

AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 7°17' W-APR 2016



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

SID

MUSASHI REVERSAL TWO DEPARTURE

RWY01 : Climb RWY HDG to 500FT, turn right HDG177° to intercept and proceed via
TFE R132 to TFE 10.0DME,...

RWY19 : Turn left, climb via TFE R132 to TFE 10.0DME,...
...turn right, direct to TFE VOR/DME.
Cross TFE VOR/DME at or above 4000FT.

Note RWY01 : 5.0% climb gradient required up to 500FT.

OBST ALT 266FT located at 2.5NM 351° FM end of RWY01.



STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

RNAV SID

EBOSHI TWO DEPARTURE		RNAV1
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	—
	DME GAP	RWY01 : DER ~ 19NM to YANAI RWY19 : DER ~ 26NM to YANAI
	Inappropriate NavAids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7°W (2014)

EBOSHI TWO DEPARTURE

RWY01 : Climb on HDG007° at or above 500FT, turn right direct to YANAI.

RWY19 : Climb on HDG187° at or above 500FT, turn left direct to YANAI.

Note RWY01 : 5.0% climb gradient required up to 500FT.

OBST ALT 266FT located at 2.5NM 351° FM end of RWY01.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

RNAV SID

EBOSHI TWO DEPARTURE

RWY01

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	—	—	007 (000.4)	-7.0	—	—	+500	—	—	RNAV1
002	DF	YANAI	—	—	-7.0	—	R	—	—	—	RNAV1

RWY19

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	—	—	187 (180.4)	-7.0	—	—	+500	—	—	RNAV1
002	DF	YANAI	—	—	-7.0	—	L	—	—	—	RNAV1

STANDARD DEPARTURE CHART- INSTRUMENT

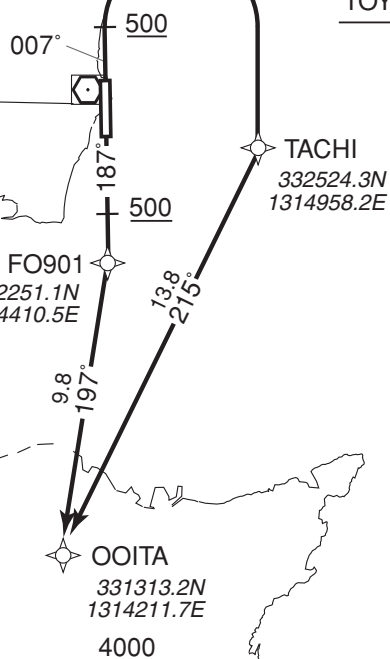
RJFO / OITA

RNAV SID

TOYO THREE DEPARTURE		RNAV1
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	—
	DME GAP	RWY01 : DER ~ 9NM to TACHI RWY19 : DER ~ 3NM to FO901
	Inappropriate NavAids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7°W (2014)

VOR/DME
MUSASHI
117.7 TFE
CH-124X
33°29'23"N/131°43'44"E
100FT

TOYO THREE DEPARTURETOYO THREE DEPARTURE

RWY01 : Climb on HDG007° at or above 500FT, turn right direct to TACHI,...

RWY19 : Climb on HDG187° at or above 500FT, direct to FO901,...
...to OOITA at or above 4000FT.Note RWY01 : 5.0% climb gradient required up to 500FT.
OBST ALT 266FT located at 2.5NM 351° FM end of RWY01.

STANDARD DEPARTURE CHART- INSTRUMENT

RJFO / OITA

RNAV SID

TOYO THREE DEPARTURE

RWY01

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	—	—	007 (000.4)	-7.0	—	—	+500	—	—	RNAV1
002	DF	TACHI	—	—	-7.0	—	R	—	—	—	RNAV1
003	TF	OOITA	—	215 (208.1)	-7.0	13.8	—	+4000	—	—	RNAV1

RWY19

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	—	—	187 (180.4)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FO901	—	—	-7.0	—	—	—	—	—	RNAV1
003	TF	OOITA	—	197 (189.8)	-7.0	9.8	—	+4000	—	—	RNAV1

STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

RNAV SID



STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

RNAV SID

FUSHA ONE DEPARTURE

RWY01

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	—	—	007 (000.4)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FUSHA	—	—	-7.0	—	R	—	—	—	RNAV1

RWY19

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	—	—	187 (180.4)	-7.0	—	—	+500	—	—	RNAV1
002	DF	FUSHA	—	—	-7.0	—	L	—	—	—	RNAV1

STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

RNAV TRANSITION

DONAR TRANSITION / DOUGO TRANSITION / FIATO TRANSITION SALTY TRANSITION / SPIDE TRANSITION / ASHIZURI TRANSITION			RNAV1
Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required.	Critical DME	SALTY TRANSITION SUC : 8.3NM to SALTY – 4.3NM to SALTY FIATO TRANSITION SUC : 8.3NM to SALTY – 4.3NM to SALTY SWE : SALTY – FIATO	
	DME GAP	—	
	Inappropriate Nav aids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1	
VAR 7°W (2017)			
<p>VOR/DME MATSUYAMA 110.65 MYE CH-43Y 33°49'48"N/132°41'32"E 0FT</p> <p>MATSUYAMA(MYE) 334948.4N 1324132.0E</p> <p>VORTAC SHIMIZU 115.2 SUC CH-99X 32°45'21"N/132°59'48"E 1500FT</p> <p>SHIMIZU(SUC) 324521.5N 1325947.9E</p> <p>FUSHA 331737.7N 1320814.6E</p> <p>DONAR 332105.1N 1322904.7E</p> <p>SALTY 335109.7N 1325530.8E</p> <p>FIATO 340037.4N 1330354.6E</p> <p>SPIDE 333840.2N 1325818.0E</p> <p>TRANSITIONS: DONAR TRANSITION: Fusha to DONAR at or above FL160. DOUGO TRANSITION: Fusha to DONAR at or above FL160, to MYE. FIATO TRANSITION: Fusha to DONAR at or above FL160, to SALTY, to FIATO. SALTY TRANSITION: Fusha to DONAR at or above FL160, to SALTY. SPIDE TRANSITION: Fusha to DONAR at or above FL160, to SPIDE. ASHIZURI TRANSITION: Fusha to SUC.</p>			
DONAR TRANSITION From FUSHA, to DONAR at or above FL160.			
DOUGO TRANSITION From FUSHA, to DONAR at or above FL160, to MYE.			
FIATO TRANSITION From FUSHA, to DONAR at or above FL160, to SALTY, to FIATO.			
SALTY TRANSITION From FUSHA, to DONAR at or above FL160, to SALTY.			
SPIDE TRANSITION From FUSHA, to DONAR at or above FL160, to SPIDE.			
ASHIZURI TRANSITION From FUSHA, to SUC.			

STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

RNAV TRANSITION

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	FUSHA	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	DONAR	—	086 (078.7)	-7.4	17.8	—	+FL160	—	—	RNAV1

DOUGO 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	FUSHA	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	DONAR	—	086 (078.7)	-7.4	17.8	—	+FL160	—	—	RNAV1
003	TF	MYE	—	027 (019.8)	-7.4	30.6	—	—	—	—	RNAV1

FIATO 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	FUSHA	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	DONAR	—	086 (078.7)	-7.4	17.8	—	+FL160	—	—	RNAV1
003	TF	SALTY	—	043 (036.1)	-7.4	37.3	—	—	—	—	RNAV1
004	TF	FIATO	—	044 (036.3)	-7.4	11.8	—	—	—	—	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	FUSHA	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	DONAR	—	086 (078.7)	-7.4	17.8	—	+FL160	—	—	RNAV1
003	TF	SALTY	—	043 (036.1)	-7.4	37.3	—	—	—	—	RNAV1

STANDARD DEPARTURE CHART - INSTRUMENT

RJFO / OITA

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	FUSHA	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	DONAR	—	086 (078.7)	-7.4	17.8	—	+FL160	—	—	RNAV1
003	TF	SPIDE	—	061 (054.1)	-7.4	30.1	—	—	—	—	RNAV1

ASHIZURI 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	FUSHA	—	—	-7.4	—	—	—	—	—	RNAV1
002	TF	SUC	—	134 (126.5)	-7.4	54.0	—	—	—	—	RNAV1

STANDARD ARRIVAL CHART- INSTRUMENT

RJFO / OITA

STAR

JEWEL ARRIVAL

From over DONKO, via TFE R038 to JEWEL.

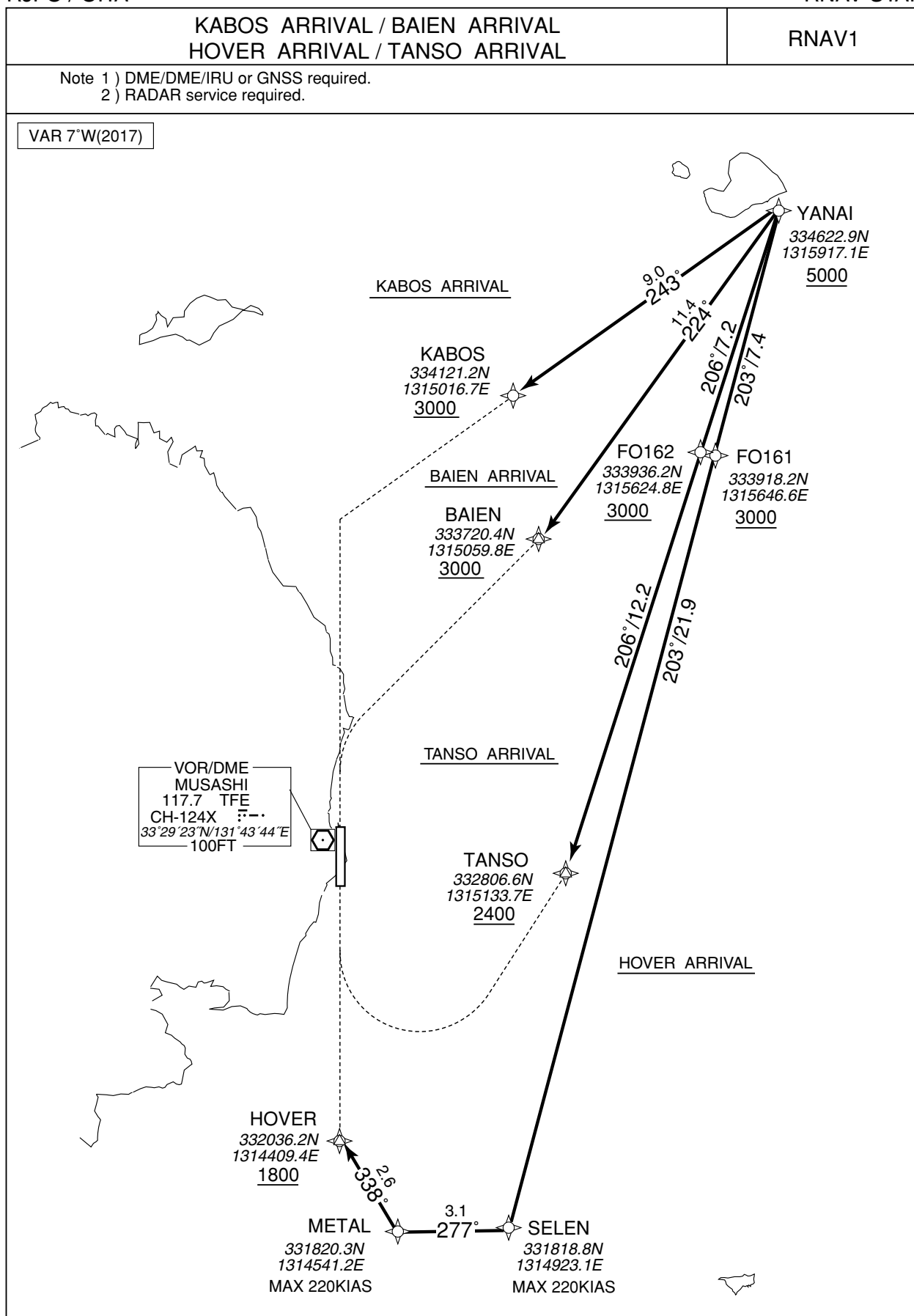
Cross DONKO at or above 5000FT, cross JEWEL at or above 3000FT.



STANDARD ARRIVAL CHART- INSTRUMENT

RJFO / OITA

RNAV STAR



STANDARD ARRIVAL CHART - INSTRUMENT

RJFO / OITA

RNAV STAR

KABOS ARRIVAL

From YANAI at or above 5000FT, to KABOS at or above 3000FT.

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	YANAI	—	—	-7.4	—	—	+5000	—	—	RNAV1
002	TF	KABOS	—	243 (236.2)	-7.4	9.0	—	+3000	—	—	RNAV1

HOVER ARRIVAL

From YANAI at or above 5000FT, to FO161 at or above 3000FT, to SELEN, to METAL, to HOVER at or above 1800FT.

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	YANAI	—	—	-7.4	—	—	+5000	—	—	RNAV1
002	TF	FO161	—	203 (196.4)	-7.4	7.4	—	+3000	—	—	RNAV1
003	TF	SELEN	—	203 (196.4)	-7.4	21.9	—	—	-220	—	RNAV1
004	TF	METAL	—	277 (270.5)	-7.4	3.1	—	—	-220	—	RNAV1
005	TF	HOVER	—	338 (330.5)	-7.4	2.6	—	+1800	—	—	RNAV1

STANDARD ARRIVAL CHART - INSTRUMENT

RJFO / OITA

RNAV STAR

BAIEN ARRIVAL

From YANAI at or above 5000FT, to BAIEN at or above 3000FT.

Critical DME	—
DME GAP	—
Inappropriate Nav aids	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	YANAI	—	—	-7.4	—	—	+5000	—	—	RNAV1
002	TF	BAIEN	—	224 (217.4)	-7.4	11.4	—	+3000	—	—	RNAV1

TANSO ARRIVAL

From YANAI at or above 5000FT, to FO162 at or above 3000FT, to TANSO at or above 2400FT.

Critical DME	—
DME GAP	—
Inappropriate Nav aids	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	YANAI	—	—	-7.4	—	—	+5000	—	—	RNAV1
002	TF	FO162	—	206 (199.4)	-7.4	7.2	—	+3000	—	—	RNAV1
003	TF	TANSO	—	206 (199.4)	-7.4	12.2	—	+2400	—	—	RNAV1

STANDARD ARRIVAL CHART - INSTRUMENT

RJFO / OITA

RNAV STAR

LUISU ARRIVAL

RNAV1

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

VAR 7°W(2016)



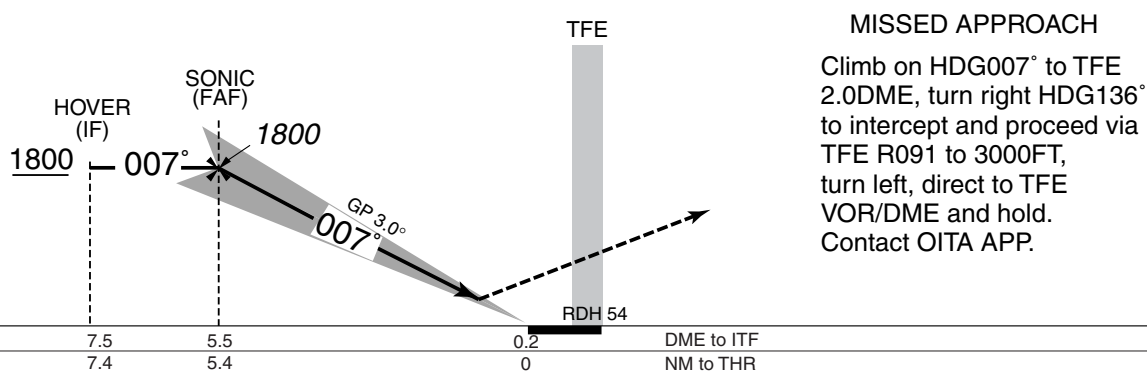
LUISU ARRIVAL

From OOKITA at or above 4000FT, to LUISU at or above 1800FT.

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	OOKITA	—	—	-7.3	—	—	+4000	—	—	RNAV1
002	TF	LUISU	—	028 (020.2)	-7.3	4.7	—	+1800	—	—	RNAV1

RJFO / OITA



Missed APCH climb gradient MNM 4.0%.

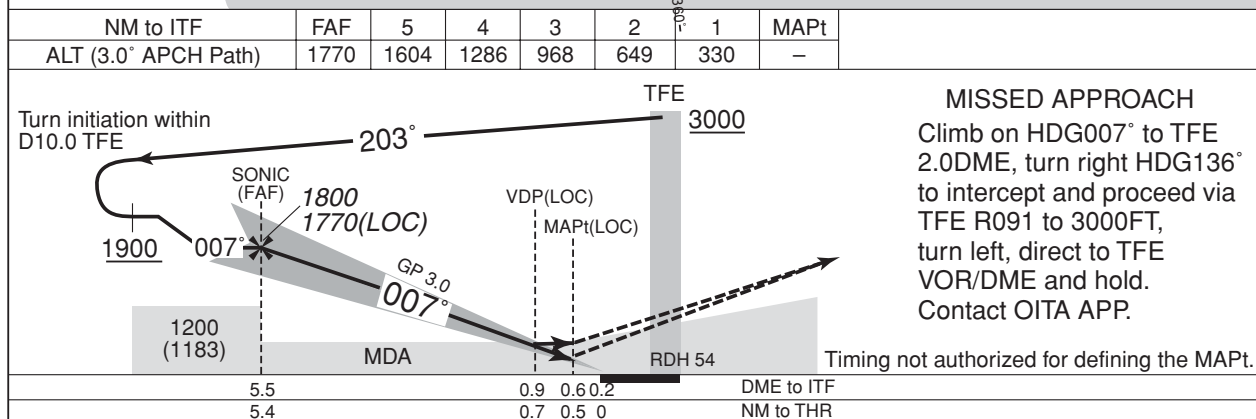
MINIMA		THR elev. 19	AD elev. 17		
CAT	CAT I		CIRCLING		
	DA(H)	RVR/ CMV	MDA(H)	VIS	
A	219 (200)	550	430 (413)	1600	
B			470 (453)		
C			690 (673)		2400
D			760 (743)		3200

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

INSTRUMENT APPROACH CHART

RJFO / OITA

ILS Y or LOC Y RWY01



Missed APCH climb gradient MNM 4.0%.

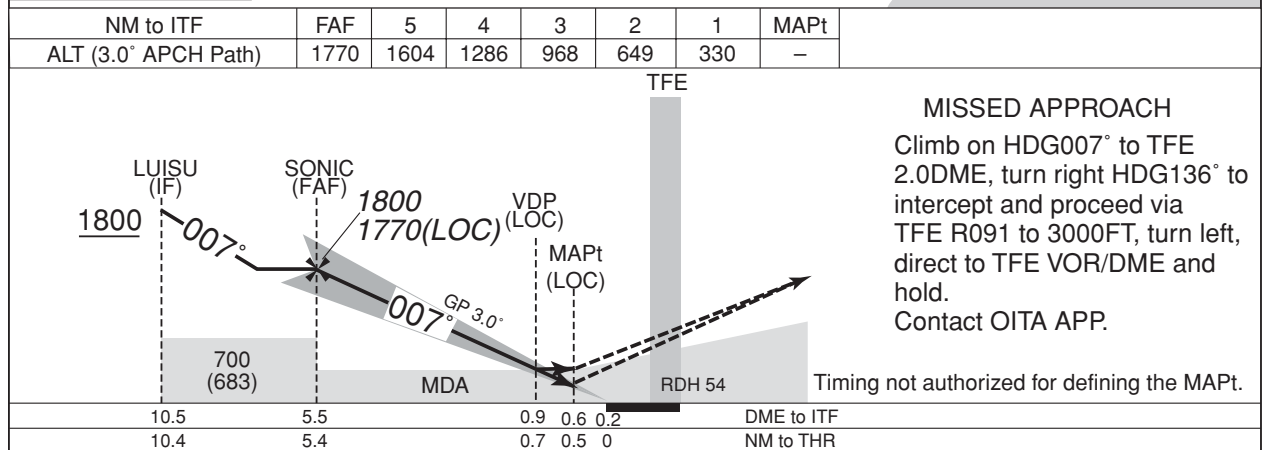
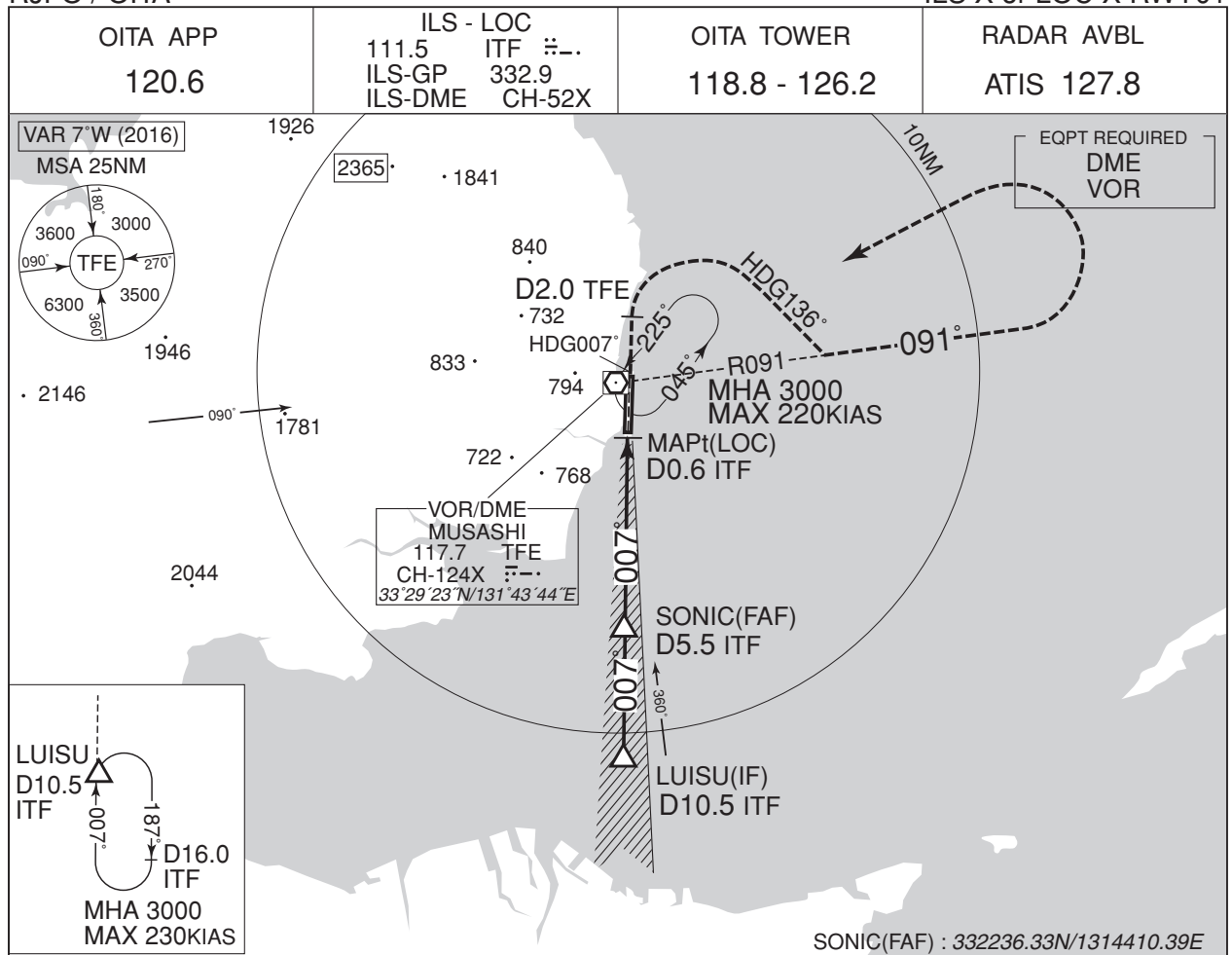
MINIMA		THR elev. 19		AD elev. 17	
CAT	CAT I		LOC		CIRCLING
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H) VIS
A	219 (200)	550	300 (283)	800	430 (413)
B					470 (453)
C					690 (673)
D					760 (743)
				1200	760 (743) 3200

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

INSTRUMENT APPROACH CHART

RJFO / OITA

ILS X or LOC X RWY01



Missed APCH climb gradient MNM 4.0%.

MINIMA THR elev. 19 AD elev. 17

CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	219 (200)	550	300 (283)	800	430 (413)	1600
B					470 (453)	
C					690 (673)	
D				1200	760 (743)	3200

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

INSTRUMENT APPROACH CHART

RJFO / OITA

VOR RWY01



MINIMA		THR elev. 19	AD elev. 17	
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	500 (483)	1000	500 (483)	1600
B		1200		
C			690 (673)	2400
D			1600	760 (743)
Circling to EAST side of RWY only.				

INSTRUMENT APPROACH CHART

RJFO / OITA

RNAV(GNSS) Z RWY19



CHANGE : Editorial

INSTRUMENT APPROACH CHART

RJFO / OITA

RNAV(RNP) RWY01

OITA APP 120.6	GNSS and RF required.	OITA TOWER 118.8 – 126.2	RADAR AVBL ATIS 127.8
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For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 45°C



MISSED APPROACH

From RW01 on track 007°, at or above 500FT turn right, direct to BAIEN and hold at 3000FT.

Contact OITA APP.



Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 19 AD elev. 17

CAT	RNP 0.30	
	DA(H)	RVR/CMV
A	-	-
B	-	-
C	326 (307)	1000
D		1400

MINIMA with Missed APCH climb gradient of 2.5% are not established.

RNP AR
Special Authorization Required

INSTRUMENT APPROACH CHART

RJFO / OITA

RNAV(RNP) RWY01

RNAV(RNP) RWY01Coding 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	TANSO	—	—	-7.0	—	—	+2400	-220	—	—
002	TF	FO151	—	221 (214.2)	-7.0	3.6	—	2400	-165	—	1.0
003	RF Center: FORF1 r=2.25NM	FO152	—	—	-7.0	5.7	R	570	—	-3.00	0.3
004	TF	RW01	Y	007 (000.4)	-7.0	1.6	—	73	—	-3.00/54	0.3
005	FA	—	—	007 (000.4)	-7.0	—	—	+500	—	—	1.0
006	DF	BAIEN	—	—	-7.0	—	R	3000	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
TANSO	332806.56N/1315133.74E	FORF1	332622.64N/1314653.79E
FO151	332506.40N/1314907.12E		
FO152	332623.67N/1314412.39E		
RW01	332757.53N/1314413.22E		
BAIEN	333720.39N/1315059.77E		

INSTRUMENT APPROACH CHART

RJFO / OITA

RNAV(RNP) Y RWY19

OITA APP 120.6	GNSS and RF required.	OITA TOWER 118.8 – 126.2	RADAR AVBL ATIS 127.8
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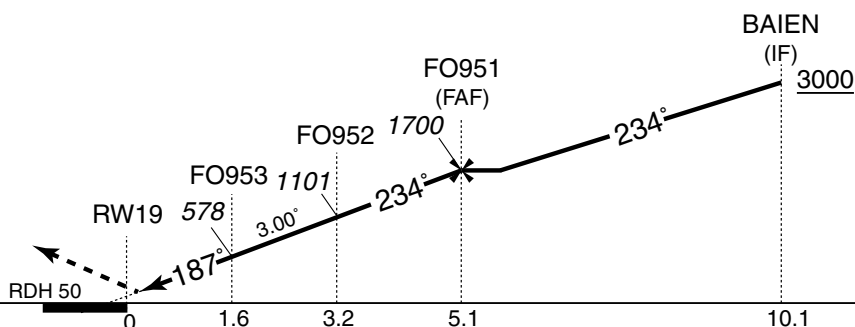
For uncompensated Baro-VNAV systems, procedure not authorized below -5°C / above 45°C



MISSED APPROACH

From RW19 on track 187°, at or above 500FT turn left, direct to BAIEN and hold at 3000FT.

Contact OITA APP.



Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 17 AD elev. 17

CAT	RNP 0.30	
	DA(H)	CMV
A	-	-
B	-	-
C	334 (317)	1400
D	334 (317)	1600

MINIMA with Missed APCH climb gradient of 2.5% are not established.

RNP AR
Special Authorization Required

INSTRUMENT APPROACH CHART

RJFO / OITA

RNAV(RNP) Y RWY19

RNAV(RNP) Y RWY19Coding Table

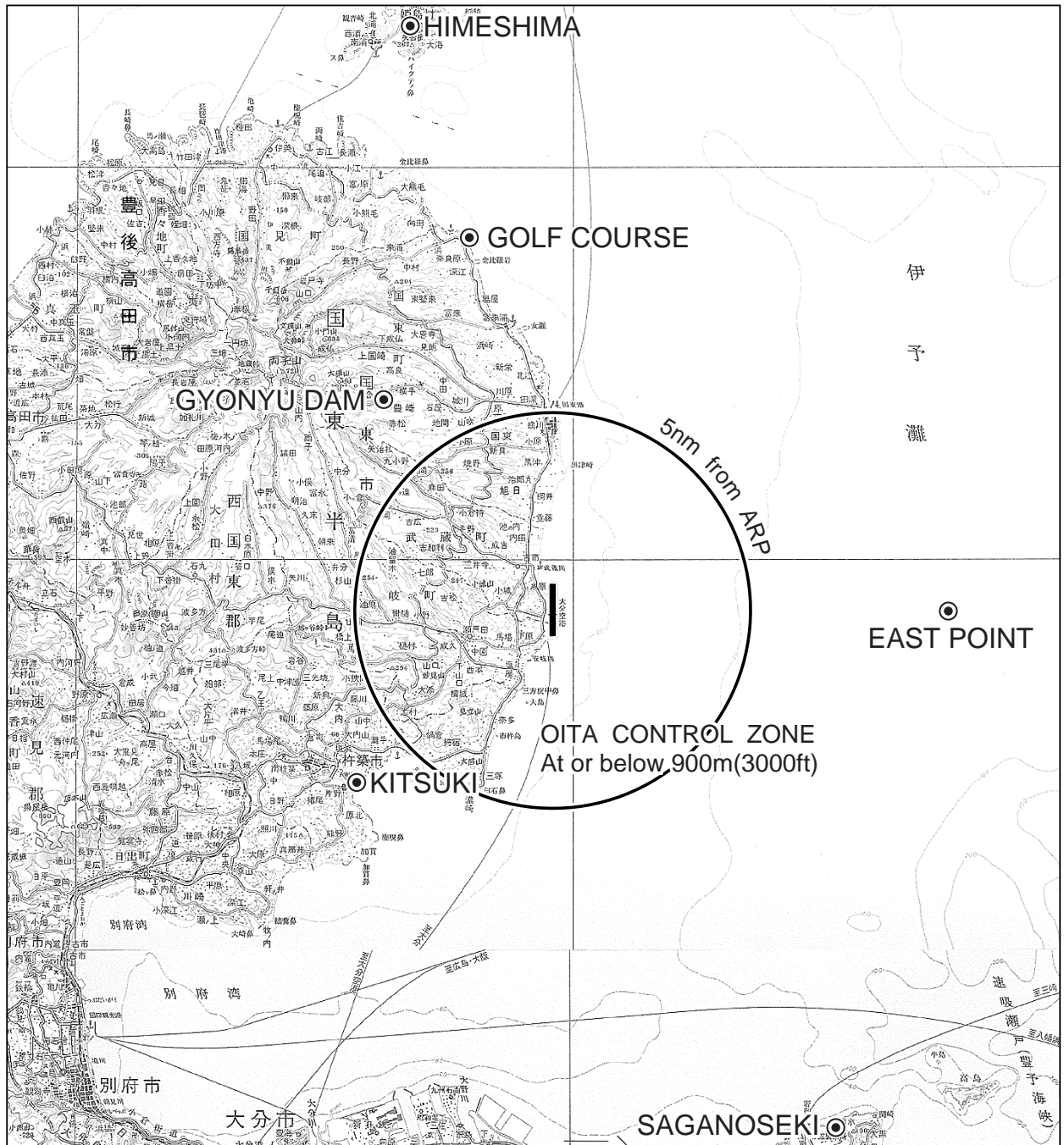
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	BAIEN	—	—	-7.0	—	—	+3000	-210	—	—
002	TF	FO951	—	234 (226.8)	-7.0	5.0	—	1700	—	—	1.0
003	TF	FO952	—	234 (226.8)	-7.0	1.9	—	1101	-165	-3.00	0.3
004	RF Center: FORF2 r=2.02NM	FO953	—	—	-7.0	1.6	L	578	—	-3.00	0.3
005	TF	RW19	Y	187 (180.4)	-7.0	1.6	—	67	—	-3.00/50	0.3
006	FA	—	—	187 (180.4)	-7.0	—	—	+500	—	—	1.0
007	DF	BAIEN	—	—	-7.0	—	L	3000	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
BAIEN	333720.39N/1315059.77E	FORF2	333110.65N/1314640.11E
FO951	333356.67N/1314639.45E		
FO952	333239.42N/1314500.88E		
FO953	333111.58N/1314414.94E		
RW19	332934.89N/1314414.08E		

RJFO / OITA

Visual REP



Call sign	BRG / DIST from ARP	Remarks
佐賀の関 Saganoseki	159°/15NM	精錬所煙突 Chimney
杵築 Kitsuki	240°/6.8NM	八坂川河口 River-mouth (The Yasaka)
姫島 Himeshima	351°/15NM	島 Island
イーストポイント East point	090°/10NM	海上 Over the sea
ゴルフコース Golf course	351°/9.5NM	ゴルフ場 Golf course
行入ダム Gyonyu dam	326°/7NM	ダム Dam

RJFO / OITA

Minimum Vectoring Altitude CHART

