

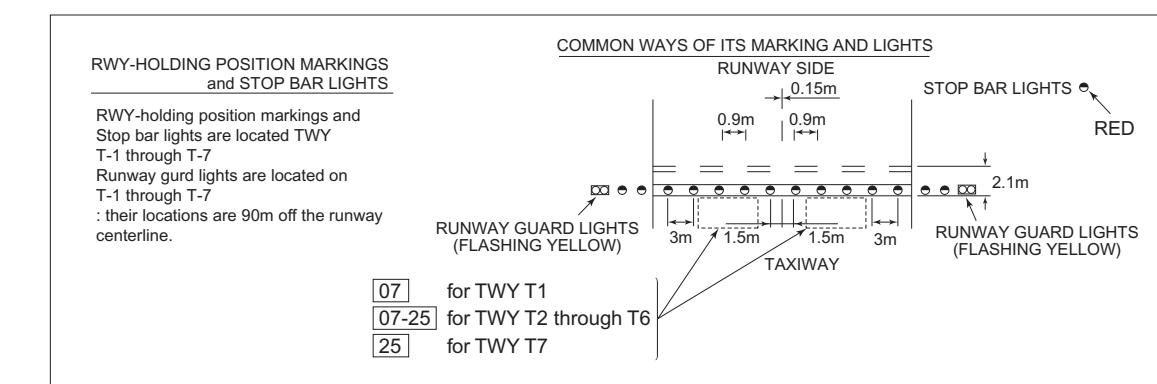
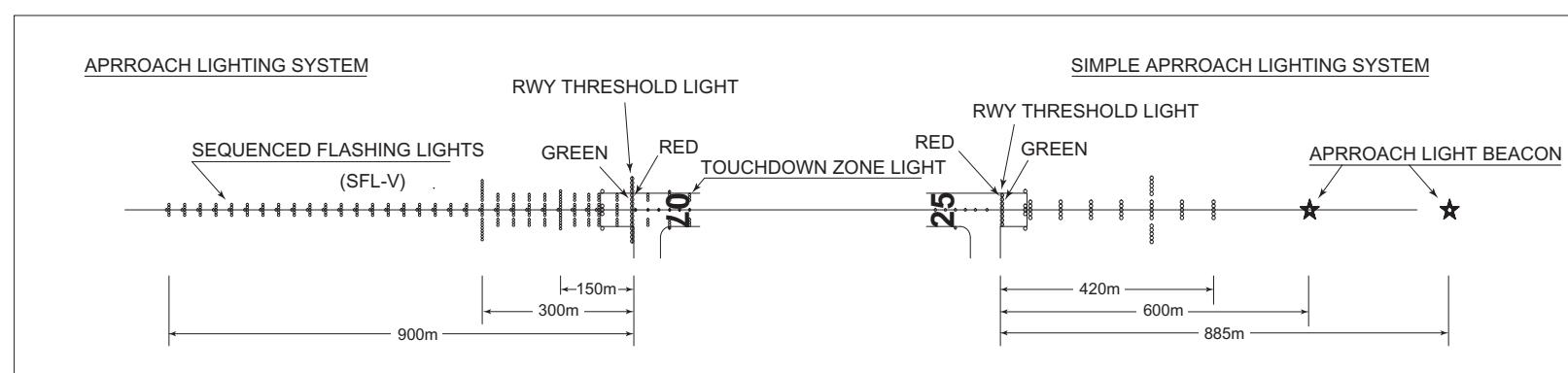
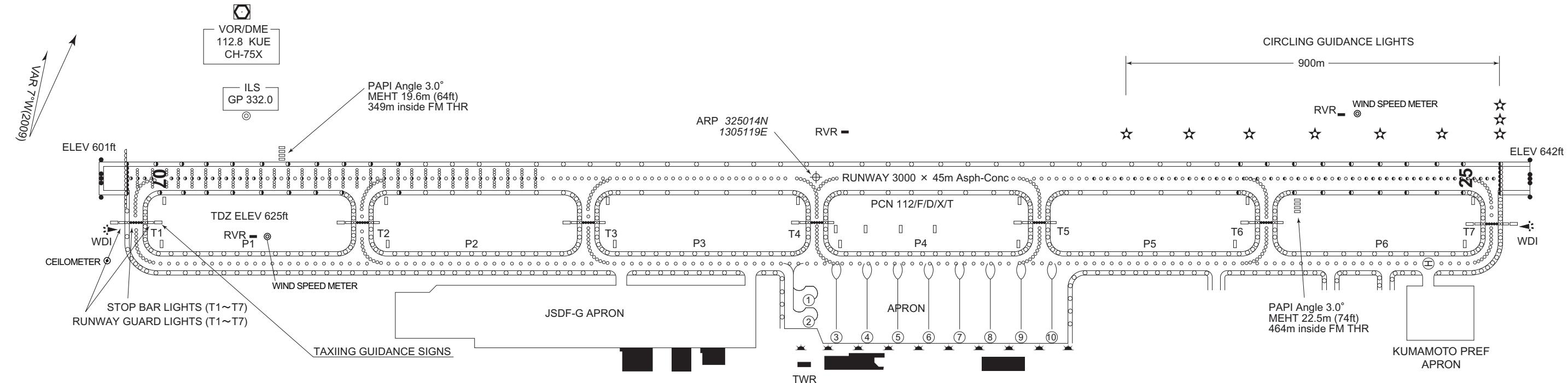
AERODROME CHART

KUMAMOTO AIRPORT
ELEV 192.7m(632ft)



MARKING AIDS

CHANGE : CEILOMETER, WIND SPEED METER added. RVR relocated.

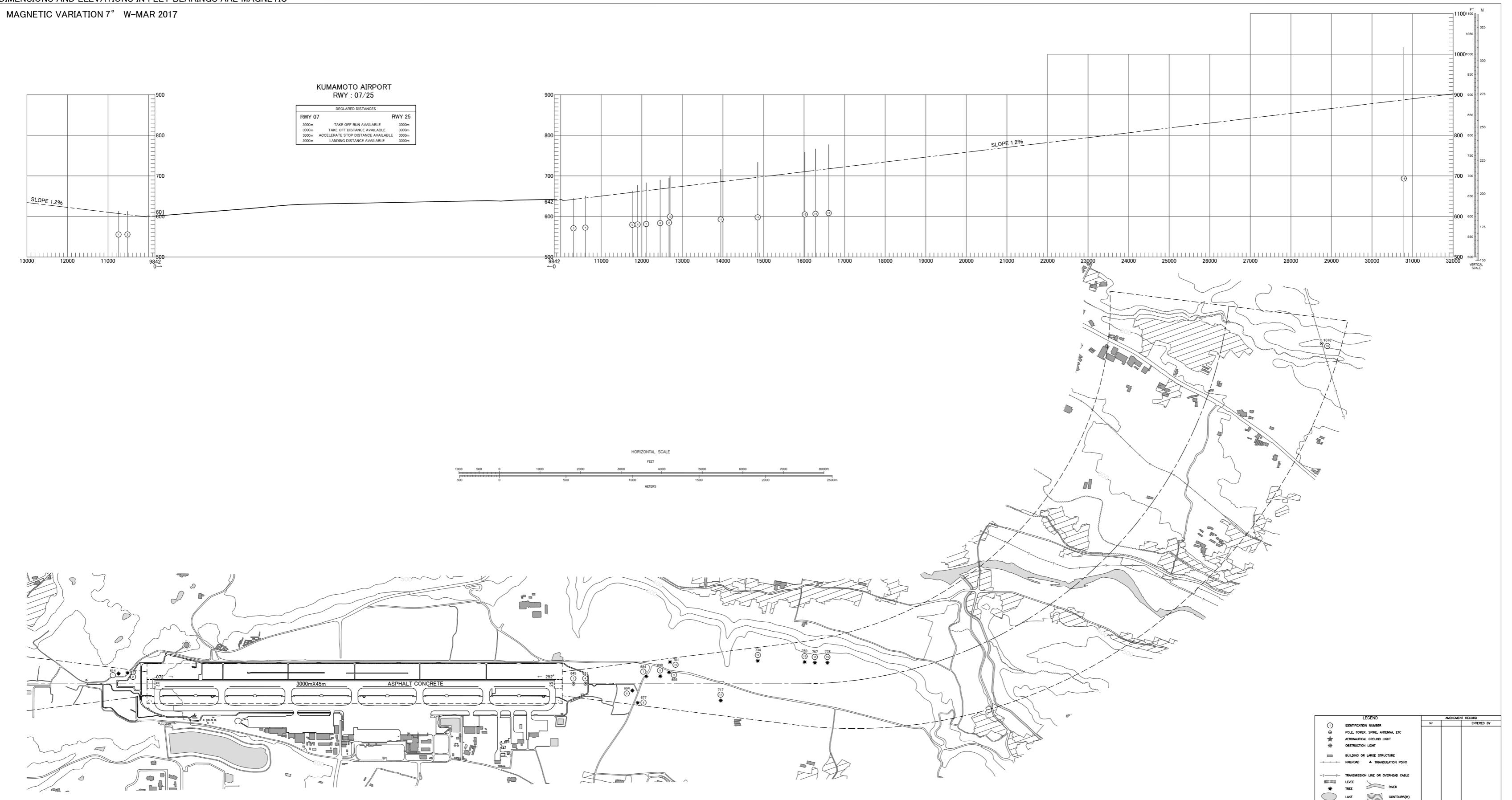




DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 7° W-MAR 2017

AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

TYPE B



PRECISION APPROACH TERRAIN CHART-ICAO



STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

SID and TRANSITION

KUMAMOTO REVERSAL SEVEN DEPARTURE

- RWY25 : Climb via KUE R251 to 3.0DME, turn left,...
RWY07 : Turn left, proceed direct to KUE VOR/DME,...
...climb via KUE R206 to RINDO, turn left to intercept and proceed via KUE R186 to KUE VOR/DME.
Cross RINDO at or above 7000FT, cross KUE R186/8.0DME at or above FL140.

Note RWY07 : 5.7% climb gradient required up to 2700FT.
OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

RINDO FIVE DEPARTURE

- RWY25 : Climb via KUE R251 to 3.0DME, turn left,...
RWY07 : Turn left, proceed direct to KUE VOR/DME,...
...climb via KUE R206 to RINDO.
Cross RINDO at or above 7000FT.

Note RWY07 : 5.7% climb gradient required up to 2700FT.
OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

MIYAZAKI TRANSITION

From over RINDO, turn left, proceed via KUE 25.0DME counterclockwise ARC to intercept and proceed via KUE R159/MZE R339 (MRA 8000FT) to MZE VOR/DME.

KAGOSHIMA TRANSITION

From over RINDO, turn left, proceed via HKC 45.0DME clockwise ARC to intercept and proceed via HKC R038 (MRA 9000FT) to HKC VORTAC.

MUSASHI TRANSITION

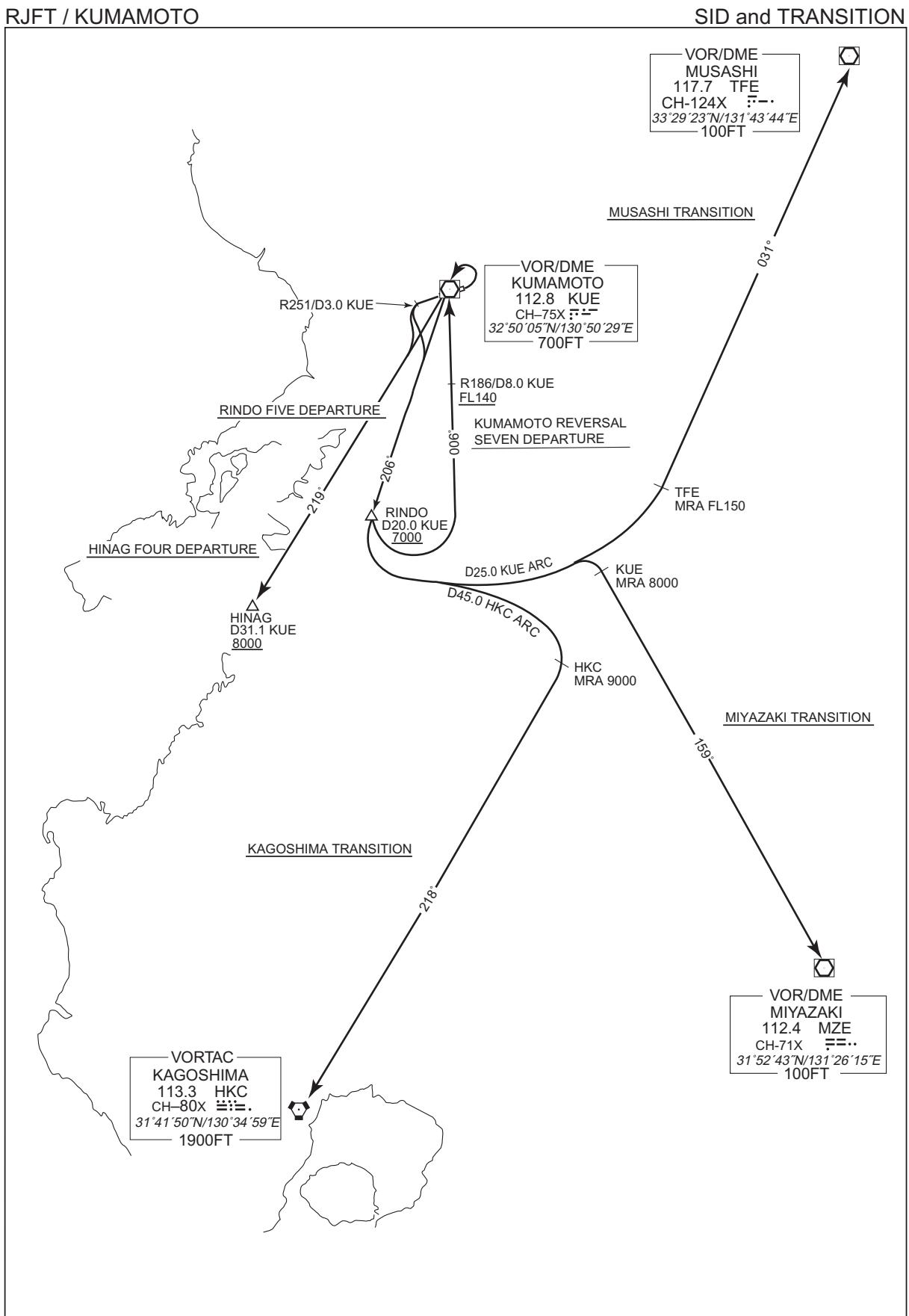
From over RINDO, turn left, proceed via KUE 25.0DME counterclockwise ARC to intercept and proceed via TFE R211 (MRA FL150) to TFE VOR/DME.

HINAG FOUR DEPARTURE

- RWY25 : Climb via KUE R251 to 3.0DME, turn left,...
RWY07 : Turn left, proceed direct to KUE VOR/DME,...
...climb via KUE R219 to HINAG.
Cross HINAG at or above 8000FT.
Note RWY07 : 5.7% climb gradient required up to 2700FT.
OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

CHANGE : KAGOSHIMA TRANSITION.

STANDARD DEPARTURE CHART-INSTRUMENT



STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

SID

IRUKA TWO DEPARTURE

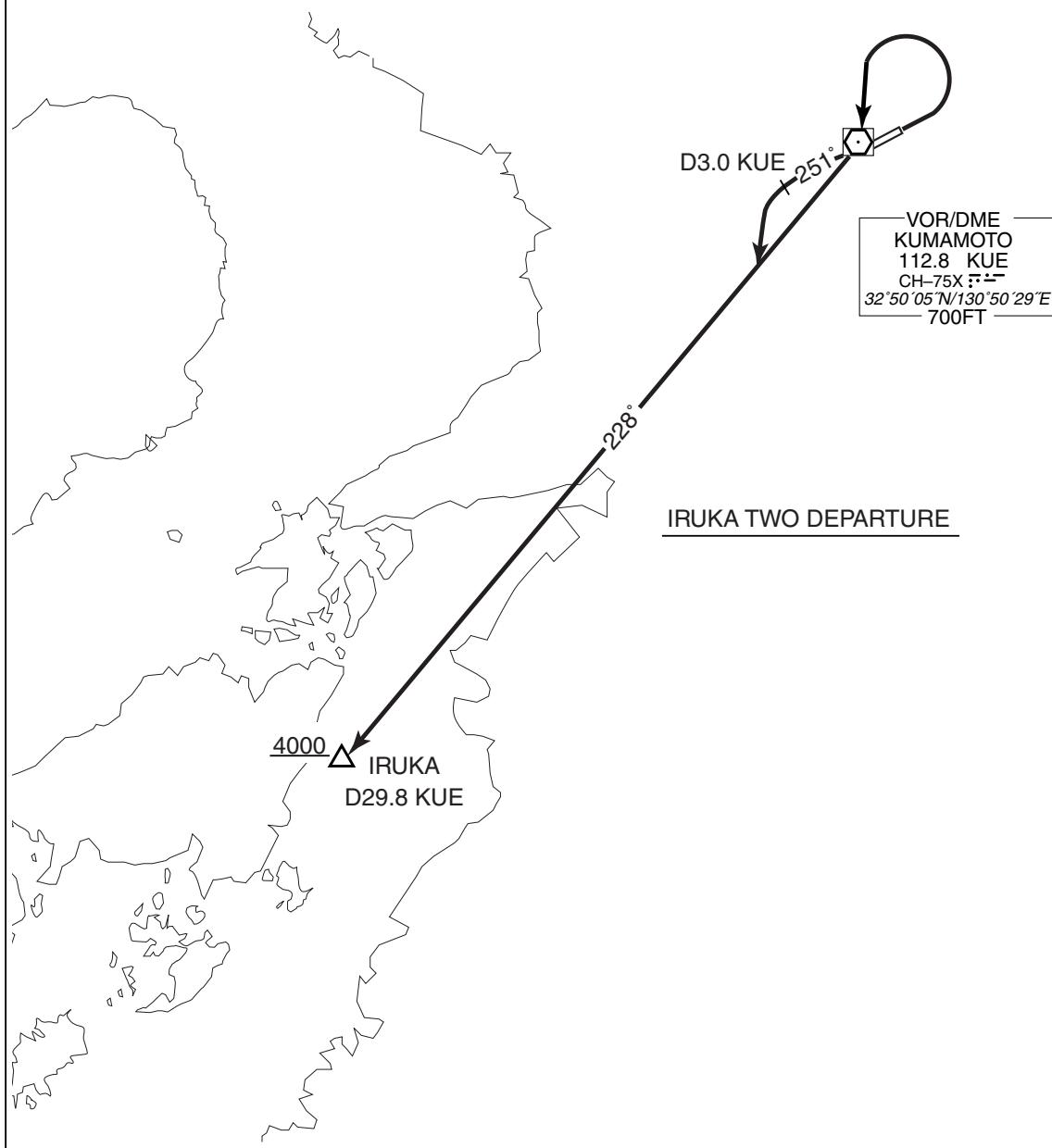
RWY07 : Turn left, direct to KUE VOR/DME,...

RWY25 : Climb via KUE R251 to 3.0DME, turn left,...
...climb via KUE R228 to IRUKA.

Cross IRUKA at or above 4000FT.

Note RWY07 : 5.7% climb gradient required up to 2700FT.

OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.



STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV SID and TRANSITION

MIFNE ONE DEPARTURE DONAR TRANSITION / MATSUYAMA TRANSITION KIRISHIMA TRANSITION / NICHINAN 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	KIRISHIMA TRANSITION MZE : 14.0NM to HKC - HKC
	DME GAP	RWY07 : DER - FT701 RWY25 : DER - FT500
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

MIFNE ONE DEPARTURE

RWY07 : Climb on HDG072° at or above 1100FT, turn left direct to FT700, to FT701, to MIFNE at or above 4000FT.

RWY25 : Climb on HDG252° at or above 1100FT, direct to FT500, turn left direct to MIFNE at or above 4000FT.

Note : RWY07 : 5.7% climb gradient required up to 2700FT.

OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

DONAR TRANSITION

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR.

MATSUYAMA TRANSITION

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR, to MYE.

KIRISHIMA TRANSITION

From MIFNE at or above 4000FT, to HKC.

NICHINAN TRANSITION

From MIFNE at or above 4000FT, to MZE.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV SID and TRANSITION

MIFNE ONE DEPARTURE

RWY07

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	—	—	072 (064.5)	-7.2	—	—	+1100	—	—	RNAV1
002	DF	FT700	—	—	-7.2	—	L	—	—	—	RNAV1
003	TF	FT701	—	252 (244.4)	-7.2	3.7	—	—	—	—	RNAV1
004	TF	MIFNE	—	183 (175.5)	-7.2	14.7	—	+4000	—	—	RNAV1

RWY25

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	—	—	252 (244.5)	-7.2	—	—	+1100	—	—	RNAV1
002	DF	FT500	Y	—	-7.2	—	—	—	—	—	RNAV1
003	DF	MIFNE	—	—	-7.2	—	L	+4000	—	—	RNAV1

DONAR 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	MIFNE	—	—	-7.2	—	—	+4000	—	—	RNAV1
002	TF	GOKAH	—	116 (109.2)	-7.2	7.4	—	—	—	—	RNAV1
003	TF	IWATO	—	085 (077.7)	-7.2	8.2	—	—	—	—	RNAV1
004	TF	DONAR	—	066 (058.4)	-7.2	84.1	—	—	—	—	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	MIFNE	—	—	-7.2	—	—	+4000	—	—	RNAV1
002	TF	GOKAH	—	116 (109.2)	-7.2	7.4	—	—	—	—	RNAV1
003	TF	IWATO	—	085 (077.7)	-7.2	8.2	—	—	—	—	RNAV1
004	TF	DONAR	—	066 (058.4)	-7.2	84.1	—	—	—	—	RNAV1
005	TF	MYE	—	027 (019.8)	-7.2	30.6	—	—	—	—	RNAV1

KIRISHIMA 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	MIFNE	—	—	-7.2	—	—	+4000	—	—	RNAV1
002	TF	HKC	—	196 (189.1)	-7.2	57.2	—	—	—	—	RNAV1

NICHINAN 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	MIFNE	—	—	-7.2	—	—	+4000	—	—	RNAV1
002	TF	MZE	—	150 (142.8)	-7.2	57.1	—	—	—	—	RNAV1

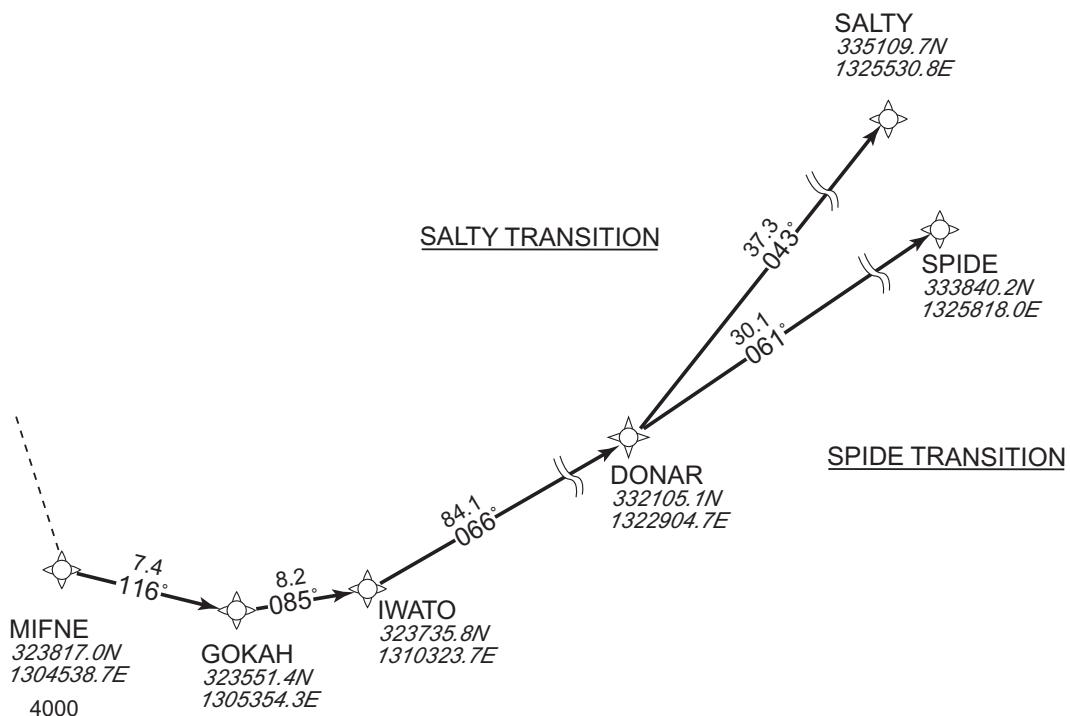
STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV TRANSITION

SPIDE TRANSITION / SALTY TRANSITION		RNAV 1
Note 1) DME/DME/IRU or GNSS required 2) RADAR service required	Critical DME	—
	DME GAP	—
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7° W(2017)



CHANGE : Critical DME deleted.

SPIDE TRANSITION

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR, to SPIDE.

SALTY TRANSITION

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR, to SALTY.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV TRANSITION

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	MIFNE	—	—	-7.2	—	—	+4000	—	—	RNAV1
002	TF	GOKAH	—	116 (109.2)	-7.2	7.4	—	—	—	—	RNAV1
003	TF	IWATO	—	085 (077.7)	-7.2	8.2	—	—	—	—	RNAV1
004	TF	DONAR	—	066 (058.4)	-7.2	84.1	—	—	—	—	RNAV1
005	TF	SPIDE	—	061 (054.1)	-7.2	30.1	—	—	—	—	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	MIFNE	—	—	-7.2	—	—	+4000	—	—	RNAV1
002	TF	GOKAH	—	116 (109.2)	-7.2	7.4	—	—	—	—	RNAV1
003	TF	IWATO	—	085 (077.7)	-7.2	8.2	—	—	—	—	RNAV1
004	TF	DONAR	—	066 (058.4)	-7.2	84.1	—	—	—	—	RNAV1
005	TF	SALTY	—	043 (036.1)	-7.2	37.3	—	—	—	—	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJFT / KUMAMOTO

STAR

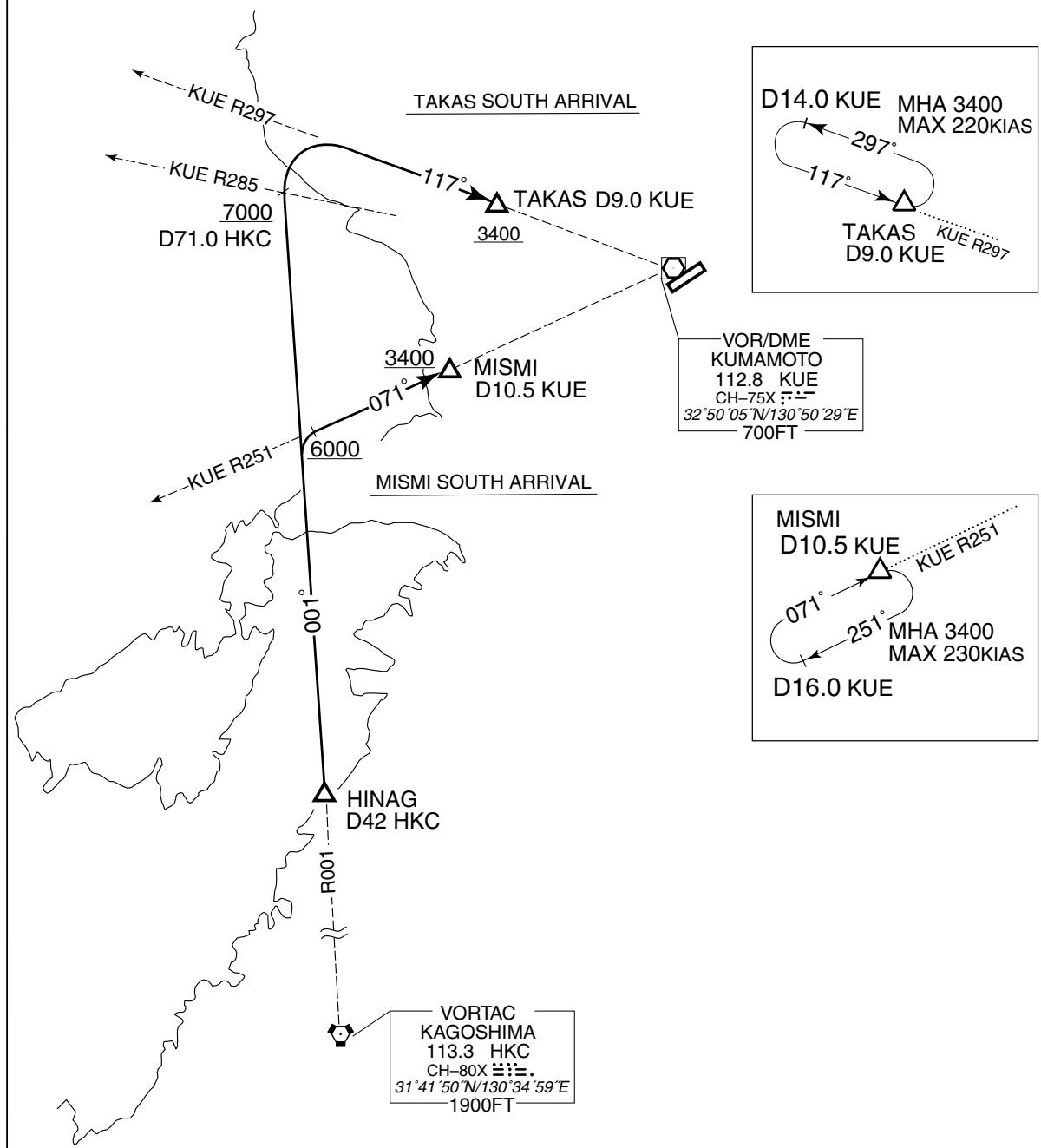
MISMI SOUTH ARRIVAL

From over HINAG, proceed via HKC R001 to intercept and proceed via KUE R251 to MISMI. Maintain 6000FT or above until intercepting KUE R251, cross MISMI at or above 3400FT.

TAKAS SOUTH ARRIVAL

From over HINAG, proceed via HKC R001 until HKC 71.0DME (KUE R285), turn right to intercept and proceed via KUE R297 to TAKAS.

Cross HKC R001/71.0DME(KUE R285) at or above 7000FT, cross TAKAS at or above 3400FT.



STANDARD ARRIVAL CHART-INSTRUMENT

RJFT / KUMAMOTO

STAR

MISMI EAST ARRIVAL

From over KUE VOR/DME, proceed via KUE R297 to KUE 12.0DME, turn left, proceed via KUE 14.0DME counterclockwise ARC to intercept and proceed via KUE R251 to MISMI.

Cross KUE VOR/DME at or above 6000FT, cross MISMI at or above 3400FT.

TAKAS EAST ARRIVAL

From over KUE VOR/DME, proceed via KUE R251 to KUE 12.0DME, turn right, proceed via KUE 14.0DME clockwise ARC to intercept and proceed via KUE R297 to TAKAS.

Cross KUE VOR/DME at or above 6000FT, cross TAKAS at or above 3400FT.



STANDARD ARRIVAL CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV STAR RWY07

KAZMA RNAV ARRIVAL

RNAV1

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

2) RADAR service required.

VAR 7°W (2009)

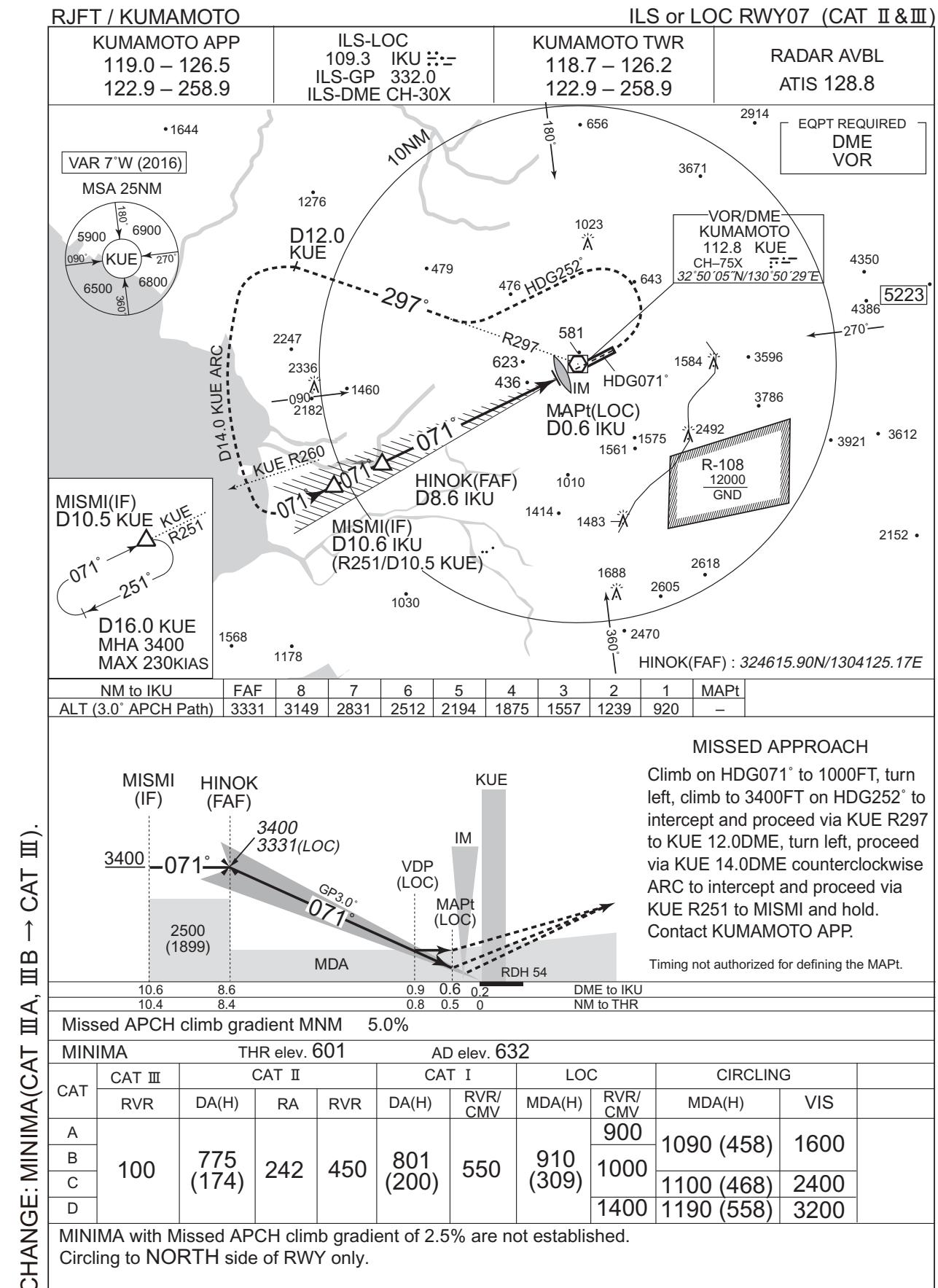


From KAZMA at or above 8000FT, to KIKTI at or above 4200FT, to FT07Z, to FT07Y, to MISMI at or above 3400FT.

FIX	DESIGNATION	COORDINATES
	KAZMA	32 58 37.7N 131 09 34.1E
	KIKTI	32 51 38.1N 130 41 49.3E
	FT07Z	32 50 06.6N 130 35 50.5E
	FT07Y	32 45 40.5N 130 35 25.7E
	MISMI	32 45 24.1N 130 39 16.7E
Critical DME	SGE : 20NM to KIKTI – 8NM to KIKTI 5NM to FT07Z – FT07Y KUE : 12NM to KIKTI – 8NM to KIKTI 5NM to FT07Z – 2NM to FT07Z	
DME GAP	8NM to KIKTI – 5NM to FT07Z	
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.	

Rcmd. Path Terminator	Fix ID (Waypoint Name)	Fly Over	Distance (NM)	MAG Track (TRUE Track)	Turn Direction	Altitude (FT)	Speed Limit (KIAS)	Vertical Angle	Navigation Performance
IF	KAZMA	—	—	—	—	+8000	—	—	RNAV1
TF	KIKTI	—	24.3	260° (253.4°)	—	+4200	—	—	RNAV1
TF	FT07Z	—	5.3	260° (253.2°)	—	—	240	—	RNAV1
TF	FT07Y	—	4.5	191° (184.5°)	—	—	210	—	RNAV1
TF	MISMI	—	3.3	101° (094.8°)	—	+3400	210	—	RNAV1

INSTRUMENT APPROACH CHART

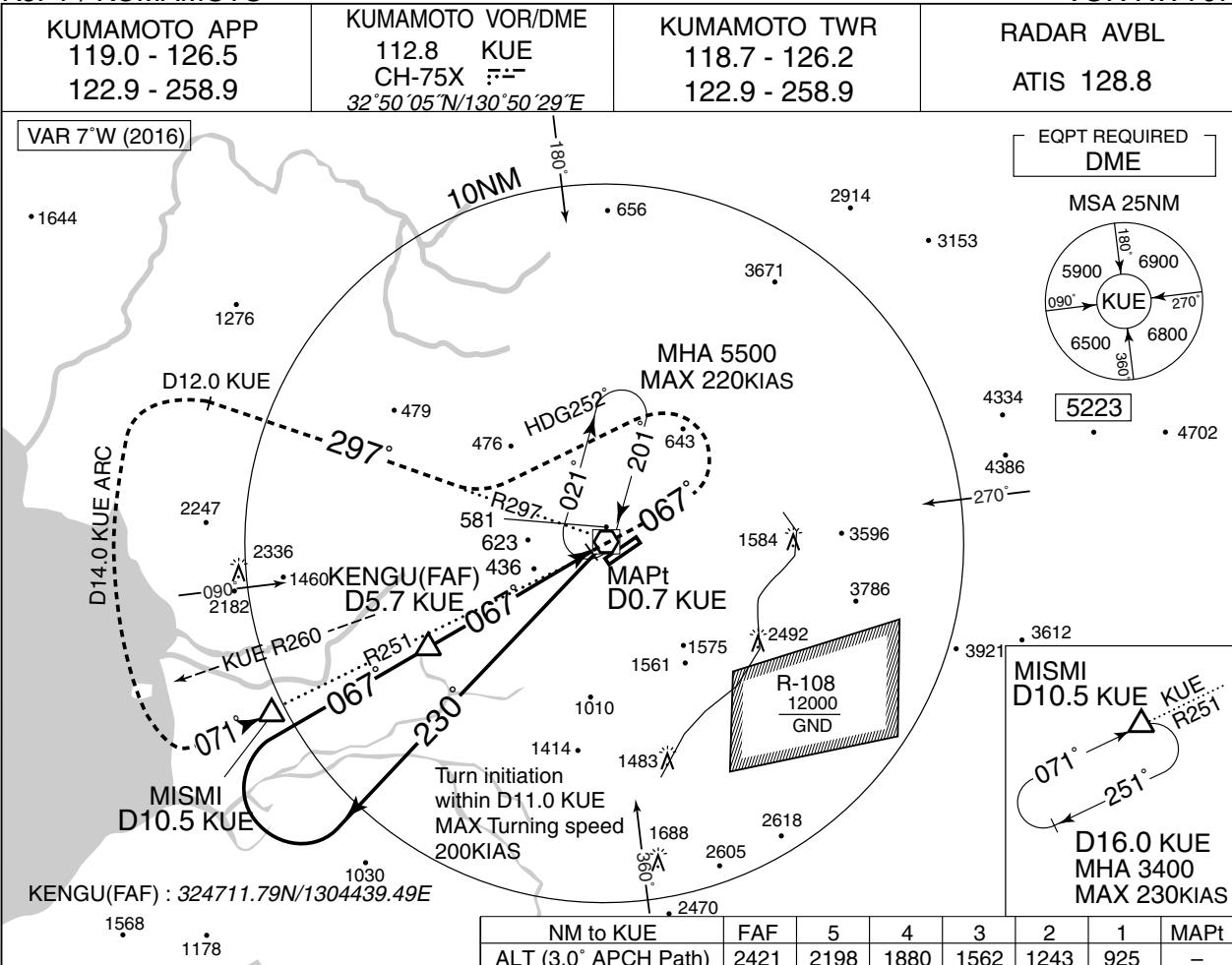


CHANGE: MINIMA(CAT IIIA, IIIB → CAT III).

INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

VOR RWY07

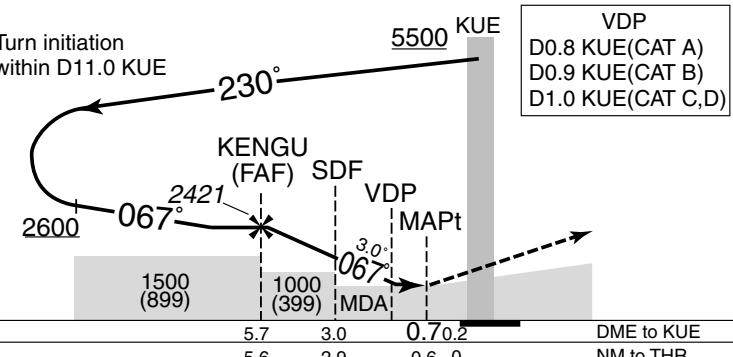


MISSED APPROACH

Climb to 1000FT via KUE R067, turn left, climb to 3400FT on HDG252° to intercept and proceed via KUE R297 to KUE 12.0DME, turn left, proceed via KUE 14.0DME counterclockwise ARC to intercept and proceed via KUE R251 to MISMI and hold. Contact KUMAMOTO APP.

No turn before MAPt.

Timing not authorized for defining the MAPt.



MINIMA		THR elev. 601	AD elev. 632	
CAT	CIRCLING			
	MDA(H)	RVR/CMV	MDA(H)	VIS
A	870 (269)	800	1090 (458)	1600
B	890 (289)			
C	910 (309)	1000	1100 (468)	2400
D		1400	1190 (558)	3200

Circling to NORTH side of RWY only.

INSTRUMENT APPROACH CHART



MISSSED APPROACH

Turn right, climb to 3400FT on HDG296° to intercept and proceed via KUE R251 to MISMI and hold.

Contact KUMAMOTO APP.



Missed APCH climb gradient MNM 4.6%

MINIMA		AD elev. 632
CAT	CIRCLING	
	MDA(H)	VIS
A	1090 (458)	1600
B		
C	1100 (468)	2400
D	1190 (558)	3200

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

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNAV(RNP) Z RWY25

RNAV(RNP) Z RWY25

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/RDH (°/FT)	RNP Value
001	IF	ASONO	—	—	-6.8	—	—	+8000	—	—	—
002	TF	DIKAN	—	279 (272.0)	-6.8	8.6	—	—	—	—	1.0
003	TF	BOCHU	—	206 (199.6)	-6.8	5.6	—	4300	-185	—	1.0
004	TF	FT550	—	206 (199.6)	-6.8	1.7	—	3730	-165	-3.10	0.3
005	RF Center: FTRF1 r=2.77NM	FT551	—	—	-6.8	3.1	R	2711	—	-3.10	0.3
006	TF	FT552	—	270 (263.6)	-6.8	1.7	—	2159	—	-3.10	0.3
007	RF Center: FTRF2 r=2.77NM	FT553	—	—	-6.8	0.9	L	1858	—	-3.10	0.3
008	TF	RW25	Y	251 (244.5)	-6.8	3.5	—	692	—	-3.10/50	0.3
009	TF	MISMI	—	251 (244.5)	-6.8	12.0	—	3400	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
ASONO	330058.11N/1311449.42E	FTRF1	325518.34N/1305837.73E
DIKAN	330115.22N/1310438.68E	FTRF2	324936.20N/1305722.87E
BOCHU	325600.39N/1310225.19E		
FT550	325422.38N/1310143.69E		
FT551	325232.83N/1305859.64E		
FT552	325221.62N/1305700.92E		
FT553	325206.61N/1305558.39E		
RW25	325035.24N/1305210.28E		
MISMI	324524.10N/1303916.73E		

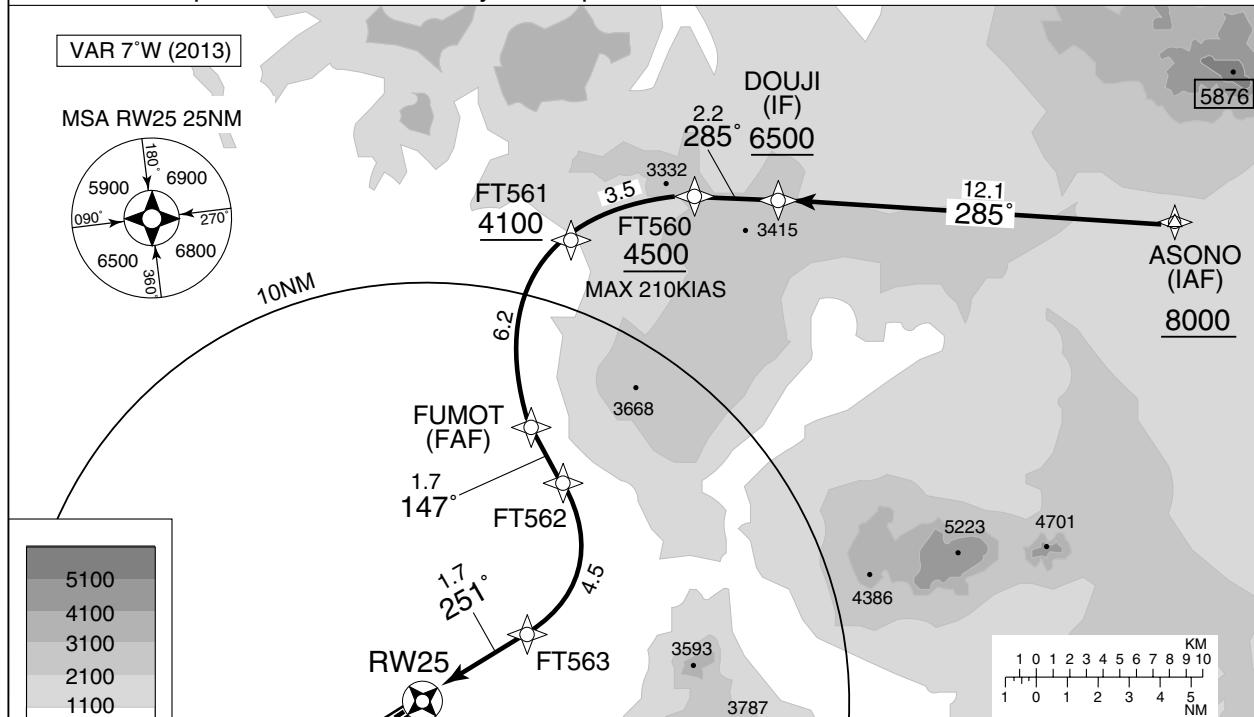
INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNAV(RNP) Y RWY25

KUMAMOTO APP 119.0 - 126.5 122.9 - 258.9	GNSS and RF required.	KUMAMOTO TWR 118.7 - 126.2 122.9 - 258.9	RADAR AVBL ATIS 128.8
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For uncompensated Baro-VNAV systems, procedure not authorized below -4°C / above 45°C



MINIMA	THR elev.642	AD elev.632
RNP 0.30		
CAT	DA(H)	RVR/CMV
A	-	-
B	-	-
C	942 (300)	1400
D	-	1600

RNP AR

Special Authorization Required

INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNAV(RNP) Y RWY25

RNAV(RNP) Y RWY25

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/RDH ('/FT)	RNP Value
001	IF	ASONO	—	—	-6.8	—	—	+8000	—	—	—
002	TF	DOUJI	—	285 (278.4)	-6.8	12.1	—	+6500	—	—	1.0
003	TF	FT560	—	285 (278.3)	-6.8	2.2	—	+4500	-210	—	1.0
004	RF Center: FTRF3 r=4.04NM	FT561	—	—	-6.8	3.5	L	+4100	—	—	1.0
005	RF Center: FTRF3 r=4.04NM	FUMOT	—	—	-6.8	6.2	L	3200	—	—	0.7
006	TF	FT562	—	147 (140.4)	-6.8	1.7	—	2650	—	-3.00	0.3
007	RF Center: FTRF4 r=2.47NM	FT563	—	—	-6.8	4.5	R	1216	—	-3.00	0.3
008	TF	RW25	Y	251 (244.5)	-6.8	1.7	—	692	—	-3.00/50	0.3
009	TF	MISMI	—	251 (244.5)	-6.8	12.0	—	3400	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
ASONO	330058.11N/1311449.42E	FTRF3	325902.05N/1305719.25E
DOUJI	330243.56N/1310035.13E	FTRF4	325331.98N/1305240.81E
FT560	330302.45N/1305800.60E		
FT561	330204.49N/1305408.90E		
FUMOT	325626.84N/1305337.58E		
FT562	325506.96N/1305456.29E		
FT563	325117.72N/1305356.28E		
RW25	325035.24N/1305210.28E		
MISMI	324524.10N/1303916.73E		

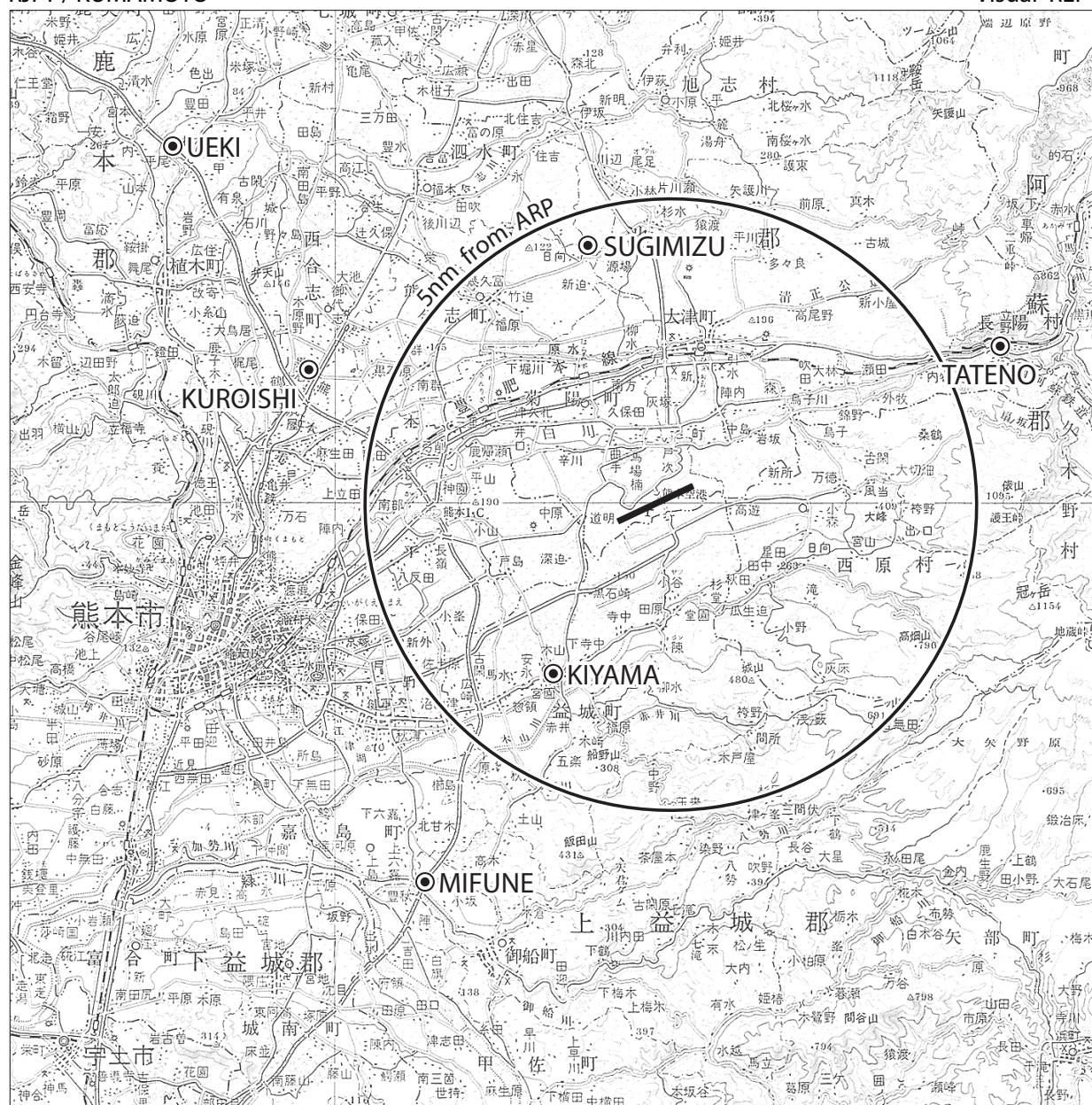
RJFT/KUMAMOTO

PROFILE OF VALUES OF RADIO ALTIMETER



RJFT / KUMAMOTO

Visual REP



Call sign	BRG / DIST from ARP	Remarks
植木 Ueki	312°/9.9NM	九州自動車道植木インター Kyushu expressway Ueki interchange
黒石 Kuroishi	292°/6.2NM	九州自動車道と国道387号との交点 Intersection of Kyushu expressway and national route 387
杉水 Sugimizu	349°/4.5NM	ゴルフ場 (くまもと中央CC) Golf course (Kumamoto Chuo CC)
立野 Tateno	073°/6.0NM	JR立野駅 JR Tateno station
木山 Kiyama	214°/3.6NM	木山川と国道443号との交点 Intersection of Kiyama river and national route 443
御船 Mifune	219°/7.4NM	九州自動車道御船インター Kyushu expressway Mifune interchange



RJFT / KUMAMOTO

Minimum Vectoring Altitude CHART

VAR 7°W (2013)



CENTER: 324949N/1305041E (RADAR SITE)

CHANGE: Update