

# AERODROME OBSTACLE CHART-ICAO





RJFO / OITA SID

### MUSASHI REVERSAL TWO DEPARTURE

RWY01: Climb RWY HDG to 500FT, turn right HDG177° to intercept and proceed via

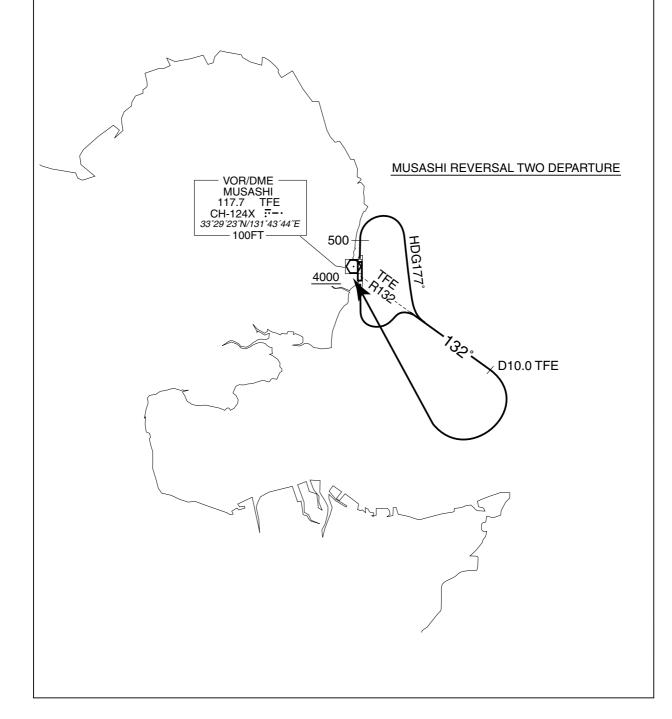
TFE R132 to TFE 10.0DME,...

RWY19: Turn left, climb via TFE R132 to TFE 10.0DME,...

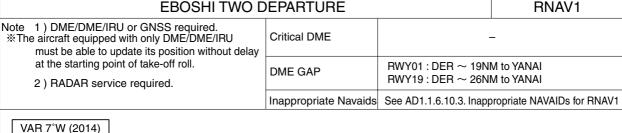
...turn right, direct to TFE VOR/DME. Cross TFE VOR/DME at or above 4000FT.

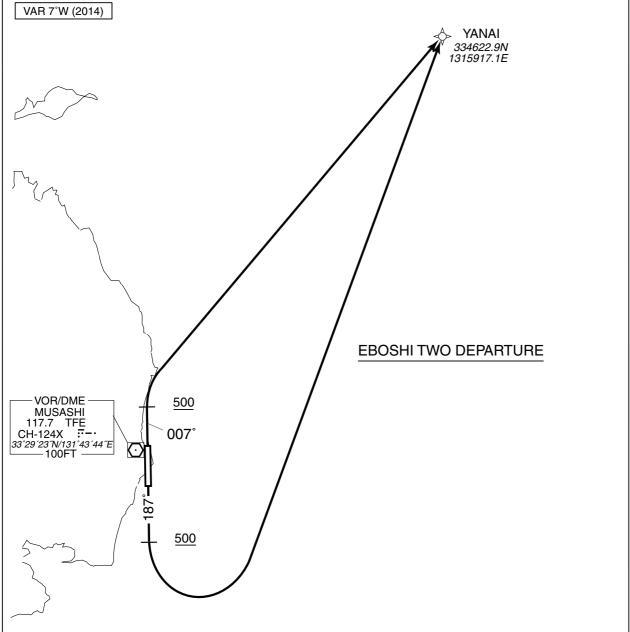
Note RWY01: 5.0% climb gradient required up to 500FT.

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



RJFO / OITA RNAV SID





### **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.

RJFO / OITA RNAV SID

# EBOSHI TWO DEPARTURE

### RWY01

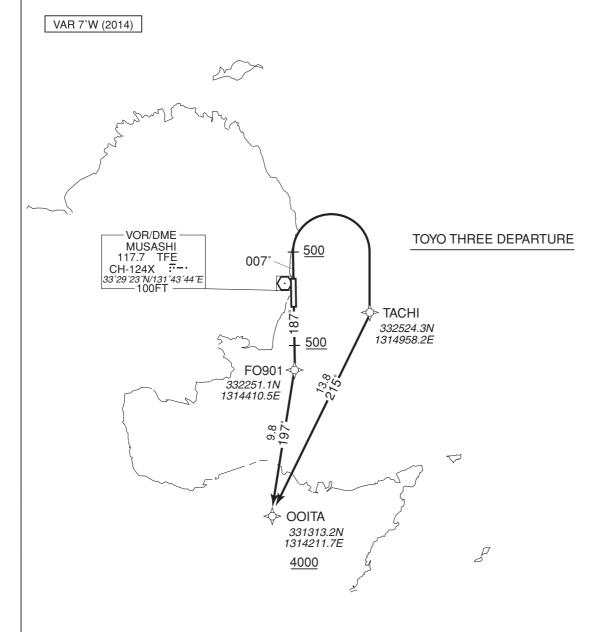
Ser Num	al Path ber Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation		Turn Direction		l '		Navigation Specification
00	1 VA	_	_	007 (000.4)	-7.0	_	_	+500	_	_	RNAV1
00	2 DF	YANAI	_	_	-7.0	_	R	_	_	_	RNAV1

# RWY19

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction		'		Navigation Specification
001	VA	_	_	187 (180.4)	-7.0	_	_	+500	_	_	RNAV1
002	DF	YANAI	_	_	-7.0	_	L	_	_	_	RNAV1

RJFO / OITA RNAV SID

TOYO THREE DEPARTURE RNAV									
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	Critical DME		-						
at the starting point of take-off roll.  2) RADAR service required.	DME GAP	RWY01 : DER $\sim$ 9NM RWY19 : DER $\sim$ 3NM	**						
2) Th Britt Solvido required.	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	propriate NAVAIDs for RNAV1						



### TOYO 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.

RJFO / OITA RNAV SID

# TOYO THREE DEPARTURE

# RWY01

Serial	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction		Speed (KIAS)		Navigation Specification
INUITIDE	Descriptor	lueritiller	Over	IVI( I )	variation	(INIVI)	Direction	(F1)	(KIAS)	Angle	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	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	$^{\circ}M(^{\circ}T)$	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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

RJFO / OITA RNAV SID

FUSHA ONE I	DEPARTURE		RNAV1
Note 1) DME/DME/IRU or GNSS required.  *The aircraft equipped with only DME/DME/IRU	Critical DME	RWY01 : MYE 25NM to	FUSHA ∼ 24NM to FUSHA
must be able to update its position without delay at the starting point of take-off roll.	DME GAP	RWY01 : DER ~ 25NM RWY19 : DER ~ 23NM	
2 ) RADAR service required.	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	propriate NAVAIDs for RNAV1
VAR 7°W (2014)	\$		
VOR/DME MUSASHI 117.7 TFE CH-124X : 33'29'23'N/131'43'44'E 100FT	FUSHA ONE DEPA	HA7N	

### FUSHA ONE DEPARTURE

RWY01: Climb on HDG007° at or above 500FT, turn right direct to FUSHA. RWY19: Climb on HDG187° at or above 500FT, turn left direct to FUSHA.

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

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

RJFO / OITA RNAV SID

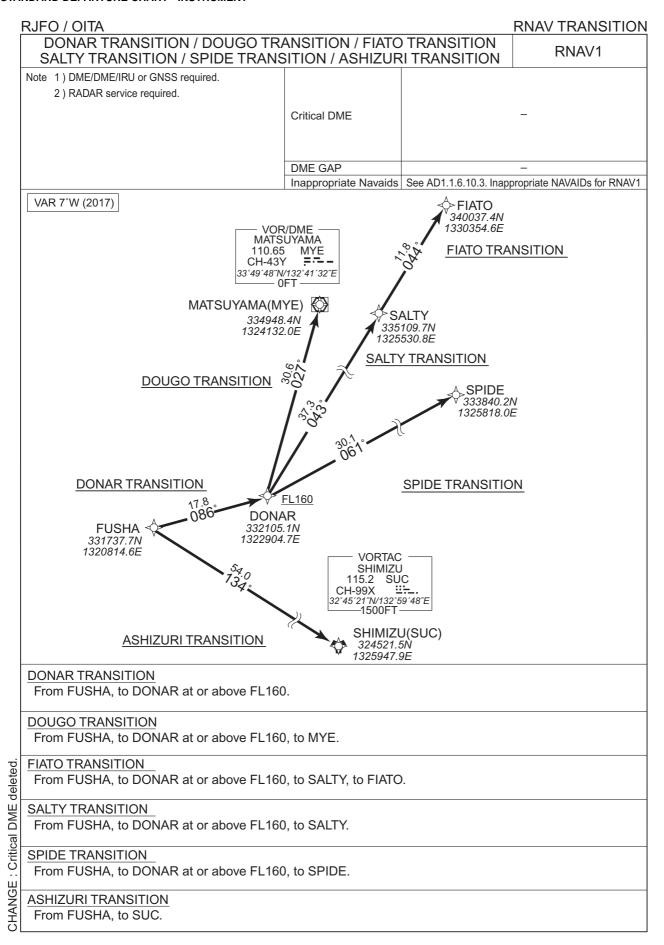
# FUSHA ONE DEPARTURE

### RWY01

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation		Turn Direction		•		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		Magnetic Variation		Turn Direction		•		Navigation Specification
001	VA	_	_	187 (180.4)	-7.0	_		+500	_	_	RNAV1
002	DF	FUSHA	_	_	-7.0	_	L	_	_	_	RNAV1



# RJFO / OITA

### **RNAV TRANSITION**

# DONAR TRANSITION

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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		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		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	
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		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

# RJFO / OITA

### **RNAV TRANSITION**

# SPIDE TRANSITION

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	
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

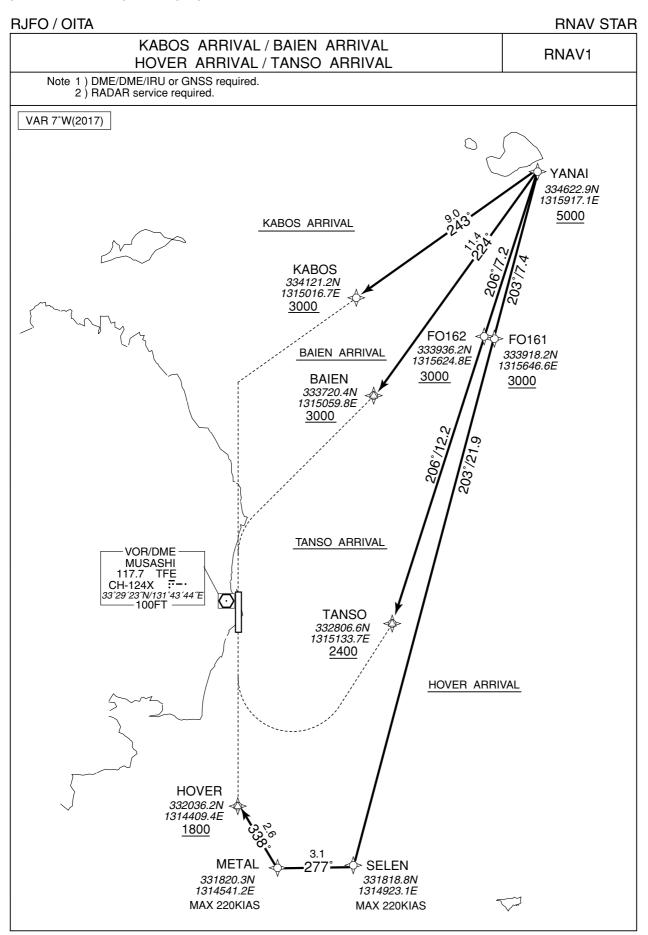
# ASHIZURI TRANSITION

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation		Turn Direction	Altitude (FT)			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. DONKO R038/D21.2 TFE 5000 JEWEL ARRIVAL **JEWEL** R038/D11.0 TFE 3000 VOR/DME MUSASHI 117.7 TFE CH-124X :--33°29′23″N/131°43′44″E 100FT

#### STANDARD ARRIVAL CHART-INSTRUMENT



#### 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		Turn Direction	Altitude (FT)	Speed (KIAS)		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 Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	'		Navigation Specification
001	IF	YANAI	_	_	-7.4	_	_	+5000	_	_	RNAV1
002	TF	BAIEN	_	224 (217.4)	-7.4	11.4	_	+3000	_	_	RNAV1

# TANSO ARRIVAL

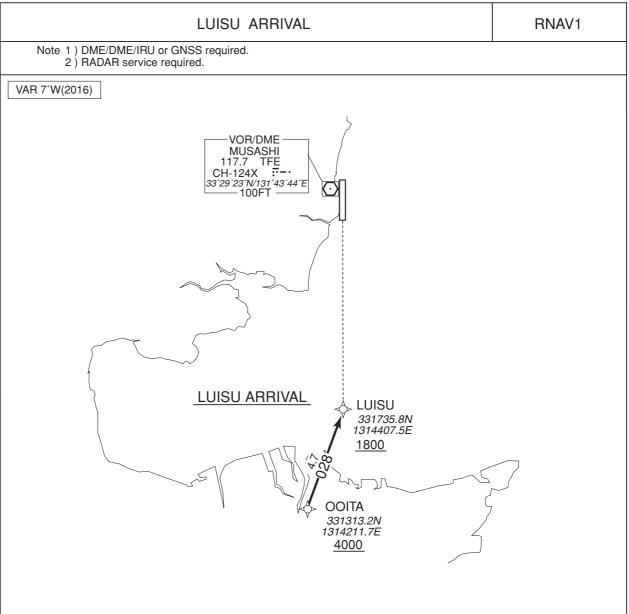
From YANAI at or above 5000FT, to FO162 at or above 3000FT, to TANSO at or above 2400FT.

Critical DME	_
DME GAP	-
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	
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

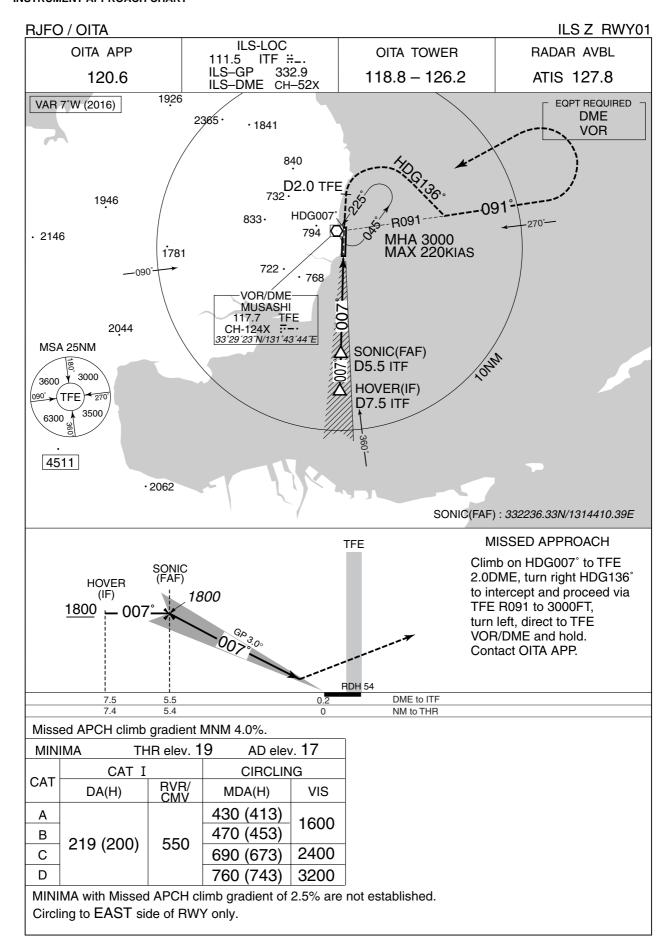


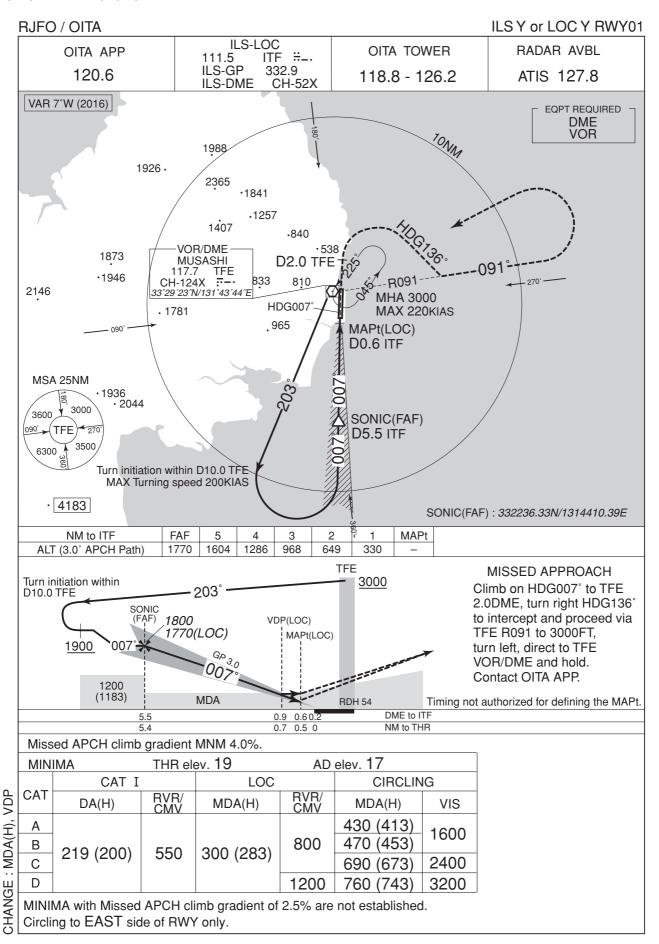
### LUISU ARRIVAL

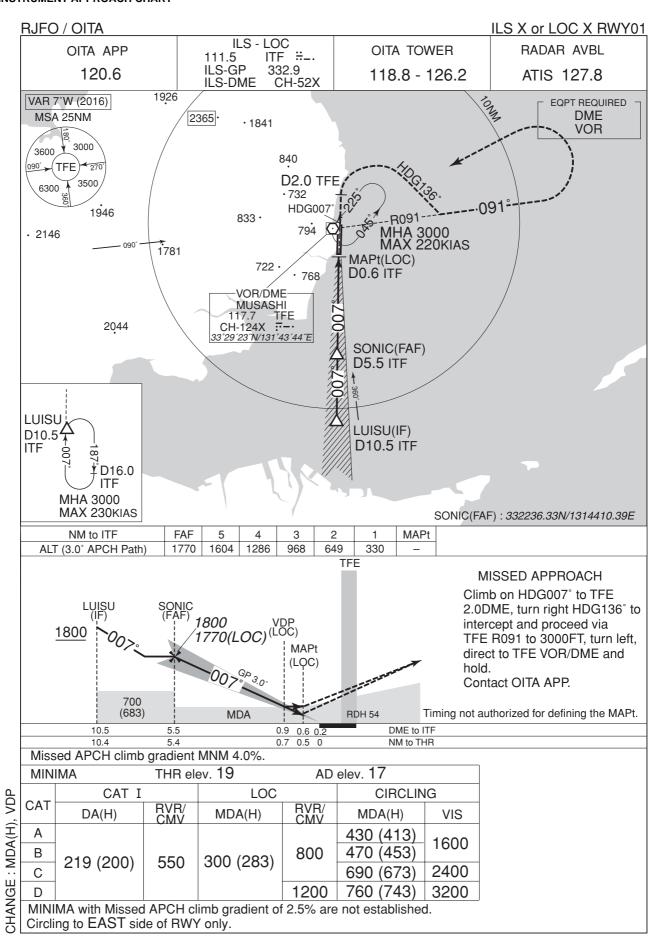
From OOITA at or above 4000FT, to LUISU at or above 1800FT.

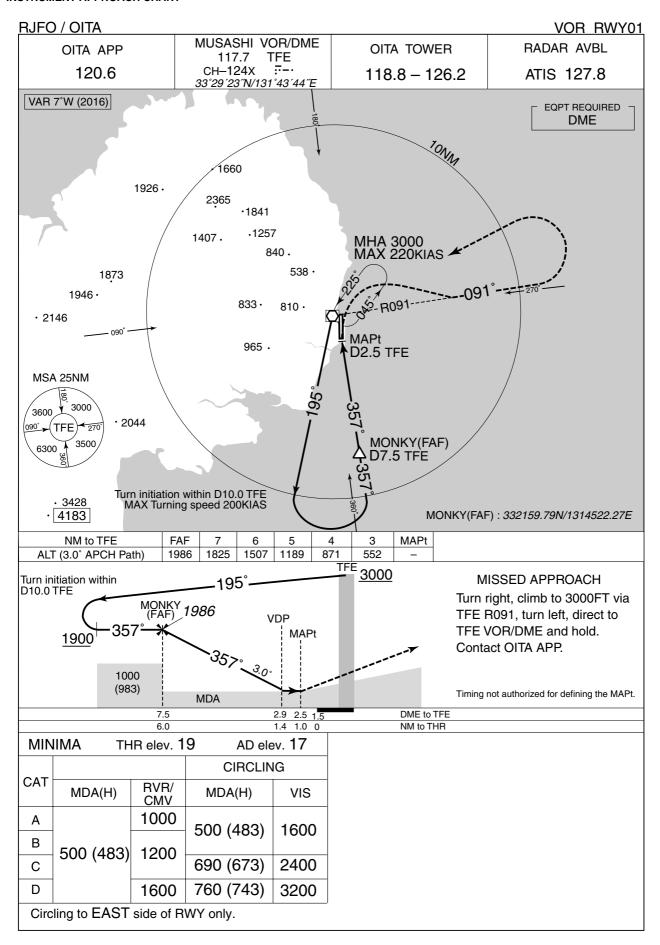
Critical DME	_
DME GAP	-
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

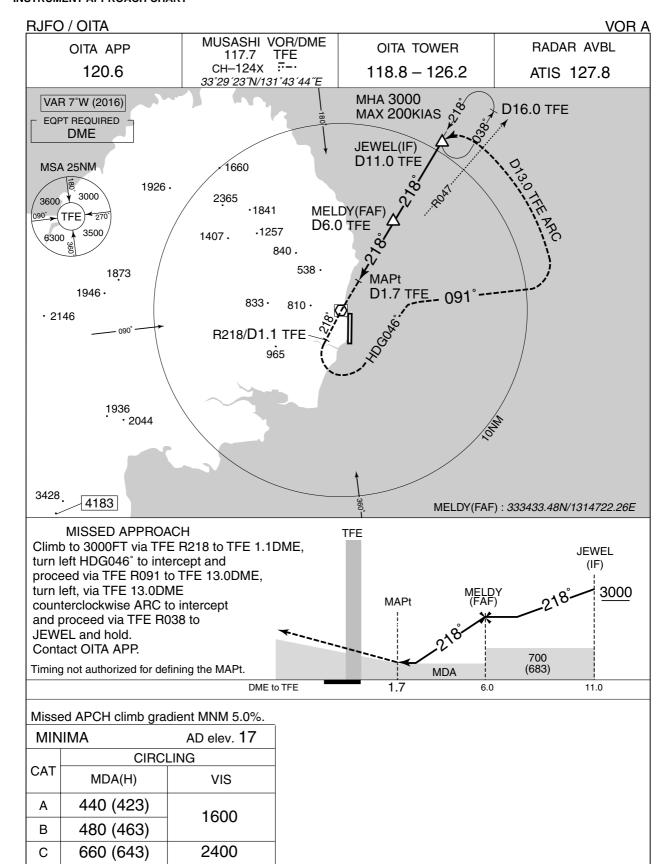
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation		Turn Direction		'		Navigation Specification
001	IF	OOITA	_	_	-7.3	_	_	+4000	_	_	RNAV1
002	TF	LUISU	_	028 (020.2)	-7.3	4.7	_	+1800	_	_	RNAV1











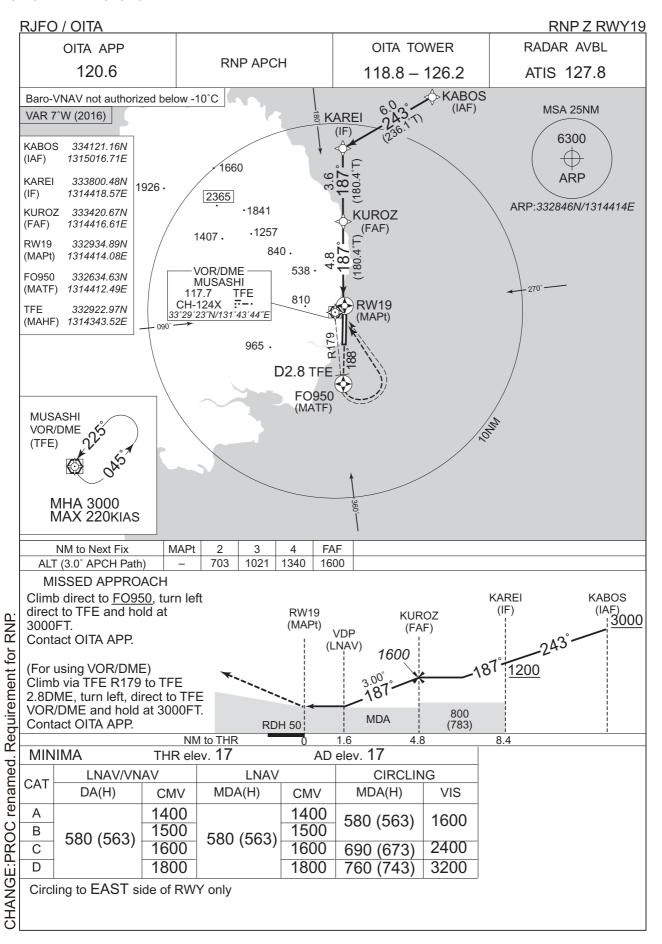
Circling to EAST side of RWY only.

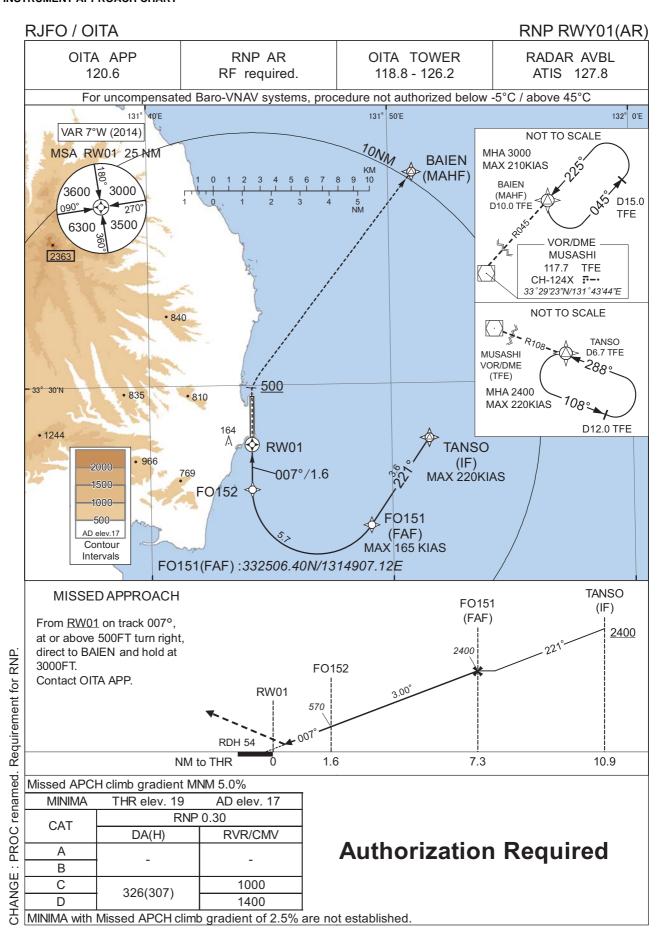
MINIMA with Missed APCH climb gradient of 2.5% are not established.

3200

760 (743)

D





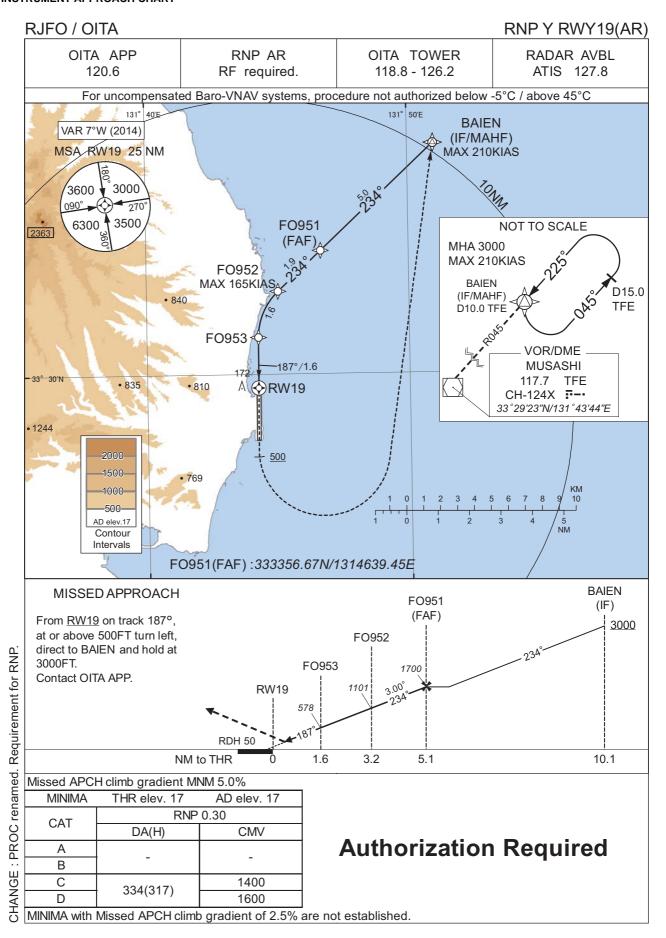
# RJFO / OITA RNP RWY01(AR)

### **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	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	Υ	007 (000.4)	-7.0	1.6	ı	73	-	-3.00/54	0.3
005	FA	-	-	007 (000.4)	-7.0	-	-	+500	-	-	1.0
006	DF	BAIEN	-	ı	-7.0	-	R	3000	-	-	1.0

# **Waypoint Coordinates**

Waypoint Iden	tifier	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		



# RJFO / OITA

# RNP Y RWY19(AR)

# 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	RNP Value
Number	-		OVCI	101( 1)	variation	(IVIVI)	Direction	(1 1)	(RIAO)	(°/FT)	Value
001	IF	BAIEN	-	-	-7.0	-	-	+3000	-210	-	-
002	TF	FO951	-	234 (226.8)	-7.0	5.0	-	1700	-	-	1.0
003	TF	FO952	1	234 (226.8)	-7.0	1.9	1	1101	-165	-3.00	0.3
004	RF Center: FORF2 r=2.02NM	FO953	ı	-	-7.0	1.6	L	578	-	-3.00	0.3
005	TF	RW19	Υ	187 (180.4)	-7.0	1.6	-	67	1	-3.00/50	0.3
006	FA	-	-	187 (180.4)	-7.0	-	-	+500	-	-	1.0
007	DF	BAIEN	1	-	-7.0	-	L	3000	1	-	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		



※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

from	Call sign	BRG / DIST from ARP	Remarks		
BRG/DIST	姫島 Himeshima	346°T / 15.3NM	島 Island		
	ゴルフコース Golf course	345°T / 9.7NM	ゴルフ場 Golf course		
Map updated.	行入ダム Gyonyu dam	321°T / 7.0NM	ダム Dam		
Мар и	イーストポイント East point	090°T / 10.0NM	海上 Over the sea		
	杵築 Kitsuki	232°T / 6.7NM	八坂川河口 River mouth (The Yasaka)		
CHANGE	佐賀関 Saganoseki	152°T / 15.0NM	精錬所煙突 Chimney		

