

RJCK / KUSHIRO SID

KUSHIRO REVERSAL FIVE DEPARTURE

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

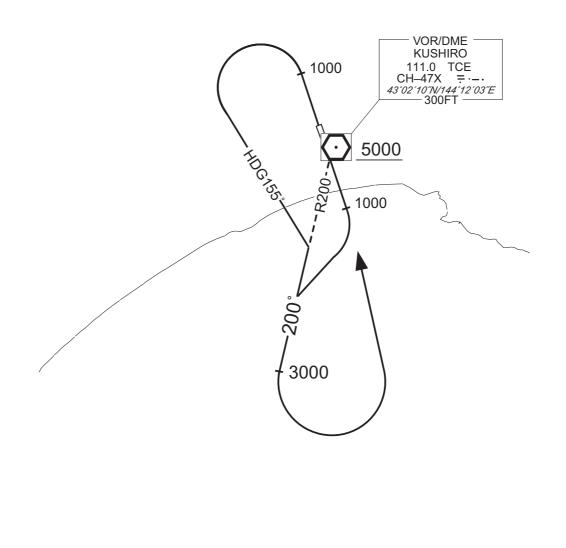
RWY35: Climb RWY HDG to 1000FT, turn left HDG155°...

...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.



PROC renamed. KUSHIRO VOR/DME relocated(KSE→TCE)

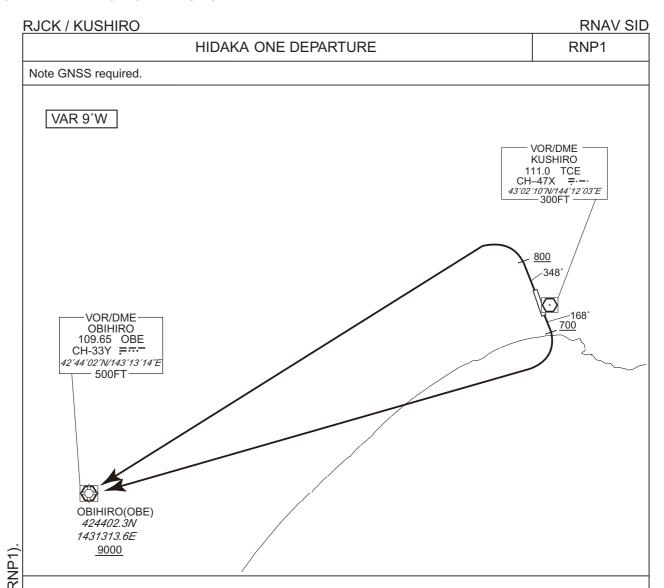
RJCK / KUSHIRO **RNAV SID** RNP1 TANCHO ONE DEPARTURE Note GNSS required. VAR 9°W VOR/DME 800 KUSHIRO 348° 111.0 TCE CH-47X **= · -** · 43°02′10″W144°12′03″E 300FT 168° <u>700</u> YUDOH 423005.4N 1434446.5E 10000

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

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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	_	_	RNP1
002	DF	YUDOH		_	-9.2	_	R	+10000	-	_	RNP1

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	_	_	RNP1
002	DF	YUDOH	_	_	-9.2	_	L	+10000	_	_	RNP1



RWY17: Climb on HDG168° at or above 700FT, turn right direct to OBE at or above 9000FT. RWY35: Climb on HDG348° at or above 800FT, turn left direct to OBE at or above 9000FT.

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	1	ı	+700	-	_	RNP1
002	DF	OBE	_	_	-9.2	_	R	+9000	_	_	RNP1

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	-	ı	+800	-	_	RNP1
002	DF	OBE	_	_	-9.2	_	L	+9000	_	_	RNP1

RJCK / KUSHIRO RNAV SID RNP1 RUGMO ONE DEPARTURE Note GNSS required. VAR 9°W 800 **RUGMO** VOR/DME **KUSHIRO** 430433.6N 111.0 TCE CH-47X =:--: 43°02′10″W/144°12′03″E 300FT 1432949.1E 6000 168° <u>700</u>

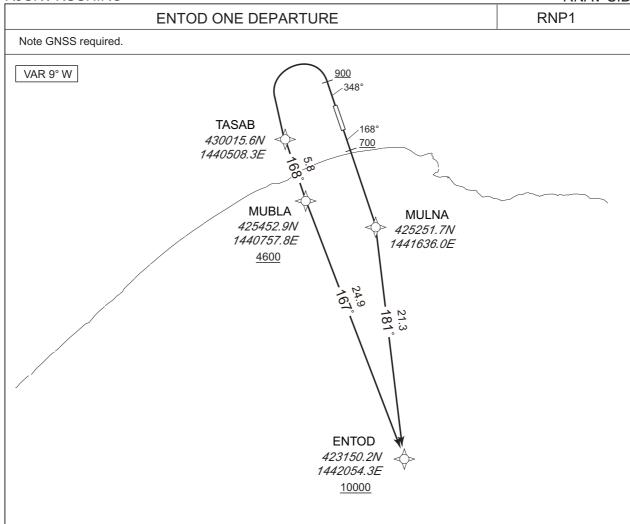
RWY17: Climb on HDG168 $^{\circ}$ at or above 700FT, turn right direct to RUGMO at or above 6000FT. RWY35: Climb on HDG348 $^{\circ}$ at or above 800FT, turn left direct to RUGMO at or above 6000FT.

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	-	_	RNP1
002	DF	RUGMO	-	_	-9.2	_	R	+6000	_	_	RNP1

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	_	_	RNP1
002	DF	RUGMO	_	_	-9.2	_	L	+6000	_	_	RNP1

RJCK / KUSHIRO RNAV SID



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.

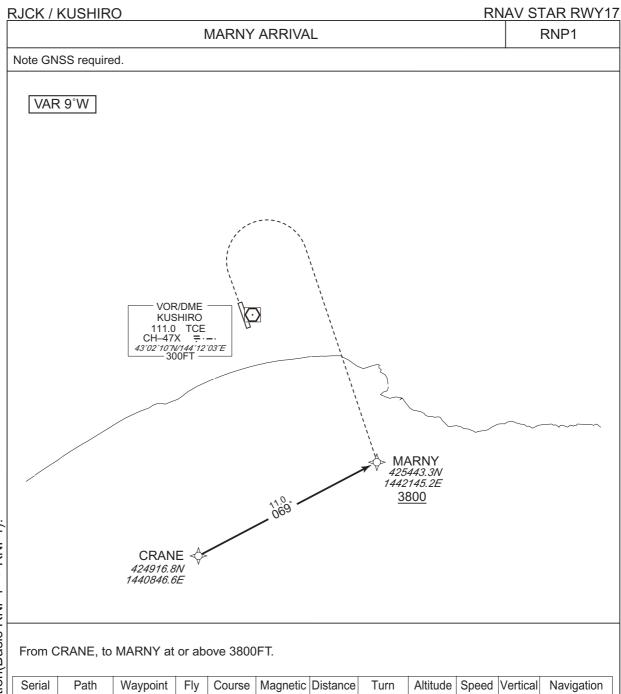
RWY17

I											
Serial Number	Path Descriptor	Waypoint Identifier			Magnetic Variation		Turn Direction		•		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

١I												
	Serial Number	Path Descriptor	Waypoint Identifier	,	Course °M(°T)	Magnetic Variation		Turn Direction		Speed (KIAS)		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
: 1												



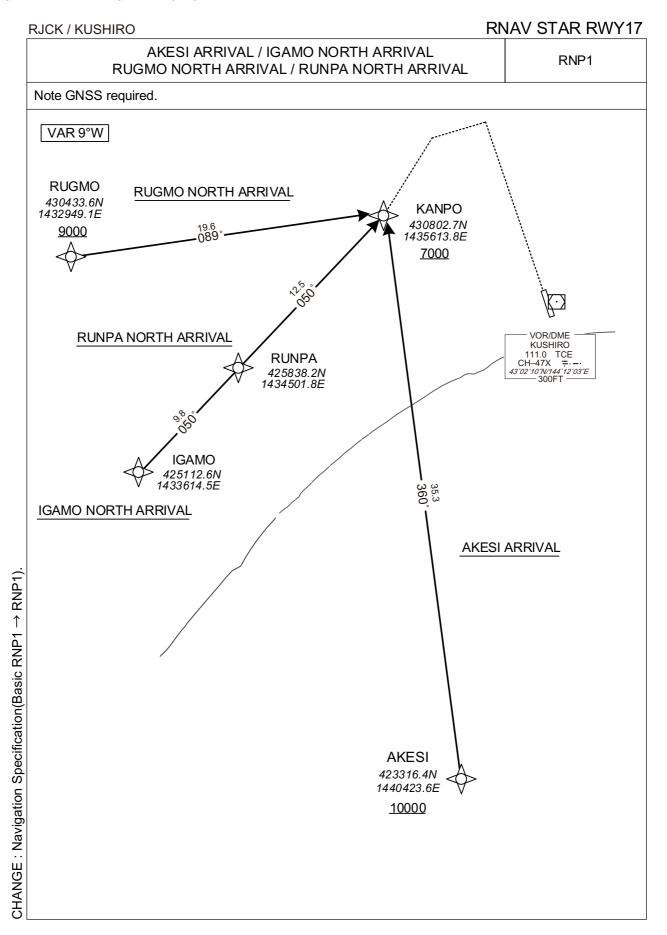
STANDARD ARRIVAL CHART -INSTRUMENT



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	_	-	_	_	_	RNP1
002	TF	MARNY	_	069 (060.2)	-9.2	11.0	-	+3800	_	_	RNP1



STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART -INSTRUMENT

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	1	-	-9.2	-	-	+10000	-	1	RNP1
002	TF	KANPO	1	360 (350.3)	-9.2	35.3	-	+7000	-	1	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	ı	1	-9.2	1	-	-	-	1	RNP1
002	TF	RUNPA	ı	050 (040.9)	-9.2	9.8	-	ı	1	1	RNP1
003	TF	KANPO	ı	050 (041.0)	-9.2	12.5	-	+7000	ı	-	RNP1

RUGMO NORTH ARRIVAL

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

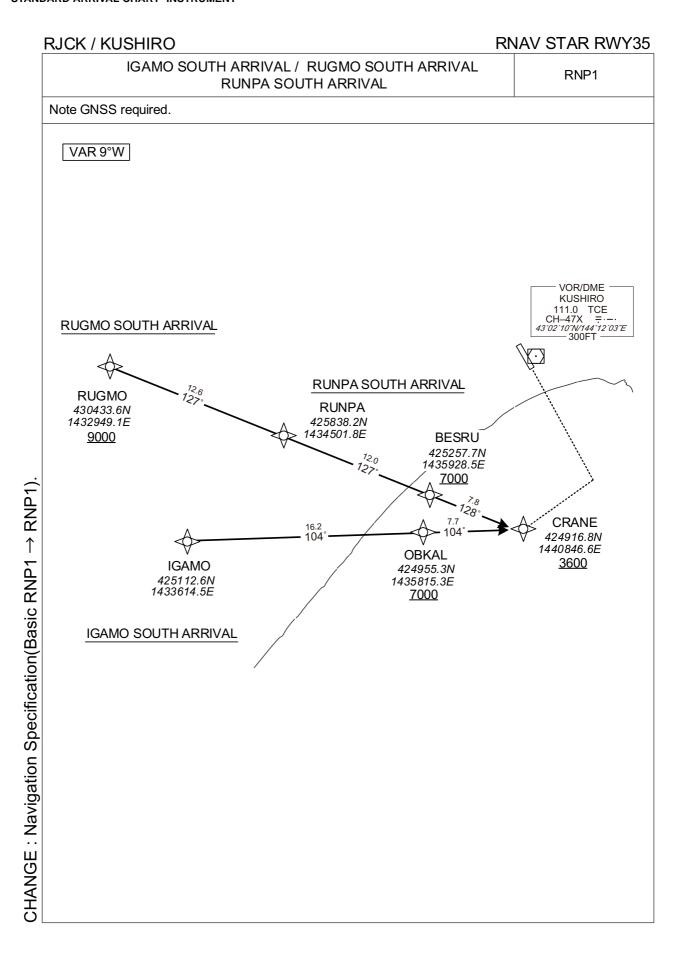
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	RUGMO	1	1	-9.2		1	+9000	-	1	RNP1
002	TF	KANPO	1	089 (079.6)	-9.2	19.6	-	+7000	-	1	RNP1

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	1	1	-9.2	1	1	ı	1	1	RNP1
002	TF	KANPO	1	050 (041.0)	-9.2	12.5	1	+7000	1	1	RNP1

STANDARD ARRIVAL CHART-INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV STAR RWY35

IGAMO SOUTH ARRIVAL

From IGAMO, to OBKAL at or above 7000FT, to CRANE 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	IGAMO	1	1	-9.2	-	1	-	-	1	RNP1
002	TF	OBKAL	1	104 (094.4)	-9.2	16.2	ı	+7000	1	-	RNP1
003	TF	CRANE	1	104 (094.7)	-9.2	7.7	-	+3600	-	1	RNP1

RUGMO SOUTH ARRIVAL

From RUGMO at or above 9000FT, to RUNPA, to BESRU at or above 7000FT, to CRANE at or above 3600FT.

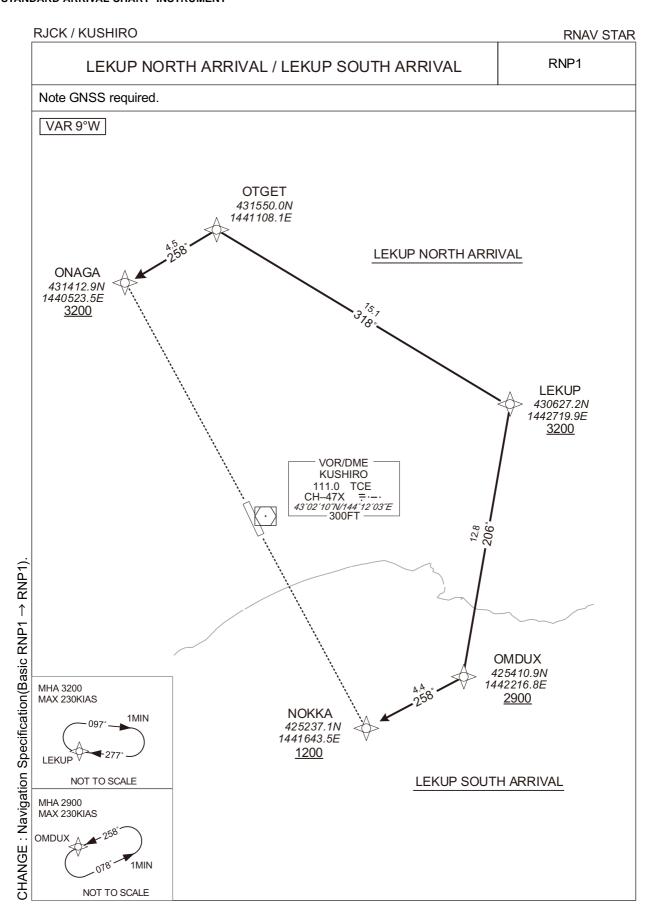
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	RUGMO	-	-	-9.2	-	1	+9000	-	1	RNP1
002	TF	RUNPA	-	127 (118.0)	-9.2	12.6	1	1	1	1	RNP1
003	TF	BESRU	-	127 (118.1)	-9.2	12.0	-	+7000	-	1	RNP1
004	TF	CRANE	-	128 (118.3)	-9.2	7.8	ı	+3600	-	-	RNP1

RUNPA SOUTH ARRIVAL

From RUNPA, to BESRU at or above 7000FT, to CRANE 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	RUNPA	1	1	-9.2	-	1	1	1	1	RNP1
002	TF	BESRU	1	127 (118.1)	-9.2	12.0	1	+7000	1	1	RNP1
003	TF	CRANE	1	128 (118.3)	-9.2	7.8	1	+3600	1	1	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	1	-	-9.2	1	1	+3200	-	1	RNP1
002	TF	OTGET	1	318 (308.5)	-9.2	15.1	-	1	-	1	RNP1
003	TF	ONAGA	-	258 (248.9)	-9.2	4.5	-	+3200	-	-	RNP1

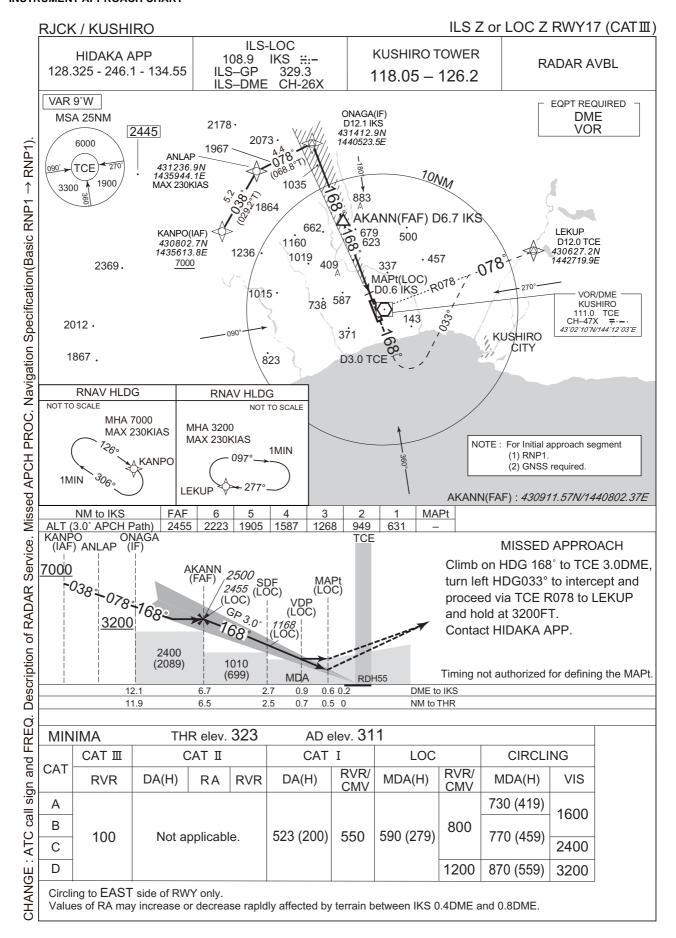
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	LEKUP	277 (268.1)	-9.2	1.0(-14000)	R	3200	FL140	-230(-14000)	RNP1

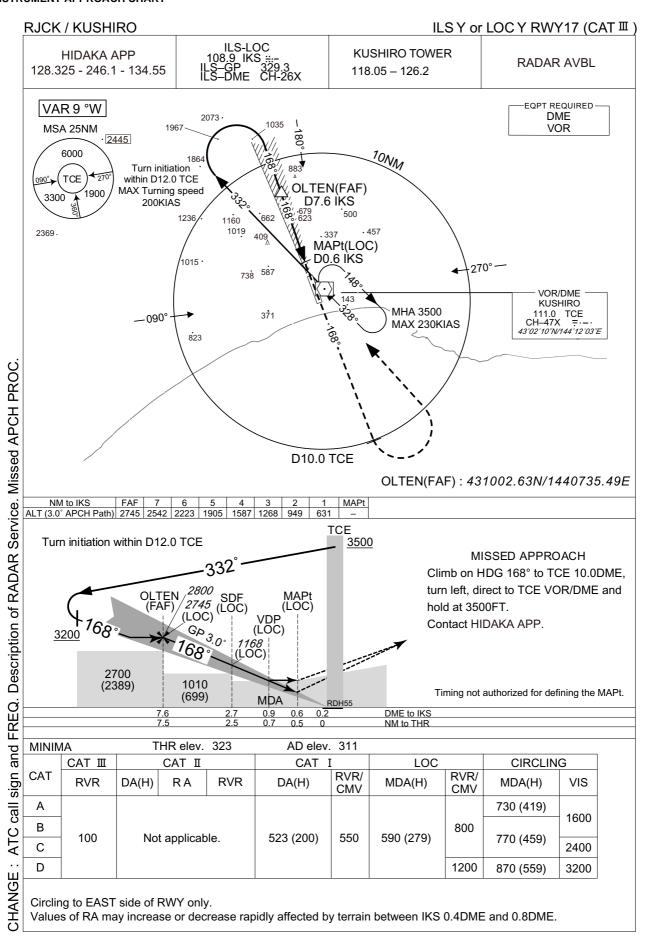
LEKUP SOUTH ARRIVAL

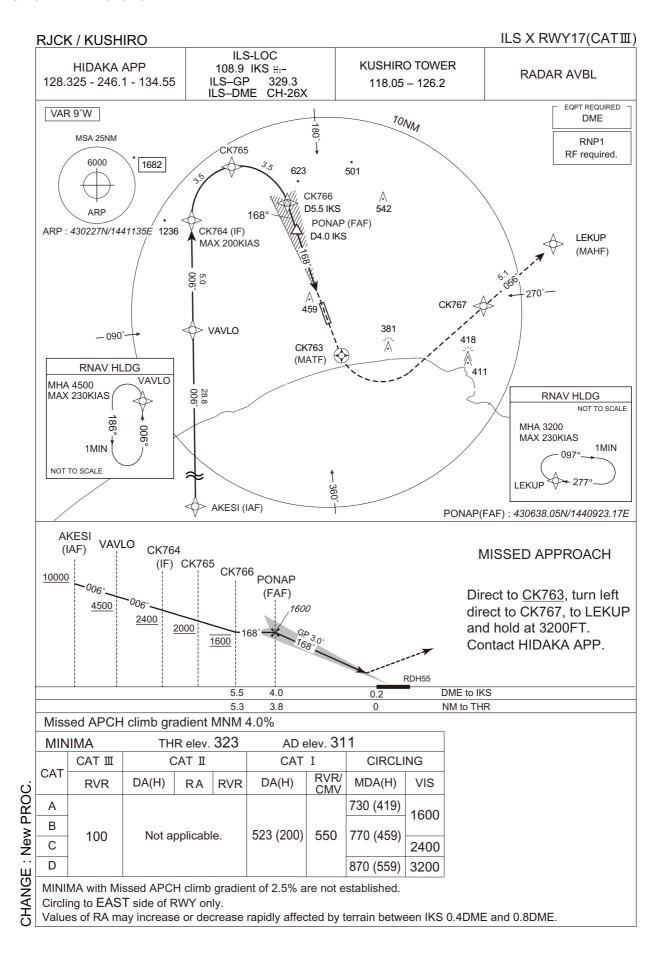
From LEKUP at or above 3200FT, to OMDUX at or above 2900FT, to NOKKA at or above 1200FT.

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	-	1	-9.2	-	-	+3200	-	1	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







RJCK / KUSHIRO

ILS X RWY17(CATⅢ)

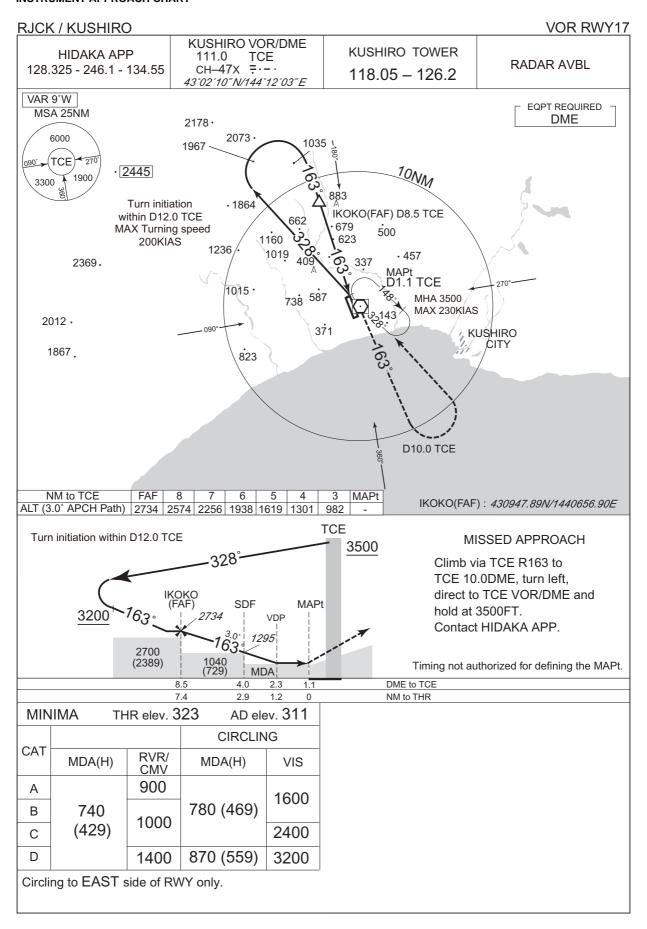
Coding Table

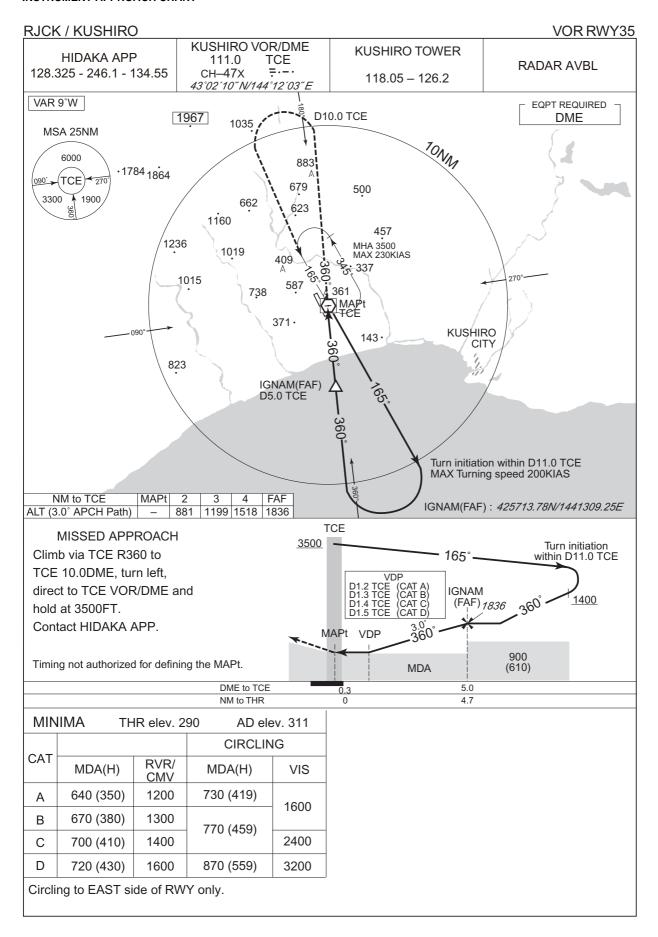
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
	·		OVCI	101(1)		(14171)	Direction	, ,	(INIAO)	Aligic	Opecinication
001	IF	AKESI	_	_	-9.3	_	_	+10000	_	_	RNP1
002	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	Υ	_	-9.3	_	_	_	_	_	RNP1
002	DF	CK767	_	_	-9.3	_	L	_	_	_	RNP1
003	TF	LEKUP	1	056 (046.9)	-9.3	5.1	_	3200	_	_	RNP1

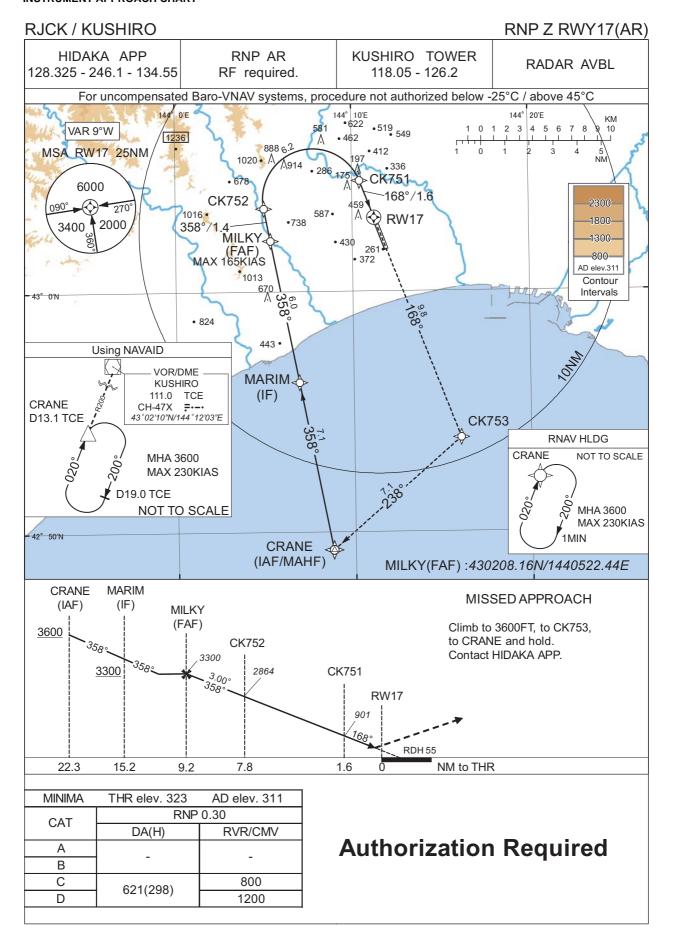
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	VAVLO	006 (357.0)	-9.3	1.0(-14000)	L	4500	FL140	-230(-14000)	RNP1
Hold	LEKUP	277 (268.1)	-9.3	1.0(-14000)	R	3200	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		







RJCK / KUSHIRO

RNP Z RWY17(AR)

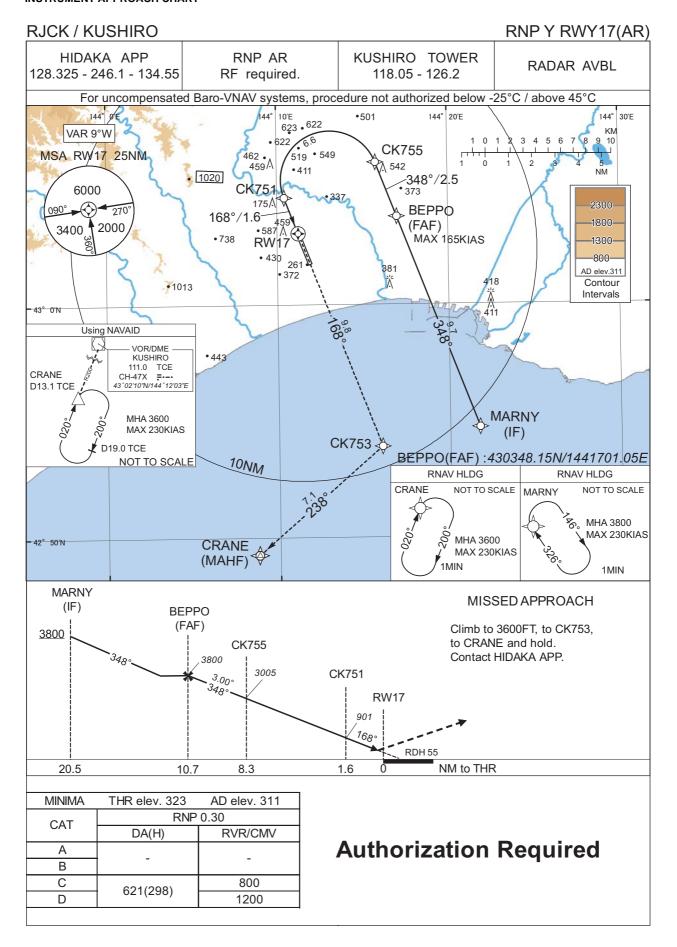
Coding Table

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	Υ	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)

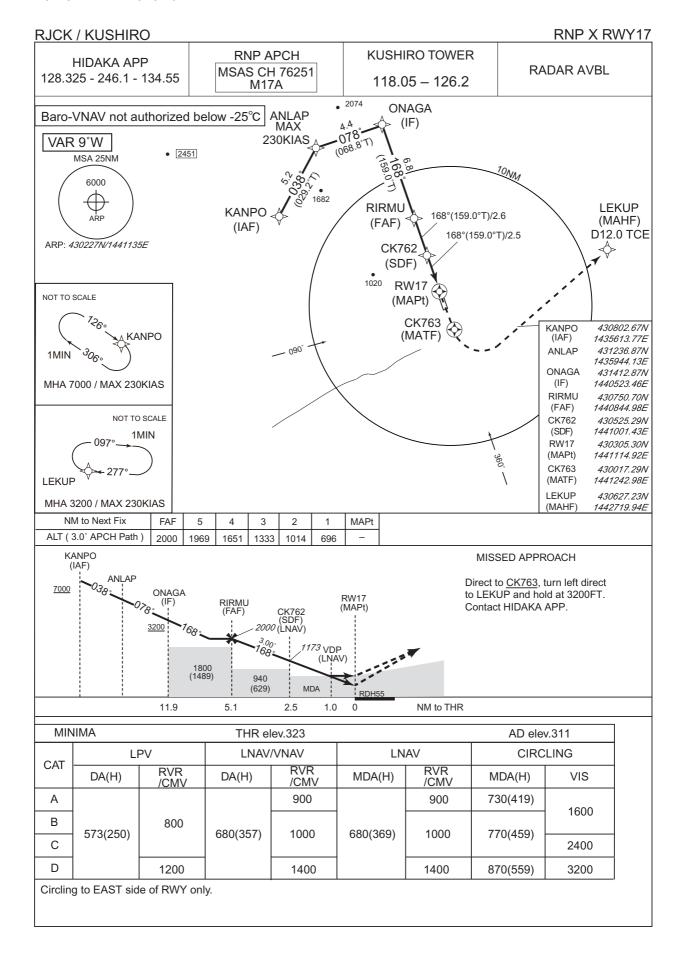
Coding Table

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	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	ı	_	-9.2	6.6	L	901	_	-3.00	0.3
005	TF	RW17	Υ	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

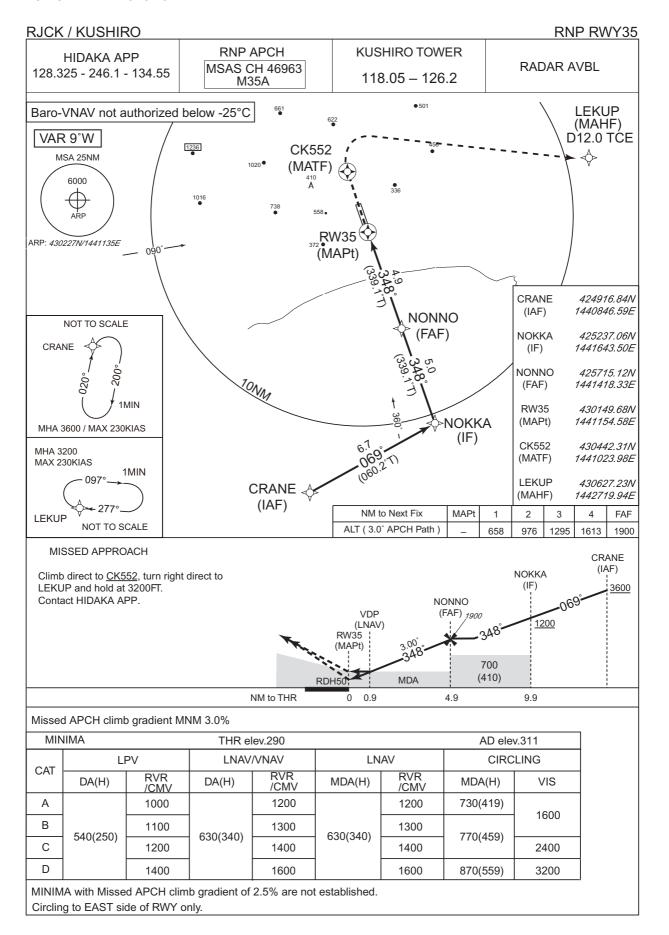
RNP X RWY17

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	
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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	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

