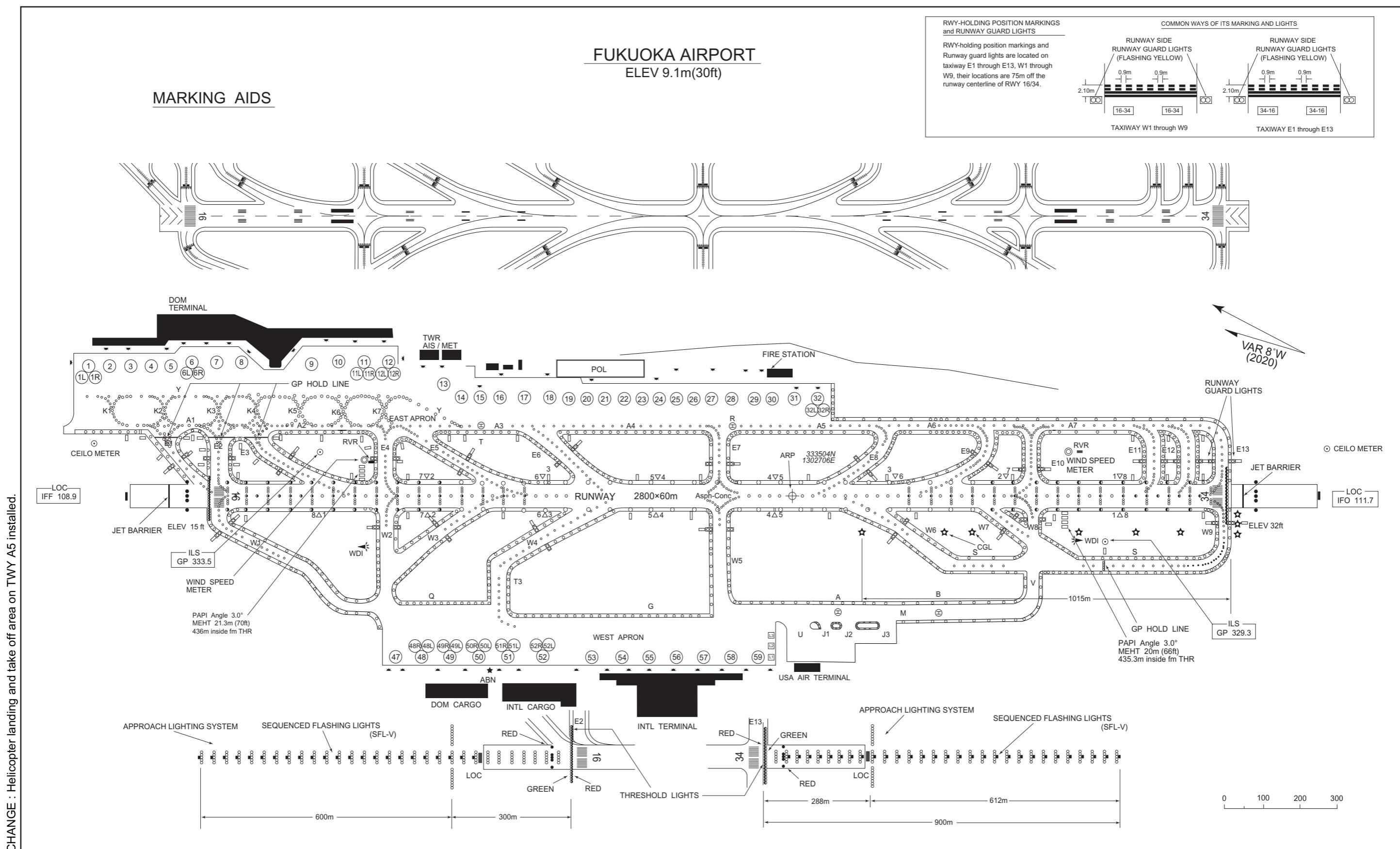
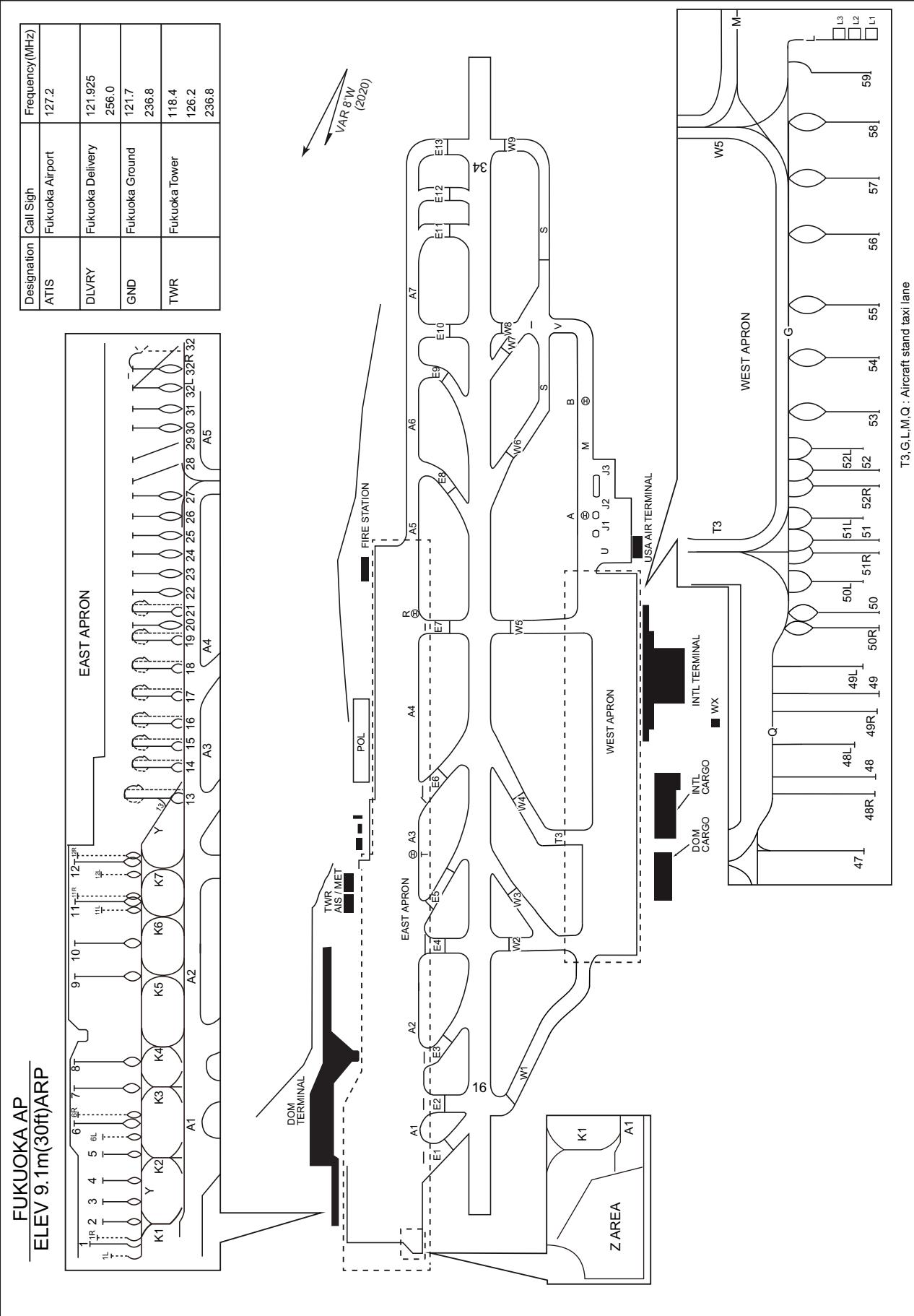


AERODROME CHART



CHANGE : Helicopter landing and take off area on TWY A5 installed.



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AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

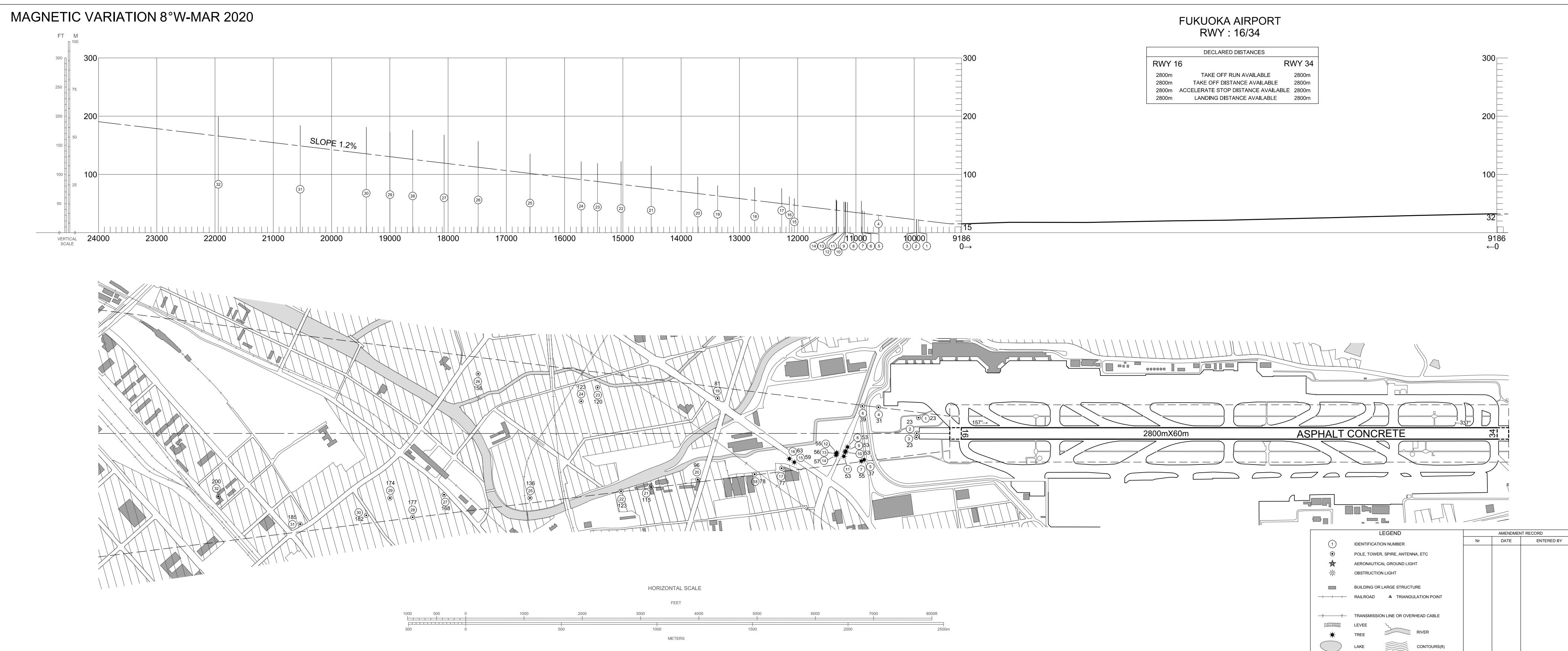


CHANGE:Update

AERODROME OBSTACLE CHART-ICAO

TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



AERODROME OBSTACLE CHART - ICAO TYPE B

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



CHANGE:Update

STANDARD DEPARTURE CHART -INSTRUMENT

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.



STANDARD DEPARTURE CHART -INSTRUMENT

RJFF / FUKUOKA

TRANSITION

MUSASHI TRANSITION

From over OGUNI, via TFE R256 to TFE VOR/DME.

Cross TFE R256/30.0DME at or above FL170.



STANDARD DEPARTURE CHART-INSTRUMENT

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.



STANDARD DEPARTURE CHART-INSTRUMENT

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.

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



CHANGE : PROC renamed, ALT restriction at YAMGA.

STANDARD DEPARTURE CHART-INSTRUMENT

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.

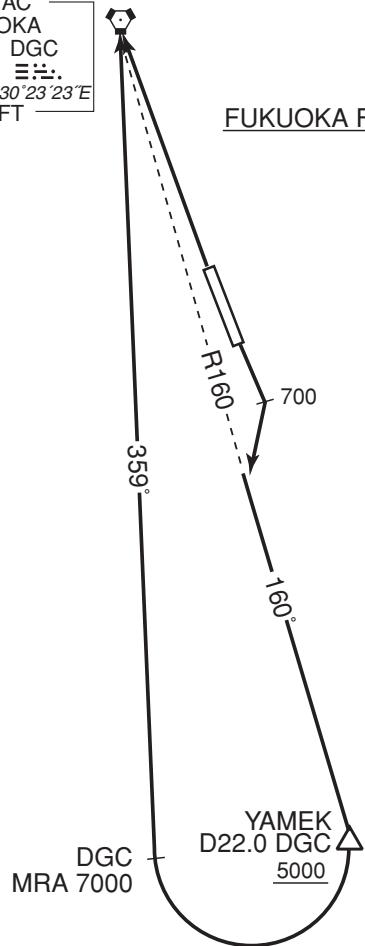
Note RWY16 : 5.8% climb gradient required up to 1100FT.

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

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

VORTAC
FUKUOKA
114.5 DGC
CH-92X
33°40'34"N/130°23'23"E
100FT

FUKUOKA FOUR DEPARTURE



CHANGE : MRA added

STANDARD DEPARTURE CHART-INSTRUMENT

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.

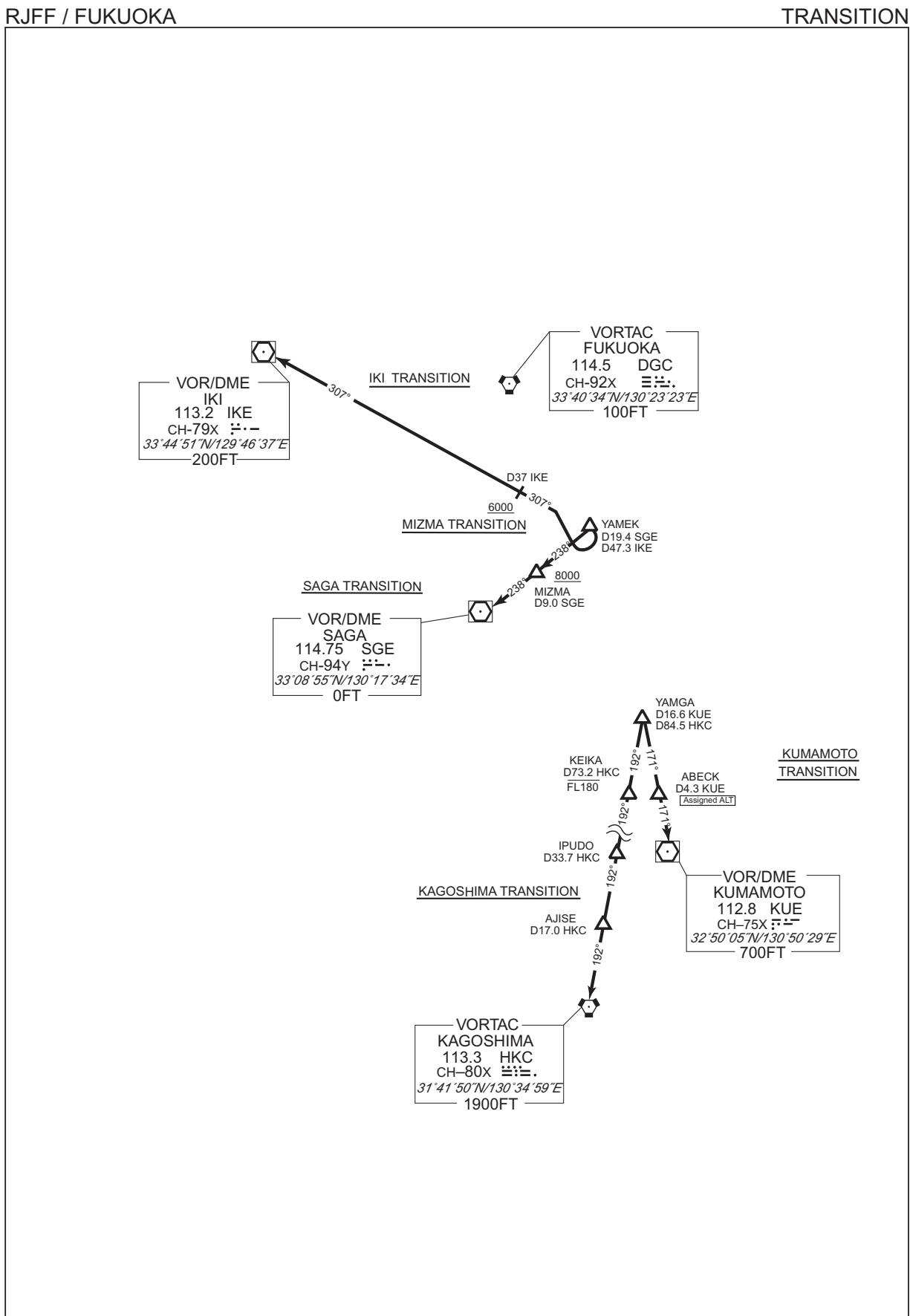
IKI TRANSITION

From over YAMEK, turn right, proceed via IKE R127 to IKE VOR/DME .

Cross IKE R127/37DME at or above 6000FT.

CHANGE : KAGOSHIMA TRANSITION.

STANDARD DEPARTURE CHART-INSTRUMENT



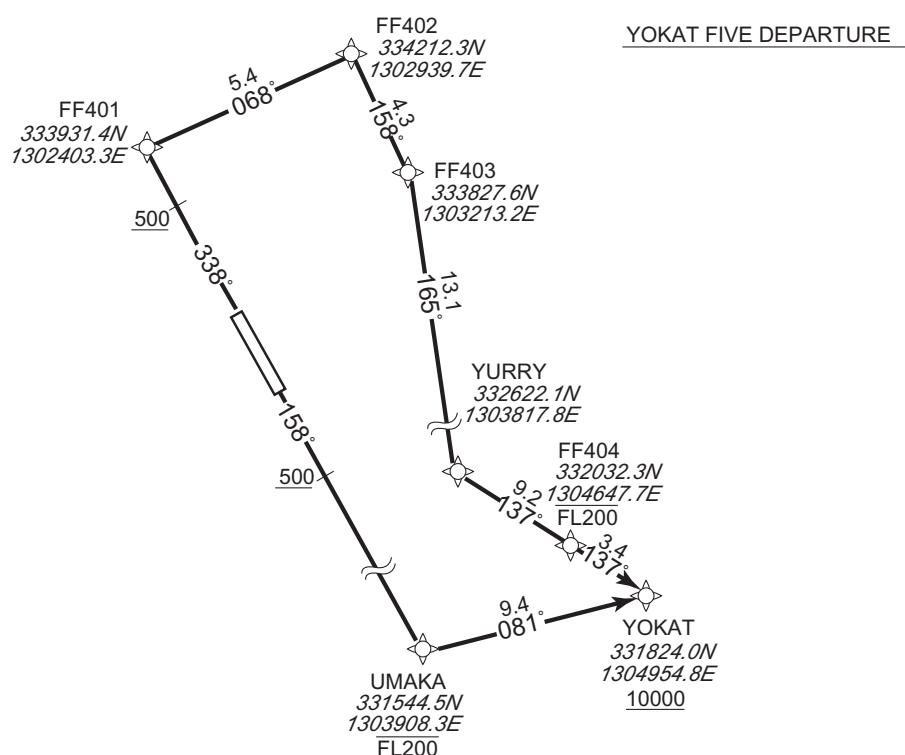
STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV SID

YOKAT FIVE DEPARTURE		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	RWY16 : DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 : DGC "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401"
	DME GAP	RWY16 : DER~1.0NM FM DER 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)

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.

CHANGE : FIX symbol(YURRY).

Note 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.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV SID

YOKAT FIVE DEPARTURE

RWY34

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	—	—	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	FF404	—	137 (129.4)	-7.7	9.2	—	-FL200	—	—	RNAV1
007	TF	YOKAT	—	137 (129.4)	-7.7	3.4	—	+10000	—	—	RNAV1

RWY16

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	—	—	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

CHANGE : VAR. PROC renamed. PROC course.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA		RNAV TRANSITION
BRAID TRANSITION / MATSUYAMA TRANSITION / SALTY TRANSITON YANKS TRANSITION / SPIDE TRANSITION / SABAR TRANSITION		RNAV 1
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 NAVIDs for RNAV1
VAR 8°W (2020)		<p>The chart illustrates the RNAV 1 transition routes originating from YOKAT at or above 10000FT. The routes include:</p> <ul style="list-style-type: none"> BRAID TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to MARCO (340446.0N, 1320850.2E) at 64.8°/057°. MATSUYAMA TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to MATSUYAMA (MYE) (334948.4N, 1324132.0E) at 078°/181.5°. SALTY TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to SALTY (335109.7N, 1325530.8E) at 080°/192.9°. SPIDE TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to SPIDE (333840.2N, 1325818.0E) at 088°/133.5°. SABAR TRANSITION: From YOKAT to AMAGA (FL140), then to HOSEN (FL170), and finally to RUISA (331425.9N, 1313022.0E) at 31.6°/105°. YANKS TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to LUFFY (333312.0N, 1321837.3E), CHOPP (335111.0N, 1332515.5E), SANJI (335458.4N, 1333940.0E), and finally to YANKS (340749.0N, 1342925.3E) at 12.6°/080°.
BRAID TRANSITION		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.

CHANGE : VAR. CHOPP established. Course FM BRAID to SALTY. Course FM RUISA to SABAR.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

BRAID 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	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	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	SALTY	—	080 (071.9)	-7.7	92.9	—	—	—	—	RNAV1

CHANGE : VAR. Course FM BRAID to SALTY.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

YANKS 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	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 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	LUFFY	—	087 (079.8)	-7.7	58.8	—	—	—	—	RNAV1
005	TF	SPIDE	—	088 (080.4)	-7.7	33.5	—	—	—	—	RNAV1

SABAR 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	AMAGA	—	104 (096.5)	-7.7	10.5	—	+FL140	—	—	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	—	—	—	—	RNAV1

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

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA		RNAV SID and TRANSITION
KURUME FOUR DEPARTURE GABAI TRANSITION / BRUIN TRANSITION / GENKAI TRANSITION		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	RWY16 :DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 :DGC "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401" BRUIN TRANSITION : DGC "2NM to OMUTA~OMUTA" DME GAP
	DME GAP	RWY16 :DER~1.0NM FM DER RWY34 :DER~0.9NM FM DER 2.2NM to FF401~FF403 GABAI TRANSITION : 6.4NM to SGE~SGE
	Inappropriate Navaids	Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVADs for RNAV1
VAR 8°W (2020)	<p>The chart shows the following key points and routes:</p> <ul style="list-style-type: none"> KURUME FOUR DEPARTURE: A direct route from the VOR/DME station at IKI (113.2) to FF401 (333931.4N, 1302403.3E). GENKAI TRANSITION: A route from IKI (113.2) to FF401 (333931.4N, 1302403.3E) via a VOR/DME station at SAGA (114.75) and a fix at DAIZE (331556.0N, 1302733.7E). GABAI TRANSITION: A route from YAMEK (332105.9N, 1303539.5E) to FF401 (333931.4N, 1302403.3E) via a fix at SAGA (330855.0N, 1301734.4E). BRUIN TRANSITION: A route from YAMEK (332105.9N, 1303539.5E) to FF403 (333827.6N, 1303213.2E) via a fix at DAIZE (331556.0N, 1302733.7E) and a fix at BRUIN (330609.6N, 1302818.4E). RWY16: A route from YAMEK (332105.9N, 1303539.5E) to FF402 (334212.3N, 1302939.7E) via a fix at DAIZE (331556.0N, 1302733.7E) and a fix at FF402 (334212.3N, 1302939.7E). RWY34: A route from YAMEK (332105.9N, 1303539.5E) to FF403 (333827.6N, 1303213.2E) via a fix at DAIZE (331556.0N, 1302733.7E) and a fix at FF403 (333827.6N, 1303213.2E). 	
CHANGE : FIX symbol(BRUIN, OMUTA, YAMEK, YURRY).	<p>KURUME FOUR DEPARTURE RWY34 : Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to YAMEK. RWY16 : Climb on HDG 158° at or above 500FT, direct to YAMEK.</p> <p>Note 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.</p> <p>BRUIN TRANSITION From YAMEK, to BRUIN, to OMUTA.</p> <p>GABAI TRANSITION From YAMEK, to SGE.</p> <p>GENKAI TRANSITION From YAMEK, to DAIZE to IKE.</p>	

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

KURUME FOUR DEPARTURE

RWY34

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

CHANGE : VAR. SID renamed. PROC course.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

BRUIN 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	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 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	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	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	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

CHANGE : VAR. PROC course.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA		RNAV SID and TRANSITION
MORIO FOUR DEPARTURE SATSUMA TRANSITION / SAKURA TRANSITION		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.	Critical DME	RWY16 :DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 :DGC "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401"
2) RADAR service required.	DME GAP	RWY16 :DER~1.0NM FM DER RWY34 :DER~0.9NM FM DER 2.2NM to FF401~FF403
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVADs for RNAV1
VAR 8°W (2020)	<p>The chart details the following routes:</p> <ul style="list-style-type: none"> MORIO FOUR DEPARTURE: A climb on HDG 338° at or above 500FT to FF401 (333931.4N/1302403.3E), then to FF402 (334212.3N/1302939.7E) via a 5.4NM leg at 068°. From FF402, a 1.5NM leg at 088° leads to FF403 (333827.6N/1303213.2E). From FF403, a 1.5NM leg at 059° leads to YURRY (332622.1N/1303817.8E). From YURRY, a 1.5NM leg at 072° leads to FF405 (331704.3N/1304125.8E) via FL200. From FF405, a 1.5NM leg at 060° leads to FF603 (331620.4N/1303847.3E) via FL200. Finally, a 1.5NM leg at 072° leads to YAMGA (330605.9N/1304507.3E) at or above 13000FT. SATSUMA TRANSITION: From YAMGA at or above 13000FT, a 1.5NM leg at 170° leads to KAGOSHIMA(HKC) (314150.0N/1303458.6E) via VORTAC KAGOSHIMA (113.3 HKC CH-80X 31°41'50"N/130°34'59"E 1900FT). SAKURA TRANSITION: From KAGOSHIMA(HKC), a 1.5NM leg at 167° leads to AJISE (315847.1N/1303659.2E) via KEIKA (325439.2N/1304343.3E) at FL180, then to IPUDO (321522.6N/1303858.2E) at 194°, and finally to KUMAMOTO(KUE) (325005.3N/1305029.5E) at 193° via 39.5°. 	
CHANGE : FIX symbol(AJISE, IPUDO, KEIKA, YAMGA, YURRY).	<p>MORIO FOUR DEPARTURE</p> <p>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.</p> <p>RWY16 : Climb on HDG 158° at or above 500FT, direct to FF603 at or below FL200, to YAMGA at or above 13000FT.</p> <p>Note 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.</p> <p>SAKURA TRANSITION From YAMGA at or above 13000FT, to KUE.</p> <p>SATSUMA TRANSITION From YAMGA at or above 13000FT, to KEIKA at or below FL180, to IPUDO, to AJISE, to HKC.</p>	

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

MORIO FOUR DEPARTURE

RWY34

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	—	—	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	FF405	—	172 (164.3)	-7.7	9.7	—	-FL200	—	—	RNAV1
007	TF	YAMGA	—	172 (164.3)	-7.7	11.4	—	+13000	—	—	RNAV1

RWY16

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	—	—	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 : VAR. PROC renamed. PROC course. ALT restriction at YAMGA.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

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

SATSUMA 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	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

CHANGE : IPUDO established. ALT restriction at KEIKA.

STANDARD DEPARTURE CHART - INSTRUMENT

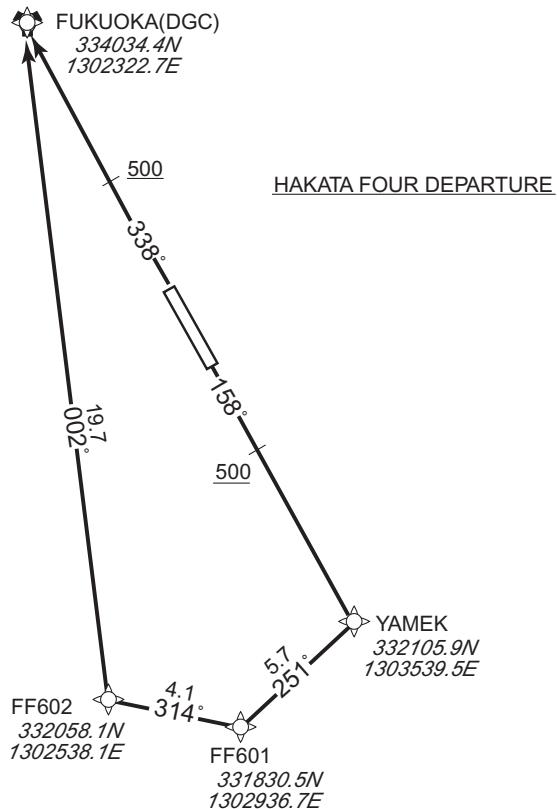
RJFF / FUKUOKA

RNAV SID

HAKATA FOUR DEPARTURE		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.	Critical DME	RWY16 : DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 : DGC "4.6NM to DGC~3.0NM to DGC" IKE "4.6NM to DGC~3.0NM to DGC"
2) RADAR service required.	DME GAP	RWY16 : DER~1.0NM FM DER RWY34 : DER~4.6NM to DGC 3.0NM to DGC~DGC
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 8°W (2020)

CHANGE : VAR. PROC renamed. PROC course.



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.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

HAKATA FOUR DEPARTURE

RWY34

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	—	—	338 (330.3)	-7.7	—	—	+500	—	—	RNAV1
002	DF	DGC	—	—	-7.7	—	—	—	—	—	RNAV1

RWY16

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	—	—	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

CHANGE : VAR. PROC renamed. PROC course.

STANDARD ARRIVAL CHART-INSTRUMENT

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

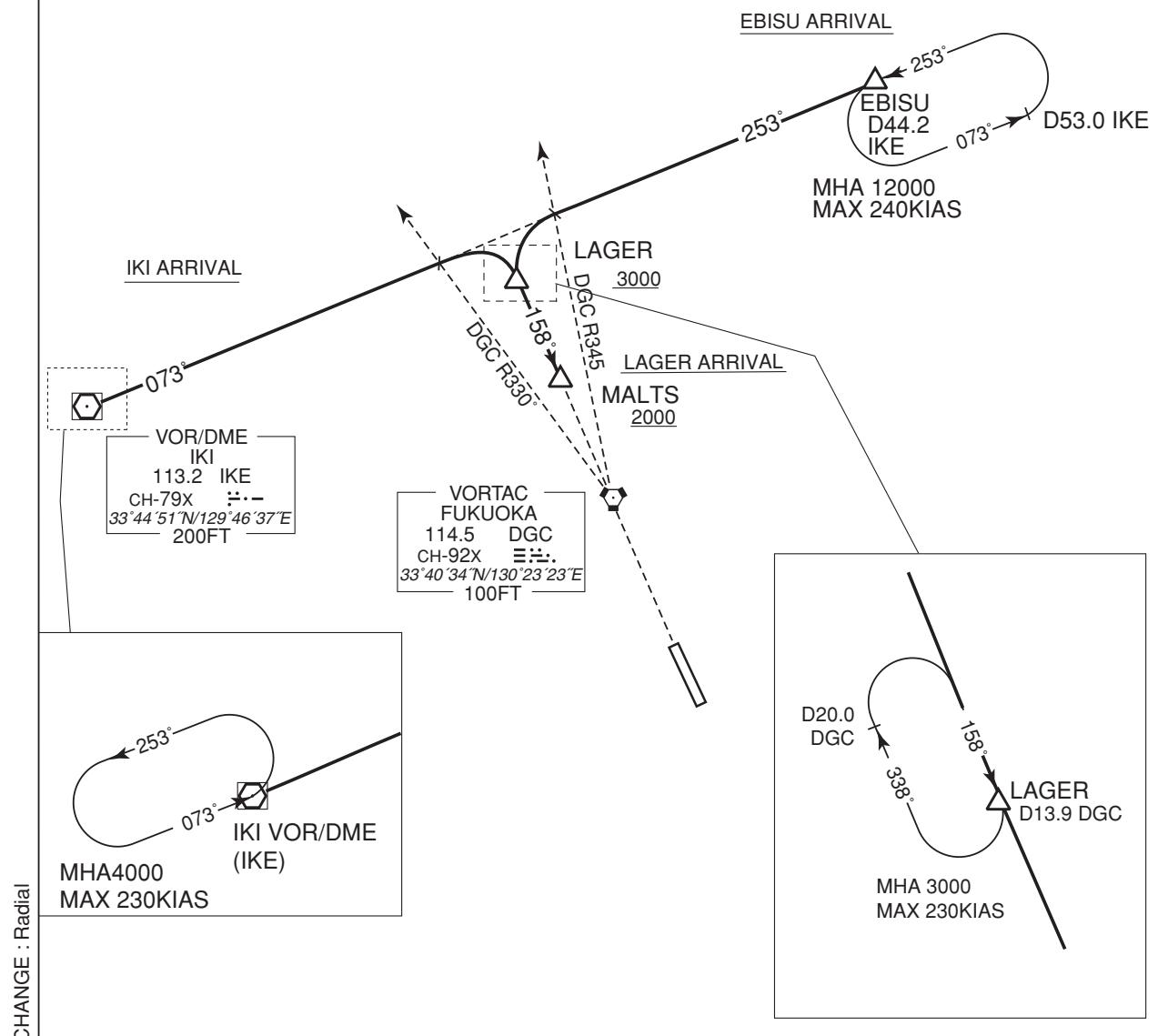
From over EBISU, via IKE R073 to intercept and proceed via DGC R338 to MALTS via LAGER.

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

IKI ARRIVAL

From over IKI 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.



STANDARD ARRIVAL CHART-INSTRUMENT

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.

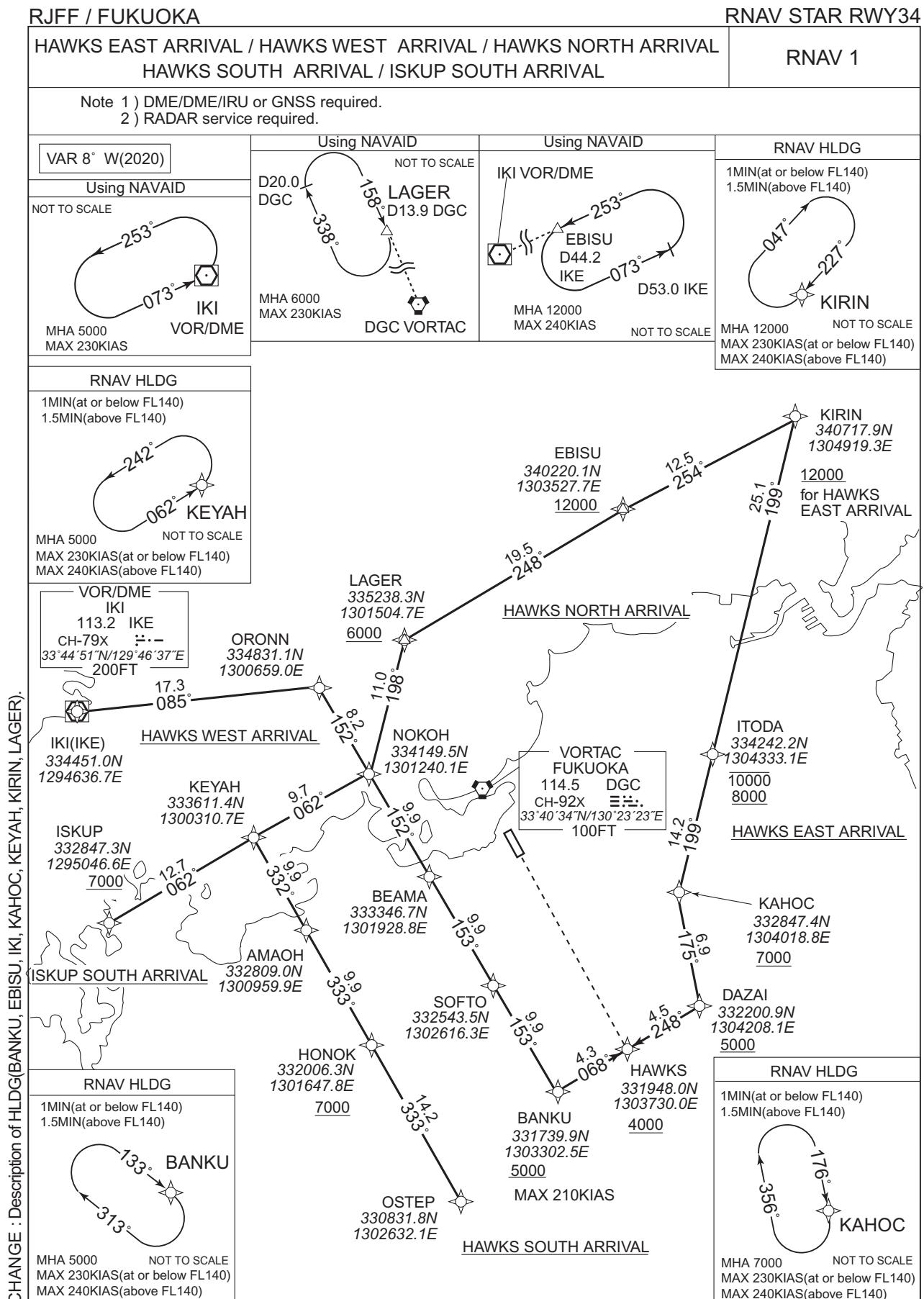
KAFRI WEST ARRIVAL

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.



STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

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	-	+7000	-	-	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)	-7.7	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.

Critical DME	DGC	IKE - 15.0NM to ORONN 6.0NM to ORONN - 5.0NM to NOKOH
	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 ORONN - 6.0NM to ORONN 5.0NM to 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	IKE	-	-	-7.7	-	-	-	-	-	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	-	-	-	-	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	BANKU	133 (125.0)	-7.7	1.0(-14000) 1.5(+14001)	R	5000	-	-230(-14000) -240(+14001)	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

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.

Critical DME	IKE	4.0NM to LAGER - 3.0NM to NOKOH
	DGC	LAGER - 3.0NM to NOKOH
	SGE	9.0NM to BEAMA - 6.0NM to BEAMA
DME GAP		3.0NM to 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	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
008	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	KIRIN	227 (218.7)	-7.7	1.0(-14000) 1.5(+14001)	R	12000	-	-230(-14000) -240(+14001)	RNAV1
Hold	BANKU	133 (125.0)	-7.7	1.0(-14000) 1.5(+14001)	R	5000	-	-230(-14000) -240(+14001)	RNAV1

CHANGE : VAR. PROC course. HLDG course.

STANDARD ARRIVAL CHART-INSTRUMENT

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	AMAOH	—	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	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)	R	5000	—	-230(-14000) -240(+14001)	RNAV1

CHANGE : VAR. PROC course. HLDG course(BANKU).

STANDARD ARRIVAL CHART-INSTRUMENT

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)	R	5000	—	-230(-14000) -240(+14001)	RNAV1

CHANGE : New PROC.

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STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

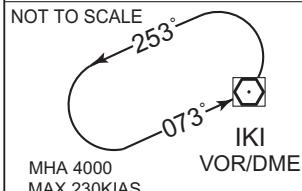
MALTS EAST ARRIVAL / MALTS WEST ARRIVAL
MALTS SOUTH ARRIVAL / ISKUP NORTH ARRIVAL

RNAV 1

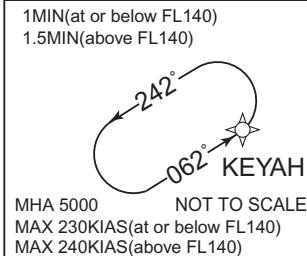
- Note 1) DME/DME/IRU or GNSS required.
2) RADAR service required.

[VAR 8° W(2020)]

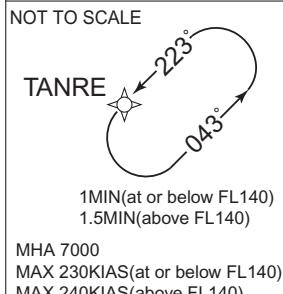
Using NAVAID



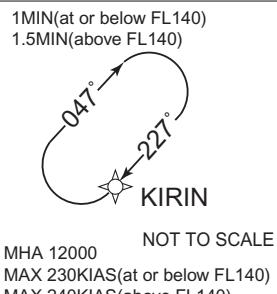
RNAV HLDG



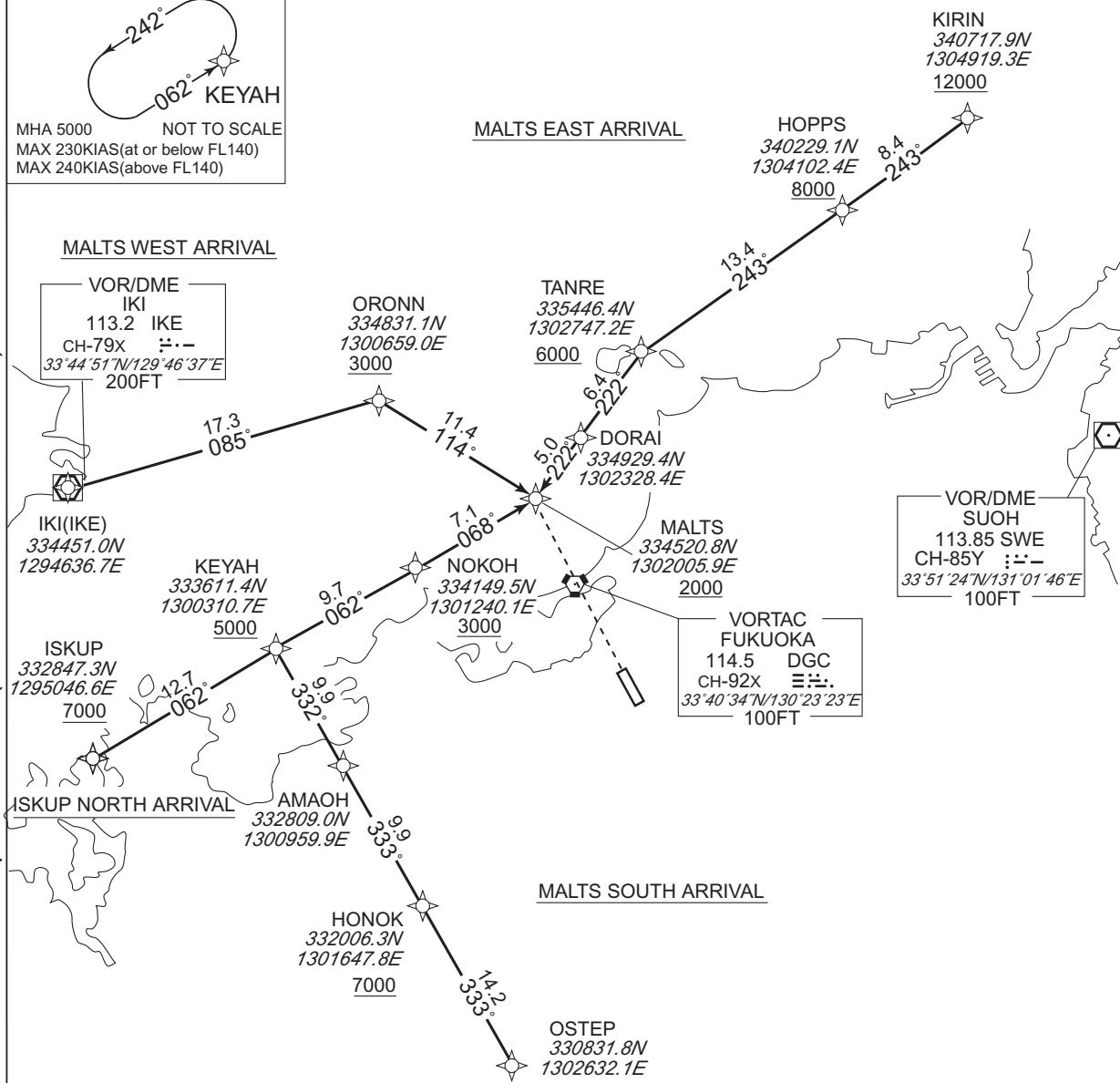
RNAV HLDG



RNAV HLDG



CHANGE : Description of HLDG(IKI, KEYAH, KIRIN, TANRE).



STANDARD ARRIVAL CHART-INSTRUMENT

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.

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	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	TANRE	223 (214.2)	-7.7	1.0(-14000) 1.5(+14001)	L	7000	-	-230(-14000) -240(+14001)	RNAV1

MALTS WEST ARRIVAL

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

Critical DME	DGC	IKE - 15.0NM to ORONN 6.0NM to ORONN - MALTS
	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. 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	-	-	-	-	-	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

CHANGE : VAR. PROC course. HDG course.

STANDARD ARRIVAL CHART-INSTRUMENT

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.

Critical DME	SGE	4.0NM to NOKOH - NOKOH
	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	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	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)	RNAV1

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.

Critical DME	SGE	4.0NM to NOKOH - NOKOH
	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	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	—	+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

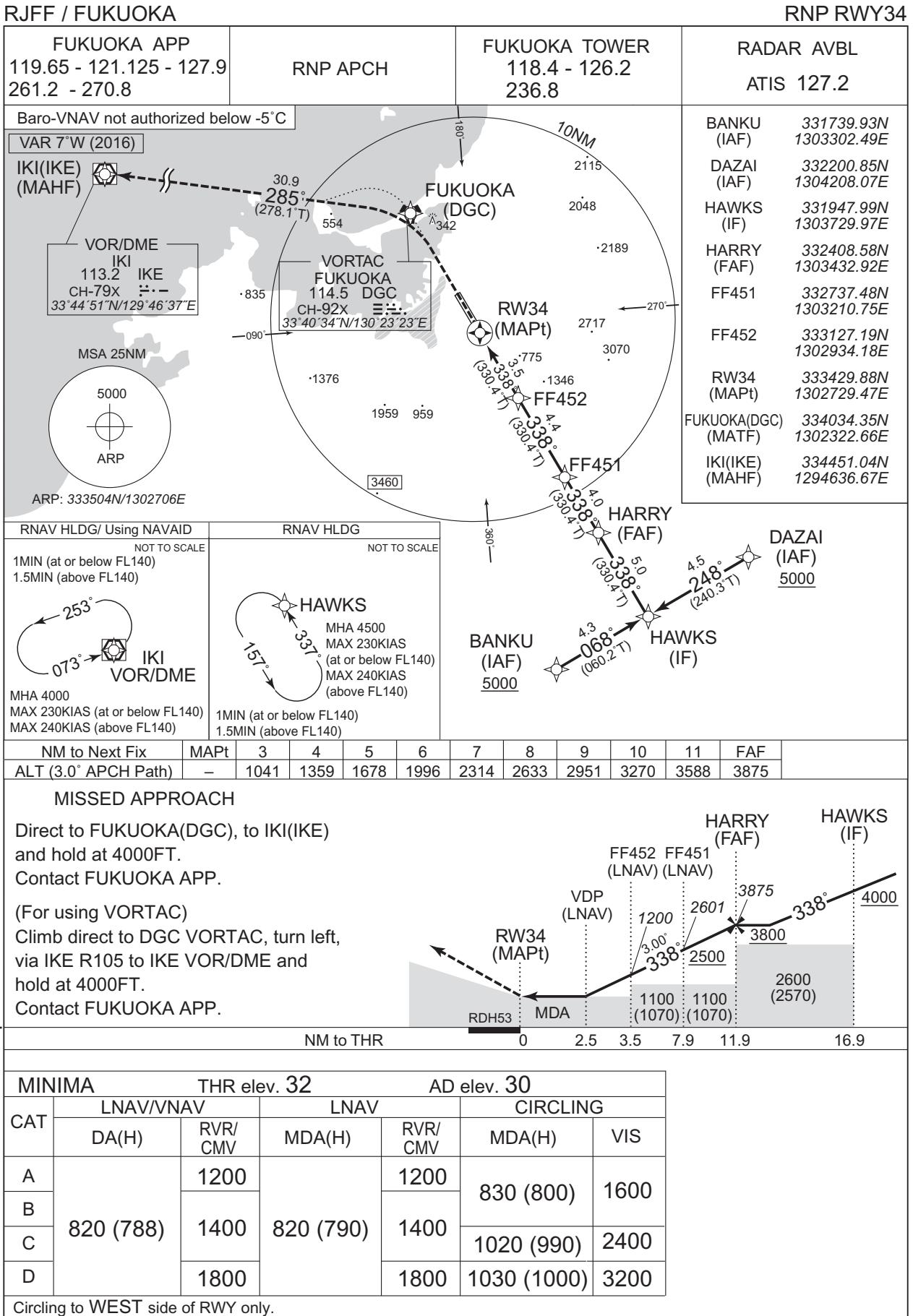
Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	KEYAH	062 (054.5)	-7.7	1.0(-14000) 1.5(+14001)	L	5000	—	-230(-14000) -240(+14001)	RNAV1

CHANGE : VAR. New PROC(ISKUP NORTH ARRIVAL). PROC course.

INSTRUMENT APPROACH CHART

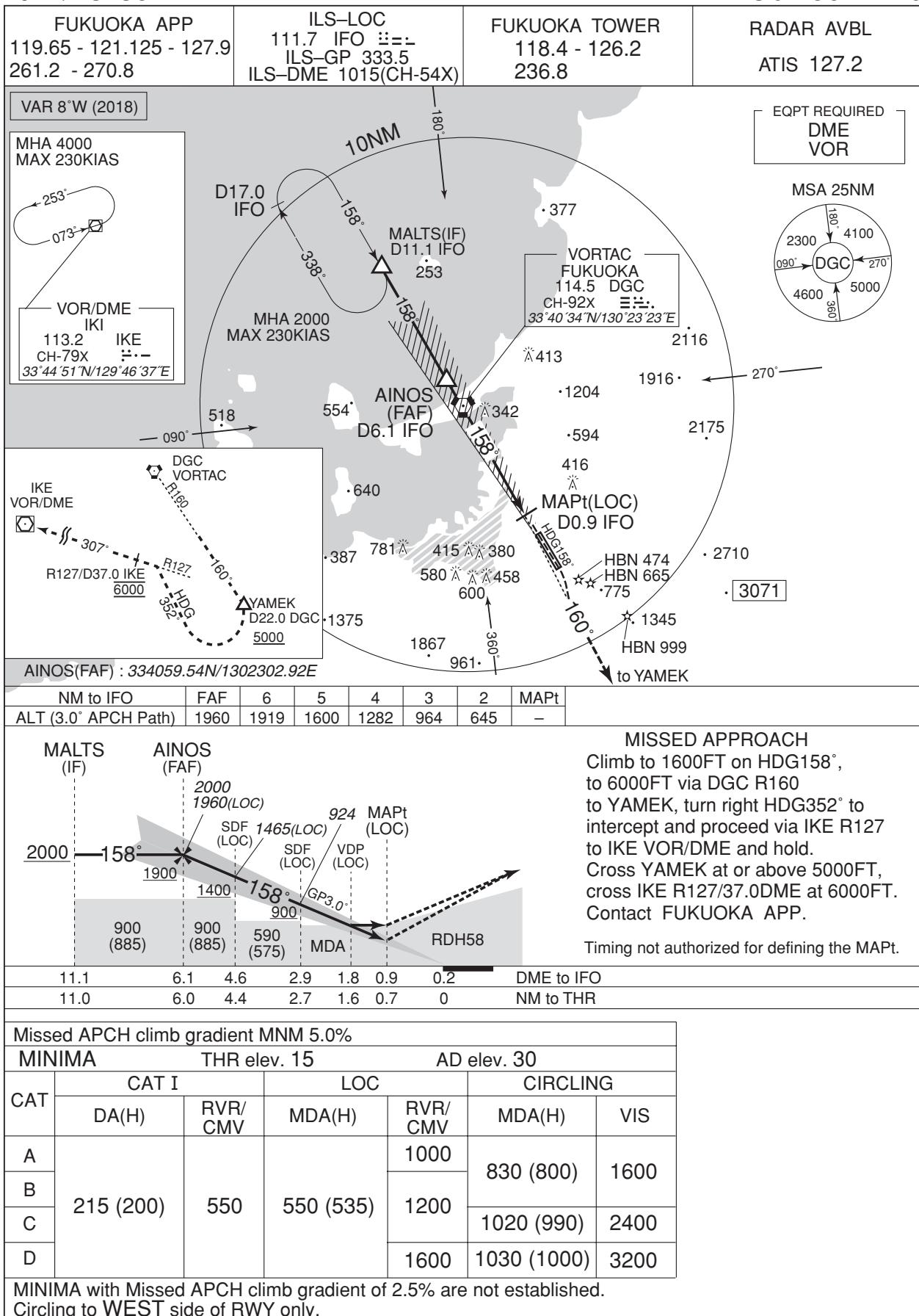


INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJFF / FUKUOKA



CHANGE : VAR

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

FUKUOKA APP
119.65 - 121.125 - 127.9
261.2 - 270.8

RNP APCH

FUKUOKA TOWER
118.4 - 126.2
236.8

RADAR AVBL
ATIS 127.2

Baro-VNAV not authorized below -5°C

VAR 7°W (2016)

RNAV HLDG
1MIN(at or below FL140)
1.5MIN(above FL140)

MALTS (IF)
157°
331°
NOT TO SCALE

MSA 25NM

5000
ARP

ARP: 333504N/1302706E

OKINO (IAF) 4000
6.9°
248° (240.4°T)

NOKOH (IAF) 3000
068° (060.3°T)

MALTS (IF)
068° (060.3°T)

VORTAC FUKUOKA 114.5 DGC
CH-92X
33°40'34"N/130°23'23"E

AINOS (FAF) 554
158° (150.3°T)/1.6
158° (150.3°T)/1.7
158° (150.3°T)/2.7

FF651 (SDF) 342
FF652 (SDF)

RW16 (MAPt)
IKI (IKE) VOR/DME 3000
MHA 4000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

NOT TO SCALE

DGC VORTAC
IKI (IKE) (MAHF)
VOR/DME IKI 113.2 IKE CH-79X
33°44'51"N/129°46'37"E

KAFRI
R180°
HDG 158°
R127/ D37.0 IKE 6000
307° (332.0°T)
22.8° (300.4°T)
22.9° (312.7°T)
307° (332.0°T)
22.9° (312.7°T)
57.1° (22.9°T)
25.0° (22.9°T)
1959 959 · to YAMEK
YAMEK D22.0 DGC 5000
FF601 6000
3070
1346

NM to Next Fix | FAF | 5 | 4 | 3 | 2 | MAPt

ALT (3.0° APCH Path) | 1969 | 1665 | 1347 | 1028 | 710 | -

OKINO (IAF)	334844.46N
	1302717.18E
NOKOH (IAF)	334149.51N
	1301240.11E
MALTS (IF)	334520.80N
	1302005.94E
AINOS (FAF)	334059.54N
	1302302.92E
FF651 (SDF)	333938.51N
	1302358.41E
FF652 (SDF)	333809.81N
	1302459.12E
RW16 (MAPt)	333548.91N
	1302635.47E
YAMEK (MATF)	332105.88N
	1303539.52E
FF601 (MATF)	331830.45N
	1302936.66E
KAFRI (MATF)	333320.84N
	1301017.68E
IKI (IKE) (MAHF)	334451.04N
	1294636.67E

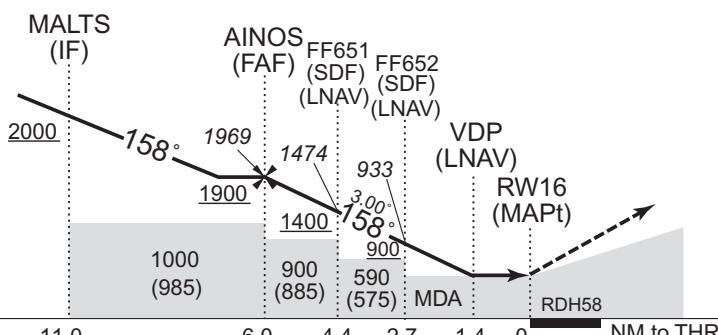
MISSED APPROACH

Direct to YAMEK at or above 5000FT, to FF601 at 6000FT, to KAFRI, to IKI(IKE) and hold at 6000FT. Contact FUKUOKA APP.

(For using VORTAC)

Climb to 1600FT on HDG158°, to 6000FT via DGC R160 to YAMEK, turn right HDG352° to intercept and proceed via IKE R127 to IKE VOR/DME and hold

Cross YAMEK at or above 5000FT,
Cross IKE R127 / 37.0DME at 6000FT.
Contact FUKUOKA APP.

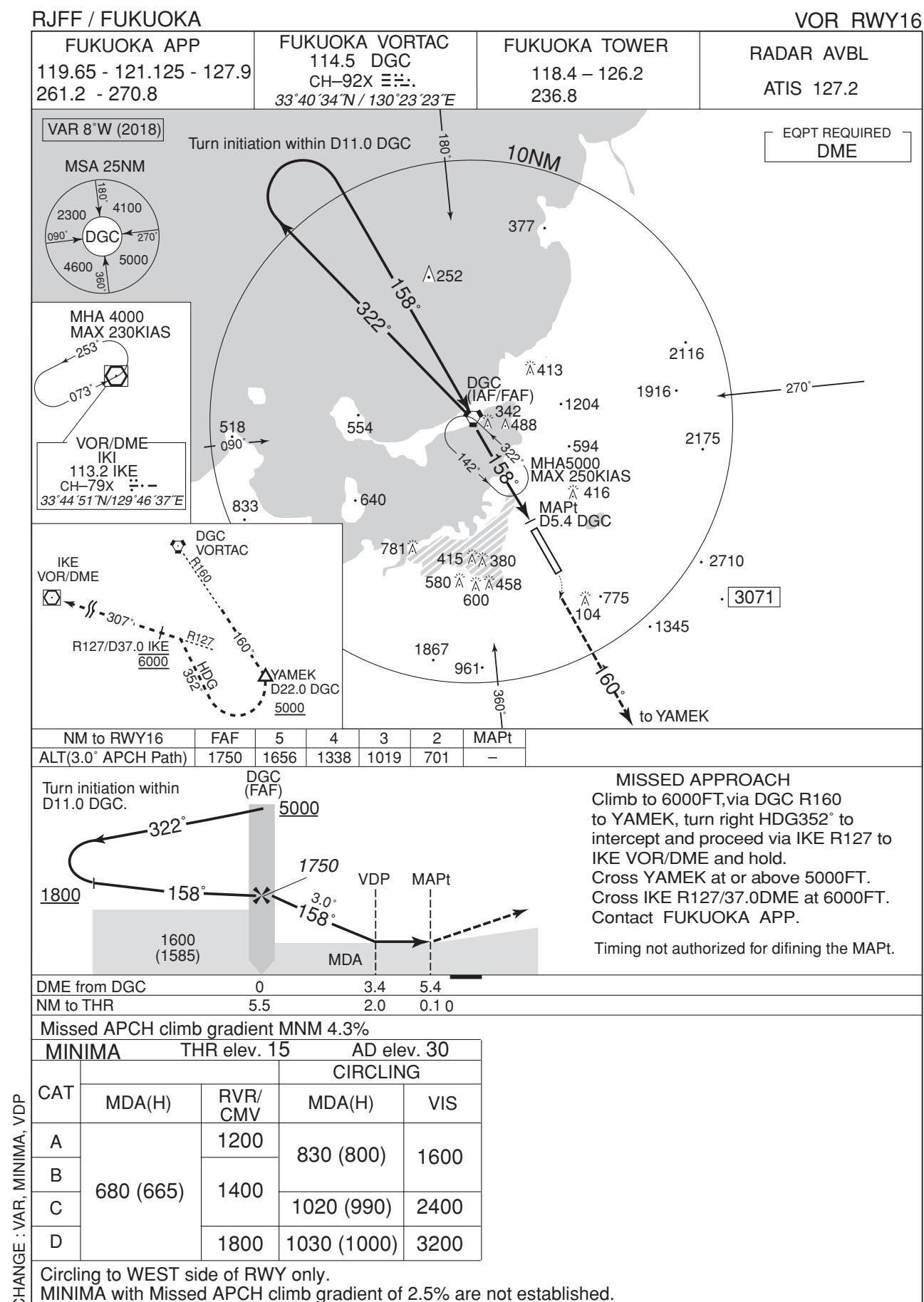


Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 15		AD elev. 30		
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	490 (475)	1000	490 (475)	1000	830 (800)	1600
B		1200		1200		
C		1600		1600	1020 (990)	2400
D		1600		1600	1030 (1000)	3200

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

INSTRUMENT APPROACH CHART

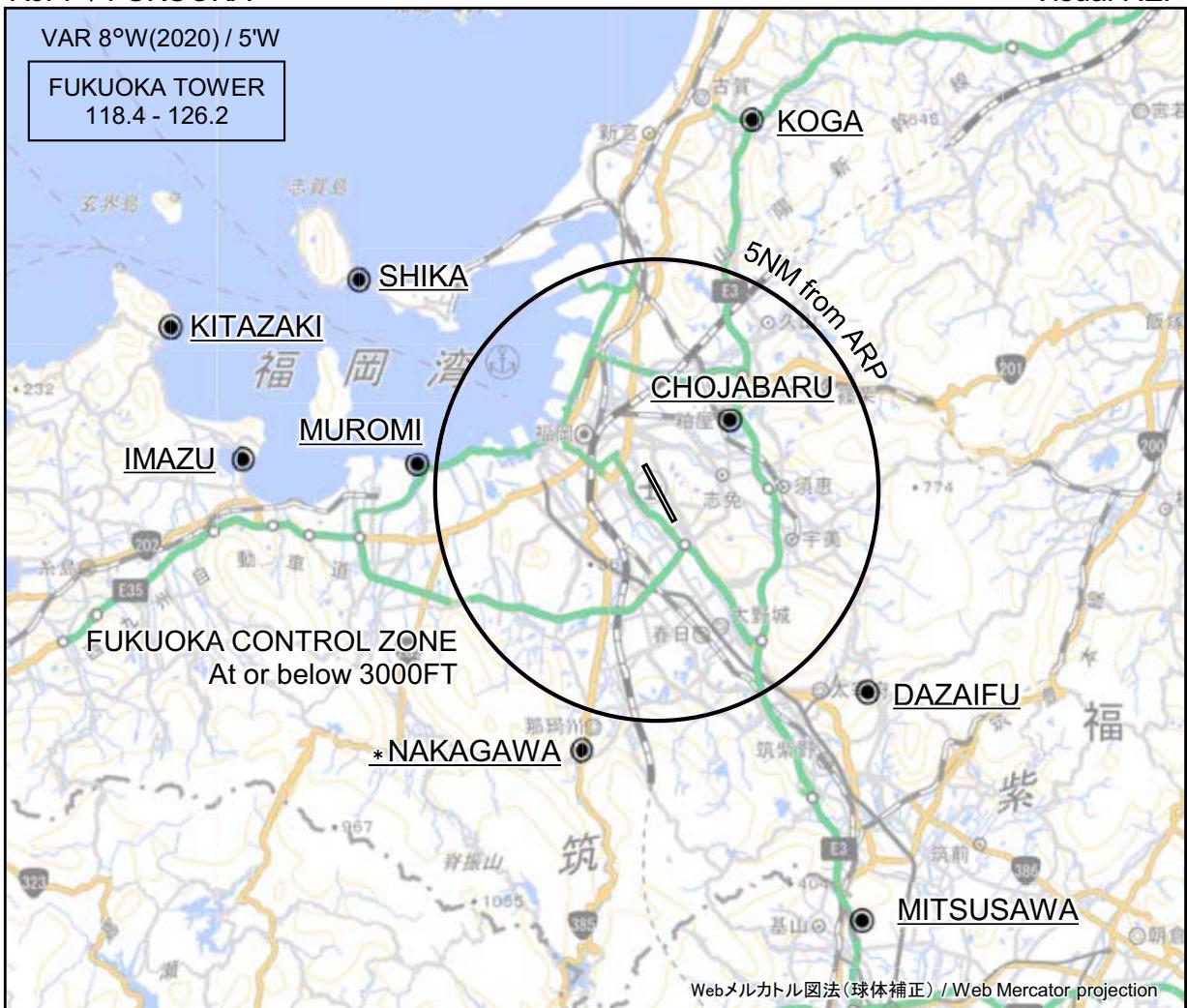


INSTRUMENT APPROACH CHART



RJFF / FUKUOKA

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).

Call sign	BRG / DIST from ARP	Remarks
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

CHANGE : Map updated. BRG/DIST from ARP.

*ヘリコプター用 Use For Helicopter



RJFF / FUKUOKA

Minimum Vectoring Altitude CHART

