AD 2 AERODROMES

RJOA AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJOA - HIROSHIMA

RJOA AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	*342610N/1325510E* 097°/1.5km FM RWY 10 THR
2	Direction and distance from (city)	50km E FM Hiroshima city
3	Elevation/ Reference temperature	1086ft / 29.9°C(2001-2005)
4	Geoid undulation at AD ELEV PSN	114ft
5	MAG VAR/ Annual change	7°W(2008)/1.56'W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Hiroshima Airport Office(CIVIL AVIATION BUREAU) 64-34, Aza-Hiraiwa, Zennyuji, Hongocho, Mihara-city, Hiroshima Pref. Tel: 0848-86-8650 Fax:0848-86-8656 AFS: RJOAYFYX
7	Types of traffic permitted(IFR/ VFR)	IFR/VFR
8	Remarks	Nil

RJOA AD 2.3 OPERATIONAL HOURS

1	AD Administration	2230 - 1330
2	Customs and immigration	Customs: 2230-1230 Immigration: 2230-1250
3	Health and sanitation	Quarantine(human): (SUN,MON,THU)2300-1215 (TUE,WED,FRI,SAT)2330-1215 Quarantine(animal): 2330-1230 Quarantine(plant): 2300-1250
4	AIS Briefing Office	2230 - 1330
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (KANSAI)
7	ATS	2230 - 1330
8	Fuelling	2100 - 1330
9	Handling	2100 - 1400
10	Security	2115 - 1135
11	De-icing	Nil
12	Remarks	Nil

RJOA AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	All the modern institutions that deal with the weight thing to a Boeing 747 type freighter.
2	Fuel/ oil types	Fuel grades : JET A-1
3	Fuelling facilities/ capacity	Fuel truck / Ask AD administration
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJOA AD 2.5 PASSENGER FACILITIES

1	Hotels	Not at Airport, but near Airport
2	Restaurants	At Airport
3	Transportation	Buses and Taxi
4	Medical facilities	Not at Airport, but near Airport Hospital in Mihara city 8km
5	Bank and Post Office	At Airport
6	Tourist Office	At Airport
7	Remarks	Nil

RJOA AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

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

RJOA AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow remove equipments: Motor graders x 6-12, Wheel loader x 2
2	Clearance priorities	(1) RWY 10/28, TWY T1, T6, P1 - P5 (2) SUB TWY, APRON, SUB APRON
3	Remarks	Seasonal availability: DEC MID - MAR MID Snow removal will be commenced, if the runway and taxiways are covered with a depth of 3cm or more.

RJOA AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Spot NR 1 - 10 Surface: cement-concrete, Strength: PCN 74/R/B/X/T Sub apron Surface: asphalt-concrete, Strength: PCN 16/F/B/Y/T
2	Taxiway width, surface and strength	TWY T2 - T5 Width: 34m, Surface: asphalt-concrete, Strength: PCN 72/F/A/X/T TWY T1,T6 Width: 32m, Surface: asphalt-concrete, Strength: PCN 72/F/A/X/T TWY P1 - P5 Width: 30m, Surface: asphalt-concrete, Strength: PCN 72/F/A/X/T SUB TWY Width: 18m, Surface: asphalt-concrete, Strength: PCN 16/F/B/Y/T
3	ACL and elevation	Not available
4	VOR checkpoints	Not available
5	INS checkpoints	Spot NR 1 : *342621.10N/1325517.84E* 2 : *342621.09N/1325515.09E* 3 : *342621.09N/1325512.35E* 5 : *342621.09N/1325509.61E* 6 : *342620.86N/1325506.74E* 6R : *342621.13N/1325507.25E* 6L : *342620.29N/1325505.47E* 7 : *342621.09N/1325503.83E* 7L : *342620.99N/1325503.69E* 8 : *342621.09N/1325500.89E* 9 : *342621.11N/1325458.60E* 10: *342621.08N/1325456.33E* L: *342621.08N/1325514.71E* C: *342621.08N/1325516.47E* R: *342621.08N/1325518.24E*
6	Remarks	Nil

RJOA AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands	Aircraft stand identification sign: Spot NR 2, 3, 5 - 8
2	RWY and TWY markings and LGT	RWY:RWY 10/28 (Marking) RWY designation, RWY CL, RWY THR, RWY middle point, Aiming point, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY10), WBAR(RWY10) TWY: TWY T1 - T6 (Marking): TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction marking (LGT) TWY edge LGT, TWY CL LGT, RWY guard LGT, Taxiing guidance sign Stop Bar LGT TWY: TWY P1 - P5 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign
3	Stop bars	Stop Bar LGT : T1-T6 Stop Bar System operations are as follows; 1) Stop bar system are installed at each taxi holding position associated with RWY 10/28. 2) Stop bar system will be operated when the visibility or the lowest RVR of RWY 10/28 is at or less than 600m. 3) Stop bar system on TWY T1 and T6 are controlled individually by ATC. 4) Stop bar system on TWY T2 through T5 are not controlled individually by ATC. 5) During the period stop bar system are operated, TWY T2 through T5 are not available for departing aircraft.
4	Remarks	(Marking): Overrun area, ACFT PRKG PSN, Apron TWY CL, ACFT stand taxi lane. (LGT): Apron flood LGT

RJOA AD 2.10 AERODROME OBSTACLES

See AD2.24 Aerodrome Obstacle Chart

In approach/TKOF areas

RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
RWY 10	Tower	*342604N/1325305E*	1008ft	Marking / LIL	
RWY 10	Tower	*342616N/1325304E*	1160ft	Marking / LIL	
RWY 10	Tower	*342626N/1325301E*	1208ft	Marking / LIL	

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
Mountain	*342644N1325451E*	1475ft	- / LIM	above the horizontal surface
Mountain	*342702N1325442E*	1485ft	- / LIM	above the horizontal surface
Mountain	*342722N1325354E*	1659ft	- / LIM	above the horizontal surface
Mountain & Tower	*342751N1325540E*	1623ft	- / LIM	above the horizontal surface
Mountain	*342802N1325628E*	1390ft	- / LIM	above the horizontal surface
Mountain	*342736N1325219E*	1688ft	- / LIM	
Mountain	*342728N1325317E*	1585ft	- / LIM	above the horizontal surface
Mountain	*342826N1325451E*	1616ft	- / LIM	above the horizontal surface

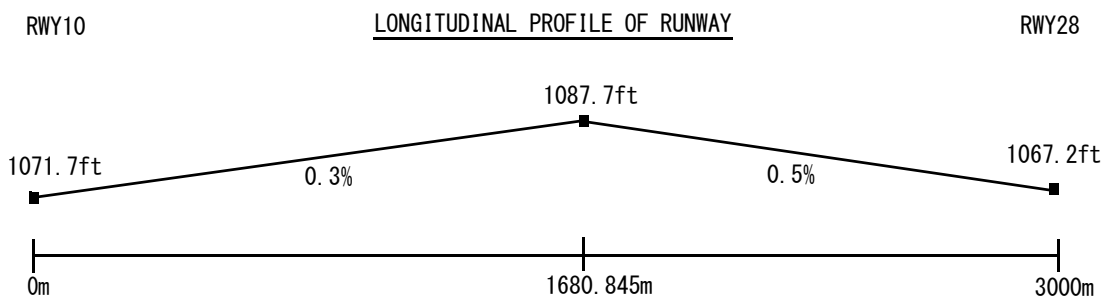
RJOA AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	KANSAI
2	Hours of service MET Office outside hours	H24 (KANSAI)
3	Office responsible for TAF preparation Periods of validity	KANSAI 30 Hours
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at KANSAI
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	S_6, U_{85}, U_7, U_5, U_3, U_{25}, U_2/T_r, P_s, P_5, P_3, P_{25}, P_{SWE}, P_{SWF}, P_{SWG}, P_{SWI}, P_{SWM}, P_{SW}(domestic), E, C, W_E, W_F, W_G, W_I, W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR, APP, ATIS
10	Additional information(limitation of service, etc.)	Nil

RJOA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and surface of RWY	THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
10	090.00°	3000×60	PCN72/F/A/X/T Asphalt Concrete	*342609.69N* *1325411.25E* 113.2ft	THR ELEV:1071.7ft TDZ ELEV:1080.8ft
28	270.00°	3000×60	PCN72/F/A/X/T Asphalt Concrete	*342609.69N* *1325608.75E* 113.4ft	THR ELEV:1067.2ft

Slope of RWY	Strip Dimensions(M)	RESA (Overrun) Dimensions(M)	Remarks
7	10	11	14
See below figure	3120 × 300	240 × (MNM:167 MAX:300)*	RWY Grooving : 3000×40m
	3120 × 300	40 × (MNM:292 MAX:300)* *For detail, ask airport administrator	



RJOA AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
10	3000	3000	3000	3000	Nil
28	3000	3000	3000	3000	Nil

RJOA 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
10	PALS (CAT Ⅲ) 900m LIH	Green Green	PAPI 3.0°/Left 397m 66ft	900m	3000m 15m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*1)
28	SALS 420m LIH	Green -	PAPI 3.0°/Left 416.3m 73.8ft		3000m 15m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*1)
Remarks								
10								
CGL and Wide angle approach lights are installed for south side circling to RWY 28, ALB is not installed. Overrun area edge LGT(LEN:60m Color:Red)(*1)								

RJOA AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: *342631N/1325459E*, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometor : RWY10 : 360m from RWY10 THR, LGTD RWY28 : 330m from RWY28 THR, LGTD
3	TWY edge and centerline lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 1 sec : PALS, SALS, REDL, RENL, RTHL, WBAR, RCLL, RTZL, Overrun area edge LGT, Stop bar LGT, RWY guard LGT and TWY CL LGT at TWY T1 , T6, P1 - P5 Within 15 sec: Other LGT
6	Remarks	WDI LGT

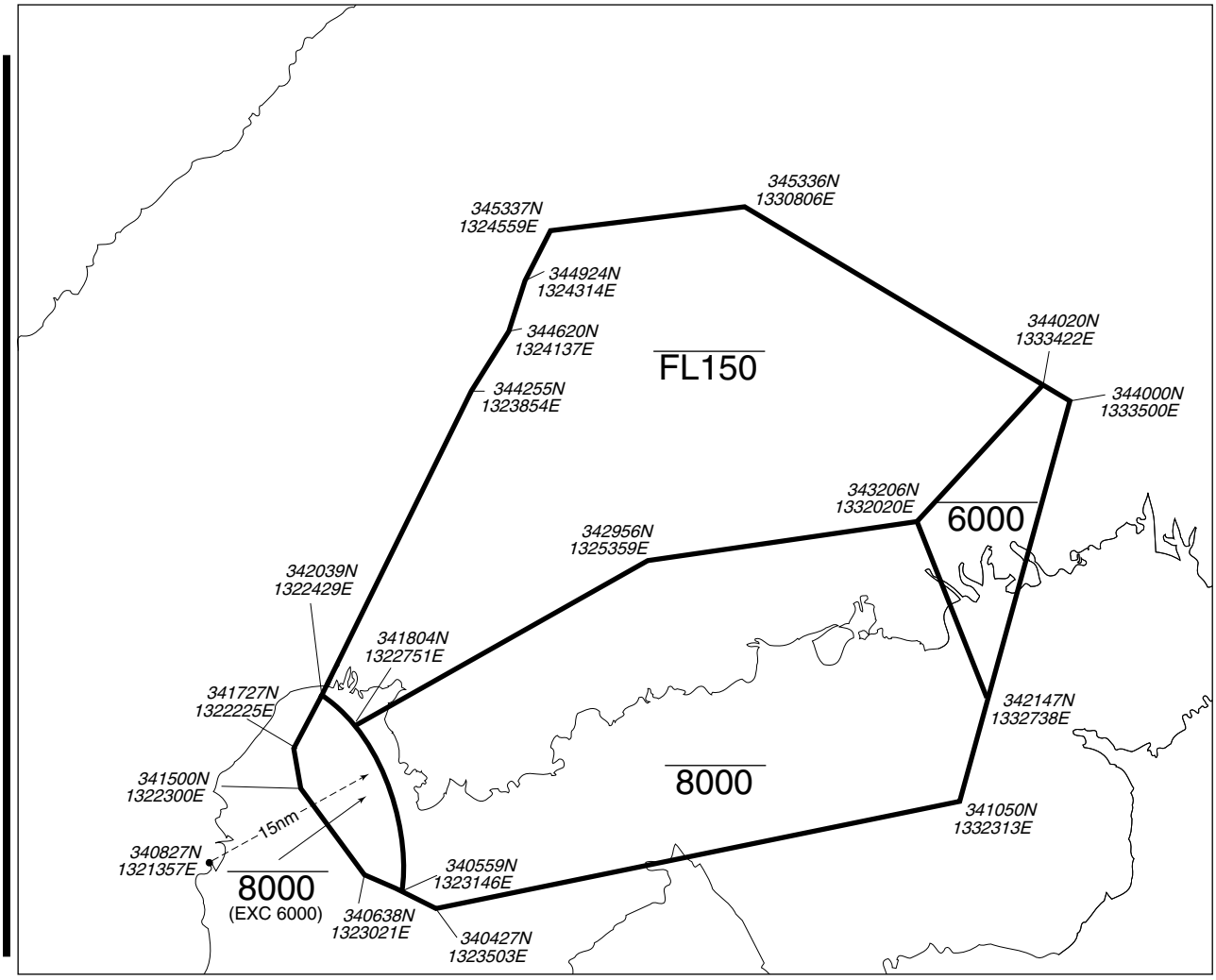
RJOA AD 2.16 HELICOPTER LANDING AREA

Nil

RJOA 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
HIROSHIMA CTR	Area within a radius of 5NM of HIROSHIMA ARP(*3426N/13255E*).	4000 or below	D	HIROSHIMA TOWER En	
HIROSHIMA ACA	See below chart		E	HIROSHIMA APP HIROSHIMA DEP HIROSHIMA RADAR En	

広島進入管制区
Hiroshima Approach Control Area



RJOA AD 2.18 ATS COMMUNICATION FACILITIES

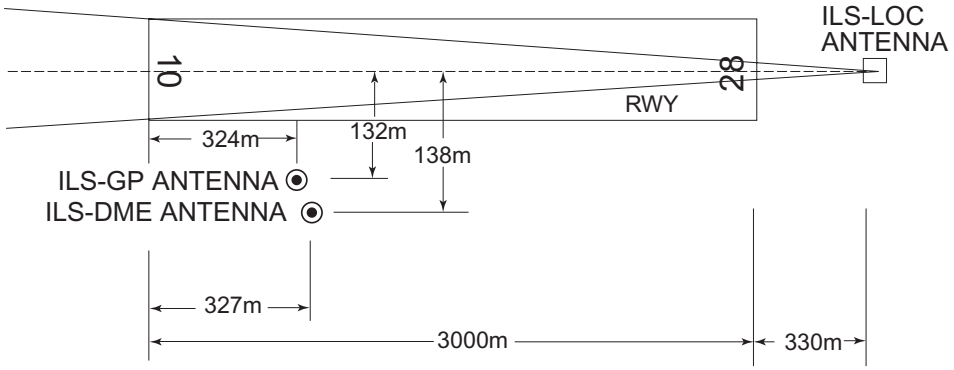
Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Hiroshima Approach	124.05MHz 119.9MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1330	
ASR	Hiroshima Radar	119.9MHz 124.05MHz 125.15MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1330	
DEP	Hiroshima Departure	119.9MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1330	
TWR	Hiroshima Tower	118.6MHz 126.2MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1330	
ATIS	Hiroshima Airport	127.25MHz	2230 - 1330	

RJOA AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (7°W /2008)	HGE	117.9MHz	H24	*342601.59N/ 1325526.29E*		
DME	HGE	1213MHz (CH-126X)	H24	*342601.59N/ 1325526.29E*	1119ft	
ILS-LOC 10 (CAT Ⅲ)	IHG	108.7MHz	2230-1330	*342609.69N/ 1325621.68E*		LOC: 330m (1083ft) away FM RWY 28 THR. BRG (MAG) 098°
ILS-GP 10	-	330.5MHz	2230-1330	*342605.40N/ 1325423.92E*		GP: 324m (1063ft) inside FM RWY 10 THR, 132m (433ft) S of RCL GP angle 3.0° ILS REF datum 16.5m (54ft).
ILS-DME 10	IHG	985MHz (CH-24X)	2230-1330	*342605.22N/ 1325424.03E*	1088ft	DME: 327m (1073ft) inside FM RWY 10 THR, 138m (453ft) S of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

ILS for RWY 10

HIROSHIMA AP



REMARKS :

1.ILS-LOC beam BRG(MAG)	098°
2.HGT of ILS REF datum	16.5m(54ft)
3.GP Angle	3.0°
4.ELEV of ILS-DME	331.5m(1088ft)

RJOA AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

1.1 定期便または緊急事態以外の航空機の取り扱い	**1.1 Aircraft operations other than scheduled flights or in an emergency**
当空港の使用について、航空機の運航者は、空港管理者の許可を得ること	On use of this airport, aircraft operator is required to obtain the prior permission of the airport administrator.

1.2 管制方式

出発機は次に掲げる方式に従うこと。

1) 管制承認
出発機はエンジン始動５分前の通報に合わせて、次に掲げる項目を広島タワーに通報すること
- ・航空機呼出符号
- ・目的地
- ・要求高度（代替要求高度がある場合は、当該高度）
- ・駐機位置（スポット番号）
- ・代替飛行経路がある場合は当該飛行経路

2) 管制承認はエンジン始動準備完了の通報を行った航空機から順に発出される。
3) パイロットはプッシュバック及び／またはエンジン始動時期が遅れることが予想される場合は、広島タワーに対しその旨通報すること。ただし、他の航空機の地上交通による遅延または出発制御時刻等が付加されたために生じる遅延を除く。
4) インターセクション・ディパーチャー
各インターセクション・ディパーチャーによる滑走路残距離は次のとおり。

1.2 ATC Procedures

Departing aircraft shall comply with the following procedures.

1) ATC clearance
Advise HIROSHIMA TOWER 5 minutes prior to starting engines with the following items
- • call sign
- • destination
- • proposed flight level/altitude (alternative flight levels/ altitude, if any)
- • parking position (spot number)
- • alternative flight routes, if any

2) Clearance will be issued in the order of reporting ready to start engines.
3) Pilots shall advise HIROSHIMA TOWER if any delay in push-back and/or engine start-up is anticipated except when delay has been caused by other ground traffic or departure time restriction such as released time.
4) Intersection departure
The remaining runway length for intersection departures are as follows.

RWY	TWY	Remaining RWY length
28	T2 T3 T4 T5	2,310m (7,570ft) 1,690m (5,540ft) 1,060m (3,470ft) 450m (1,470ft)
10	T5 T4 T3 T2	2,420m (7,930ft) 1,810m (5,930ft) 1,190m (3,900ft) 560m (1,830ft)

＊誘導路中心線と滑走路中心線の交点から滑走路末端までの距離で 10m（10ft）の端数を切り捨てた値

* Rounded down to the nearest 10m (10ft) from the measurement between the point where TWY CL meets RCL and RWY THR.

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

6.1 誘導路交差地点の翼端クリアランス
（AD1.1.6.8参照）

誘導路上の停止位置に待機中の航空機と後方の誘導路を走行する航空機の翼端クリアランスは以下のとおりである。

誘導路T2, T3, T4, T5の停止位置標識でB773型機が一時停止している場合、当該航空機の後方を通過しようとする航空機との間に必要最小限度の安全余裕が確保されていない。
その他の型式の航空機が停止位置標識で一時停止している場合は当該航空機の後方を通過しようとする航空機との間に十分な安全余裕がとれない可能性がある。

6.1 Wing tip clearance at the TWY intersection
(REF AD1.1.6.8)

Wing tip clearance at the TWY intersection between the aircraft holding at the stop marking on the TWY and the other aircraft taxiing behind it are as follows.

When B773 holding at the stop marking on TWY T2, T3, T4 and T5, there is no minimum safety buffer between the aircraft holding at the stop marking on the TWY and the aircraft passing behind it.
When other aircraft holding at the stop marking on TWY T2, T3, T4 and T5, there might be no safety buffer between the aircraft holding at the stop marking on the TWY and the aircraft passing behind it.

7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

10. Remarks

Nil

RJOA AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJOA AD 2.22 FLIGHT PROCEDURES

1.TAKE OFF MINIMA

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		Nil (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP filed	10/28	A,B,C	400 *200 **150	400 *200	400 *250	400 *250	-	500
		D	400 *250 **200	400 *250	400 *300	400 *300	-	500
OTHER	10/28	A,B,C,D	AVBL LDG MINIMA					

* Applicable when SSP IN FORCE
** Applicable when SSP IN FORCE and MULTIPLE RVRs AVAILABLE

2. Lost communication procedures for arrival aircraft under radar navigational guidance

If radio communications with HIROSHIMA Approach/Radar are lost for 30 seconds, squawk Mode A/3 Code 7600 and;

(I) 1. Contact HIROSHIMA Tower.
2. If unable, proceed in accordance with visual flight rules.
3. If unable, proceed to HONGO VOR/DME at last assigned altitude or 4,100 feet whichever is higher, and excute instrument approach.

(II) Procedures other than above will be issued when situation required.

3.Trajectorized Airport Traffic Data Processing System (TAPS)

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

If an aircraft with non-discrete capability be instructed to reply with the discrete code, it shall report a controller accordingly.

広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. Category III A / III B Operations at Hiroshima Airport
広島空港におけるカテゴリーⅢ A／Ⅲ B 航行

4.1 Facilities

The following Categories are available: 2230-1330UTC(Daily)

Runway 10
• ILS Runway 10-CAT III • Lighting system Runway 10-CAT III • RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)

4.2 Conditions

A. The following systems must be operative:

For ILS RWY 10 approach (CAT III A / III B)
(1) ILS comprising; • ILS-LOC 10 with standby transmitter(including far field monitor) • ILS-GP 10 with standby transmitter (When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.) • ILS-DME 10
(2) Lighting system comprising; • PALS 10 (including side row barrettes) • High INTST REDL • High INTST RTHL • RCLL and RTZL
(3) Secondary power supply
(4) RVR by forward-scatter meters at the touchdown zone, mid-point and stop-end of the runway.

B. The following information must be currently available:

1) Surface wind speed and direction
2) RVR

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

4.3 Precision Approach Terrain Chart

See RJOA AD2.24

4.4 Operating Minimum

Approach minima stated in AD2.24 (Instrument Approach Chart) are observed.

4.5 Special Safeguards and Procedures (SSP)

CAT III A /III B Operations are available when SSP are applied.
SSP will be applied when the following conditions are met:
a) Ceiling is at or less than 200ft and/or RVR is at or less than 600m.
b) Facilities listed 4.1 above are operational.
c) ILS Critical Area is protected.
In order to protect ILS Critical Area for the succeeding arrival aircraft, an arrival aircraft may be given following instruction by ATC.
" REPORT OUT OF ILS CRITICAL AREA "
The exit taxiway centerline lights are fixed alternate green and yellow inside the ILS Critical Area. If an aircraft is given the above instruction, she is expected to advise the ATC when the taxiway centerline lights change from alternate green and yellow to steady green.

4.6 Approval for CAT III A / III B Operations

Operators must obtain operational approval from the State of Registry or the State of Operator, as appropriate, to conduct CAT III A / III B Operations. (See GEN1.5)

4.7 Taxiway available for CAT III A / III B Operations.

Taxiway available for CAT III A / III B Operations are T1, T6 and the parallel taxiway.

RJOA AD 2.23 ADDITIONAL INFORMATION

Nil

RJOA AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Aerodrome Obstacle Chart type A (RWY10/28)
Aerodrome Obstacle Chart type B (RWY10/28)
Precision Approach Terrain Chart
Standard Departure Chart - Instrument (TOJYO, OPERA, BINGO, KINOE, HONGO)
Standard Departure Chart - Instrument (MARCO-RNAV)
Standard Departure Chart - Instrument (KIJYY-RNAV)
Standard Departure Chart - Instrument (MOMOT-RNAV)
Standard Departure Chart - Instrument (SINFO-RNAV)
Standard Arrival Chart - Instrument (HONGO)
Standard Arrival Chart - Instrument (MISEN-RNAV)
Standard Arrival Chart - Instrument (AXELA-RNAV)
Standard Arrival Chart - Instrument (DEMIO-RNAV)
Standard Arrival Chart - Instrument (VISTA-RNAV)
Instrument Approach Chart (ILS or LOC RWY10 (CAT Ⅲ))
Instrument Approach Chart (VOR RWY10)
Instrument Approach Chart (VOR Z RWY28)
Instrument Approach Chart (VOR Y RWY28)
Instrument Approach Chart (RNAV(GNSS) RWY28)
Instrument Approach Chart (RNAV(RNP) Z RWY10)
Instrument Approach Chart (RNAV(RNP) Y RWY10)
Other Chart (Visual REP)
Other Chart (LDG CHART)
Other Chart (MVA CHART)

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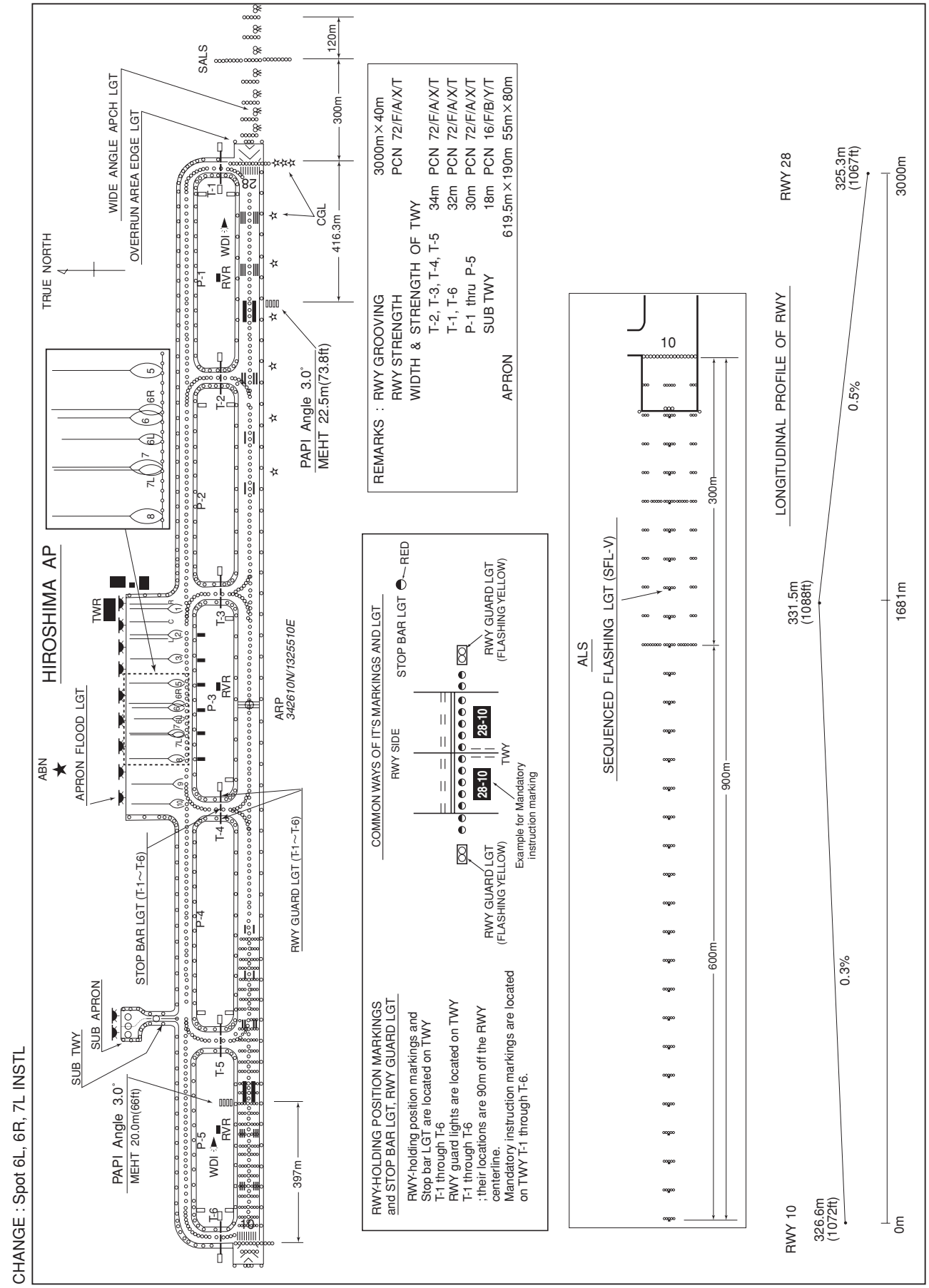
RJOA / HIROSHIMA AD CHART



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AERODROME OBSTACLE CHART-ICAO

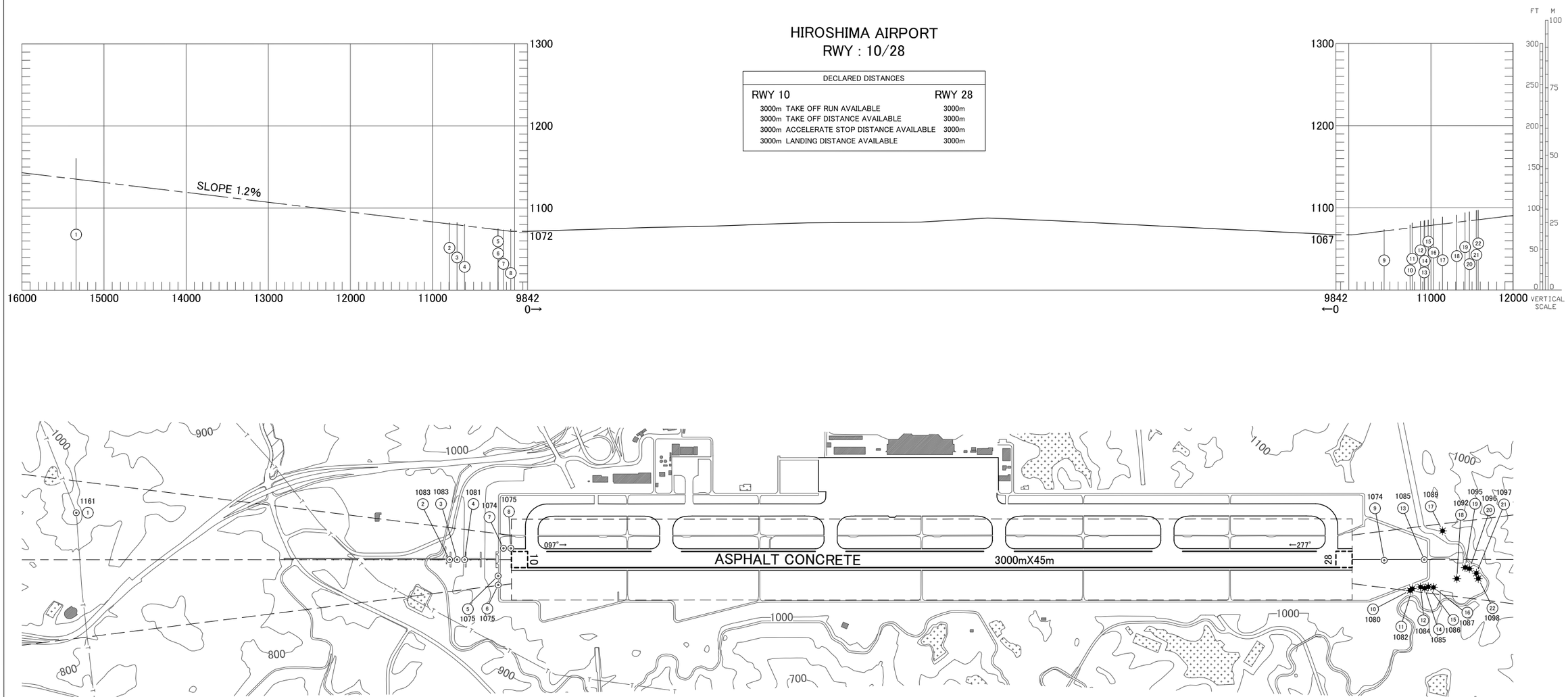
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 7° W-APR 2019

HIROSHIMA AIRPORT
RWY : 10/28

DECLARED DISTANCES	
RWY 10	RWY 28
3000m TAKE OFF RUN AVAILABLE	3000m
3000m TAKE OFF DISTANCE AVAILABLE	3000m
3000m ACCELERATE STOP DISTANCE AVAILABLE	3000m
3000m LANDING DISTANCE AVAILABLE	3000m



HORIZONTAL SCALE

FEET

1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000ft

300 0 500 1000 1500 2000 2500m

METER

LEGEND	
①	IDENTIFICATION NUMBER
⊙	POLE, TOWER, SPIRE, ANTENNA, ETC
✳	OBSTRUCTION LIGHT
▬	BUILDING OR LARGE STRUCTURE
─┼─┼─	RAILROAD
△	TRIANGULATION POINT
─T─T─	TRANSMISSION LINE OR OVERHEAD CABLE
▥	LEVEE
✱	TREE
◯	LAKE
≈	RIVER
∿	CONTOURS(ft)

AMENDMENT RECORD		
Nr	DATE	ENTERED BY

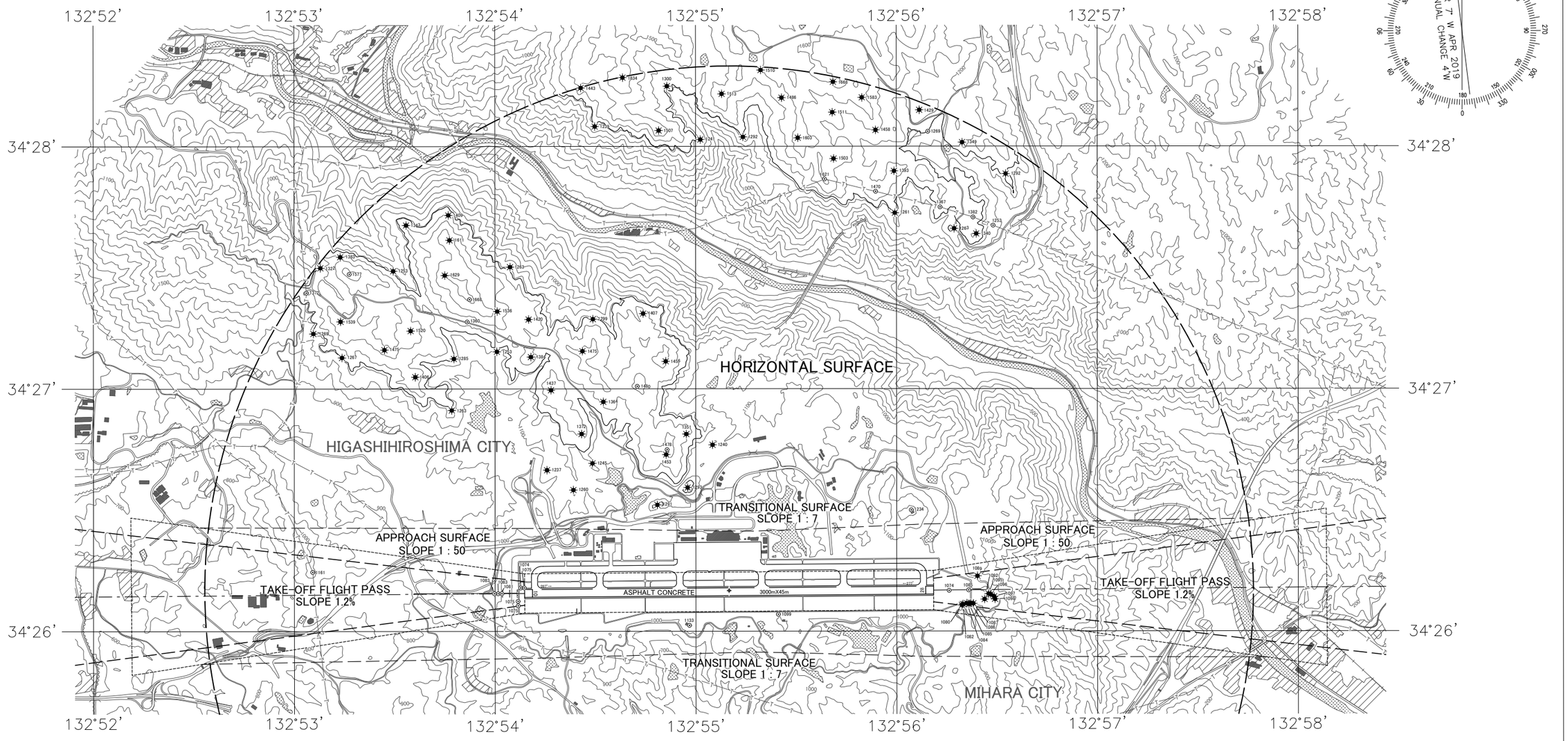
CHANGE:Update

AERODROME OBSTACLE CHART-ICAO

TYPE B (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

AERODROME ELEVATION 1086ft ARP



HORIZONTAL SCALE

FEET

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000ft

300 0 500 1000 1500 2000 2500 3000m

METER

LEGEND

- AERODROME REFERENCE POINT 34°26'10"N 132°55'10"E
- POLE, TOWER, SPIRE, ANTENNA, ETC
- AERONAUTICAL GROUND LIGHT
- OBSTRUCTION LIGHT
- BUILDING OR LARGE STRUCTURE
- RAILROAD
- TERRAIN PENETRATING OBSTACLE PLANE
- TRANSMISSION LINE OR OVERHEAD CABLE
- LEVEE
- TREE
- RIVER
- LAKE
- CONTOURS(ft)

AMENDMENT RECORD		
NO	DATE	ENTERED BY

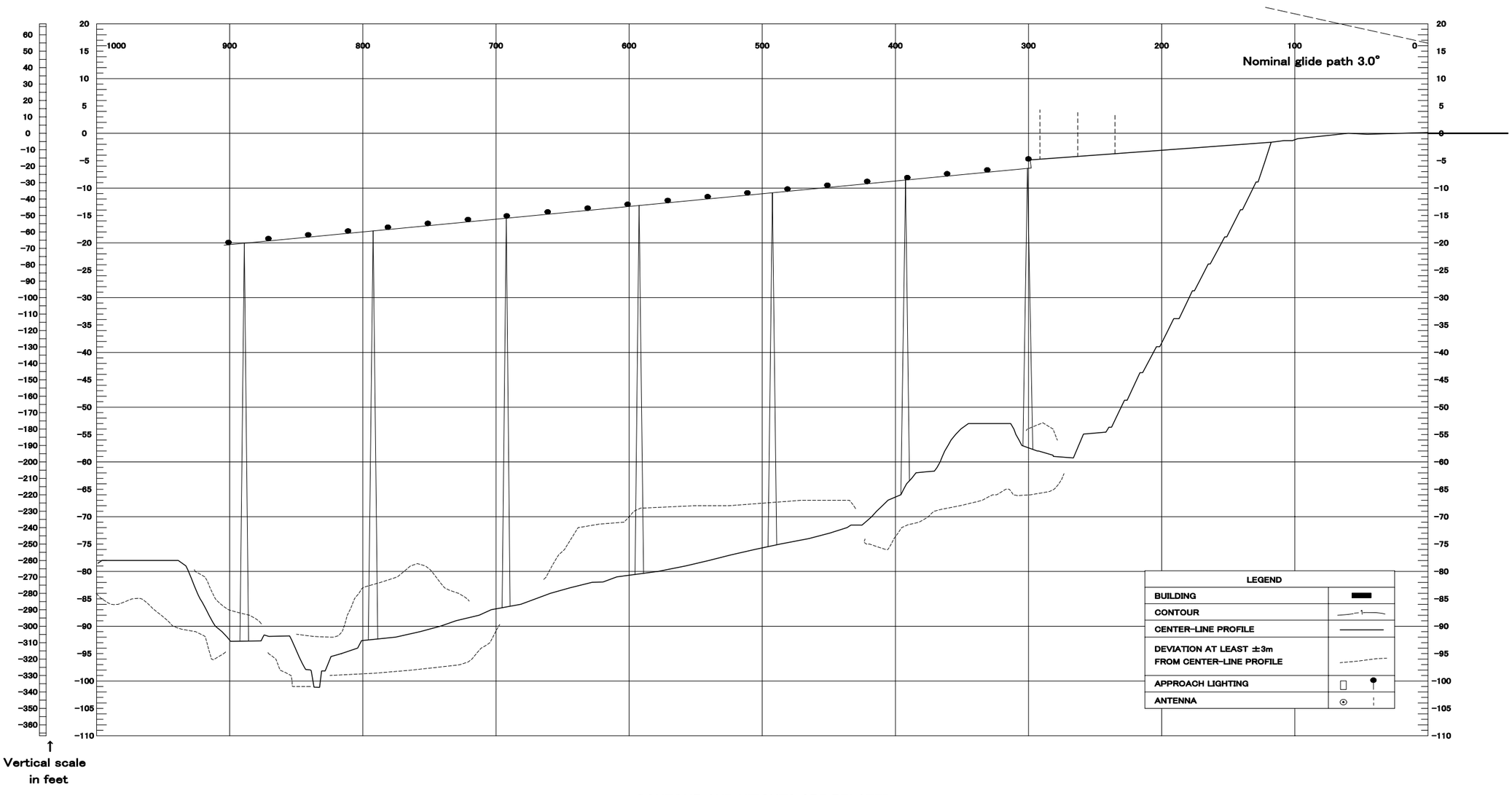
CHANGE:Update

PRECISION APPROACH TERRAIN CHART-ICAO

PRICISION APPROACH TERRAIN CHART

DISTANCES AND HEIGHTS IN METERS

RWY 10



CONTOUR AND HEIGHTS ARE RELATED
TO ELEVATION OF RWY THR

STANDARD DEPARTURE CHART - INSTRUMENT

RJOA / HIROSHIMA SID and TRANSITION

TOJYO THREE DEPARTURE

RWY 10 : Climb RWY HDG to HGE 2.5DME(1.9NM FM DER), turn left to intercept and proceed via HGE R040 to TOJYO...

RWY 28 : Climb on HDG 270˚ to HGE 5.0DME(4.0NM FM DER), turn right HDG 085˚ to intercept and proceed via HGE R-040 to TOJYO...
...Cross TOJYO at or above 12000FT.

Note : RWY10 : 3.5% climb gradient required up to 1900FT.
OBST ALT 1579FT located at 023˚/3.31NM FM DER.
RWY28 : 3.4% climb gradient required up to 1600FT.
OBST ALT 2484FT located at 337˚/7.77NM FM DER.

MIYAZU TRANSITION

From over TOJYO, proceed via YME R256 to YME VOR/DME.

OTSU TRANSITION

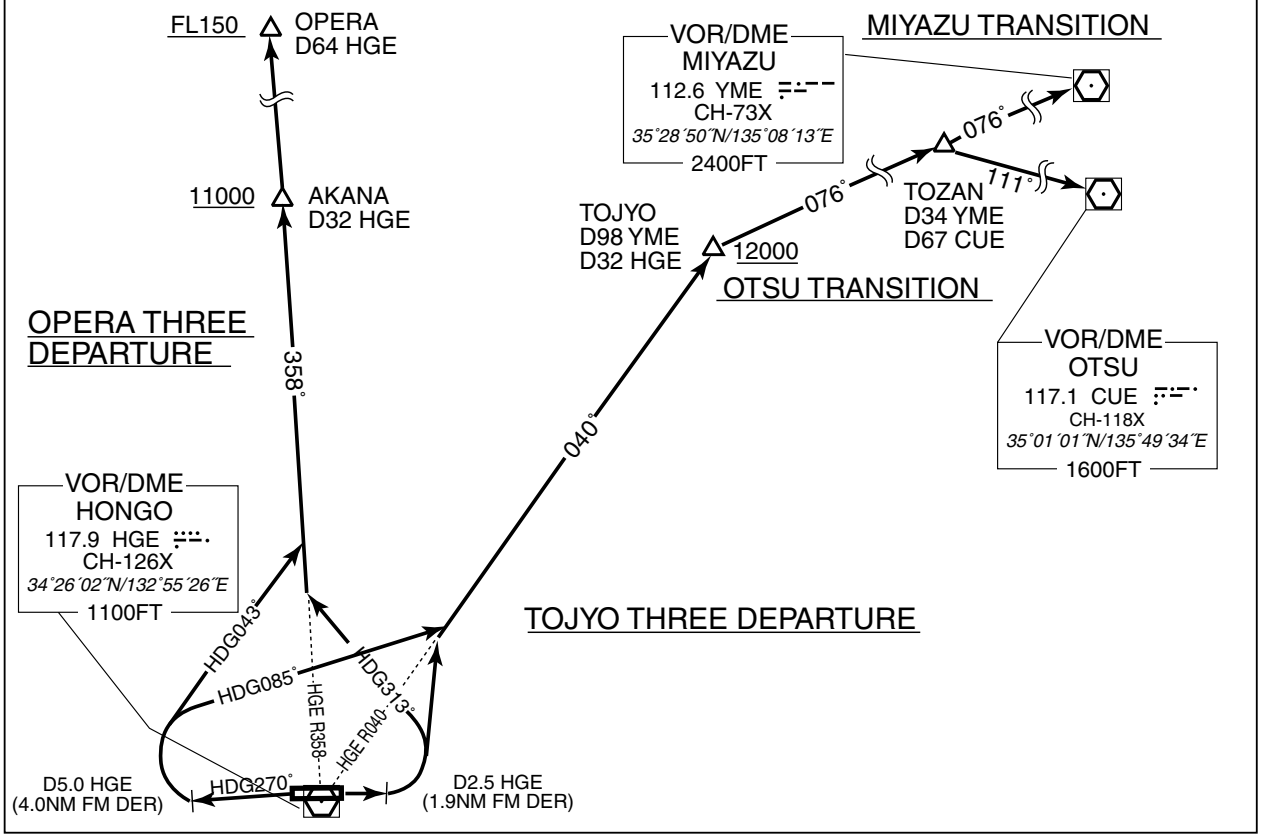
From over TOJYO, proceed via YME R256 to TOZAN, via CUE R291 to CUE VOR/DME.

OPERA THREE DEPARTURE

RWY 10 : Climb RWY HDG to HGE 2.5DME(1.9NM FM DER), turn left HDG 313˚....

RWY 28 : Climb on HDG 270˚ to HGE 5.0DME(4.0NM FM DER), turn right HDG 043˚....
....to intercept and proceed via HGE R358 to OPERA, via AKANA.
Cross AKANA at or above 11000FT, cross OPERA at or above FL150.

Note : RWY10 : 3.5% climb gradient required up to 1900FT.
OBST ALT 1579FT located at 023˚/3.31NM FM DER.
RWY28 : 3.8% climb gradient required up to 3300FT.
OBST ALT 3025FT located at 329˚/11.0NM FM DER.



STANDARD DEPARTURE CHART - INSTRUMENT

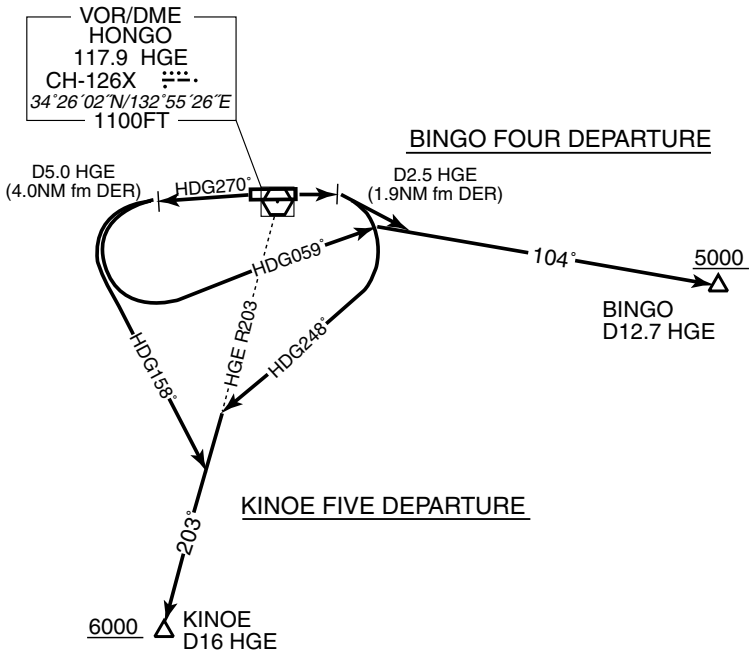
RJOA / HIROSHIMA SID

BINGO FOUR DEPARTURE

RWY 10 : Climb RWY HDG to HGE 2.5DME(1.9NM FM DER), turn right....
RWY 28 : Climb on HDG 270˚ to HGE 5.0DME(4.0NM FM DER), turn left HDG 059˚....
....to intercept and proceed via HGE R104 to BINGO.
Cross BINGO at or above 5000FT.

KINOE FIVE DEPARTURE

RWY 10 : Climb RWY HDG to HGE 2.5DME(1.9NM FM DER), turn right HDG 248˚....
RWY 28 : Climb on HDG 270˚ to HGE 5.0DME(4.0NM FM DER), turn left HDG 158˚....
....to intercept and proceed via HGE R203 to KINOE.
Cross KINOE at or above 6000FT.



STANDARD DEPARTURE CHART - INSTRUMENT

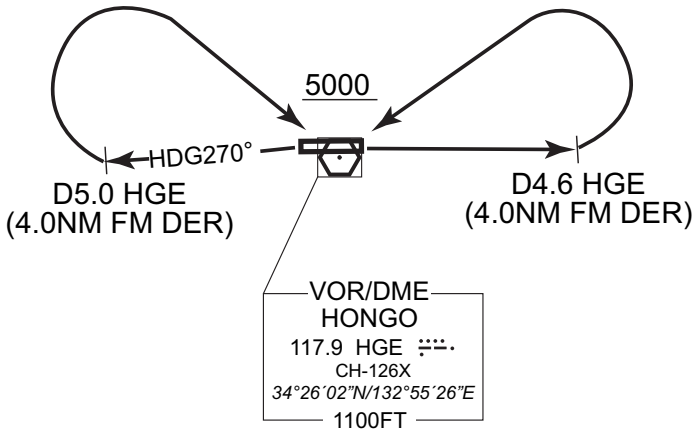
RJOA / HIROSHIMA SID and TRANSITION

HONGO REVERSAL THREE DEPARTURE

RWY 10 : Climb RWY HDG to HGE 4.6DME(4.0NM FM DER), turn left....,
RWY 28 : Climb on HDG 270° to HGE 5.0DME(4.0NM FM DER), turn right....,
....direct to HGE VOR/DME. Cross HGE VOR/DME at or above 5000FT.

Note : RWY10 : 3.8% climb gradient required up to 2300FT.
OBST ALT 2002FT located at 093°/5.73NM FM DER.
RWY28 : 3.4% climb gradient required up to 1600FT.
OBST ALT 2484FT located at 337°/7.77NM FM DER.

HONGO REVERSAL THREE DEPARTURE



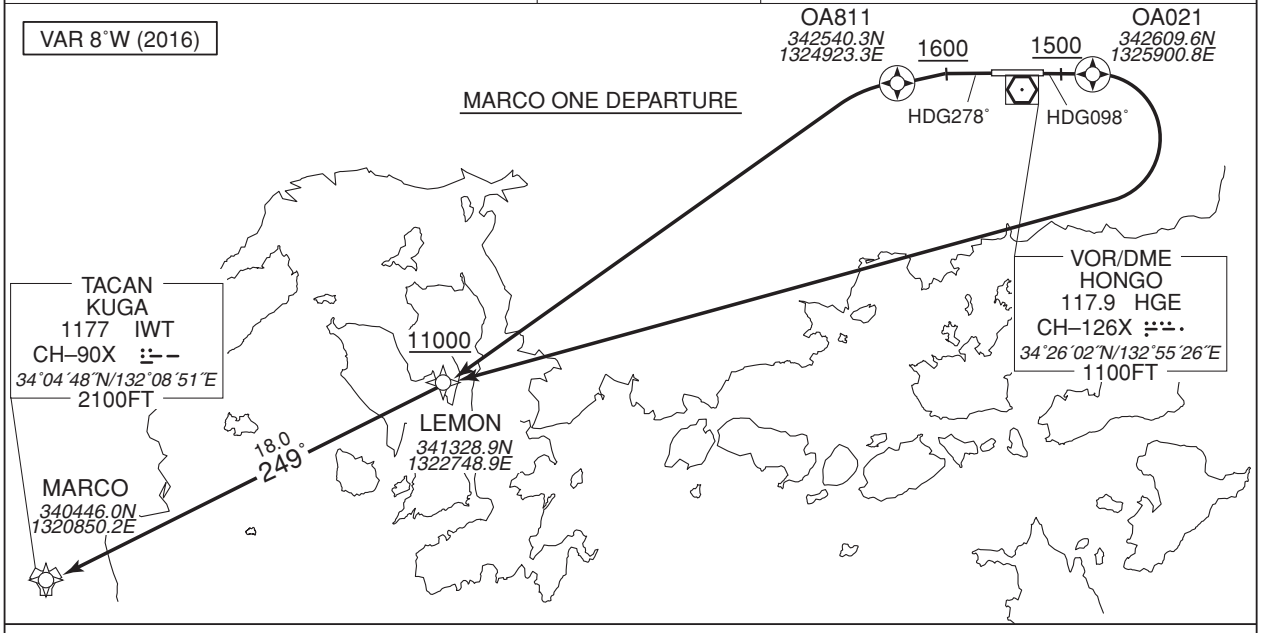
STANDARD DEPARTURE CHART - INSTRUMENT

RJOA / HIROSHIMA RNAV SID

MARCO ONE 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 rolling.
2) RADAR service required.

Critical DME	–
DME GAP	RWY10 : DER – OA021 RWY28 : DER – 2NM to OA811
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



MARCO ONE DEPARTURE

RWY10 : Climb on HDG098˚ at or above 1500FT, direct to OA021, turn right direct to LEMON at or above 11000FT, to MARCO.

RWY28 : Climb on HDG278˚ at or above 1600FT, direct to OA811, turn left direct to LEMON at or above 11000FT, to MARCO.

NOTE RWY10 : 5.0% climb gradient required up to 1500FT.
RWY28 : 3.6% climb gradient required up to 1600FT.

MARCO ONE DEPARTURE

RWY10

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	–	–	098 (090.0)	-7.6	–	–	+1500	–	–	RNAV1
002	DF	OA021	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	LEMON	–	–	-7.6	–	R	+11000	–	–	RNAV1
004	TF	MARCO	–	249 (241.1)	-7.6	18.0	–	–	–	–	RNAV1

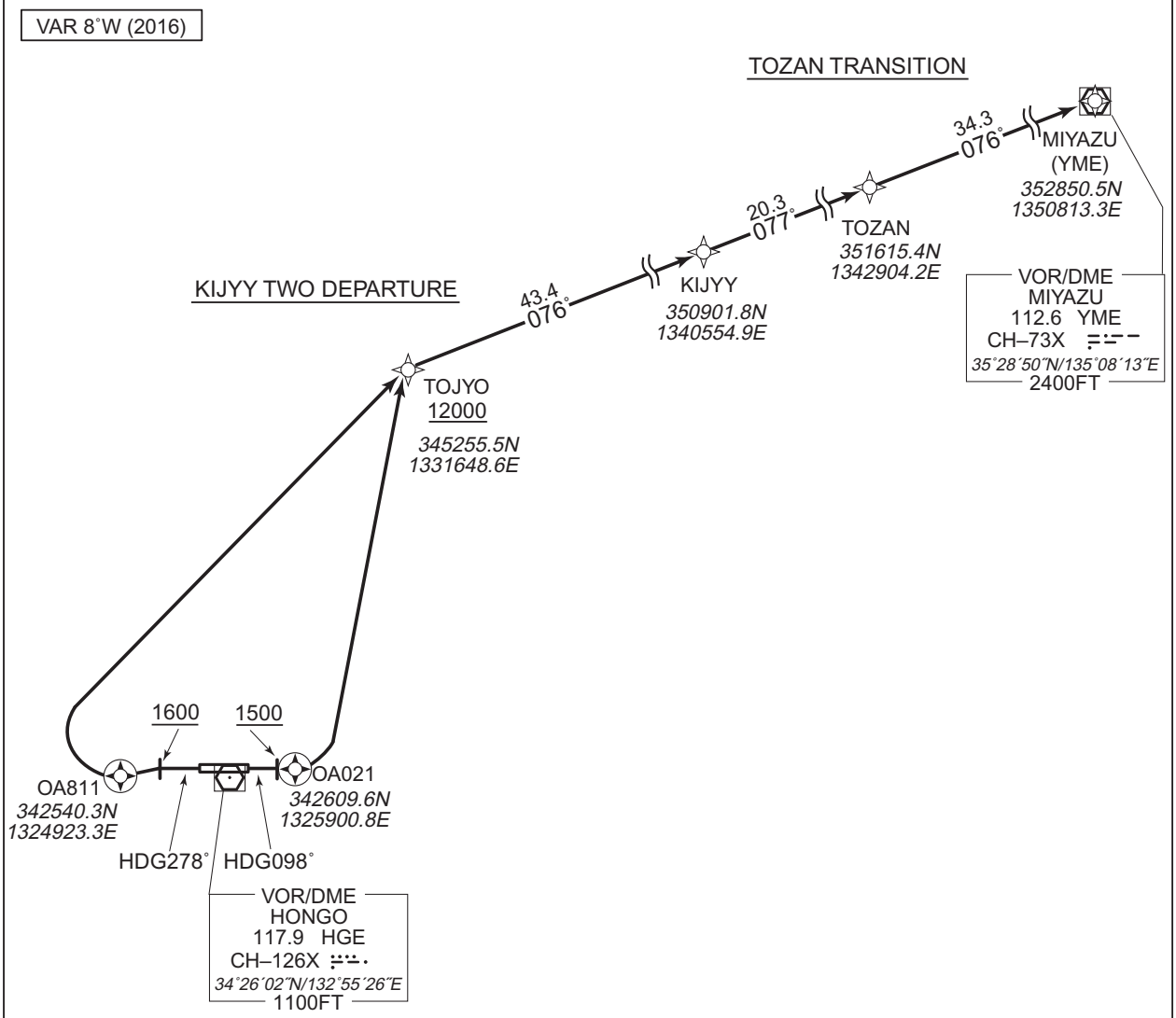
RWY28

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	–	–	278 (270.0)	-7.6	–	–	+1600	–	–	RNAV1
002	DF	OA811	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	LEMON	–	–	-7.6	–	L	+11000	–	–	RNAV1
004	TF	MARCO	–	249 (241.1)	-7.6	18.0	–	–	–	–	RNAV1

STANDARD DEPARTURE CHART - INSTRUMENT

RJOA / HIROSHIMA — RNAV SID and TRANSITION

KIJYY 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	HGE : OA021 ～ 27NM to TOJYO TZT : OA021 ～ 24NM to TOJYO
	DME GAP	RWY10 : DER – OA021 RWY28 : DER – 2NM to OA811
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



KIJYY TWO DEPARTURE

RWY10 : Climb on HDG098˚ at or above 1500FT, direct to OA021, turn left direct to TOJYO at or above 12000FT, to KIJYY.

RWY28 : Climb on HDG278˚ at or above 1600FT, direct to OA811, turn right direct to TOJYO at or above 12000FT, to KIJYY.

NOTE RWY10 : 5.0% climb gradient required up to 1600FT.
OBST ALT 2090FT located at 5.74NM 087˚ FM end of RWY10.
RWY28 : 3.6% climb gradient required up to 2700FT.
OBST ALT 2570FT located at 7.71NM 337˚ FM end of RWY28.

TOZAN TRANSITION

From KIJYY, to TOZAN, to YME.

CHANGE: Correction of misdescription (Course FM TOZAN to MIYAZU).

STANDARD DEPARTURE CHART - INSTRUMENT

RJOA / HIROSHIMA RNAV SID and TRANSITION

KIJYY TWO DEPARTURE

RWY10

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	–	–	098 (090.0)	-7.6	–	–	+1500	–	–	RNAV1
002	DF	OA021	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	TOJYO	–	–	-7.6	–	L	+12000	–	–	RNAV1
004	TF	KIJYY	–	076 (067.9)	-7.6	43.4	–	–	–	–	RNAV1

RWY28

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	–	–	278 (270.0)	-7.6	–	–	+1600	–	–	RNAV1
002	DF	OA811	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	TOJYO	–	–	-7.6	–	R	+12000	–	–	RNAV1
004	TF	KIJYY	–	076 (067.9)	-7.6	43.4	–	–	–	–	RNAV1

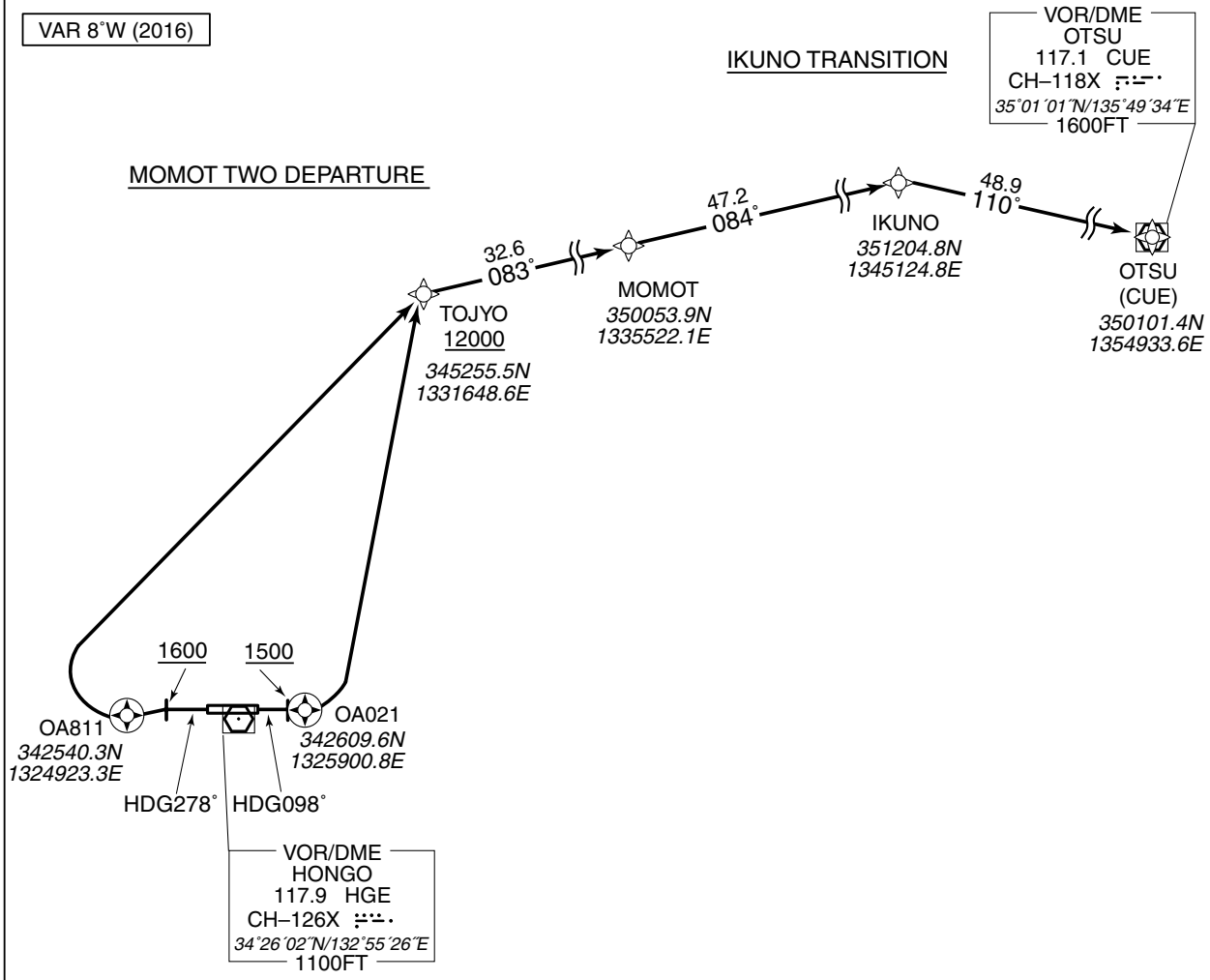
TOZAN TRANSITION

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	KIJYY	–	–	-7.6	–	–	–	–	–	RNAV1
002	TF	TOZAN	–	077 (069.0)	-7.6	20.3	–	–	–	–	RNAV1
003	TF	YME	–	076 (068.3)	-7.6	34.3	–	–	–	–	RNAV1

STANDARD DEPARTURE CHART - INSTRUMENT

RJOA / HIROSHIMA — RNAV SID and TRANSITION

MOMOT 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	HGE : OA021 ～ 27NM to TOJYO TZT : OA021 ～ 24NM to TOJYO OKT : 25NM to IKUNO ～ 19NM to IKUNO
	DME GAP	RWY10 : DER – OA021 RWY28 : DER – 2NM to OA811
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



MOMOT TWO DEPARTURE

RWY10 : Climb on HDG098˚ at or above 1500FT, direct to OA021, turn left direct to TOJYO at or above 12000FT, to MOMOT.

RWY28 : Climb on HDG278˚ at or above 1600FT, direct to OA811, turn right direct to TOJYO at or above 12000FT, to MOMOT.

NOTE RWY10 : 5.0% climb gradient required up to 1600FT.
OBST ALT 2090FT located at 5.74NM 087˚ FM end of RWY10.
RWY28 : 3.6% climb gradient required up to 2700FT.
OBST ALT 2570FT located at 7.71NM 337˚ FM end of RWY28.

IKUNO TRANSITION

From MOMOT, to IKUNO, to CUE.

STANDARD DEPARTURE CHART - INSTRUMENT

RJOA / HIROSHIMA RNAV SID and TRANSITION

MOMOT TWO DEPARTURE

RWY10

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	–	–	098 (090.0)	-7.6	–	–	+1500	–	–	RNAV1
002	DF	OA021	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	TOJYO	–	–	-7.6	–	L	+12000	–	–	RNAV1
004	TF	MOMOT	–	083 (075.7)	-7.6	32.6	–	–	–	–	RNAV1

RWY28

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	–	–	278 (270.0)	-7.6	–	–	+1600	–	–	RNAV1
002	DF	OA811	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	TOJYO	–	–	-7.6	–	R	+12000	–	–	RNAV1
004	TF	MOMOT	–	083 (075.7)	-7.6	32.6	–	–	–	–	RNAV1

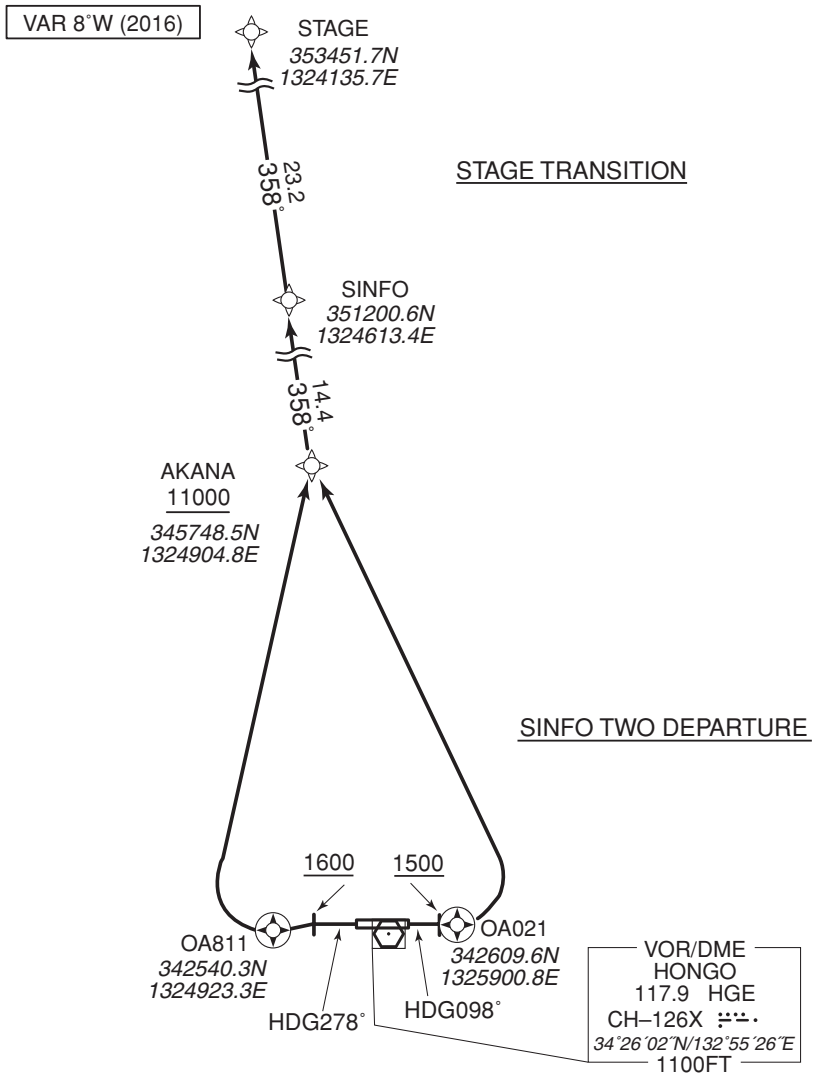
IKUNO TRANSITION

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	MOMOT	–	–	-7.6	–	–	–	–	–	RNAV1
002	TF	IKUNO	–	084 (076.0)	-7.6	47.2	–	–	–	–	RNAV1
003	TF	CUE	–	110 (102.8)	-7.6	48.9	–	–	–	–	RNAV1

STANDARD DEPARTURE CHART -INSTRUMENT

RJOA / HIROSHIMA — RNAV SID and TRANSITION

SINFO 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	MYE : OA021 ～ 31NM to AKANA TRE : SINFO ～ STAGE
	DME GAP	RWY10 : DER – OA021 RWY28 : DER – 2NM to OA811
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1



SINFO TWO DEPARTURE

RWY10 : Climb on HDG098˚ at or above 1500FT, direct to OA021, turn left direct to AKANA at or above 11000FT, to SINFO.

RWY28 : Climb on HDG278˚ at or above 1600FT, direct to OA811, turn right direct to AKANA at or above 11000FT, to SINFO.

NOTE RWY10 : 5.0% climb gradient required up to 1800FT.
OBST ALT 1780FT located at 2.30NM 006˚ FM end of RWY10.
RWY28 : 3.8% climb gradient required up to 3700FT.
OBST ALT 3150FT located at 11.02NM 322˚ FM end of RWY28.

STAGE TRANSITION

From SINFO, to STAGE.

STANDARD DEPARTURE CHART -INSTRUMENT

RJOA / HIROSHIMA RNAV SID and TRANSITION

SINFO TWO DEPARTURE

RWY10

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	–	–	098 (090.0)	-7.6	–	–	+1500	–	–	RNAV1
002	DF	OA021	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	AKANA	–	–	-7.6	–	L	+11000	–	–	RNAV1
004	TF	SINFO	–	358 (350.7)	-7.6	14.4	–	–	–	–	RNAV1

RWY28

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	–	–	278 (270.0)	-7.6	–	–	+1600	–	–	RNAV1
002	DF	OA811	Y	–	-7.6	–	–	–	–	–	RNAV1
003	DF	AKANA	–	–	-7.6	–	R	+11000	–	–	RNAV1
004	TF	SINFO	–	358 (350.7)	-7.6	14.4	–	–	–	–	RNAV1

STAGE TRANSITION

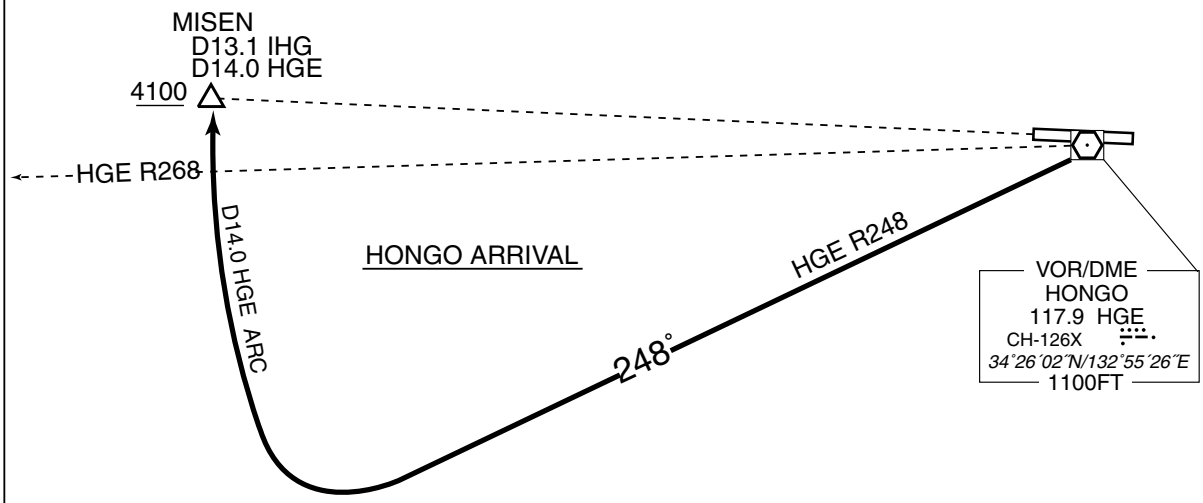
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	SINFO	–	–	-7.6	–	–	–	–	–	RNAV1
002	TF	STAGE	–	358 (350.6)	-7.6	23.2	–	–	–	–	RNAV1

STANDARD ARRIVAL CHART -INSTRUMENT

RJOA / HIROSHIMA STAR

HONGO ARRIVAL

From over HGE VOR/DME, via HGE R248 to intercept and proceed via HGE 14.0DME clockwise ARC to MISEN.
Cross MISEN at or above 4100FT.

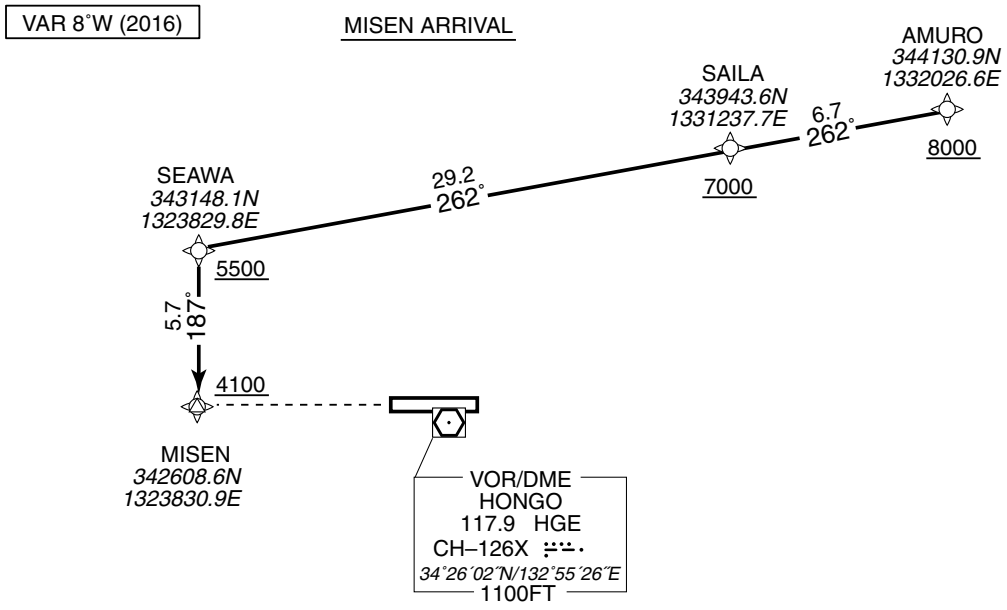


STANDARD ARRIVAL CHART -INSTRUMENT

RJOA / HIROSHIMA RNAV STAR RWY10

MISEN ARRIVAL	RNAV1

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



MISEN ARRIVAL

From AMURO at or above 8000FT, to SAILA at or above 7000FT, to SEAWA at or above 5500FT, to MISEN at or above 4100FT.

Critical DME	HGE	SAILA - 25NM to SEAWA
	IWT	25NM to SEAWA - 20NM to SEAWA SEAWA - MISEN
DME GAP	–	
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.	

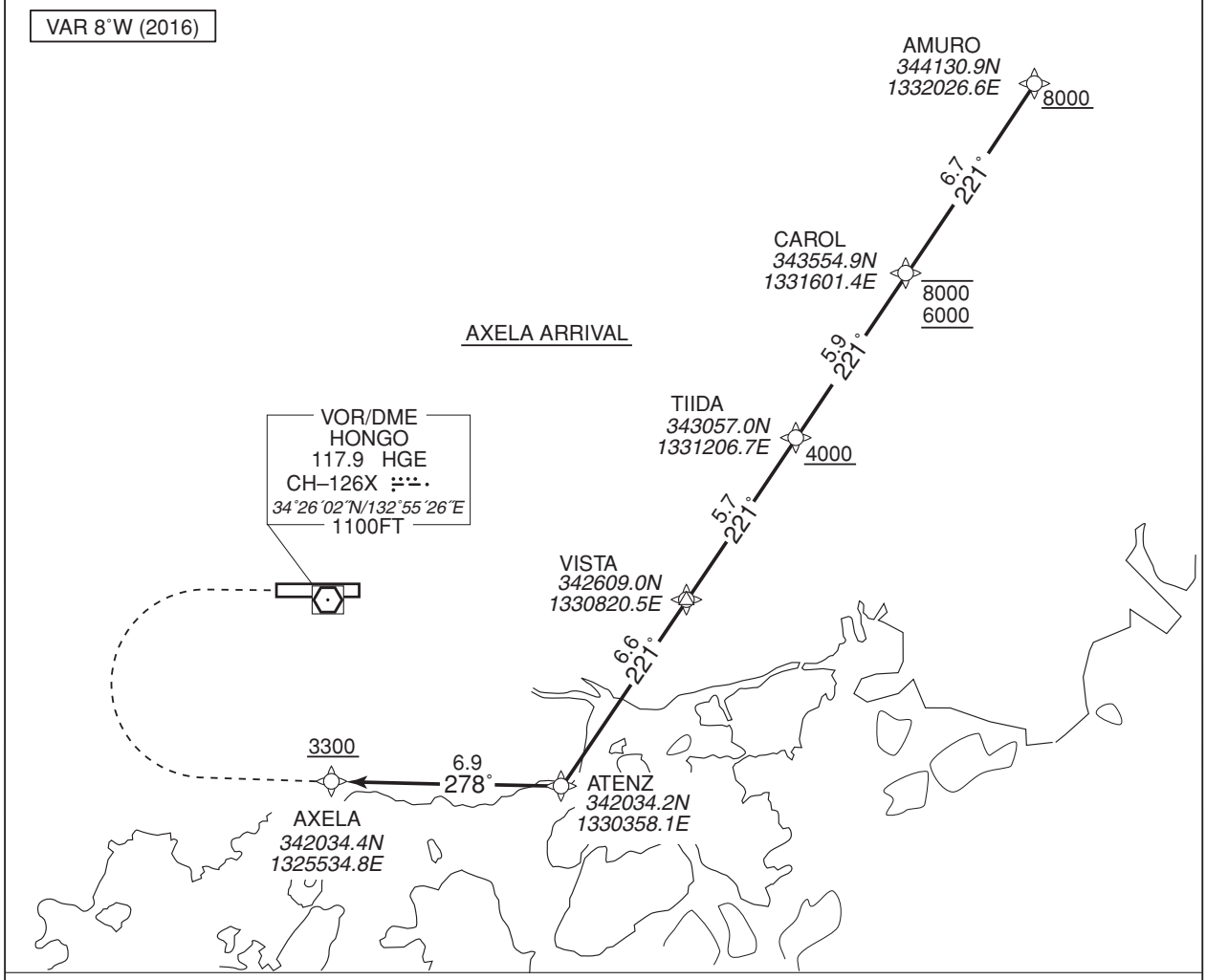
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	AMURO	–	–	-7.6	–	–	+8000	–	–	RNAV1
002	TF	SAILA	–	262 (254.5)	-7.6	6.7	–	+7000	–	–	RNAV1
003	TF	SEAWA	–	262 (254.4)	-7.6	29.2	–	+5500	–	–	RNAV1
004	TF	MISEN	–	187 (179.8)	-7.6	5.7	–	+4100	–	–	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJOA / HIROSHIMA — RNAV STAR RWY10

AXELA ARRIVAL	RNAV1

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



AXELA ARRIVAL

From AMURO at or above 8000FT, to CAROL between 8000FT and 6000FT, to TIIDA at or above 4000FT, to VISTA, to ATENZ, to AXELA at or above 3300FT.

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

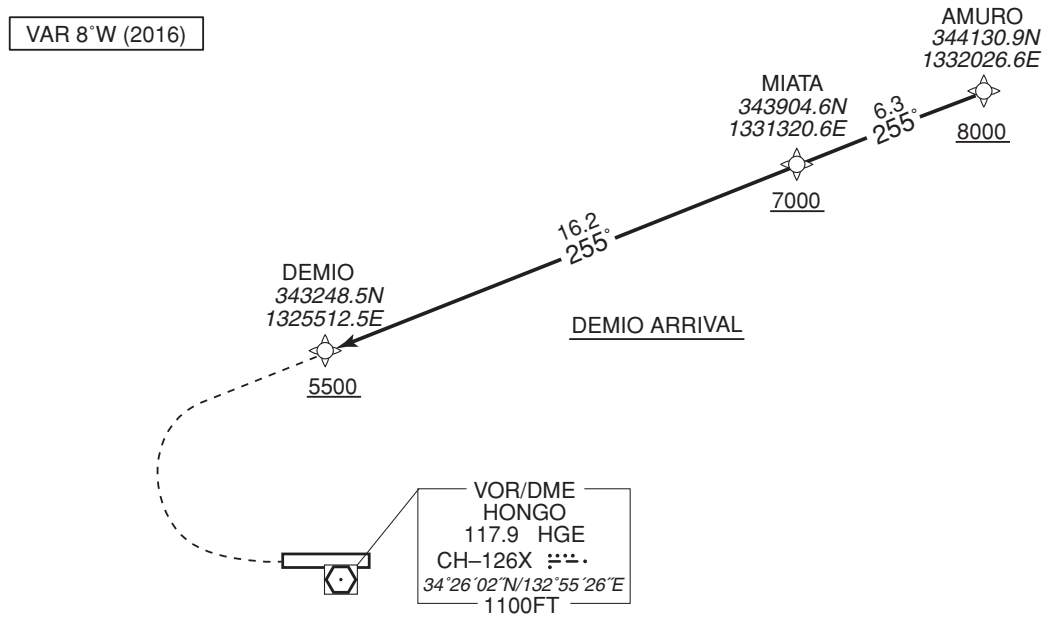
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	AMURO	–	–	-7.6	–	–	+8000	–	–	RNAV1
002	TF	CAROL	–	221 (213.0)	-7.6	6.7	–	-8000 +6000	–	–	RNAV1
003	TF	TIIDA	–	221 (213.0)	-7.6	5.9	–	+4000	–	–	RNAV1
004	TF	VISTA	–	221 (212.9)	-7.6	5.7	–	–	–	–	RNAV1
005	TF	ATENZ	–	221 (212.9)	-7.6	6.6	–	–	–	–	RNAV1
006	TF	AXELA	–	278 (270.1)	-7.6	6.9	–	+3300	–	–	RNAV1

STANDARD ARRIVAL CHART-INSTRUMENT

RJOA / HIROSHIMA — RNAV STAR RWY10

DEMIO ARRIVAL	RNAV1

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



DEMIO ARRIVAL

From AMURO at or above 8000FT, to MIATA at or above 7000FT, to DEMIO at or above 5500FT.

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

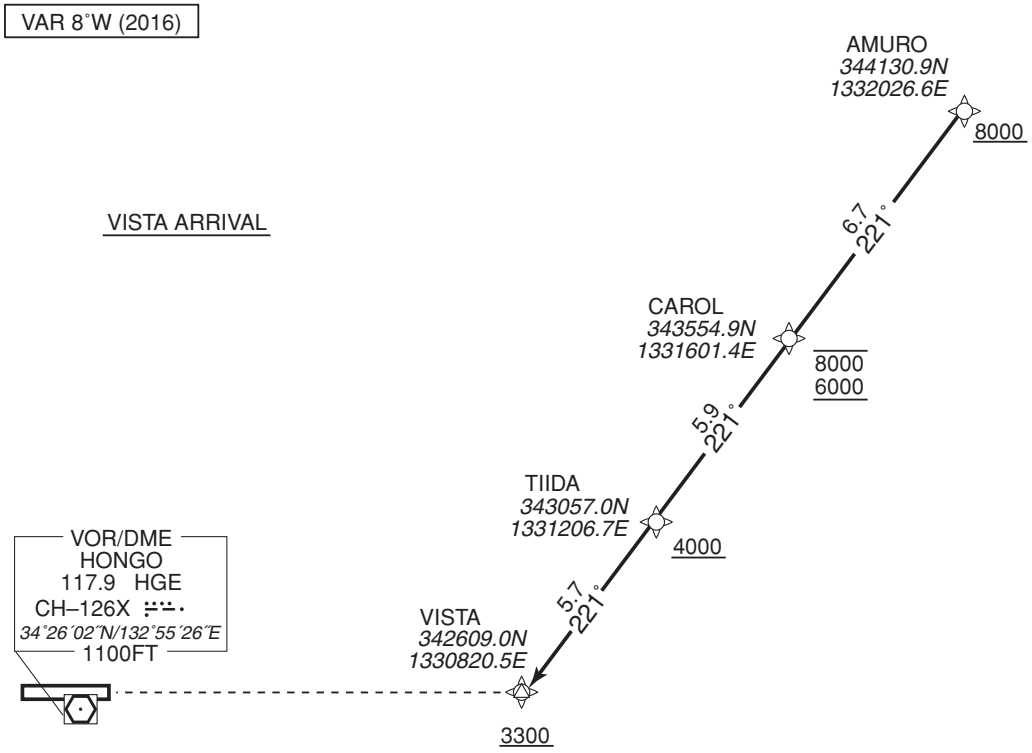
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course ˚M(˚T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	AMURO	–	–	-7.6	–	–	+8000	–	–	RNAV1
002	TF	MIATA	–	255 (247.4)	-7.6	6.3	–	+7000	–	–	RNAV1
003	TF	DEMIO	–	255 (247.3)	-7.6	16.2	–	+5500	–	–	RNAV1

STANDARD ARRIVAL CHART -INSTRUMENT

RJOA / HIROSHIMA — RNAV STAR RWY28

VISTA ARRIVAL	RNAV1

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



VISTA ARRIVAL

From AMURO at or above 8000FT, to CAROL between 8000FT and 6000FT, to TIIDA at or above 4000FT, to VISTA at or above 3300FT.

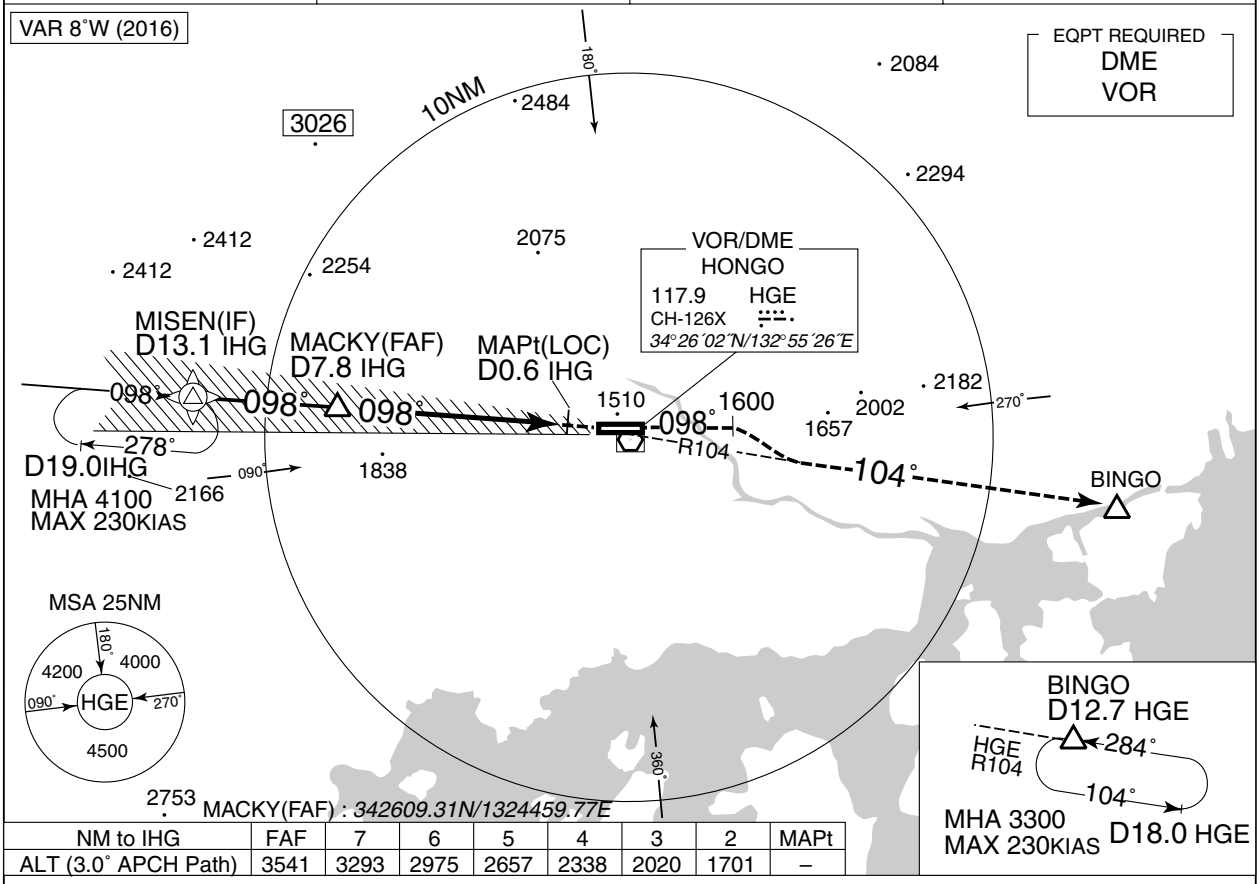
Critical DME	–
DME GAP	–
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.

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	AMURO	–	–	-7.6	–	–	+8000	–	–	RNAV1
002	TF	CAROL	–	221 (213.0)	-7.6	6.7	–	-8000 +6000	–	–	RNAV1
003	TF	TIIDA	–	221 (213.0)	-7.6	5.9	–	+4000	–	–	RNAV1
004	TF	VISTA	–	221 (212.9)	-7.6	5.7	–	+3300	–	–	RNAV1

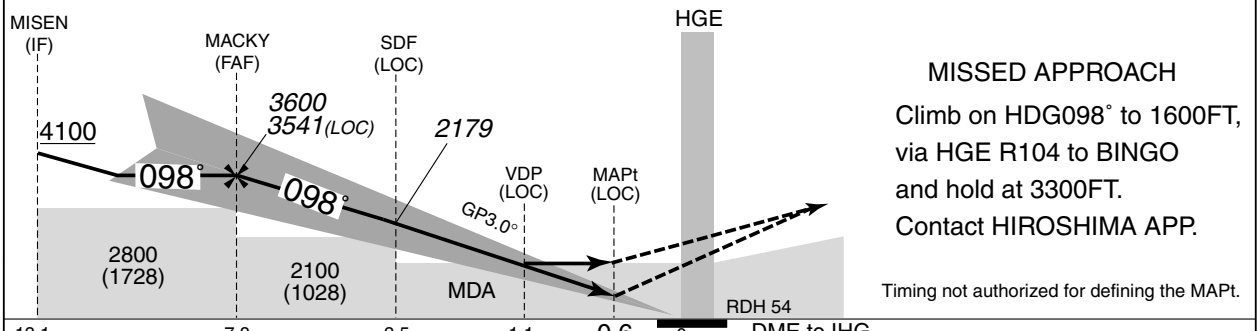
INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA — ILS or LOC RWY10 (CAT Ⅲ)

HIROSHIMA APP	ILS-LOC	HIROSHIMA TOWER	RADAR AVBL
124.05–119.9	108.7 IHG ILS–GP 330.5 ILS–DME CH–24X	118.6–126.2	ATIS 127.25



NM to IHG	FAF	7	6	5	4	3	2	MAPt
ALT (3.0° APCH Path)	3541	3293	2975	2657	2338	2020	1701	–



MISSED APPROACH
Climb on HDG098° to 1600FT,
via HGE R104 to BINGO
and hold at 3300FT.
Contact HIROSHIMA APP.

Timing not authorized for defining the MAPt.

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 1072 AD elev. 1086

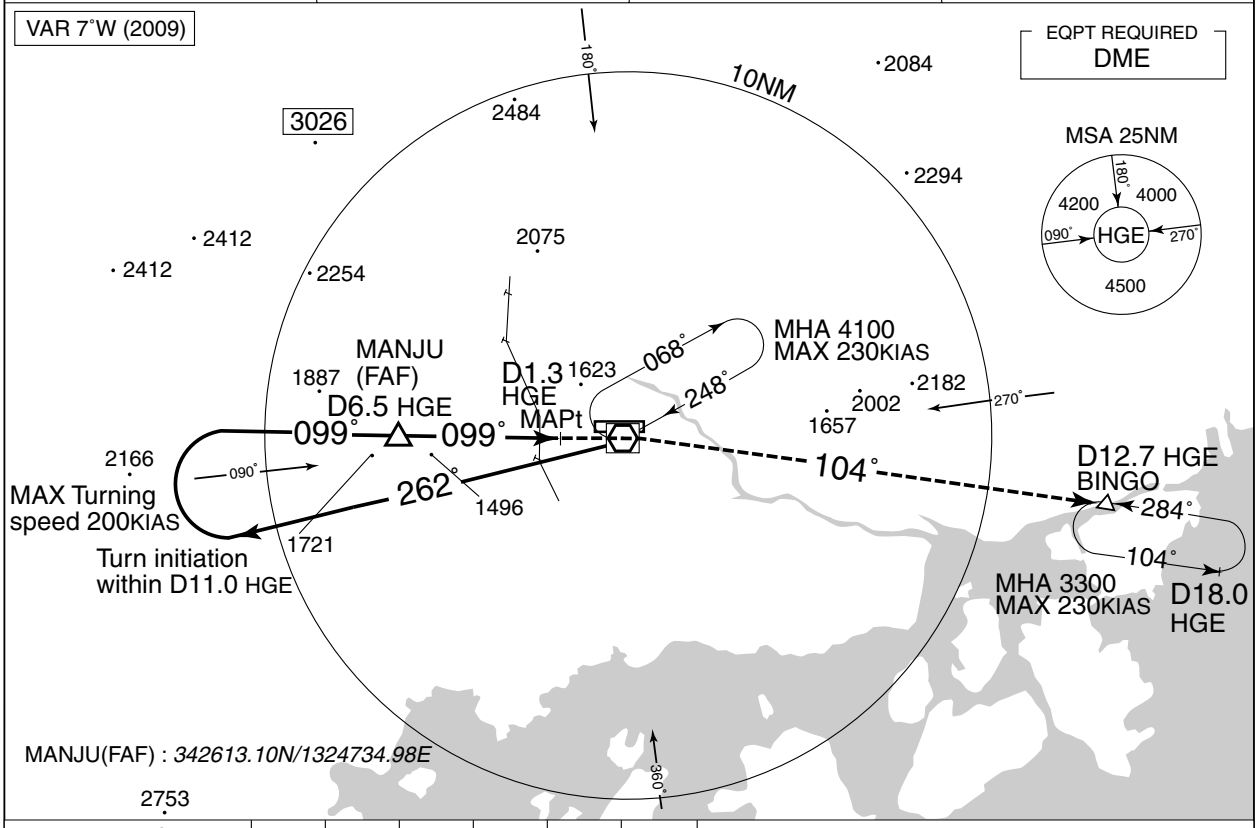
CAT	CAT Ⅲ B	CAT Ⅲ A	CAT Ⅱ			CAT Ⅰ		LOC		CIRCLING	
	RVR	RVR	DA(H)	RA	RVR	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	100	200	Not applicable			1272 (200)	550	1410 (338)	900	1510 (424)	1600
B									1000	1540 (454)	
C											2400
D									1400	1640 (554)	3200

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to SOUTH side of RWY only
Values of RA may increase or decrease rapidly affected by terrain until IHG 0.3DME.

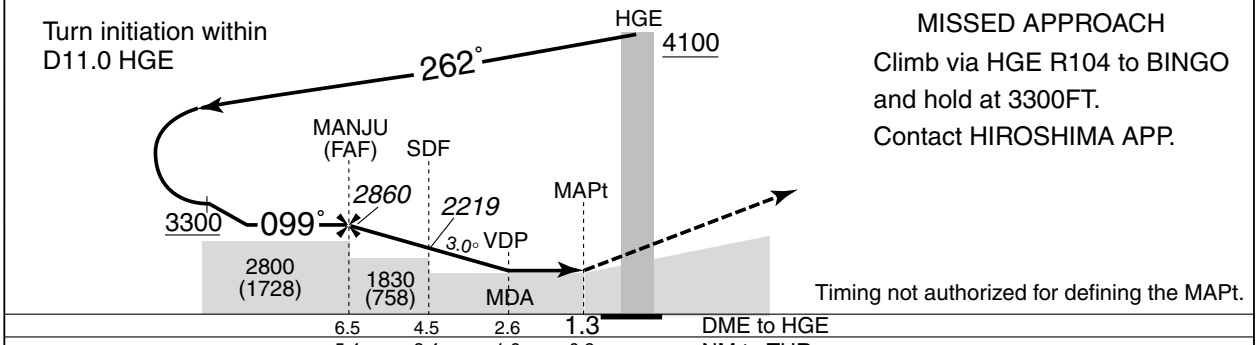
INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA VOR RWY10

HIROSHIMA APP	HONGO VOR/DME 117.9 HGE CH–126X	HIROSHIMA TOWER	RADAR AVBL
124.05 – 119.9	*34˚26´02˝N/132˚55´26˝E*	118.6 - 126.2	ATIS 127.25



NM to HGE	FAF	6	5	4	3	MAPt
ALT (3.0˚ APCH Path)	2860	2701	2383	2064	1746	–



MISSED APPROACH
Climb via HGE R104 to BINGO
and hold at 3300FT.
Contact HIROSHIMA APP.

Timing not authorized for defining the MAPt.

MINIMA THR elev. 1072 AD elev. 1086

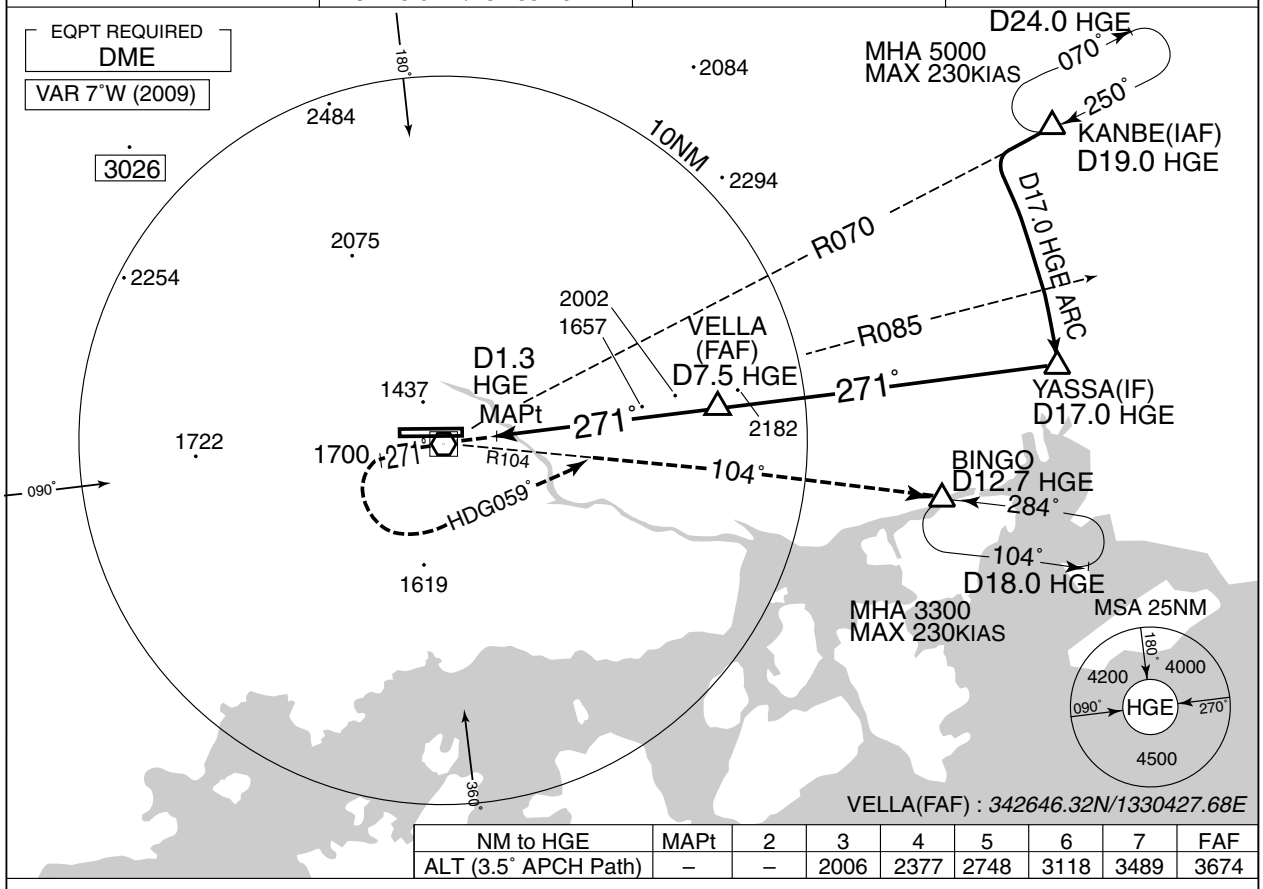
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	1600 (528)	1000	1600 (514)	1600
B		1200		
C				2400
D		1600	1640 (554)	3200

Circling to SOUTH side of RWY only.

INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA VOR Z RWY28

HIROSHIMA APP	HONGO VOR/DME	HIROSHIMA TOWER	RADAR AVBL
124.05 – 119.9	117.9 HGE CH–126X *34˚26´02˝N/132˚55´26˝E*	118.6 - 126.2	ATIS 127.25

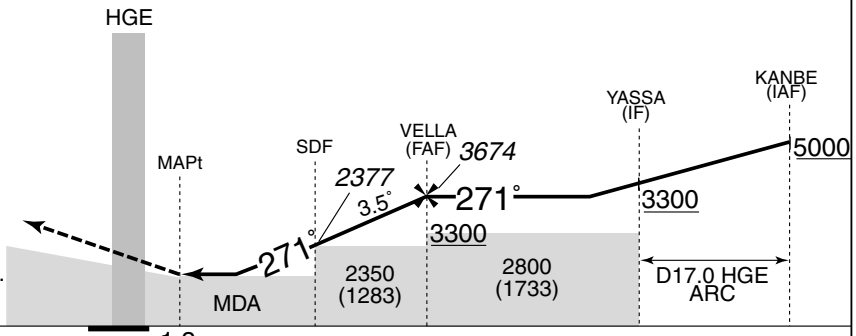


VELLA(FAF) : *342646.32N/1330427.68E*

NM to HGE	MAPt	2	3	4	5	6	7	FAF
ALT (3.5˚ APCH Path)	–	–	2006	2377	2748	3118	3489	3674

MISSED APPROACH
Climb to 1700FT on HDG271˚,
turn left climb to 3300FT via
HDG059˚ to intercept and
proceed via HGE R104
to BINGO and hold.
Contact HIROSHIMA APP.

PAPI and descent angles not coincident.
Timing not authorized for defining the MAPt.



DME to HGE	0	1.3	4.0	7.5	17.0	
NM to THR	0	0.8	3.4	6.9	16.4	

MINIMA THR elev. 1067 AD elev. 1086

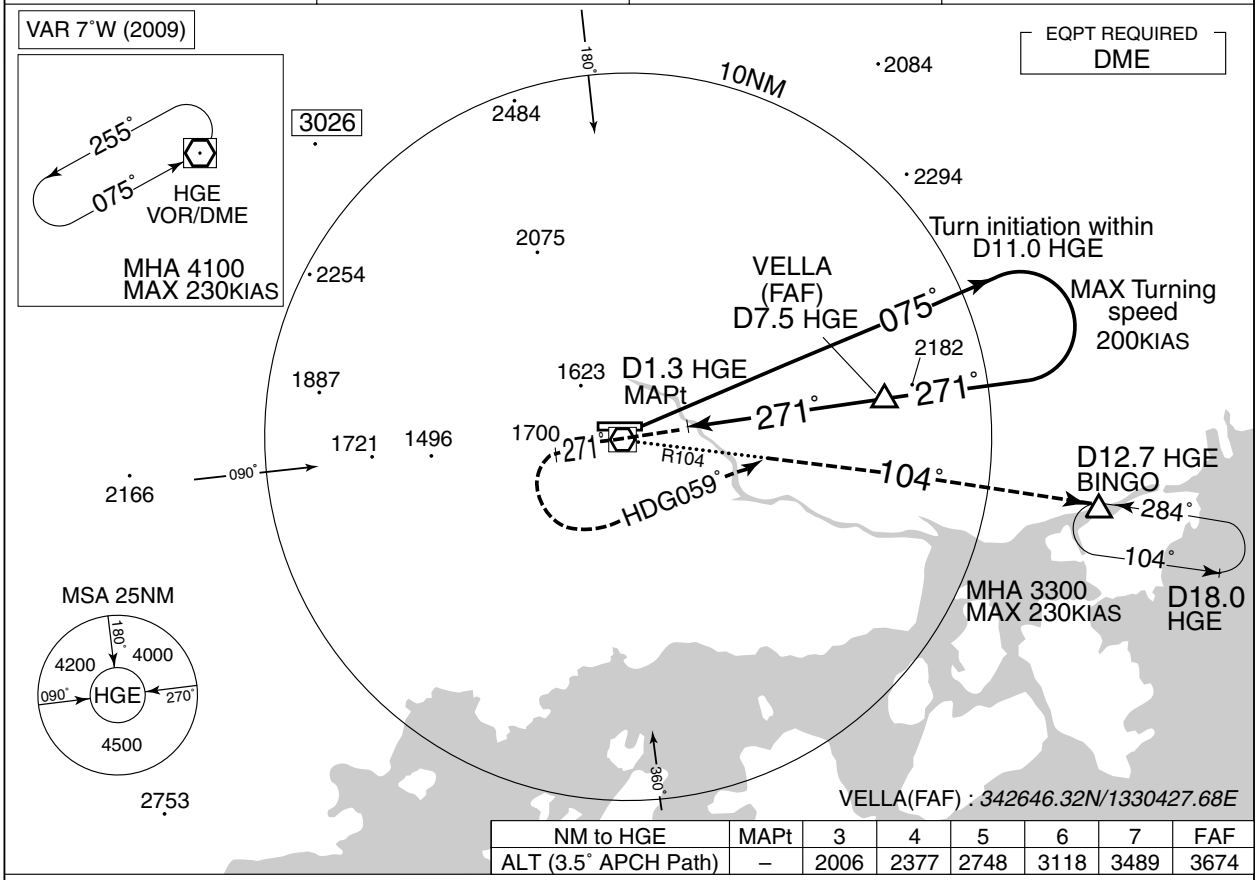
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	1420 (353)	1200	1510 (424)	1600
B	1450 (383)	1300	1540 (454)	
C	1480 (413)	1400		2400
D	1500 (433)	1600	1640 (554)	3200

Circling to SOUTH side of RWY only
VDP not applicable.

INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA VOR Y RWY28

HIROSHIMA APP	HONGO VOR/DME	HIROSHIMA TOWER	RADAR AVBL
124.05 – 119.9	117.9 HGE CH–126X *34˚26´02˝N/132˚55´26˝E*	118.6 - 126.2	ATIS 127.25

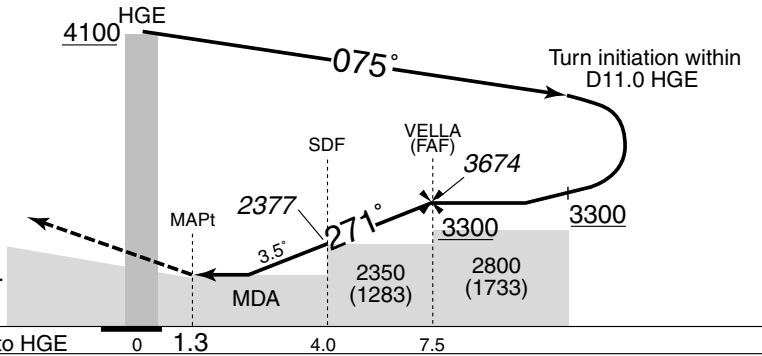


NM to HGE	MAPt	3	4	5	6	7	FAF
ALT (3.5˚ APCH Path)	–	2006	2377	2748	3118	3489	3674

MISSED APPROACH

Climb to 1700FT on HDG271˚,
turn left climb to 3300FT via
HDG059˚ to intercept and
proceed via HGE R104
to BINGO and hold.
Contact HIROSHIMA APP.

PAPI and descent angles not coincident.
Timing not authorized for defining the MAPt.



DME to HGE	0	1.3	4.0	7.5
NM to THR	0	0.8	3.4	6.9

MINIMA THR elev. 1067 AD elev. 1086

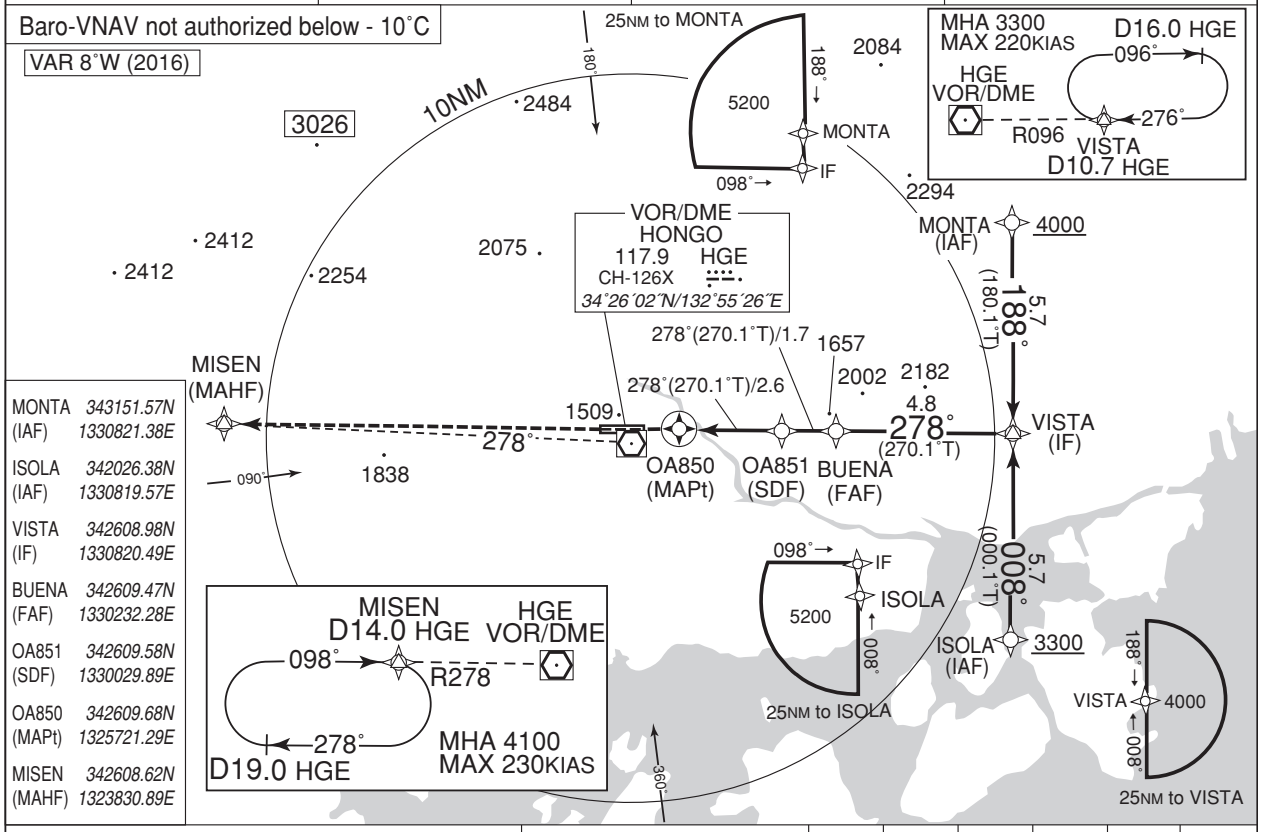
CAT			CIRCLING	
	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	1420 (353)	1200	1510 (424)	1600
B	1450 (383)	1300	1540 (454)	
C	1480 (413)	1400		2400
D	1500 (433)	1600	1640 (554)	3200

Circling to SOUTH side of RWY only.
VDP not applicable.

INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA — RNAV(GNSS) RWY28

HIROSHIMA APP	1. DME/DME not authorized. 2. RADAR service required. 3. GNSS required.	HIROSHIMA TOWER	RADAR AVBL
124.05–119.9		118.6–126.2	ATIS 127.25

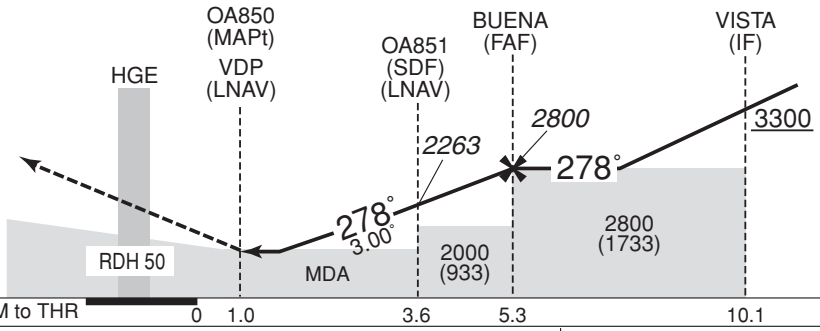


	NM to Next Fix	MAPt	1	2	3	4	FAF
	ALT (3.0˚ APCH Path)	–	1753	2072	2390	2709	2800

MISSED APPROACH

Direct to MISEN and hold at 4100FT.
Contact HIROSHIMA APP.

(for using VOR/DME)
Climb via HGE R278 to MISEN and hold at 4100FT.
Contact HIROSHIMA APP.



Missed APCH climb gradient MNM 4.0%

MINIMA THR elev. 1067 AD elev. 1086

CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/CMV	MDA(H)	RVR/CMV	MDA(H)	VIS
A	1440 (373)	1200	1440 (373)	1200	1510 (424)	1600
B		1300		1300	1540 (454)	
C		1400		1400		2400
D		1600		1600	1640 (554)	3200

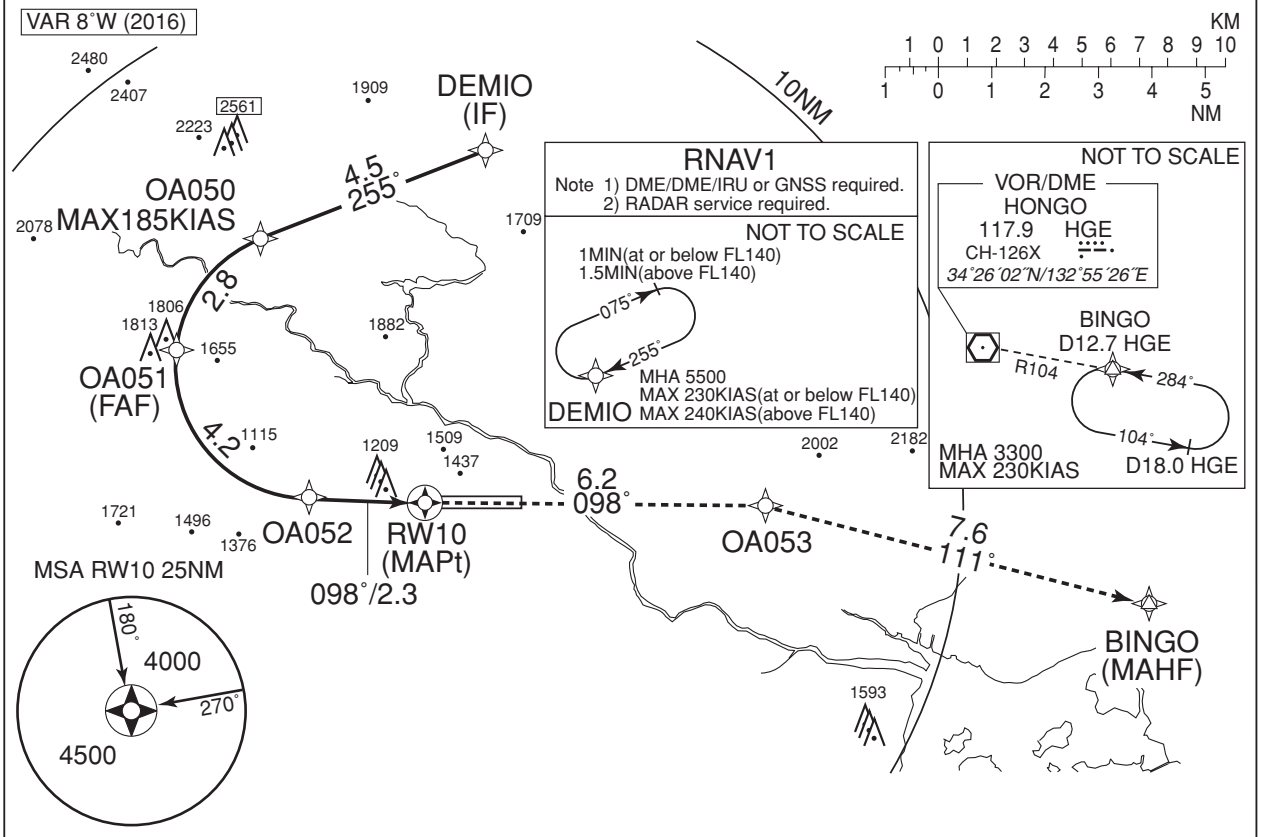
Circling to SOUTH side of RWY only.
MINIMA with Missed APCH climb gradient of 2.5% are not established.

INSTRUMENT APPROACH CHART

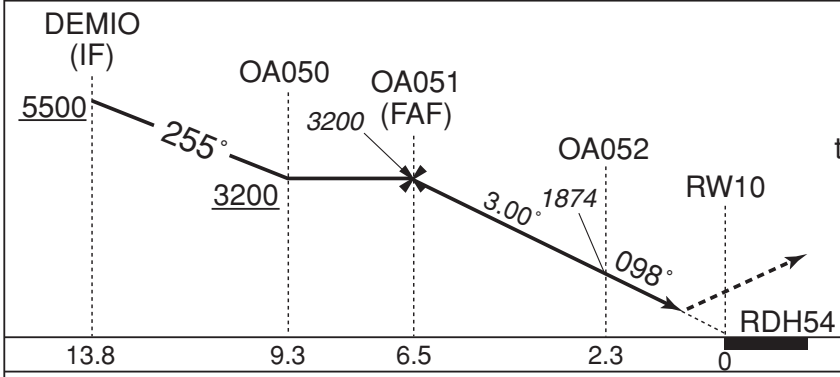
RJOA / HIROSHIMA RNAV(RNP) Z RWY10

HIROSHIMA APP	GNSS and RF required.	HIROSHIMA TOWER	RADAR AVBL
124.05–119.9		118.6–126.2	ATIS 127.25

For uncompensated Baro-VNAV systems, procedure not authorized below -10˚C / above 45˚C



OA051(FAF) : *342852.58N/1324816.81E*



MISSED APPROACH

Climb to 3300FT, to OA053,
to BINGO and hold.
Contact HIROSHIMA APP.

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 1072		AD elev. 1086	
CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	–	–	–	–
B				
C	1515(443)	1000	1598(526)	1200
D		1400		1600

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

RNP AR
Special Authorization Required

INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA RNAV(RNP) Z RWY10

RNAV(RNP) Z RWY10

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	DEMIO	–	–	-7.6	–	–	+5500	–	–	–
002	TF	OA050	–	255 (247.1)	-7.6	4.5	–	+3200	-185	–	1.0
003	RF Center: OARF1 r=2.54NM	OA051	–	–	-7.6	2.8	L	3200	–	–	1.0
004	RF Center: OARF1 r=2.54NM	OA052	–	–	-7.6	4.2	L	1874	–	-3.00	0.10 0.30
005	TF	RW10	Y	098 (090.0)	-7.6	2.3	–	1126	–	-3.00/54	0.10 0.30
006	TF	OA053	–	098 (090.0)	-7.6	6.2	–	–	–	–	1.0
007	TF	BINGO	–	111 (103.2)	-7.6	7.6	–	3300	–	–	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	DEMIO	255 (247.1)	-7.6	1.0(–14000) 1.5(+14001)	R	5500	–	–230(–14000) –240(+14001)	RNAV1

Waypoint Coordinates

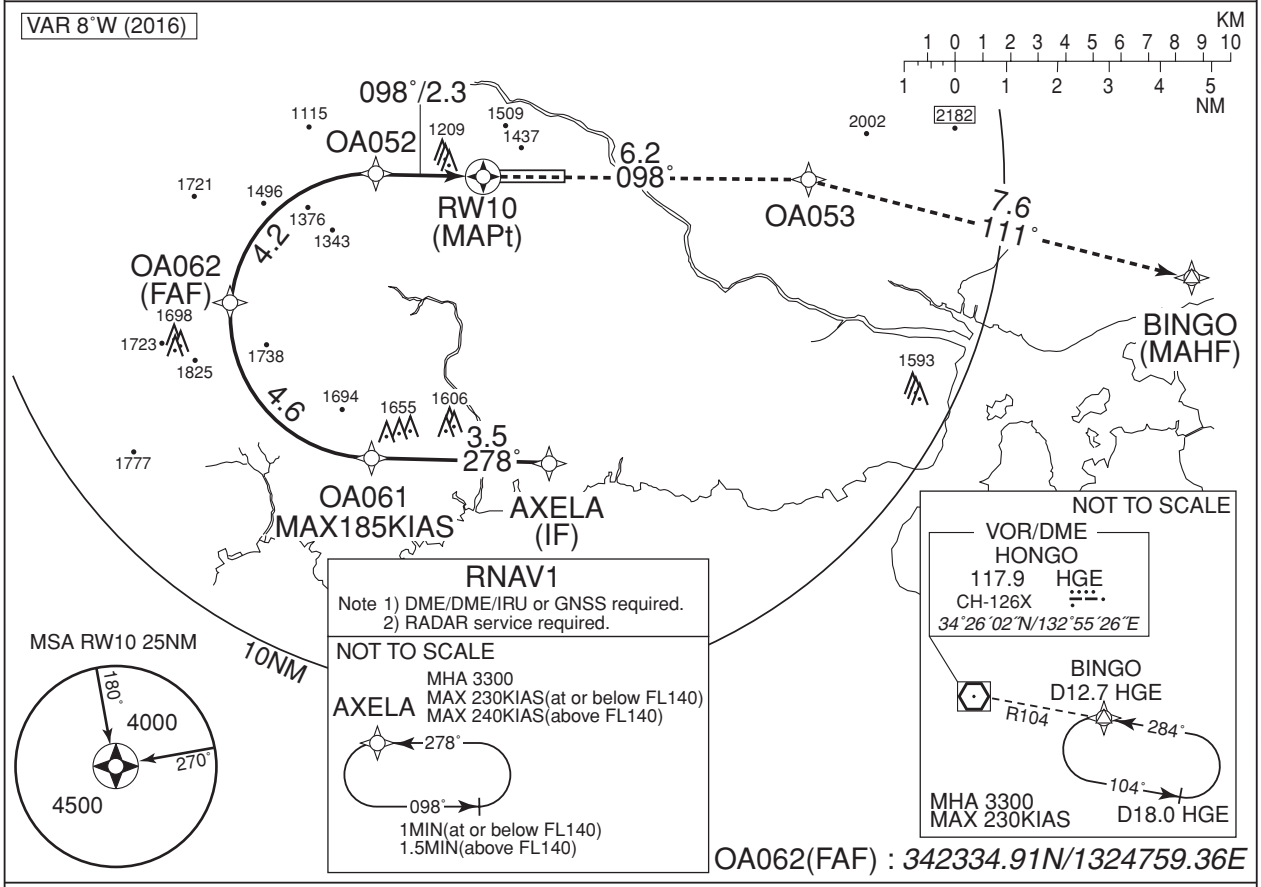
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
DEMIO	*343248.47N/1325512.50E*	OARF1	*342842.28N/1325120.72E*
OA050	*343102.99N/1325009.23E*		
OA051	*342852.58N/1324816.81E*		
OA052	*342609.63N/1325120.84E*		
RW10	*342609.69N/1325411.25E*		
OA053	*342609.67N/1330143.51E*		
BINGO	*342425.72N/1331040.68E*		

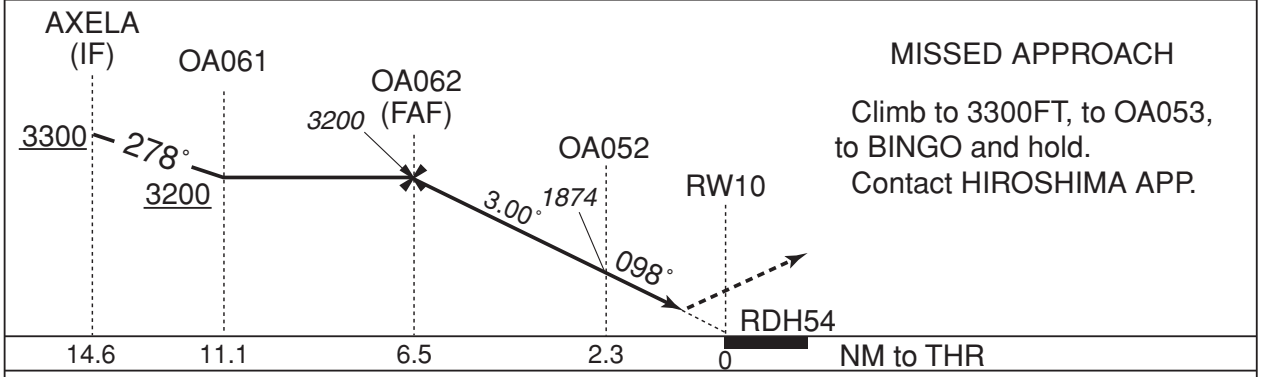
INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA — RNAV(RNP) Y RWY10

HIROSHIMA APP	GNSS and RF required.	HIROSHIMA TOWER	RADAR AVBL
124.05–119.9		118.6–126.2	ATIS 127.25

For uncompensated Baro-VNAV systems, procedure not authorized below -10˚C / above 45˚C





Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 1072		AD elev. 1086	
CAT	RNP 0.10		RNP 0.30	
	DA(H)	RVR/CMV	DA(H)	RVR/CMV
A	–	–	–	–
B				
C	1515(443)	1000	1598(526)	1200
D		1400		1600

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

RNP AR
Special Authorization Required

INSTRUMENT APPROACH CHART

RJOA / HIROSHIMA RNAV(RNP) Y RWY10

RNAV(RNP) Y RWY10

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	AXELA	–	–	-7.6	–	–	+3300	–	–	1.0
002	TF	OA061	–	278 (270.0)	-7.6	3.5	–	+3200	-185	–	1.0
003	RF Center: OARF2 r=2.79NM	OA062	–	–	-7.6	4.6	R	3200	–	–	1.0
004	RF Center: OARF2 r=2.79NM	OA052	–	–	-7.6	4.2	R	1874	–	-3.00	0.10 0.30
005	TF	RW10	Y	098 (090.0)	-7.6	2.3	–	1126	–	-3.00/54	0.10 0.30
006	TF	OA053	–	098 (090.0)	-7.6	6.2	–	–	–	–	1.0
007	TF	BINGO	–	111 (103.2)	-7.6	7.6	–	3300	–	–	1.0

Path	Waypoint Identifier	Inbound Course ˚M(˚T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	AXELA	278 (270.0)	-7.6	1.0(–14000) 1.5(+14001)	L	3300	–	–230(–14000) –240(+14001)	RNAV1

Waypoint Coordinates

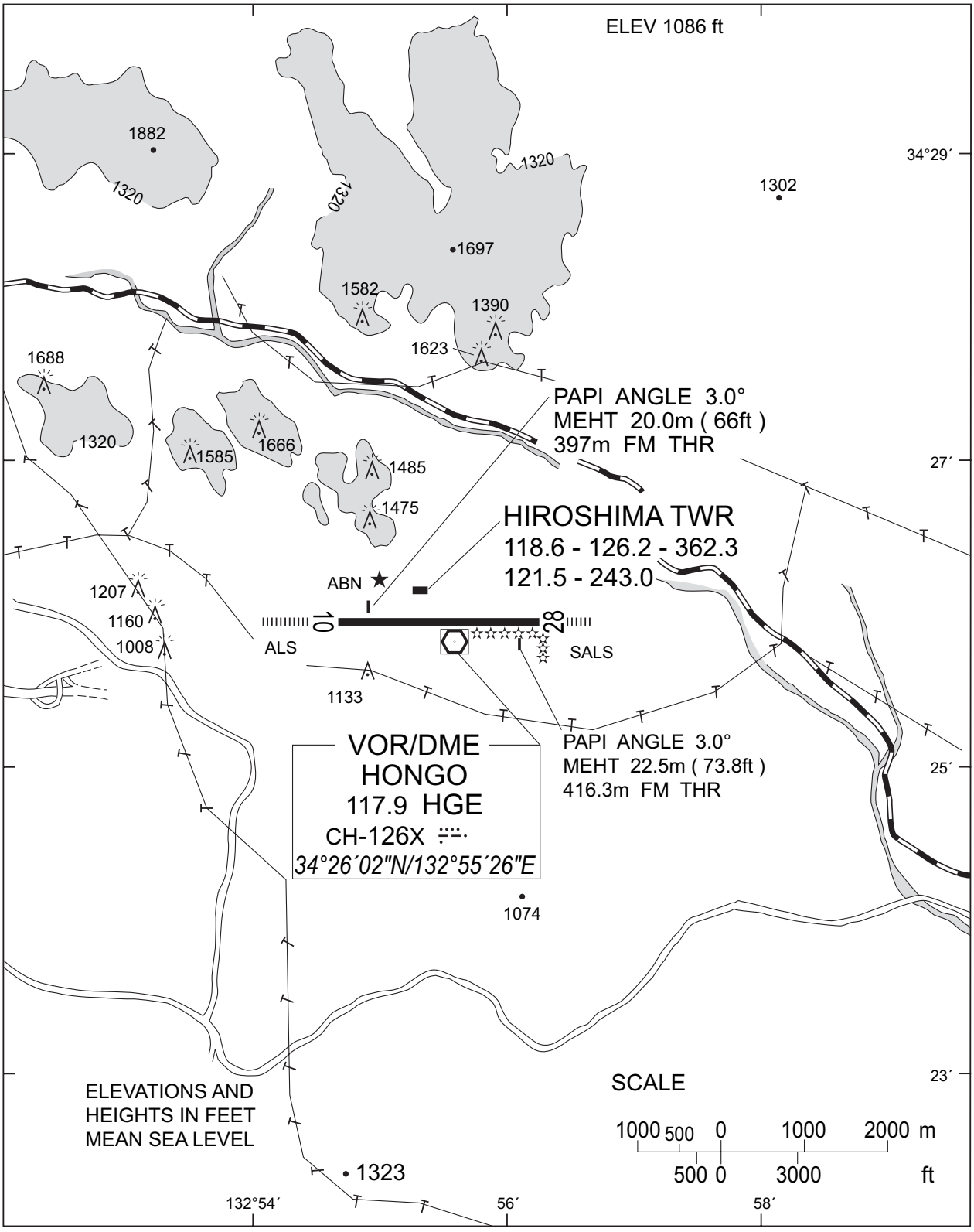
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
AXELA	*342034.40N/1325534.80E*	OARF2	*342321.96N/1325120.96E*
OA061	*342034.29N/1325121.21E*		
OA062	*342334.91N/1324759.36E*		
OA052	*342609.63N/1325120.84E*		
RW10	*342609.69N/1325411.25E*		
OA053	*342609.67N/1330143.51E*		
BINGO	*342425.72N/1331040.68E*		

RJOA / HIROSHIMA Visual REP

Call sign	BRG / DIST from ARP	Remarks
白　　竜 Hakuryu	352˚/ 4.3NM	湖 Lake
小 佐 木 Kosagi	122˚/10.1NM	小佐木島 Kosagi - Island
竹　　原 Takehara	192˚/ 5.8NM	竹原駅 Railway station
三永サウス Minaga South	257˚/ 8.4NM	東広島駅 Railway station
新　　庄 Shinjo	215˚/ 2.9NM	新庄交差点 Shinjo Intersection

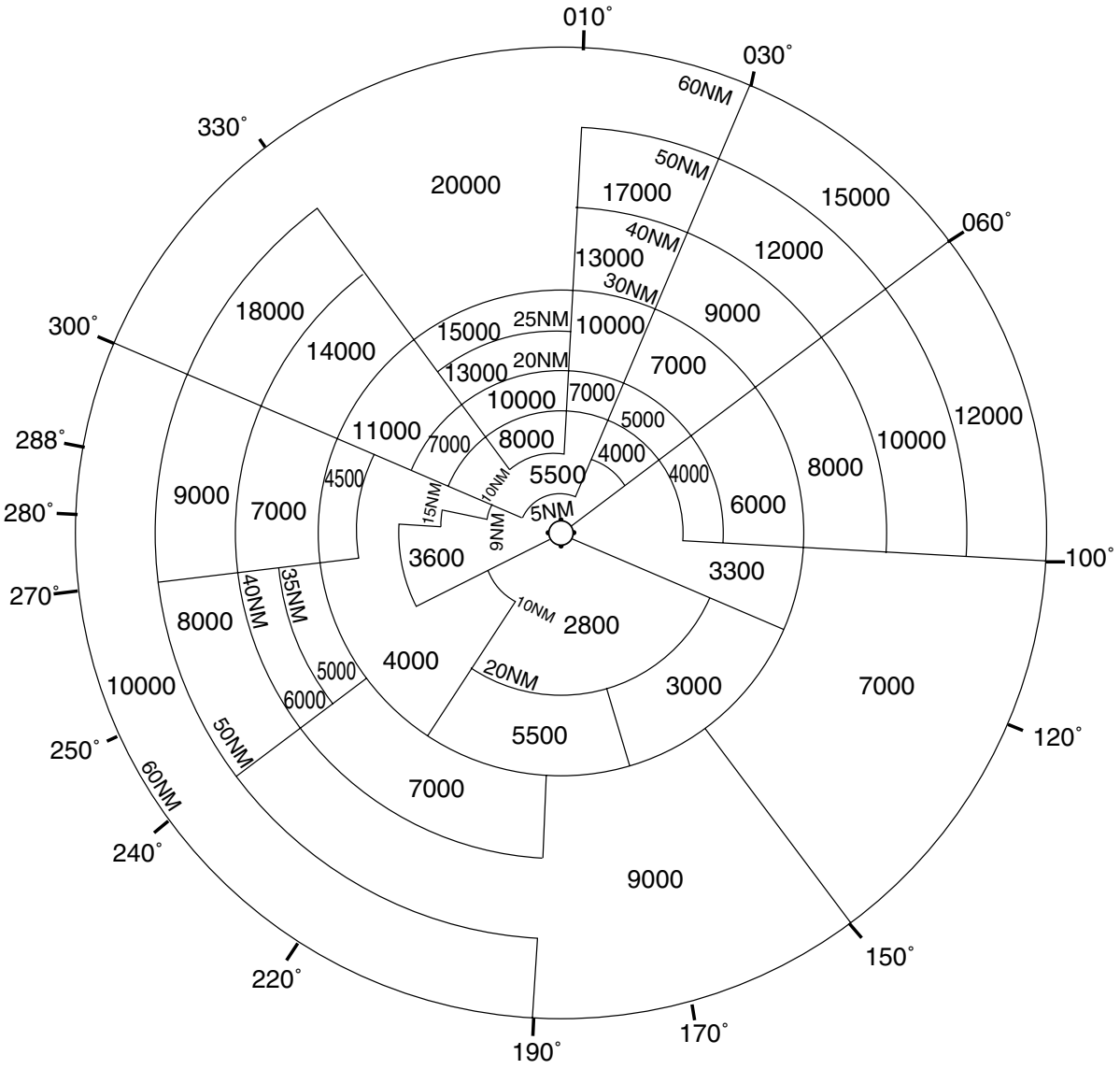
RJOA / HIROSHIMA

LDG CHART



RJOA / HIROSHIMA Minimum Vectoring Altitude CHART

VAR 7˚W (2009)



CENTER : *342602N/1325458E* (RADAR SITE)