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	114ft			
	PSN	114IL			
5	MAG VAR/ Annual change	8°W(2022)/4.8'W			
6	AD Administration, address,	Hiroshima International Airport Co., Ltd.			
	telephone, telefax, telex, AFS,	64-31, Zennyuji, Hongo-cho, Mihara-city, Hiroshima Pref.			
	e-mail and/or Web-site addresses	TEL: +81-848-60-8108 FAX: +81-848-60-8103			
7	Types of traffic permitted(IFR/	IFR/VFR			
	VFR)				
8	Remarks	Hiroshima Airport Office (Civil Aviation Bureau)			
		64-34, Zennyuji, Hongo-cho, Mihara-city, Hiroshima Pref.			
		TEL: 0848-86-8650			

RJOA AD 2.3 OPERATIONAL HOURS

1	AD Administration	2230 - 1330			
2	Customs and immigration	2230 - 1230			
3	Health and sanitation	Quarantine(human): SAT 2300-SUN 1215, SUN 2300-MON 1215,			
		MON 2330-TUE 1215, TUE 2330-WED 1215,			
		WED 2300-THU 1215, THU 2330-FRI 1215,			
		FRI 2330-SAT 1215			
		Quarantine(animal): 2330-0800 EXC FRI 2330- SUN 0800 and HOL			
		Quarantine(plant): INTL SKED FLT hours only			
4	AIS Briefing Office	Nil			
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 ty 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: 342621.09N/1325503.69E 8: 342621.09N/1325500.89E 9: 342621.11N/1325458.60E 10: 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 dock- ing/ parking guidance system of	Aircraft stand identification sign: Spot NR 2, 3, 5 - 8
	aircraft stands	
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	$\begin{aligned} &S_{6},U_{85},U_{7},U_{5},U_{3},U_{25},U_{2}\!/T_{r},P_{s},P_{5},P_{3},P_{25},P_{SWE},P_{SWF},P_{SWG},P_{SWI},\\ &P_{SWM},P_{SW}(domestic),E,C,W_{E},W_{F},W_{G},W_{I},W,N \end{aligned}$
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

Desimation	TOUE	Discounting	Otro and (DON)	TUD as and as t	THR elevation and
Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and surface of RWY	THR coordinates THR geoid undulation	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		
28	270.00°	3000×60	PCN72/F/A/X/T Asphalt Concrete	342609.69N 1325608.75E 113.4ft	THR ELEV:1067.2ft
Slope of	f 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
			•	292 MAX:300)* airport administrator	
RWY10	RWY10		ONGITUDINAL PROFILE	OF RUNWAY	RWY28
			1087. 7	7ft	
1071. 7ft		0. 3%		0. 5%	1067. 2ft
<u> </u>			+		
Om			1680. 8	345m	3000m

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 : 460m from RWY10 THR, LGTD RWY28 : 380m 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

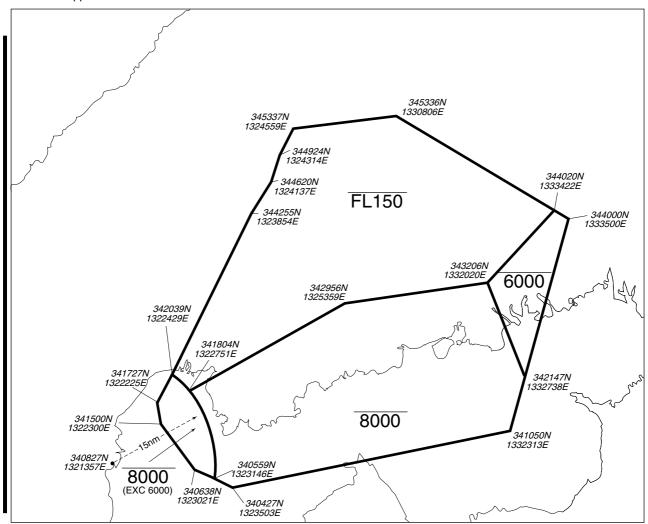
RJOA AD 2.16 HELICOPTER LANDING AREA

Nil	

RJOA AD 2.17 ATS AIRSPACE

Designation and lateral limits			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

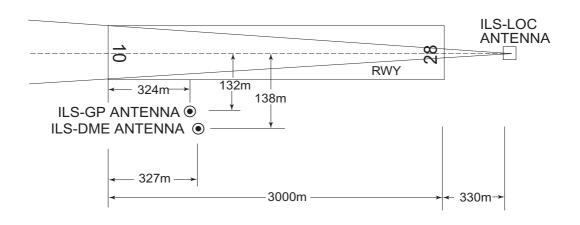
Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Hiroshima Approach	124.05MHz 119.9MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1330	
ASR	Hiroshima Radar	119.9MHz 124.05MHz 125.15MHz 121.5MHz(E) 243.0MHz(E)	2230 - 1330	
DEP	Hiroshima Departure	119.9MHz 121.5MHz(E) 243.0MHz(E)	2230 - 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 (8°W /2021)	HGE	117.9MHz	H24	342601.59N/ 1325526.29E		
DME	HGE	1213MHz (CH-126X)	H24	342601.59N/ 1325526.29E	1124ft	
ILS-LOC 10 (CAT III)	IHG	108.7MHz	2230-1330	342609.69N/ 1325621.68E		LOC: 330m (1083ft) away FM RWY 28 THR. BRG (MAG) 097.93°
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) 097.93°

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

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

TEL: 0848(86)8323 FAX: 0848(86)8327

1.1 Aircraft operations other than scheduled flights or in an emergency

On use of this airport, aircraft operator is required to obtain the prior permission of the airport administrator.

TEL: +81-848-86-8323 FAX: +81-848-86-8327

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
- 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. Tax	kiing to and from stands	
		Nil
3. Pai	rking area for small aircraft(General aviation)	
		Nil
4. Pai	rking area for helicopters	
		Nil
5. Apı	ron - taxiing during winter conditions	
		Nil
6. Tax	kiing - 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)	6.1 Wing tip clearance at the TWY intersection (REF AD1.1.6.8)
	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。	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.
	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。	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. Scł	hool and training flights - technical test flights - use of runways	
		Nil
8. He	licopter traffic - limitation	
		Nil
9. Re	moval of disabled aircraft from runways	
		Nil
10. R	emarks	
		Nil
	RJOA AD 2.21 NOISE ABA	ATEMENT PROCEDURES
		Nil

RJOA AD 2.22 FLIGHT PROCEDURES

1.TAKE OFF MINIMA								
	RWY ACFT		REDL & RCLL		REDL or RCLL or RCL Marking		Nil (DAYTIME ONLY)	
		CAI	RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with	10/28	A,B,C	400m *200m **150m	400m *200m	400m *250m	400m *250m	-	500m
TKOF ALTN AP filed		D	400m *250m **200m	400m *250m	400m *300m	400m *300m	-	500m
OTHER	10/28	A,B,C,D			AVBL LD0	G MINIMA		

^{*} Applicable when LVP/LVPD IN FORCE

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。

^{**} Applicable when LVP/LVPD IN FORCE and MULTIPLE RVRs AVAILABLE

4. Category III Operations at Hiroshima Airport

広島空港におけるカテゴリーⅢ運航

4.1 Facilities

The following facilities are available:

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)

- 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 LVP

LVP will be available when the following conditions are met:

- 1) Ceiling is at or less than 200ft and/or RVR is at or less than 600m.
- 2) Facilities listed 4.1 above are operational.
- 3) 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 Operations

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

5. LVTO at Hiroshima Airport

5.1. Facilities

The following facilities are available:

RWY 10	RWY 28
Lighting system RWY 10 for LVTO RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)	Lighting system RWY 28 for LVTO RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)

5.2. Conditions

A. The following systems must be operative:

For LVTO
(1) Lighting system comprising; • High INTST REDL • High INTST RENL • RCLL
(2) Secondary power supply

- B. The following information must be currently available:
 - a) Surface wind speed and direction.
 - b) RVR or VIS
- C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

5.3. Operating Minima

Take-off minima stated in AD2.22(TAKE-OFF MINIMA) are observed.

5.4. LVP/LVPD

- (1)LVP/LVPD will be available when the following conditions are met:
 - a)RVR is at or less than 600m.
 - b) Facilities listed 5.1 above are operational.
- (2)Taxiway available for LVTO Entering taxiway: T1 and T6

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 (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 RWY28)

Instrument Approach Chart (RNP RWY28)

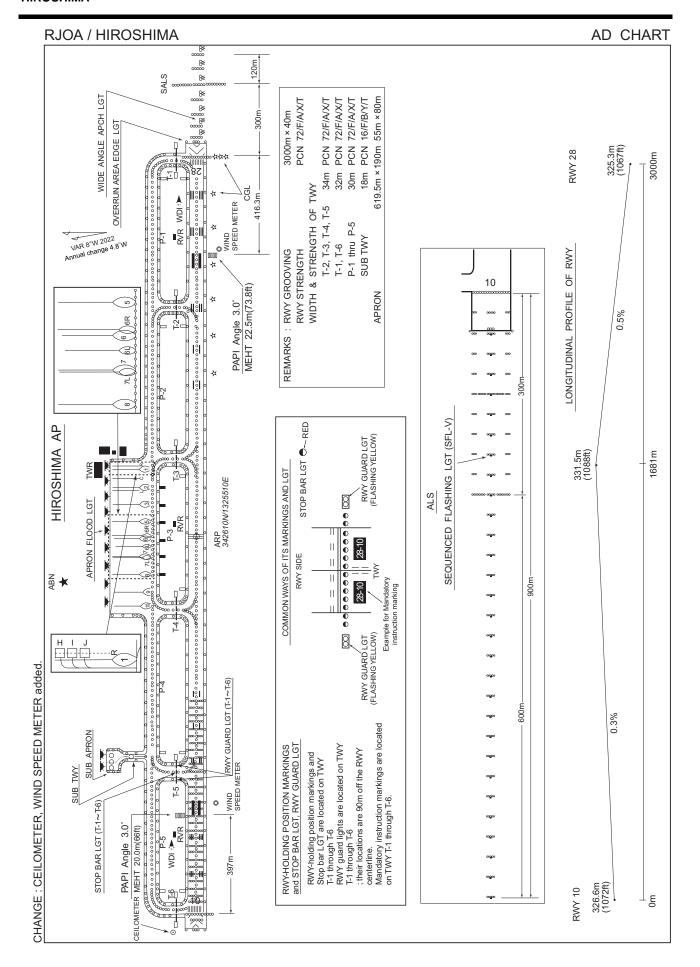
Instrument Approach Chart (RNP Z RWY10(AR))

Instrument Approach Chart (RNP Y RWY10(AR))

Other Chart (Visual REP)

Other Chart (LDG CHART)

Other Chart (MVA CHART)





AERODROME OBSTACLE CHART-ICAO

TYPE A (OPERATING LIMITATIONS)



AERODROME OBSTACLE CHART-ICAO TYPE B (OPERATING LIMITATIONS)



PRECISION APPROACH TERRAIN CHART-ICAO

PRICISION APPROACH TERRAIN CHART



RJOA / HIROSHIMA SID

HONGO REVERSAL FOUR DEPARTURE

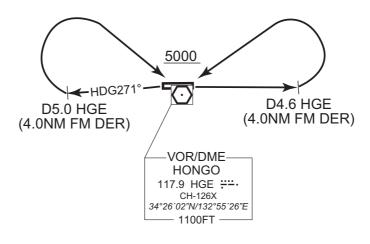
RWY 10: Climb RWY HDG to HGE 4.6DME(4.0NM FM DER), turn left...., RWY 28: Climb on HDG 271° to HGE 5.0DME(4.0NM FM DER), turn right....,direct to HGE VOR/DME. Cross HGE VOR/DME at or above 5000FT.

Note: RWY10: 3.8% climb gradient required up to 2300FT.

OBST ALT 2002FT located at 088°/5.7NM FM DER.

RWY28: 3.8% climb gradient required up to 1600FT.

OBST ALT 2559FT located at 338°/7.7NM FM DER.



RJOA / HIROSHIMA **RNAV SID** Basic RNP1 MARCO TWO DEPARTURE Note GNSS required. VAR 8°W (2022) OA811 OA021 342540.3N 1324923.3E <u>16</u>00 1500 342609.6N 1325900.8E HDG278° HDG098 BU VOR/DME HONGO TACAN 117.9 HGE CH–126X **∺ ∵** · KUGA 1177 IWT CH-90X <u>:-</u>-<u>11000</u> 34°26′02″N/132°55′26″E 34°04′48″N/132°08′51″E 2100FT, 1100FT LEMON 341328.9N 1322748.9E MARCO 340446.0N 1320850.2E \approx

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 <u>OA811</u>, 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.

RWY10

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	_	_	098 (090.0)	-8.1	_	_	+1500	_	_	Basic RNP1
002	DF	OA021	Υ	_	-8.1	_	_	_	_	_	Basic RNP1
003	DF	LEMON	_	_	-8.1	_	R	+11000	_	_	Basic RNP1
004	TF	MARCO	_	249 (241.1)	-8.1	18.0	_	_	_	_	Basic RNP1

RWY28

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	_	_	278 (270.0)	-8.1	_	_	+1600	_	_	Basic RNP1
002	DF	OA811	Υ	_	-8.1	_	_	_	1	_	Basic RNP1
003	DF	LEMON	_	_	-8.1	_	L	+11000	_	_	Basic RNP1
004	TF	MARCO	_	249 (241.1)	-8.1	18.0	_	_	_	_	Basic RNP1

RJOA / HIROSHIMA RNAV SID and TRANSITION KIJYY THREE DEPARTURE Basic RNP1 Note GNSS required. VAR 8°W (2022) **TOZAN TRANSITION** MIYAZU (YME) 352850.5N CHANGE: PROC renamed(KIJYY THREE DEPARTURE). VAR. Navigation specification. Sensor for RNAV 1350813.3E TOZAN 351615.4N 1342904.2E VOR/DME KIJYY KIJYY THREE DEPARTURE MIYAZU 350901.8N 112.6 YME 1340554.9E CH-73X =:-35°28′50″N/135°08′13″E 2400FT TOJYO 12000 345255.5N 1331648.6E 1600 1500 ŶOA021 OA811 342609.6N 342540.3N 1325900.8E 1324923.3E HDG278 HDG098° VOR/DME HONGO 117.9 HGE CH-126X :: ---34°26′02″N/132°55′26″E 1100FT KIJYY THREE DEPARTURE RWY10: Climb on HDG098° at or above 1500FT, direct to OA021, turn left direct to TOJYO at or above 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.

RJOA / HIROSHIMA

RNAV SID and TRANSITION

KIJYY THREE DEPARTURE

RWY10

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	_	_	098 (090.0)	-8.1	_	_	+1500	_	_	Basic RNP1
002	DF	OA021	Υ	_	-8.1	_	_	_	-	_	Basic RNP1
003	DF	TOJYO	_	_	-8.1	_	L	+12000	_	_	Basic RNP1
004	TF	KIJYY	_	076 (067.9)	-8.1	43.4	_	_	_	_	Basic RNP1

RWY28

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	_	_	278 (270.0)	-8.1	_	_	+1600	_	_	Basic RNP1
002	DF	OA811	Υ	_	-8.1	_	_	_	_	_	Basic RNP1
003	DF	TOJYO	_	_	-8.1	_	R	+12000	_	_	Basic RNP1
004	TF	KIJYY	_	076 (067.9)	-8.1	43.4	_	_	_	_	Basic RNP1

TOZAN TRANSITION

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)			Navigation Specification
001	IF	KIJYY	_	_	-8.1	_	_	_	_	_	Basic RNP1
002	TF	TOZAN	_	077 (069.0)	-8.1	20.3	_	_	_	_	Basic RNP1
003	TF	YME	_	076 (068.3)	-8.1	34.3	_	_	_	_	Basic RNP1

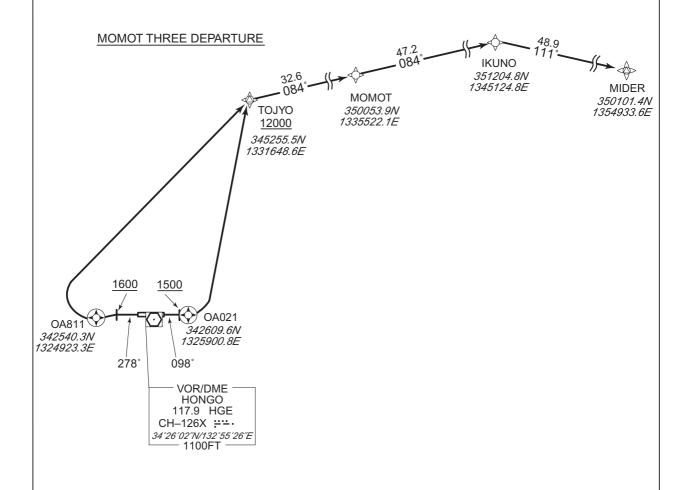
RJOA / HIROSHIMA

RNAV SID and TRANSITION

MOMOT THREE	DEPARTURE		RNAV1
Note 1) DME/DME/IRU or GNSS required. **The aircraft equipped with only DME/DME/IRU	Critical DME	HGE: OA021 ~ 27N TZT: OA021 ~ 24NM OKT: 25NM to IKUNO	to TOJYO
must be able to update its position without delay at the starting point of take-off roll. 2) RADAR service required.	DMECAD	RWY10 : DER – OA021 RWY28 : DER – 2NM to	
2) IVADAIN Service required.	Inappropriate Navaids	See AD1.1.6.10.3. Inapp	propriate NAVAIDs for RNAV1

VAR 8°W (2020)

IKUNO TRANSITION



MOMOT THREE DEPARTURE

RWY10 : Climb on HDG098° at or above 1500FT, direct to <u>OA021</u>, 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 MIDER.

RJOA / HIROSHIMA

RNAV SID and TRANSITION

MOMOT THREE DEPARTURE

RWY10

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	_	_	098 (090.0)	-7.9	_	_	+1500	_	_	RNAV1
002	DF	OA021	Υ	_	-7.9	_	_	_	_	_	RNAV1
003	DF	TOJYO	_	_	-7.9	_	L	+12000	_	_	RNAV1
004	TF	момот	_	084 (075.7)	-7.9	32.6	_	_	_	_	RNAV1

RWY28

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	_	_	278 (270.0)	-7.9	_	_	+1600	_	_	RNAV1
002	DF	OA811	Υ	_	-7.9	_	_	_	_	_	RNAV1
003	DF	TOJYO	_	_	-7.9	_	R	+12000	_	_	RNAV1
004	TF	MOMOT	_	084 (075.7)	-7.9	32.6	_	_	_	_	RNAV1

IKUNO TRANSITION

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over		Magnetic Variation		Turn Direction			Vertical Angle	Navigation Specification
001	IF	момот	_	_	-7.9	_	_	_	_	_	RNAV1
002	TF	IKUNO	_	084 (076.0)	-7.9	47.2	_	_	_	_	RNAV1
003	TF	MIDER	_	111 (102.8)	-7.9	48.9	_	_	_	_	RNAV1

RNAV SID and TRANSITION RJOA / HIROSHIMA SINFO THREE DEPARTURE Basic RNP1 Note GNSS required. VAR 8°W (2022) CHANGE: PROC renamed(SINFO THREE DEPARTURE). VAR. Course(FM AKANA TO STAGE). Navigation specification. Sensor for RNAV. **STAGE** 353451.7N 1324135.7E 23.2 359 STAGE TRANSITION SINFO 351200.6N 1324613.4E **AKANA** 11000 345748.5N 1324904.8E SINFO THREE DEPARTURE <u>16</u>00 1500 OA021 OA811 342609.6N VOR/DME 342540.3N **HONGO** 1325900.8E 1324923.3E 117.9 HGE HDG098° CH-126X ::--HDG278° 34°26′02″N/132°55′26″E 1100FT SINFO THREE 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.

RJOA / HIROSHIMA

RNAV SID and TRANSITION

SINFO THREE DEPARTURE

RWY10

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	VA	_	_	098 (090.0)	-8.1	_	_	+1500	_	_	Basic RNP1
002	DF	OA021	Υ	_	-8.1	_	_	_	_	_	Basic RNP1
003	DF	AKANA	_	_	-8.1	_	L	+11000	_	_	Basic RNP1
004	TF	SINFO	1	359 (350.7)	-8.1	14.4	ı	ı	1	_	Basic RNP1

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)	-8.1	_	_	+1600	_	_	Basic RNP1
002	DF	OA811	Υ	<u>(270.0)</u> –	-8.1	_	_	_	_	_	Basic RNP1
003	DF	AKANA	_	_	-8.1	_	R	+11000	_	_	Basic RNP1
004	TF	SINFO	_	359 (350.7)	-8.1	14.4	_	_	_	_	Basic RNP1

STAGE TRANSITION

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	SINFO	_	_	-8.1	_	_	_	_	_	Basic RNP1
002	TF	STAGE	_	359 (350.6)	-8.1	23.2	ı	-	_	_	Basic RNP1

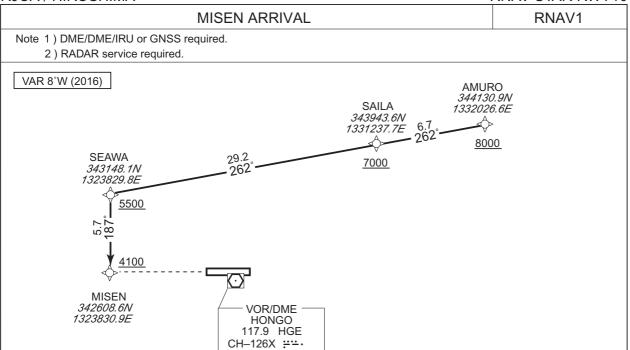
STANDARD ARRIVAL CHART -INSTRUMENT



STANDARD ARRIVAL CHART -INSTRUMENT

RJOA / HIROSHIMA

RNAV STAR RWY10



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

34°26′02″N/132°55′26″E 1100FT

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

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

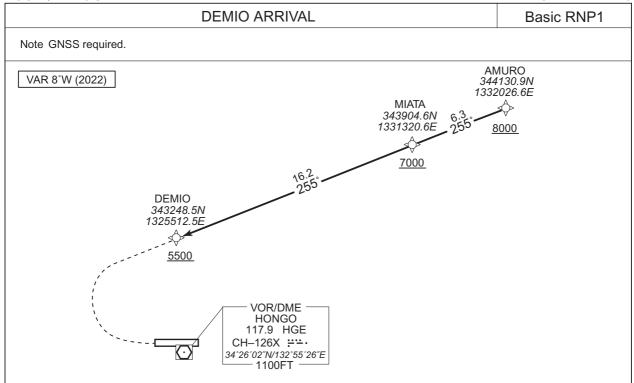


From AMURO at or above 8000FT, to CAROL between 8000FT and 6000FT, to TIIDA at or above 4000FT, to VISTA, to ATENZ, to AXELA at or above 3300FT.

Serial	Path	Waypoint	Fly	Course	Magnetic			Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	AMURO	_	-	-8.1	_	_	+8000	_	_	Basic RNP1
002	TF	CAROL	_	221 (213.0)	-8.1	6.7	_	-8000 +6000	_	_	Basic RNP1
003	TF	TIIDA	_	221 (213.0)	-8.1	5.9	_	+4000	_	_	Basic RNP1
004	TF	VISTA	_	221 (212.9)	-8.1	5.7	_	_	_	_	Basic RNP1
005	TF	ATENZ	_	221 (212.9)	-8.1	6.6	_	_	_	_	Basic RNP1
006	TF	AXELA	_	278 (270.1)	-8.1	6.9	_	+3300	_	_	Basic RNP1

STANDARD ARRIVAL CHART-INSTRUMENT

RJOA / HIROSHIMA RNAV STAR RWY10

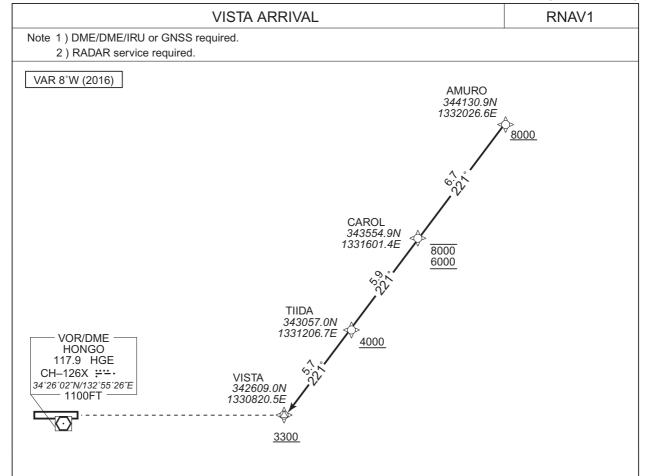


From AMURO at or above 8000FT, to MIATA at or above 7000FT, to DEMIO at or above 5500FT.

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	AMURO	_	_	-8.1	_	_	+8000	_	_	Basic RNP1
002	TF	MIATA	_	255 (247.4)	-8.1	6.3	_	+7000	_	_	Basic RNP1
003	TF	DEMIO	_	255 (247.3)	-8.1	16.2	_	+5500	1	_	Basic RNP1

STANDARD ARRIVAL CHART -INSTRUMENT

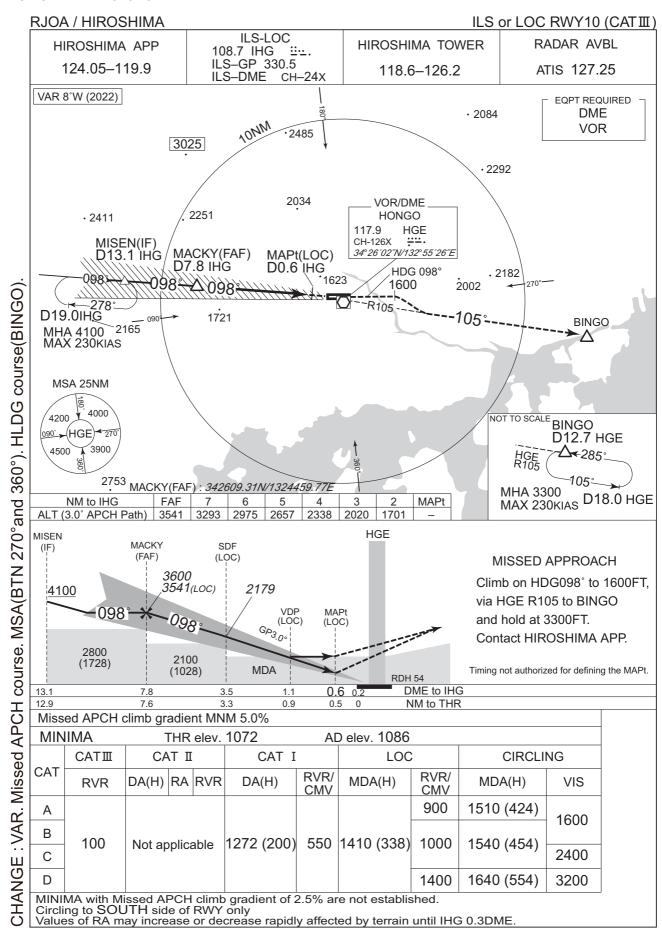
RJOA / HIROSHIMA RNAV STAR RWY28

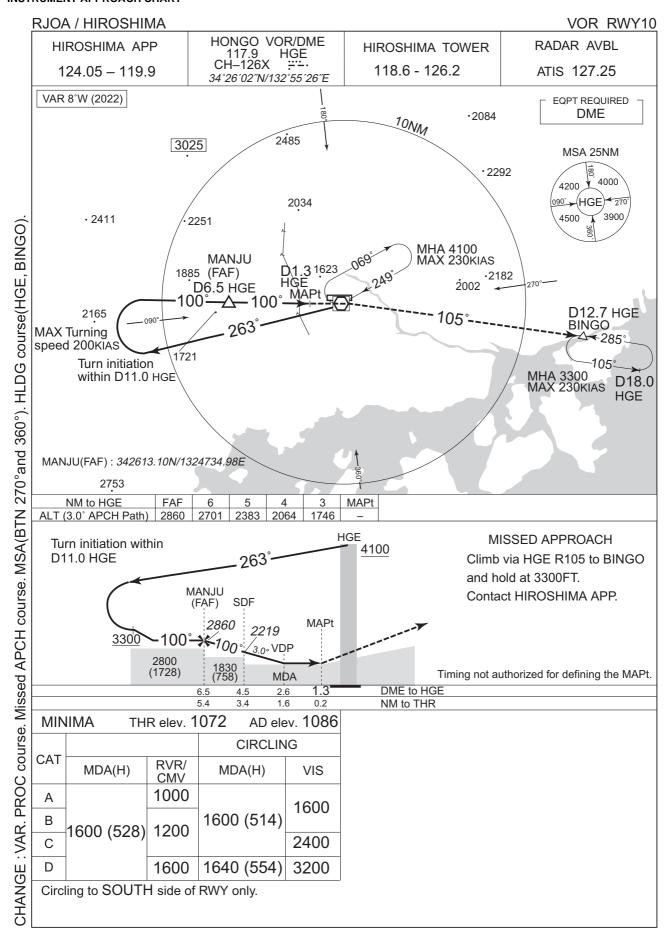


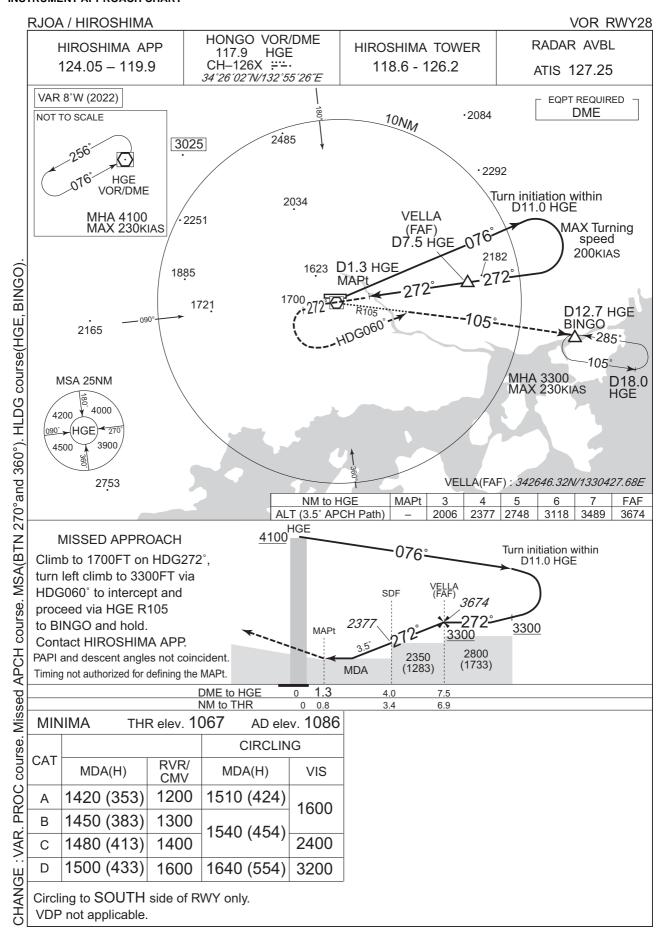
From AMURO at or above 8000FT, to CAROL between 8000FT and 6000FT, to TIIDA at or above 4000FT, to VISTA at or above 3300FT.

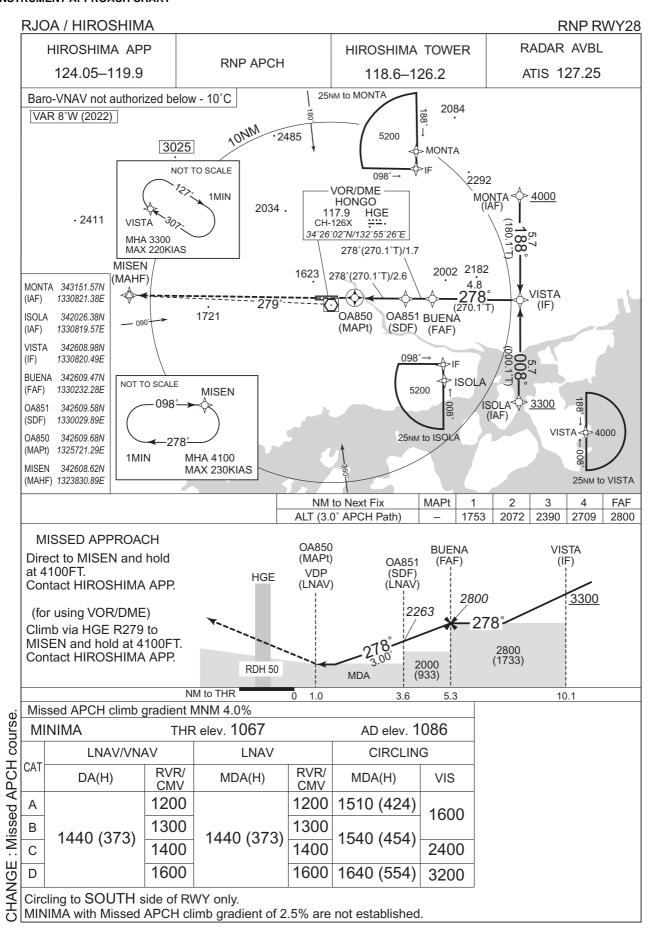
Critical DME	_
DME GAP	-
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.

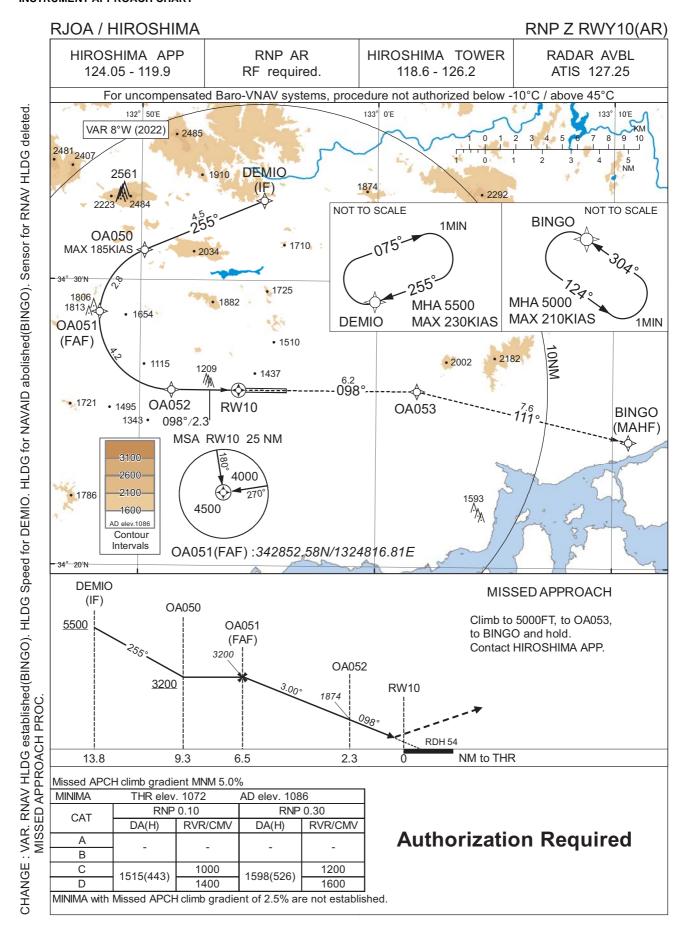
Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	Specification
001	IF	AMURO	_	_	-7.6	_	_	+8000	_	_	RNAV1
002	TF	CAROL	_	221 (213.0)	-7.6	6.7	-	-8000 +6000	_	_	RNAV1
003	TF	TIIDA	_	221 (213.0)	-7.6	5.9	ı	+4000	_	_	RNAV1
004	TF	VISTA	_	221 (212.9)	-7.6	5.7	_	+3300	_	_	RNAV1











RJOA / HIROSHIMA

RNP Z RWY10(AR)

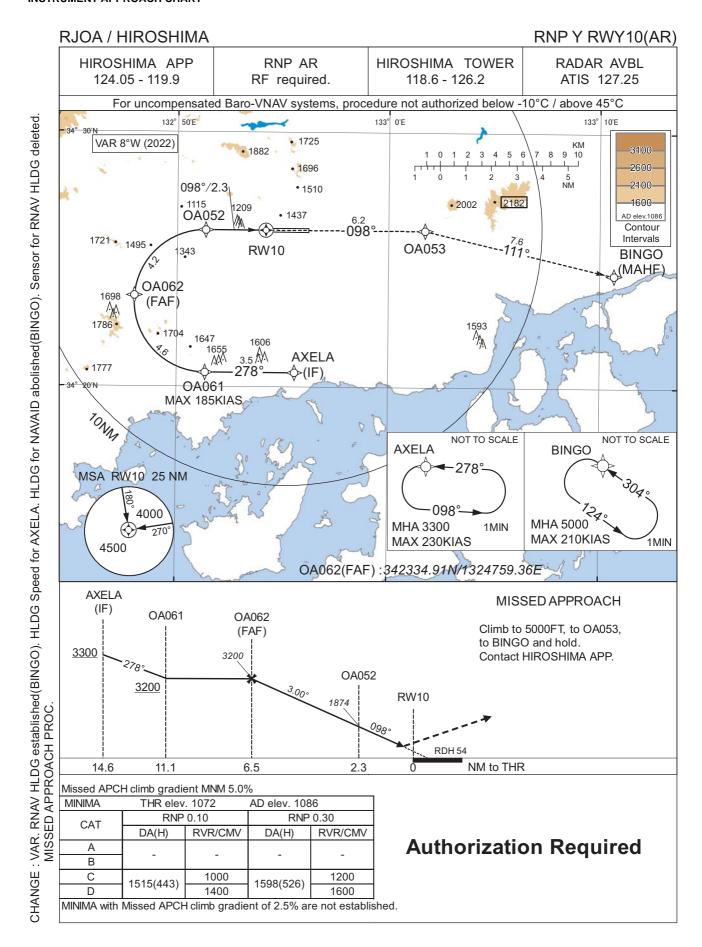
Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	DEMIO	1	-	-8.1	-	ı	+5500	1	-	-
002	TF	OA050	-	255 (247.1)	-8.1	4.5	-	+3200	-185	-	1.0
003	RF Center: OARF1 r=2.54NM	OA051	,	-	-8.1	2.8	L	3200	-		1.0
004	RF Center: OARF1 r=2.54NM	OA052	1	-	-8.1	4.2	L	1874	-	-3.00	0.10 0.30
005	TF	RW10	Υ	098 (090.0)	-8.1	2.3	ı	1126	ı	-3.00/54	0.10 0.30
006	TF	OA053	1	098 (090.0)	-8.1	6.2	1	-	1	-	1.0
007	TF	BINGO	-	111 (103.2)	-8.1	7.6	ı	5000	ı	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Δltituda	Maximum Altitude (FT)	Speed (KIAS)	RNP Value
Hold	DEMIO	255 (247.1)	-8.1	1.0 (-14000)	R	5500	FL140	-230(-14000)	1.0
Hold	BINGO	304 (296.1)	-8.1	1.0 (-14000)	L	5000	FL140	-210(-14000)	1.0

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		
		-	



RJOA / HIROSHIMA

RNP Y RWY10(AR)

Coding Table

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	AXELA	1	-	-8.1	-	-	+3300	-	-	1.0
002	TF	OA061	-	278 (270.0)	-8.1	3.5	-	+3200	-185	-	1.0
003	RF Center: OARF2 r=2.79NM	OA062	-	-	-8.1	4.6	R	3200	-	-	1.0
004	RF Center: OARF2 r=2.79NM	OA052	ı	-	-8.1	4.2	R	1874	ı	-3.00	0.10 0.30
005	TF	RW10	Υ	098 (090.0)	-8.1	2.3	ı	1126	ı	-3.00/54	0.10 0.30
006	TF	OA053	1	098 (090.0)	-8.1	6.2	ı	-	-	ı	1.0
007	TF	BINGO	1	111 (103.2)	-8.1	7.6	-	5000	-	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	RNP Value
Hold	AXELA	278 (270.0)	-8.1	1.0 (-14000)	L	3300	FL140	-230(-14000)	1.0
Hold	BINGO	304 (296.1)	-8.1	1.0 (-14000)	L	5000	FL140	-210(-14000)	1.0

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		
I			-	



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

	Call sign	BRG / DIST from ARP	Remarks
CHANGE : VAR.	白竜 Hakuryu	345°T / 4.3NM	湖 Lake
	小佐木 Kosagi	115°T / 10.1NM	小佐木島 Kosagi - Island
	竹原 Takehara	184°T / 5.8NM	竹原駅 Railway Station
	三永サウス Minaga South	251°T / 8.4NM	東広島駅 Railway Station
	新庄 Shinjo	209°T / 2.9NM	新庄交差点 Shinjo Intersection

