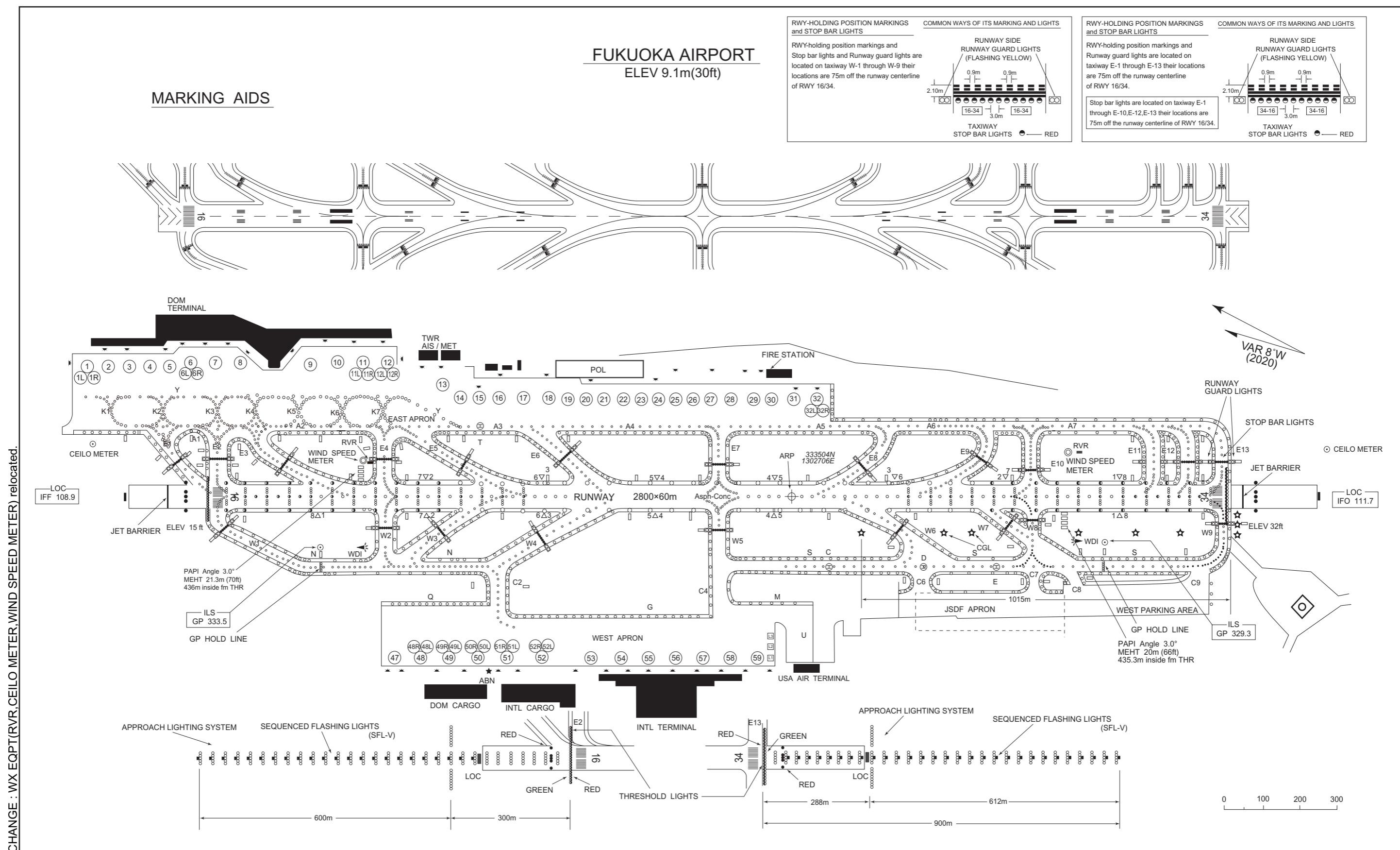
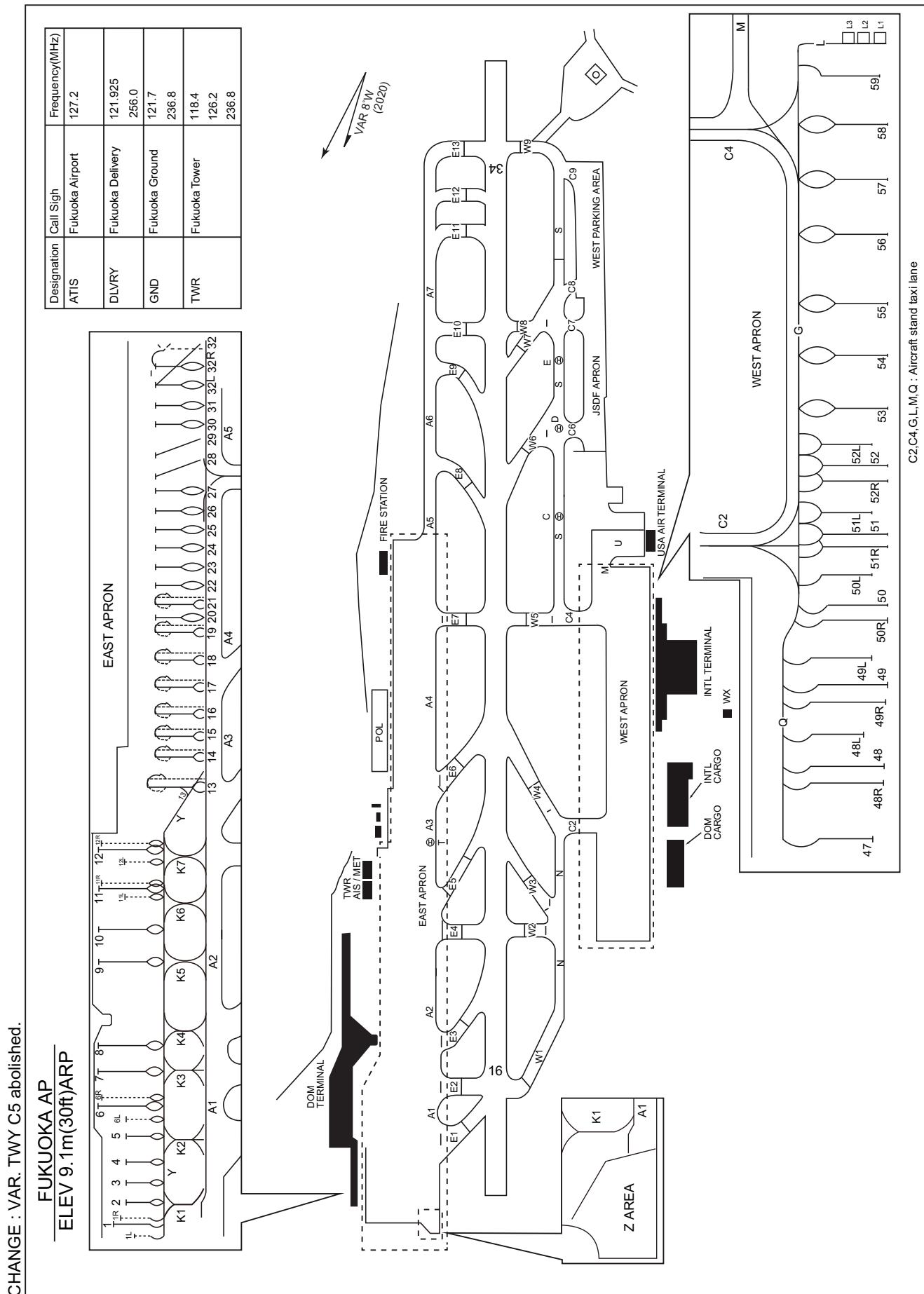


AERODROME CHART





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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.

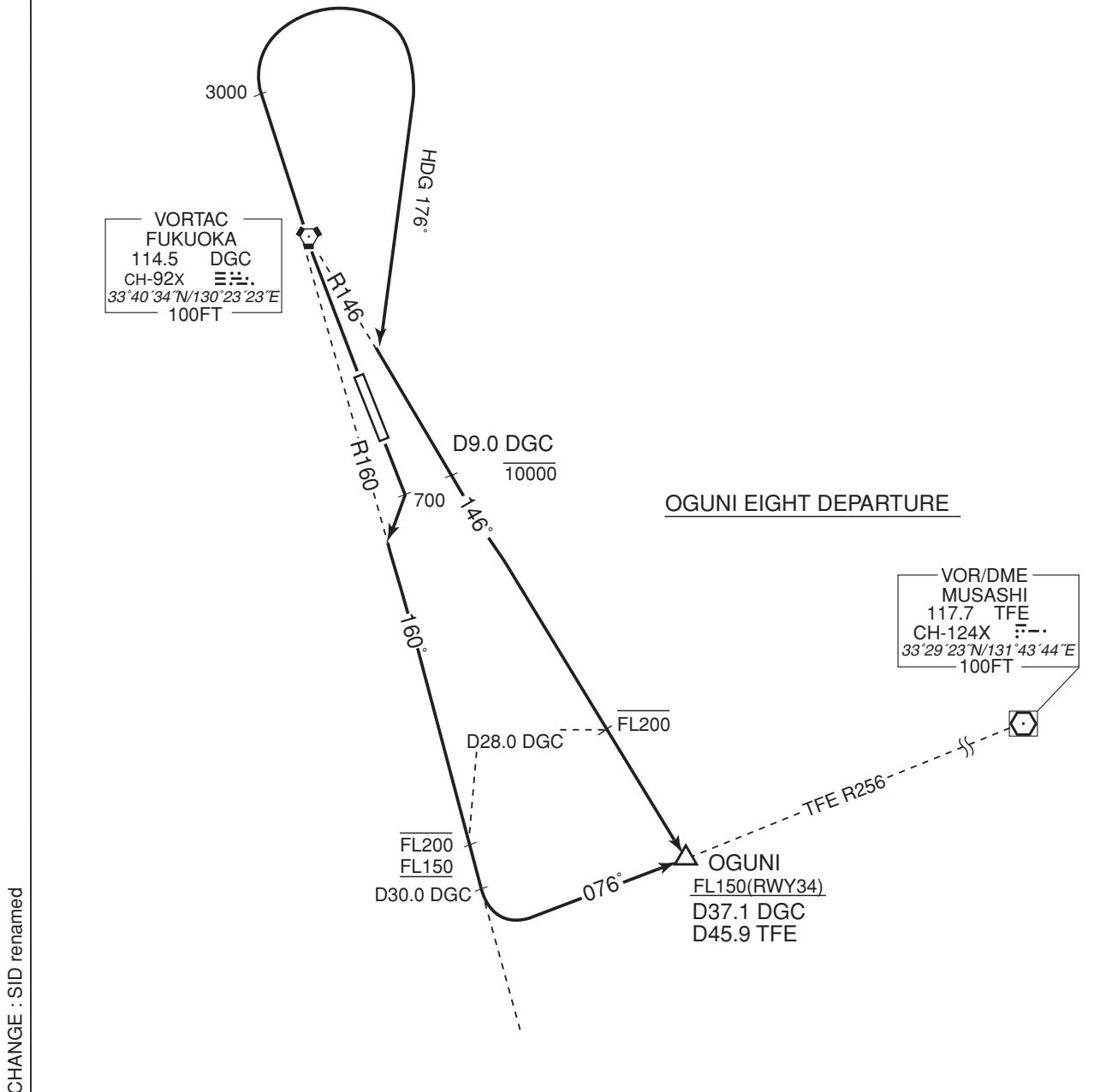
RWY 34 : Climb RWY HDG to 3000FT, turn right HDG176° to intercept and proceed via DGC R146 to OGUNI.

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 SIX 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 10000FT.

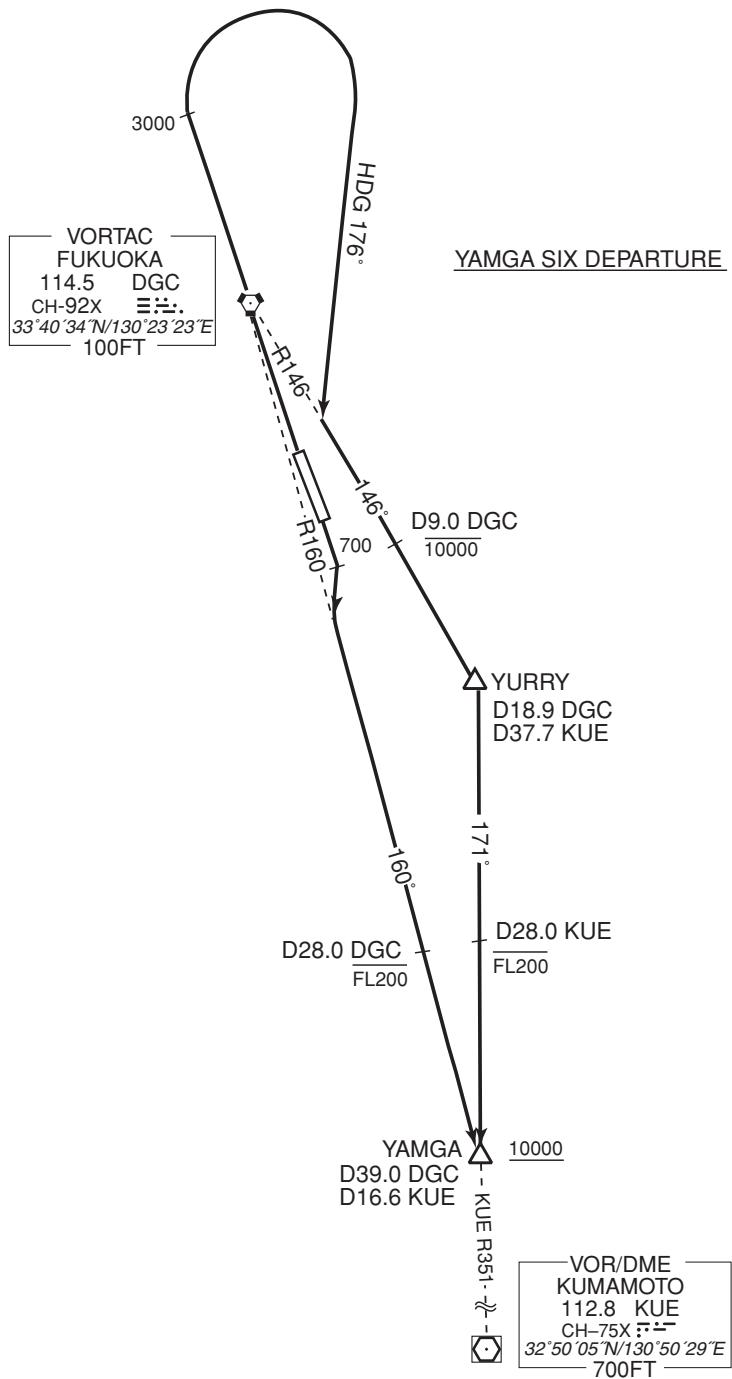
RWY 34 : Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to YURRY, turn right, via KUE R351 to YAMGA.

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

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

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.

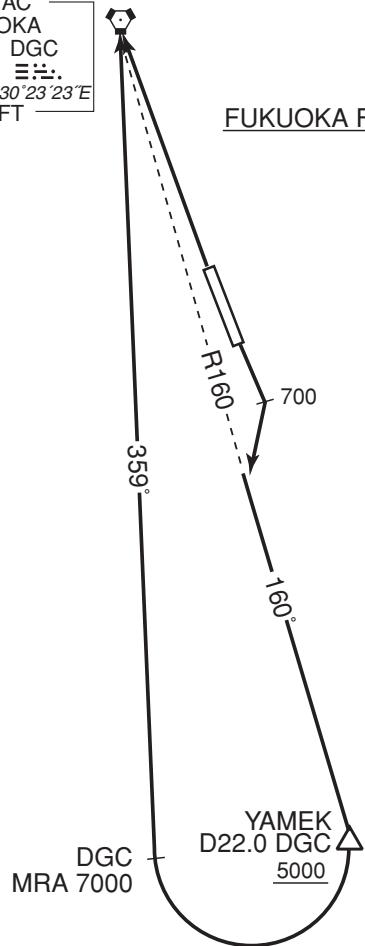
Note RWY16 : 5.8% climb gradient required up to 1100FT.

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.

KUMAMOTO TRANSITION

From over YAMGA, proceed via KUE R351 to KUE VOR/DME.

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.

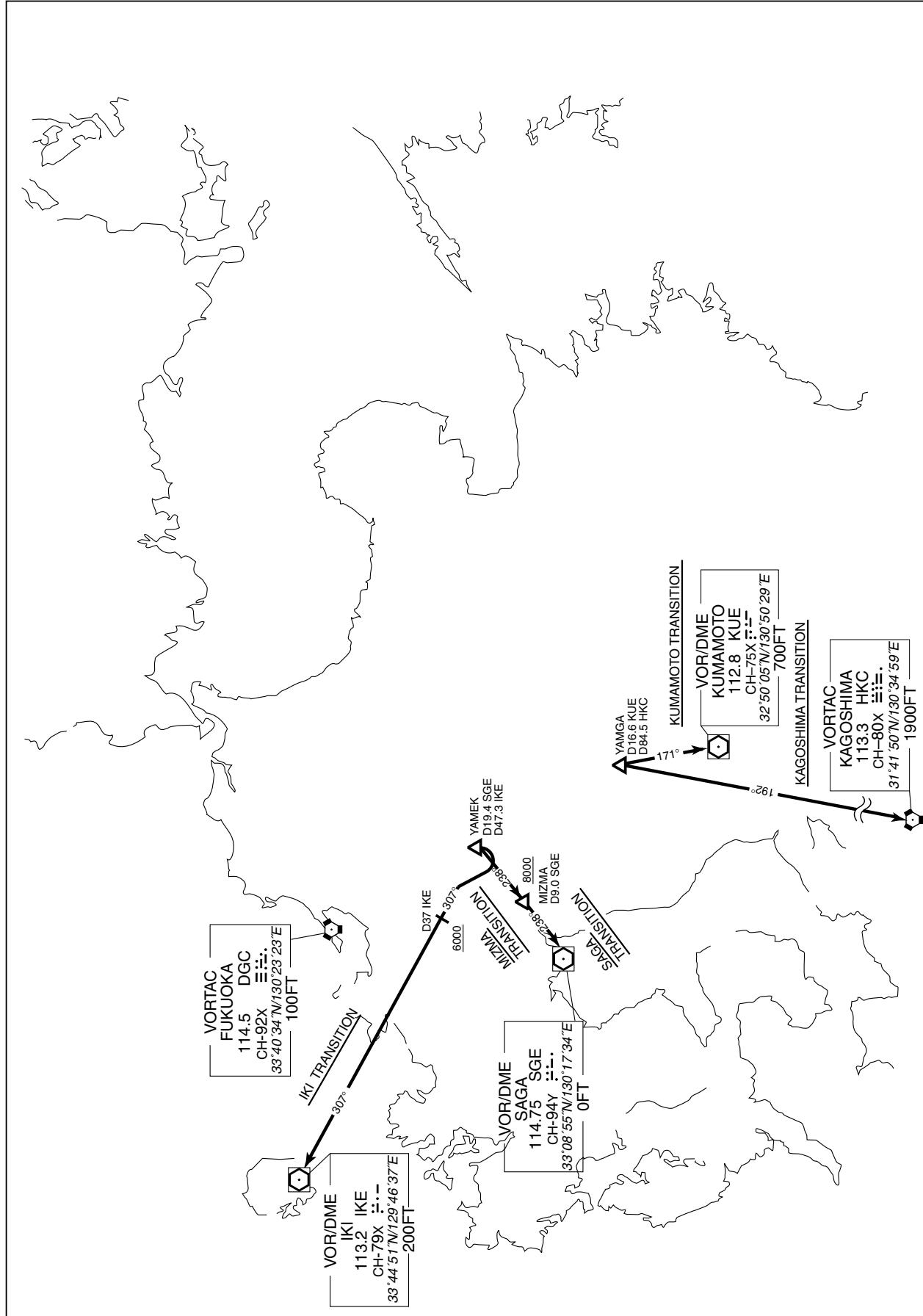
IKI TRANSITION

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

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

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA TRANSITION



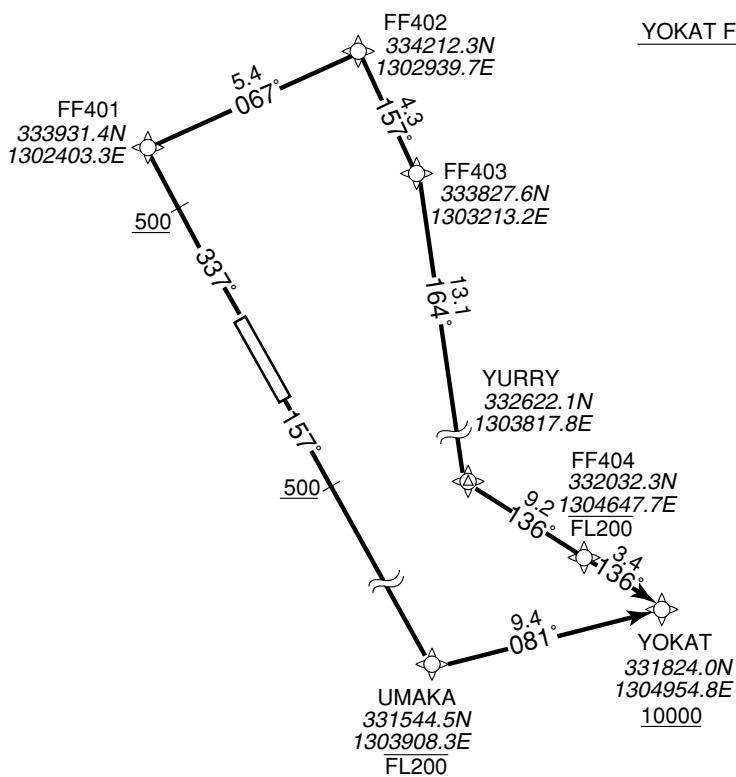
STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV SID

YOKAT 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 "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 NAVAIDs for RNAV1

VAR 7°W (2014)

YOKAT FOUR DEPARTURE

RWY34 : Climb on HDG 337° 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 157° at or above 500FT, direct to UMAKA at or below FL200, to YOKAT at or above 10000FT.

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 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	—	—	337 (330.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FF401	—	—	-7.0	—	—	—	—	—	RNAV1
003	TF	FF402	—	067 (060.1)	-7.0	5.4	—	—	—	—	RNAV1
004	TF	FF403	—	157 (150.4)	-7.0	4.3	—	—	—	—	RNAV1
005	TF	YURRY	—	164 (157.2)	-7.0	13.1	—	—	—	—	RNAV1
006	TF	FF404	—	136 (129.4)	-7.0	9.2	—	-FL200	—	—	RNAV1
007	TF	YOKAT	—	136 (129.4)	-7.0	3.4	—	+10000	—	—	RNAV1

RWY16

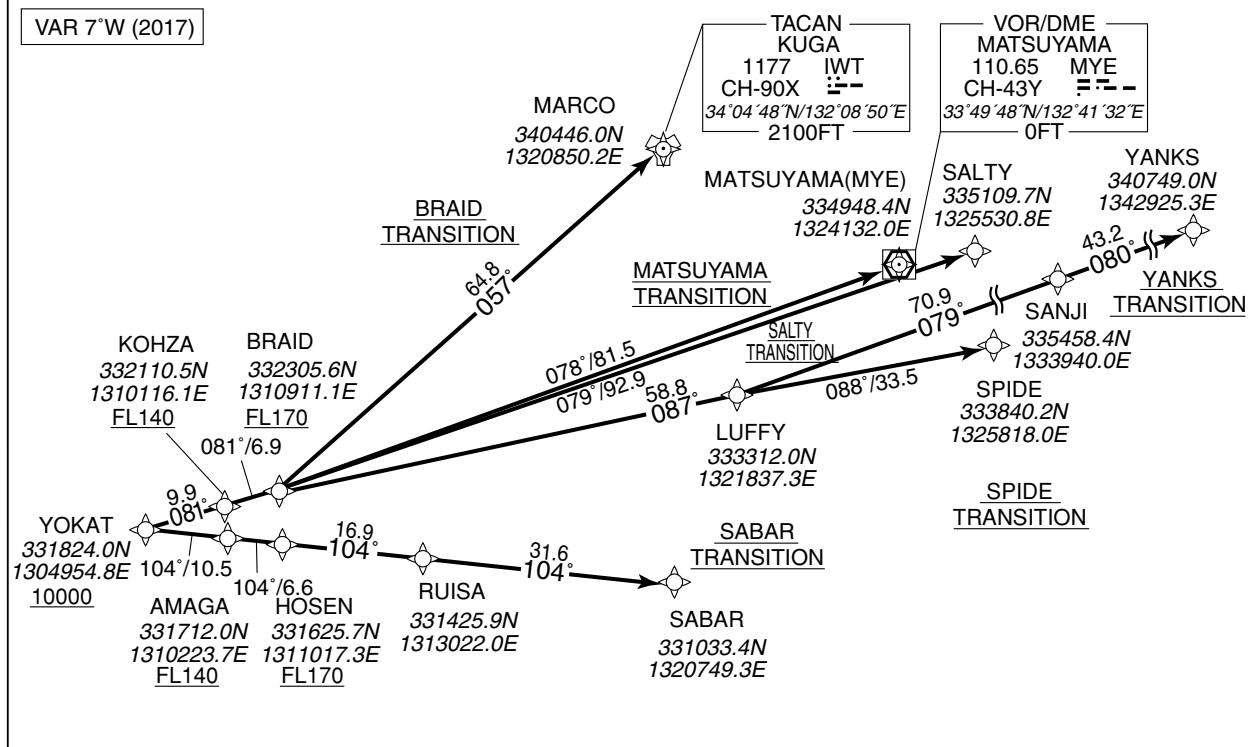
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	157 (150.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	UMAKA	—	—	-7.0	—	—	-FL200	—	—	RNAV1
003	TF	YOKAT	—	081 (073.5)	-7.0	9.4	—	+10000	—	—	RNAV1

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 NAVAIDs for RNAV1

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 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.

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	—	—	-7.4	—	—	+10000	—	—	RNAV1
002	TF	KOHZA	—	081 (073.6)	-7.4	9.9	—	+FL140	—	—	RNAV1
003	TF	BRAID	—	081 (073.8)	-7.4	6.9	—	+FL170	—	—	RNAV1
004	TF	MARCO	—	057 (049.7)	-7.4	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	—	—	-7.4	—	—	+10000	—	—	RNAV1
002	TF	KOHZA	—	081 (073.6)	-7.4	9.9	—	+FL140	—	—	RNAV1
003	TF	BRAID	—	081 (073.8)	-7.4	6.9	—	+FL170	—	—	RNAV1
004	TF	MYE	—	078 (070.4)	-7.4	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	—	—	-7.4	—	—	+10000	—	—	RNAV1
002	TF	KOHZA	—	081 (073.6)	-7.4	9.9	—	+FL140	—	—	RNAV1
003	TF	BRAID	—	081 (073.8)	-7.4	6.9	—	+FL170	—	—	RNAV1
004	TF	SALTY	—	079 (071.9)	-7.4	92.9	—	—	—	—	RNAV1

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	—	—	-7.4	—	—	+10000	—	—	RNAV1
002	TF	KOHZA	—	081 (073.6)	-7.4	9.9	—	+FL140	—	—	RNAV1
003	TF	BRAID	—	081 (073.8)	-7.4	6.9	—	+FL170	—	—	RNAV1
004	TF	LUFFY	—	087 (079.8)	-7.4	58.8	—	—	—	—	RNAV1
005	TF	SANJI	—	079 (071.7)	-7.4	70.9	—	—	—	—	RNAV1
006	TF	YANKS	—	080 (072.5)	-7.4	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	—	—	-7.4	—	—	+10000	—	—	RNAV1
002	TF	KOHZA	—	081 (073.6)	-7.4	9.9	—	+FL140	—	—	RNAV1
003	TF	BRAID	—	081 (073.8)	-7.4	6.9	—	+FL170	—	—	RNAV1
004	TF	LUFFY	—	087 (079.8)	-7.4	58.8	—	—	—	—	RNAV1
005	TF	SPIDE	—	088 (080.4)	-7.4	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	—	—	-7.4	—	—	+10000	—	—	RNAV1
002	TF	AMAGA	—	104 (096.5)	-7.4	10.5	—	+FL140	—	—	RNAV1
003	TF	HOSEN	—	104 (096.6)	-7.4	6.6	—	+FL170	—	—	RNAV1
004	TF	RUISA	—	104 (096.7)	-7.4	16.9	—	—	—	—	RNAV1
005	TF	SABAR	—	104 (096.9)	-7.4	31.6	—	—	—	—	RNAV1

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID and TRANSITION

KURUME THREE 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

RWY16 :DER~1.0NM FM DER
RWY34 :DER~0.9NM FM DER
2.2NM to FF401~FF403
GABAI TRANSITION :
6.4NM to SGE~SGE

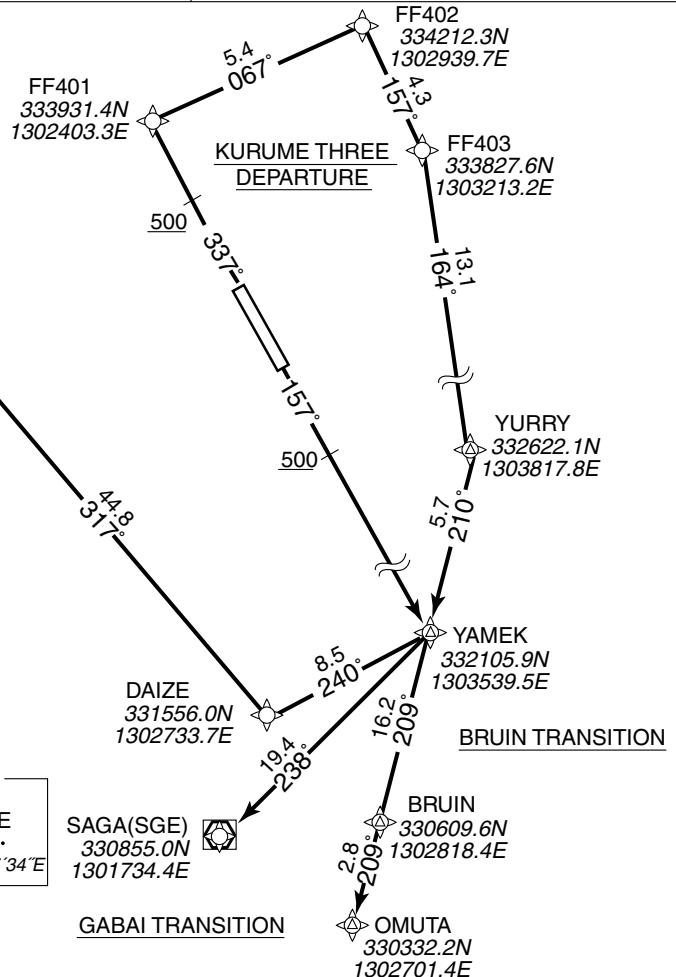
Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7°W (2014)

IKI(IKE)
334451.0N
1294636.7E

VOR/DME
IKI
113.2 IKE
CH-79X
33°44'51"N/129°46'37"E
200FT

GENKAI TRANSITION



KURUME THREE DEPARTURE

RWY34 : Climb on HDG 337° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to YAMEK.

RWY16 : Climb on HDG 157° at or above 500FT, direct to YAMEK.

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.

BRUIN TRANSITION

From YAMEK, to BRUIN, to OMUTA.

GABAI TRANSITION

From YAMEK, to SGE.

GENKAI TRANSITION

From YAMEK, to DAIZE to IKE.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

KURUME THREE 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	—	—	337 (330.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FF401	—	—	-7.0	—	—	—	—	—	RNAV1
003	TF	FF402	—	067 (060.1)	-7.0	5.4	—	—	—	—	RNAV1
004	TF	FF403	—	157 (150.4)	-7.0	4.3	—	—	—	—	RNAV1
005	TF	YURRY	—	164 (157.2)	-7.0	13.1	—	—	—	—	RNAV1
006	TF	YAMEK	—	210 (202.7)	-7.0	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	—	—	157 (150.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	YAMEK	—	—	-7.0	—	—	—	—	—	RNAV1

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	—	—	-7.0	—	—	—	—	—	RNAV1
002	TF	BRUIN	—	209 (202.4)	-7.0	16.2	—	—	—	—	RNAV1
003	TF	OMUTA	—	209 (202.3)	-7.0	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	—	—	-7.0	—	—	—	—	—	RNAV1
002	TF	SGE	—	238 (231.2)	-7.0	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	—	—	-7.0	—	—	—	—	—	RNAV1
002	TF	DAIZE	—	240 (232.7)	-7.0	8.5	—	—	—	—	RNAV1
003	TF	IKE	—	317 (310.4)	-7.0	44.8	—	—	—	—	RNAV1

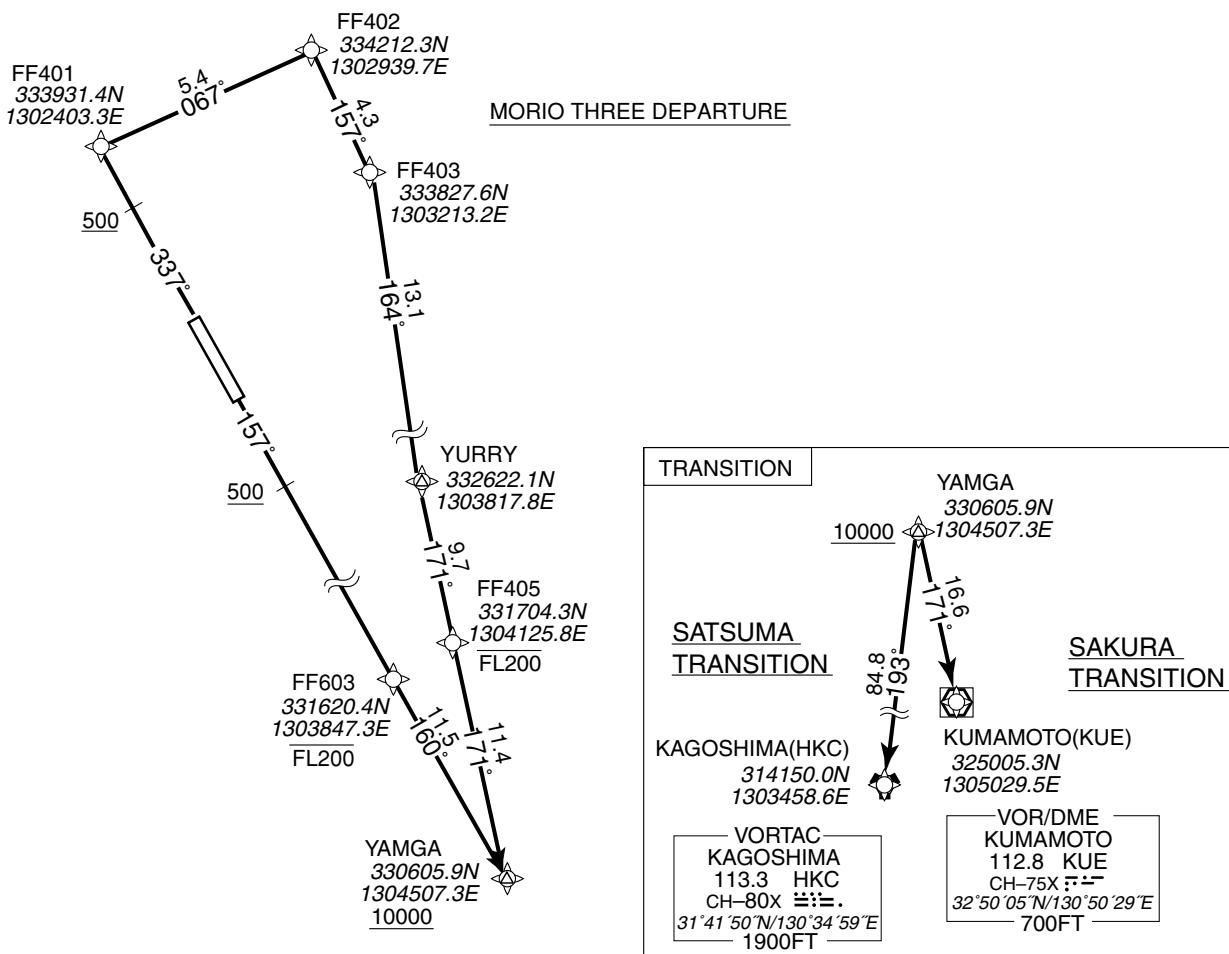
STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID and TRANSITION

MORIO THREE 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 NAVAIDs for RNAV1

VAR 7°W (2014)

MORIO THREE DEPARTURE

RWY34 : Climb on HDG 337° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to FF405 at or below FL200, to YAMGA at or above 10000FT.

RWY16 : Climb on HDG 157° at or above 500FT, direct to FF603 at or below FL200, to YAMGA at or above 10000FT.

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.

SAKURA TRANSITION

From YAMGA at or above 10000FT, to KUE.

SATSUMA TRANSITION

From YAMGA at or above 10000FT, to HKC.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

MORIO THREE 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	—	—	337 (330.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FF401	—	—	-7.0	—	—	—	—	—	RNAV1
003	TF	FF402	—	067 (060.1)	-7.0	5.4	—	—	—	—	RNAV1
004	TF	FF403	—	157 (150.4)	-7.0	4.3	—	—	—	—	RNAV1
005	TF	YURRY	—	164 (157.2)	-7.0	13.1	—	—	—	—	RNAV1
006	TF	FF405	—	171 (164.3)	-7.0	9.7	—	-FL200	—	—	RNAV1
007	TF	YAMGA	—	171 (164.3)	-7.0	11.4	—	+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	—	—	157 (150.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FF603	—	—	-7.0	—	—	-FL200	—	—	RNAV1
003	TF	YAMGA	—	160 (152.6)	-7.0	11.5	—	+10000	—	—	RNAV1

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	—	—	-7.0	—	—	+10000	—	—	RNAV1
002	TF	KUE	—	171 (164.3)	-7.0	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	—	—	-7.0	—	—	+10000	—	—	RNAV1
002	TF	HKC	—	193 (185.8)	-7.0	84.8	—	—	—	—	RNAV1

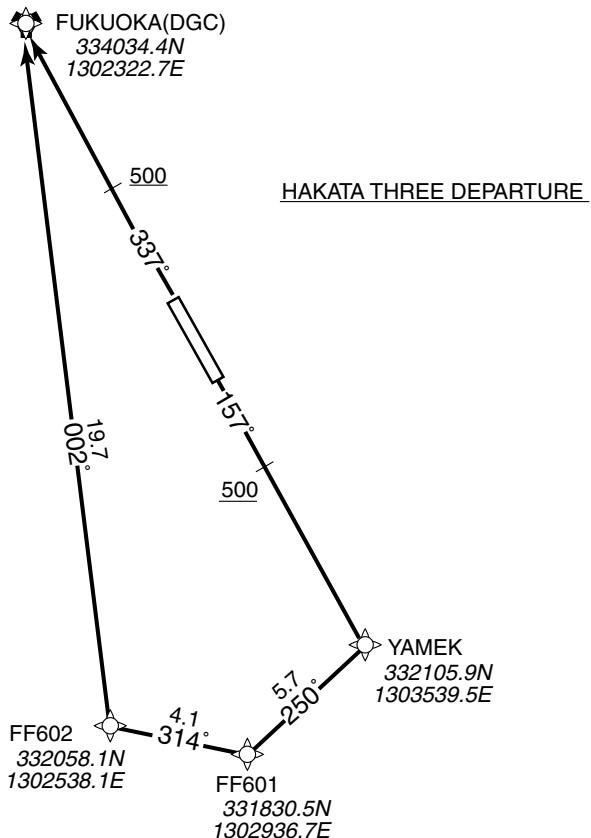
STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

HAKATA THREE 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 7°W (2014)



HAKATA THREE DEPARTURE

RWY34 : Climb on HDG 337° at or above 500FT, direct to DGC.

RWY16 : Climb on HDG 157° 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 THREE 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	—	—	337 (330.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	DGC	—	—	-7.0	—	—	—	—	—	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	—	—	157 (150.3)	-7.0	—	—	+500	—	—	RNAV1
002	DF	YAMEK	—	—	-7.0	—	—	—	—	—	RNAV1
003	TF	FF601	—	250 (242.9)	-7.0	5.7	—	—	—	—	RNAV1
004	TF	FF602	—	314 (306.5)	-7.0	4.1	—	—	—	—	RNAV1
005	TF	DGC	—	002 (354.5)	-7.0	19.7	—	—	—	—	RNAV1

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

RJFF / FUKUOKA

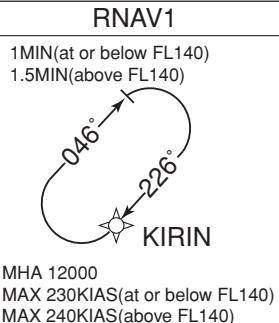
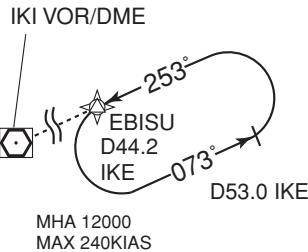
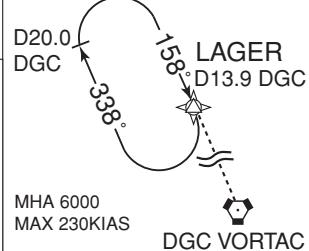
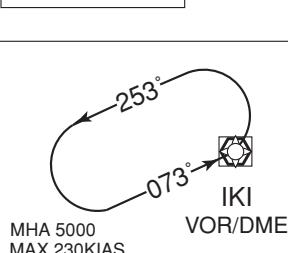
RNAV STAR RWY34

HAWKS EAST ARRIVAL / HAWKS WEST ARRIVAL
HAWKS NORTH ARRIVAL / HAWKS SOUTH ARRIVAL

RNAV 1

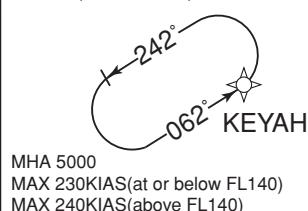
Note 1) DME/DME/IRU or GNSS required.
2) RADAR service required.

VAR 7° W(2016)



RNAV1

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



VOR/DME
IKI
113.2 IKE
CH-79X
33°44'51"N/129°46'37"E
200FT

IKI(IKE)
334451.0N
1294636.7E

HAWKS WEST ARRIVAL

LAGER
335238.3N
1301504.7E
6000

ORONN
334831.1N
1300659.0E

LAGER
335238.3N
1301504.7E
6000

HAWKS NORTH ARRIVAL

EBISU
340220.1N
1303527.7E
12000

KIRIN
340717.9N
1304919.3E
12000
for HAWKS
EAST ARRIVAL

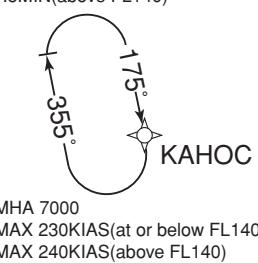
ITODA
334242.2N
1304333.1E
10000
8000

HAWKS EAST ARRIVAL

KAHOC
332847.4N
1304018.8E
7000

DAZAI
332200.9N
1304208.1E
5000

RNAV1
1MIN(at or below FL140)
1.5MIN(above FL140)



CHANGE : Radial (HOLD Pattern on LAGER)

RNAV1

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



MHA 5000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

HONOK
332006.3N
1301647.8E
7000

OSTEP
330831.8N
1302632.1E

HAWKS SOUTH ARRIVAL

BANKU
331739.9N
1303302.5E
5000
MAX 210KIAS

HAWKS
331948.0N
1303730.0E
4000

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	-	-	■ -7.4	-	-	+12000	-	-	RNAV1
002	TF	ITODA	-	198 (191.0)	■ -7.4	25.1	-	-10000 +8000	-	-	RNAV1
003	TF	KAHOC	-	198 (191.0)	■ -7.4	14.2	-	+7000	-	-	RNAV1
004	TF	DAZAI	-	175 (167.3)	■ -7.4	6.9	-	+5000	-	-	RNAV1
005	TF	HAWKS	-	248 (240.3)	■ -7.4	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	226 (218.7)	■ -7.4	1.0(-14000) 1.5(+14001)	R	12000	-	-230(-14000) -240(+14001)	RNAV1
Hold	KAHOC	■ 175 (167.3)	■ -7.4	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	-	-	-7.4	-	-	-	-	-	RNAV1
002	TF	ORONN	-	085 (077.7)	-7.4	17.3	-	-	-	-	RNAV1
003	TF	NOKOH	-	152 (144.7)	-7.4	8.2	-	-	-	-	RNAV1
004	TF	BEAMA	-	152 (144.8)	-7.4	9.9	-	-	-	-	RNAV1
005	TF	SOFTO	-	152 (144.9)	-7.4	9.9	-	-	-	-	RNAV1
006	TF	BANKU	-	152 (144.9)	-7.4	9.9	-	+5000	-210	-	RNAV1
007	TF	HAWKS	-	068 (060.2)	-7.4	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	132 (125.0)	■ -7.4	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 NAVAIIDs 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	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	EBISU	—	254 (246.7)	-7.4	12.5	—	+12000	—	—	RNAV1
003	TF	LAGER	—	248 (240.3)	-7.4	19.5	—	+6000	—	—	RNAV1
004	TF	NOKOH	—	198 (190.5)	-7.4	11.0	—	—	—	—	RNAV1
005	TF	BEAMA	—	152 (144.8)	-7.4	9.9	—	—	—	—	RNAV1
006	TF	SOFTO	—	152 (144.9)	-7.4	9.9	—	—	—	—	RNAV1
007	TF	BANKU	—	152 (144.9)	-7.4	9.9	—	+5000	-210	—	RNAV1
008	TF	HAWKS	—	068 (060.2)	-7.4	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	226 (218.7)	-7.4	1.0(-14000) 1.5(+14001)	R	12000	—	-230(-14000) -240(+14001)	RNAV1
Hold	BANKU	132 (125.0)	-7.4	1.0(-14000) 1.5(+14001)	R	5000	—	-230(-14000) -240(+14001)	RNAV1

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	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	HONOK	—	332 (324.9)	-7.4	14.2	—	+7000	—	—	RNAV1
003	TF	AMAOH	—	332 (324.8)	-7.4	9.9	—	—	—	—	RNAV1
004	TF	KEYAH	—	332 (324.8)	-7.4	9.9	—	—	—	—	RNAV1
005	TF	NOKOH	—	062 (054.5)	-7.4	9.7	—	—	—	—	RNAV1
006	TF	BEAMA	—	152 (144.8)	-7.4	9.9	—	—	—	—	RNAV1
007	TF	SOFTO	—	152 (144.9)	-7.4	9.9	—	—	—	—	RNAV1
008	TF	BANKU	—	152 (144.9)	-7.4	9.9	—	+5000	-210	—	RNAV1
009	TF	HAWKS	—	068 (060.2)	-7.4	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)	-7.4	1.0(-14000) 1.5(+14001)	L	5000	—	-230(-14000) -240(+14001)	RNAV1
Hold	BANKU	132 (125.0)	-7.4	1.0(-14000) 1.5(+14001)	R	5000	—	-230(-14000) -240(+14001)	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

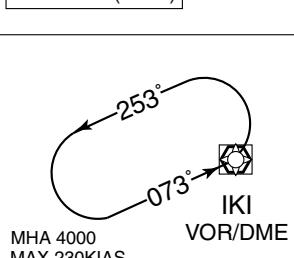
MALTS EAST ARRIVAL / MALTS WEST ARRIVAL
MALTS SOUTH ARRIVAL

RNAV 1

Note 1) DME/DME/IRU or GNSS required.

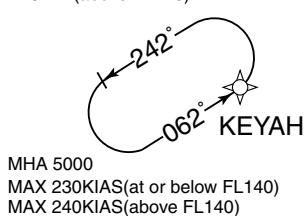
2) RADAR service required.

VAR 7° W(2016)

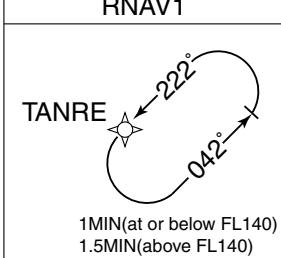


RNAV1

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

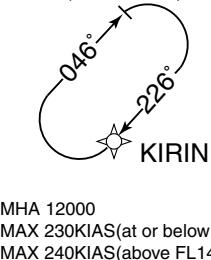


RNAV1



RNAV1

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



MALTS WEST ARRIVAL

VOR/DME
IKI
113.85 SWE
CH-85Y ;:-:
33°44'51"N/129°46'37"E
200FT

IKI(IKE)
334451.0N
1294636.7E

ORONN
334831.1N
1300659.0E
3000

TANRE
335446.4N
1302747.2E
6000

HOPPS
340229.1N
1304102.4E
8000

KIRIN
340717.9N
1304919.3E
12000

KEYAH
333611.4N
1300310.7E
5000

AMAOH
332809.0N
1300959.9E
3000

HONOK
332006.3N
1301647.8E
7000

DORAI
334929.4N
1302328.4E
5000

NOKOH
334149.5N
1301240.1E
3000

MALTS
334520.8N
1302005.9E
2000

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

MALTS SOUTH ARRIVAL

OSTEP
330831.8N
1302632.1E
3332°

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	-	-	-7.4	-	-	+12000	-	-	RNAV1
002	TF	HOPPS	-	242 (235.0)	-7.4	8.4	-	+8000	-	-	RNAV1
003	TF	TANRE	-	242 (235.0)	-7.4	13.4	-	+6000	-	-	RNAV1
004	TF	DORAI	-	222 (214.2)	-7.4	6.4	-	-	-	-	RNAV1
005	TF	MALTS	-	221 (214.1)	-7.4	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	226 (218.7)	-7.4	1.0(-14000) 1.5(+14001)	R	12000	-	-230(-14000) -240(+14001)	RNAV1
Hold	TANRE	222 (214.2)	-7.4	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	-	-	-7.4	-	-	-	-	-	RNAV1
002	TF	ORONN	-	085 (077.7)	-7.4	17.3	-	+3000	-	-	RNAV1
003	TF	MALTS	-	114 (106.2)	-7.4	11.4	-	+2000	-	-	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

→ RNAV STAR RWY16

MALTS SOUTH ARRIVAL

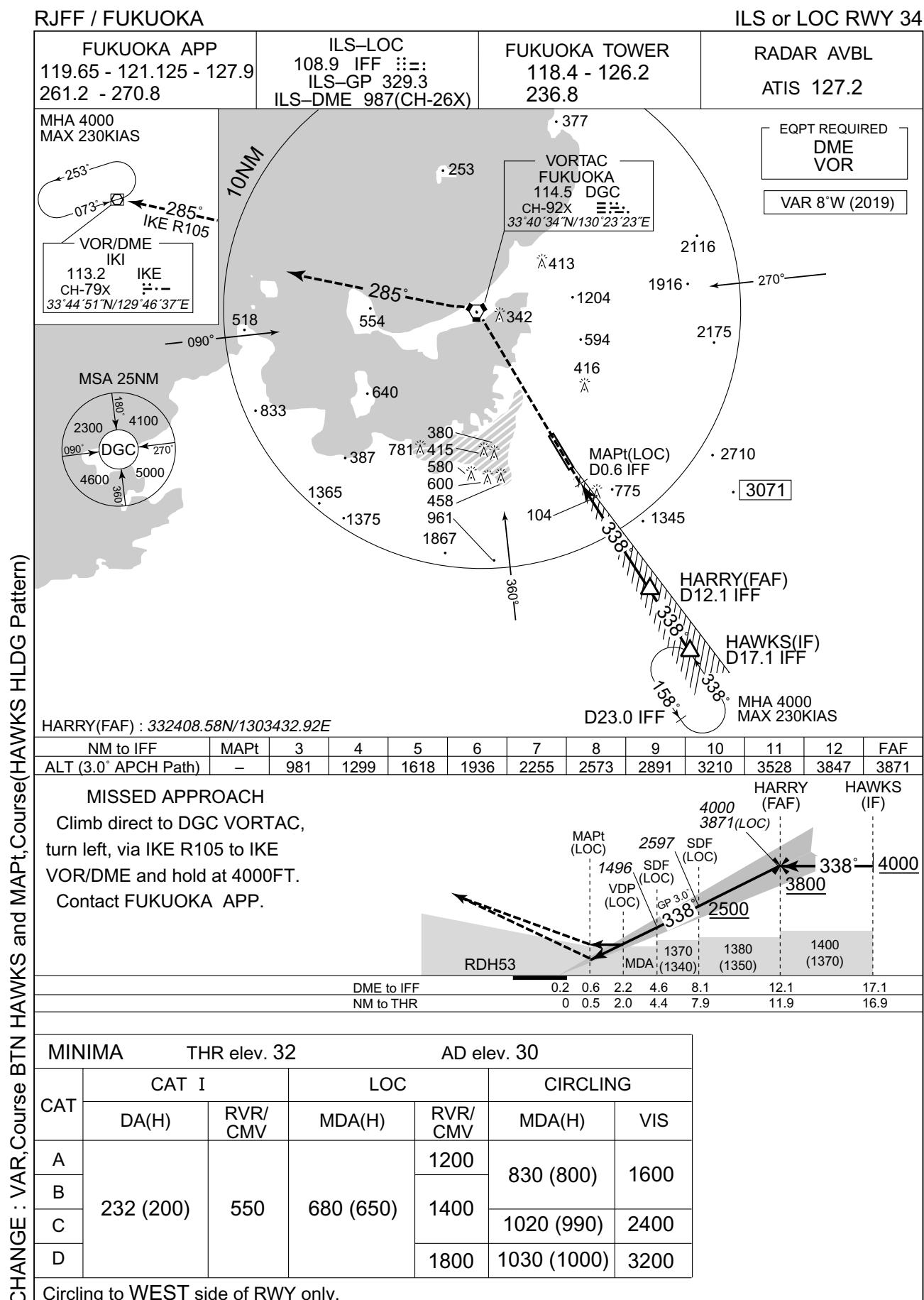
From OSTEP, to HONOK at or above 7000FT, to AMAOH, to KEYAH at or above 5000FT, to NOKOH at or above 3000FT, to MALTS at or above 2000FT.

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

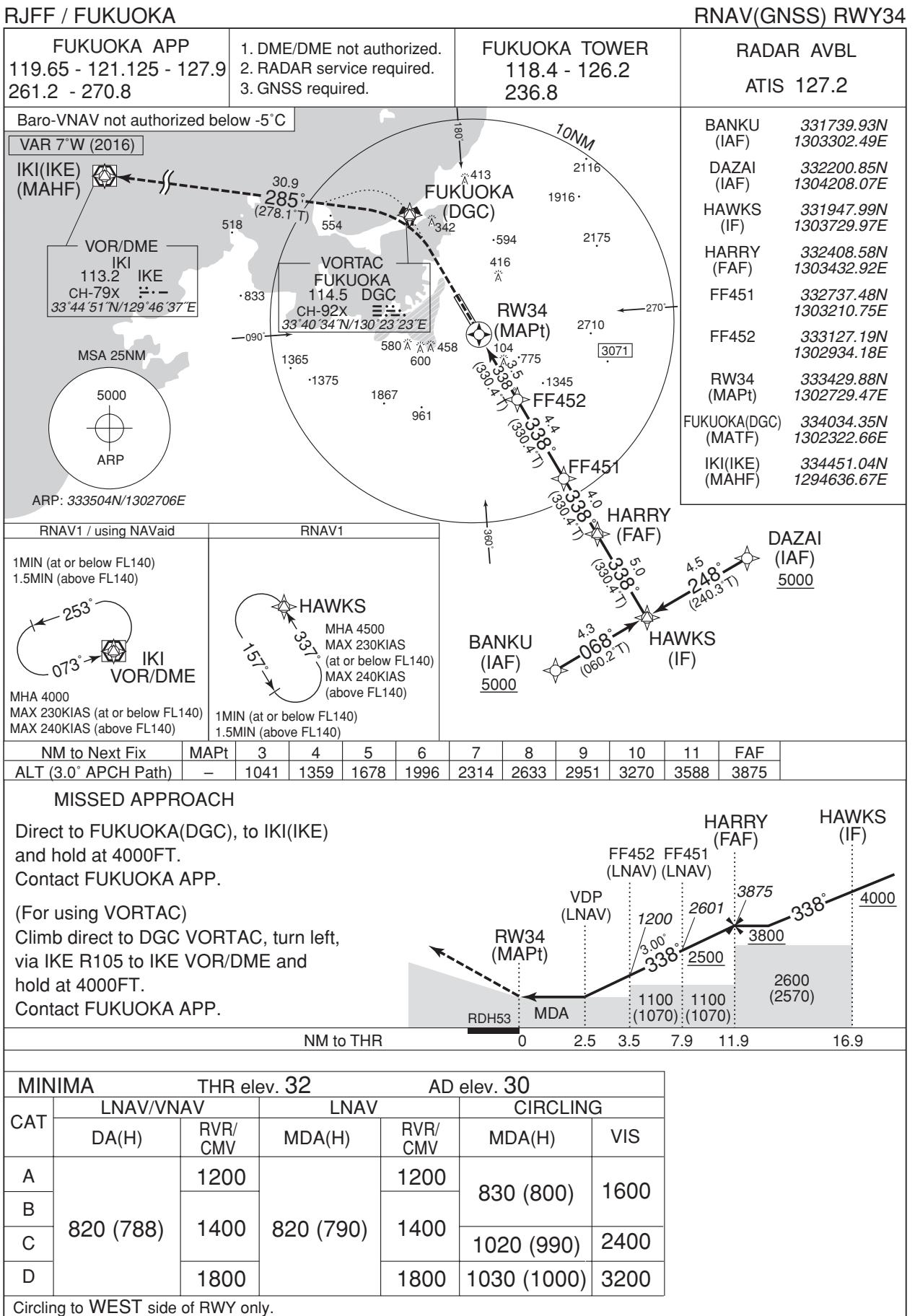
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	OSTEP	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	HONOK	—	332 (324.9)	-7.4	14.2	—	+7000	—	—	RNAV1
003	TF	AMAOH	—	332 (324.8)	-7.4	9.9	—	—	—	—	RNAV1
004	TF	KEYAH	—	332 (324.8)	-7.4	9.9	—	+5000	—	—	RNAV1
005	TF	NOKOH	—	062 (054.5)	-7.4	9.7	—	+3000	—	—	RNAV1
006	TF	MALTS	—	068 (060.3)	-7.4	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)	-7.4	1.0(-14000) 1.5(+14001)	L	5000	— -230(-14000) -240(+14001)	RNAV1	

INSTRUMENT APPROACH CHART

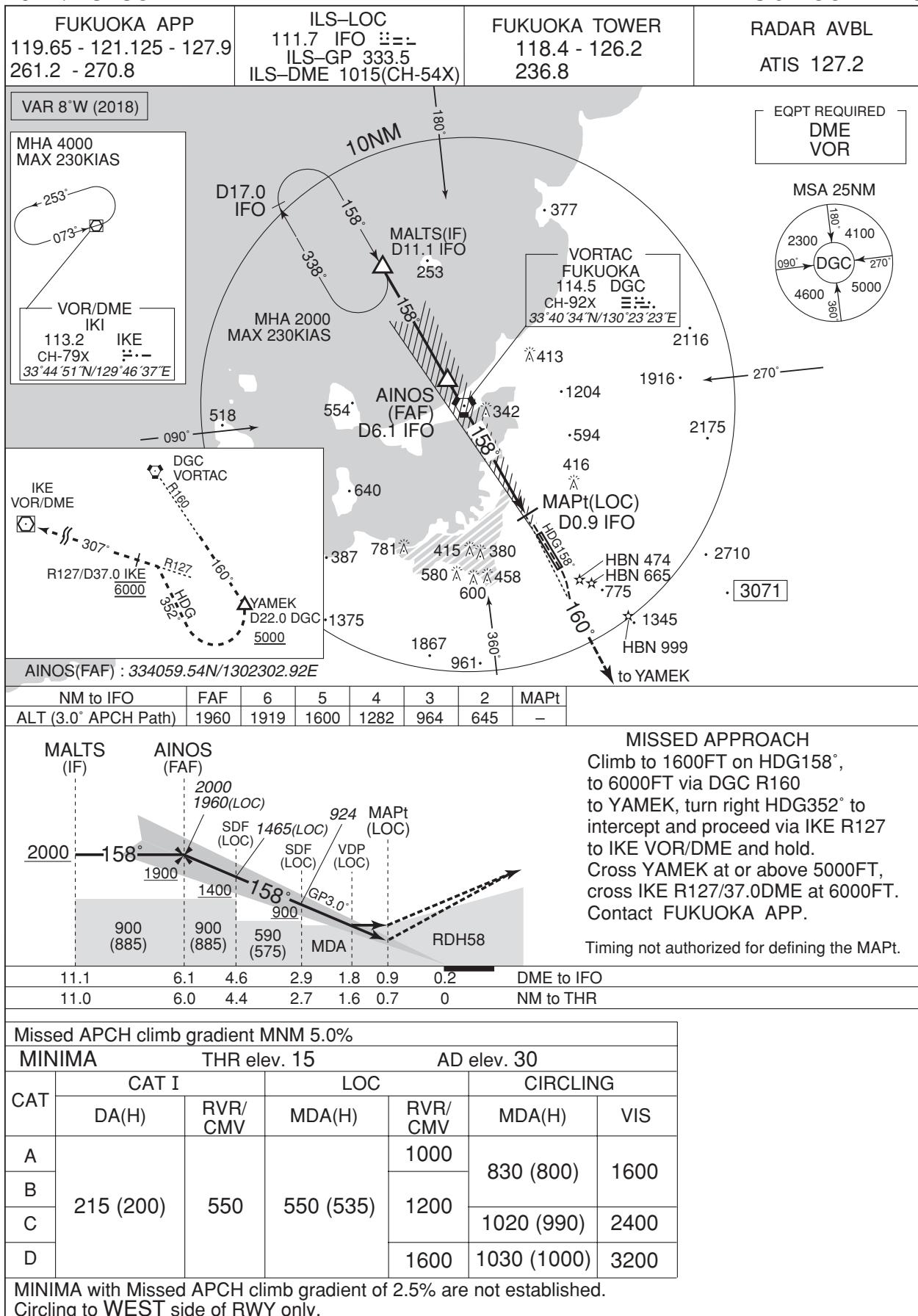


INSTRUMENT APPROACH CHART



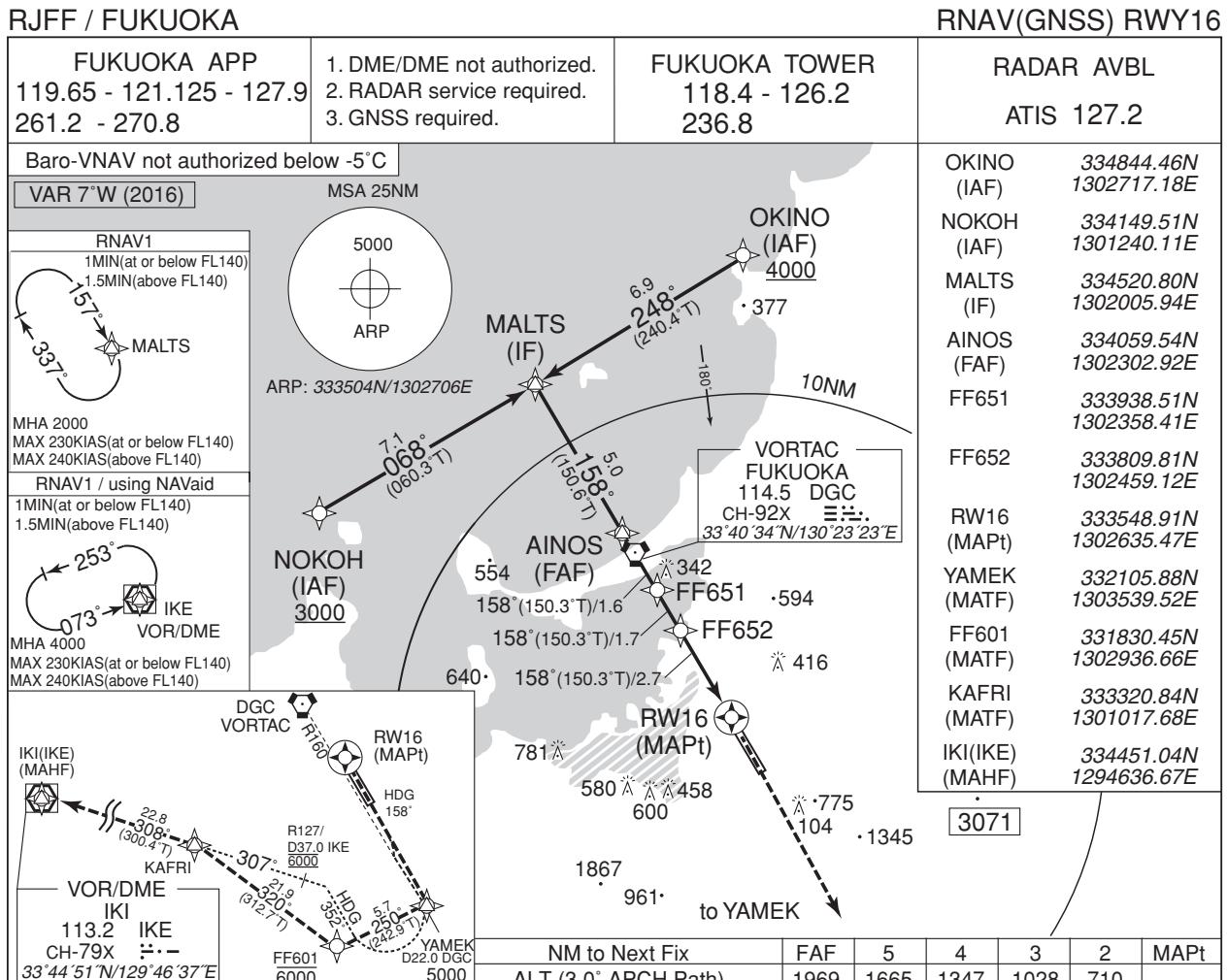
INSTRUMENT APPROACH CHART

RJFF / FUKUOKA



CHANGE : VAR

INSTRUMENT APPROACH CHART



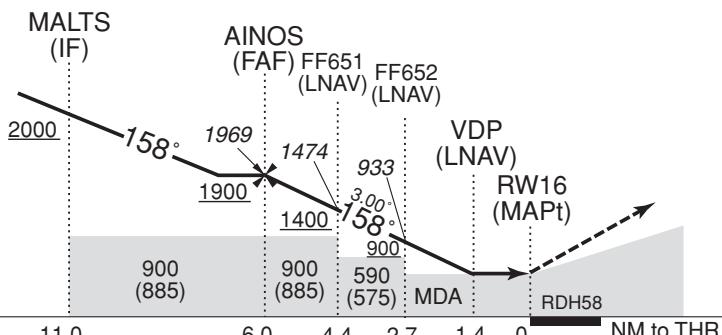
MISSIED APPROACH

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%

CHANGE : HOLD Pattern on MALTS

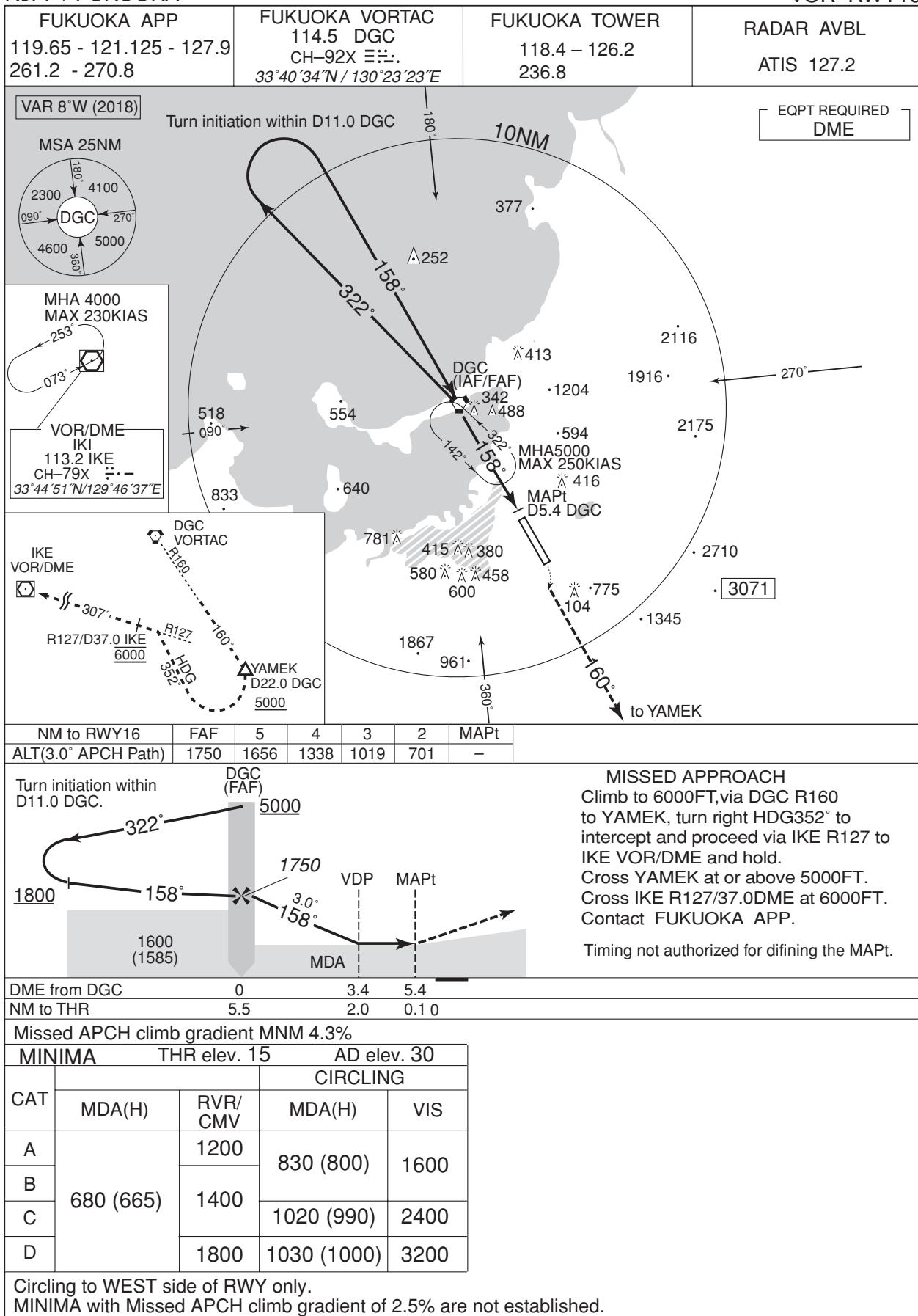
MINIMA		THR elev. 15		AD elev. 30		
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A		1000		1000	830 (800)	1600
B	490 (475)	1200	490 (475)	1200	1020 (990)	2400
C					1030 (1000)	3200
D		1600				

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

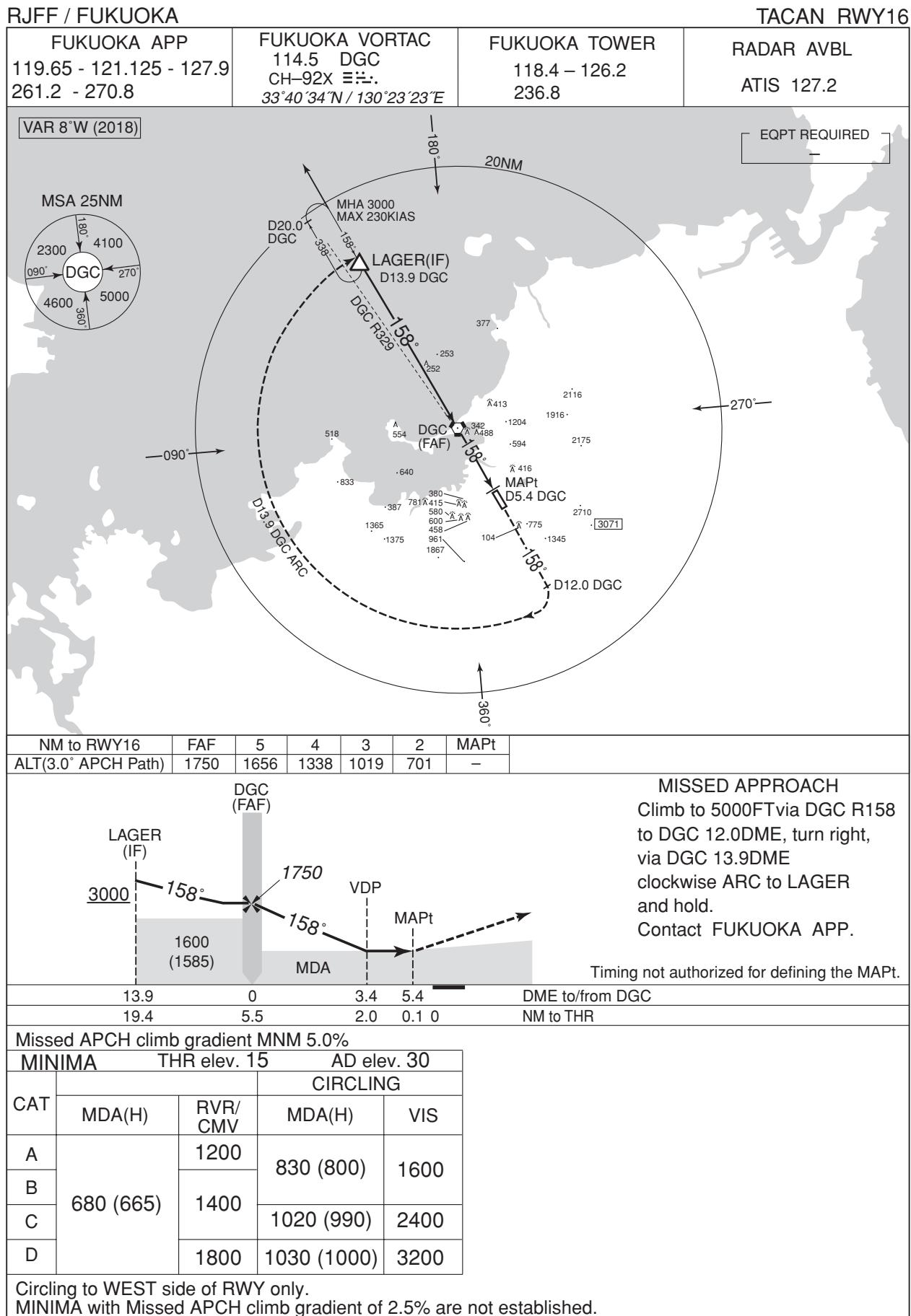
INSTRUMENT APPROACH CHART

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VOR RWY16

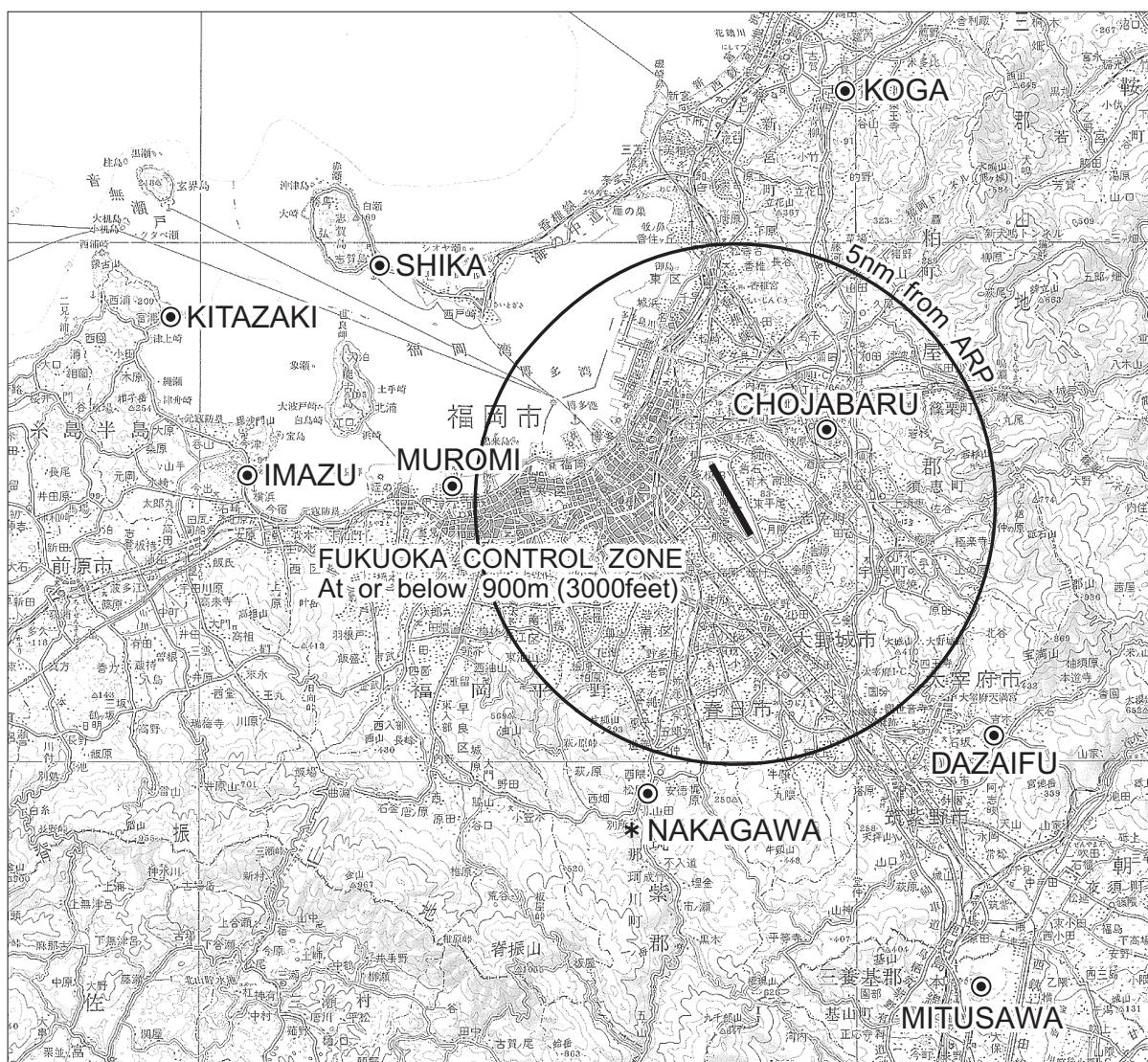


INSTRUMENT APPROACH CHART



RJFF

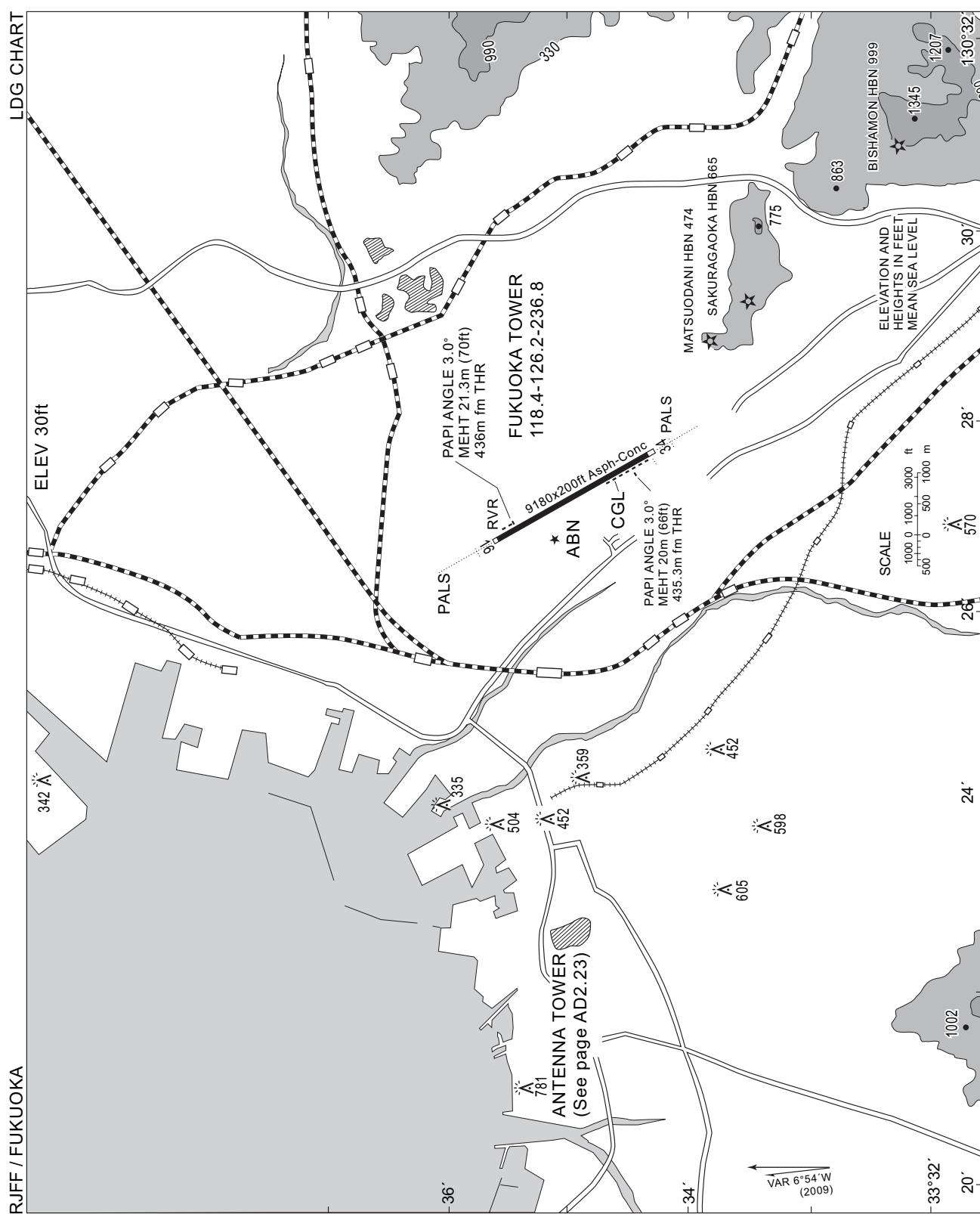
FUKUOKA Visual REP



CHANGE : Shape of FUKUOKA CONTROL ZONE.

Call sign	BRG / DIST from ARP	Remarks
古賀 koga	014° / 8.4NM	高速道路インターチェンジ Interchange
長者原 Chojabaru	046° / 2.3NM	ドーム型建造物 Dome
太宰府 Dazaifu	133° / 6.4NM	ゴルフ場 Golf Course
三沢 Mitusawa	153°/10.4NM	ゴルフ場 Golf Course
* 那珂川 Nakagawa	196° / 5.9NM	松尾橋 Bridge
室見 Muromi	273° / 5.5NM	室見川河口 River - Mouth
今津 Imazu	273° / 9 NM	今津橋 Bridge
志賀 Shika	303° / 8 NM	志賀島橋 Bridge
北崎 Kitazaki	288°/12 NM	漁港 Harbor

* ヘリコプター用 Use For Helicopter



RJFF / FUKUOKA

Minimum Vectoring Altitude CHART

