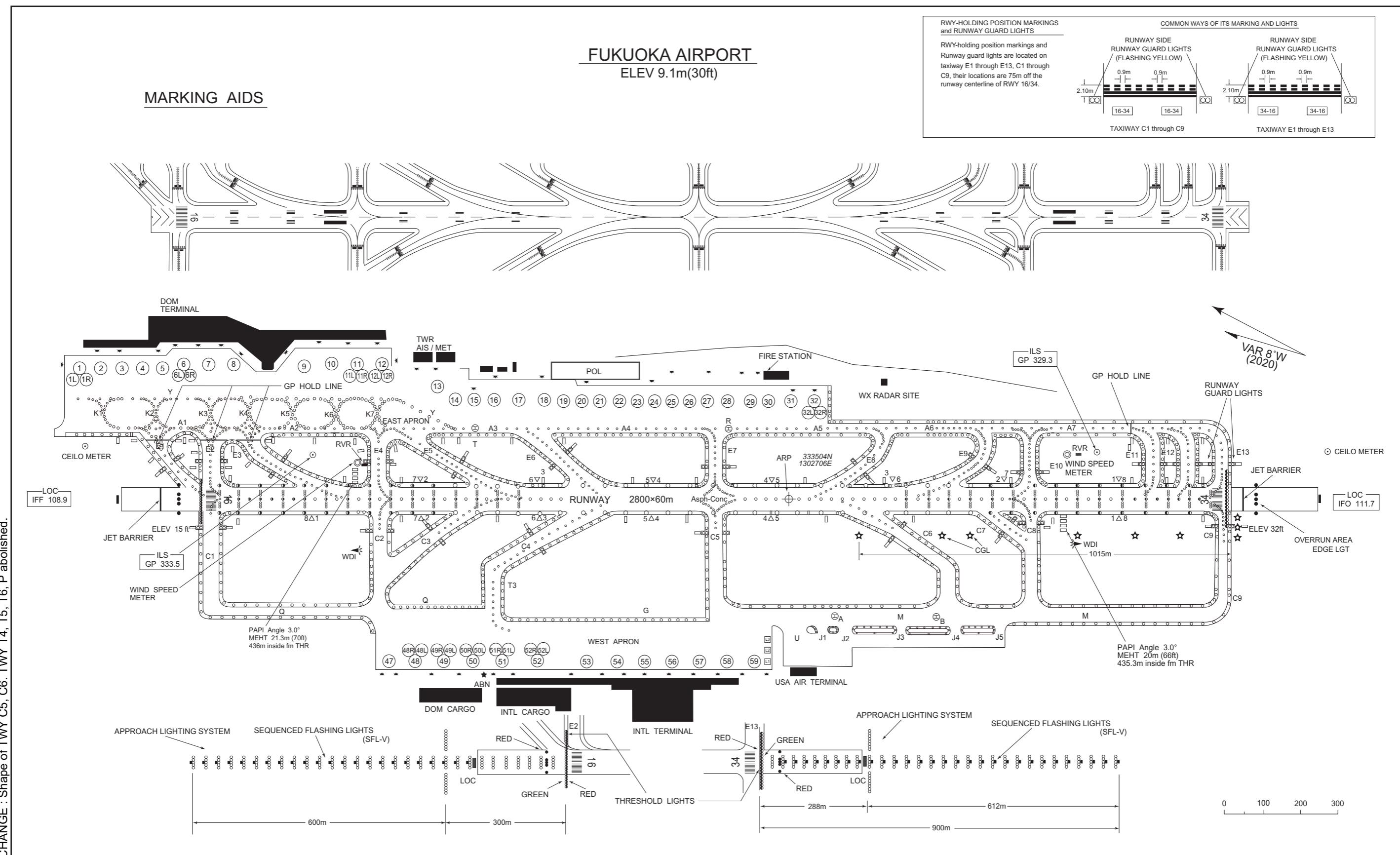
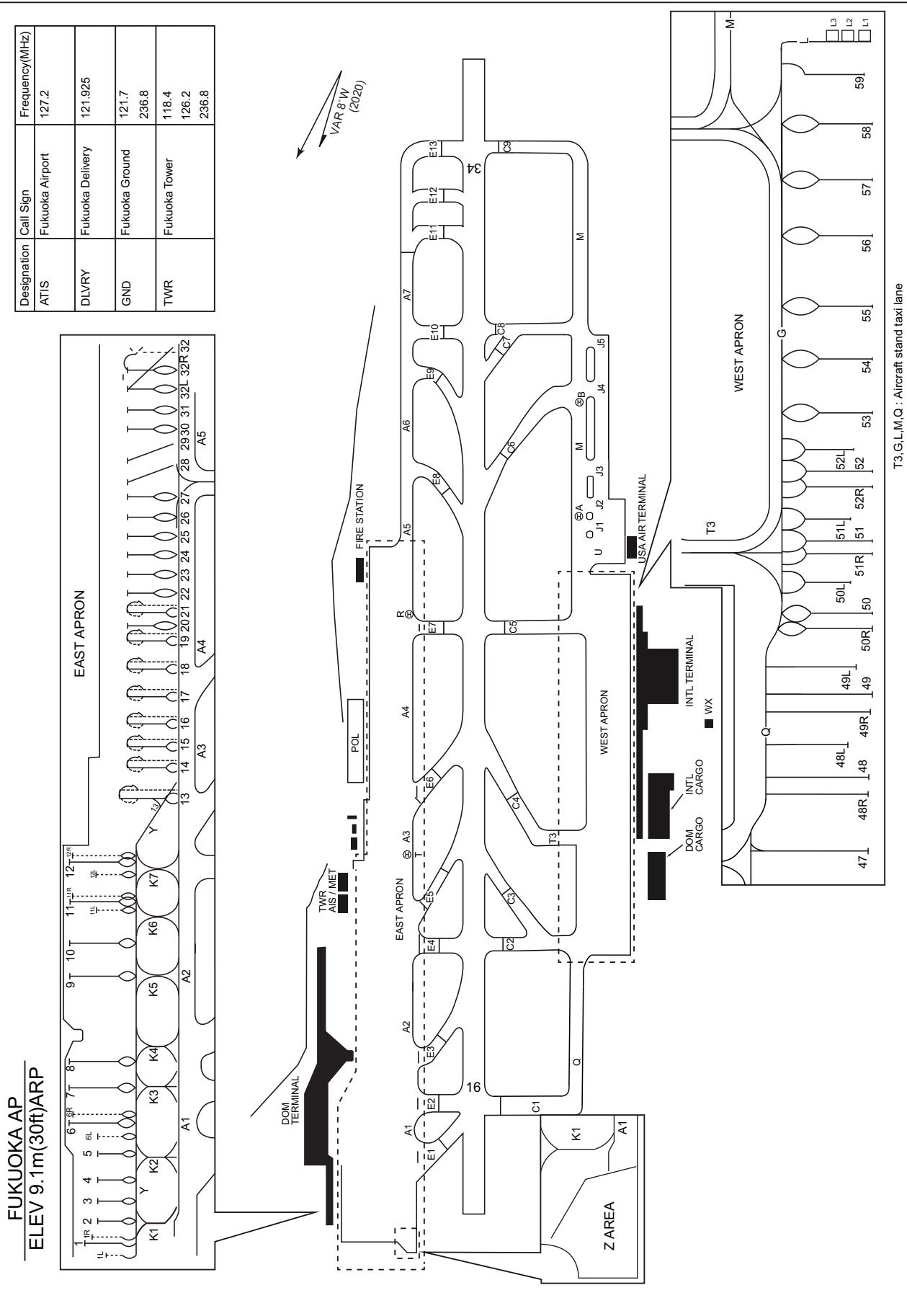


AERODROME CHART



CHANGE : Shape of TWY C5, C6, TWY T4, T5, T6, P abolished.



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AERODROME OBSTACLE CHART-ICAO

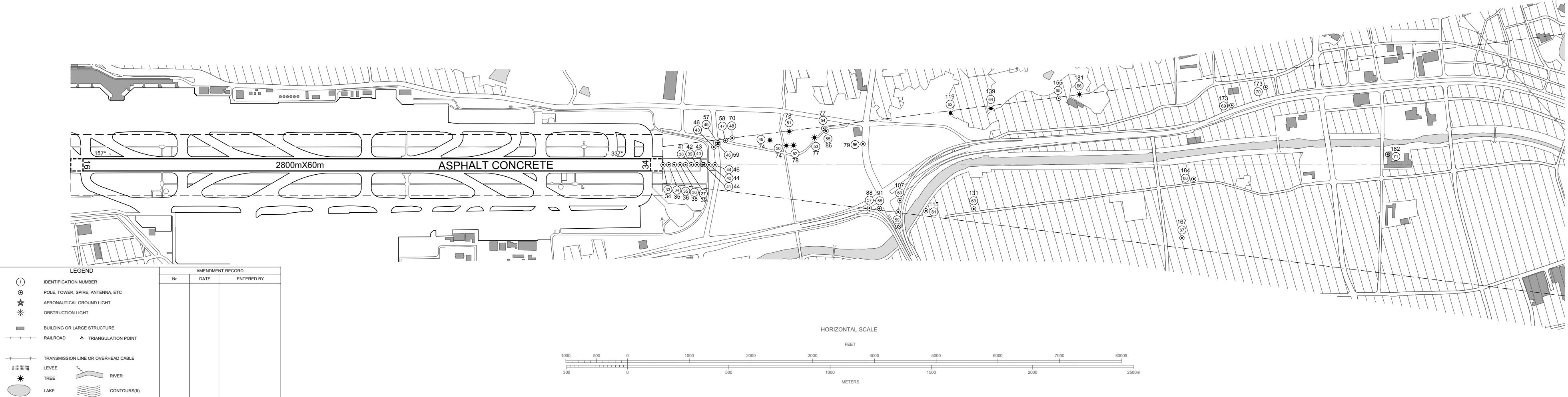
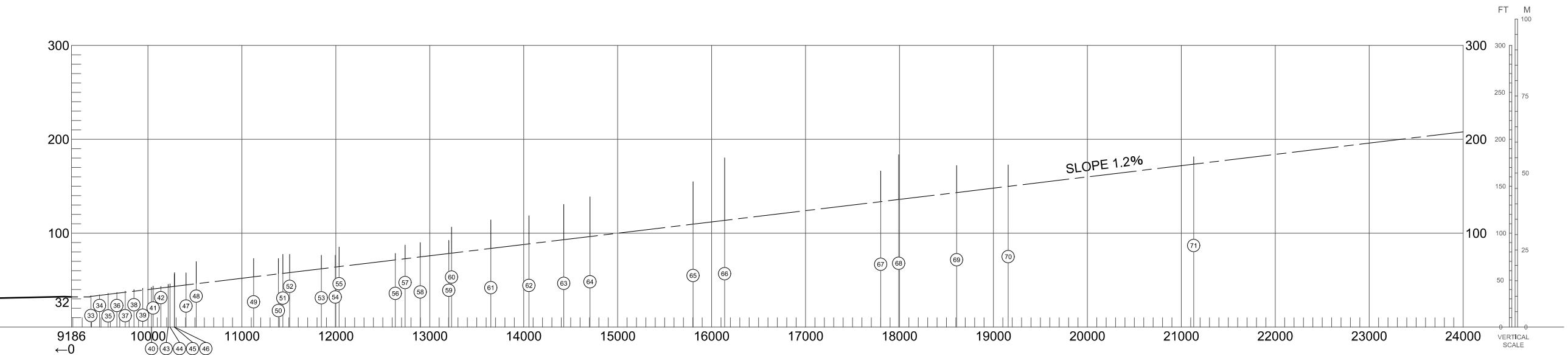
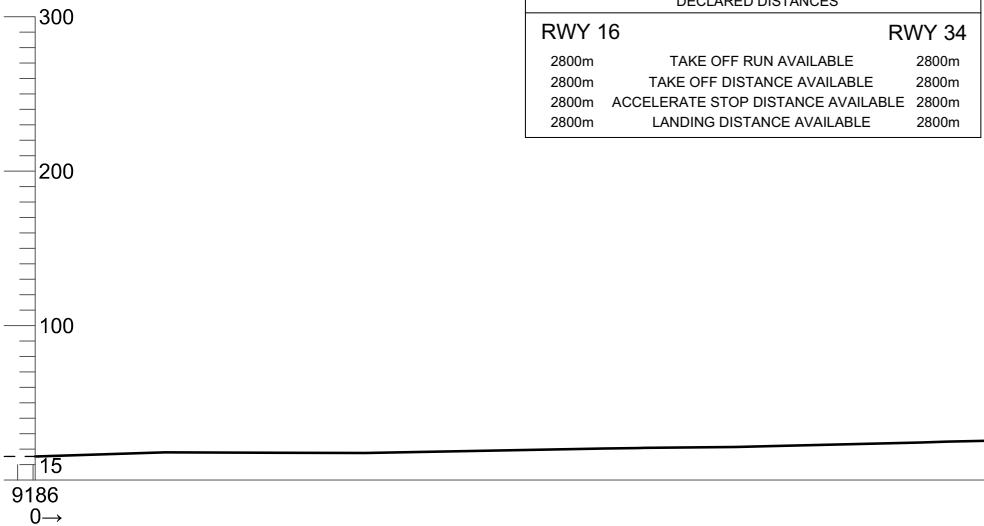
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8° W-MAR 2020

FUKUOKA AIRPORT
RWY : 16/34

DECLARED DISTANCES		
RWY 16	RWY	
2800m	TAKE OFF RUN AVAILABLE	280
2800m	TAKE OFF DISTANCE AVAILABLE	280
2800m	ACCELERATE STOP DISTANCE AVAILABLE	280
2800m	LANDING DISTANCE AVAILABLE	280

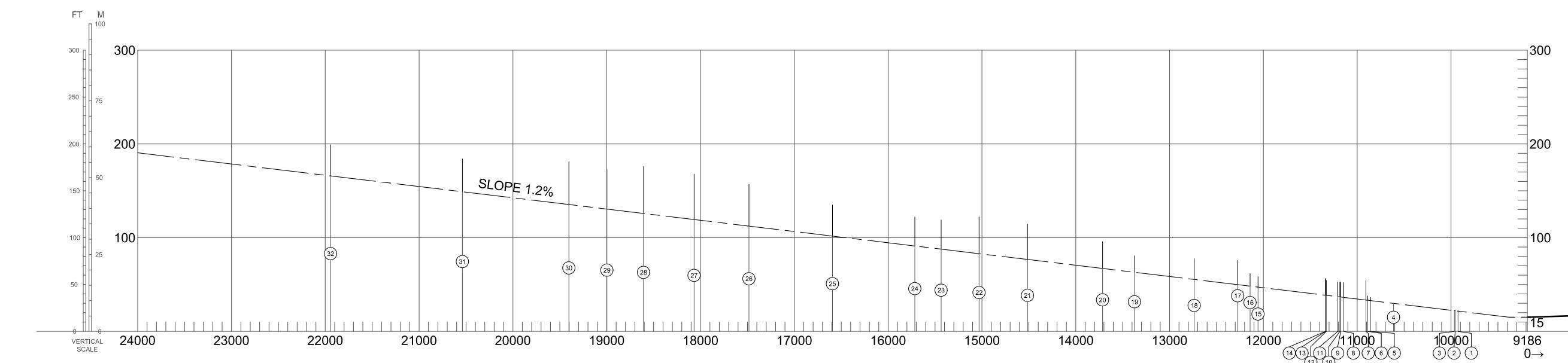


AERODROME OBSTACLE CHART-ICAO

TYPE A (OPERATING LIMITATIONS)

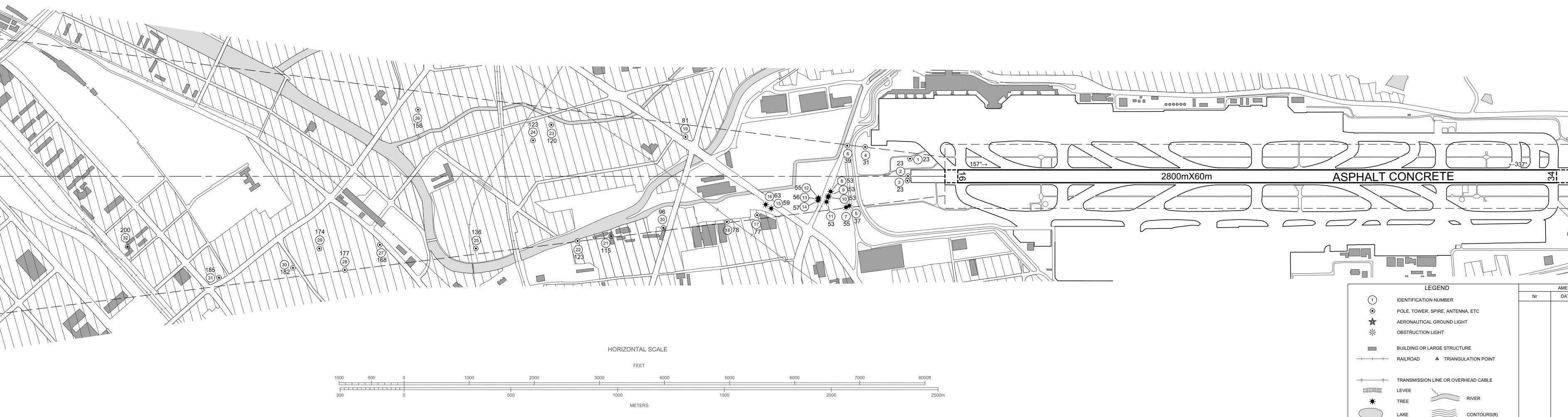
DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 8°W-MAR 2020



FUKUOKA AIRPORT
RWY : 16/34

DECLARED DISTANCES		
RWY 16		RWY 34
2800m	TAKE OFF RUN AVAILABLE	2800m
2800m	TAKE OFF DISTANCE AVAILABLE	2800m
2800m	ACCELERATE STOP DISTANCE AVAILABLE	2800m
2800m	LANDING DISTANCE AVAILABLE	2800m



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.

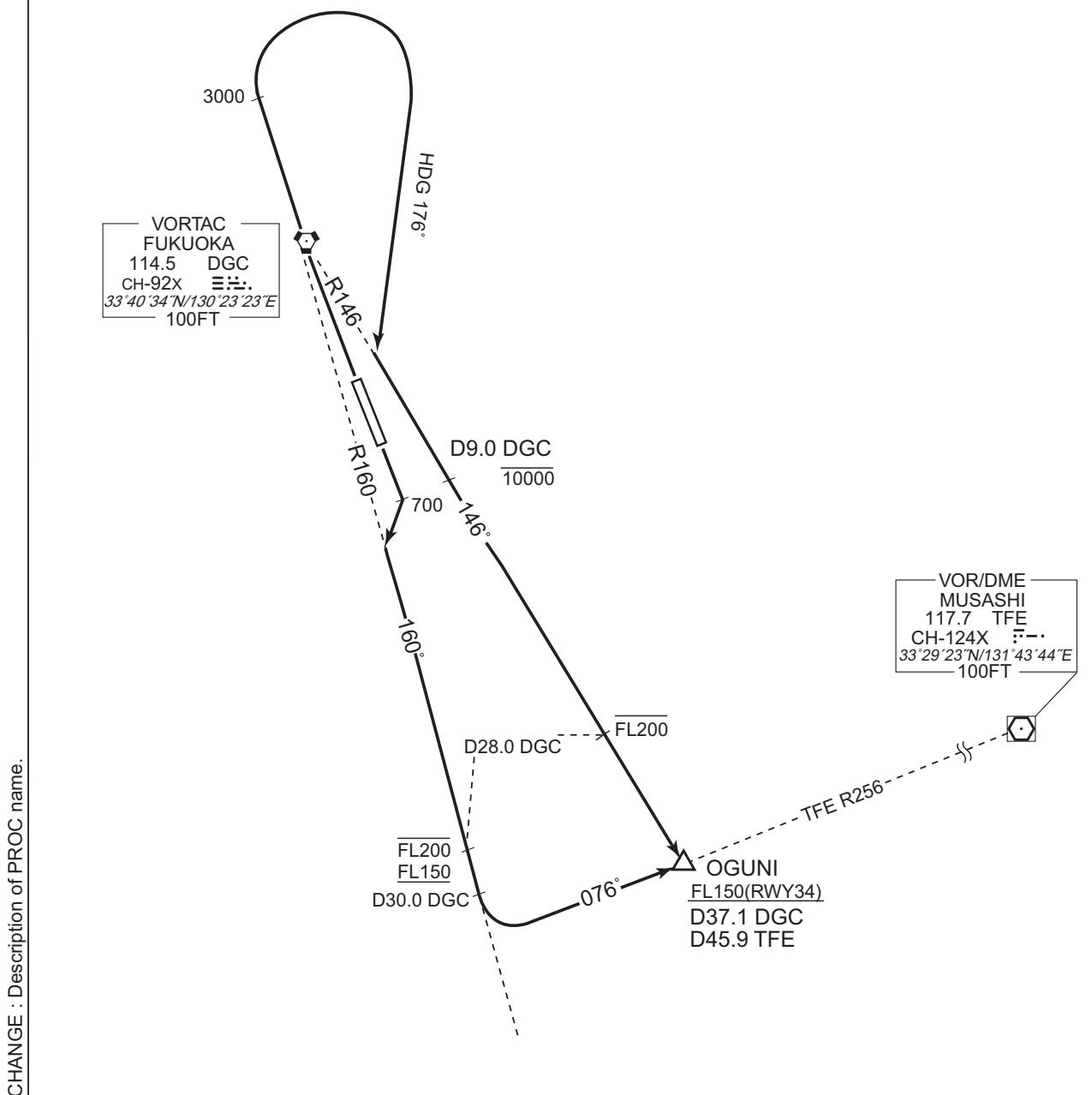
RWY 34 : Climb RWY HDG to 3000FT, turn right HDG176° to intercept and proceed via DGC R146 to OGUNI.

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

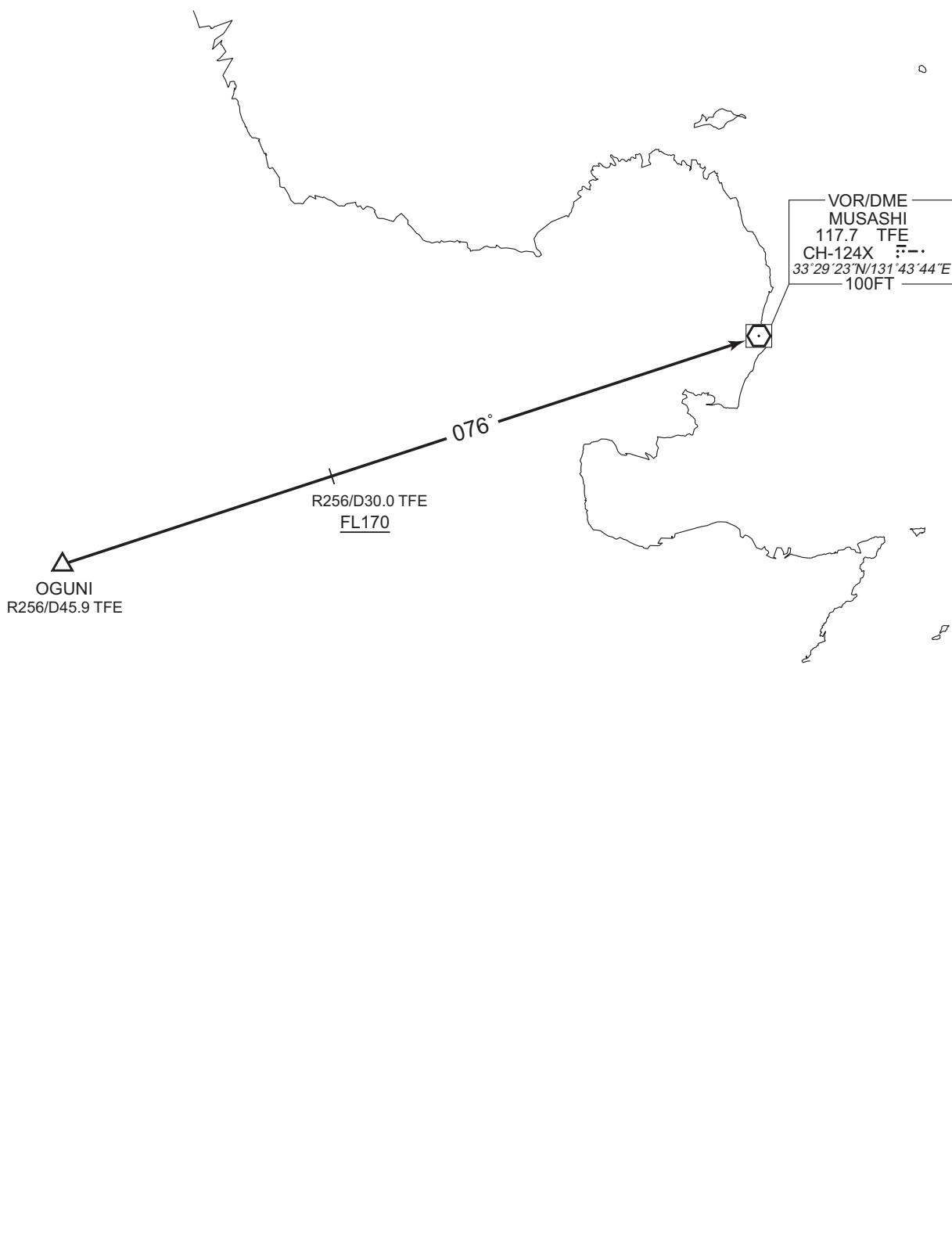
RJFF / FUKUOKA

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.

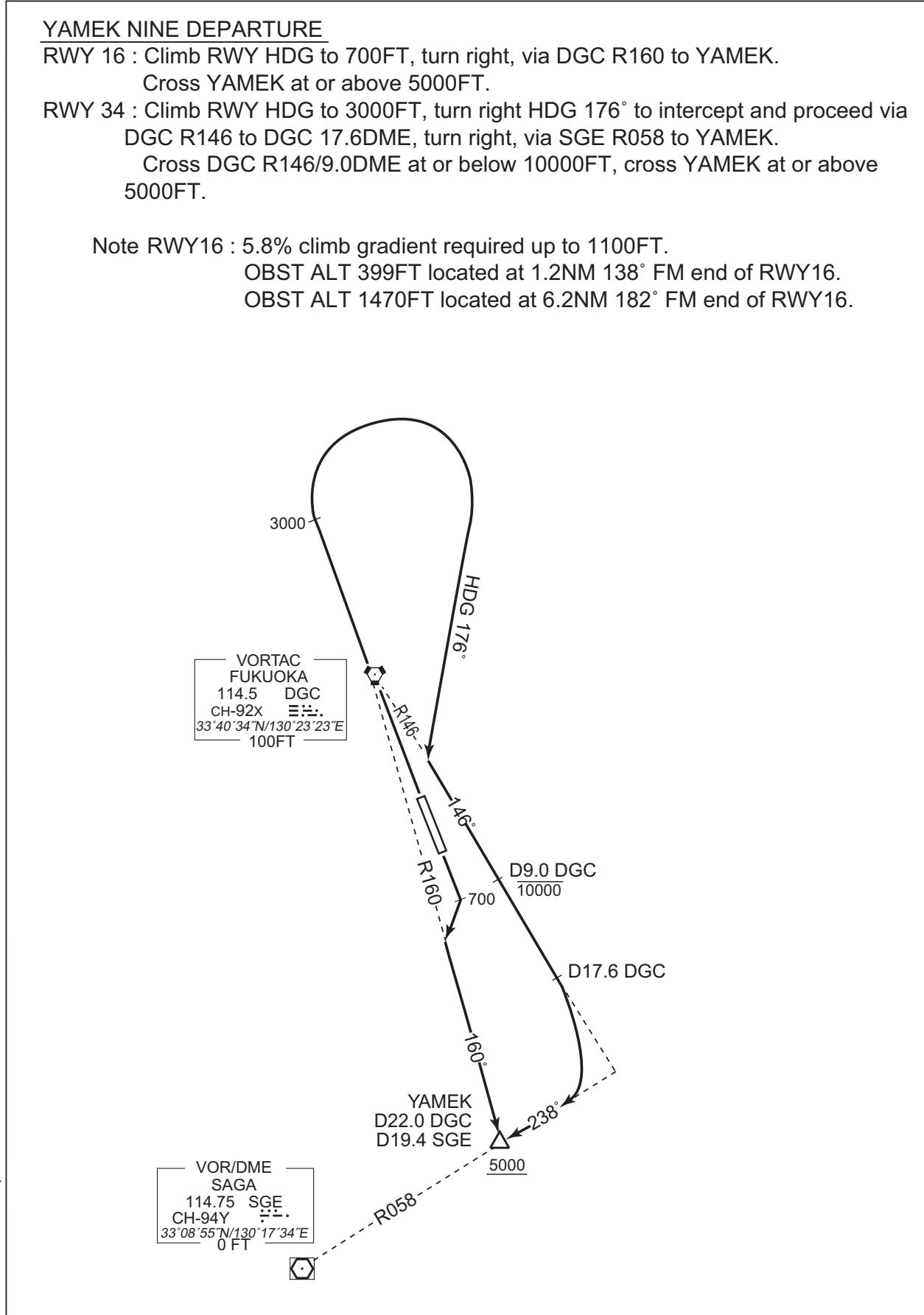
Cross DGC R146/9.0DME at or below 10000FT, cross YAMEK at or above 5000FT.

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.

CHANGE : Description of PROC name.



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.

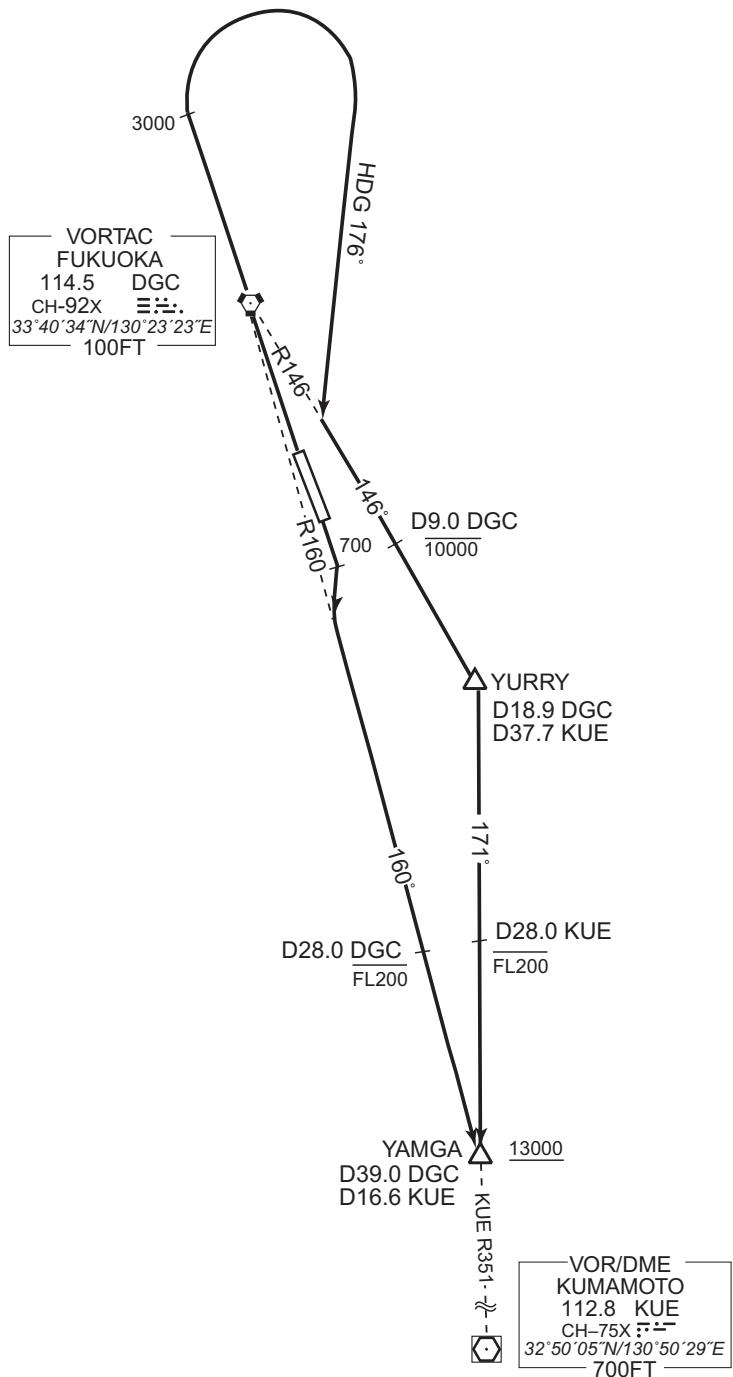
RWY 34 : Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to YURRY, turn right, via KUE R351 to YAMGA.

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 : Description of PROC name.

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.

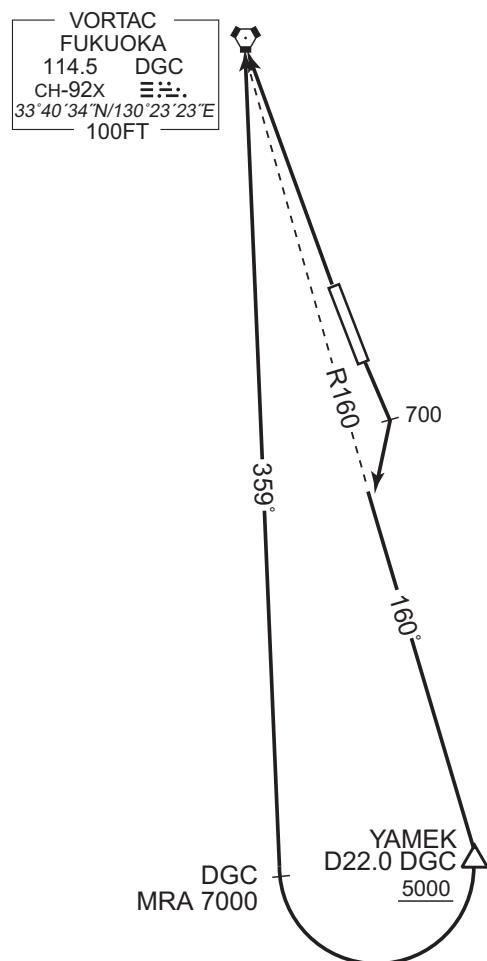
RWY 34 : Climb direct to DGC VORTAC.

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.

CHANGE : Description of PROC name.



STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

TRANSITION

KAGOSHIMA TRANSITION

From over YAMGA, proceed via HKC R013 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

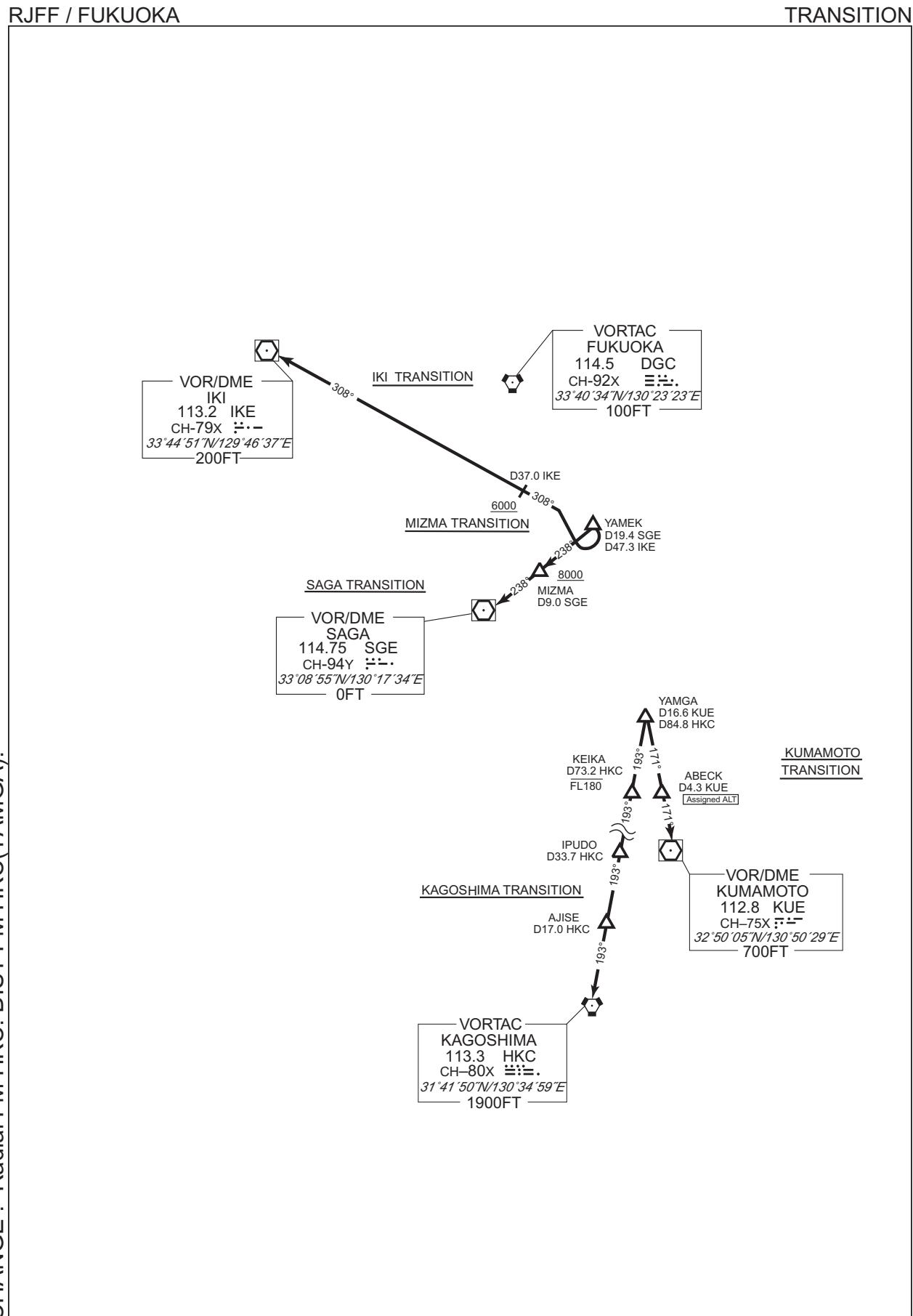
From over YAMEK, proceed via SGE R058 to MIZMA.
Cross MIZMA at or above 8000FT.

IKI TRANSITION

From over YAMEK, turn right, proceed via IKE R128 to IKE VOR/DME .
Cross IKE R128/37.0DME at or above 6000FT.

CHANGE : Radial FM HKC.

STANDARD DEPARTURE CHART-INSTRUMENT



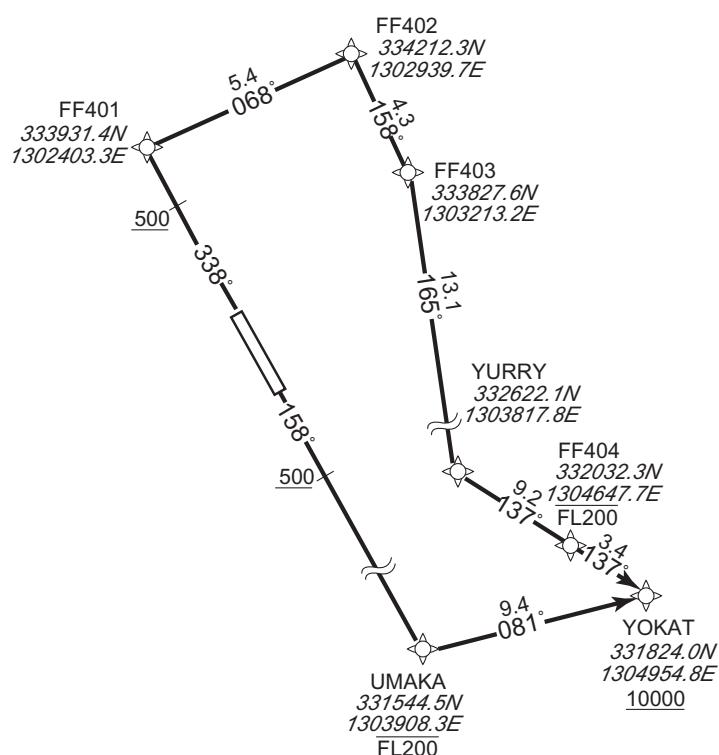
STANDARD DEPARTURE CHART-INSTRUMENT

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



CHANGE : Description of VAR and PROC name.

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 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

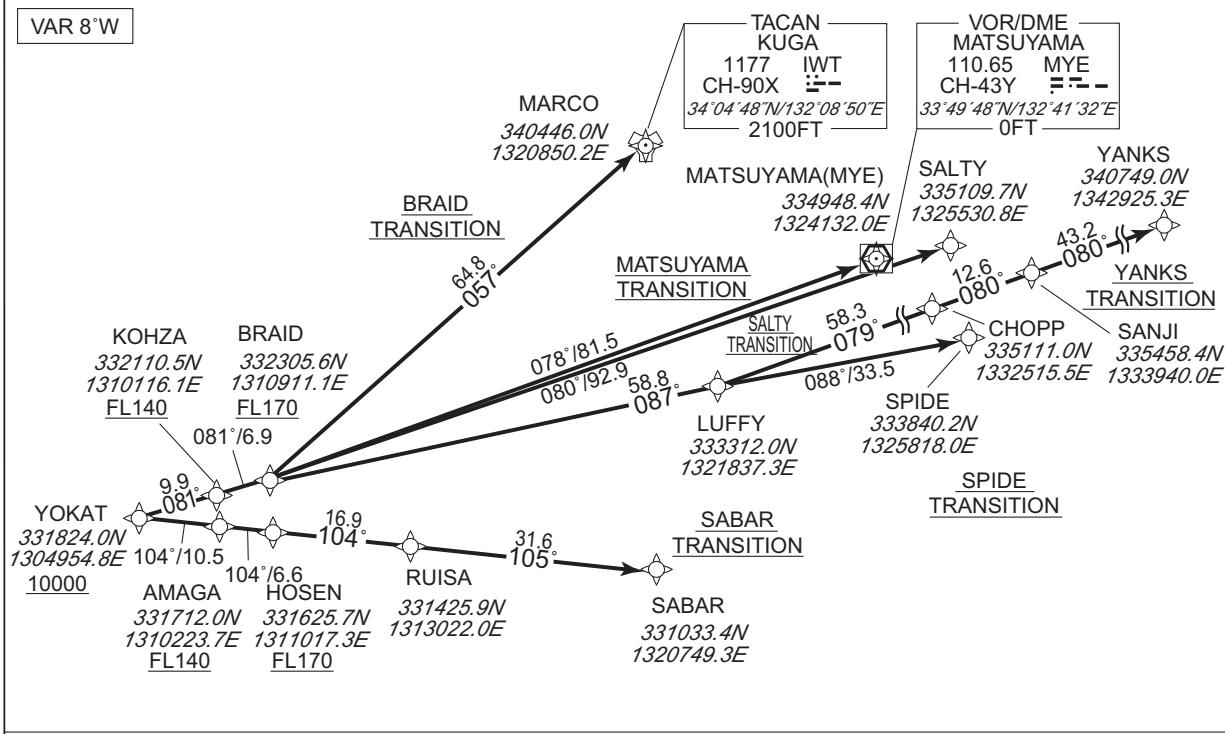
CHANGE : VAR. PROC renamed. PROC course.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

BRAID TRANSITION / MATSUYAMA TRANSITION / SALTY TRANSITION 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



CHANGE : Description of VAR.

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	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 NAVAIDs for RNAV1
<div style="border: 1px solid black; padding: 2px; display: inline-block;">VAR 8°W</div>		
<p>KURUME FOUR DEPARTURE</p> <p>RWY34 : Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to YAMEK.</p> <p>RWY16 : Climb on HDG 158° at or above 500FT, direct to YAMEK.</p> <p>Note RWY34 : 7.0% climb gradient required up to 2800FT.</p> <p>RWY16 : 5.8% climb gradient required up to 1100FT.</p> <p>OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.</p> <p>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>		

CHANGE : Description of VAR.

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.

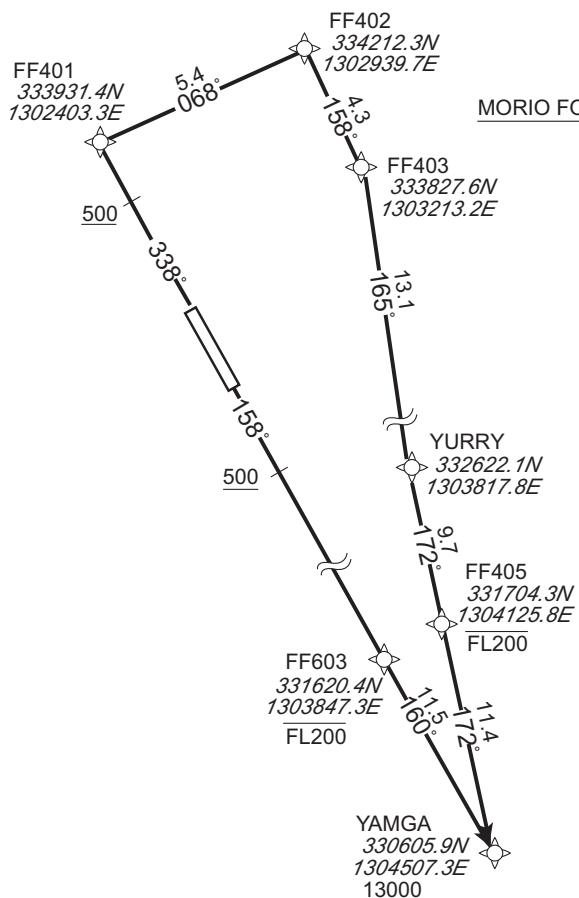
STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

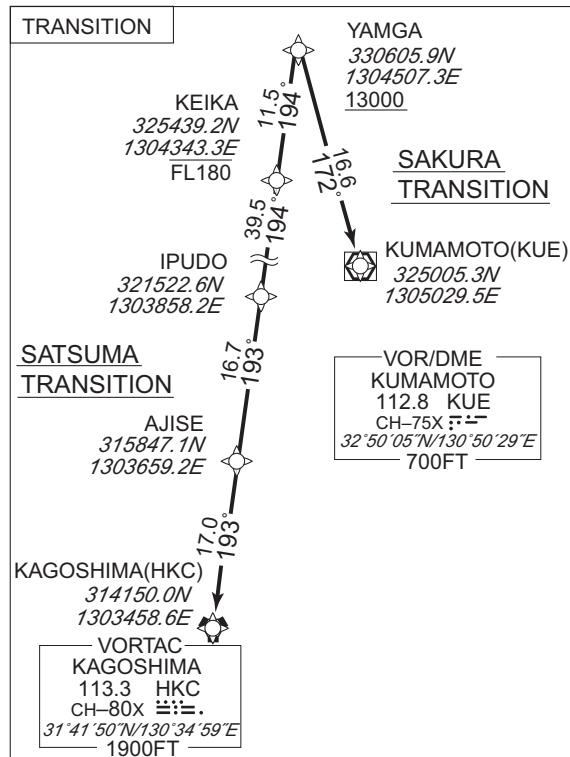
RNAV SID and TRANSITION

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 NAVAIDs for RNAV1

VAR 8°W



MORIO FOUR DEPARTURE



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.

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 13000FT, to KUE.

SATSUMA TRANSITION

From YAMGA at or above 13000FT, to KEIKA at or below FL180, to IPUDO, to AJISE, to HKC.

CHANGE : Description of VAR.

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.

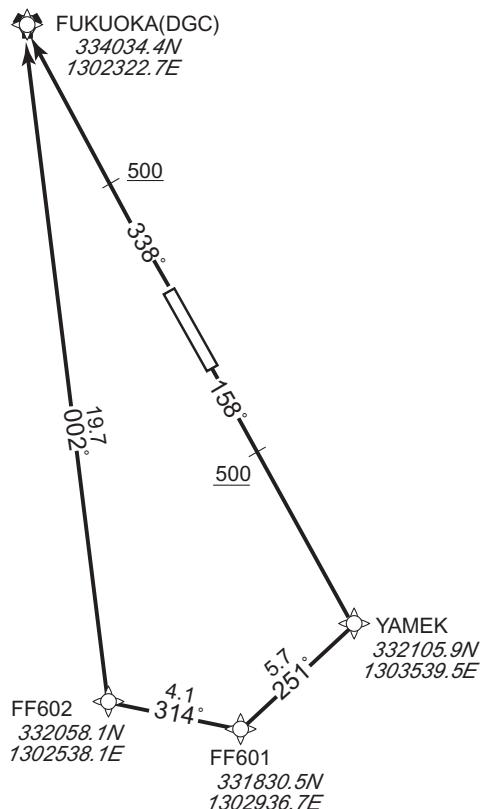
STANDARD DEPARTURE CHART - INSTRUMENT

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. 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 "4.6NM to DGC~3.0NM to DGC" IKE "4.6NM to DGC~3.0NM to DGC"
	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



CHANGE : Description of VAR and PROC name.

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 R074 to intercept and proceed via DGC R338 to MALTS via LAGER.

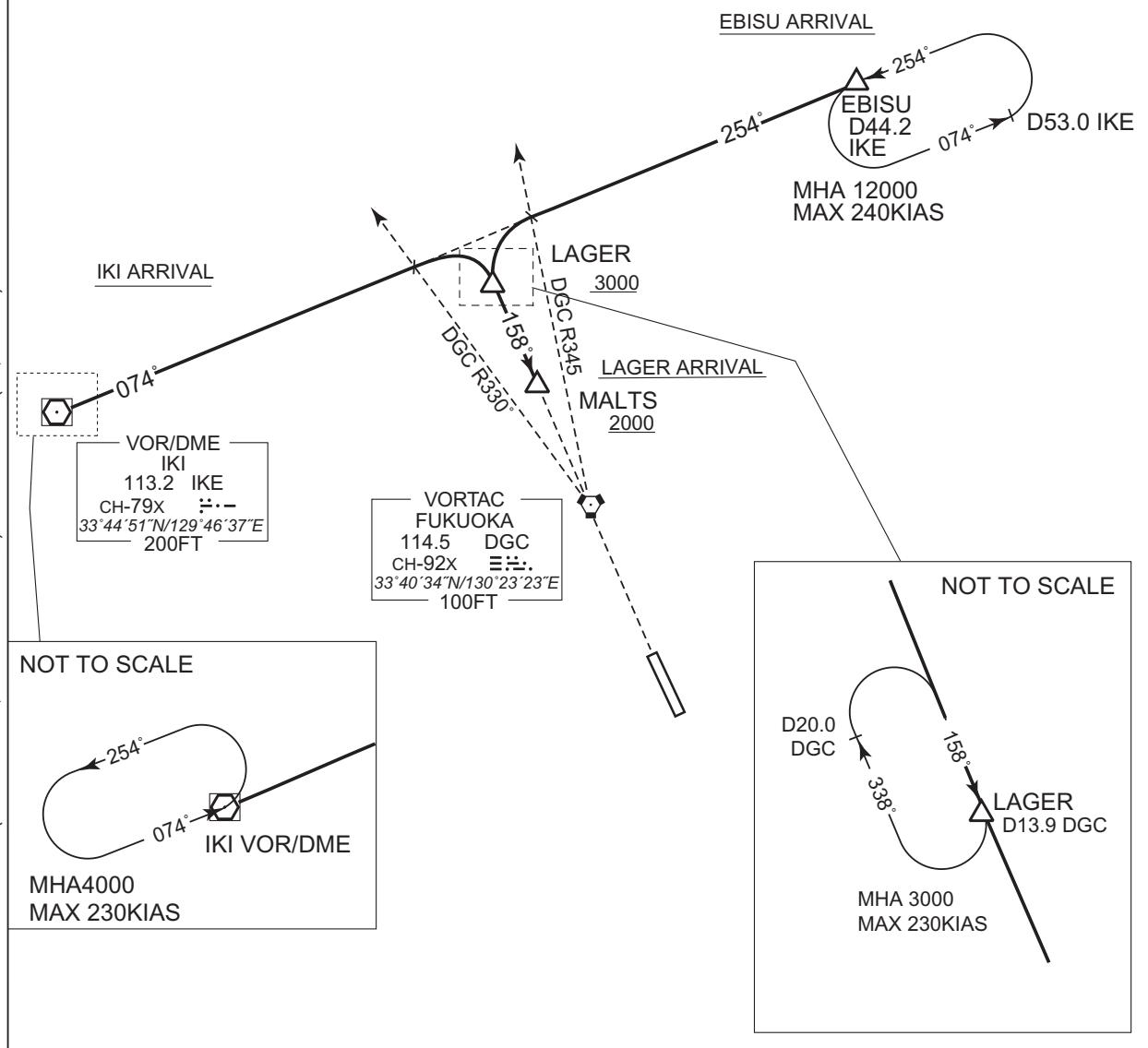
Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.

IKI ARRIVAL

From over IKE VOR/DME, via IKE R074 to intercept and proceed via DGC R338 to MALTS via LAGER.

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

CHANGE : PROC course(IKI ARRIVAL, EBISU ARRIVAL), HLDG course(IKI, EBISU).



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

STAR

KAFRI EAST ARRIVAL

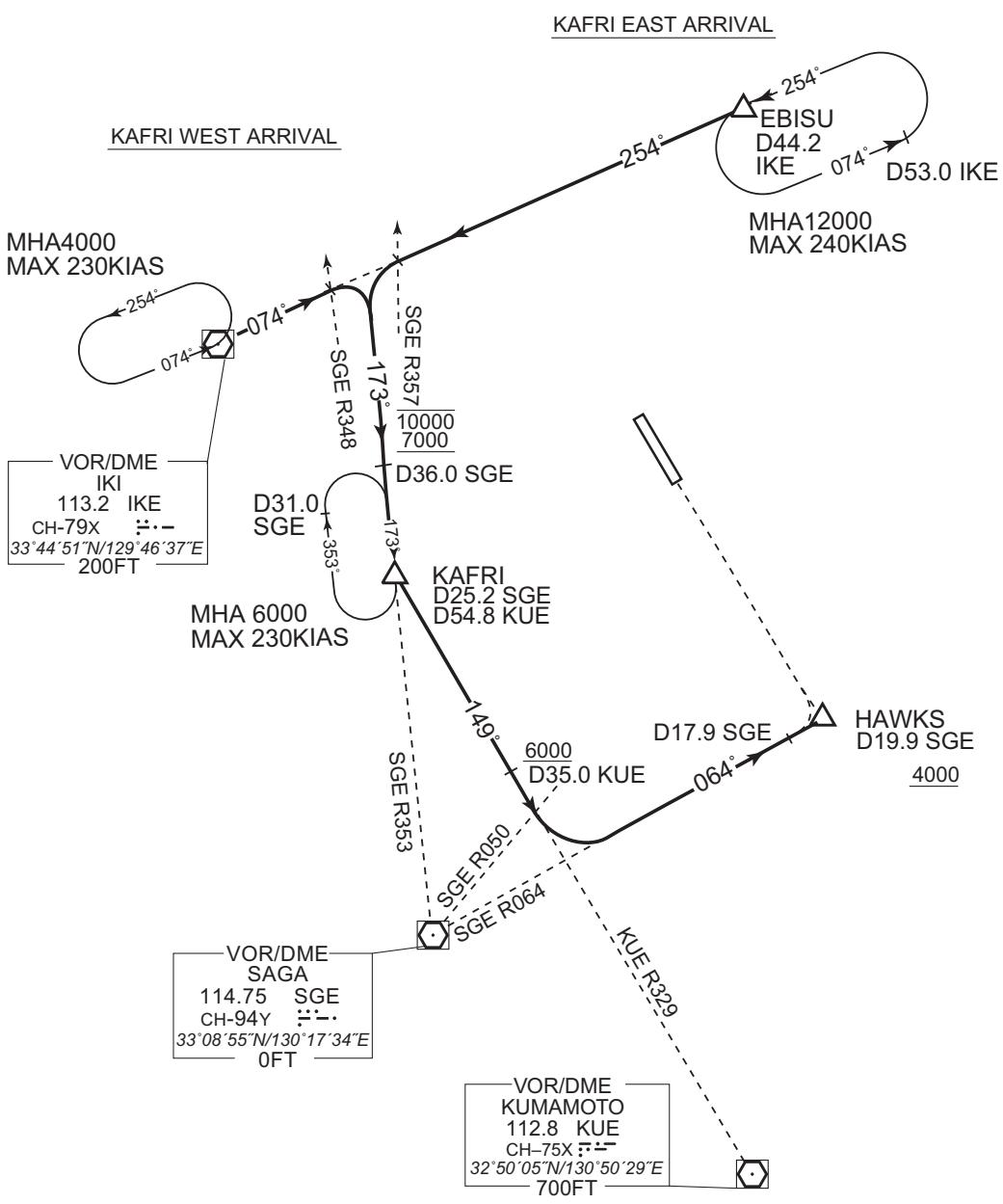
From over EBISU, proceed via IKE R074 to intercept and proceed via SGE R353 to KAFRI, via KUE R329 to intercept and proceed via SGE R064 to HAWKS.

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 R074 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 / ISKUP SOUTH ARRIVAL

RNAV 1

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

VAR 8° W
1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
254°
074° IKI (IKE)
MHA 5000
MAX 230KIAS (at or below FL140)
MAX 240KIAS (above FL140)

1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
018°
198°
LAGER
MHA 6000
MAX 230KIAS (at or below FL140)
MAX 240KIAS (above FL140)

1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
255°
075° EBISU
MHA 12000
MAX 230KIAS (at or below FL140)
MAX 240KIAS (above FL140)

1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
047°
221° KIRIN
MHA 12000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
242°
062° KEYAH
MHA 5000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

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

ORONN
334831.1N
1300659.0E
6000
17.3
085°
LAGER
335238.3N
1301504.7E
11.0
198°

EBISU
340220.1N
1303527.7E
12000
12.5°
254°
19.5°
248°
KIRIN
340717.9N
1304919.3E
12000
12.1°
199°
for HAWKS EAST ARRIVAL

CHANGE : HLDG pattern for using NAVAID abolished. RNAV HLDG established(IKI, LAGER, EBISU).

HAWKS WEST ARRIVAL

IKI(IKE)
334451.0N
1294636.7E
17.3
085°
KEYAH
333611.4N
1300310.7E
9.1
062°
ISKUP
332847.3N
1295046.6E
7000
12.1
062°
AMAOH
332809.0N
1300959.9E
3.3°
3.3°
ISKUP SOUTH ARRIVAL

6000
17.1°
11.0
198°
NOKOH
334149.5N
1301240.1E
15.6°
15.6°
BEAMA
333346.7N
1301928.8E
15.6°
15.6°
SOFTO
332543.5N
1302616.3E
15.9°
15.9°
HONOK
332006.3N
1301647.8E
7000
15.3°
15.3°
BANKU
331739.9N
1303302.5E
5000
MAX 210KIAS

OSTEP
330831.8N
1302632.1E

HAWKS SOUTH ARRIVAL

ITODA
334242.2N
1304333.1E
10000
8000

HAWKS EAST ARRIVAL

KAHOC
332847.4N
1304018.8E
7000

DAZAI
332200.9N
1304208.1E
5000

1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
356°
179°
KAHOC
MHA 7000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

1MIN(at or below FL140)
1.5MIN(above FL140)
NOT TO SCALE
33°
33°
BANKU
MHA 5000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

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	IKE	074 (066.4)	-8.0	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 : RNAV HLDG established(IKE).

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	EBISU	255 (246.6)	-8.0	1.0(-14000) 1.5(+14001)	L	12000	—	-230(-14000) -240(+14001)	RNAV1
Hold	LAGER	198 (190.5)	-8.0	1.0(-14000) 1.5(+14001)	R	6000	—	-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 : RNAV HLDG established(EBISU, LAGER).

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.

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

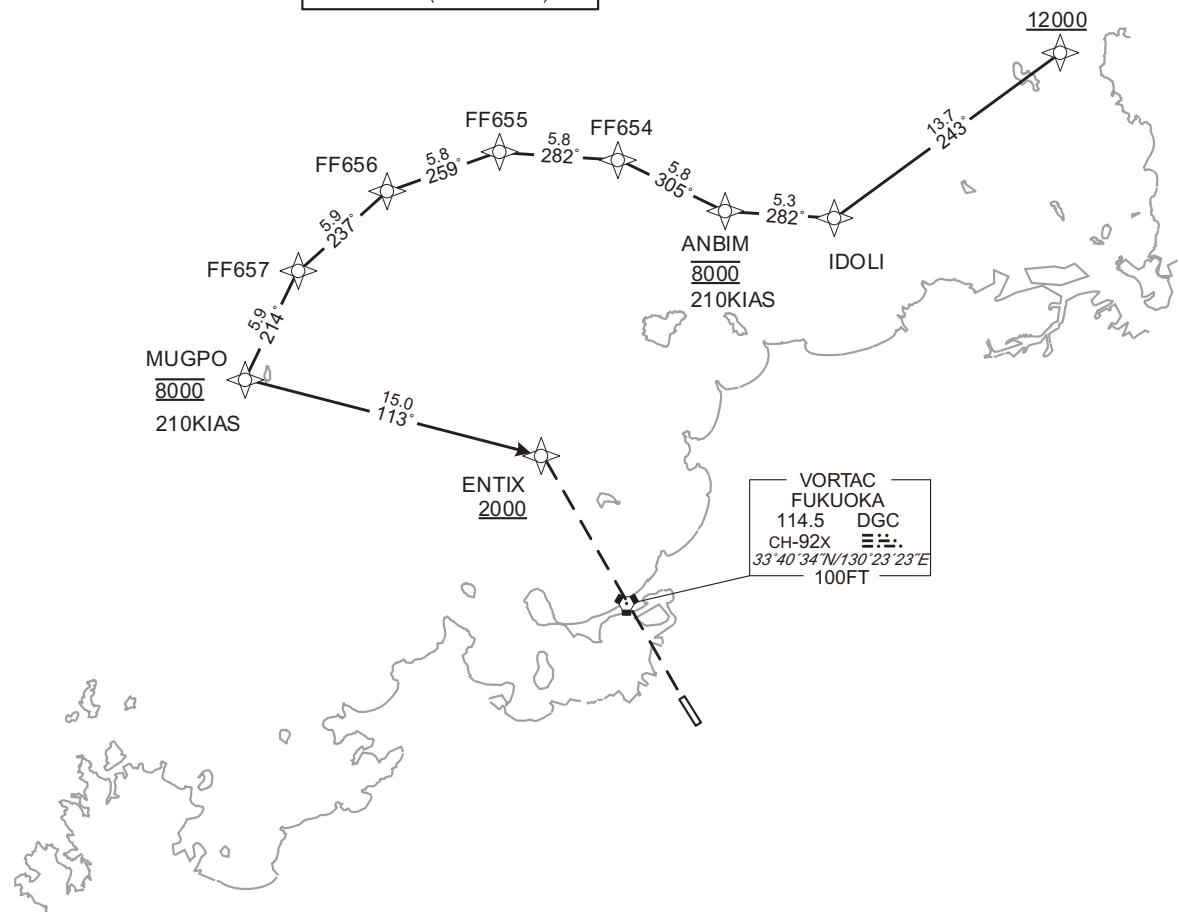
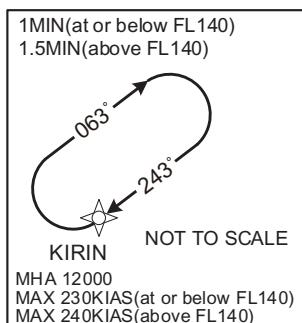
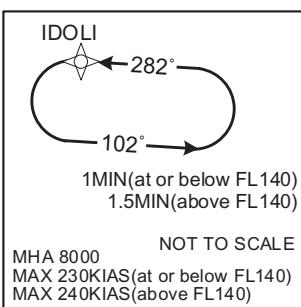
KIRIN ARRIVAL

RNAV 1

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

2) RADAR service required.

VAR 8° W



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

KIRIN ARRIVAL

From KIRIN at or above 12000FT, to IDOLI, to ANBIM at 8000FT, to FF654, to FF655, to FF656, to FF657, to MUGPO at 8000FT, to ENTIX at or above 2000FT.

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	-	-	-8.0	-	-	+12000	-	-	RNAV1
002	TF	IDOLI	-	243 (235.0)	-8.0	13.7	-	-	-	-	RNAV1
003	TF	ANBIM	-	282 (274.2)	-8.0	5.3	-	8000	210	-	RNAV1
004	TF	FF654	-	305 (296.8)	-8.0	5.8	-	-	-	-	RNAV1
005	TF	FF655	-	282 (274.1)	-8.0	5.8	-	-	-	-	RNAV1
006	TF	FF656	-	259 (251.4)	-8.0	5.8	-	-	-	-	RNAV1
007	TF	FF657	-	237 (228.8)	-8.0	5.9	-	-	-	-	RNAV1
008	TF	MUGPO	-	214 (206.3)	-8.0	5.9	-	8000	210	-	RNAV1
009	TF	ENTIX	-	113 (105.2)	-8.0	15.0	-	+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	243 (235.1)	-8.0	1.0(-14000) 1.5(+14001)	R	12000	-	-230(-14000) -240(+14001)	RNAV1
Hold	IDOLI	282 (274.3)	-8.0	1.0(-14000) 1.5(+14001)	L	8000	-	-230(-14000) -240(+14001)	RNAV1

Waypoint Coordinates

Waypoint Identifier	Coordinates
KIRIN	340717.9N / 1304919.3E
IDOLI	335926.2N / 1303546.7E
ANBIM	335949.6N / 1302922.5E
FF654	340227.2N / 1302304.8E
FF655	340252.2N / 1301603.1E
FF656	340100.5N / 1300922.3E
FF657	335709.4N / 1300403.8E
MUGPO	335154.2N / 1300056.2E
ENTIX	334757.5N / 1301818.9E

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

OSTEP ARRIVAL / ISKUP ARRIVAL / ATSAG ARRIVAL / SARUP ARRIVAL

RNAV 1

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

VAR 8° W

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

283°

103°

SARUP

MHA 6000
MAX 230KIAS(at or below FL140)

NOT TO SCALE

Diagram illustrating a turn with two headings: 029° and 209°. A note at the bottom right says 'NOT TO SCALE'.

SARUP ARRIVAL

FLCHT (Flight Level Chart) showing flight levels and headings for various aircraft. The chart includes labels for FF663, FF664, FF665, FF666, FF667, FF668, FF669, and PIKOP. It also shows a 203°/16.5 and 203°/18.0 heading. A legend on the right indicates 1MIN (at or below FL140) and 1.5MIN (above FL140).

ATSAG ARRIVAL

A map of the Arctic region showing the location of the ISKUP research station and the arrival point of the research vessel. The map includes the Beaufort Sea, the Canadian Archipelago, and the Mackenzie River delta. The ISKUP location is marked with a diamond symbol, and the arrival point is marked with a star symbol. A line connects the two points, indicating the route of the vessel.

OSTEP ARRIVAL

Civil Aviation Bureau,Japan (EFF:2 NOV 2023)

5/10/23

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

OSTEP ARRIVAL

From OSTEP, to HONOK, to AMAOH, to KEYAH, to AKSIL at 7000FT, to FF658, to FF659, to FF660, to FF661, to PIKOP at 7000FT, to ENTIX at or above 2000FT.

Critical DME	DGC	7.0NM to ENTIX - ENTIX
	IKE	1.0NM to ENTIX - ENTIX
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	OSTEP	-	-	-8.0	-	-	-	-	-	RNAV1
002	TF	HONOK	-	333 (324.9)	-8.0	14.2	-	-	-	-	RNAV1
003	TF	AMAOH	-	333 (324.8)	-8.0	9.9	-	-	-	-	RNAV1
004	TF	KEYAH	-	333 (324.8)	-8.0	9.9	-	-	-	-	RNAV1
005	TF	AKSIL	-	348 (339.9)	-8.0	10.8	-	7000	210	-	RNAV1
006	TF	FF658	-	012 (003.8)	-8.0	6.0	-	-	-	-	RNAV1
007	TF	FF659	-	034 (026.3)	-8.0	6.4	-	-	-	-	RNAV1
008	TF	FF660	-	057 (048.8)	-8.0	6.4	-	-	-	-	RNAV1
009	TF	FF661	-	079 (071.4)	-8.0	6.4	-	-	-	-	RNAV1
010	TF	PIKOP	-	102 (094.0)	-8.0	6.4	-	7000	210	-	RNAV1
011	TF	ENTIX	-	203 (195.3)	-8.0	16.5	-	+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	HONOK	333 (324.9)	-8.0	1.0(-14000) 1.5(+14001)	R	7000	-	-230(-14000) -240(+14001)	RNAV1
Hold	KEYAH	333 (324.8)	-8.0	1.0(-14000) 1.5(+14001)	R	7000	-	-230(-14000) -240(+14001)	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

ISKUP ARRIVAL

From ISKUP, to AKSIL, at 7000FT, to FF658, to FF659, to FF660, to FF661, to PIKOP, at 7000FT, to ENTIX at or above 2000FT.

Critical DME	DGC	7.0NM to ENTIX - ENTIX
	IKE	1.0NM to ENTIX - ENTIX
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	ISKUP	-	-	-8.0	-	-	-	-	-	RNAV1
002	TF	AKSIL	-	029 (020.6)	-8.0	18.8	-	7000	210	-	RNAV1
003	TF	FF658	-	012 (003.8)	-8.0	6.0	-	-	-	-	RNAV1
004	TF	FF659	-	034 (026.3)	-8.0	6.4	-	-	-	-	RNAV1
005	TF	FF660	-	057 (048.8)	-8.0	6.4	-	-	-	-	RNAV1
006	TF	FF661	-	079 (071.4)	-8.0	6.4	-	-	-	-	RNAV1
007	TF	PIKOP	-	102 (094.0)	-8.0	6.4	-	7000	210	-	RNAV1
008	TF	ENTIX	-	203 (195.3)	-8.0	16.5	-	+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	ISKUP	029 (020.6)	-8.0	1.0(-14000) 1.5(+14001)	R	7000	-	-230(-14000) -240(+14001)	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

ATSAG ARRIVAL

From ATSAG, to IKE, to OSPUN, at 6000FT, to FF662, to FF663, to FF664, to FF665, to SEDKA at 6000FT, to ENTIX at or above 2000FT.

Critical DME	DGC	6.0NM to ENTIX - ENTIX
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	ATSAG	-	-	-8.0	-	-	-	-	-	RNAV1
002	TF	IKE	-	045 (036.6)	-8.0	6.2	-	-	-	-	RNAV1
003	TF	OSPUN	-	057 (049.2)	-8.0	6.9	-	6000	210	-	RNAV1
004	TF	FF662	-	057 (048.7)	-8.0	5.0	-	-	-	-	RNAV1
005	TF	FF663	-	034 (026.2)	-8.0	7.0	-	-	-	-	RNAV1
006	TF	FF664	-	057 (048.8)	-8.0	7.0	-	-	-	-	RNAV1
007	TF	FF665	-	079 (071.4)	-8.0	7.0	-	-	-	-	RNAV1
008	TF	SEDKA	-	102 (094.0)	-8.0	7.0	-	6000	210	-	RNAV1
009	TF	ENTIX	-	203 (195.3)	-8.0	18.0	-	+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	ATSAG	045 (036.6)	-8.0	1.0(-14000) 1.5(+14001)	R	6000	-	-230(-14000) -240(+14001)	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

SARUP ARRIVAL

From SARUP, to OSPUN at 6000FT, to FF662, to FF663, to FF664, to FF665, to SEDKA at 6000FT, to ENTIX at or above 2000FT.

Critical DME	DGC	6.0NM to ENTIX - ENTIX
DME GAP		-
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1	

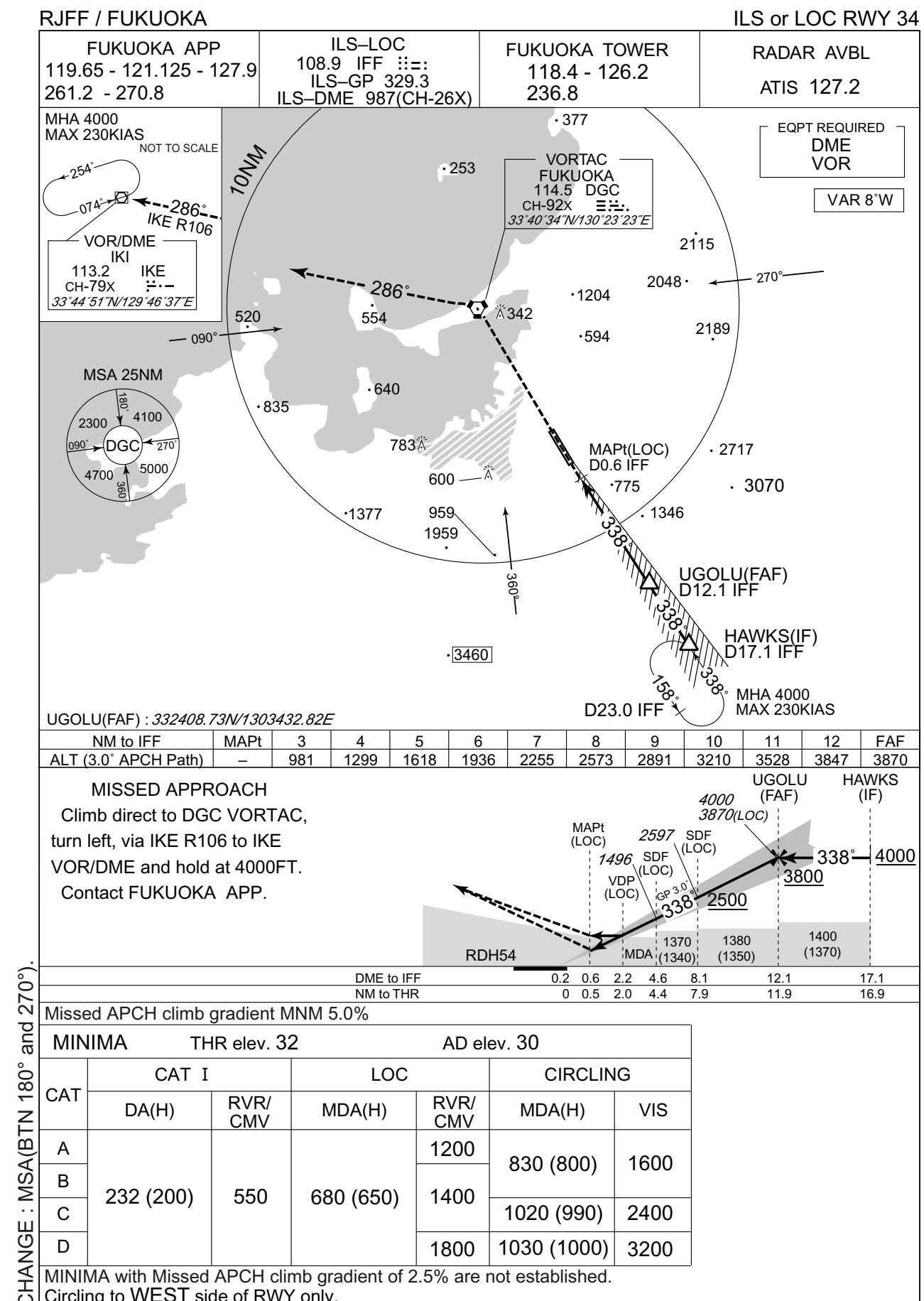
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	SARUP	-	-	-8.0	-	-	-	-	-	RNAV1
002	TF	OSPUN	-	103 (095.0)	-8.0	8.5	-	6000	210	-	RNAV1
003	TF	FF662	-	057 (048.7)	-8.0	5.0	-	-	-	-	RNAV1
004	TF	FF663	-	034 (026.2)	-8.0	7.0	-	-	-	-	RNAV1
005	TF	FF664	-	057 (048.8)	-8.0	7.0	-	-	-	-	RNAV1
006	TF	FF665	-	079 (071.4)	-8.0	7.0	-	-	-	-	RNAV1
007	TF	SEDKA	-	102 (094.0)	-8.0	7.0	-	6000	210	-	RNAV1
008	TF	ENTIX	-	203 (195.3)	-8.0	18.0	-	+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	SARUP	103 (094.9)	-8.0	1.0(-14000) 1.5(+14001)	L	6000	-	-230(-14000) -240(+14001)	RNAV1

Waypoint Coordinates

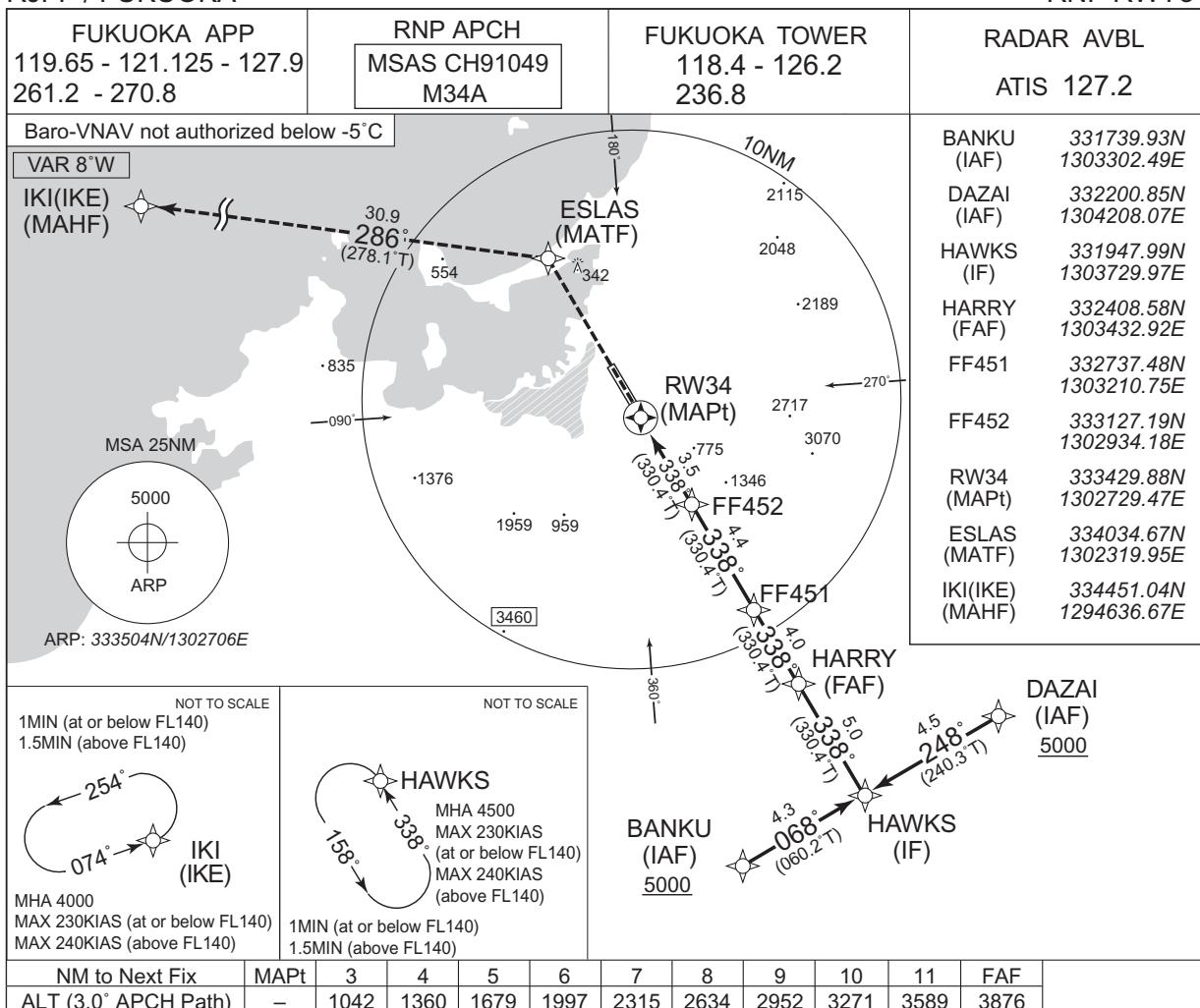
Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
OSTEP	330831.8N / 1302632.1E	PIKOP	340354.2N / 1302333.4E
HONOK	332006.3N / 1301647.8E	ATSAG	333953.2N / 1294210.5E
AMAOH	332809.0N / 1300959.9E	SARUP	335008.4N / 1294244.7E
KEYAH	333611.4N / 1300310.7E	OSPUN	334923.3N / 1295256.2E
ISKUP	332847.3N / 1295046.6E	FF662	335241.2N / 1295727.4E
IKE	334451.0N / 1294636.7E	FF663	335859.6N / 1300112.4E
AKSIL	334619.9N / 1295842.8E	FF664	340337.0N / 1300734.7E
FF658	335217.7N / 1295911.8E	FF665	340551.1N / 1301535.9E
FF659	335804.5N / 1300238.1E	SEDKA	340521.2N / 1302402.1E
FF660	340218.8N / 1300828.5E	ENTIX	334757.5N / 1301818.9E
FF661	340421.6N / 1301549.5E		

INSTRUMENT APPROACH CHART



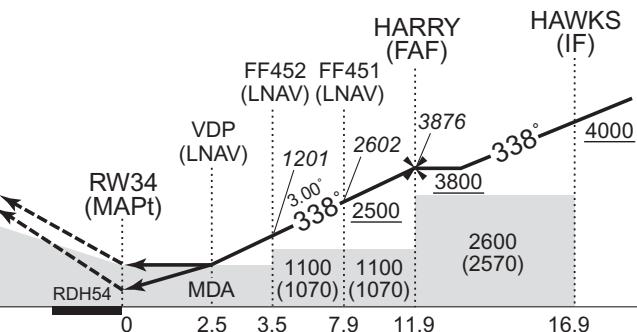
INSTRUMENT APPROACH CHART

RJFF / FUKUOKA



MISSED APPROACH

Direct to ESLAS, to IKE and hold at 4000FT. Contact FUKUOKA APP.



MINIMA THR elev. 32 AD elev. 30								
CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	306 (274)		1200		1200		830 (800)	1600
B	316 (284)	800	820 (788)	1400	820 (790)	1400	1020 (990)	2400
C	326 (294)			1800		1800	1030 (1000)	3200
D	336 (304)	1400						

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

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

RNP RWY34

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+00424
SBAS service provider identifier	2	FPAP latitude	333548.8630N
Airport identifier	RJFF	FPAP longitude	1302635.4830E
Runway	34	Threshold crossing height	00016.5
Approach performance designator	0	TCH units selector	1
Route indicator		Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M34A	Δ length offset	0000
LTP/FTP latitude	333429.8705N	HAL	40.0
LTP/FTP longitude	1302729.4540E	VAL	50.0
CRC remainder	9DA9C0E7		

Required additional data

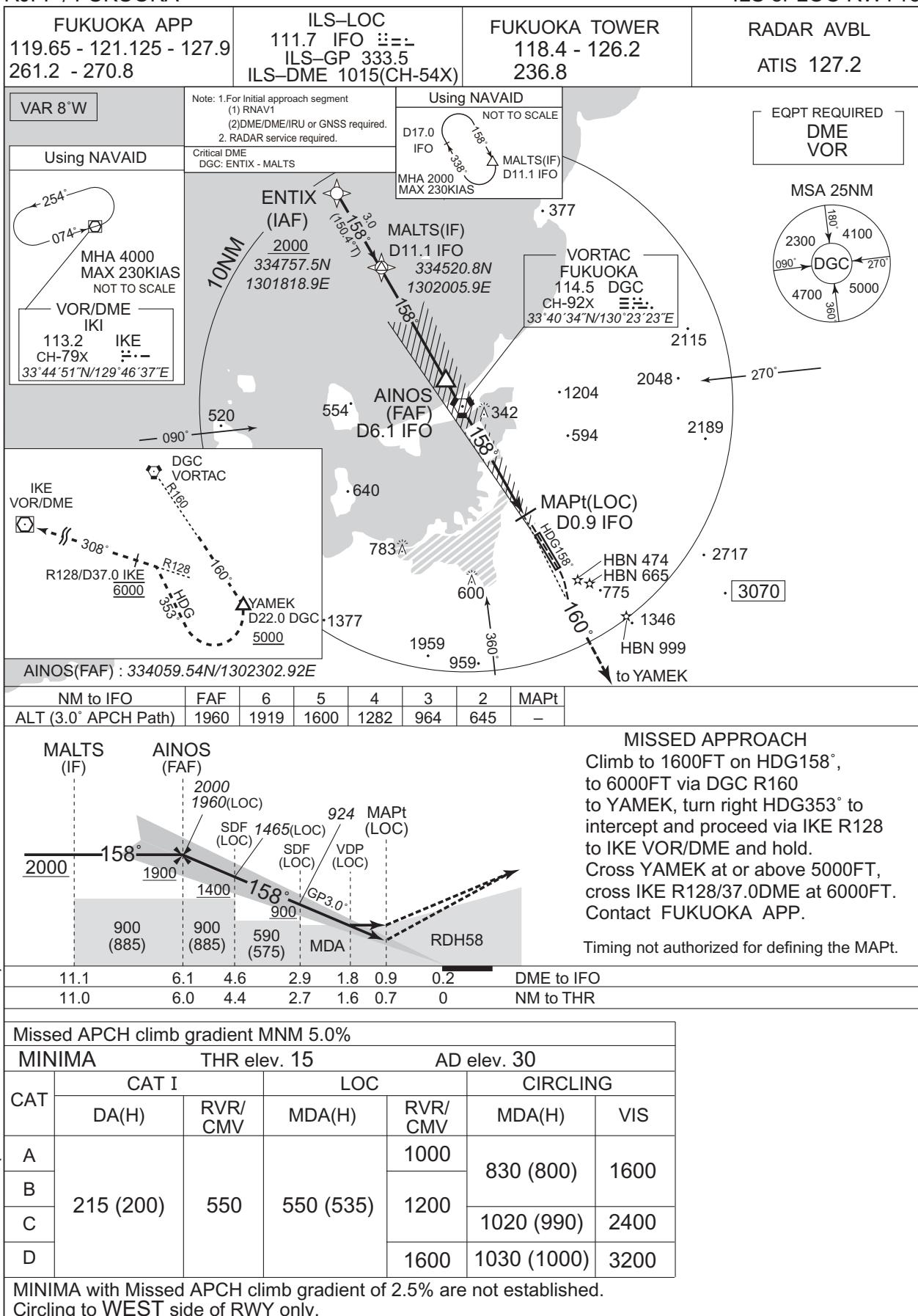
LTP/FTP orthometric height	9.8
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CHANGE : FAS DATA BLOCK and Required additional data established.

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

ILS or LOC RWY16



CHANGE : MSA(BTN 180° and 270°).

INSTRUMENT APPROACH CHART

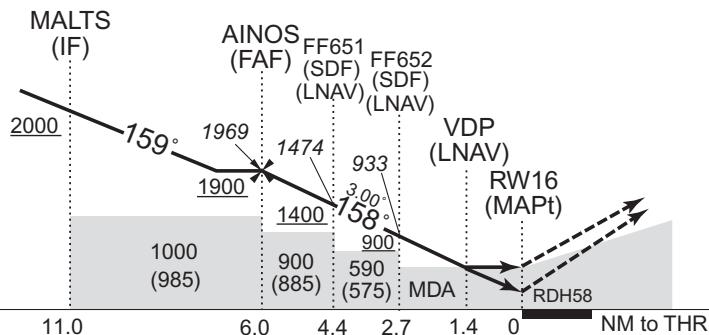
RJFF / FUKUOKA

Point	Altitude	Lat	Long
OKINO (IAF)	4000	334844.46N	1302717.18E
ENTIX (IAF)	2000	334757.48N	1301818.94E
NOKOH (IAF)	3000	334149.51N	1301240.11E
MALTS (IF)	10NM	334520.80N	1302005.94E
AINOS (FAF)	554	334059.54N	1302302.92E
FF651	342	333938.51N	1302358.41E
FF652	342	333809.81N	1302459.12E
RW16 (MAPt)	640	333548.91N	1302635.47E
FF653	783	333312.33N	1302822.43E
YAMEK (MATF)	775	332105.88N	1303539.52E
FF601 (MATF)	1346	331830.45N	1302936.66E
KAFRI (MATF)	1959	333320.84N	1301017.68E
IKI (IKE) (MAHF)	959	334451.04N	1294636.67E

MISSED APPROACH

Direct to FF653, to YAMEK at or above 5000FT,
to FF601 at 6000FT, to KAFRI, to IKE
and hold at 6000FT.

Contact FUKUOKA APP.



Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 15 AD elev. 30

MINIMA		THR elev. 15		AD elev. 30		CIRCLING		
CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	265 (250)	800	490 (475)	1000	490 (475)	1000	830 (800)	1600
B	267 (252)			1200		1200		
C	277 (262)			1600		1600	1020 (990)	2400
D	287 (272)	1200		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

RJFF / FUKUOKA

RNP RWY16

FAS DATA BLOCK

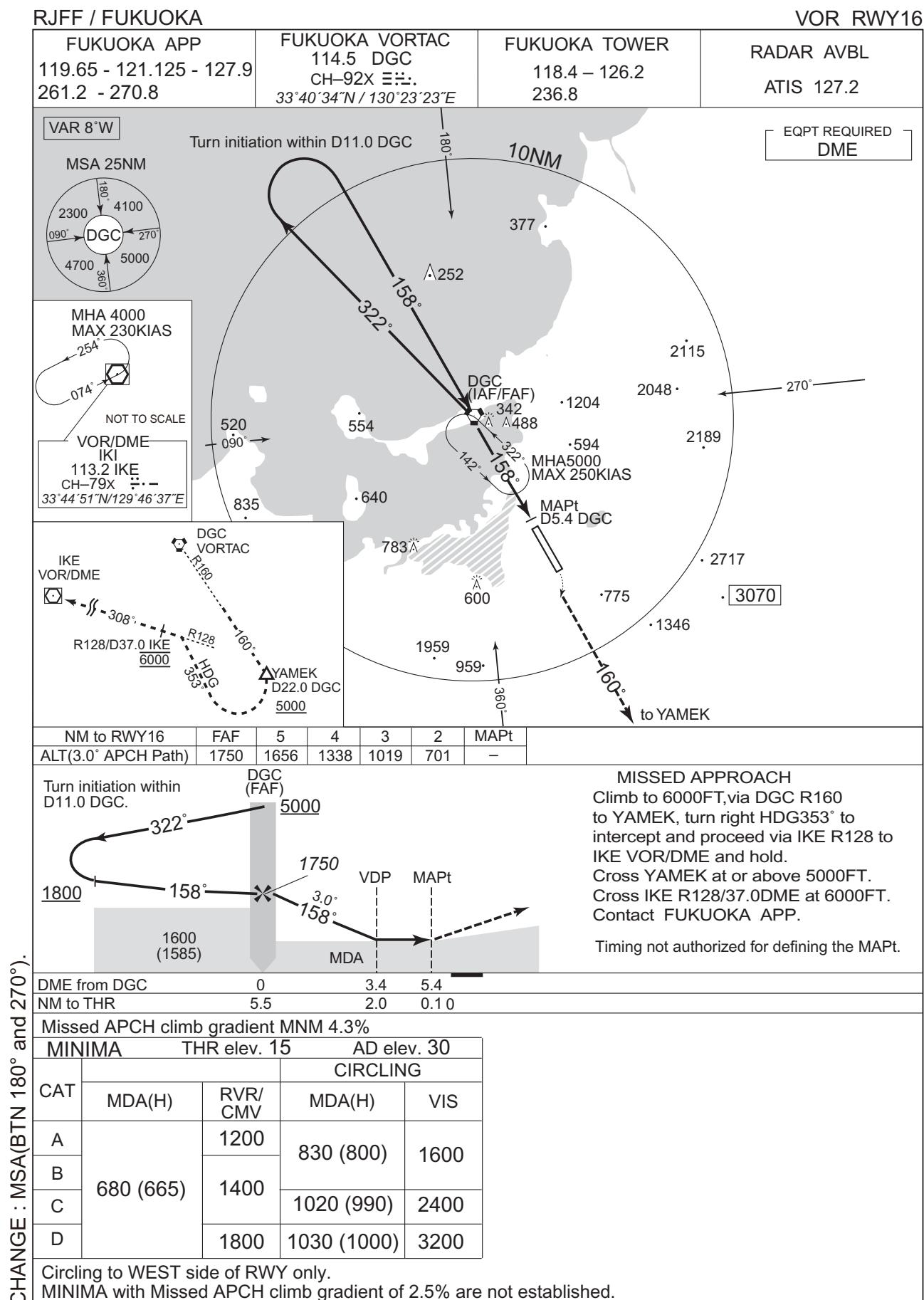
Operation type	0	LTP/FTP ellipsoidal height	+00371
SBAS service provider identifier	2	FPAP latitude	333429.8705N
Airport identifier	RJFF	FPAP longitude	1302729.4540E
Runway	16	Threshold crossing height	00017.7
Approach performance designator	0	TCH units selector	1
Route indicator		Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M16A	Δ length offset	0000
LTP/FTP latitude	333548.8630N	HAL	40.0
LTP/FTP longitude	1302635.4830E	VAL	50.0
CRC remainder	AA995500		

Required additional data

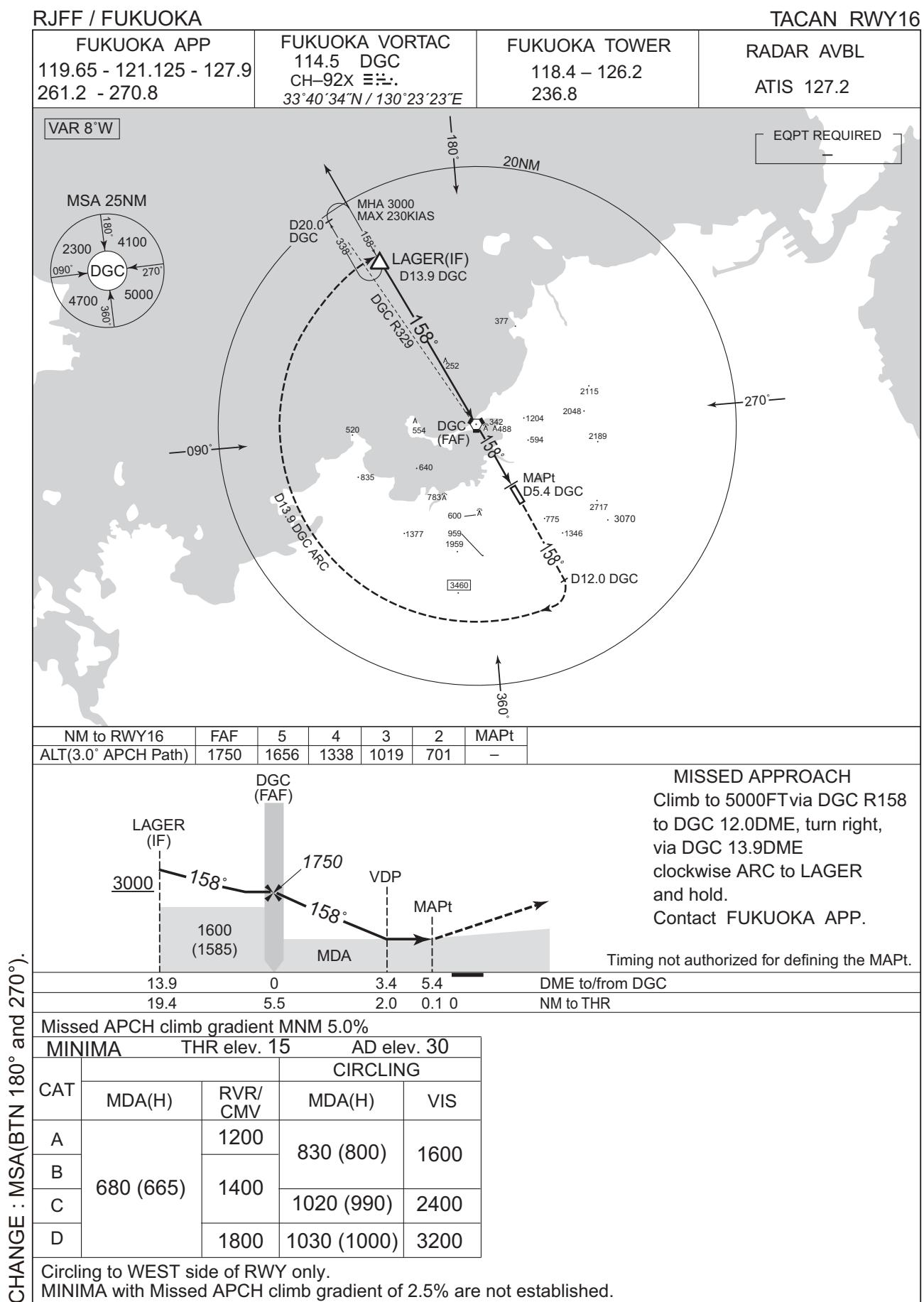
LTP/FTP orthometric height	4.5
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CHANGE : FAS DATA BLOCK and Required additional data established.

INSTRUMENT APPROACH CHART

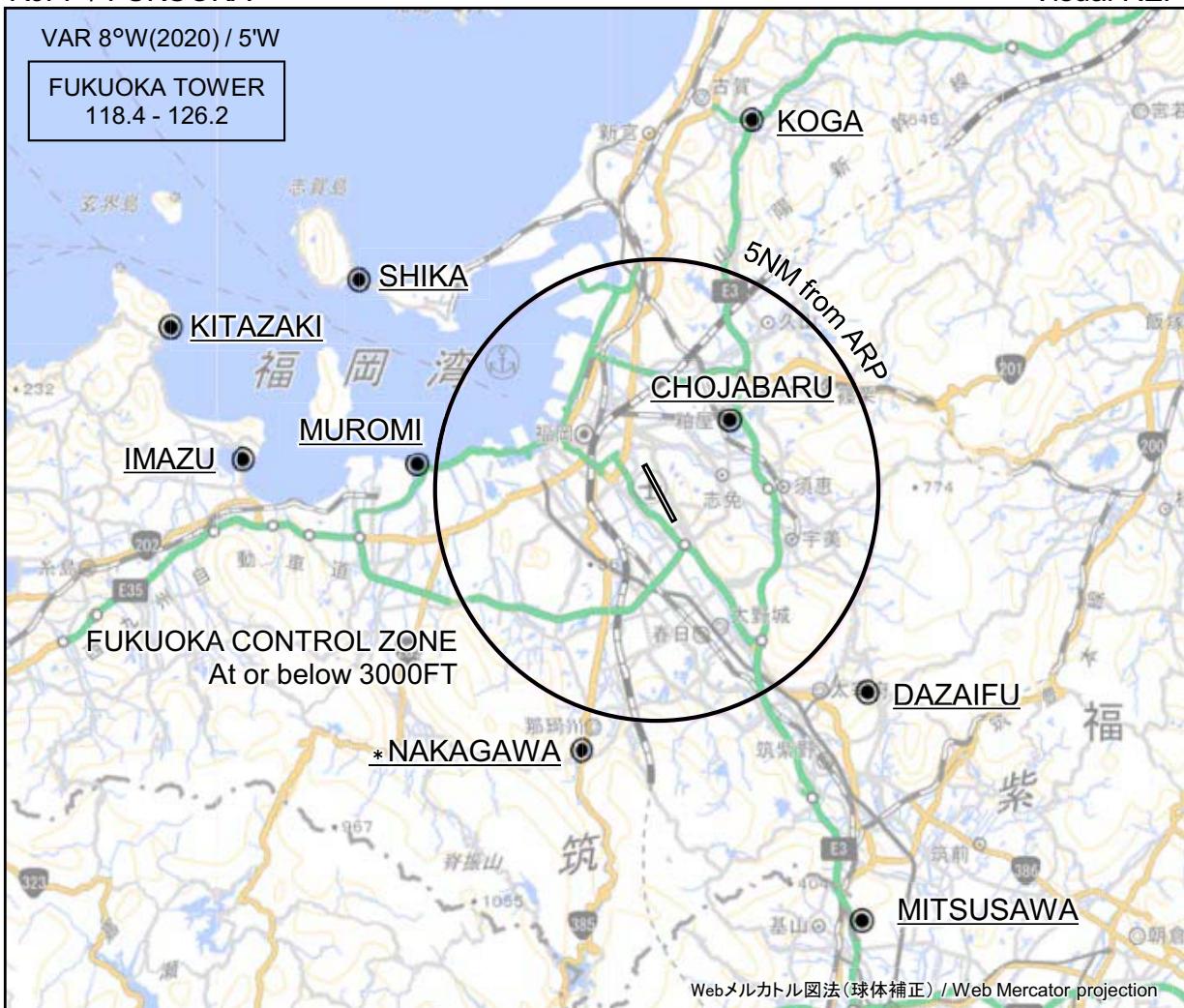


INSTRUMENT APPROACH CHART



RJFF / FUKUOKA

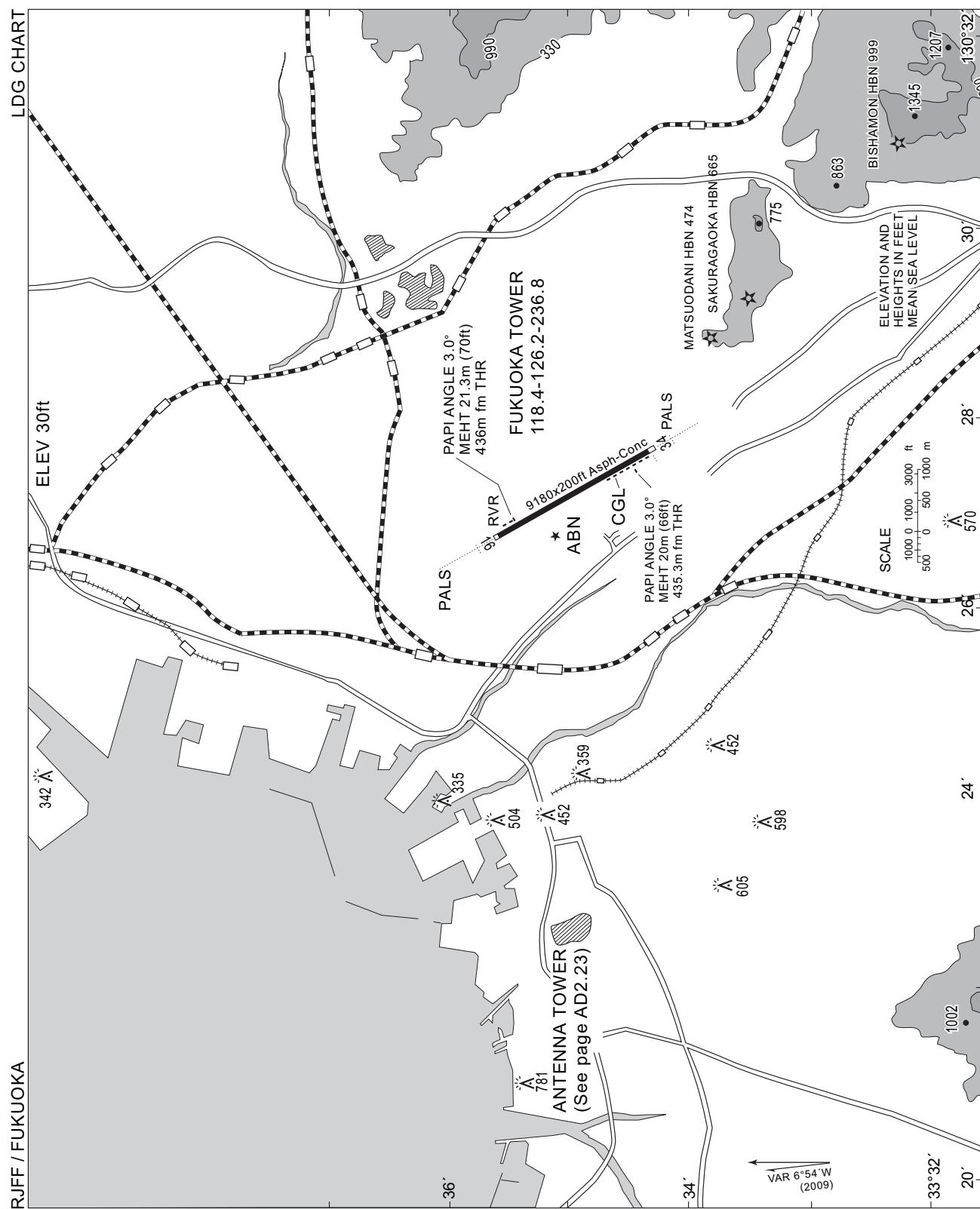
Visual REP



CHANGE : Map updated. BRG/DIST from ARP.

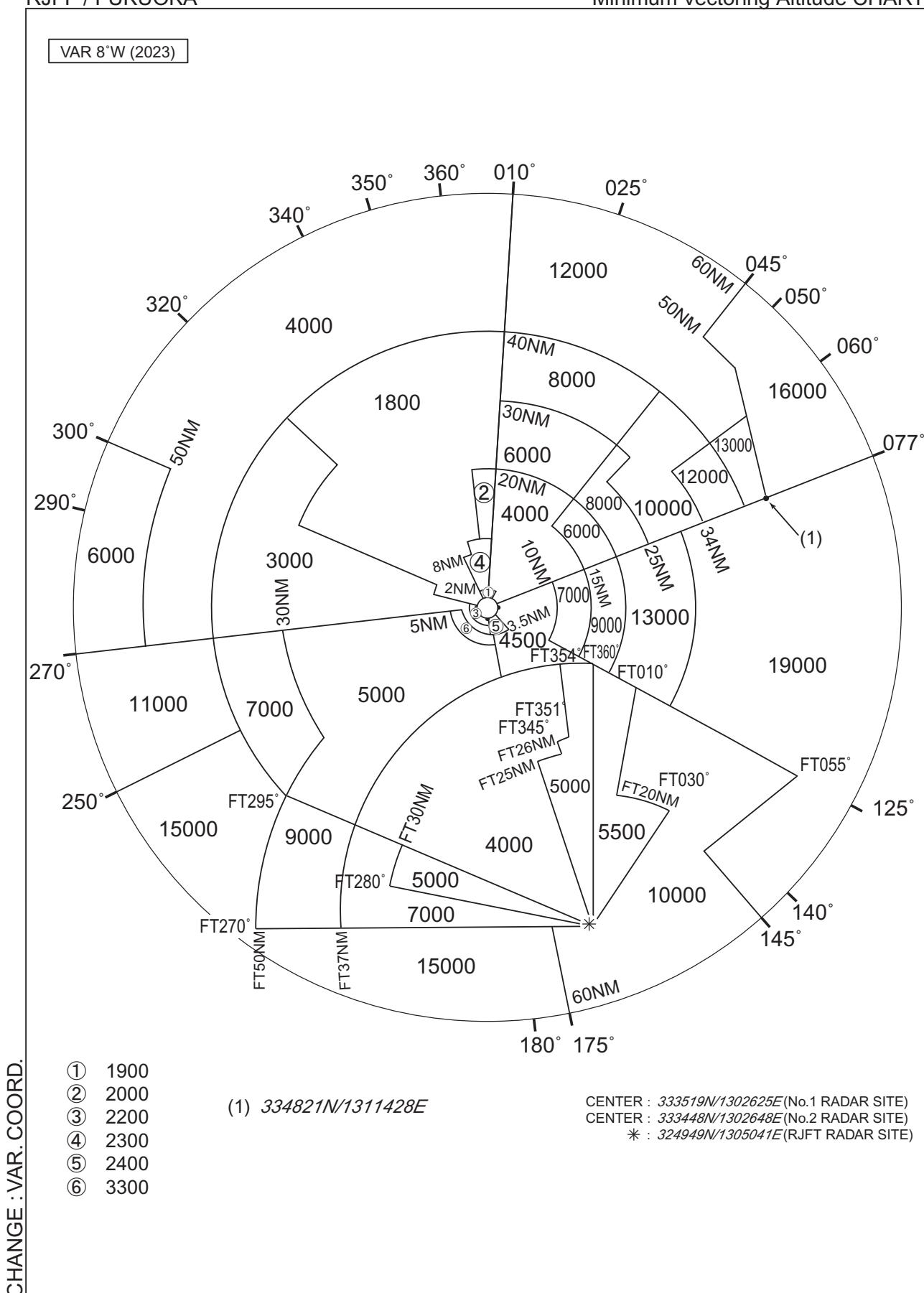
Call sign	BRG / DIST from ARP	Remarks
古賀 Koga	014°T / 8.4NM	高速道路インターチェンジ Interchange
長者原 Chojabaru	046°T / 2.3NM	ドーム型建造物 Dome
太宰府 Dazaifu	133°T / 6.4NM	ゴルフ場 Golf Course
三沢 Mitsusawa	153°T / 10.4NM	ゴルフ場 Golf Course
* 那珂川 Nakagawa	197°T / 5.8NM	松尾橋 Bridge
室見 Muromi	277°T / 5.4NM	室見川河口 River mouth
今津 Imazu	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

* ヘリコプター用 Use For Helicopter



RJFF / FUKUOKA

Minimum Vectoring Altitude CHART



INTENTIONALLY LEFT BLANK