



RJCO / SAPPORO SID

# KURIS THREE DEPARTURE

RWY 14: Turn left,....

RWY 32: Turn right,....

....Climb via HDG 057° to intercept and proceed via SPE R103 to KURIS.

Cross KURIS at or above 5000FT.

## SAPPORO REVERSAL FOUR DEPARTURE

RWY 14: Turn left,....

RWY 32: ....

....Climb to SPE VOR/DME, via SPE R335, turn left to intercept and proceed via SPE R310 to SPE VOR/DME within SPE 15.0DME.

Cross SPE R335/6.0DME at or below 6000FT, cross SPE R310/6.0DME at or above 10000FT.

# SAPPORO THREE DEPARTURE

RWY 14: Turn left,....

RWY 32: ....

....Climb to SPE VOR/DME.

## **RUMOI TRANSITION**

From over SPE VOR/DME, climb via SPE R040 to RUMOI.

Cross SPE R040/8.0DME at or above 4000FT, cross RUMOI at assigned altitude.

### BEEBA TRANSITION

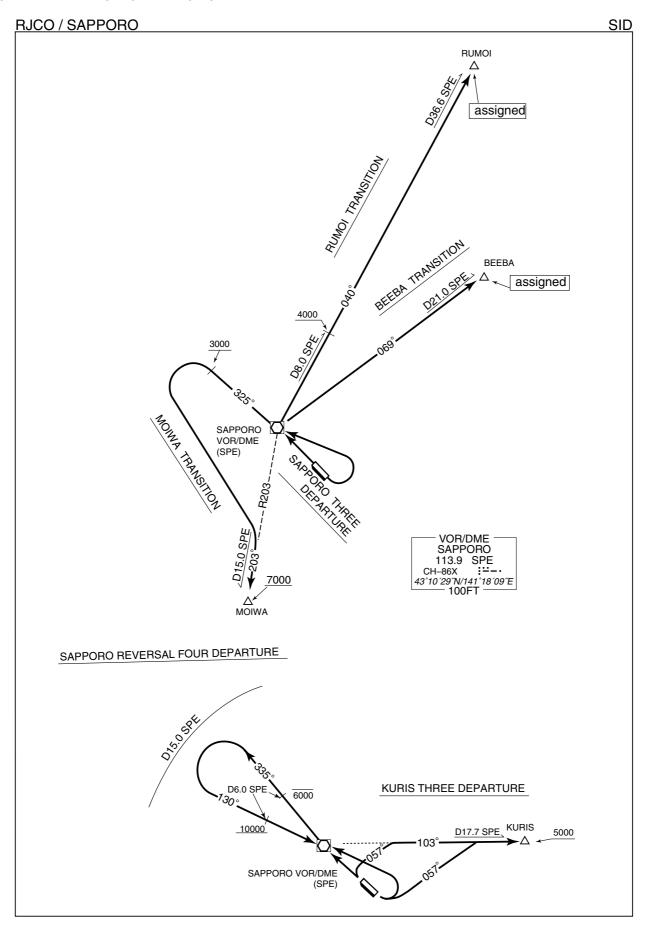
From over SPE VOR/DME, climb via SPE R069 to BEEBA. Cross BEEBA at assigned altitude.

## MOIWA TRANSITION

From over SPE VOR/DME, climb via SPE R325 to 3000FT or above, turn left to intercept and proceed via SPE R203 to MOIWA.

Cross MOIWA at or above 7000FT.

Note: Do not start left turn to MOIWA before SPE VOR/DME.



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# KURIS REVERSAL FOUR DEPARTURE

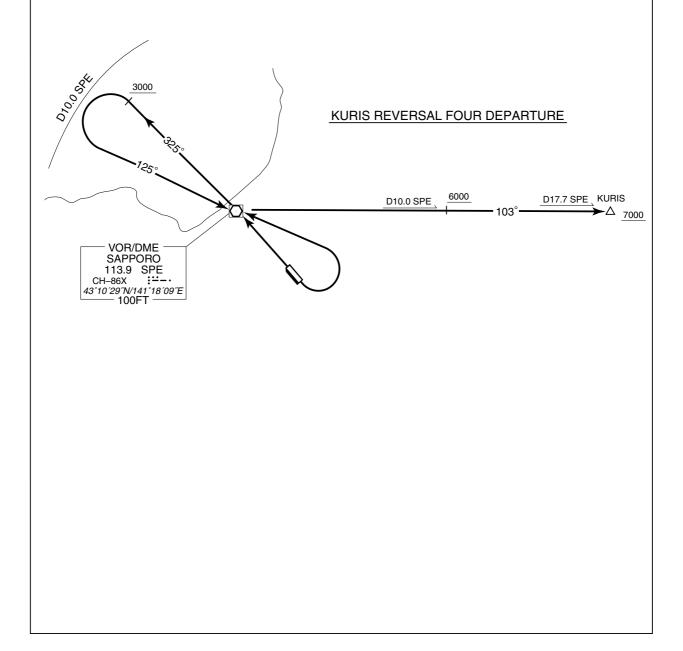
RWY 14: Turn left,....

RWY 32: ....

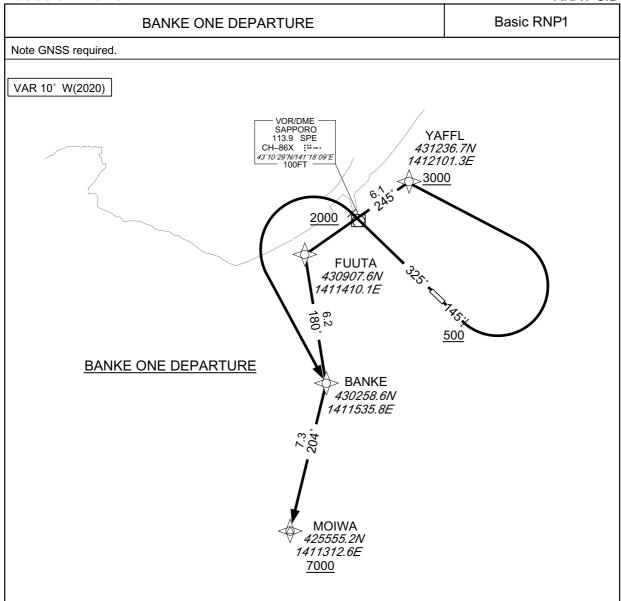
....climb direct to SPE VOR/DME, via SPE R325 until passing 3000 FT, turn left to intercept and proceed via SPE R305 to SPE VOR/DME within SPE 10.0DME, via SPE R103 to KURIS.

Cross SPE R103/10.0DME at or above 6000FT,

cross KURIS at or above 7000FT.



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### BANKE ONE DEPARTURE

RWY14 : Climb on HDG145° at or above 500FT, turn left direct to YAFFL at or above 3000FT, to FUUTA, to BANKE, to MOIWA at or above 7000FT.

RWY32 : Climb on HDG325° at or above 2000FT, turn left direct to BANKE, to MOIWA at or above 7000FT.

Note RWY14: 6.0% climb gradient required up to 2200FT.

OBST ALT 2822FT located at 7.8NM 266° FM end of RWY14.

RWY32: 6.0% climb gradient required up to 4000FT.

OBST ALT 3585FT located at 8.4NM 261° FM end of RWY32.

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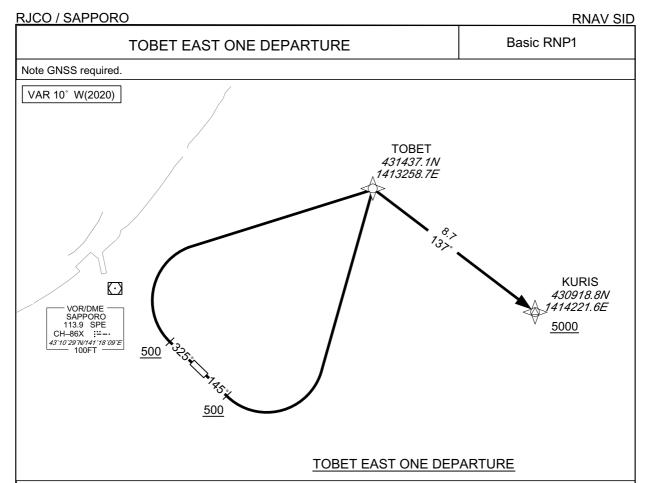
# **BANKE ONE DEPARTURE**

# RWY14

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	1	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	_	_	145 (134.8)	-9.7	_	_	+500	-	_	Basic RNP1
002	DF	YAFFL	_	_	-9.7	_	L	+3000	-	_	Basic RNP1
003	TF	FUUTA	_	245 (235.2)	-9.7	6.1	_	_	_	_	Basic RNP1
004	TF	BANKE	_	180 (170.4)	-9.7	6.2	_	_	_	_	Basic RNP1
005	TF	MOIWA	_	204 (193.9)	-9.7	7.3	_	+7000	_	_	Basic RNP1

### RWY32

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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	_	_	325 (314.8)	-9.7	_	_	+2000	_	_	Basic RNP1
002	DF	BANKE	_	_	-9.7	_	L	_	_	_	Basic RNP1
003	TF	MOIWA	_	204 (193.9)	-9.7	7.3	_	+7000	_	_	Basic RNP1



# TOBET EAST ONE DEPARTURE

RWY14 : Climb on HDG145° at or above 500FT, turn left direct to TOBET, to KURIS at or above 5000FT.

RWY32 : Climb on HDG325° at or above 500FT, turn right direct to TOBET, to KURIS at or above 5000FT.

Note RWY14: 6.0% climb gradient required up to 500FT.

RWY32: 6.0% climb gradient required up to 500FT.

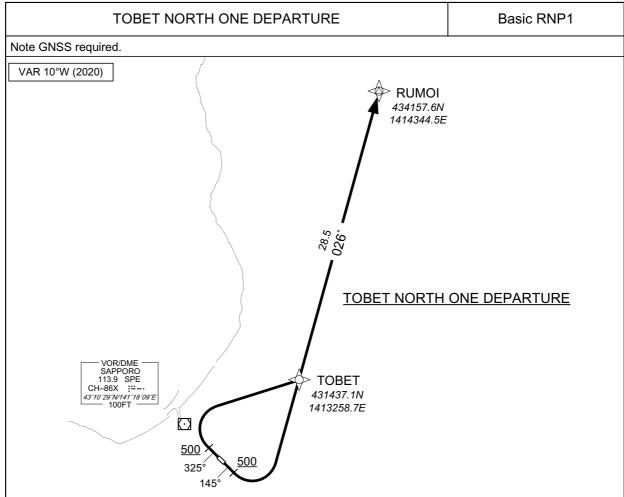
# RWY14

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	_		145 (134.8)	-9.7	_	_	+500	_	_	Basic RNP1
002	DF	TOBET	_	_	-9.7	_	L	_	_	_	Basic RNP1
003	TF	KURIS	_	137 (127.7)	-9.7	8.7	_	+5000	1	_	Basic RNP1

# RWY32

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Serial Numbe	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	_		325 (314.8)	-9.7	_	_	+500	_	_	Basic RNP1
002	DF	TOBET	-	_	-9.7	_	R	_	-	_	Basic RNP1
003	TF	KURIS	_	137 (127.7)	-9.7	8.7	_	+5000	_	_	Basic RNP1

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### TOBET NORTH ONE DEPARTURE

RWY14 : Climb on HDG145° at or above 500FT, turn left direct to TOBET, to RUMOI. RWY32 : Climb on HDG325° at or above 500FT, turn right direct to TOBET, to RUMOI.

Note RWY14 : 6.0% climb gradient required up to 500FT. RWY32 : 6.0% climb gradient required up to 500FT.

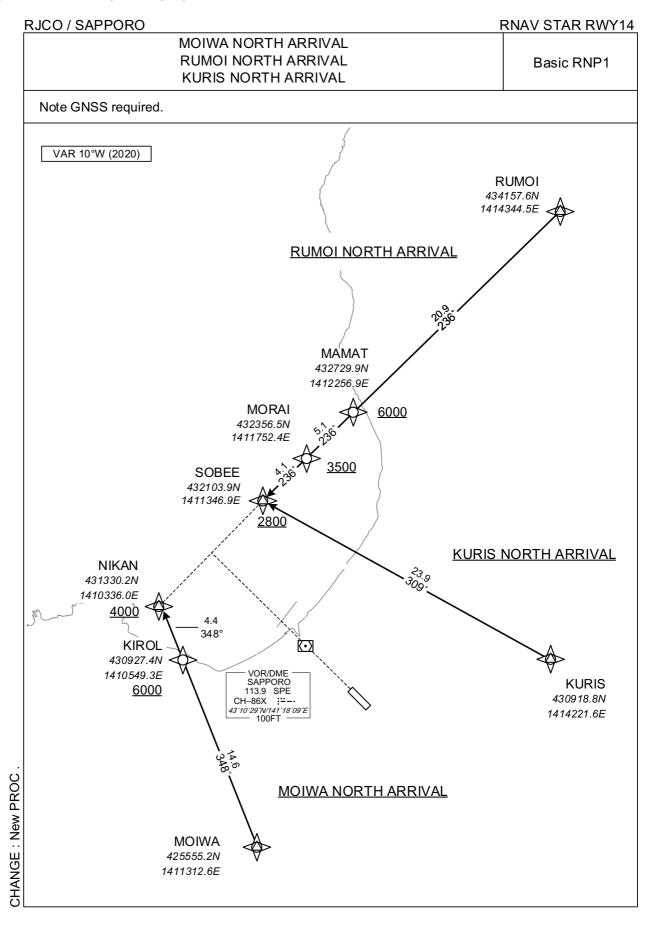
## RWY14

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	_	_	145 (134.8)	-9.7	_	_	+500	_	_	Basic RNP1			
002	DF	TOBET	_	_	-9.7	_	L	_	_	_	Basic RNP1			
003	TF	RUMOI	_	026 (015.9)	-9.7	28.5	_	-	_	-	Basic RNP1			

# RWY32

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	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	_	_	325 (314.8)	-9.7	_	_	+500	_	_	Basic RNP1
	002	DF	TOBET	_	_	-9.7	_	R	_	_	_	Basic RNP1
	003	TF	RUMOI	_	026 (015.9)	-9.7	28.5	_	_	_	_	Basic RNP1





## RJCO / SAPPORO

## **RNAV STAR RWY14**

## **MOIWA NORTH ARRIVAL**

From MOIWA, to KIROL at or above 6000FT, to NIKAN at or above 4000FT.

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	MOIWA	-	-	-9.7	-	-	-	-	-	Basic RNP1
002	TF	KIROL	-	348 (338.3)	-9.7	14.6	-	+6000	-	-	Basic RNP1
003	TF	NIKAN	-	348 (338.2)	-9.7	4.4	-	+4000	-	-	Basic RNP1

## **RUMOI NORTH ARRIVAL**

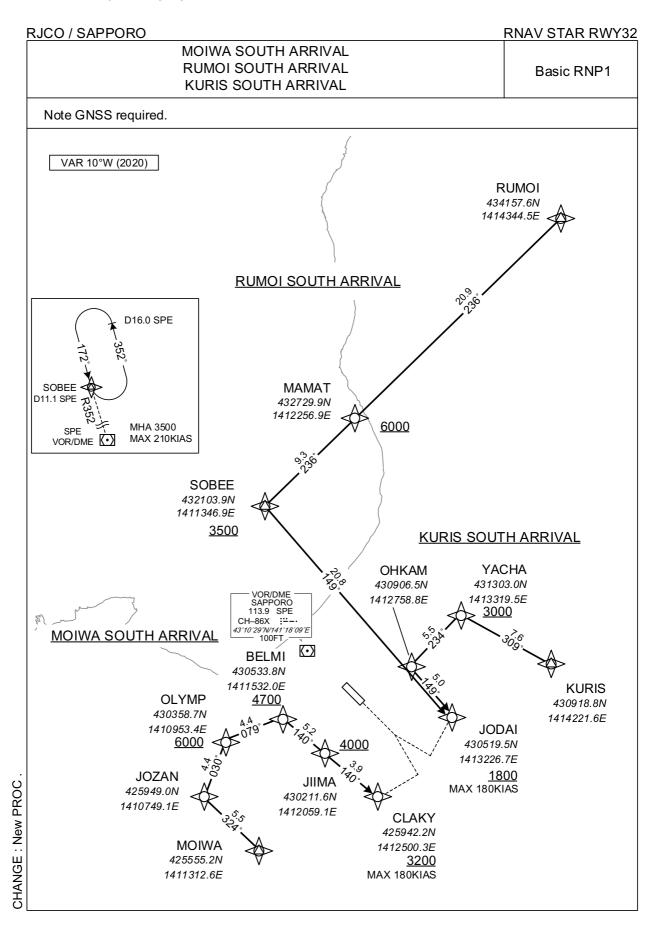
From RUMOI, to MAMAT at or above 6000FT, to MORAI at or above 3500FT, to SOBEE at or above 2800FT.

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	RUMOI	-	-	-9.7	-	-	-	-	-	Basic RNP1
002	TF	MAMAT	-	236 (226.3)	-9.7	20.9	1	+6000	-	1	Basic RNP1
003	TF	MORAI	-	236 (226.0)	-9.7	5.1	-	+3500	-	-	Basic RNP1
004	TF	SOBEE	-	236 (226.0)	-9.7	4.1	-	+2800	-	-	Basic RNP1

## **KURIS NORTH ARRIVAL**

From KURIS, to SOBEE at or above 2800FT.

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	KURIS	-	-	-9.7	-	-	-	-	-	Basic RNP1
002	TF	SOBEE	-	309 (299.6)	-9.7	23.9	-	+2800	-	-	Basic RNP1



## RJCO / SAPPORO

### **RNAV STAR RWY32**

### **MOIWA SOUTH ARRIVAL**

From MOIWA, to JOZAN, to OLYMP at or above 6000FT, to BELMI at or above 4700FT, to JIIMA at or above 4000FT, to CLAKY 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	MOIWA	-	-	-9.7	-	-	-	-	-	Basic RNP1
002	TF	JOZAN	-	324 (314.7)	-9.7	5.5	-	-	-	-	Basic RNP1
003	TF	OLYMP	-	030 (020.0)	-9.7	4.4	-	+6000	-	-	Basic RNP1
004	TF	BELMI	-	079 (068.9)	-9.7	4.4	-	+4700	-	-	Basic RNP1
005	TF	JIIMA	-	140 (130.2)	-9.7	5.2	-	+4000	-	-	Basic RNP1
006	TF	CLAKY	-	140 (130.3)	-9.7	3.9	-	+3200	-180	-	Basic RNP1

## **RUMOI SOUTH ARRIVAL**

From RUMOI, to MAMAT at or above 6000FT, to SOBEE at or above 3500FT, to JODAI at or above 1800FT.

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	RUMOI	-	-	-9.7	-	-	-	-	-	Basic RNP1
002	TF	MAMAT	-	236 (226.3)	-9.7	20.9	-	+6000	-	-	Basic RNP1
003	TF	SOBEE	-	236 (226.0)	-9.7	9.3	-	+3500	-	-	Basic RNP1
004	TF	JODAI	-	149 (139.1)	-9.7	20.8	-	+1800	-180	-	Basic RNP1

## KURIS SOUTH ARRIVAL

From KURIS, to YACHA at or above 3000FT, to OHKAM, to JODAI at or above 1800FT.

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	KURIS	-	-	-9.7	-	-	-	-	-	Basic RNP1
002	TF	YACHA	-	309 (299.6)	-9.7	7.6	-	+3000	-	1	Basic RNP1
003	TF	OHKAM	1	234 (224.7)	-9.7	5.5	ı	ı	ı	ı	Basic RNP1
004	TF	JODAI	-	149 (139.2)	-9.7	5.0	-	+1800	-180	-	Basic RNP1

