## **AD 2 AERODROMES**

## RJFK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

## **RJFK - KAGOSHIMA**

## RJFK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	314812N/1304310E 150°(MAG) / 1.5km from RWY 16 THR
2	Direction and distance from (city)	29.6km (16.0nm) NE of Kagoshima-Chuo railway station. 8.5km(4.6nm) Kajiki Railway station.
3	Elevation/ Reference temperature	891ft / 31°C (2012-2016)
4	Geoid undulation at AD ELEV PSN	Nil
5	MAG VAR/ Annual change	7°W (JAN 2015) / 5'W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Kagoshima Airport Office (CAB) Fumoto, Mizobe-cho, Kirishima-shi, Kagoshima Pref. AFS:RJFKYFYX Tel:0995(58)4461
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Nil

## **RJFK AD 2.3 OPERATIONAL HOURS**

1	AD Administration	2200 - 1300
2	Customs and immigration	Customs: 2330-0815 Immigration: INTL SKED FLT hours only
3	Health and sanitation	Quarantine(human): 2330-0815 Quarantine(animal, plant): INTL SKED FLT hours only
4	AIS Briefing Office	H24
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24(FUKUOKA)
7	ATS	2200 - 1300 (Flight Information Service (except ATIS) and Alerting Service : H24)
8	Fuelling	2330 - 0800
9	Handling	2200 - 1300
10	Security	2105 - 1210
11	De-icing	Nil
12	Remarks	Nil

## **RJFK AD 2.4 HANDLING SERVICES AND FACILITIES**

1	Cargo-handling facilities	No limitation
2	Fuel/ oil types	Fuel / JET A-1, AVGAS 100 Oil / W80,W100
3	Fuelling facilities/ capacity	Fuel Truck Refueling, No limitation
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

## **RJFK AD 2.5 PASSENGER FACILITIES**

1	Hotels	Hotels in the city	
2	Restaurants	At Airport, Not Continuous	
3	Transportation	Busses and Taxis	
4	Medical facilities	Hospital in Kajiki-cho (10km from Airport)	
5	Bank and Post Office	At Airport, Not Continuous	
6	Tourist Office	Nil	
7	Remarks	Nil	

## **RJFK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1	AD category for fire fighting	CAT 9
2	Rescue equipment	Chemical fire fighting truck, Water-supply truck, Lighting power supply truck, Emergency medical equipments conveyance truck
3	Capability for removal of disabled aircraft	Nil
4	Remarks	Nil

## **RJFK AD 2.7 SEASONAL AVAILABILITY-CLEARING**

1	Types of clearing equipment	Snow removal equipment: Motor grader x 5		
2	Clearance priorities	Nil		
3	Remarks	Seasonal availability : From early DEC to early MAR, Ask AD administration for detail		

## RJFK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Surface-Asphalt concrete, and concrete in part Strength: PCN 62/R/B/X/T PCN 20/F/A/Y/T PCN 20/R/B/X/T in front of Japan Coast Guard hangar	
2	Taxiway width, surface and strength	Surface: Asphalt concrete Strength: PCN 58/F/A/X/T Width: 23m (P1-P6), 28.5m (T1, T7), 34m (T2, T3, T4 and T6), 30m (T5)	
3	ACL and elevation	Not available	
4	VOR checkpoints	Not available	
5	INS checkpoints	(Spot NR)  1: 314817.13N, 1304251.30E 2: 314815.26N, 1304252.50E 3: 314813.42N, 1304253.74E 4: 314811.39N, 1304255.12E 5: 314809.37N, 1304256.54E 6: 314807.42N, 1304257.91E 7: 314805.92N, 1304259.23E 8: 314804.66N, 1304300.08E 9: 314803.04N, 1304300.76E 10: 314801.16N, 1304302.04E 17: 314749.18N, 1304310.21E 18: 314747.22N, 1304311.53E	
6	Remarks	Nil	

## RJFK AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual dock- ing/ parking guidance system of aircraft stands	ACFT stand ID sign: NR 3 - 10
2	RWY and TWY markings and LGT	RWY: (RWY 16/34) (Marking): RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe (LGT):REDL, RENL, RCLL, RTHL, RTZL(RWY 34), WBAR(RWY34) RWY DIST marker LGT  TWY: ALL TWY (Marking): TWY CL, TWY side stripe (LGT): TWY edge LGT, TWY CL LGT  TWY: T1 - T7 (Marking): RWY HLDG PSN, Mandatory instruction (LGT): RWY guard LGT, Taxiing guidance sign
3	Stop bars	Stop bar LGT: T1-T7 Stop bar LGT operations  1)Stop bar LGT are installed at each RWY holding position associated with RWY 16/34.  2)Stop bar LGT will be operated when the visibility or the lowest RVR of RWY 16/34 is at or less than 600m.  3)Stop bar LGT on TWY T1,T7 are controlled individually by ATC.  4)Stop bar LGT on TWY T2 through T6 are not controlled individually by ATC.  5)During the period Stop bar LGT operated, TWY T2 through T6 are not available for departure aircraft.
4	Remarks	(Marking): Overrun area (LGT) Apron flood LGT

## **RJFK AD 2.10 AERODROME OBSTACLES**

In approach/TKOF areas

See AD 2.24 Obstacle Chart

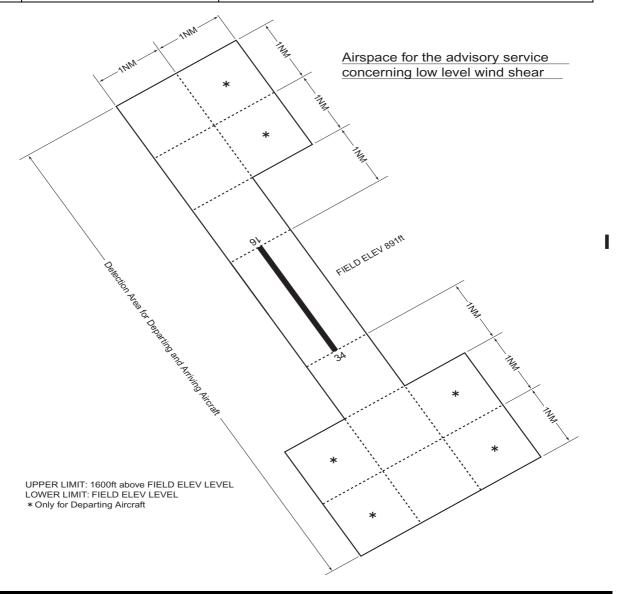
RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
	Pylon	315718N1303639E	2117ft	Marking / -	Above outer horizontal surface
	Pylon	315717N1303651E	2189ft	Marking / Lighted	Above outer horizontal surface
	Pylon	315716N1303704E	1894ft	Marking / -	Above outer horizontal surface
	Building	314939N1304110E	1245ft	- / Lighted	Above conical surface
	Pylon	315227N1304736E	1627ft	Marking / Lighted	Above conical surface
	Windmill	314038N1303551E	1903ft	Marking / Lighted	Above outer horizontal surface
	Windmill	314034N1303547E	1903ft	- / Lighted	Above outer horizontal surface
	Windmill	314030N1303542E	1913ft	- / Lighted	Above outer horizontal surface
	Windmill	314025N1303550E	2015ft	Marking / Lighted	Above outer horizontal surface
	Windmill	314019N1303548E	2070ft	Marking / Lighted	Above outer horizontal surface
	Windmill	314013N1303548E	2067ft	- / Lighted	Above outer horizontal surface
	Windmill	314011N1303554E	2031ft	- / Lighted	Above outer horizontal surface
	Windmill	314006N1303556E	1992ft	Marking / Lighted	Above outer horizontal surface
	Antenna	314925N1304104E	1245ft	Marking / -	Above conical surface
	Antenna	315306N1304841E	1667ft	Marking / Lighted	Above conical surface
	Pylon	315520N1303908E	1794ft	- / Lighted	Above conical surface
	Pylon	315513N1303901E	1840ft	- / Lighted	Above conical surface
	Pylon	315504N1303853E	1803ft	- / -	Above conical surface
	Pylon	315305N1303806E	1678ft	- / Lighted	Above conical surface
	Pylon	315218N1303711E	1638ft	- / Lighted	Above conical surface
	Pylon	315209N1303703E	1849ft	- / Lighted	Above conical surface
	Pylon	315200N1303659E	1938ft	- / Lighted	Above conical surface
	Pylon	315150N1303701E	1725ft	- / Lighted	Above conical surface
	Pylon	315142N1303659E	1678ft	- / -	Above conical surface
	Windmill	313645N1304913E	2063ft	Marking / Lighted	Above outer horizontal surface
	Windmill	313635N1304917E	2119ft	Marking / Lighted	Above outer horizontal surface
	Windmill	313627N1304921E	2210ft	Marking / Lighted	Above outer horizontal surface

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
	See AD	2.24 Obstacle C	hart	

## **RJFK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

1	Associated MET Office	FUKUOKA
2	Hours of service MET Office outside hours	H24(FUKUOKA)
3	Office responsible for TAF preparation Periods of validity	FUKUOKA 30 Hours
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at FUKUOKA
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	$\begin{aligned} &S_{6},U_{85},U_{7},U_{5},U_{3},U_{25},U_{2}/\text{Tr},P_{s},P_{5},P_{3},P_{25},P_{SWE},P_{SWF},P_{SWG},P_{SWI},P_{SWM},\\ &P_{SW}(\text{domestic}),\;\;E,C,W_{E},W_{F},W_{G},W_{I},W,N \end{aligned}$
8	Supplementary equipment available for providing information	Doppler Radar for Airport Weather (See attached chart)
9	ATS units provided with information	TWR, APP, ATIS
10	Additional information (limitation of service, etc.)	Nil



## **RJFK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

•	THR elevation and highest elevation of TD2 of precision APP RWY
Asphalt Concrete 1304241.34E  34 330° 3000 x 45 PCN 58/F/A/X/T 314730.07N Asphalt Concrete 1304338.38E  Slope of RWY Strip Dimensions(M) RESA (Overrun) Dimensions(M)  7 10 11  See attached chart 3120x 300 240 x (MNM:90 MAX:300)* RWY gr See attached chart 3120x 300 240 x (MNM:90 MAX:300)* RWY gr *For detail, ask airport administrator  RWY16 906.2ft	6
Strip	THR ELEV: 906ft TDZ ELEV: 905.2ft
Dimensions(M)   Dimensions(M)	THR ELEV: 858.8ft TDZ ELEV: 861.6ft
See attached chart 3120×300 240 × (MNM:90 MAX:300)* RWY gr  See attached chart 3120×300 240 × (MNM:90 MAX:300)* RWY gr  *For detail, ask airport administrator  RWY16 906.2ft	Remarks
See attached chart 3120×300 240 × (MNM:90 MAX:300)* RWY gr *For detail, ask airport administrator  RWY16 906.2ft	14
*For detail, ask airport administrator  RWY16 906.2ft	rooving 3000 X 30m
906.2ft	grooving 3000 X 30m
907 2ft	RWY34
-0.21% 885.2ft	
-0.54% 870.7ft	858.8ft
0m 1200m 1875m 2500m	3000m

## **RJFK AD 2.13 DECLARED DISTANCES**

RWY	TORA	TODA	LDA	ASDA	Remarks
Designator	(m)	(m)	(m)	(m)	
1	2	3	4	5	6
16	3000	3000	3000	3000	Nil
34	3000	3000	3000	3000	Nil

## **RJFK AD 2.14 APPROACH AND RUNWAY LIGHTING**

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
16 34	SALS (*1) 421m LIH PALS 900m LIH	Green Green Green	PAPI 3.0°/LEFT 481m 74ft  PAPI 3.0°/LEFT 378m 68ft	900m	3000m 30m Coded color (White/Red) LIH 3000m 30m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH 3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2) Nil (*2)
				Remarks				
				10				
SALS with AP Overrun area CGL for RWY	edge LGT(C		nd 948m FM RW	/Y THR)(*1)				

## RJFK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: 314804N/1304328E,White/Green EV4.3sec,HO
2	LDI location and LGT Anemometer location and LGT	LDI: Nil Anemometor : RWY 16: 425m from RWY 16 THR, LGTD RWY 34: 515m from RWY 34 THR, LGTD
3	TWY edge and center line lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 1sec: REDL, RENL, RTHL, WBAR, RCLL, Overrun area edge LGT, Stop bar LGT Within 15sec: Other LGT
5	Remarks	WDI LGT

## **RJFK AD 2.16 HELICOPTER LANDING AREA**

Nil
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## **RJFK AD 2.17 ATS AIRSPACE**

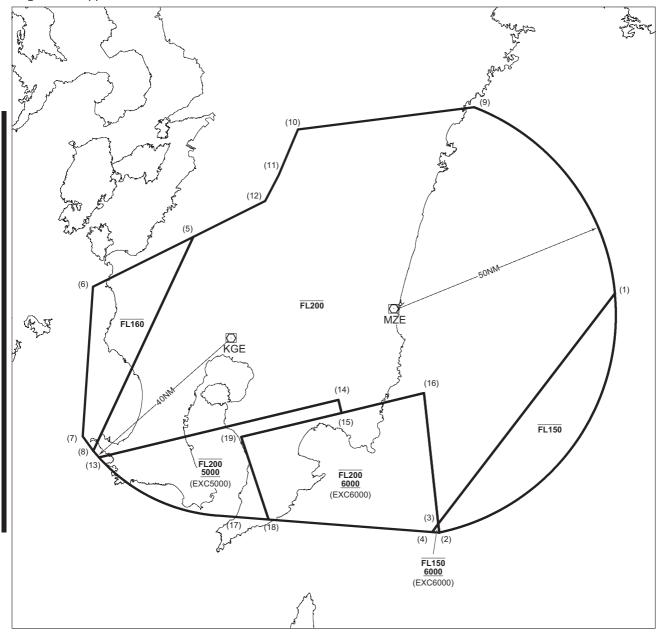
	Designation and lateral limits	Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
	1	2	3	4	6
KAGOSHIMA CTR	Area within a radius of 5 nm of KAGOSHIMA ARP (31° 48'N 130° 43'E)	D	KAGOSHIMA TWR En		
KAGOSHIMA PCA	I See attached chart			KAGOSHIMA APP(1) KAGOSHIMA RADAR(1) KAGOSHIMA TWR(2) En	(1)Primary (2)Secondary
KAGOSHIMA ACA	ISee attached chart			KAGOSHIMA APP KAGOSHIMA RADAR KAGOSHIMA DEP En	
KAGOSHIMA TCA	I See attached chart			KAGOSHIMA TCA En	

鹿児島特別管制区 Kagoshima Positive Control Area

NAME	LATERAL LIMITS	UPPER LIMIT (AMSL) LOWER LIMIT (AMSL) M(ft)	UNIT PROVIDING SERVICE	REMARKS
1 鹿児島 KAGOSHIMA	を記に示される区域 The area shown below	3	4 Primary Kagoshima APP Kagoshima Radar 126.0 120.8 261.2 Secondary Kagoshima TWR 118.2 126.2 261.2	当該空域を飛行しようとする航空機は、鹿児島アプローチ (鹿児島レーダー) 又は鹿児島タワーに連絡し、コールサイン、現在位置、高度及び意図を通報し指示を受けること。 Pilot requiring transit of Kagoshima Positive Control Area must call Kagoshima Approach (Kagoshima Radai or Kagoshima Tower prior to the point of entry to provide aircraft identification, position altitude and intention.
	KAJIKI TOWN	5000 314313N 1304349E	JINGU 314513N 1304753E 314322N 1304908E	
		314122N 1304504E Na. 31393 130461.	5000 1800 314138 1305018 56 2300 ZAIHO 313702N 304800E	

鹿児島進入管制区

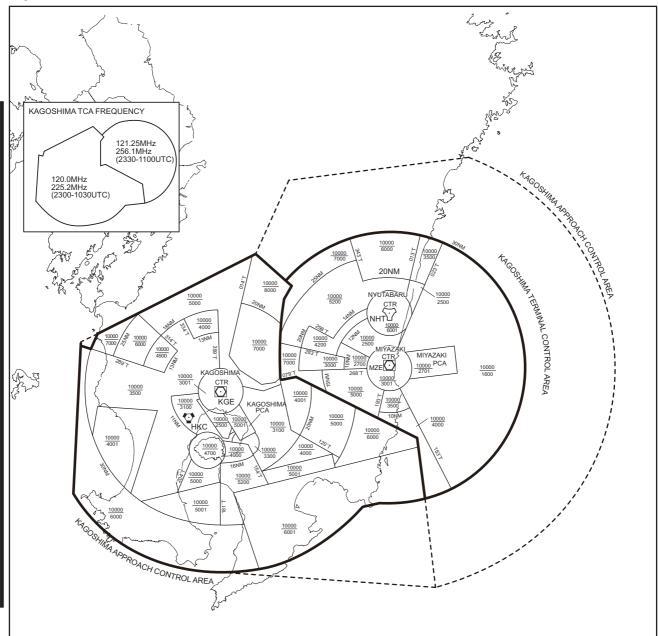
## Kagoshima Approach Control Area



## Point list

- 315637N1322447E
- 310334N1313731E
- 310532N1313718E
- 310343N1313539E
- 321040N1303343E
- (6)315929N1300708E
- 312550N1300425E
- 312235N1300712E (8)
- 323907N1314828E
- (10) 323437N1310137E
- (11) 322421N1305624E
- (12) 321836N1305245E (13) 312105N1300842E
- (14) 313341N1311133E
- (15) 313045N1311220E
- (16) 313500N1313405E
- (17) 310754N1303942E (18) 310657N1305257E
- (19) 312533N1304601E

鹿児島ターミナルコントロールエリア Kagoshima Terminal Control Area

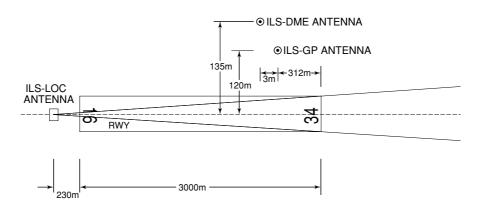


## **RJFK AD 2.18 ATS COMMUNICATION FACILITIES**

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Kagoshima approach	126.0MHz(1) 119.4MHz 121.4MHz 120.9MHz 362.3MHz 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	(1)Primary
ASR	Kagoshima Radar	120.8MHz 121.4MHz 120.9MHz 362.3MHz 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
DEP	Kagoshima Departure	119.4MHz(1) 120.1MHz 121.4MHz 362.3MHz 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
TCA	Kagoshima TCA	120.0MHz 225.2MHz	2300 - 1030	
		121.25MHz 256.1MHz	2330 - 1100	
TWR	Kagoshima Tower	118.2MHz(1) 126.2MHz 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
GND	Kagoshima Ground	121.7MHz	2200 - 1300	
DLVRY	Kagoshima Delivery	121.8MHz	2200 - 1300	
ATIS	Kagoshima Airport	127.05MHz	2200 - 1300	

## **RJFK AD 2.19 RADIO NAVIGATION AND LANDING AIDS**

Type of aid (VOR decli- nation)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (6°W/2004)	HKC	113.3MHz	H24	314150.00N/ 1303458.59E		
TACAN	HKC	1167MHz (CH-80X)	H24	314149.80N/ 1303500.26E	1909ft	VORTAC unusable : 150°- 160° beyond 20nm BLW 6000ft.
VOR (7°W/2018)	KGE	115.7MHz	2200 - 1300	314751.15N/ 1304333.97E		VOR Unusable : 040°- 070° beyond 20nm BLW 8000ft.
DME	KGE	1191MHz (CH-104X)	2200 - 1300	314751.15N/ 1304333.97E	901ft	DME Unusable : 040°- 050° beyond 15nm BLW 8000ft. 050°- 070° beyond 20nm BLW 8000ft.
ILS-LOC 34	IKG	111.7MHz	2200 - 1300	314900.89N/ 1304236.96E		LOC : 230m(755ft) away FM RWY 16 THR, BRG (MAG) 337°
ILS-GP 34	-	333.5MHz	2200 - 1300	314740.78N/ 1304336.38E		GP: 312m(1024ft) inside FM RWY 34 THR, 120m(394ft) E of RCL. HGT of ILS REF datum 17.3m(57ft). GP angle 3.0°
ILS-DME 34	IKG	1015MHz (CH-54X)	2200 - 1300	314741.11N/ 1304336.81E	880ft	DME : 315m(1034ft) inside FM RWY 34 THR, 135m(443ft) E of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based



REMARKS: 1. ILS-LOC beam BRG(MAG) 337°

4. ELEV of ILS-DME

2. HGT of ILS REF datum 17.3m (57ft)

268.1m (880ft)

3. GP Angle 3.0°

Civil Aviation Bureau, Japan (EFF:5 NOV 2020)

## **RJFK AD 2.20 LOCAL TRAFFIC REGULATIONS**

1. Airport regulations

Owing to congestion on the ACFT aprons, operators of transient ACFT are requested to obtain prior permission from CAB KAGOSHIMA(TEL:0995-58-4470), EXC SKD FLT and ACFT in an emergency.

	N	il	
Parking area for small aircraft(General aviation)			
	N	il	
Parking area for helicopters			
	N	il	
Apron - taxiing during winter conditions			
	N	 il	
Wing Span (WS) of aircraft taxiing on TWY P1 - P2 or P5 - P6	WS =< 21.4m	WS > 21.4m	Legend: *A wing tip clearance ≧ 15m
When B744 holding at the stop marking on T	TWY T2 or T6		
Wing tip clearance	*B	*C	*A wing tip clearance ≤ 15m  *B 6.5m ≤ wing tip clearance < 15m  *C wing tip clearance < 6.5m
1			
School and training flights - technical test flights -	use of runways		
School and training flights - technical test flights -	· use of runways N	il	
School and training flights - technical test flights -		il	
	N		

#### **RJFK AD 2.21 NOISE ABATEMENT PROCEDURES**

#### 1. 騒音軽減運航方式

すべてのジェット機に対して、空港周辺における航空機 騒音軽減のため、運航の安全に支障のない範囲で、以下の 方式が適用される。ただし、これらの方式によることがで きない航空機は実効的にこれらと同等と認められる代替 方式を実施するものとする。

(1) 離陸について (滑走路 16/34)急上昇方式

(2) 着陸について (滑走路 16/34) ディレイド・フラップ進入方式及び低フラップ角 着陸方式

(3) リバース・スラストについてなし

2. 優先滑走路方式

なし

3. 優先飛行経路

なし

#### 1. Noise Abatement Operating Procedures

For all jet aircraft, in order to reduce aircraft noise in the vicinity of airport, the following procedures shall be applied unless compliance of the procedures adversely affects the safety of aircraft operations. In case that the aircraft is unable to take these procedures, pilots should execute alternative procedures which are considered to be practically equivalent.

(1)For take-off from RWY16/34 Steepest Climb Procedure

(2)For landing to RWY16/34

Delayed Flap Approach Procedure and Reduced Flap Setting Procedure

(3)Reverse Thrust Nil

2. Preferential Runways Procedures

Nil

3. Noise Preferential Routes

Nil

#### **RJFK AD 2.22 FLIGHT PROCEDURES**

#### 1. TAKE OFF MINIMA

	RWY		& RCLL BL		or RCLL BL		& RCLL JT
		CEIL-RVR	CEIL-VIS	CEIL-RVR	CEIL-VIS	CEIL-RVR	CEIL-VIS
TKOF ALTN AP FILED	16	-	0' - 400m *200' - 800m	-	0' - 600m *200' - 800m	-	0' - 800m *200' - 800m
AFFILLD	34	200' - 800m	200' - 800m	200' - 800m	200' - 800m	-	200' - 800m
OTHER	16	AVBL LDG MINIMA					
OTTIER	34			AVBL LD	J IVIII VIIIVIA		

NOTE: SIDs are designed in accordance with provisional standards for FLIGHT PROCEDURE DESIGN.

#### 2. TAKE OFF MINIMA for RNAV DEPARTURE

	RWY	RWY	ACFT CAT	REDL 8	& RCLL		or RCLL Marking		IL IE ONLY)
		CAI	RVR	VIS	RVR	VIS	RVR	VIS	
Multi-Engine ACFT with	16	A,B,C,D	-	400m	-	400m	-	500m	
TKOF ALTN AP FILED	34	A,B,C,D	400m	400m	400m	400m	-	500m	
OTHER	16	A,B,C,D	AVBL LDG MINIMA						
OTHER	34	A,B,C,D			AVBL LD	JIVIIIVIIVIA			

<sup>\*</sup> Applicable to OSUMI FIVE DEPARTURE

AIP Japan KAGOSHIMA

#### 3. Trajectorized Airport Traffic Data Processing System (TAPS)

Aircraft flying in Kagoshima approach control area under its control will be instructed to reply with discrete code on Mode A/3 and Mode C.

If an aircraft has no capability of replying with discrete code, the pilot shall report ATC if so instructed.

鹿児島アプローチの指示のもとに、当該進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。

二次レーダー個別コードを搭載していない航空機が当該コードによる応答を指示された場合は、管制官に対し、その旨通報 すること。

#### 4. Lost Communication Procedures for Arrival Aircraft under radar navigational guidance

If radio communications with Kagoshima Approach/Radar are lost for 30 seconds, Squawk Mode A/3 Code 7600 and :

- 1) Contact Kagoshima tower.
- 2) If unable, proceed in accordance with visual flight rules.
- 3) If unable, proceed to KAJIKI VOR at the last assigned altitude or 4000 feet whichever is higher, and execute approach.

Note: Procedures other than above will be issued when situation requires.

#### **RJFK AD 2.23 ADDITIONAL INFORMATION**

Volcano SAKURAJIMA located 3135N/13040E being active

#### **RJFK AD 2.24 CHARTS RELATED TO AN AERODROME**

Aerodrome/Heliport Chart-1

Aerodrome/Heliport Chart-2

Aerodrome Obstacle Chart - type A (RWY16/34)

Aerodrome Obstacle Chart - type B (RWY16/34)

Standard Departure Chart - Instrument (NANSHU)\*

Standard Departure Chart - Instrument (OSUMI)\*

Standard Departure Chart - Instrument (SOGIE)\*

Standard Departure Chart - Instrument (AIRA)\*

Standard Departure Chart - Instrument (MIDAI-RNAV)

Standard Arrival Chart - Instrument (SIMAZ-RNAV)

Standard Arrival Chart - Instrument (KINKOH-RNAV)

Standard Arrival Chart - Instrument (OGOJO, YUKSA, OIDON-RNAV)

Instrument Approach Chart (ILS Z or LOC Z RWY34)

Instrument Approach Chart (ILS Y or LOC Y RWY34)

Instrument Approach Chart (VOR RWY34)\*

Instrument Approach Chart (VOR A)\*

Instrument Approach Chart (RNAV(GNSS) RWY16)

Other Chart (KINKO VISUAL RWY34)

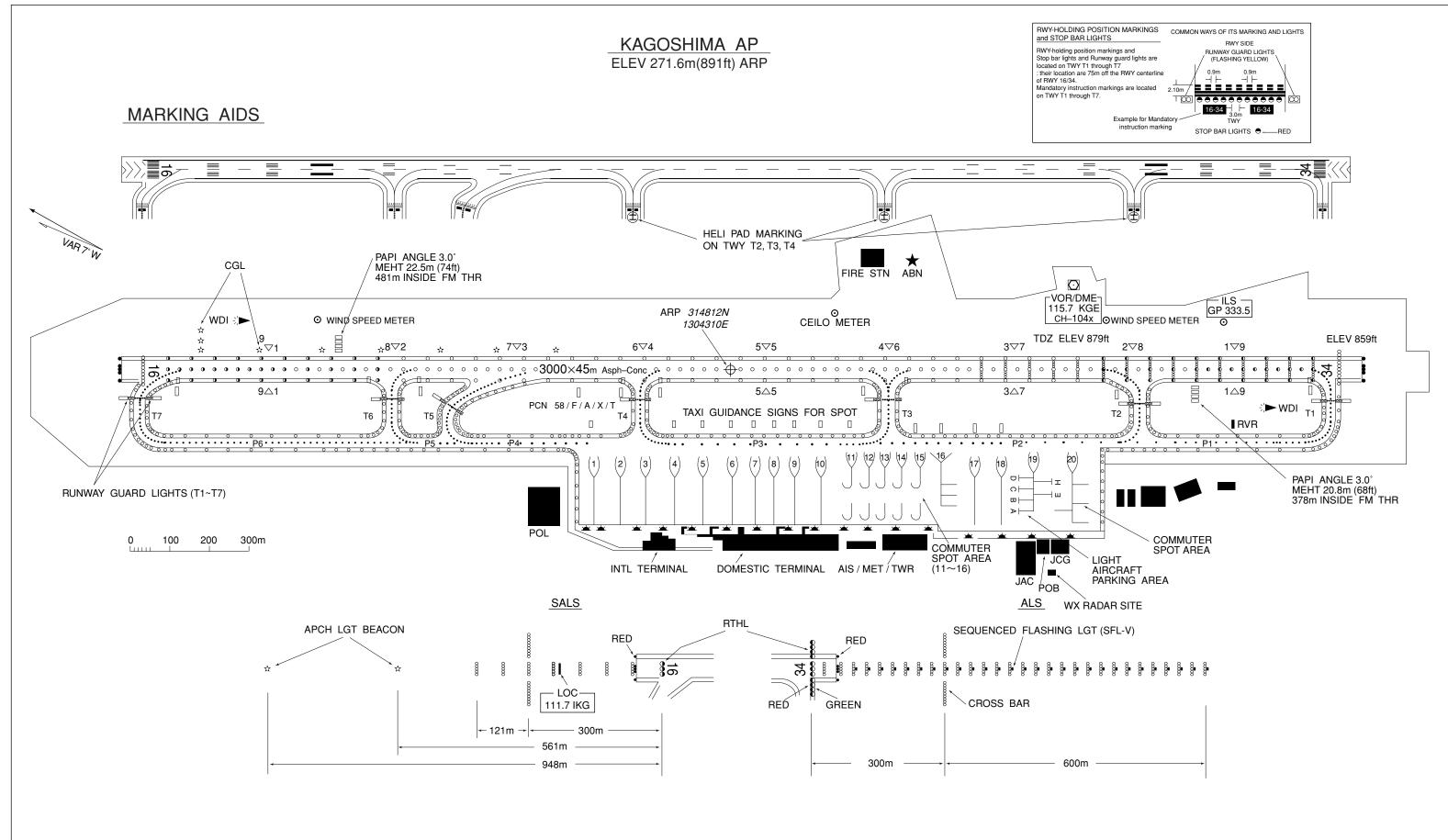
Other Chart (Visual REP)

Other Chart (LDG CHART)

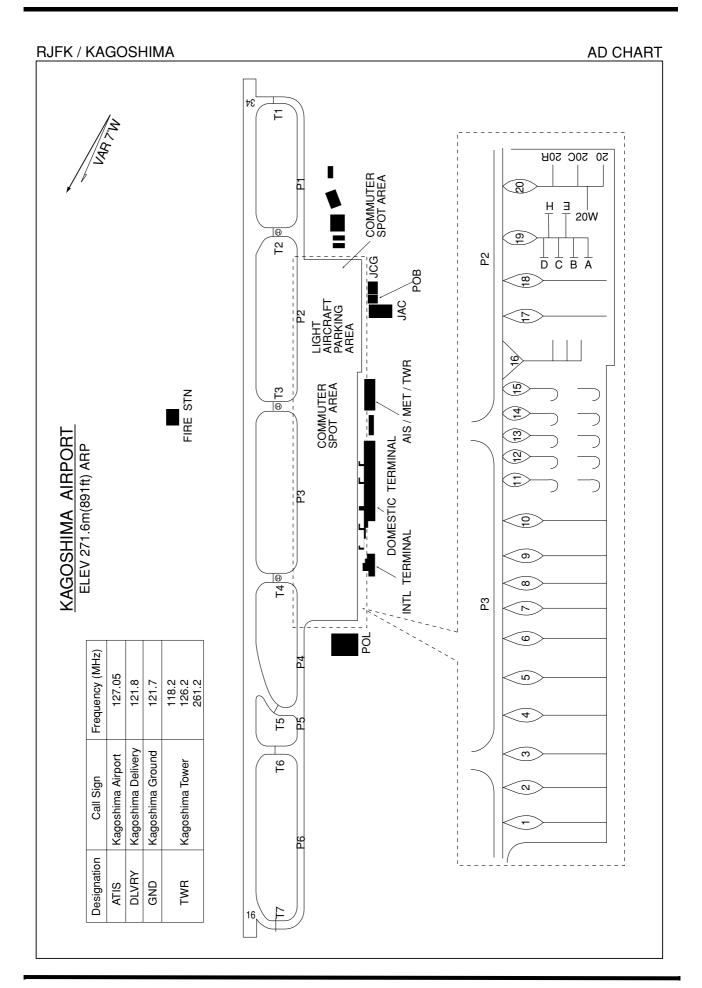
Other Chart (MVA CHART)

<sup>\*:</sup> Designed in accordance with provisional standards for FLIGHT PROCEDURE DESIGN.

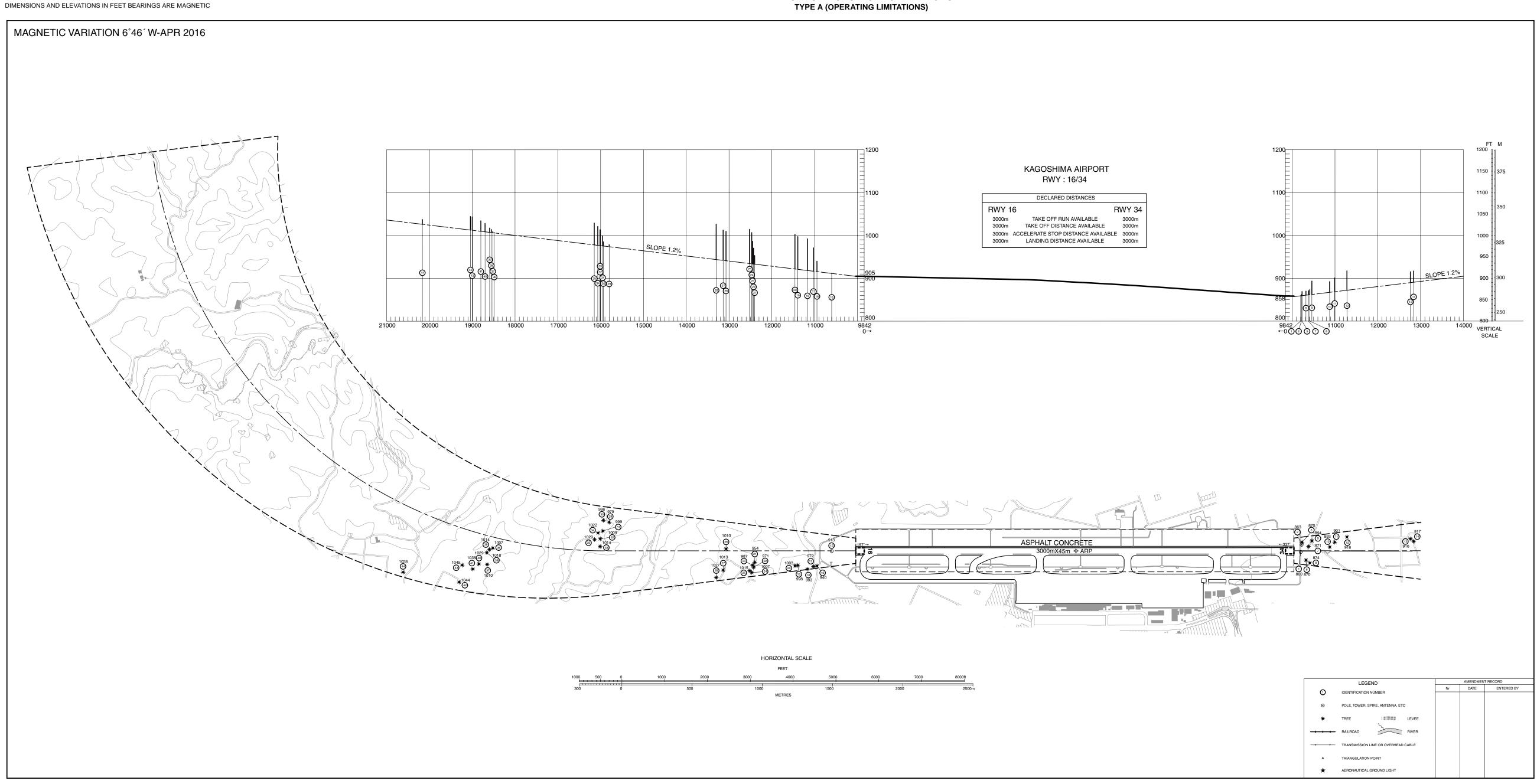
## **AERODROME CHART**



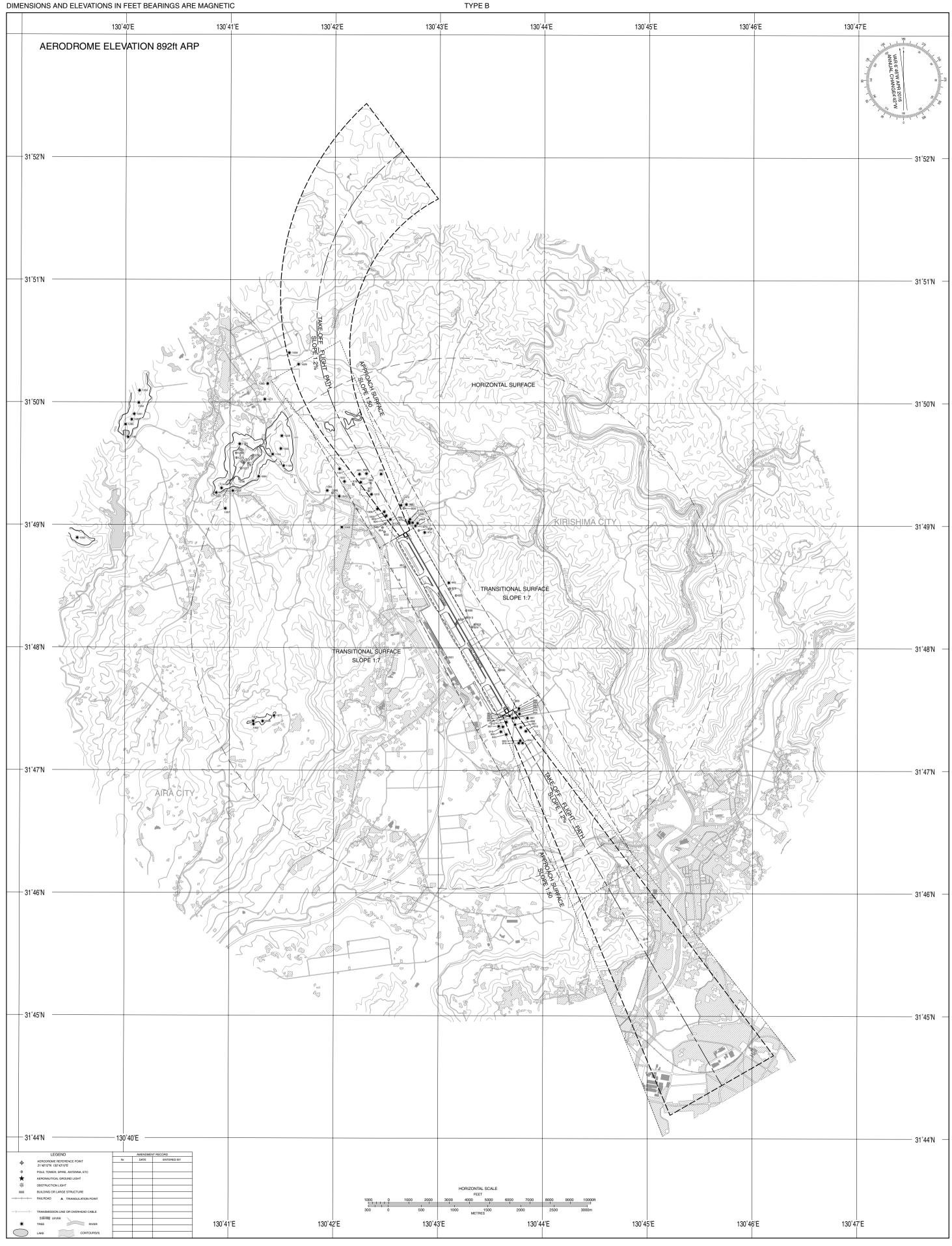
Civil Aviation Bureau, Japan (EFF:1 FEB 2018)



## AERODROME OBSTACLE CHART - ICAO TYPE A (OPERATING LIMITATIONS)



# AERODROME OBSTACLE CHART-ICAO TYPE B



RJFK / KAGOSHIMA SID

## NANSHU TWO DEPARTURE

RWY 16: Climb via RWY HDG until 1NM from RWY end/KGE 1.3DME, turn left....

RWY 34: Climb via RWY HDG until 1NM from RWY end/KGE 2.3DME, turn right,...

...direct to KGE VOR/DME, via KGE R238 to HKC VORTAC. Cross KGE VOR/DME at or above 2500FT, cross HKC VORTAC at or above 5000FT.

NOTE: When take off RWY34, following climb gradient should be maintained until 2100FT.

Speed (Knots)	60	90	120	150	180	210
Rate (Feet/Min)	300	450	600	750	900	1050



Civil Aviation Bureau, Japan (EFF:31 JAN 2019)

## RJFK / KAGOSHIMA

SID and TRANSITION

## OSUMI FIVE DEPARTURE

RWY 16: Climb ...

RWY 34: Climb via RWY HDG until 1NM from RWY end/KGE 2.3DME, turn

right,...

... via KGE R170 to OSUMI.

Note: Following climb gradient should be maintained until 4200FT.

Speed (Knots)	60	90	120	150	180	210
Rate (Feet/Min)	300	450	600	750	900	1050

## JOKER TRANSITION

From over OSUMI, via HKC R134 to JOKER.

## SAZMA TRANSITION

From over OSUMI, via KGE R170 to KGE 24DME(HKC R146/22DME), turn right, via HKC 25DME clockwise ARC to intercept and proceed via HKC R207 to SAZMA.

Cross KGE R170/24DME(HKC R146/22DME) at or above 8000FT.



#### RJFK / KAGOSHIMA

SID and TRANSITION

## SOGIE THREE DEPARTURE

RWY 16: Climb via RWY HDG until 1NM from RWY end/KGE 1.3DME, turn left, direct to KGE VOR/DME to cross at or above 2500FT,...

RWY 34: Climb via RWY HDG until 1NM from RWY end/KGE 2.3DME, turn right....

... via KGE R348 to SOGIE.

NOTE: When take off RWY34, following climb gradient should be maintained until 2300FT.

Speed (Knots)	60	90	120	150	180	210
Rate (Feet/Min)	300	450	600	750	900	1050

## **SAKURAJIMA TRANSITION**

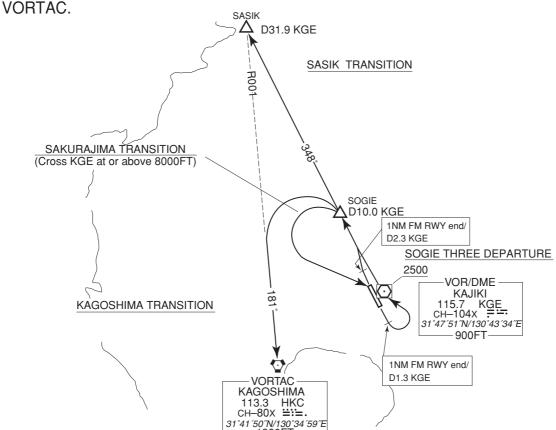
From over SOGIE, turn left, direct to KGE VOR/DME. Cross KGE VOR/DME at or above 8000FT.

## SASIK TRANSITION

From over SOGIE, via KGE R348 to SASIK.

## KAGOSHIMA TRANSITION

From over SOGIE, turn left to intercept and proceed via HKC R001 to HKC



## **RJFK / KAGOSHIMA**

→ SID

## AIRA ONE DEPARTURE

RWY16: Climb via RWY HDG until 1NM from RWY end/KGE 1.3DME, turn right, proceed

to HKC VORTAC. RWY34: (Not established)

Cross HKC VORTAC at or above 5000FT.



RJFK / KAGOSHIMA **RNAV SID** MIDAI THREE DEPARTURE RNAV 1 Note 1) DME/DME/IRU or GNSS required. RWY16: HKC:7NM to OICHI — 2NM to OICHI KGE:7NM to OICHI — 2NM to OICHI %The aircraft equipped with only DME/DME/IRU Critical DME must be able to update its position without delay at the starting point of take-off roll. RWY16: DER - 7NM to OICHI 2) RADAR service required. DME GAP RWY34: DER - 12NM to SMIKO Inappropriate Navaids | See AD 1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 7°W (2020) VOR/DME MIYAZAKI 112.4 MZE CH-71X ==... VOR/DMF KAJIKI 115.7 KGE CH-104X :---31°47′51″N/130°43′34″E 31°52′43″N/131°26′15″E 100FT -900FT MIYAZAKIAP 337 2000 FK400 315023.2N 1304844.2E 157 MIDAI THREE DEPARTURE ري. مير 1300 4 OICHI 9.4 20.3 313712.8N 099 1304725.8E 099 FL160 **SMIKO** MIDAI 313657.5N 313621.1N 1305824.7E 1312212.7E 7000 0 MIDAI THREE DEPARTURE

RWY16 : Climb on HDG 157° at or above 1300FT, turn right direct to OICHI, to SMIKO at or above 7000FT, to MIDAI at or above FL160.

RWY34 : Climb on HDG 337° at or above 2000FT, turn right direct to FK400, to SMIKO at or above 7000FT, to MIDAI at or above FL160.

Note RWY34: 5.0% climb gradient required up to 3100FT.

OBST ALT 3117FT located at 7.7NM 046° FM end of RWY34.

KOKUBU VOR/DME(KBE) abolished

CHANGE: PROC.

**RNAV SID** 

## STANDARD DEPARTURE CHART - INSTRUMENT

## RJFK / KAGOSHIMA

## MIDAI THREE DEPARTURE

## RWY16

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	VA	_	_	157 (150.1)	-7.2	_	-	+1300	_	_	RNAV1
002	DF	OICHI	_	_	-7.2	_	R	1	_	_	RNAV1
003	TF	SMIKO	_	099 (091.5)	-7.2	9.4	-	+7000	_	_	RNAV1
004	TF	MIDAI	_	099 (091.6)	-7.2	20.3	_	+FL160	_	_	RNAV1

#### RWY34

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	VA	_	_	337 (330.1)	-7.2	_	_	+2000	_	_	RNAV1
002	DF	FK400	_	_	-7.2	_	R	_	_	_	RNAV1
003	TF	SMIKO	_	156 (148.5)	-7.2	15.8	-	+7000	-	_	RNAV1
004	TF	MIDAI	_	099 (091.6)	-7.2	20.3	1	+FL160	-	_	RNAV1

CHANGE: PROC. KOKUBU VOR/DME(KBE) abolished. HLDG pattern.

#### STANDARD ARRIVAL CHART -INSTRUMENT

#### **RNAV STAR RWY34** RJFK / KAGOSHIMA SIMAZ EAST ARRIVAL RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 7°W (2020) **SPICA** 315650.2N 1312623.5E 10000 SIMAZ EAST ARRIVAL $\odot$ VOR/DME MIYAZAKIAP **KAJIKI** 115.7 KGE CH−104X =:--31°47′51″W130°43′34″E VOR/DME MIYAZAKI 112.4 MZE CH-71X ==·· 31°52′43″N/131°26′15″E -900FT -100FT MUSES 314004.5N 1305007.4E JANUS *314516.7N* 3100 RNAV1 1310450.1E 6000 1MIN(at or below FL140) 297 <sup>®</sup> SIMAZ *314038.1N* 1.5MIN(above FL140) 265° **CELES** 1304816.5E 314010.5N **CELES** 2800 1305520.6E 297 MAX200KIAS 4100 KEPLA 313932.3N MAX230KIAS 1305153.4E MHA 4100 3300 MAX 230KIAS(at or below FL140) MAX 240KIAS (above FL140) SIMAZ EAST ARRIVAL From SPICA at or above 10000FT, to JANUS at or above 6000FT, to CELES at or above 4100FT, to KEPLA at or above 3300FT, to MUSES at or above 3100FT, to SIMAZ at above 2800FT. Critical DME DME GAP Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 Turn Serial Path Waypoint Fly Course Magnetic Distance Altitude Speed Vertical Navigation Number Descriptor Specification Identifier °M(°T) Variation (KIAS) Angle Over (NM) Direction (FT) 001 +10000 IF **SPICA** -7.2 RNAV1 245 002 21.7 TF **JANUS** -7.2 +6000 RNAV1 (237.8)245 003 TF **CELES** -7.2 RNAV1 +4100 $(2\overline{37.8})$ 9.6 -230 265 (257.8) 004 TF **KEPLA** -7.2 RNAV1 +3300 3.0 297 005 TF **MUSES** -7.2 +3100 RNAV1 1.6 (289.6)297 SIMAZ +2800 -7.2 -200 006 TF 1.7 RNAV1 (289.6)Outbound Minimum Maximum Waypoint Inbound Magnetic Outbound Turn Speed Navigation Path Distance Altitude (FT) Altitude Course Time Variation Identifier Direction (KIAS) Specification °M(°T) (MIN) (NM) (FT) -230(-14000) 265 (257.8) 1.0(-14000) CELES -7.2 4100 Hold RNAV1 -240(+14001) 1.5(+14001)

#### STANDARD ARRIVAL CHART -INSTRUMENT

#### RJFK / KAGOSHIMA **RNAV STAR RWY34** SIMAZ NORTH ARRIVAL RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 7°W (2017) VOR/DME KAJIKI 115.7 KGE CH−104X =:-: 31°47′51″W130°43′34″E 900FT SIMAZ NORTH ARRIVAL VORTAC -KAGOSHIMA 113.3 HKC CH–80x ≌:≡ 31°41′50″N/130°34′59″E 1900FT KAGOSHIMA(HKC) 314150.0N 1303458.6E 6.0 SIMAZ 3500 314038.1N *1304816.5E* 2800 ROKET HKC 314004.5N VORTAC 1304139.5E TOPPY 1100 3100 313908.0N 1304513.8E MAX185KIAS 290 MHA 4500

SIMAZ NORTH ARRIVAL

From HKC at or above 3500FT, to ROKET at or above 3100FT, to TOPPY, to SIMAZ at or above 2800FT.

Critical DME	KGE: 3NM to ROKET - SIMAZ
DME GAP	HKC - 3NM to ROKET
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

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	HKC	_	_	-6.9	_	_	+3500	_	_	RNAV1
002	TF	ROKET	_	114 (107.2)	-6.9	6.0	1	+3100	1	_	RNAV1
003	TF	TOPPY	_	114 (107.2)	-6.9	3.2	1	_	-185	_	RNAV1
004	TF	SIMAZ	_	067 (059.9)	-6.9	3.0	ı	+2800	١	_	RNAV1

#### STANDARD ARRIVAL CHART -INSTRUMENT

#### RJFK / KAGOSHIMA **RNAV STAR RWY34** SIMAZ SOUTH ARRIVAL RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VOR/DME VAR 7°W (2017) KAJIKI 115.7 KGE CH-104X ≓∺ 31°47′51″W130°43′34″E $\odot$ 900FT VORTAC -SIMAZ SOUTH ARRIVAL KAGOSHIMA 113.3 HKC CH-80x **∷**:=. 31°41′50″N/130°34′59″E 1900FT HKC VORTAC MHA 6000 · 420> MAX240KIAS MAGIL **ROKET** 314010.5N 1303652.5E 314004.5N 1304139.5E SIMAZ 3500 İSKID 3100 314038.1N 4.1 D16.0 R207/D6.5 HKC 1304816.5E 098 HKC 2800 **TOPPY** 45.70g 313908.0N 1304513.8E MAX185KIAS ISKID 313547.4N 1303213.9E

## SIMAZ SOUTH ARRIVAL

From ISKID, to MAGIL at or above 3500FT, to ROKET at or above 3100FT, to TOPPY, to SIMAZ at or above 2800FT.

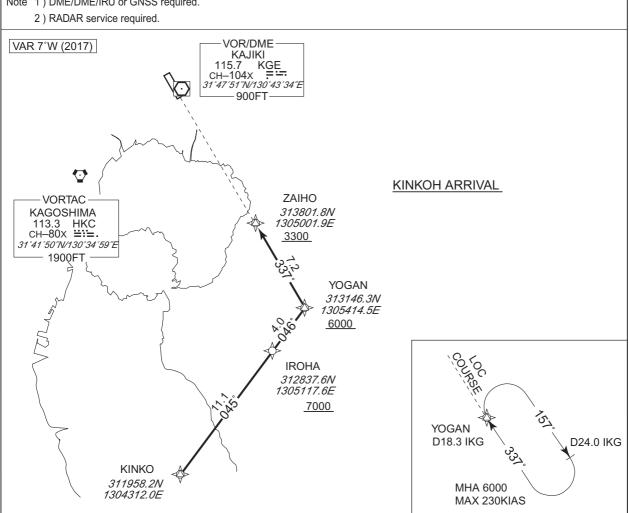
Critical DME	-
DME GAP	ISKID - 3NM to MAGIL 1NM to MAGIL - SIMAZ
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

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	ISKID	_	_	-6.9	_	_	_	_	_	RNAV1
002	TF	MAGIL	_	049 (042.0)	-6.9	5.9	_	+3500	-	_	RNAV1
003	TF	ROKET	_	098 (091.4)	-6.9	4.1	_	+3100	1	_	RNAV1
004	TF	TOPPY	-	114 (107.2)	-6.9	3.2	_	-	-185	_	RNAV1
005	TF	SIMAZ	_	067 (059.9)	-6.9	3.0	_	+2800	_	_	RNAV1

#### STANDARD ARRIVAL CHART -INSTRUMENT

#### RJFK / KAGOSHIMA **RNAV STAR RWY34** KINKOH ARRIVAL RNAV 1

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



## KINKOH ARRIVAL

From KINKO, to IROHA at or above 7000FT, to YOGAN at or above 6000FT, to ZAIHO at or above 3300FT.

	JAT: 10.2NM to IROHA – 5.7NM to IROHA NHT: 5.6NM to IROHA – 2.4NM to IROHA 2.4NM to ZAIHO – 1.2NM to ZAIHO HKC: 4.4NM to ZAIHO – 1.3NM to ZAIHO
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	Navigation Specification
001	IF	KINKO		_	-6.9	1	_	_	_	_	RNAV1
002	TF	IROHA	_	045 (038.6)	-6.9	11.1	_	+7000	_	_	RNAV1
003	TF	YOGAN	_	046 (038.6)	-6.9	4.0	_	+6000	_	_	RNAV1
004	TF	ZAIHO	_	337 (330.2)	-6.9	7.2	_	+3300	-	_	RNAV1

#### STANDARD ARRIVAL CHART-INSTRUMENT

## RJFK / KAGOSHIMA **RNAV STAR RWY16 OGOJO ARRIVAL** RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 7°W (2020) OGOJO 320101.5N 3.6 1304237.6E 283° **DEMET** 315907.1N **SPICA** 5000 1310252.7E 13.7 315650.2N 10000 1312623.5E 284 20.1 **PERSE** 10000 320038.1N 284 1304649.2E 7000 OGOJO ARRIVAL MIYAZAKI AP VOR/DME MIYAZAKI 112.4 CH-71X VOR/DME KAJIKI 115.7 KGE CH–104X **≓** 31°47′51″W130°43′34″E 31°52′43″N/131°26′15″E -100FT -900FT-

## OGOJO ARRIVAL

From SPICA at or above 10000FT, to DEMET at or above 10000FT, to PERSE at or above 7000FT, to OGOJO at or above 5000FT.

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

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number De	escriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	SPICA	_	_	-7.2	_	_	+10000	_	_	RNAV1
002	TF	DEMET	-	284 (276.6)	-7.2	20.1	_	+10000	_	_	RNAV1
003	TF	PERSE	-	284 (276.4)	-7.2	13.7	_	+7000	_	_	RNAV1
004	TF	OGOJO	-	283 (276.3)	-7.2	3.6	_	+5000	_	_	RNAV1

abolished.

#### STANDARD ARRIVAL CHART-INSTRUMENT

# **RNAV STAR RWY16** RJFK / KAGOSHIMA YUKSA ARRIVAL RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 7°W (2017) JADDO SEPPE 320827.6N 320755.5N 1303856.6E 1304908.6E 8.7 10000 280° YUKSA ARRIVAL 4.0 MOCOS 281: 320740.4N 1305350.6E 10000 YUKSA *320313.3N* <sup>≪</sup> *1303258.9E* 5000 VOR/DME KAJIKI 115.7 KGE CH-104x F 31°47′51″N/130°43′34″E -900FT

## YUKSA ARRIVAL

From MOCOS at or above 10000FT, to SEPPE at or above 10000FT, to JADDO, to YUKSA at or above 5000FT.

	MZE	2NM to JADDO - JADDO				
Critical DME	KUE	1NM to YUKSA - YUKSA				
	MZE	1NM to YUKSA - YUKSA				
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)		•
001	IF	MOCOS	_	_	-6.9	_	_	+10000	_	_	RNAV1
002	TF	SEPPE		281 (273.6)	-6.9	4.0	_	+10000	_	_	RNAV1
003	TF	JADDO	-	280 (273.6)	-6.9	8.7	_	-	_	_	RNAV1
004	TF	YUKSA	_	231 (224.0)	-6.9	7.3	_	+5000	-	_	RNAV1

#### STANDARD ARRIVAL CHART-INSTRUMENT

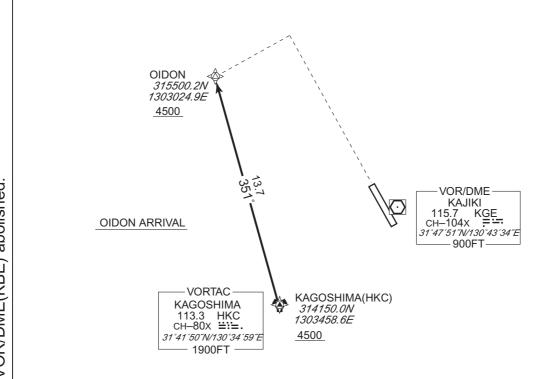
## RJFK / KAGOSHIMA

**RNAV STAR RWY16** 

OIDON ARRIVAL RNAV 1

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

VAR 7°W (2017)



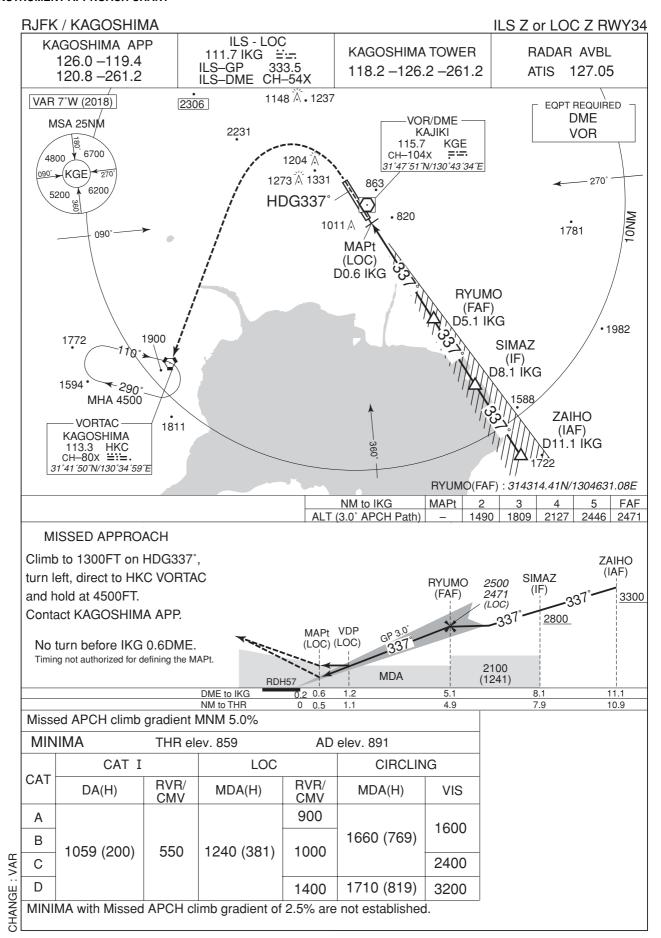
## OIDON ARRIVAL

From HKC at or above 4500FT, to OIDON at or above 4500FT.

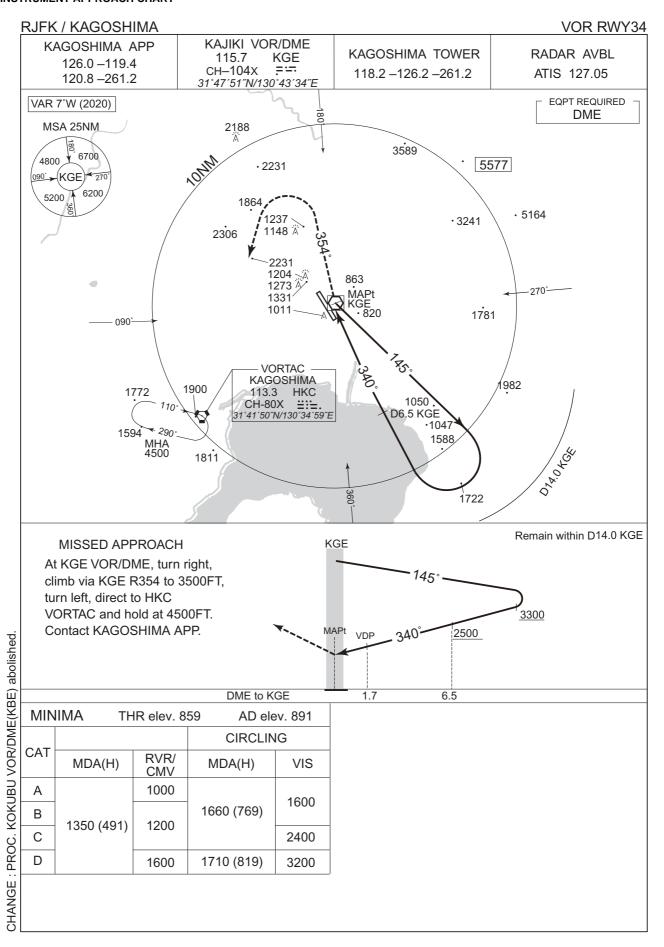
Critical DME	HKC	7NM to OIDON - OIDON			
DME GAP	HKC - 10NM to OIDON				
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1				

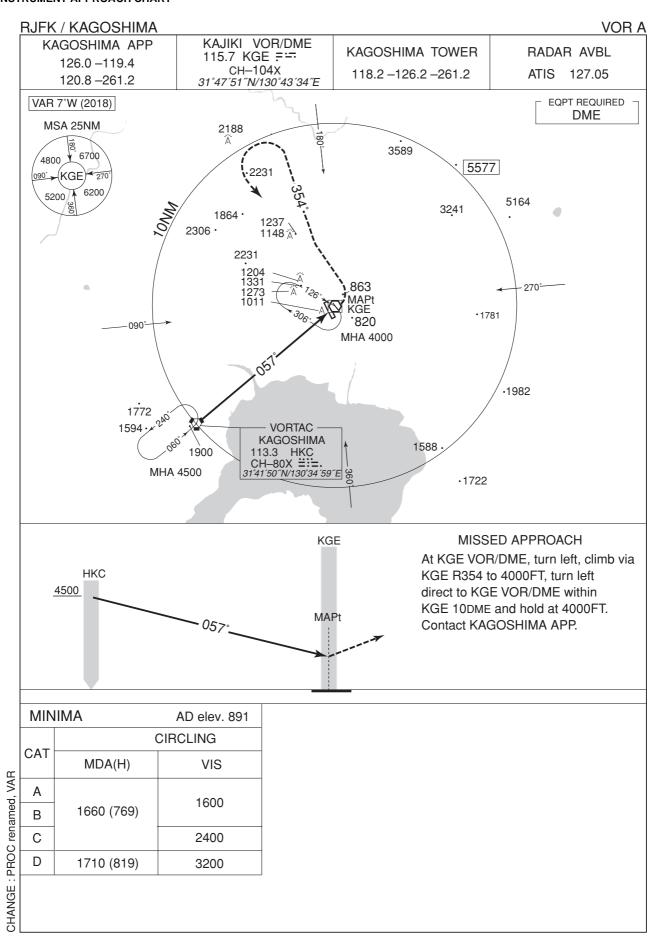
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	HKC	_	_	-6.9	_	_	+4500	_	_	RNAV1
002	TF	OIDON	_	351 (343.6)	-6.9	13.7	_	+4500	_	_	RNAV1

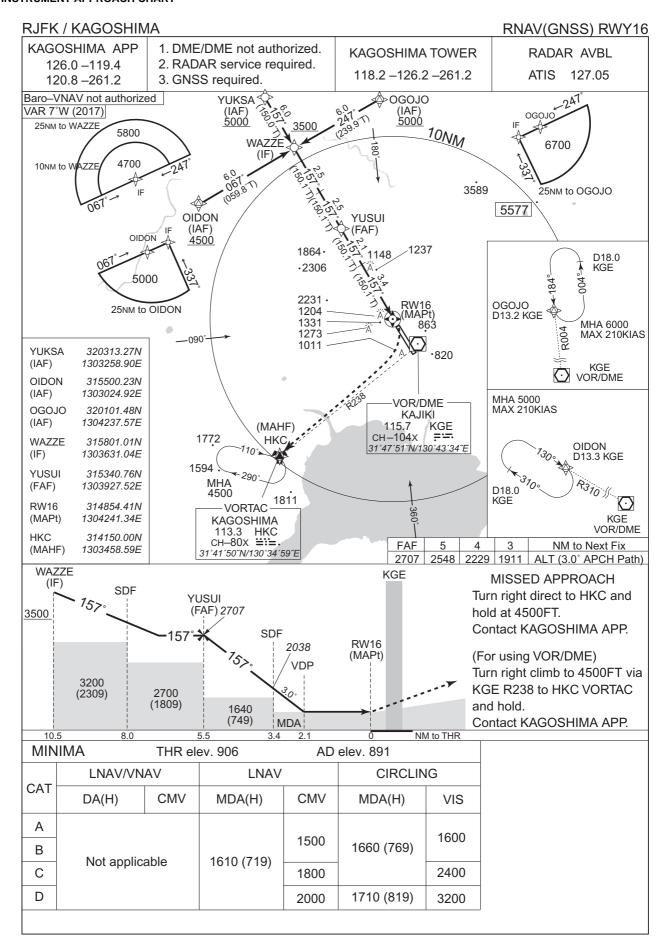




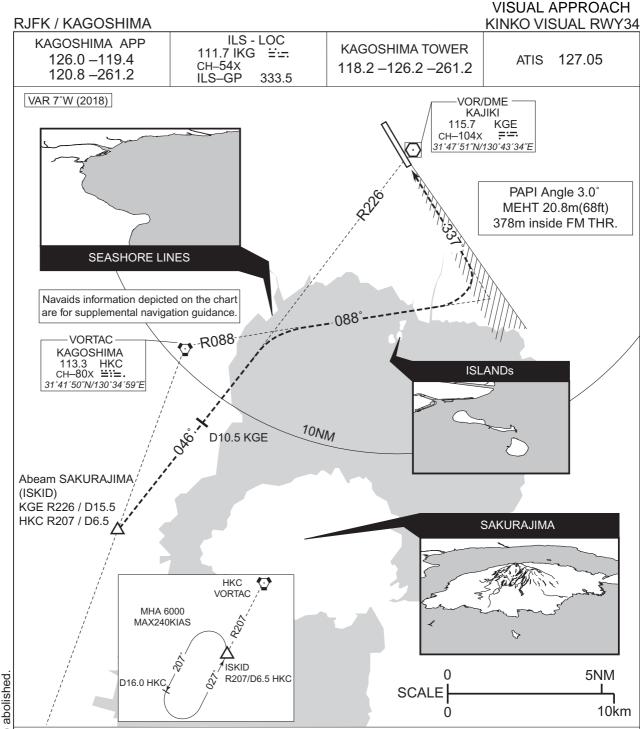












When visual approaches to RWY34 are in progress, arriving aircraft may be vectored into the ISKID for KINKO VISUAL RWY34 APPROACH.

In the event of a go-around, climb via IKG LOC and RWY HDG to 3500FT until receiving ATC instructions.

#### <KINKO VISUAL RWY34 APPROACH>

After ISKID, aircraft proceed via seashore lines to the mouth of the Beppu River (KGE R226), proceed via seashore lines to ISLANDs(HKC R088) until intercept to RWY34 RWY center line, and proceed to RWY34(IKG LOC course).

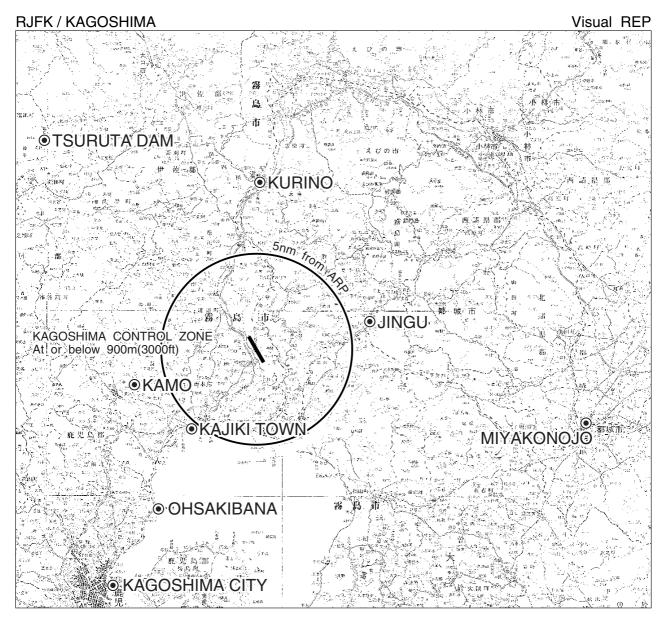
Aircraft is recommended KGE 10.5DME(HKC R167) at or above 3500FT.

Note1: Pilot is urged to report promptly to ATC when lose sight of landmark(SAKURAJIMA, Seashore Lines and ISLANDs) and the preceding aircraft concerned.

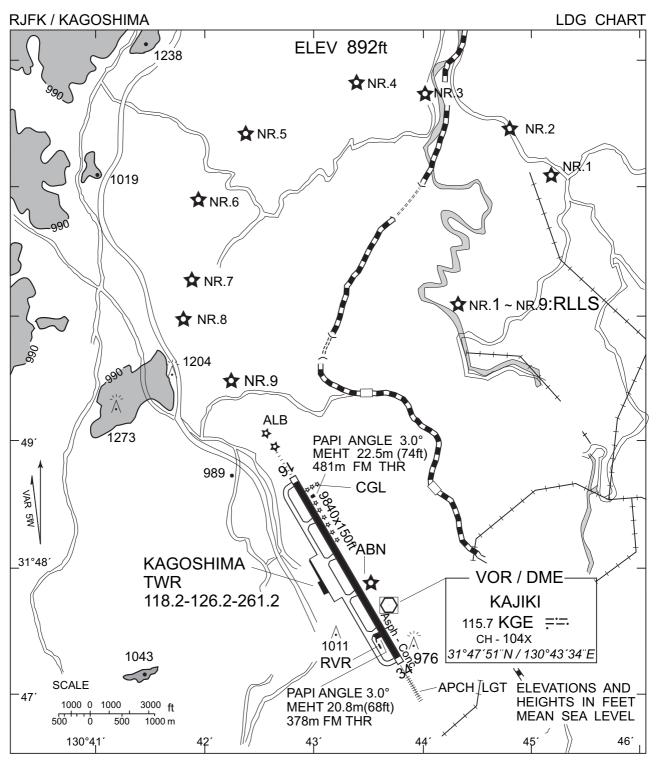
Note2: Reference NAVAIDS(KGE, HKC and IKG LOC) must be operating.

Note3: RADAR service required.

Note4: Procedure not authorized at night.



Call sign	BRG / DIST from ARP	Remarks				
栗 野 Kurino	001°/ 8.8NM	JR駅 JR Station				
都 城 Miyakonojo	102°/18.5NM	JR駅 JR Station				
加治木タウン Kajiki Town	213°/ 5.4NM	網掛川河口 River-mouth(The Amikake)				
大 崎 鼻 Ohsakibana	210°/10.0NM	崎 Point				
鹿児島シティ Kagoshima City	211°/14.7NM	港 Harbor				
蒲 生 Kamo	253°/ 6.8NM	住吉池 Pond				
鶴田ダム Tsuruta Dam	314°/16.0NM	ダム Dam				
神 宮 Jingu	081°/ 6.0NM	JR駅 JR Station				



RUNWAY LEAD - IN LIGHTING SYSTEM:

NR.1~NR.9 FLASHING WHITE



