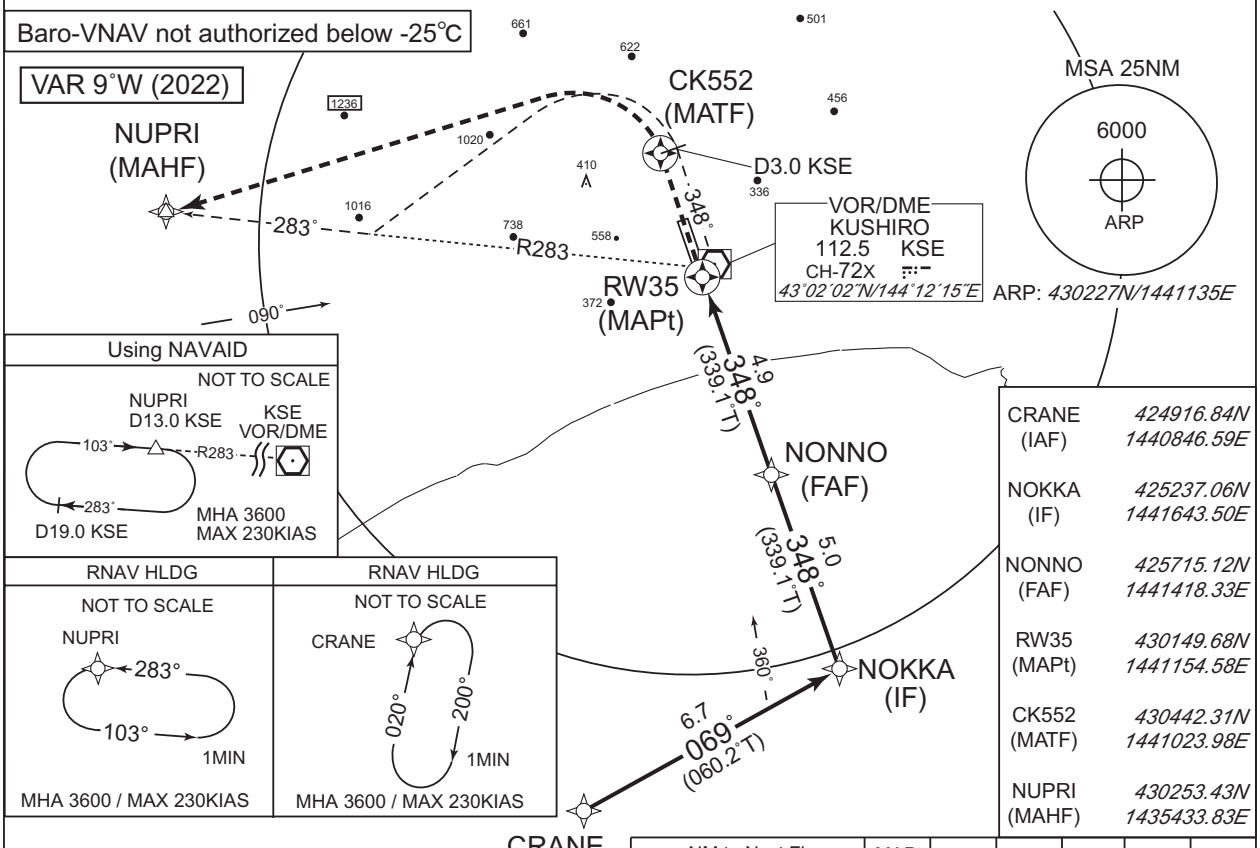
LTP/FTP orthometric height	98.0

CHANGE:PROC renamed.

INSTRUMENT APPROACH CHART

RJCK / KUSHIRO — RNP RWY35

SAPPORO CONTROL	RNP APCH	KUSHIRO TOWER	NO RADAR
128.325 – 246.1 134.25 – 260.4	MSAS CH 46963 M35A	118.05 – 126.2	

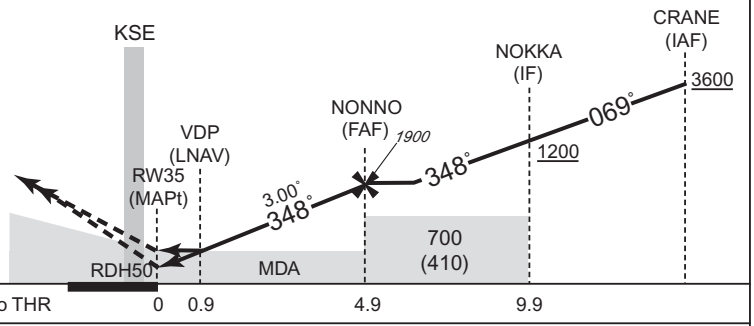


NM to Next Fix	MAPt	1	2	3	4	FAF
ALT (3.0˚ APCH Path)	–	658	976	1295	1613	1900

MISSED APPROACH

Climb direct to CK552, turn left direct to NUPRI and hold at 3600FT.
Contact KUSHIRO TOWER.

(For using VOR/DME)
Climb via KSE R348 to KSE 3.0DME, turn left to intercept and proceed via KSE R283 to NUPRI and hold at 3600FT.
Contact KUSHIRO TOWER.



Missed APCH climb gradient MNM 3.0%

MINIMA			THR elev.290				AD elev.311	
CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR /CMV	DA(H)	RVR /CMV	MDA(H)	RVR /CMV	MDA(H)	VIS
A	540(250)	1000	630(340)	1200	630(340)	1200	730(419)	1600
B		1100		1300		1300	770(459)	
C		1200		1400		1400		2400
D		1400		1600		1600	870(559)	3200

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to EAST side of RWY only.

CHANGE:PROC renamed. Requirement for RNP.

INSTRUMENT APPROACH CHART

RJCK /KUSHIRO

RNP 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 reminder	F9C3454C		

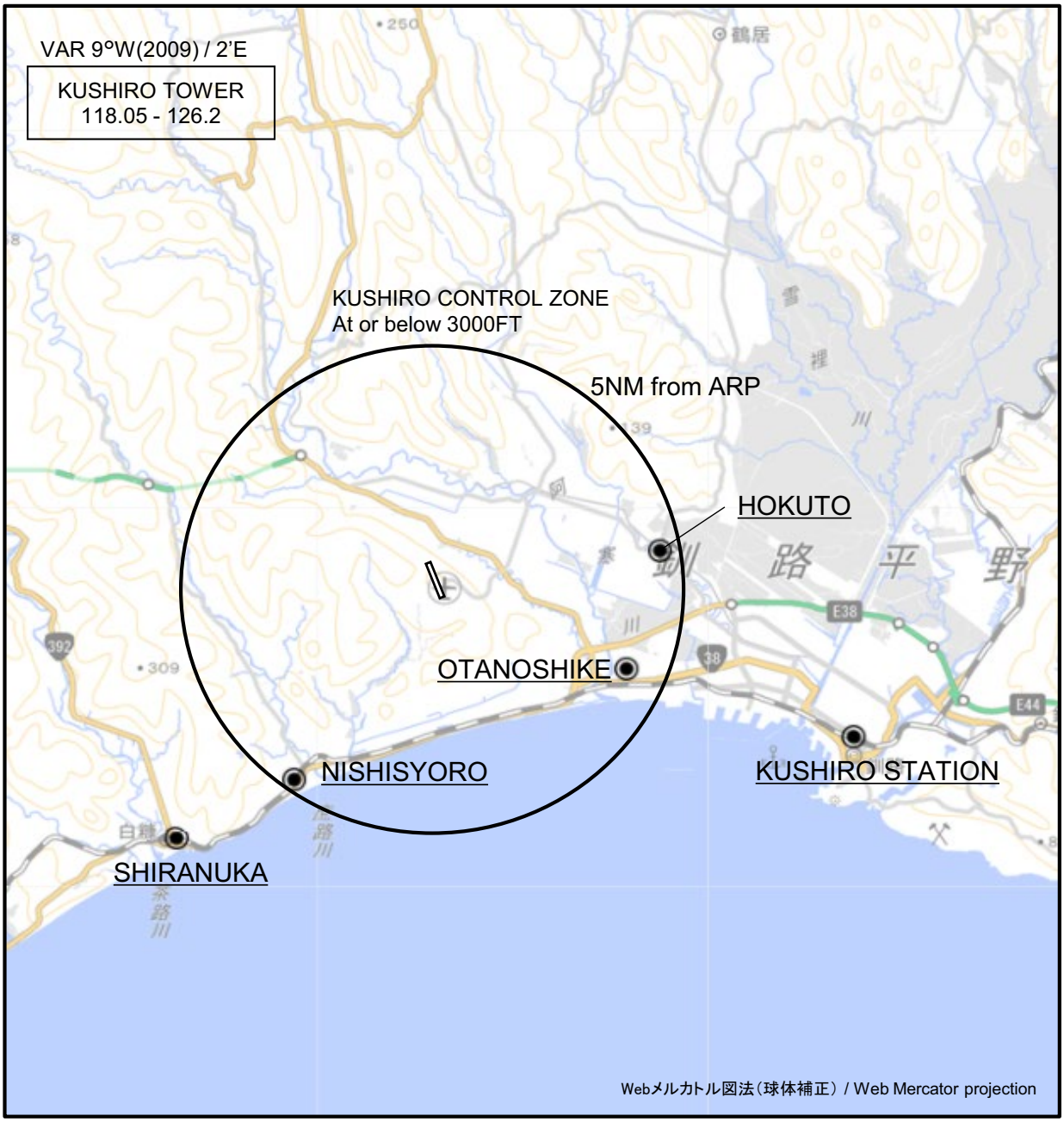
Required additional data

LTP/FTP orthometric height	88.1

CHANGE:PROC renamed.

RJCK / KUSHIRO

Visual REP



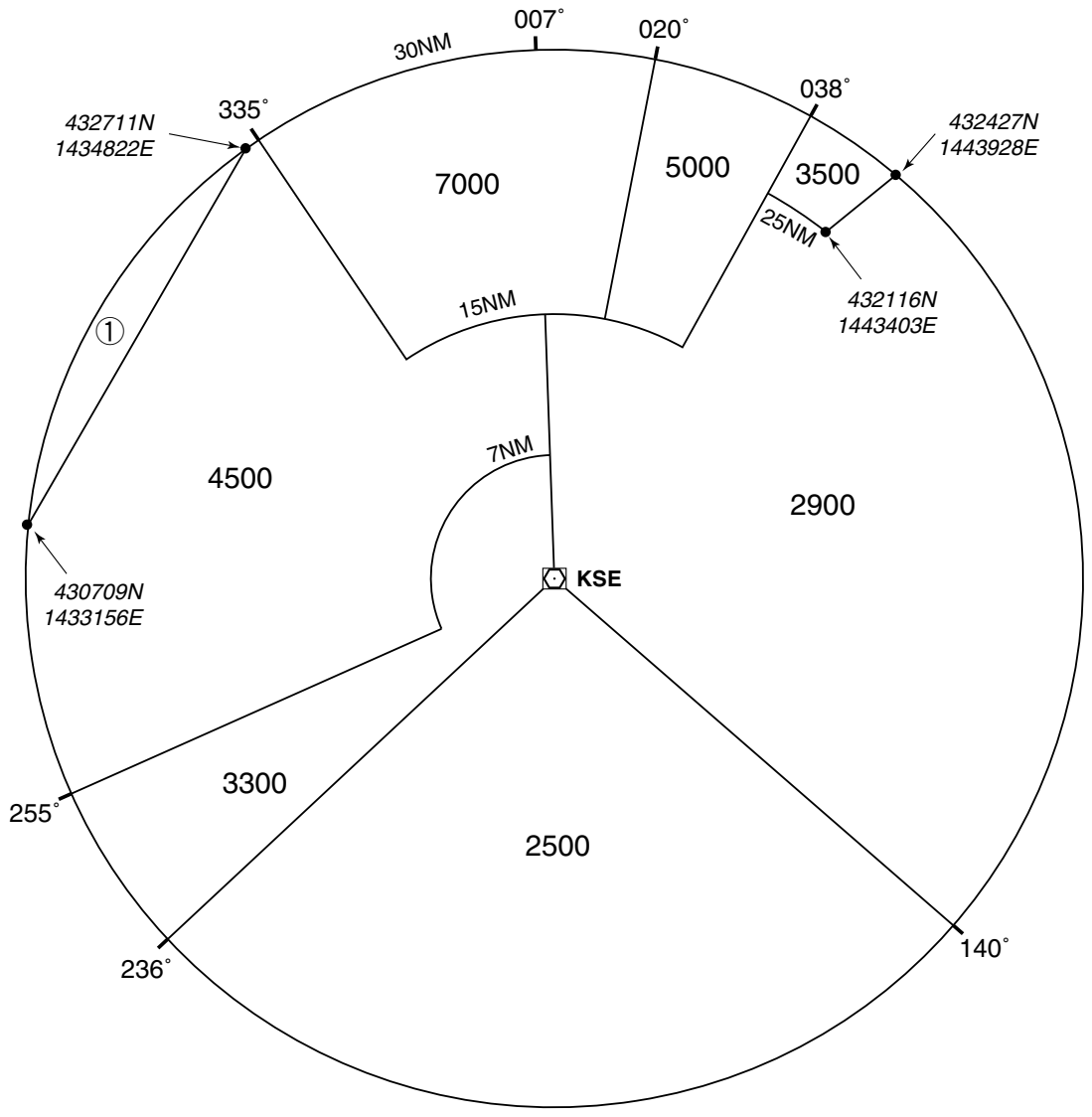
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : Map updated. BRG/DIST from ARP.

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
白糠 Shiranuka	225°T / 7.2NM	JR駅 Station

RJCK / KUSHIRO Minimum Vectoring Altitude CHART

VAR 9˚W (2007)



① 7000

CENTER : *430202N/1441215E* (KSE VOR/DME)