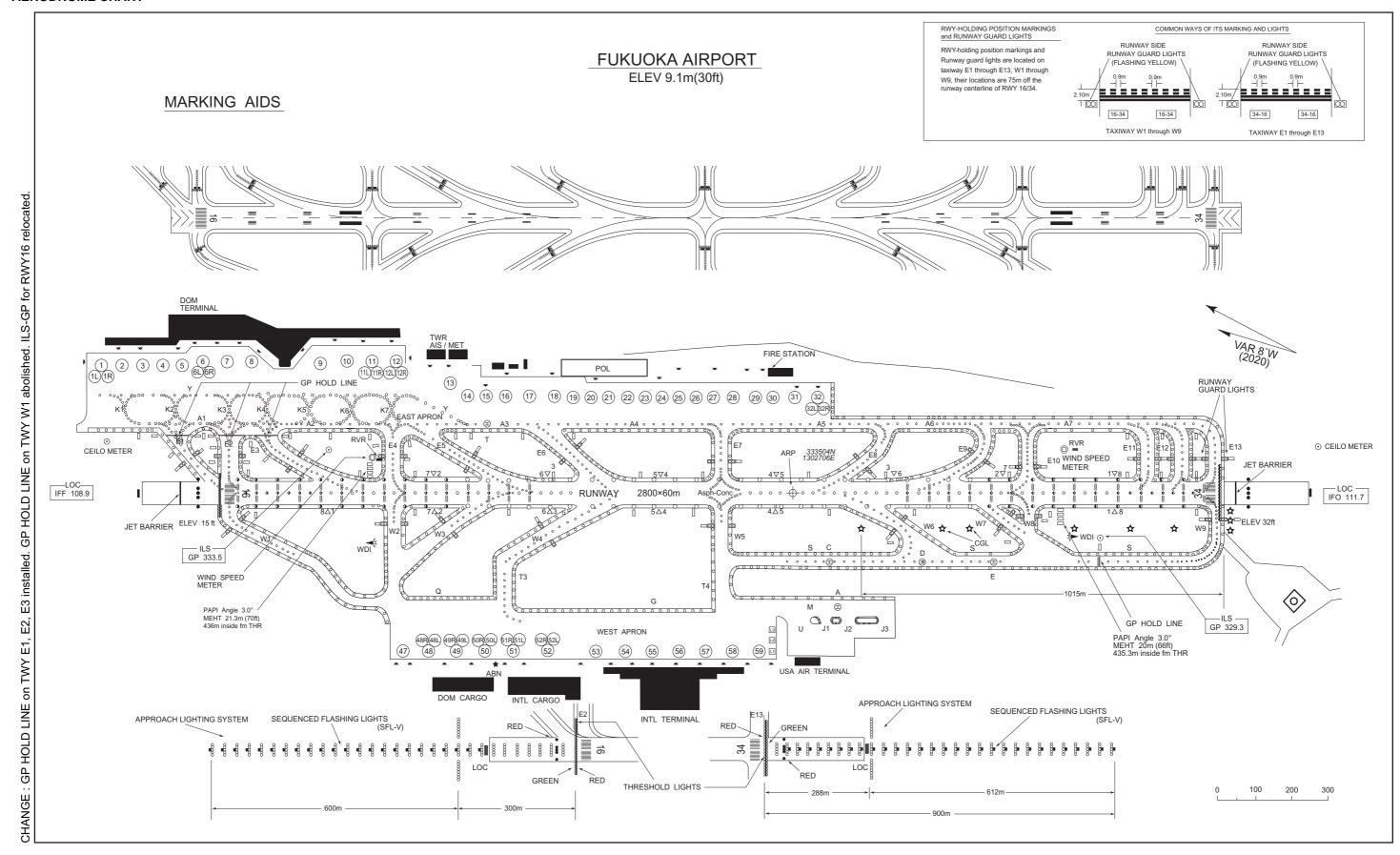
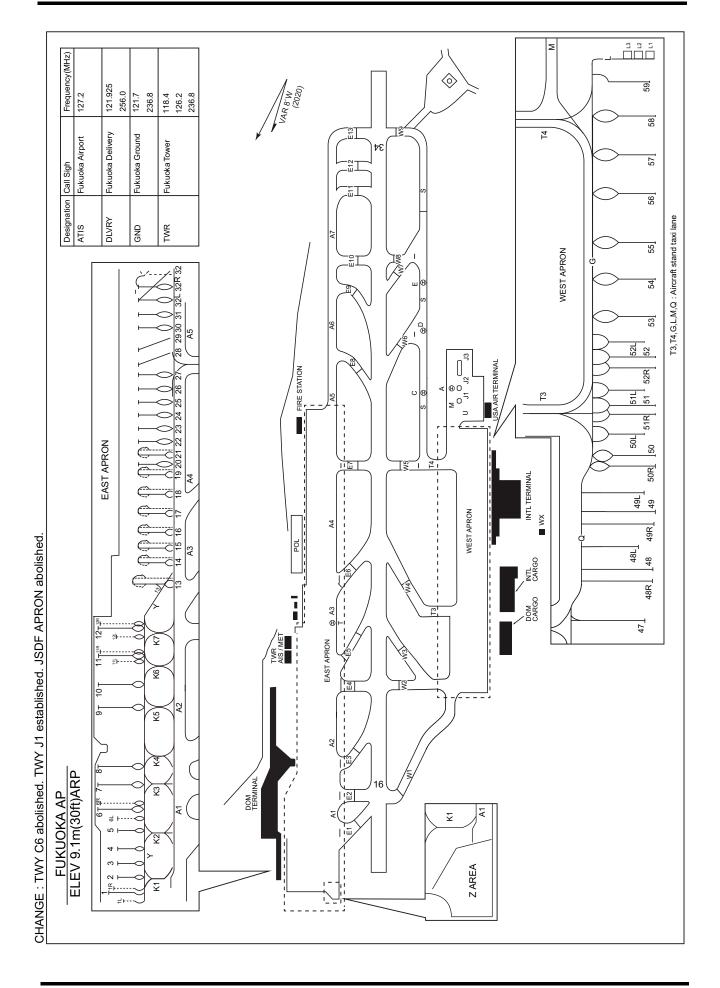
### **AERODROME CHART**

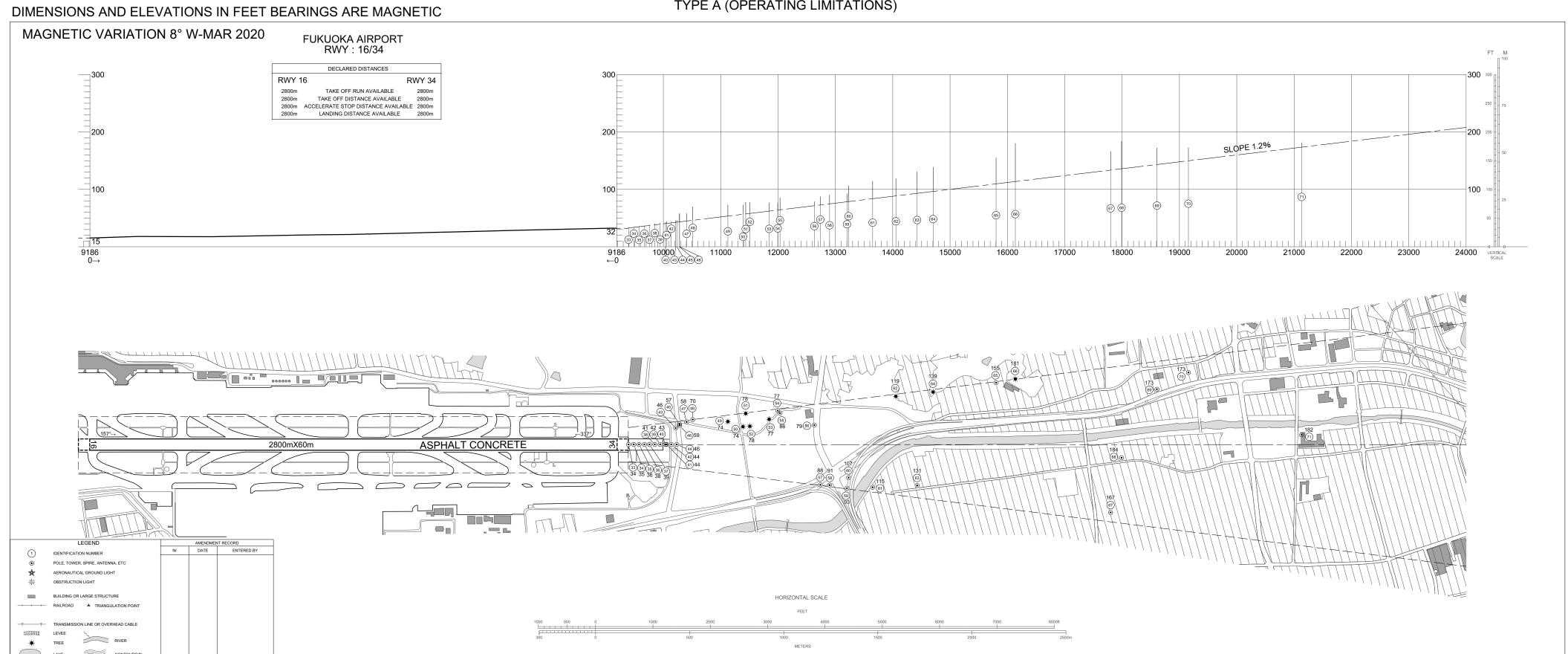


Civil Aviation Bureau, Japan (EFF:24 MAR 2022)



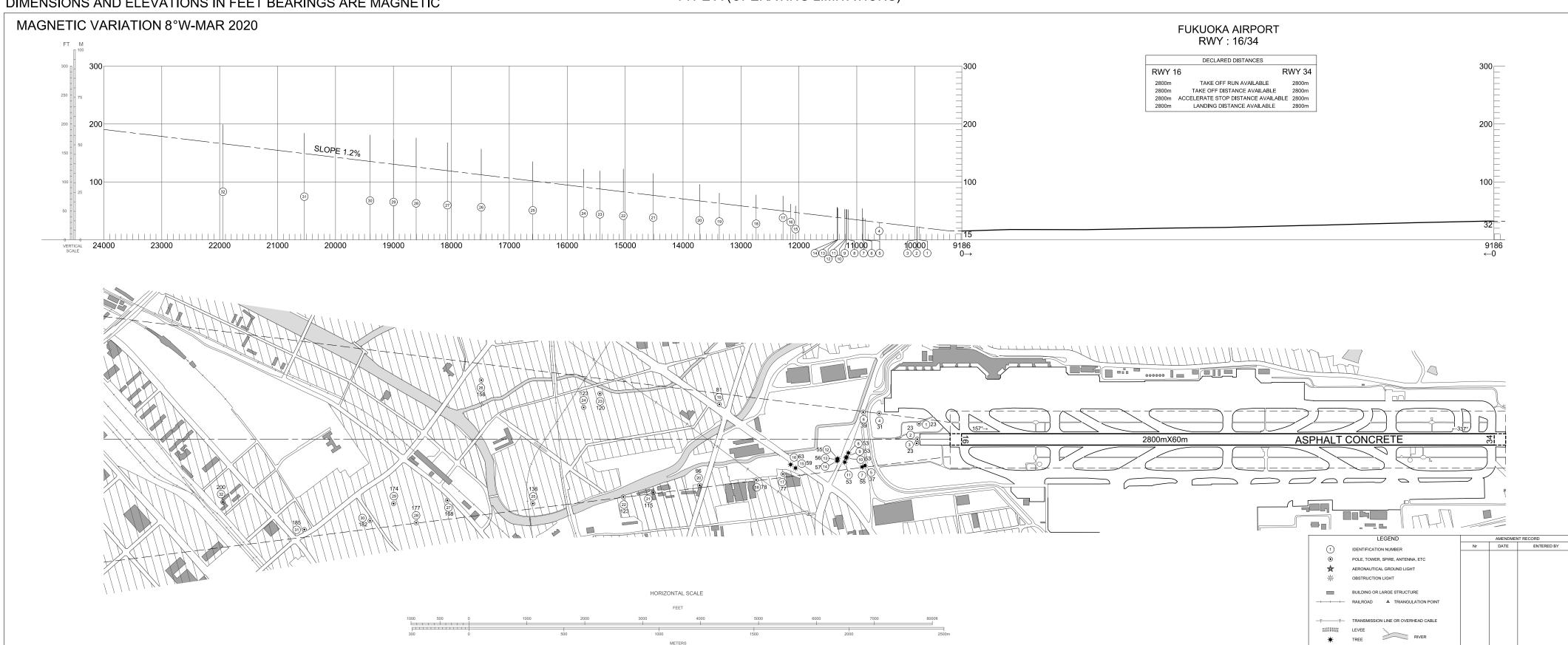


### AERODROME OBSTACLE CHART-ICAO TYPE A (OPERATING LIMITATIONS)



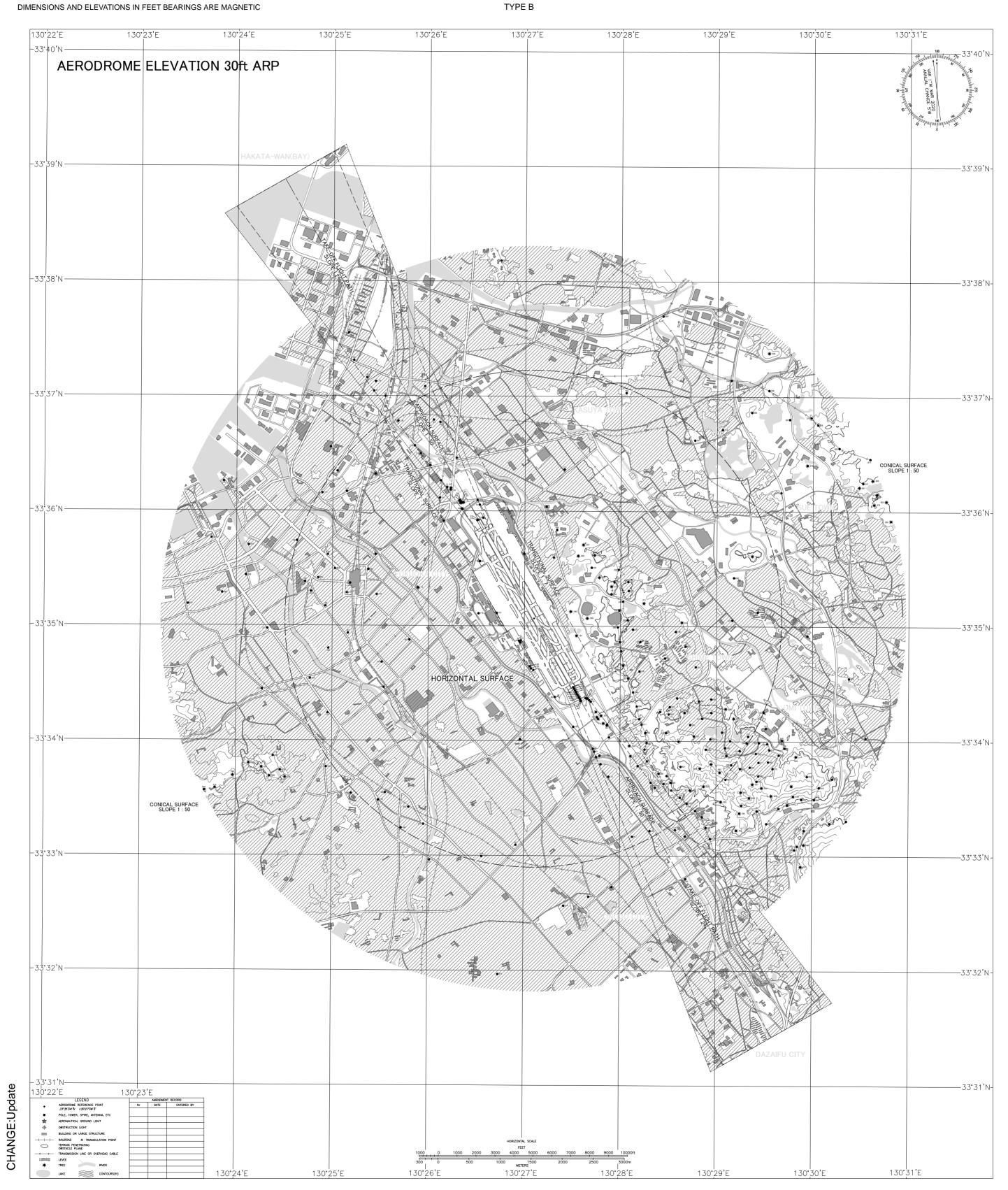
### AERODROME OBSTACLE CHART-ICAO TYPE A (OPERATING LIMITATIONS)

### DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



AIP Japan FUKUOKA RJFF AD2.24-AOC-3

### **AERODROME OBSTACLE CHART - ICAO**



RJFF / FUKUOKA SID

### OGUNI EIGHT DEPARTURE

RWY 16: Climb RWY HDG to 700FT, turn right, via DGC R160 to 30.0DME, turn left, via TFE R256 to OGUNI.

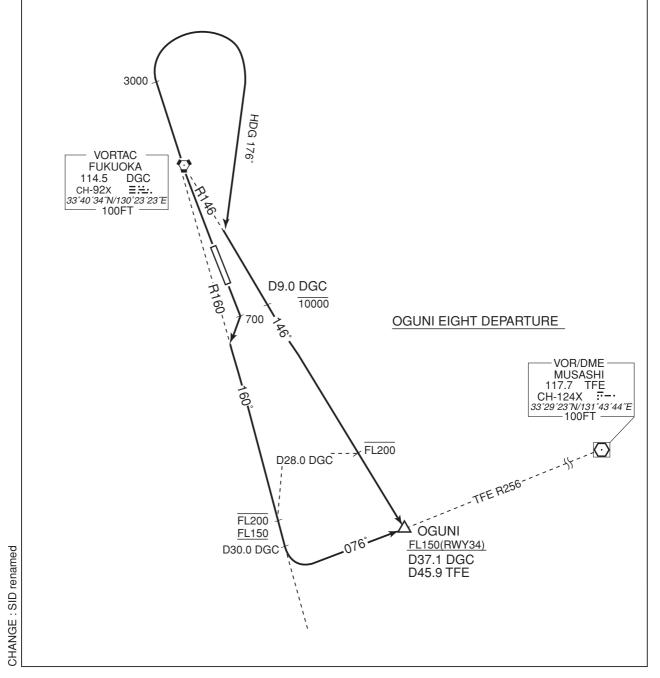
Cross DGC R160/28.0DME between FL150 and FL200.

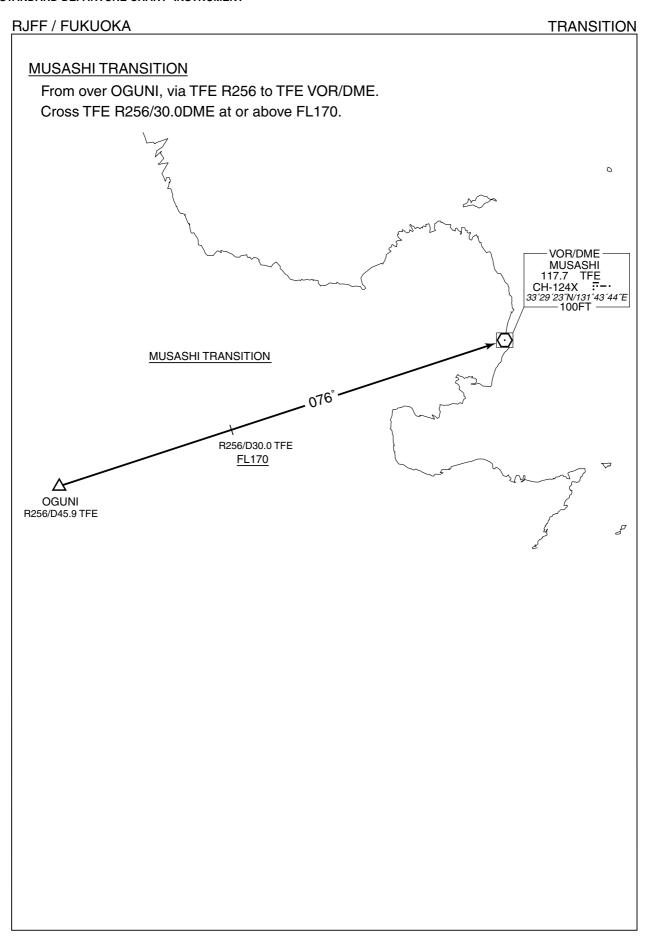
RWY 34 : Climb RWY HDG to 3000FT, turn right HDG176° to intercept and proceed via DGC R146 to OGUNI.

Cross DGC R146/9.0DME at or below 10000FT, cross DGC R146/28.0DME at or below FL200, cross OGUNI at or above FL150.

Note RWY16: 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.





RJFF / FUKUOKA SID

### YAMEK NINE DEPARTURE

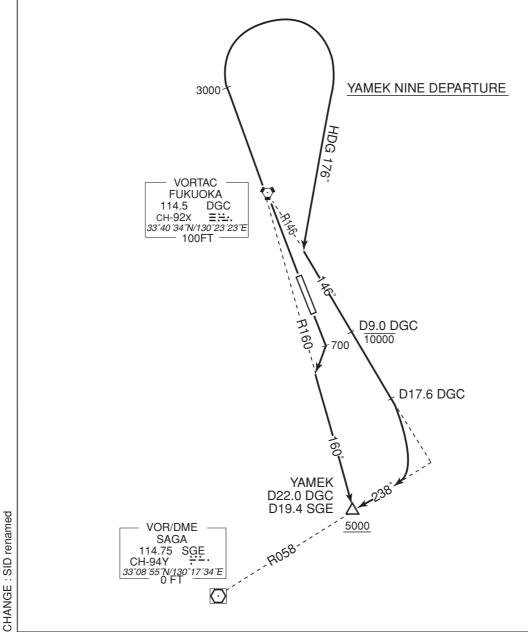
RWY 16: Climb RWY HDG to 700FT, turn right, via DGC R160 to YAMEK. Cross YAMEK at or above 5000FT.

RWY 34: Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to DGC 17.6DME, turn right, via SGE R058 to YAMEK. Cross DGC R146/9.0DME at or below 10000FT, cross YAMEK at or above

5000FT.

Note RWY16: 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.



RJFF / FUKUOKA SID

### YAMGA SEVEN DEPARTURE

RWY 16: Climb RWY HDG to 700FT, turn right, via DGC R160 to YAMGA.

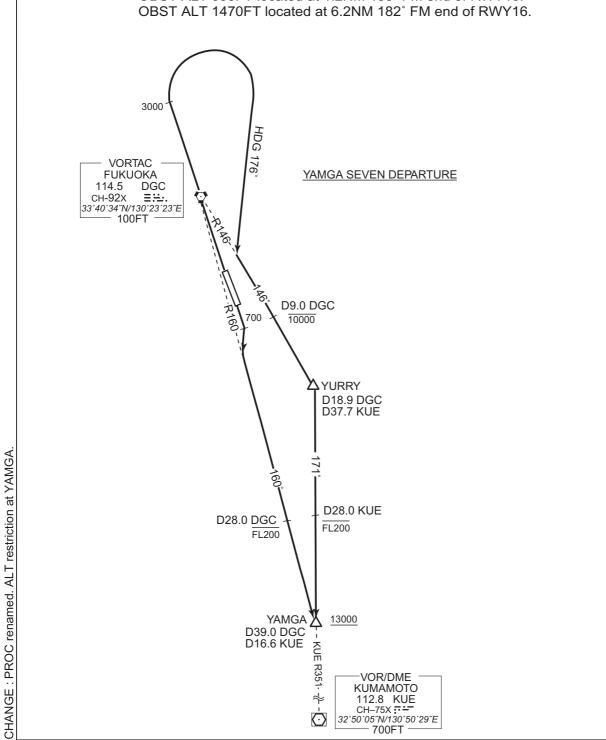
Cross DGC R160/28.0DME at or below FL200, cross YAMGA at or above 13000FT.

RWY 34 : Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to YURRY, turn right, via KUE R351 to YAMGA.

Cross DGC R146/9.0DME at or below 10000FT, cross KUE R351/28.0DME at or below FL200, cross YAMGA at or above 13000FT.

Note RWY16: 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.



RJFF / FUKUOKA SID

### FUKUOKA FOUR DEPARTURE

RWY 16: Climb RWY HDG to 700FT, turn right, via DGC R160 to YAMEK, turn right,

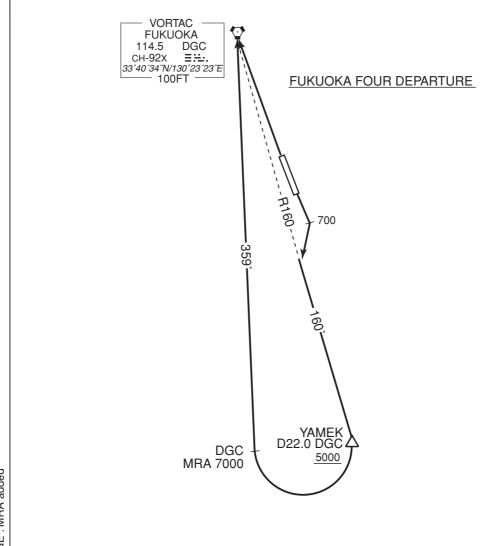
via DGC R179 (MRA 7000FT) to DGC VORTAC.

Cross YAMEK at or above 5000FT.

RWY 34: Climb direct to DGC VORTAC.

Note RWY16: 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.



RJFF / FUKUOKA TRANSITION

### KAGOSHIMA TRANSITION

From over YAMGA, proceed via HKC R012 to HKC VORTAC via KEIKA, IPUDO and AJISE.

Cross KEIKA at or below FL180.

### **KUMAMOTO TRANSITION**

From over YAMGA, proceed via KUE R351 to KUE VOR/DME via ABECK. Cross ABECK at assigned altitude.

### SAGA TRANSITION

From over YAMEK, proceed via SGE R058 to SGE VOR/DME.

### MIZMA TRANSITION

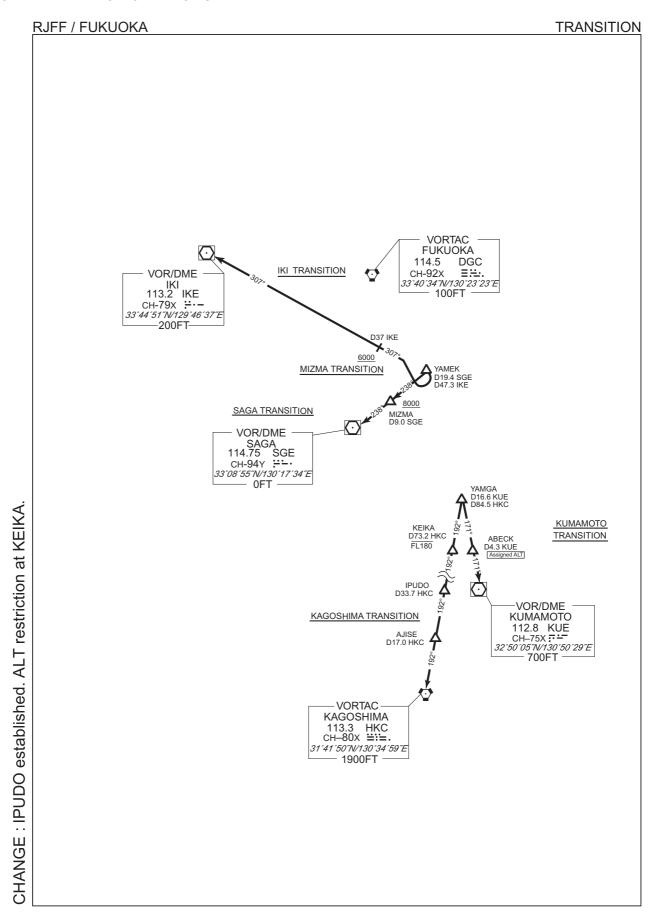
From over YAMEK, proceed via SGE R058 to MIZMA.

Cross MIZMA at or above 8000FT.

### **IKI TRANSITION**

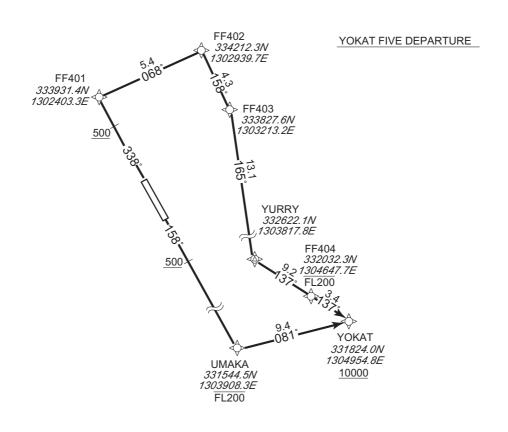
From over YAMEK, turn right, proceed via IKE R127 to IKE VOR/DME . Cross IKE R127/37DME at or above 6000FT.

CHANGE: KAGOSHIMA TRANSITION.



RJFF / FUKUOKA			RNAV SID
YOKAT FIVE DI	EPARTURE		RNAV 1
Note 1) DME/DME/IRU or GNSS required.  **The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.  2) RADAR service required.	Critical DME	IKE "1.0NM F RWY34 : DGC "3.5NM	FM DER~5.4NM FM DER" M DER~5.4NM FM DER" to FF401~2.2NM to FF401" o FF401~2.2NM to FF401"
	DME GAP	RWY16 :DER~1.0NN RWY34 :DER~0.9NN 2.2NM to FF4	1 FM DER
	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	ropriate NAVAIDs for RNAV1

VAR 8°W (2020)



### YOKAT FIVE DEPARTURE

RWY34 : Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to FF404 at or below FL200, to YOKAT at or above 10000FT.

RWY16 : Climb on HDG 158° at or above 500FT, direct to UMAKA at or below FL200, to YOKAT at or above 10000FT.

Note  $\mbox{RWY34}: 7.0\%$  climb gradient required up to 2800FT.

RWY16: 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.

RJFF / FUKUOKA RNAV SID

### YOKAT FIVE DEPARTURE

### RWY34

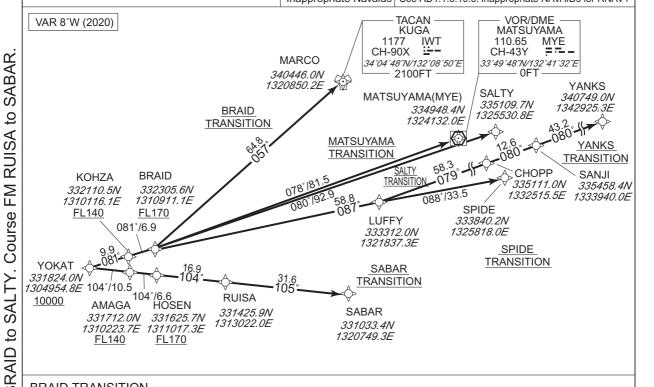
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	338 (330.3)	-7.7	_	_	+500	_	_	RNAV1
002	DF	FF401	_	_	-7.7	_	_	_	_	_	RNAV1
003	TF	FF402	_	068 (060.1)	-7.7	5.4	_	_	_	_	RNAV1
004	TF	FF403	_	158 (150.4)	-7.7	4.3	-	_	1	_	RNAV1
005	TF	YURRY	_	165 (157.2)	-7.7	13.1	ı	_	I	_	RNAV1
006	TF	FF404	_	137 (129.4)	-7.7	9.2	_	-FL200	_	_	RNAV1
007	TF	YOKAT	_	137 (129.4)	-7.7	3.4	_	+10000	_	_	RNAV1

### RWY16

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	_	_	158 (150.3)	-7.7	_	_	+500	_	_	RNAV1
002	DF	UMAKA	_	_	-7.7	_	_	-FL200	_	_	RNAV1
003	TF	YOKAT	_	081 (073.5)	-7.7	9.4	_	+10000	_	_	RNAV1

### RJFF / FUKUOKA RNAV TRANSITION

### BRAID TRANSITION / MATSUYAMA TRANSITION / SALTY TRANSITON YANKS TRANSITION / SPIDE TRANSITION / SABAR TRANSITION Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. Critical DME SABAR TRANSITION: SWE "YOKAT ~ RUISA" SGE "HOSEN ~ RUISA" DME GAP Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



### **BRAID TRANSITION**

FM BI

Course

established.

CHOPP

 $\alpha$ 

N.

CHANGE

From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to MARCO.

### MATSUYAMA TRANSITION

From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to MYE.

### SALTY TRANSITION

From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to SALTY.

### YANKS TRANSITION

From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to LUFFY, to CHOPP, to SANJI, to YANKS.

### SPIDE TRANSITION

From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to LUFFY, to SPIDE.

### SABAR TRANSITION

From YOKAT at or above 10000FT, to AMAGA at or above FL140, to HOSEN at or above FL170, to RUISA, to SABAR.

### RJFF / FUKUOKA

### **RNAV TRANSITION**

BRAID	<b>TRANSITION</b>
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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	IF	YOKAT	_	_	-7.7	_	_	+10000	_	_	RNAV1
002	TF	KOHZA	_	081 (073.6)	-7.7	9.9	_	+FL140	_	_	RNAV1
003	TF	BRAID	_	081 (073.8)	-7.7	6.9	_	+FL170	_	_	RNAV1
004	TF	MARCO	_	057 (049.7)	-7.7	64.8	_	_	_	_	RNAV1

### MATSUYAMA TRANSITION

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	YOKAT	_	_	-7.7	_	_	+10000	_	_	RNAV1
002	TF	KOHZA	_	081 (073.6)	-7.7	9.9	_	+FL140	_	_	RNAV1
003	TF	BRAID	-	081 (073.8)	-7.7	6.9	-	+FL170	_	_	RNAV1
004	TF	MYE	_	078 (070.4)	-7.7	81.5	_	_	_	_	RNAV1

### SALTY TRANSITION

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	YOKAT	_	_	-7.7	_	_	+10000	_	_	RNAV1
002	TF	KOHZA	_	081 (073.6)	-7.7	9.9	_	+FL140	_	_	RNAV1
003	TF	BRAID	_	081 (073.8)	-7.7	6.9	_	+FL170	_	_	RNAV1
004	TF	SALTY	_	080 (071.9)	-7.7	92.9	_	_	_	_	RNAV1

# CHANGE: VAR. CHOPP established. Course FM RUISA to SABAR.

### STANDARD DEPARTURE CHART-INSTRUMENT

### RJFF / FUKUOKA

### **RNAV TRANSITION**

### YANKS TRANSITION

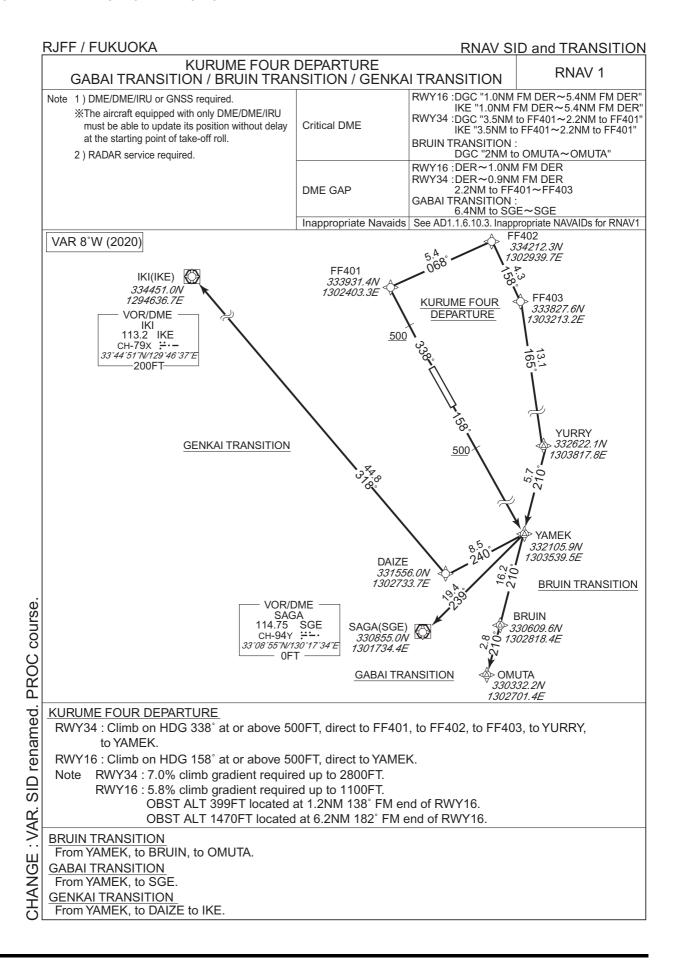
Serial	Path	Waypoint	Fly	Course	Magnetic			Altitude	•		•
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	YOKAT	_	_	-7.7	_	_	+10000	-	_	RNAV1
002	TF	KOHZA	_	081 (073.6)	-7.7	9.9	_	+FL140	1	_	RNAV1
003	TF	BRAID	_	081 (073.8)	-7.7	6.9	_	+FL170	-	_	RNAV1
004	TF	LUFFY	_	087 (079.8)	-7.7	58.8	_	_	-	_	RNAV1
005	TF	CHOPP	_	079 (071.7)	-7.7	58.3	_	_	-	_	RNAV1
006	TF	SANJI	_	080 (072.4)	-7.7	12.6	_	_	_	_	RNAV1
007	TF	YANKS	_	080 (072.5)	-7.7	43.2	_	_	_	_	RNAV1

### SPIDE TRANSITION

Serial	Path	Waypoint	Fly	Course	Magnetic	1		Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	YOKAT	_	ı	-7.7	_	ı	+10000	_	_	RNAV1
002	TF	KOHZA	_	081 (073.6)	-7.7	9.9	1	+FL140	_	_	RNAV1
003	TF	BRAID	_	081 (073.8)	-7.7	6.9	_	+FL170	_	_	RNAV1
004	TF	LUFFY	_	087 (079.8)	-7.7	58.8	-	_	_	_	RNAV1
005	TF	SPIDE	_	088 (080.4)	-7.7	33.5	_	_	_	_	RNAV1

### SABAR TRANSITION

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	YOKAT	_	-	-7.7	_	_	+10000	1	_	RNAV1
002	TF	AMAGA	_	104 (096.5)	-7.7	10.5	_	+FL140	ı	_	RNAV1
003	TF	HOSEN	_	104 (096.6)	-7.7	6.6	_	+FL170	_	_	RNAV1
004	TF	RUISA	_	104 (096.7)	-7.7	16.9	_	_	_	_	RNAV1
005	TF	SABAR	_	105 (096.9)	-7.7	31.6	_	1	1	_	RNAV1



RJFF / FUKUOKA RNAV SID

### KURUME FOUR DEPARTURE

### RWY34

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	_	_	338 (330.3)	-7.7	_	_	+500	_	_	RNAV1
002	DF	FF401	_	_	-7.7	_	_	_	_	_	RNAV1
003	TF	FF402	_	068 (060.1)	-7.7	5.4	_	_	_	_	RNAV1
004	TF	FF403	_	158 (150.4)	-7.7	4.3	_	_	_	_	RNAV1
005	TF	YURRY	_	165 (157.2)	-7.7	13.1	_	_	_	_	RNAV1
006	TF	YAMEK	_	210 (202.7)	-7.7	5.7	_	_	_	_	RNAV1

### RWY16

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	_	_	158 (150.3)	-7.7	_	_	+500	-	_	RNAV1
002	DF	YAMEK	_	_	-7.7	_	_	_	_	_	RNAV1

### RJFF / FUKUOKA

### **RNAV TRANSITION**

### **BRUIN TRANSITION**

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	1	Turn Direction	Altitude (FT)	Speed (KIAS)	l .	Navigation Specification
001	IF	YAMEK	_	_	-7.7	_	_	_	_	_	RNAV1
002	TF	BRUIN	_	210 (202.4)	-7.7	16.2	_	_	_	_	RNAV1
003	TF	OMUTA	_	210 (202.3)	-7.7	2.8	_	_	_	_	RNAV1

### **GABAI TRANSITION**

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	YAMEK	_	_	-7.7	_	_	_	_	_	RNAV1
002	TF	SGE	_	239 (231.2)	-7.7	19.4	_	_	_	_	RNAV1

### **GENKAI TRANSITION**

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation	l	Turn Direction	Altitude (FT)	Speed (KIAS)		Navigation Specification
001	IF	YAMEK	_	_	-7.7	_	_	_	_	_	RNAV1
002	TF	DAIZE	_	240 (232.7)	-7.7	8.5	_	_	_	_	RNAV1
003	TF	IKE	_	318 (310.4)	-7.7	44.8	_	_	_	_	RNAV1

### RJFF / FUKUOKA RNAV SID and TRANSITION MORIO FOUR DEPARTURE RNAV 1 SATSUMA TRANSITION / SAKURA TRANSITION RWY16 :DGC "1.0NM FM DER~5.4NM FM DER" Note 1) DME/DME/IRU or GNSS required IKE "1.0NM FM DER~5.4NM FM DER" XThe aircraft equipped with only DME/DME/IRU RWY34 :DGC "3.5NM to FF401~2.2NM to FF401" Critical DME must be able to update its position without delay IKE "3.5NM to FF401~2.2NM to FF401" at the starting point of take-off roll. 2) RADAR service required. RWY16:DER~1.0NM FM DER DME GAP RWY34:DER~0.9NM FM DER 2.2NM to FF401~FF403 Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 8°W (2020) FF402 334212.3N 1302939.7F FF401 333931.4N 296 MORIO FOUR DEPARTURE 1302403.3E ζ, FF403 333827.6N **TRANSITION** YAMGA 1303213.2E 500 330605.9N 1304507.3E <u>13000</u> **KEIKA** 겁 65 325439.2N 1304343.3E **SAKURA** FL180 **TRANSITION** 39.5 KUMAMOTO(KUE) **IPUDO** YURRY 325005.3N 321522.6N 1305029.5E 332622.1N 1303858.2E 500 1303817.8E SATSUMA VOR/DME 16. **KUMAMOTO TRANSITION** 112.8 KUE FF405 ALT restriction at KEIKA CH-75X **:- :-**32°50′05″N/130°50′29″E 331704.3N 315847.1N 1304125.8E 700FT 1303659.2E FL200 FF603 331620.41 1303847.3E 6 KAGOSHIMA(HKC) FL200 314150.0N 1303458.6E VORTAC-YAMGA KAGOSHIMA 330605.9N 113.3 HKC CH–80x **≒**:= 1304507.3E 13000 31°41′50″N/130°34′59″E 1900FT established. MORIO FOUR DEPARTURE RWY34: Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to FF405 at or below FL200, to YAMGA at or above 13000FT. RWY16: Climb on HDG 158° at or above 500FT, direct to FF603 at or below FL200, to YAMGA at or above 13000FT. : IPUDO RWY34: 7.0% climb gradient required up to 2800FT. RWY16: 5.8% climb gradient required up to 1100FT. OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16. CHANGE **SAKURA TRANSITION** From YAMGA at or above 13000FT, to KUE. SATSUMA TRANSITION From YAMGA at or above 13000FT, to KEIKA at or below FL180, to IPUDO, to AJISE, to HKC.

RJFF / FUKUOKA RNAV SID

### MORIO FOUR DEPARTURE

### RWY34

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	_	_	338 (330.3)	-7.7	_	_	+500	_	_	RNAV1
002	DF	FF401	_	_	-7.7	_	_	_	_	_	RNAV1
003	TF	FF402	_	068 (060.1)	-7.7	5.4	_	_	_	_	RNAV1
004	TF	FF403	_	158 (150.4)	-7.7	4.3	_	1	_	_	RNAV1
005	TF	YURRY	_	165 (157.2)	-7.7	13.1	_	-	_	_	RNAV1
006	TF	FF405	_	172 (164.3)	-7.7	9.7	_	-FL200	_	_	RNAV1
007	TF	YAMGA	_	172 (164.3)	-7.7	11.4	_	+13000	_	_	RNAV1

### RWY16

L	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	_	_	158 (150.3)	-7.7	_	_	+500	_	_	RNAV1
	002	DF	FF603	_	_	-7.7	_	_	-FL200	_	_	RNAV1
	003	TF	YAMGA	_	160 (152.6)	-7.7	11.5	_	+13000	_		RNAV1

## CHANGE: IPUDO established. ALT restriction at KEIKA.

### STANDARD DEPARTURE CHART - INSTRUMENT

### RJFF / FUKUOKA

### **RNAV TRANSITION**

### SAKURA TRANSITION

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	YAMGA	_	_	-7.7	_	_	+13000	_	_	RNAV1
002	TF	KUE	-	172 (164.3)	-7.7	16.6	_	_	-	_	RNAV1

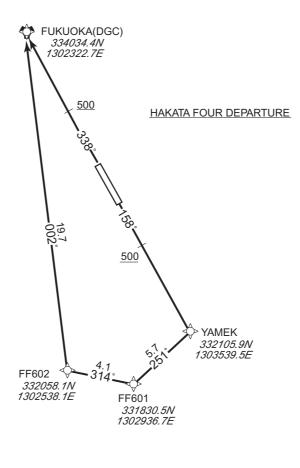
### SATSUMA TRANSITION

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	YAMGA	_	_	-7.7	_	_	+13000	_	_	RNAV1
002	TF	KEIKA	_	194 (185.9)	-7.7	11.5	_	-FL180	_	_	RNAV1
003	TF	IPUDO	_	194 (185.8)	-7.7	39.5	_	_	_	_	RNAV1
004	TF	AJISE	_	193 (185.8)	-7.7	16.7	_	_	_	_	RNAV1
005	TF	HKC	_	193 (185.8)	-7.7	17.0	_	_	_	_	RNAV1

RJFF / FUKUOKA RNAV SID

HAKATA FOUR [		RNAV 1	
Note 1) DME/DME/IRU or GNSS required.  **The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.  2) RADAR service required.	Critical DME	IKE "1.0NM I RWY34 : DGC "4.6NN	FM DER~5.4NM FM DER" FM DER~5.4NM FM DER" I to DGC~3.0NM to DGC" to DGC~3.0NM to DGC"
,	DME GAP  Inappropriate Navaids	RWY16: DER~1.0NM RWY34: DER~4.6NM 3.0NM to DC See AD1.1.6.10.3. Inapp	M to DGC

VAR 8°W (2020)



### HAKATA FOUR DEPARTURE

RWY34 : Climb on HDG 338° at or above 500FT, direct to DGC.

RWY16: Climb on HDG 158° at or above 500FT, direct to YAMEK, to FF601, to FF602 to DGC.

Note RWY16: 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.

### RJFF / FUKUOKA RNAV SID

### **HAKATA FOUR DEPARTURE**

### RWY34

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	_	_	338 (330.3)	-7.7	_	_	+500	_	_	RNAV1
002	DF	DGC	_	_	-7.7	_	_	_	<u> </u>	_	RNAV1

### RWY16

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	158 (150.3)	-7.7	_	_	+500	_	_	RNAV1
002	DF	YAMEK	_	_	-7.7	_	_	_	_	_	RNAV1
003	TF	FF601	_	251 (242.9)	-7.7	5.7	_	_	_	_	RNAV1
004	TF	FF602	_	314 (306.5)	-7.7	4.1	_	_	_	_	RNAV1
005	TF	DGC	_	002 (354.5)	-7.7	19.7	_	_	_	_	RNAV1

RJFF / FUKUOKA STAR

### LAGER ARRIVAL

From over LAGER, via DGC R338 to MALTS.

Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.

### **EBISU ARRIVAL**

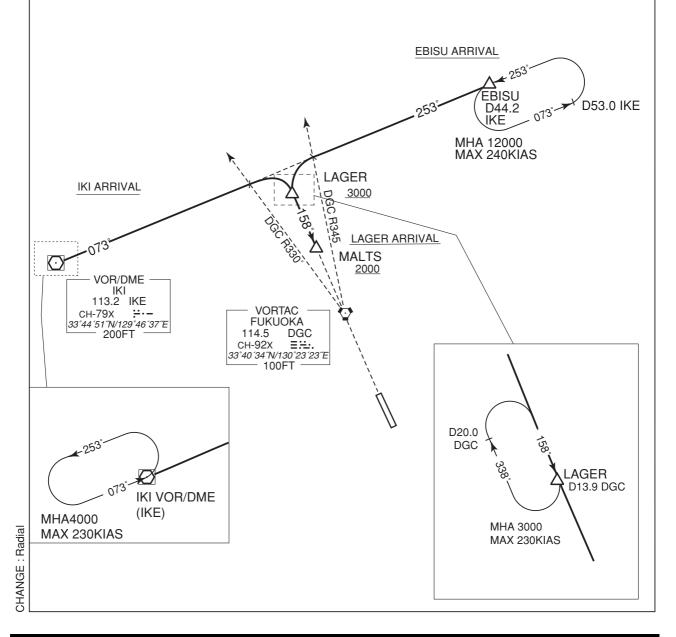
From over EBISU, via IKE R073 to intercept and proceed via DGC R338 to MALTS via LAGER.

Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.

### IKI ARRIVAL

From over IKE VOR/DME, via IKE R073 to intercept and proceed via DGC R338 to MALTS via LAGER.

Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.



RJFF / FUKUOKA STAR

### KAFRI EAST ARRIVAL

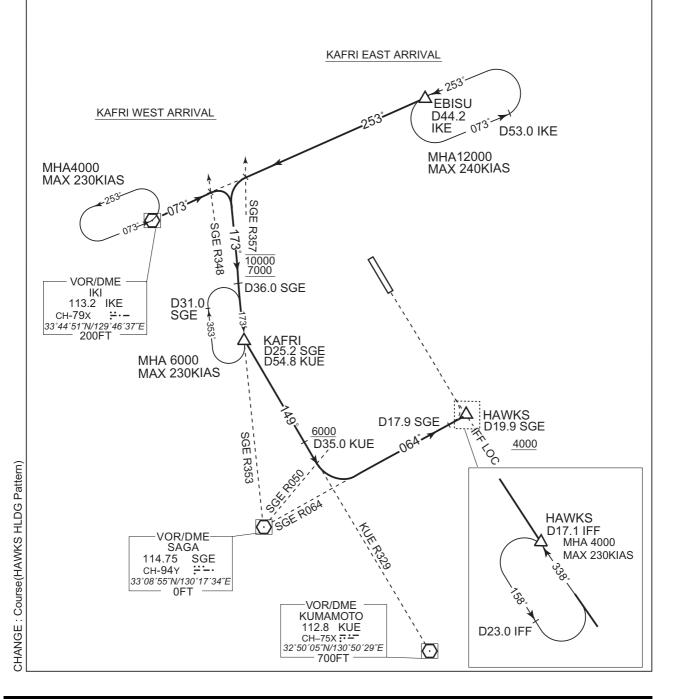
From over EBISU, proceed via IKE R073 to intercept and proceed via SGE R353 to KAFRI, via KUE R329 to intercept and proceed via SGE R064 to HAWKS.

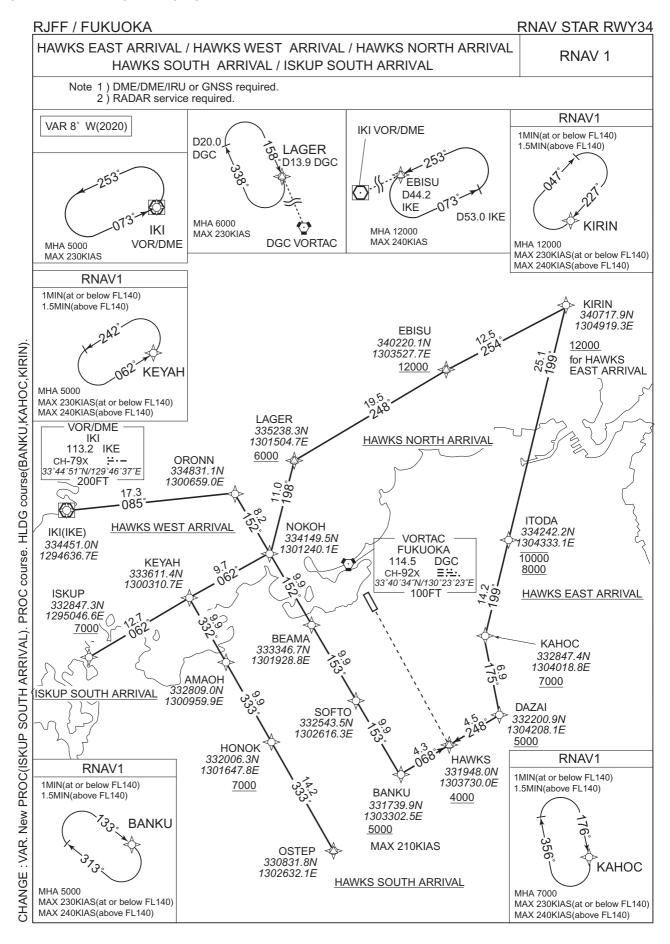
Cross SGE R353/36.0DME between 7000FT and 10000FT, cross KUE R329/35.0DME at or above 6000FT, cross HAWKS at or above 4000FT.

### KAFRI WEST ARRIVAL

From over IKE VOR/DME, proceed via IKE R073 to intercept and proceed via SGE R353 to KAFRI, via KUE R329, to intercept and proceed via SGE R064 to HAWKS.

Cross SGE R353/36.0DME between 7000FT and 10000FT, cross KUE R329/35.0DME at or above 6000FT, cross HAWKS at or above 4000FT.





### RJFF / FUKUOKA

### **RNAV STAR RWY34**

### HAWKS EAST ARRIVAL

From KIRIN at or above 12000FT, to ITODA between 10000FT and 8000FT, to KAHOC at or above 7000FT, to DAZAI at or above 5000FT, to HAWKS at or above 4000FT.

	_	_
Critical DME	_	_
	_	-
DME GAP		_
Inappropriate Navaids	See AD1.1.6.10	.3. Inappropriate NAVAIDs for RNAV1

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	KIRIN	_	_	-7.7	_	_	+12000	_	_	RNAV1
002	TF	ITODA	_	199 (191.0)	-7.7	25.1	_	-10000 +8000	_	_	RNAV1
003	TF	KAHOC	_	199 (191.0)	-7.7	14.2	ı	+7000	ı	_	RNAV1
004	TF	DAZAI	_	175 (167.3)	-7.7	6.9	_	+5000	_	_	RNAV1
005	TF	HAWKS	_	248 (240.3)	-7.7	4.5	_	+4000	_	_	RNAV1

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	KIRIN	227 (218.7)	-7.7	1.0(-14000) 1.5(+14001)	R	12000	_	-230(-14000) -240(+14001)	RNAV1
Hold	KAHOC	176 (167.3)		1.0(-14000) 1.5(+14001)	R	7000	_	-230(-14000) -240(+14001)	RNAV1

### HAWKS WEST ARRIVAL

From IKE, to ORONN, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

	DGC	IKE - 15.0NM to ORONN				
	DOC	6.0NM to ORONN - 5.0NM to NOKOH				
Critical DME	KUE	IKE - 15.0NM to ORONN				
	IKE	6.0NM to ORONN - 5.0NM to NOKOH				
	SGE 9.0NM to BEAMA - 6.0NM to BEAMA					
DME GAP	15.0NM to ORC	ONN - 6.0NM to ORONN				
DIVIE GAP	5.0NM to NOK	DH - 9.0NM to BEAMA				
Inappropriate Navaids	See AD1.1.6.10	.3. Inappropriate NAVAIDs for RNAV1				

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	IKE	_	_	-7.7	_	-	_	_	1	RNAV1
002	TF	ORONN	_	085 (077.7)	-7.7	17.3	_	_	_	_	RNAV1
003	TF	NOKOH	_	152 (144.7)	-7.7	8.2	-	_	_	-	RNAV1
004	TF	BEAMA	-	152 (144.8)	-7.7	9.9	1	-	1	ı	RNAV1
005	TF	SOFTO	-	153 (144.9)	-7.7	9.9	1	ı	1	1	RNAV1
006	TF	BANKU	_	153 (144.9)	-7.7	9.9	-	+5000	-210	-	RNAV1
007	TF	HAWKS	_	068 (060.2)	-7.7	4.3	_	+4000	_	_	RNAV1

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	BANKU	133 (125.0)	-7.7	1.0(-14000) 1.5(+14001)	R	5000	_	-230(-14000) -240(+14001)	RNAV1

### RJFF / FUKUOKA

**RNAV STAR RWY34** 

### HAWKS NORTH ARRIVAL

From KIRIN, to EBISU at or above 12000FT, to LAGER at or above 6000FT, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

	IKE	4.0NM to LAGER - 3.0NM to NOKOH			
Critical DME	DGC	LAGER - 3.0NM to NOKOH			
	SGE 9.0NM to BEAMA - 6.0NM to BEA				
DME GAP	3.0NM to NOKO	DH - 9.0NM to BEAMA			
Inappropriate Navaids	See AD1.1.6.10	.3. Inappropriate NAVAIDs for RNAV1			

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	KIRIN		_	-7.7	_	_	_	_	_	RNAV1
002	TF	EBISU	_	254 (246.7)	-7.7	12.5	_	+12000	_	_	RNAV1
003	TF	LAGER	_	248 (240.3)	-7.7	19.5	_	+6000	_	_	RNAV1
004	TF	NOKOH	_	198 (190.5)	-7.7	11.0	_	_	_	_	RNAV1
005	TF	BEAMA	_	152 (144.8)	-7.7	9.9	_	_	_	_	RNAV1
006	TF	SOFTO	_	153 (144.9)	-7.7	9.9	_	_	_	_	RNAV1
007	TF	BANKU	_	153 (144.9)	-7.7	9.9	_	+5000	-210	_	RNAV1
800	TF	HAWKS	_	068 (060.2)	-7.7	4.3	_	+4000	_	_	RNAV1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Lime	Turn Direction	Altitude	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	KIRIN	227 (218.7)	-7.7	1.0(-14000) 1.5(+14001)		12000	_	-230(-14000) -240(+14001)	
Hold	BANKU	133 (125.0)	-7.7	1.0(-14000) 1.5(+14001)		5000	_	-230(-14000) -240(+14001)	

### RJFF / FUKUOKA

**RNAV STAR RWY34** 

### HAWKS SOUTH ARRIVAL

From OSTEP, to HONOK at or above 7000FT, to AMAOH, to KEYAH, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

Critical DME	SGE	4.0NM to NOKOH - NOKOH 9.0NM to BEAMA - 6.0NM to BEAMA			
DME GAP	NOKOH - 9.0NM to BEAMA				
Inappropriate Navaids	See AD1.1.6.10	.3. Inappropriate NAVAIDs for RNAV1			

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	OSTEP	_	_	-7.7	_	_	_	_	_	RNAV1
002	TF	HONOK	_	333 (324.9)	-7.7	14.2	_	+7000	_	_	RNAV1
003	TF	АМАОН	_	333 (324.8)	-7.7	9.9	_	_	_	_	RNAV1
004	TF	KEYAH	-	332 (324.8)	-7.7	9.9	_	-	_	_	RNAV1
005	TF	NOKOH	_	062 (054.5)	-7.7	9.7	_	_	_	_	RNAV1
006	TF	BEAMA	_	152 (144.8)	-7.7	9.9	_	_	_	_	RNAV1
007	TF	SOFTO	_	153 (144.9)	-7.7	9.9	_	_	_	_	RNAV1
008	TF	BANKU	_	153 (144.9)	-7.7	9.9	_	+5000	-210	_	RNAV1
009	TF	HAWKS	_	068 (060.2)	-7.7	4.3	_	+4000	_	_	RNAV1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	l lime	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	KEYAH	062 (054.5)	-7.7	1.0(-14000) 1.5(+14001)	. I	5000	_	-230(-14000) -240(+14001)	RNAV1
Hold	BANKU	133 (125.0)	-7.7	1.0(-14000) 1.5(+14001)		5000	_	-230(-14000) -240(+14001)	

### RJFF / FUKUOKA

**RNAV STAR RWY34** 

### ISKUP SOUTH ARRIVAL

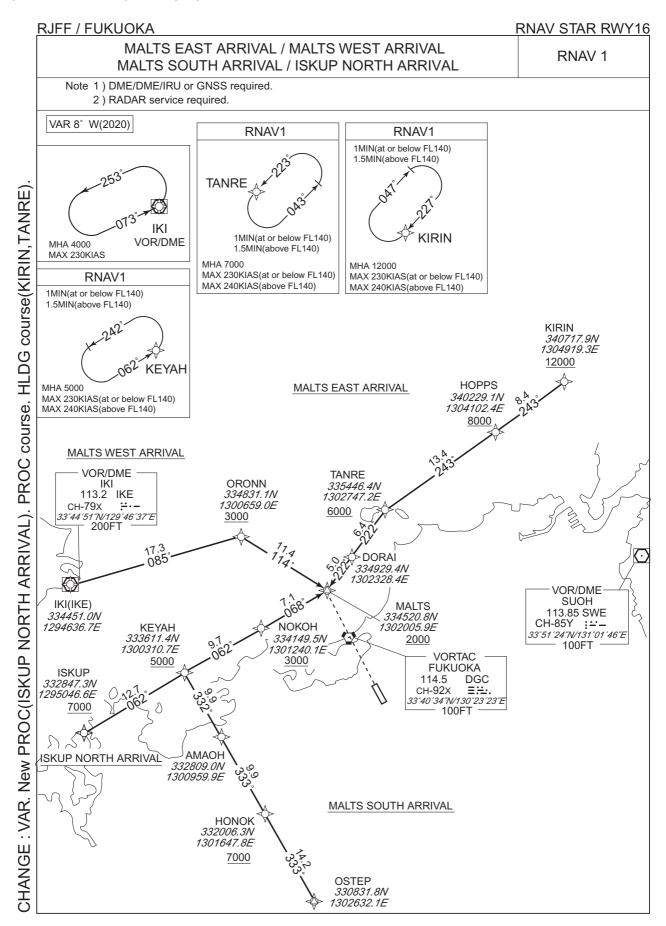
From ISKUP at or above 7000FT, to KEYAH, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

Critical DME	SGE	4.0NM to NOKOH - NOKOH 9.0NM to BEAMA - 6.0NM to BEAMA				
DME GAP	NOKOH - 9.0NM to BEAMA					
Inappropriate Navaids	See AD1.1.6.10	.3. Inappropriate NAVAIDs for RNAV1				

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	ISKUP	_	_	-7.7	_	-	+7000	_	_	RNAV1
002	TF	KEYAH	_	062 (054.3)	-7.7	12.7	_	_	_	_	RNAV1
003	TF	NOKOH	_	062 (054.5)	-7.7	9.7	_	_	_	_	RNAV1
004	TF	BEAMA	_	152 (144.8)	-7.7	9.9	_	_	_	_	RNAV1
005	TF	SOFTO	_	153 (144.9)	-7.7	9.9	-	_	_	_	RNAV1
006	TF	BANKU	_	153 (144.9)	-7.7	9.9	-	+5000	-210	_	RNAV1
007	TF	HAWKS	_	068 (060.2)	-7.7	4.3	-	+4000	_	_	RNAV1

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	KEYAH	062 (054.5)	-7.7	1.0(-14000) 1.5(+14001)	L	5000	_	-230(-14000) -240(+14001)	RNAV1
Hold	BANKU	133 (125.0)	-7.7	1.0(-14000) 1.5(+14001)		5000	_	-230(-14000) -240(+14001)	RNAV1





### RJFF / FUKUOKA

**RNAV STAR RWY16** 

### MALTS EAST ARRIVAL

From KIRIN at or above 12000FT, to HOPPS at or above 8000FT, to TANRE at or above 6000FT, to DORAI, to MALTS at or above 2000FT.

Cuitinal DMF	_	_				
Critical DME	DGC	TANRE - MALTS				
DME GAP	_					
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1					

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	KIRIN	_	_	-7.7	_	_	+12000	_	_	RNAV1
002	TF	HOPPS	_	243 (235.0)	-7.7	8.4	_	+8000	_	_	RNAV1
003	TF	TANRE	_	243 (235.0)	-7.7	13.4	-	+6000	_	_	RNAV1
004	TF	DORAI	_	222 (214.2)	-7.7	6.4	_	_	_	_	RNAV1
005	TF	MALTS	_	222 (214.1)	-7.7	5.0	_	+2000	_	_	RNAV1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Altitude	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	KIRIN	227 (218.7)	-7.7	1.0(-14000) 1.5(+14001)	R	12000	_	-230(-14000) -240(+14001)	
Hold	TANRE	223 (214.2)	_//	1.0(-14000) 1.5(+14001)	L	7000	_	-230(-14000) -240(+14001)	

### MALTS WEST ARRIVAL

From IKE, to ORONN at or above 3000FT, to MALTS at or above 2000FT.

	DGC	IKE - 15.0NM to ORONN			
	B00	6.0NM to ORONN - MALTS			
Critical DME	KUE	IKE - 15.0NM to ORONN			
	IKE	6.0NM to ORONN - MALTS			
DME GAP	15NM to ORONN - 6.0NM to ORONN				
Inappropriate Navaids	See AD1.1.6.10.3. II	nappropriate NAVAIDs for RNAV1			

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	
001	IF	IKE	_	_	-7.7	_	_	_	_	_	RNAV1
002	TF	ORONN	_	085 (077.7)	-7.7	17.3	_	+3000	_	_	RNAV1
003	TF	MALTS	_	114 (106.2)	-7.7	11.4	_	+2000	_	_	RNAV1

### RJFF / FUKUOKA

**RNAV STAR RWY16** 

### MALTS SOUTH ARRIVAL

From OSTEP, to HONOK at or above 7000FT, to AMAOH, to KEYAH at or above 5000FT, to NOKOH at or above 3000FT, to MALTS at or above 2000FT.

	SGE	4.0NM to NOKOH - NOKOH			
Critical DME	IKE	2.0NM to MALTS - MALTS			
	DGC	2.0NM to MALTS - MALTS			
DME GAP	NOKOH - 2.0NM to MALTS				
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1				

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	OSTEP	_	_	-7.7	1	_	_	_	_	RNAV1
002	TF	HONOK	_	333 (324.9)	-7.7	14.2	_	+7000	_	_	RNAV1
003	TF	AMAOH	_	333 (324.8)	-7.7	9.9	_	_	_	_	RNAV1
004	TF	KEYAH	_	332 (324.8)	-7.7	9.9	_	+5000	_	_	RNAV1
005	TF	NOKOH	_	062 (054.5)	-7.7	9.7	_	+3000	_	_	RNAV1
006	TF	MALTS	_	068 (060.3)	-7.7	7.1	_	+2000	_	_	RNAV1

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	KEYAH	062 (054.5)	-7.7	1.0(-14000) 1.5(+14001)	L	5000	_	-230(-14000) -240(+14001)	

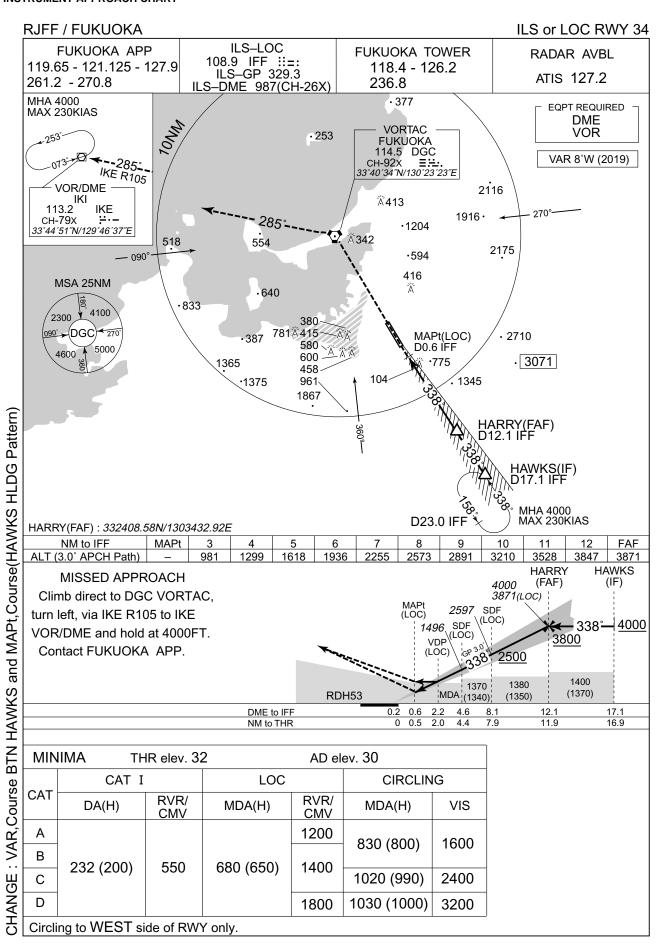
### ISKUP NORTH ARRIVAL

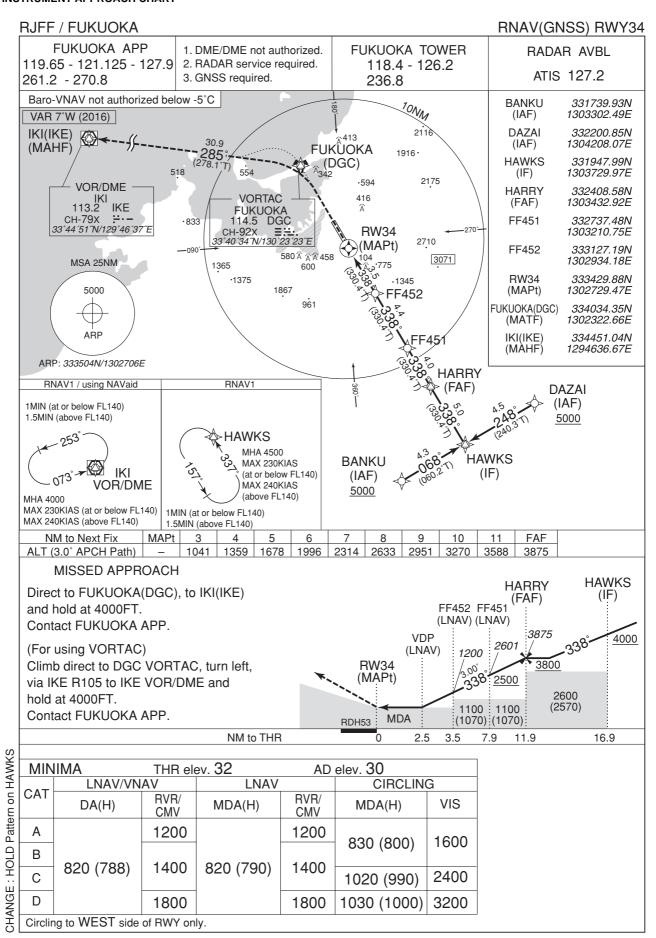
From ISKUP at or above 7000FT, to KEYAH at or above 5000FT, to NOKOH at or above 3000FT, to MALTS at or above 2000FT.

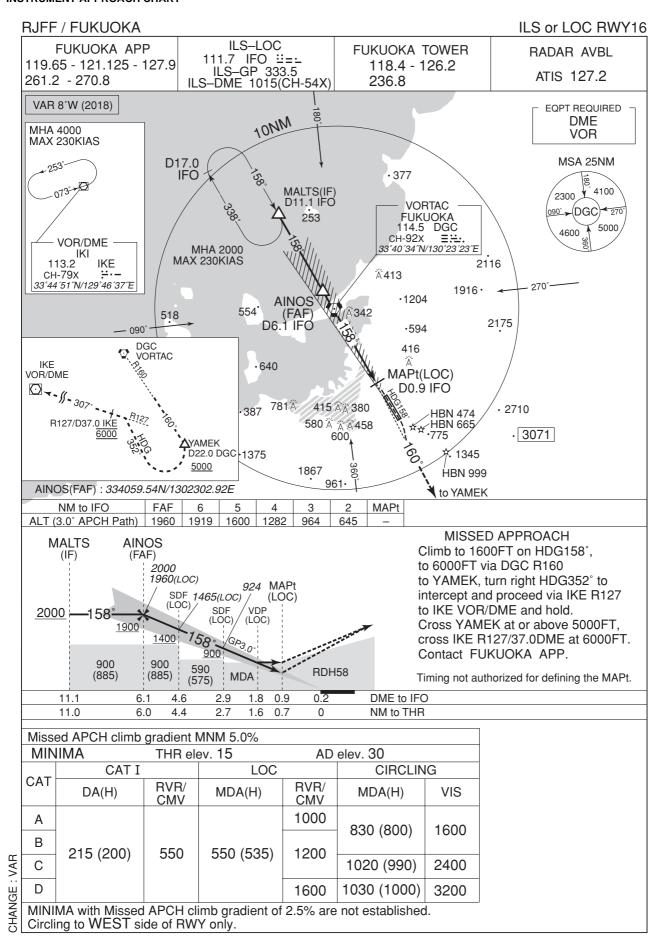
	SGE	4.0NM to NOKOH - NOKOH			
Critical DME	IKE	2.0NM to MALTS - MALTS			
	DGC 2.0NM to MALTS - MALTS				
DME GAP	NOKOH - 2.0NM to MALTS				
Inappropriate Navaids	See AD1.1.6.10	.3. Inappropriate NAVAIDs for RNAV1			

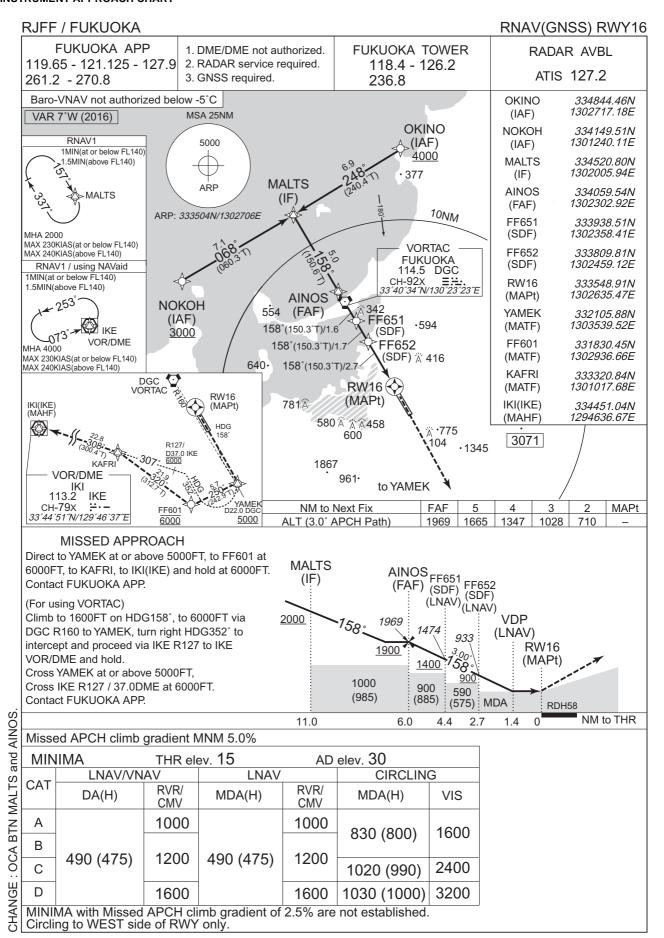
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	ISKUP	_	_	-7.7	_	_	+7000	_	_	RNAV1
002	TF	KEYAH	_	062 (054.3)	-7.7	12.7	_	+5000	_	_	RNAV1
003	TF	NOKOH	_	062 (054.5)	-7.7	9.7	_	+3000	_	_	RNAV1
004	TF	MALTS	-	068 (060.3)	-7.7	7.1	_	+2000	_	_	RNAV1

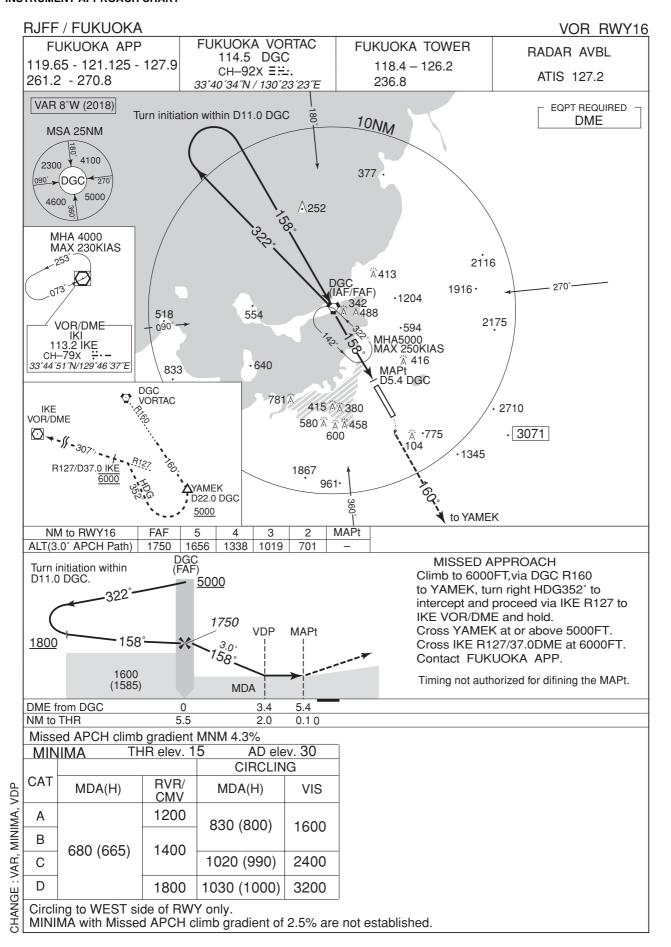
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	KEYAH	062 (054.5)	-7.7	1.0(-14000) 1.5(+14001)	L	5000	-	-230(-14000) -240(+14001)	RNAV1

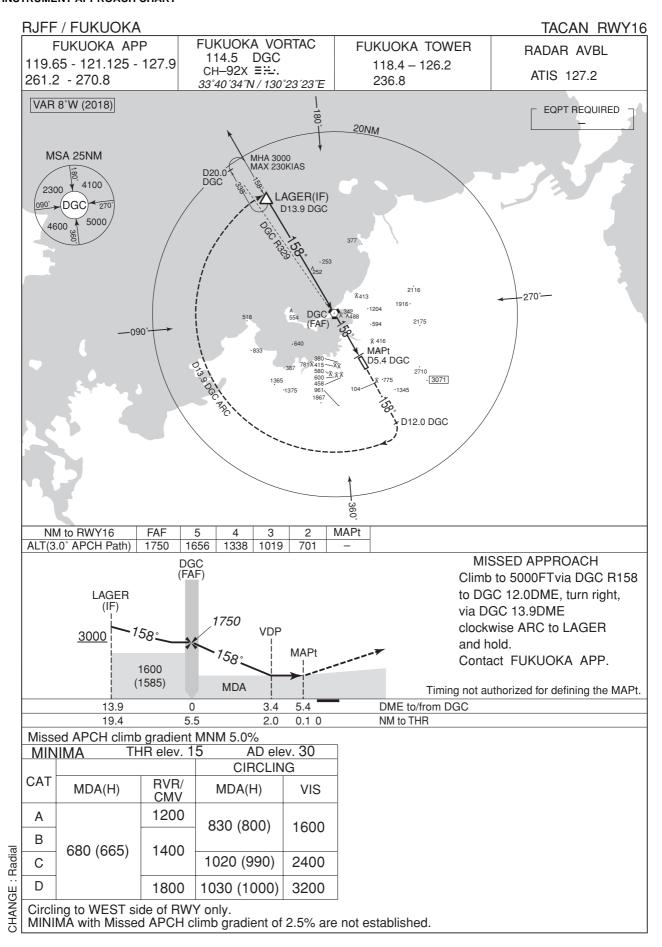


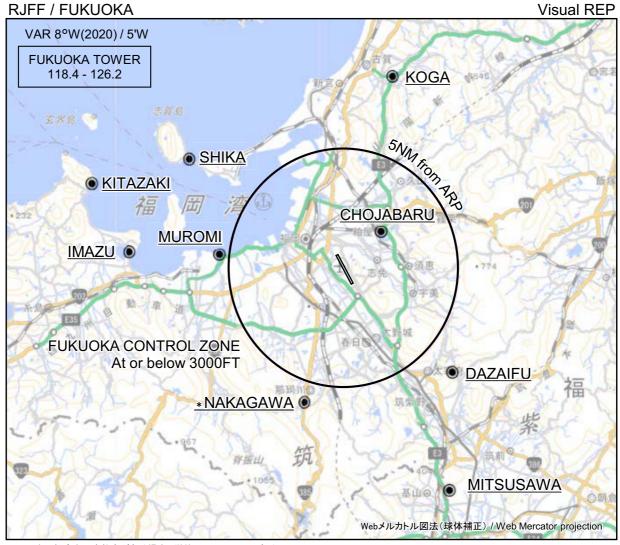












※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

	Call sign	BRG / DIST from ARP	Remarks
CHANGE : Map updated. BRG/DIST from ARP.	古賀 Koga	014°T / 8.4NM	高速道路インターチェンジ Interchange
	長者原 Chojabaru	046°T / 2.3NM	ドーム型建造物 Dome
	太宰府 Dazaifu	133°T / 6.4NM	ゴルフ場 Golf Course
	三沢 Mitsusawa	153°T / 10.4NM	ゴルフ場 Golf Course
	∗那珂川 Nakagawa	197°T / 5.8NM	松尾橋 Bridge
	室見 Muromi	277°T / 5.4NM	室見川河口 River mouth
	今津 Imazu	275°T / 9.4NM	今津橋 Bridge
	志賀 Shika	305°T / 8.2NM	志賀島橋 Bridge
	北崎 Kitazaki	289°T / 11.5NM	漁港 Harbor
	· A リコプカー田 - Hoo For b	lalia-maken	

\*ヘリコプター用 Use For Helicopter

