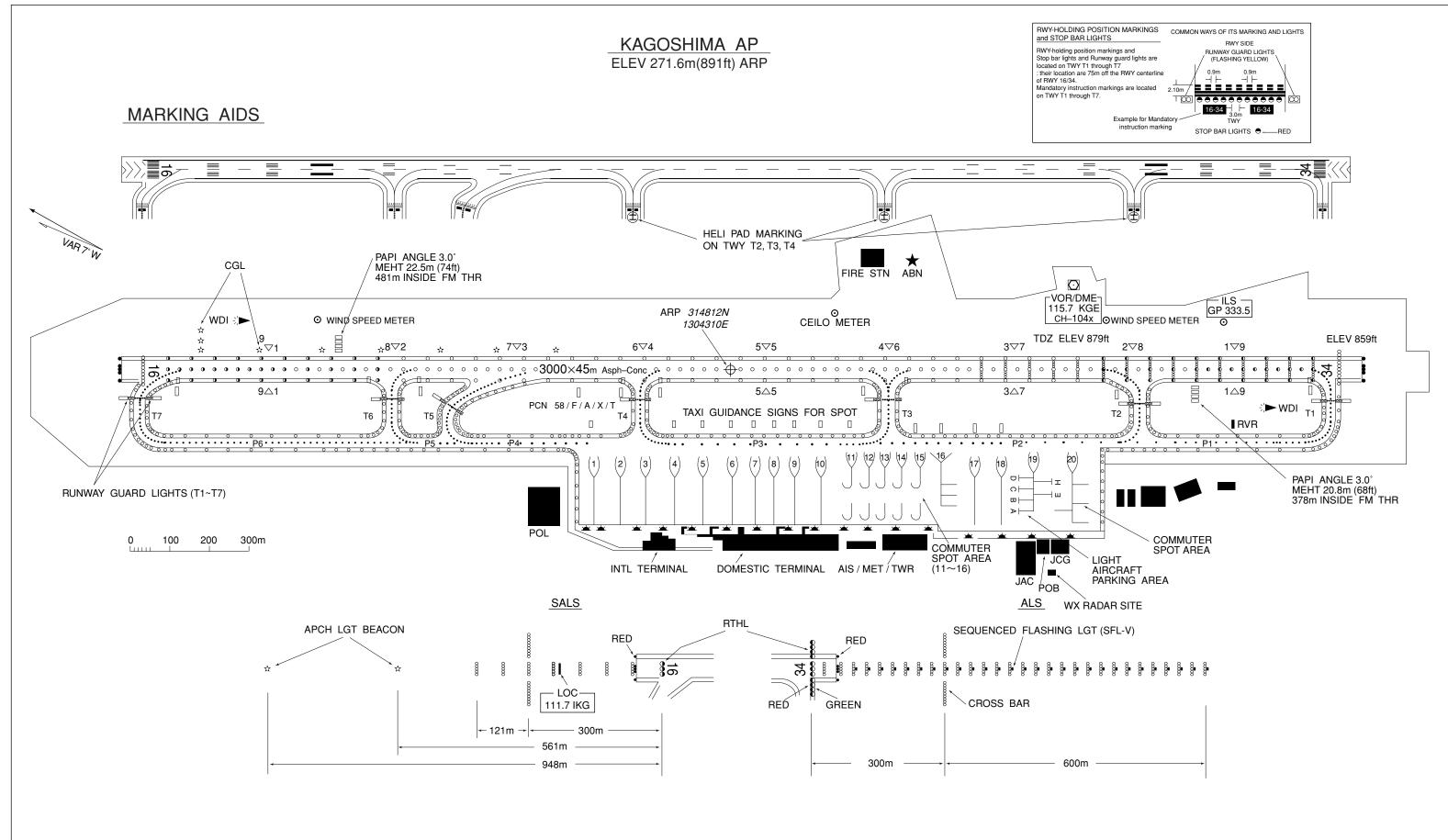
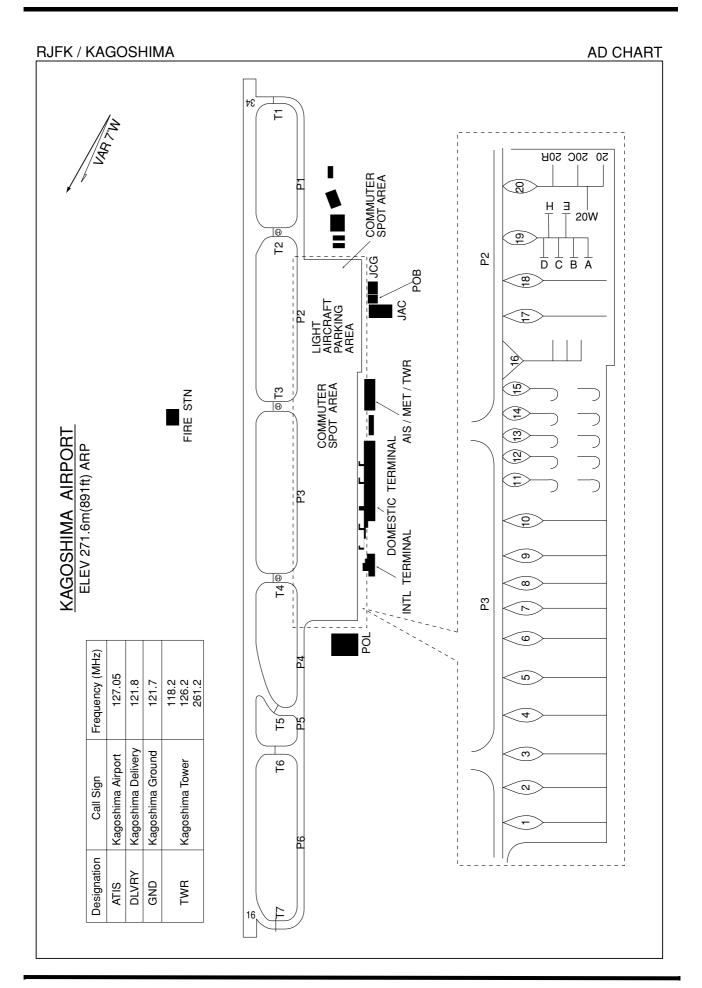
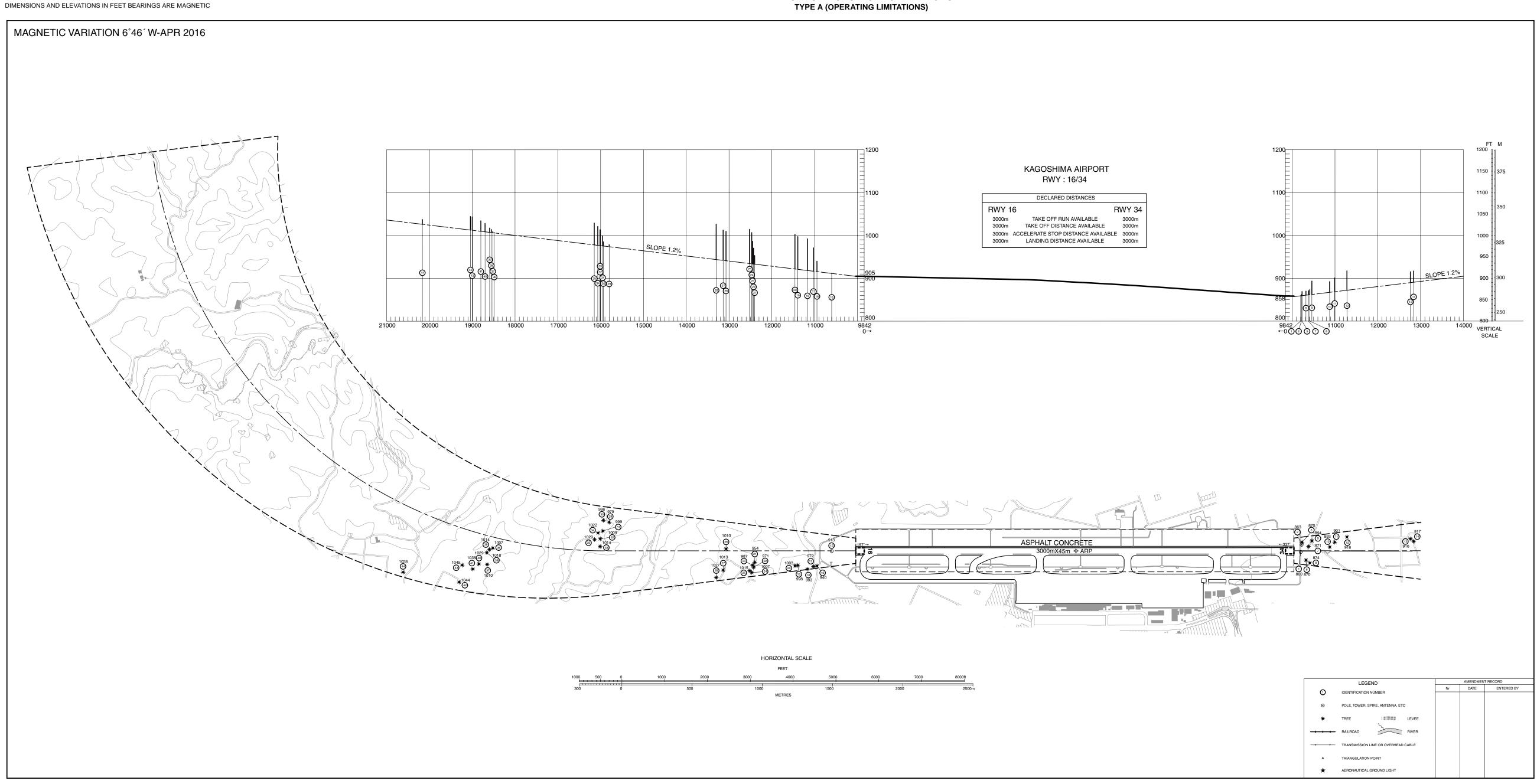
AERODROME CHART

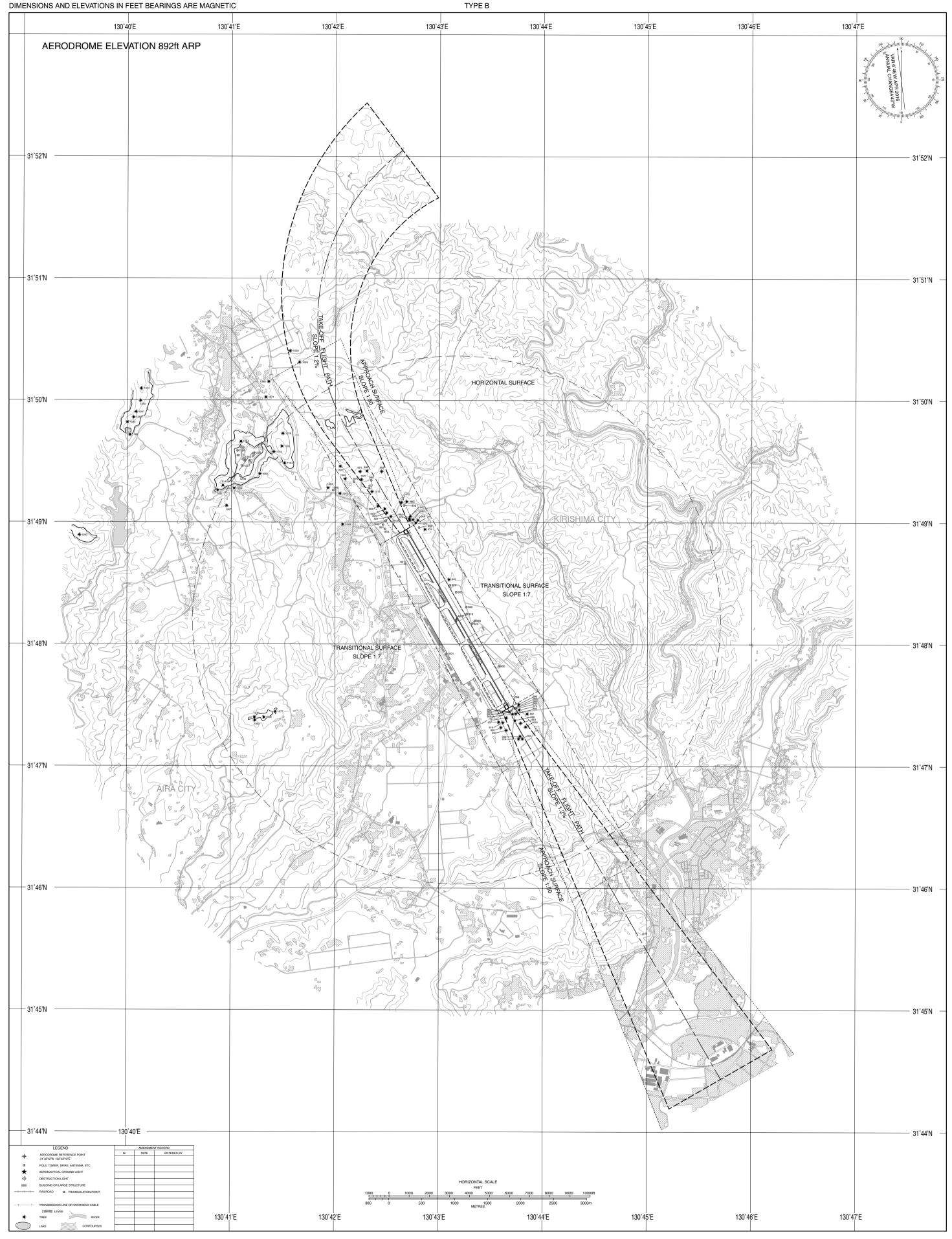


Civil Aviation Bureau, Japan (EFF:1 FEB 2018)



AERODROME OBSTACLE CHART - ICAO TYPE A (OPERATING LIMITATIONS)





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

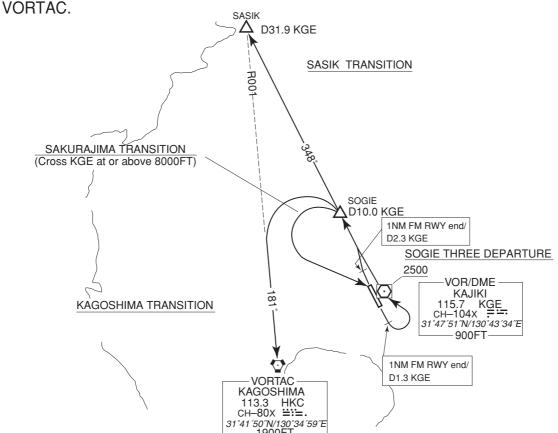
From over SOGIE, turn left, direct to KGE VOR/DME. Cross KGE VOR/DME at or above 8000FT.

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 TWO DEPARTURE RNAV 1 HKC : RWY16 : DER — OKATU RWY34 : DER — KONOE Note 1) DME/DME/IRU or GNSS required. %The aircraft equipped with only DME/DME/IRU KBE: RWY16: DER-9NM to OKATU Critical DME must be able to update its position without delay RWY34:DER-17NM to KONOE at the starting point of take-off roll. KGE: RWY16:9NM to OKATU-OKATU 2) RADAR service required. RWY34:17NM to KONOE-KONOE DME GAP Inappropriate Navaids | See AD 1.1.6.10.3 Inappropriate NAVAIDs for RNAV1 VAR 7°W (2017) 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 \odot -900FT 337 2000 157 MIDAI TWO DEPARTURE 1300 VOR/DME **KOKUBU** 117.3 KBE CH−120X ☴:□ 31°38′38″N/130°50′32″E 1500FT \odot (from KONOE) ⇒ FL160 092°/19.8 MİDAI (from OKATU) 313621.1N 092°/28.8 1312212.7E KONOE 313438.5N OKATU 1305902.3E 313350.7N 1304834.0E 0 MIDAI TWO DEPARTURE RWY16: Climb on HDG 157° at or above 1300FT, direct to OKATU, to MIDAI at or above FL160. RWY34: Climb on HDG 337° at or above 2000FT, turn right direct to KONOE, to MIDAI at or above FL160.

Note RWY34: 5.0% climb gradient required up to 2100FT.

OBST ALT 3150FT located at 7.7NM 046° FM end of RWY34.

Editorial

CHANGE

RJFK / KAGOSHIMA RNAV SID

MIDAI TWO DEPARTURE

RWY16

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	_	_	■ 157 (150.1)	-6.9	_	_	+1300	_	_	RNAV1
002	DF	OKATU	_	_	-6.9	_	R	_	_	_	RNAV1
003	TF	MIDAI	_	■ 092 (084.8)	-6.9	28.8	_	+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)	-6.9	_	_	+2000	_	_	RNAV1
002	DF	KONOE	_	_	-6.9	_	R	_	_	_	RNAV1
003	TF	MIDAI	_	■ 092 (084.9)	-6.9	19.8	_	+FL160	Ī	_	RNAV1

RJFK / KAGOSHIMA STAR

HAYAT SOUTH ARRIVAL

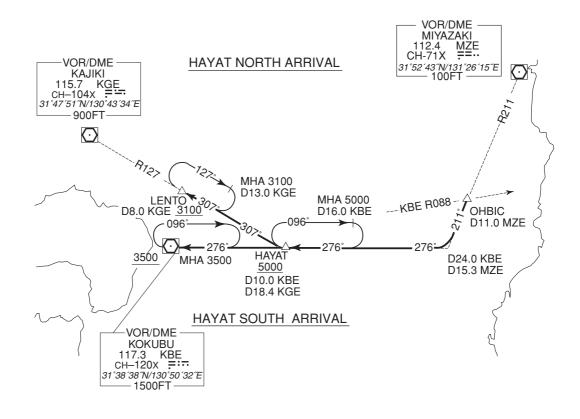
From over OHBIC, via MZE R211 to intercept and proceed via KBE R096 to KBE VOR/DME.

Cross HAYAT at or above 5000FT, cross KBE VOR/DME at or above 3500FT.

HAYAT NORTH ARRIVAL

From over OHBIC, via MZE R211 to intercept and proceed via KBE R096 to HAYAT, via KGE R127 to LENTO.

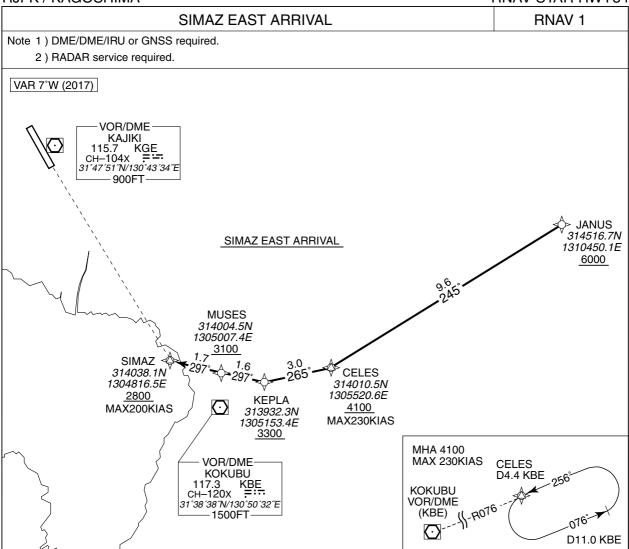
Cross HAYAT at or above 5000FT, cross LENTO at or above 3100FT.



CHANGE: Radial

RJFK / KAGOSHIMA

RNAV STAR RWY34



SIMAZ EAST ARRIVAL

From 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 or above 2800FT.

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	JANUS	_	_	-6.9	_	_	+6000	_	_	RNAV1
002	TF	CELES	_	245 (237.8)	-6.9	9.6	_	+4100	-230	_	RNAV1
003	TF	KEPLA	_	265 (257.8)	-6.9	3.0	_	+3300	_	_	RNAV1
004	TF	MUSES	_	297 (289.6)	-6.9	1.6	_	+3100	_	_	RNAV1
005	TF	SIMAZ	_	297 (289.6)	-6.9	1.7	_	+2800	-200	_	RNAV1

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 114 314038.1N 1304816.5E 2800 ROKET HKC 314004.5N \odot **VORTAC** 1304139.5E **TOPPY** 1100 3100 VOR/DME 313908.0N KOKUBU 1304513.8E 117.3 KBE CH-120X =: •• 31°38'38'W130'50'32'E 1500FT MAX185KIAS 290 MHA 4500 C

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	KBE: HKC - 3NM to ROKET
Chilcal Divie	KGE: HKC-SIMAZ
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	I	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	HKC	_	_	I -6.9	_	_	+3500	_	_	RNAV1
002	TF	ROKET	-	114 (107.2)	-6.9	6.0	1	+3100	_	_	RNAV1
003	TF	TOPPY	-	114 (107.2)	■ -6.9	3.2	1	_	-185	_	RNAV1
004	TF	SIMAZ	_	■ 067 (059.9)	■ -6.9	3.0	_	+2800	_	_	RNAV1

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″N/130°43′34″E \bigcirc 900FT VORTAC -SIMAZ SOUTH ARRIVAL KAGOSHIMA 113.3 HKC CH-80x ≌∷=. 31°41′50″N/130°34′59″E 1900FT HKC **VORTAC** MHA 6000 . A20> MAX240KIAS MAGIL **ROKET** 314010.5N 314004.5N 1303652.5E 1304139.5E SIMAZ 3500 İSKID 3100 314038.1N 4.1 D16.0 R207/D6.5 HKC 1304816.5E 30 3.2 098 HKC 2800 \odot **TOPPY** 60.00 60.00 313908.0N VOR/DME 1304513.8E KOKUBU 117.3 KBE MAX185KIAS CH-120X **=:**•• 31°38′38″N/130°50′32″E 1500FT 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	KBE: ISKID - 3NM to MAGIL 1NM to MAGIL - SIMAZ KGE: 1NM to MAGIL - 4NM to ROKET
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	ISKID	_	_	I -6.9	_	_	_	_	_	RNAV1
002	TF	MAGIL	_	049 (042.0)	I -6.9	5.9	_	+3500	_	_	RNAV1
003	TF	ROKET	_	098 (091.4)	I -6.9	4.1	_	+3100	_	_	RNAV1
004	TF	TOPPY	_	114 (107.2)	■ -6.9	3.2	_	-	-185	-	RNAV1
005	TF	SIMAZ	_	■ 067 (059.9)	I -6.9	3.0	_	+2800	_	_	RNAV1

→ RNAV STAR RWY34 RJFK / KAGOSHIMA KINKOH 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″N/130°43′34″E 900FT VOR/DME KOKUBU 117.3 KBE CH-120X **₹:**[™] 31°38′38″N/130°50′32″E 1500FT KINKOH ARRIVAL ZAIHO **VORTAC** KAGOSHIMA 113.3 HKC CH-80X ≌∷=. 313801.8N 1305001.9E 3300 31°41′50″N/130°34′59″E 1900FT YOGAN 313146.3N 1305414.5E 6000 **IROHA** 312837.6N 1305117.6E 7000 YOGAN D18.3 IKG D24.0 IKG **KINKO** 311958.2N MHA 6000 1304312.0E MAX 230KIAS

KINKOH ARRIVAL

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

Critical DME	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	Path	Waypoint	Fly	Course	Magnetic				•	Vertical	
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	KINKO	_	1	-6.9	_	-	-	1	_	RNAV1
002	TF	IROHA	_	045 (038.6)	-6.9	11.1	1	+7000	-	_	RNAV1
003	TF	YOGAN	_	046 (038.6)	-6.9	4.0	1	+6000	1	_	RNAV1
004	TF	ZAIHO	_	337 (330.2)	-6.9	7.2	_	+3300	_	_	RNAV1

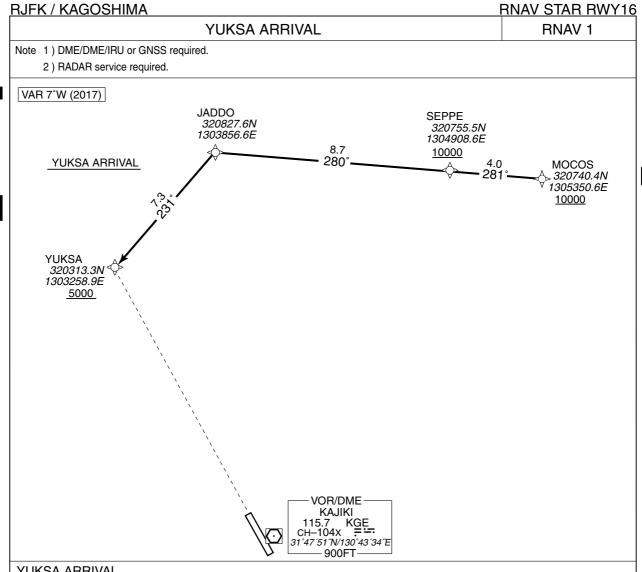
RJFK / KAGOSHIMA **RNAV STAR RWY16** OGOJO ARRIVAL RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 7°W (2017) **GOWAS** 320421.0N 1304813.8E 5.8 7000 242 **OGOJO** OGOJO ARRIVAL 320101.5N 1304237.6E 5000 VOR/DME **KAJIKI** 115.7 KGE CH-104x = :--31°47′51″N/130°43′34″E -900FT VOR/DME KOKUBU VORTAC -**JANUS** 314516.7N KAGOSHIMA **(**) 1310450.1E 113.3 HKC CH-80x **≒**;**=**. 117.3 KBE 7000 31°41′50″N/130°34′59″E 31°38′38″N/130°50′32″E 1500FT 1900FT

OGOJO ARRIVAL

From JANUS at or above 7000FT, to GOWAS 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	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	JANUS	_	-	-6.9	_	-	+7000	1	_	RNAV1
002	TF	GOWAS	_	331 (323.6)	-6.9	23.7	ı	+7000	ı	_	RNAV1
003	TF	OGOJO	_	242 (235.0)	-6.9	5.8	_	+5000	_	_	RNAV1



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		Speed (KIAS)	Vertical Angle	Navigation Specification
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

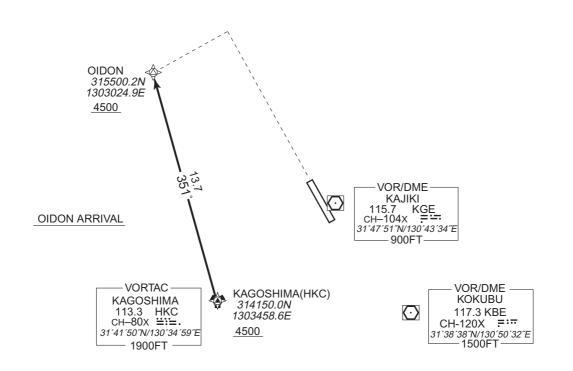
RJFK / KAGOSHIMA

RNAV STAR RWY16

OIDON ARRIVAL RNAV 1

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

VAR 7°W (2017)

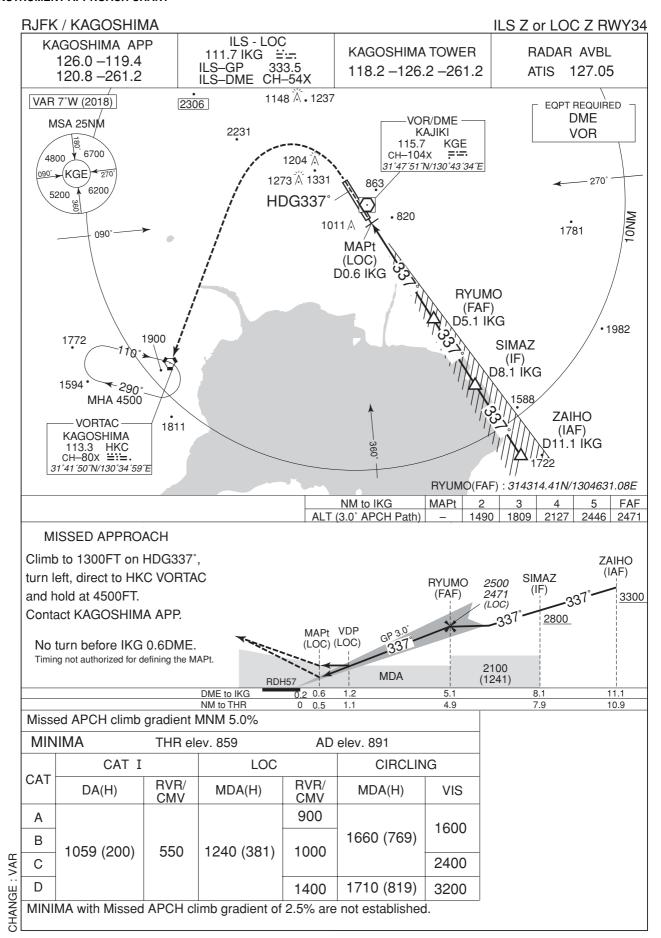


OIDON ARRIVAL

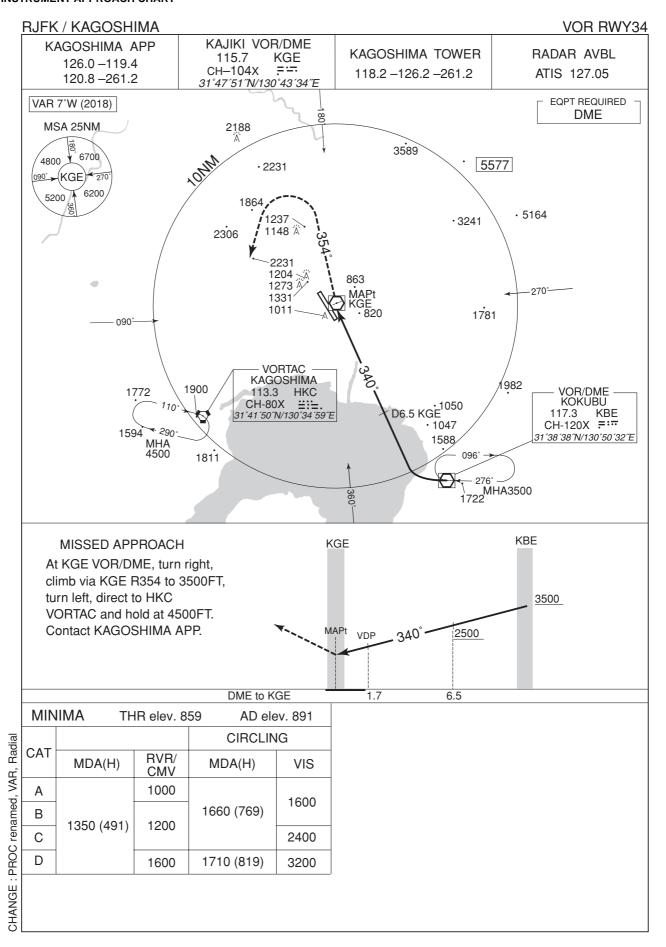
From HKC at or above 4500FT, to OIDON at or above 4500FT.

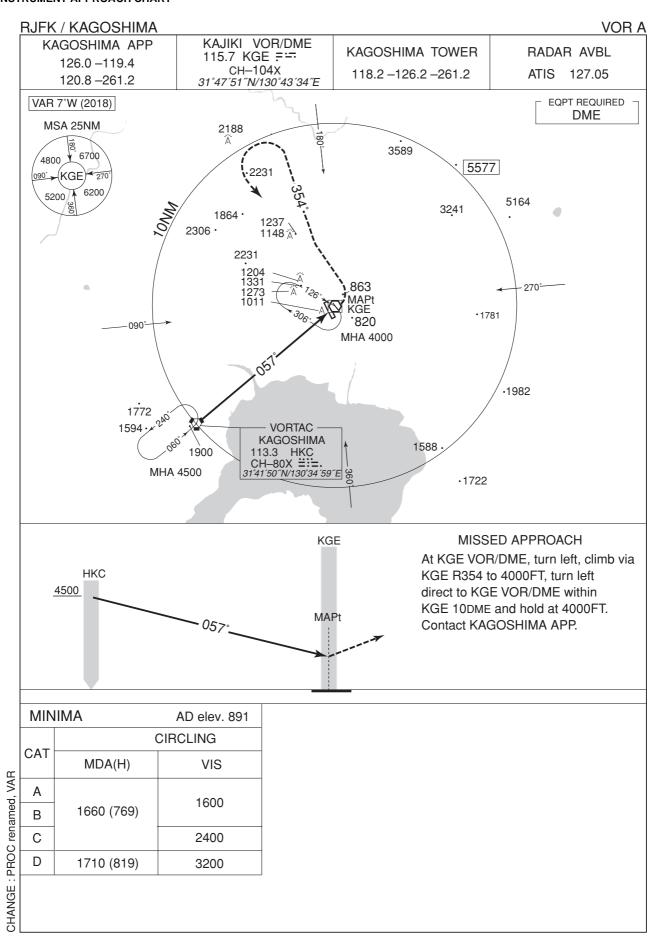
	KGE	HKC - 10NM to OIDON				
Critical DME	KBE	HKC - 10NM to OIDON				
	HKC	7NM to OIDON - OIDON				
DME GAP	_	_				
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1					

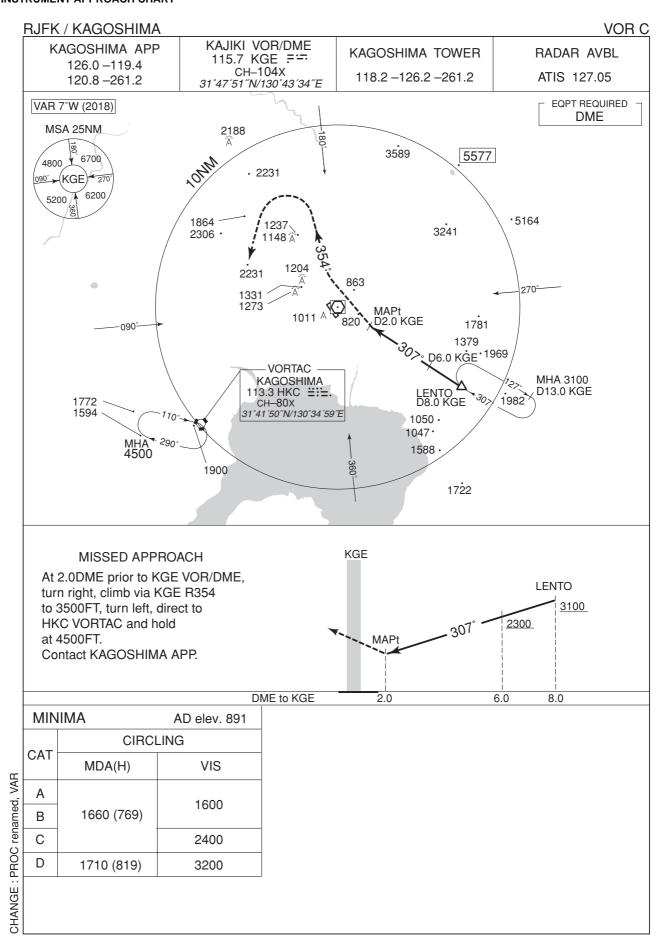
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	HKC	_	_	-6.9	_	_	+4500	_	_	RNAV1
002	TF	OIDON	_	351 (343.6)	-6.9	13.7	_	+4500	_	_	RNAV1

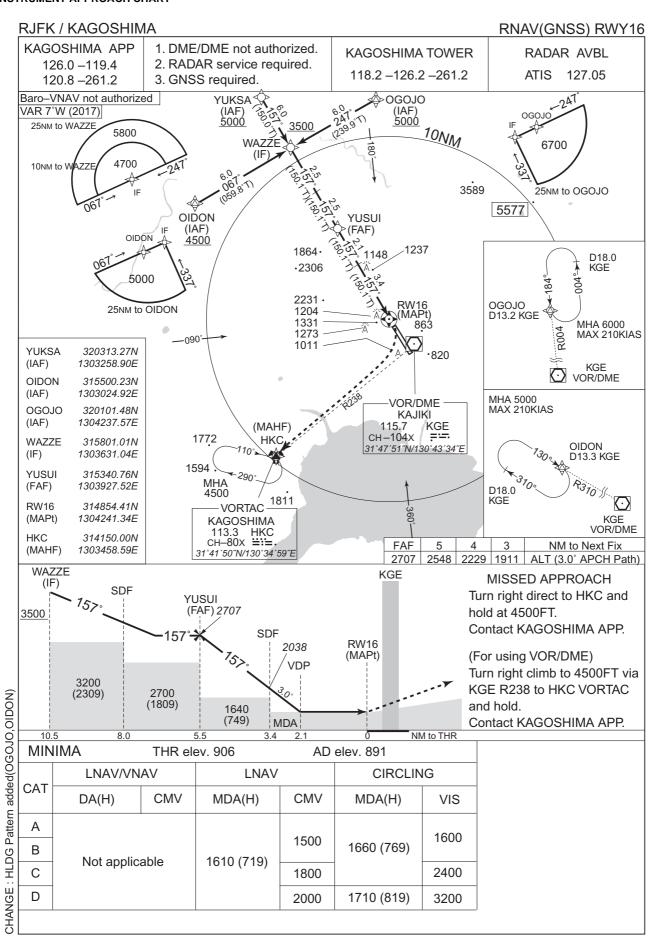


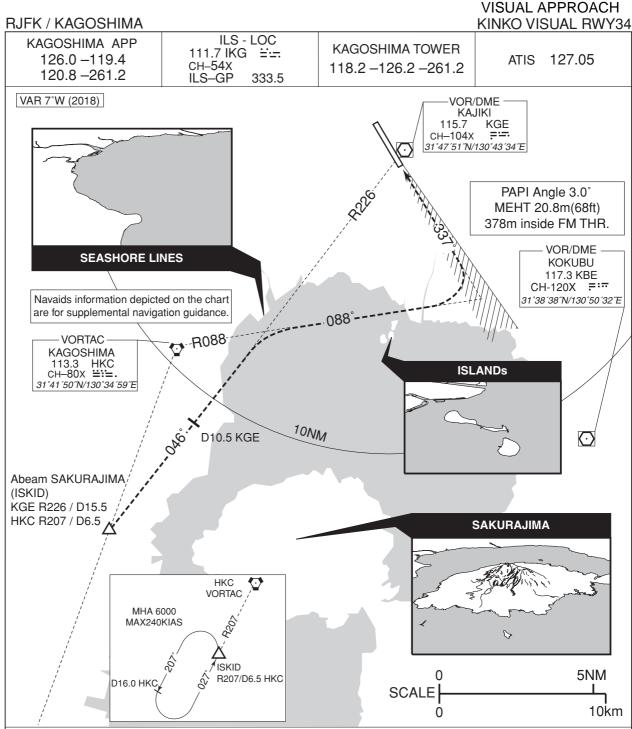












When visual approaches to RWY34 are in progress, arriving aircraft may be vectored into the ISKID for KINKO VISUAL RWY34 APPROACH.

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).

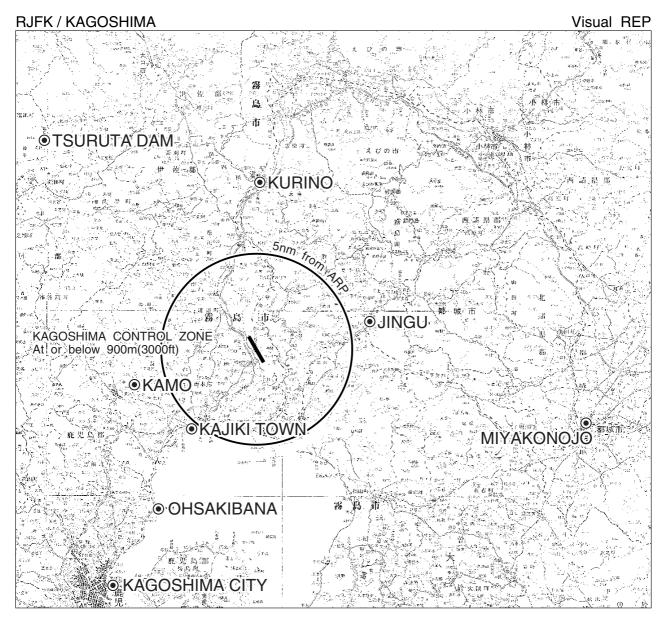
Aircraft is recommended KGE 10.5DME(HKC R167) at or above 3500FT.

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

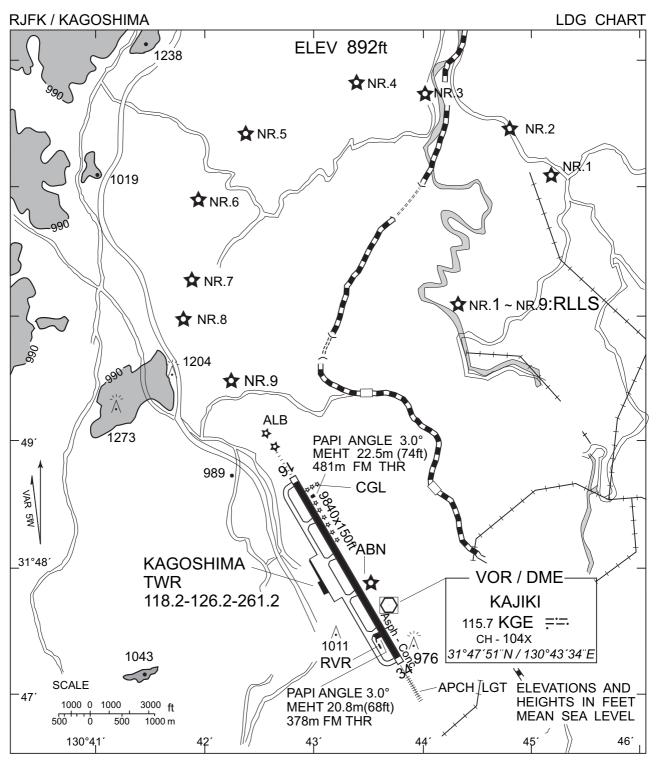
Note2: Reference NAVAIDS(KGE, HKC and IKG LOC) must be operating.

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



