## **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, tele- phone, 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	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	WIDTH & STRENGTH
	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	H24 (NEW CHITOSE)
	MET Office outside hours	
3	Office responsible for TAF preparation	NEW CHITOSE
	Periods of validity	30 Hours
4	Trend forecast	Nil
	Interval of issuance	
5	Briefing/ consultation provided	Briefing is available upon inquiry at NEW CHITOSE
6	Flight documentation	С
	Language(s) used	En
7	Charts and other information available	S <sub>6</sub> , U <sub>85</sub> , U <sub>7</sub> ,U <sub>5</sub> , U <sub>3</sub> , U <sub>25</sub> , U <sub>2</sub> /T <sub>r</sub> , P <sub>S</sub> , P <sub>5</sub> , P <sub>3</sub> , P <sub>25</sub> , P <sub>SWE</sub> , P <sub>SWF</sub> , P <sub>SWG</sub> , P <sub>SWI</sub> ,
	for briefing or consultation	P <sub>SWM</sub> , P <sub>SW</sub> (domestic), E, C, W <sub>E</sub> , W <sub>F</sub> , W <sub>G</sub> , W <sub>I</sub> , W, N
8	Supplementary equipment	Nil
	available for providing information	
9	ATS units provided with information	TWR
10	Additional information(limitation of ser-	Nil
	vice, etc.)	

## **RJCK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

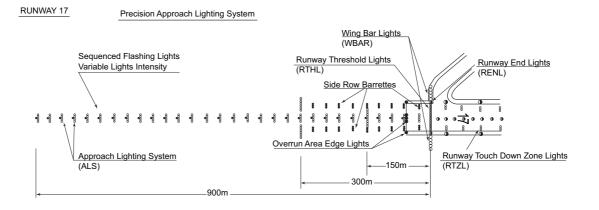
Designations RWY NR		Dimensions of Strength(PCN) and RWY(M) surface of RWY		THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY	
1	1 2		4	5	6	
17	17 158.96°		PCN 106/F/C/X/T Asphalt Concrete	430305.30N1441114.92E	THR ELEV:322.5ft TDZ ELEV:325.1ft	
35	35 338.96° 25			430149.68N1441154.58E	THR ELEV:290ft	
Slope	Slope of RWY		Strip ensions(M)	RESA(Overrun) Dimensions(M)	Remarks	
7	7	10		11	14	
See AD 2.2	See AD 2.24 AD Chart		20×300	192×(MNM:95 MAX:283)	RWY Grooving 2500×45m	
		26	20×300	90×(MNM:90 MAX:300)*  *For detail, ask airport administrator		

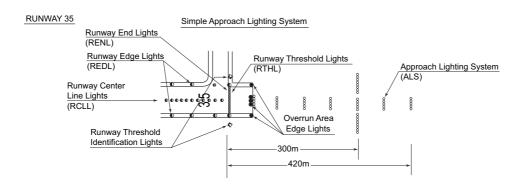
## **RJCK AD 2.13 DECLARED DISTANCES**

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
17 35	2500 2500	2500 2500	2500 2500	2500 2500	Nil 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	BN: 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	
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#### **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 skin(Sixivi) of AKF		` ' 1 3 000 or nelow		D	Kushiro Tower En	

#### **RJCK AD 2.18 ATS COMMUNICATION FACILITIES**

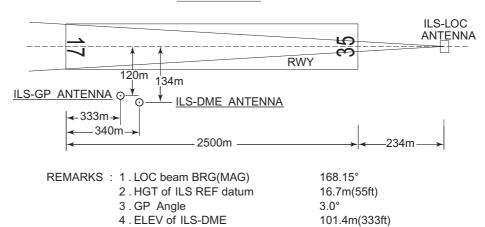
Service designation	Call sign	Frequency	Hours of operation	Remarks			
1	2	3	4	5			
TWR	Kushiro Tower	118.05MHz(1) 126.2MHz	2300 - 1200	(1)Primary			

## **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
DME	KSE	1159MHz (CH-72X)	H24	430201.69N/1441214.81E	334ft	35nm BLW 7,000ft.
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.

<u>ILS</u>

## KUSHIRO AP



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#### **RJCK AD 2.20 LOCAL TRAFFIC REGULATIONS**

1. Air	port 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. Tax	. Taxiing to and from stands									
			Nil							
3. Pa	3. Parking area for small aircraft(General aviation)									
			Nil							
4. Pa	rking area for helicopters									
			Nil							
5. Ap	ron - taxiing during winter condition	ns								
			Nil							
6. Tax	kiing - limitations									
	1. Wing tip clearance at the TW	/ intersection	(REF AD1.1.6.8)							
	Wing tip clearance at the TWY in taxiing behind it are as follows.	tersection bet	ween the aircraft hold	ding at the stop	o marking on the TWY and the other aircraft					
	(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<="" td=""><td>WS &gt;40m</td><td></td></ws>	WS >40m						
	wing tip clearance	*A	*B	*C	Legend:					
	(2)When MD90 holding at the	stop marking	on TWY T2		*A: wing tip clearance >= 15m *B: 6.5m =< wing tip clearance < 15m					
	wing span (WS) of ACFT taxiing on TWY P1-P2	*C : wing tip clearance < 6.5m								
	wing tip clearance *A *B *C									
7. Sc	hool and training flights - technical	test flights - u	ise of runways							
	Nil									

	Nil

Nil

8. Helicopter traffic - limitation

9. Removal of disabled aircraft from runways

## **RJCK AD 2.21 NOISE ABATEMENT PROCEDURES**

Nil
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## **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	17/35	A,B,C	400m *200m **150m	400m *200m	400m *250m	400m *250m	-	500m	
TKOF ALTN AP FILED	17/33	D	400m *250m **200m	400m *250m	400m *300m	400m *300m	-	500m	
OTHER	17/35	A,B,C,D	AVBL LDG MINIMA						

<sup>\*</sup> APPLICABLE WHEN LVP/LVPD IN FORCE.

 $<sup>^{\</sup>star\star}$  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
<ul><li>(1) Lighting system comprising;</li><li>High INTST REDL</li><li>High INTST RENL</li><li>RCLL</li></ul>
(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

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#### **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 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

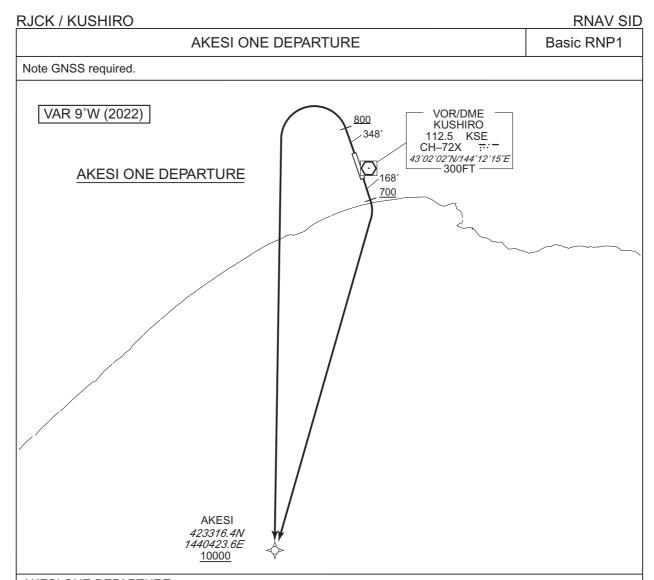
RWY17: Climb RWY HDG to 1000FT, turn right HDG328°... RWY35: Climb RWY HDG to 1000FT, turn left HDG238°...

...to intercept and proceed via KSE R283 to EATAK.

Cross EATAK at assigned altitude.

Note: No turn before DER.





## 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.

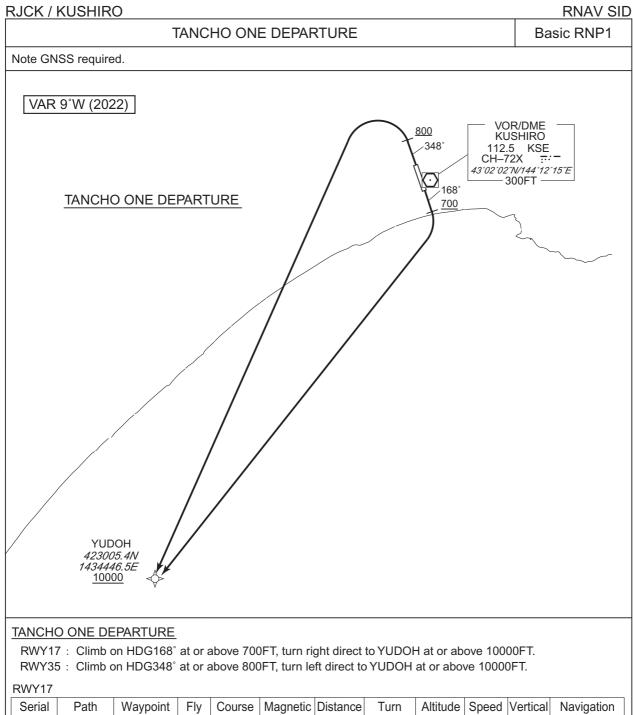
## RWY17

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	ı	_	168 (159.0)	-9.2	_	ı	+700	_	_	Basic RNP1
002	DF	AKESI	_	_	-9.2	_	R	+10000	_	_	Basic RNP1

#### RWY35

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	348 (339.0)	-9.2	_	1	+800	_	-	Basic RNP1
002	DF	AKESI	_	_	-9.2	_	L	+10000	_	_	Basic RNP1

CHANGE: VAR.



П												
l	Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
l	Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
	001	VA	_	-	168 (159.0)	-9.2	_	_	+700	_	_	Basic RNP1
	002	DF	YUDOH	_	_	-9.2	_	R	+10000	_	_	Basic RNP1

RWY35

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	348 (339.0)	-9.2	_	_	+800	_	_	Basic RNP1
002	DF	YUDOH	_	_	-9.2	_	L	+10000	_	_	Basic RNP1

**RNAV SID RJCK / KUSHIRO** Basic RNP1 ASHORO ONE DEPARTURE Note GNSS required. VAR 9°W (2022) ASHORO ONE DEPARTURE 800 348° **EATAK** VOR/DME 430406.3N KUSHIRO 1432936.2E 112.5 KSE CH-72X ::- = 6000 168° 43°02′02″N/144°12′15″E 700 -300FT -

## 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	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	168 (159.0)	-9.2	_	_	+700	_	_	Basic RNP1
002	DF	EATAK	_	_	-9.2	_	R	+6000	_	_	Basic RNP1

#### RWY35

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	348 (339.0)	-9.2	_	_	+800	_	_	Basic RNP1
002	DF	EATAK	_	_	-9.2	_	L	+6000	_	_	Basic RNP1



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. /MENOK D13.0 KSE 3600 R306 **NUPRI** VOR/DME D13.0 KSE 103° **KUSHIRO** MHA 3600 112.5 KSE CH–72X <del>;;: =</del> 43°02′02″N/144°12′15″E R283 MAX 230KIAS R269 283° -300FT D19.0 KSE **KOTAN** 089° D13.0 KSE MHA 3600 MAX 230KIAS 269 **SHORO** D13.0 KSE D19.0 KSE 076° O13.0 ASE ARC MHA 3600 MAX 230KIAS D19.0 KSE MENOK ARC ARRIVAL **CRANE** D13.0 KSE MHA 3600 MAX 230KIAS D19.0 KSE

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.



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.



## **RNAV STAR RWY17 RJCK / KUSHIRO** MENOK ARRIVAL Basic RNP1 Note GNSS required. VAR 9°W (2022) **MENOK** VOR/DME 430748.9N 1435622.0E **KUSHIRO** 112.5 KSE CH–72X <del>...</del> 3600 360 43°02′02″N/144°12′15″E -300FT CK760 425658.5N 1435854.2E 6000 MENOK ARRIVAL 24.1 360 **AKESI** *423316.4N 1440423.6E*

#### MENOK ARRIVAL

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

5	Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
N	umber	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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

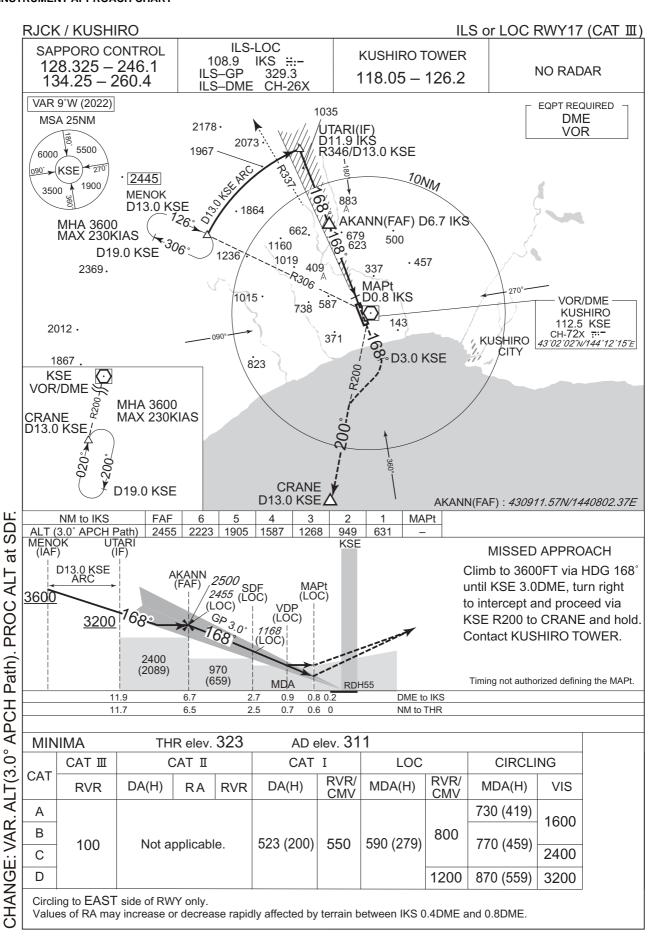
# RJCK / KUSHIRO **RNAV STAR RWY17** MARNY ARRIVAL Basic RNP1 Note GNSS required. VAR 9°W (2022) VOR/DME **KUSHIRO** 112.5 KSE CH–72X <del>7.: –</del> 43°02′02″W144°12′15″E -300FT -MARNY ARRIVAL MARNY 425443.3N 1442145.2E 3800 CRANE ♦ 424916.8N 1440846.6E

## MARNY ARRIVAL

From CRANE, to MARNY at or above 3800FT.

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	CRANE	_	_	-9.2	_	_	_	_	_	Basic RNP1
002	TF	MARNY	_	069 (060.2)	-9.2	11.0	_	+3800	_	_	Basic RNP1

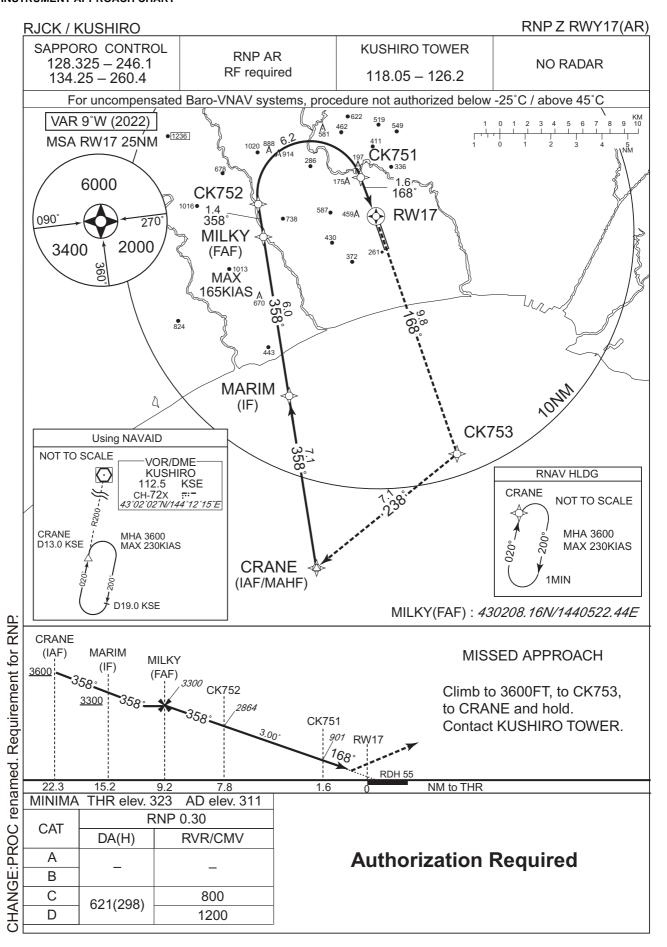
CHANGE: VAR.











## RJCK / KUSHIRO

RNP Z RWY17(AR)

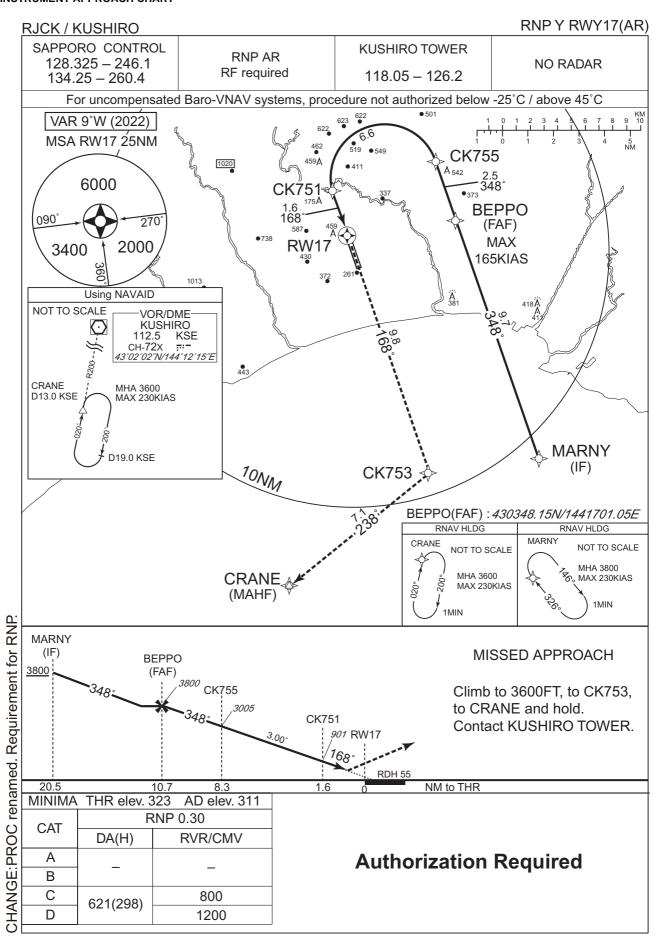
## **Coding Table**

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		



## RJCK / KUSHIRO

RNP Y RWY17(AR)

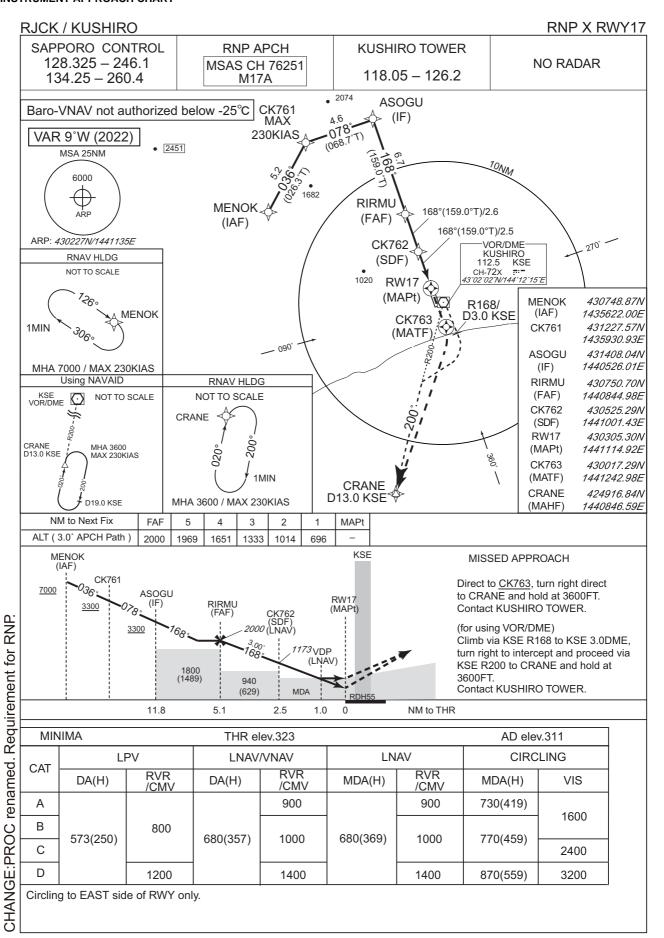
## Coding Table

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	ВЕРРО	_	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		



## **RJCK/KUSHIRO**

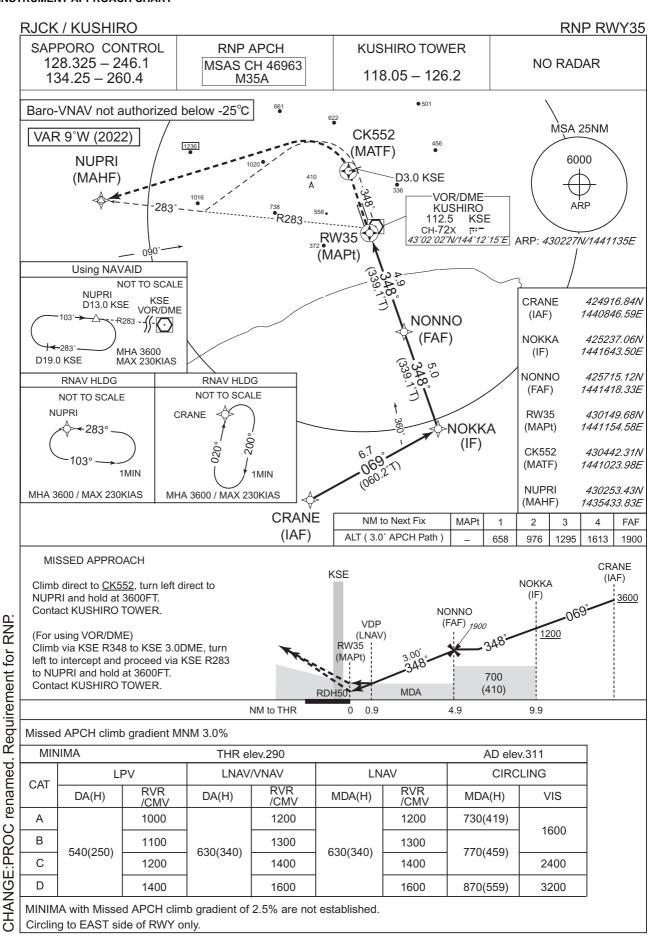
RNP X RWY17

## **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



## 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 remainder	F9C3454C		

## Required additional data

LTP/FTP orthometric height	88.1



※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
白糠 Shiranuka	225°T / 7.2NM	JR駅 Station

