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 | 11411 | | | | |
| 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): 2330-1215 | | | |
| | | | | | |
| | | | | | |
| | | Quarantine(animal): 2330-1230 | | | |
| | | 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 |

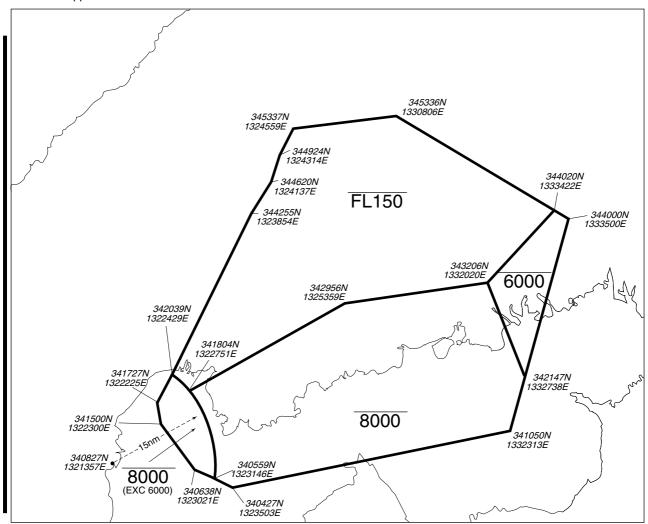
RJOA AD 2.16 HELICOPTER LANDING AREA

| 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

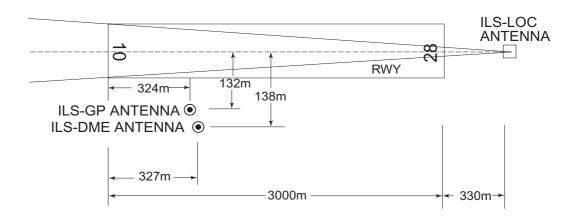
| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|------------------------|--|--------------------|---------|
| 1 | 2 | 3 | 4 | 5 |
| APP | Hiroshima Approach | 124.05MHz 119.9MHz 121.5MHz(E) 243.0MHz(E) | 2230 - 1330 | |
| ASR | Hiroshima Radar | 119.9MHz 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 | | VOR unusable: 270° - 320° beyond 30nm BLW 7000ft. 320° - 360° beyond 30nm BLW 6000ft. |
| DME | HGE | 1213MHz (CH-126X) | H24 | 342601.59N/ 1325526.29E | 1124ft | DME unusable: 050° - 060° beyond 30nm BLW 5000ft. 270° - 320° beyond 30nm BLW 7000ft. 320° - 360° beyond 25nm BLW 6000ft. |
| 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. Taxiing to and from stands

2.1 プッシュバック方式について

1) プッシュバックは、プッシュバックガイドライン上へ実施すること。但し、次の航空機、スポットからのプッシュバックはP3 誘導路上へ実施すること。

- ※1 全幅 61m 以上の航空機
- ※2 スポット 1、2番から機首を西向きのプッシュバック
- ※3 スポット 8、9、10番から機首を東向きのプッシュバック (スポット 8番については、翼幅 36m以上の航空機)

プッシュバックに関する詳細は、空港管理者に確認すること。

2)B787-8及び翼幅52m未満の航空機は管制官により、プッシュバックガイドライン上から P3 誘導路上への180 度ターンが必要となる方向へのプッシュバックを指示されることがある。

2.2 プッシュバック後の地上走行

プッシュバックガイドラインからの地上走行開始後は、速やか に P3 誘導路へ合流すること。

2.1 Pushback procedures

1)Pushback should be made onto pushback guideline.

However, pushbacks for aircraft and from SPOTs will be carried out onto the TWY P3.

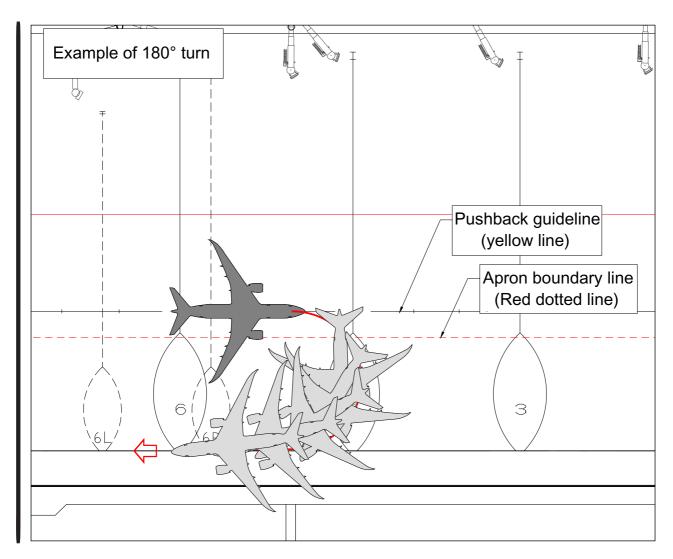
- *1 Aircraft with a wingspan is 61m or longer.
- *2 Pushback facing west from SPOT1, 2
- *3 Pushback facing east from SPOT8, 9, 10 (For SPOT8, only aircraft with a wingspan of 36m or longer.)

Pushback procedures are listed in the regulation established by airport administrator.

2)Aircrafts (B787-8 and wingspan shorter than 52m) may be instructed by ATC to pushback in a direction that requires a 180° turn from the pushback guideline to TWY P3.

2.2 Taxiing after pushback

After the aircraft commence taxiing from the pushback guideline, join the TWY P3 as soon as possible.



3. Parking area for small aircraft(General aviation)

Nil

| | Nil |
|--|--|
| ron - taxiing during winter conditions | |
| | Nil |
| | |
| 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 othe 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。 | 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. |
| nool and training flights - technical test flights - use of runways | |
| | Nil |
| licopter traffic - limitation | |
| | Nil |
| moval of disabled aircraft from runways | |
| | Nil |
| | |
| emarks | |
| emarks | Nil |
| emarks | |
| emarks | |

RJOA AD 2.22 FLIGHT PROCEDURES

| 1.TAKE OFF MINIMA | | | | | | | | | |
|---------------------------|-------|-------------|-------------------------|---------------|---------------|---|-----|------|--|
| | RWY | ACFT CAT | REDL 8 | REDL & RCLL | | REDL & RCLL REDL or RCLL or RCL Marking | | - | |
| | | 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;

- 1) 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 execute 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)

- (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 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 REDLHigh INTST RENLRCLL |
| (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

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 (BOLIG-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)

Standard Arrival Chart - Instrument (PUNUP-RNAV)

Instrument Approach Chart (ILS Z or LOC RWY10 (CAT III))

Instrument Approach Chart (ILS Y 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))

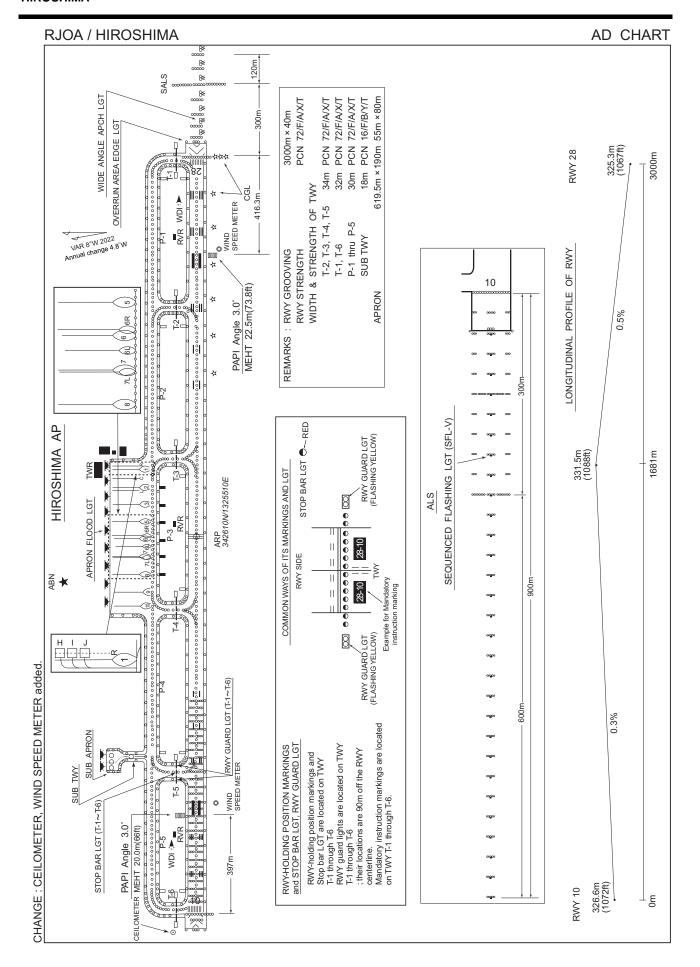
Instrument Approach Chart (RNP Y RWY10(AR))

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

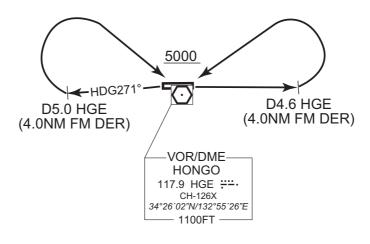
RWY 10: Climb RWY HDG to HGE 4.6DME(4.0NM FM DER), turn left...., RWY 28: Climb on HDG 271° to HGE 5.0DME(4.0NM FM DER), turn right....,direct to HGE VOR/DME. Cross HGE VOR/DME at or above 5000FT.

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

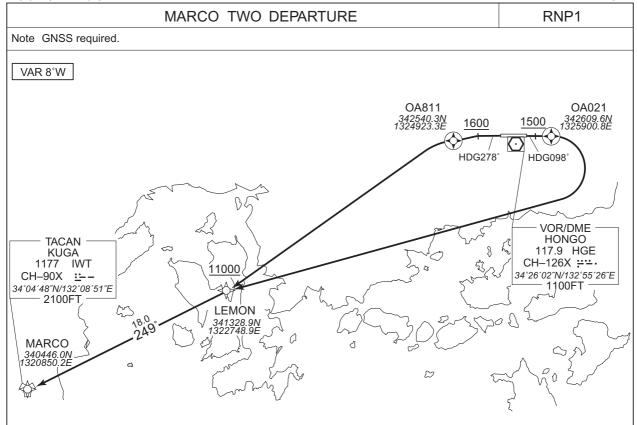
OBST ALT 2002FT located at 088°/5.7NM FM DER.

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

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



RNAV SID



RWY10 : Climb on HDG098° at or above 1500FT, direct to <u>OA021</u>, turn right direct to LEMON at or above 11000FT, to MARCO.

RWY28 : Climb on HDG278 $^{\circ}$ 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 | _ | _ | RNP1 |
| 002 | DF | OA021 | Υ | _ | -8.1 | _ | _ | _ | _ | _ | RNP1 |
| 003 | DF | LEMON | _ | _ | -8.1 | _ | R | +11000 | _ | _ | RNP1 |
| 004 | TF | MARCO | _ | 249 (241.1) | -8.1 | 18.0 | _ | _ | _ | _ | 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 | _ | _ | RNP1 |
| 002 | DF | OA811 | Υ | _ | -8.1 | _ | _ | _ | ı | _ | RNP1 |
| 003 | DF | LEMON | _ | _ | -8.1 | _ | L | +11000 | _ | _ | RNP1 |
| 004 | TF | MARCO | _ | 249 (241.1) | -8.1 | 18.0 | _ | _ | _ | _ | RNP1 |

RJOA / HIROSHIMA RNAV SID and TRANSITION KIJYY THREE DEPARTURE RNP1 Note GNSS required. VAR 8°W **TOZAN TRANSITION** MIYAZU (YME) 352850.5N 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 **♥**OA021 OA811 342609.6N RNP1) 342540.3N 1325900.8E 1324923.3E HDG278 HDG098° CHANGE : Navigation Specification(Basic RNP1 → 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 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.

RJOA / HIROSHIMA

RNAV SID and TRANSITION

KIJYY THREE 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 | - | ı | 098 (090.0) | -8.1 | - | ı | +1500 | 1 | 1 | RNP1 |
| 002 | DF | OA021 | Υ | 1 | -8.1 | - | ı | ı | ı | - | RNP1 |
| 003 | DF | TOJYO | - | - | -8.1 | - | L | +12000 | - | - | RNP1 |
| 004 | TF | KIJYY | - | 076 (067.9) | -8.1 | 43.4 | - | - | - | - | 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 | 1 | 1 | 278 (270.0) | -8.1 | ı | ı | +1600 | 1 | 1 | RNP1 |
| 002 | DF | OA811 | Υ | 1 | -8.1 | 1 | ı | ı | 1 | 1 | RNP1 |
| 003 | DF | TOJYO | 1 | - | -8.1 | - | R | +12000 | - | 1 | RNP1 |
| 004 | TF | KIJYY | ı | 076 (067.9) | -8.1 | 43.4 | ı | - | - | - | RNP1 |

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 | ı | 1 | -8.1 | 1 | ı | - | 1 | 1 | RNP1 |
| 002 | TF | TOZAN | - | 077 (069.0) | -8.1 | 20.3 | - | - | - | - | RNP1 |
| 003 | TF | YME | - | 076 (068.3) | -8.1 | 34.3 | - | - | - | - | RNP1 |

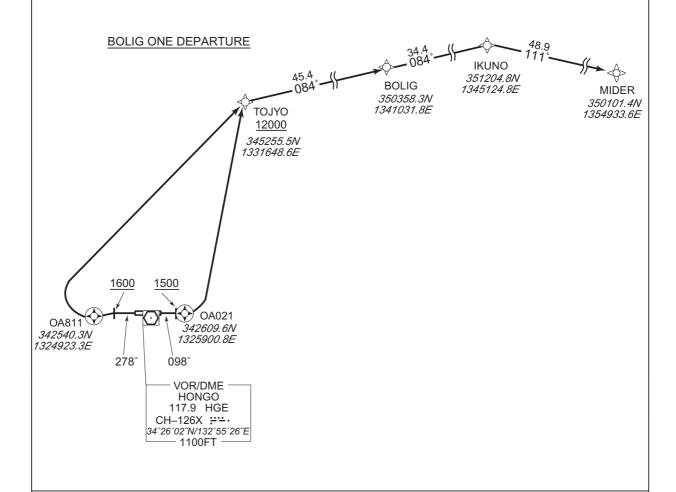
RJOA / HIROSHIMA

RNAV SID and TRANSITION

| BOLIG ONE DEF MIDER TRANS | | | RNAV1 |
|--|-----------------------|--|--|
| Note 1) DME/DME/IRU or GNSS required. | | | TOJYO - 24.0NM to TOJYO TOJYO - 28.0NM to TOJYO |
| *The aircraft equipped with only DME/DME/IRU must be able to update its position without delay | Critical DME | MYE 31.0NM to | TOJYO - 28.0NM to TOJYO TOJYO - 15.0NM to TOJYO |
| at the starting point of take-off roll. 2) RADAR service required. | DME GAP | RWY10 : DER - 24.0NM to RWY28 : DER - 31.0NM to | |
| 2) NADAN Service required. | Inappropriate Navaids | See AD1.1.6.10.3. Inappr | ropriate NAVAIDs for RNAV1 |

VAR 8°W

MIDER TRANSITION



BOLIG ONE DEPARTURE

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

RWY28 : Climb on HDG278° at or above 1600FT, direct to <u>OA811</u>, turn right direct to TOJYO at or above 12000FT, to BOLIG.

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.

MIDER TRANSITION

From BOLIG, to IKUNO, to MIDER.

GAP.

DME

RJOA / HIROSHIMA

RNAV SID and TRANSITION

BOLIG ONE DEPARTURE

RWY10

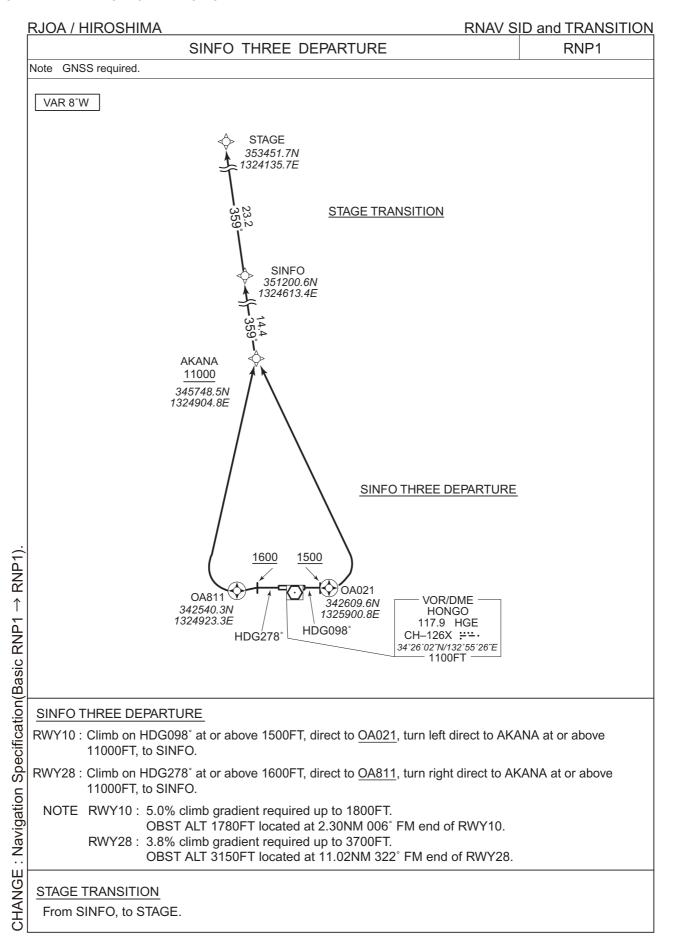
| Serial | Path | Waypoint | Fly | Course | Magnetic | Distance | Turn | Altitude | Speed | Vertical | Navigation |
|--------|------------|------------|------|----------------|-----------|----------|-----------|----------|--------|----------|---------------|
| Number | Descriptor | Identifier | Over | °M(°T) | Variation | (NM) | Direction | (FT) | (KIAS) | Angle | Specification |
| 001 | VA | _ | _ | 098 (090.0) | -8.2 | _ | _ | +1500 | - | _ | RNAV1 |
| 002 | DF | OA021 | Υ | 1 | -8.2 | _ | _ | _ | ı | _ | RNAV1 |
| 003 | DF | TOJYO | _ | _ | -8.2 | _ | L | +12000 | - | _ | RNAV1 |
| 004 | TF | BOLIG | _ | 084 (075.7) | -8.2 | 45.4 | - | _ | 1 | _ | RNAV1 |

RWY28

| Serial | Path | Waypoint | Fly | Course | 0 | | | Altitude | Speed | Vertical | Navigation |
|--------|------------|------------|------|----------------|-----------|------|-----------|----------|--------|----------|---------------|
| Number | Descriptor | Identifier | Over | °M(°T) | Variation | (NM) | Direction | (FT) | (KIAS) | Angle | Specification |
| 001 | VA | _ | _ | 278 (270.0) | -8.2 | _ | _ | +1600 | - | _ | RNAV1 |
| 002 | DF | OA811 | Υ | _ | -8.2 | _ | - | _ | 1 | _ | RNAV1 |
| 003 | DF | TOJYO | _ | _ | -8.2 | _ | R | +12000 | - | _ | RNAV1 |
| 004 | TF | BOLIG | | 084 (075.7) | -8.2 | 45.4 | 1 | _ | 1 | _ | RNAV1 |

MIDER TRANSITION

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | | Turn Direction | Altitude (FT) | Speed (KIAS) | | |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|---|-------|
| 001 | IF | BOLIG | _ | _ | -8.2 | _ | - | _ | - | _ | RNAV1 |
| 002 | TF | IKUNO | _ | 084 (076.2) | -8.2 | 34.4 | _ | _ | _ | _ | RNAV1 |
| 003 | TF | MIDER | _ | 111 (102.8) | -8.2 | 48.9 | 1 | _ | _ | _ | RNAV1 |



RJOA / HIROSHIMA

RNAV SID and TRANSITION

SINFO THREE 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 | - | ı | 098 (090.0) | -8.1 | ı | i | +1500 | 1 | ı | RNP1 |
| 002 | DF | OA021 | Υ | ı | -8.1 | - | ı | 1 | 1 | 1 | RNP1 |
| 003 | DF | AKANA | 1 | - | -8.1 | - | L | +11000 | - | 1 | RNP1 |
| 004 | TF | SINFO | - | 359 (350.7) | -8.1 | 14.4 | - | - | - | - | 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 | - | 1 | 278 (270.0) | -8.1 | ı | ı | +1600 | 1 | - | RNP1 |
| 002 | DF | OA811 | Υ | ı | -8.1 | ı | ı | ı | 1 | ı | RNP1 |
| 003 | DF | AKANA | ı | ı | -8.1 | ı | R | +11000 | 1 | ı | RNP1 |
| 004 | TF | SINFO | 1 | 359 (350.7) | -8.1 | 14.4 | ı | - | 1 | - | RNP1 |

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 | 1 | - | -8.1 | 1 | 1 | - | - | 1 | RNP1 |
| 002 | TF | STAGE | 1 | 359 (350.6) | -8.1 | 23.2 | - | - | - | - | RNP1 |

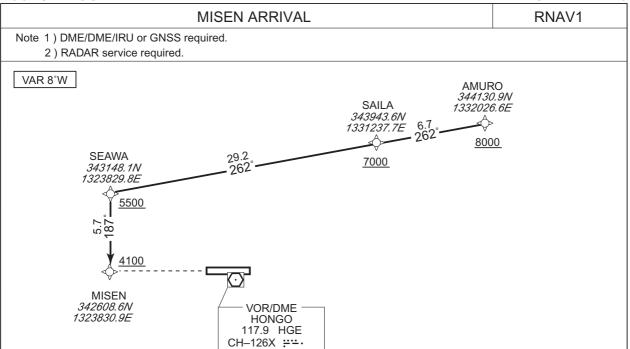
STANDARD ARRIVAL CHART -INSTRUMENT



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

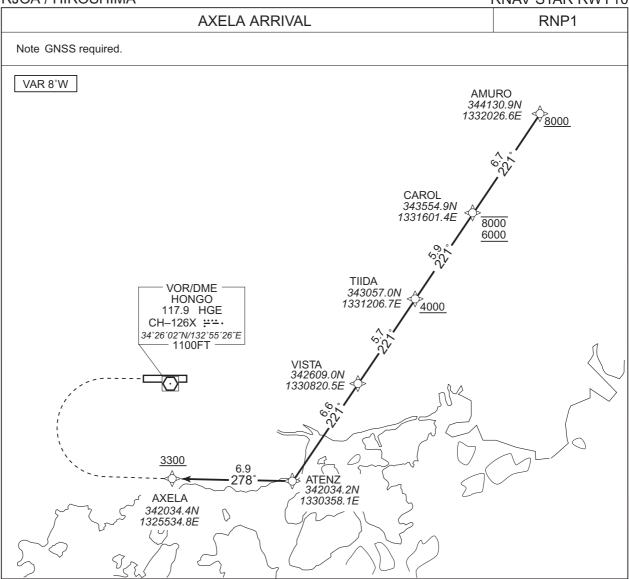
| Critical DME | _ |
|-----------------------|--|
| DME GAP | - |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1. |

| Serial | 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 | 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

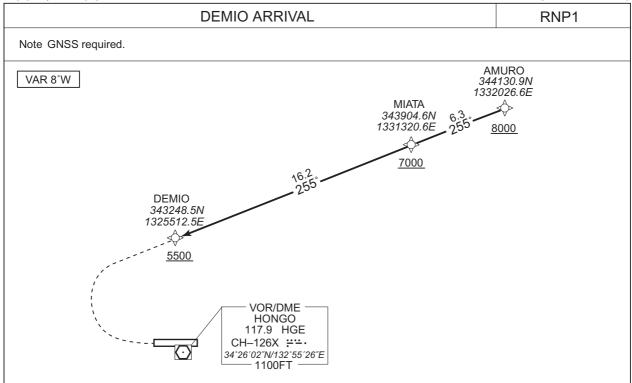


From AMURO at or above 8000FT, to CAROL between 8000FT and 6000FT, to TIIDA at or above 4000FT, to VISTA, to ATENZ, to AXELA at or above 3300FT.

| | Serial | Path | Waypoint | Fly | Course | Magnetic | 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 | 1 | _ | RNP1 |
| | 002 | TF | CAROL | _ | 221 (213.0) | -8.1 | 6.7 | _ | -8000 +6000 | 1 | _ | RNP1 |
| | 003 | TF | TIIDA | _ | 221 (213.0) | -8.1 | 5.9 | _ | +4000 | _ | _ | RNP1 |
| | 004 | TF | VISTA | _ | 221 (212.9) | -8.1 | 5.7 | _ | _ | - | _ | RNP1 |
| | 005 | TF | ATENZ | _ | 221 (212.9) | -8.1 | 6.6 | _ | _ | - | _ | RNP1 |
| | 006 | TF | AXELA | _ | 278 (270.1) | -8.1 | 6.9 | _ | +3300 | _ | _ | RNP1 |
| L | | | | | | | | | | | | |

STANDARD ARRIVAL CHART-INSTRUMENT

RJOA / HIROSHIMA RNAV STAR RWY10

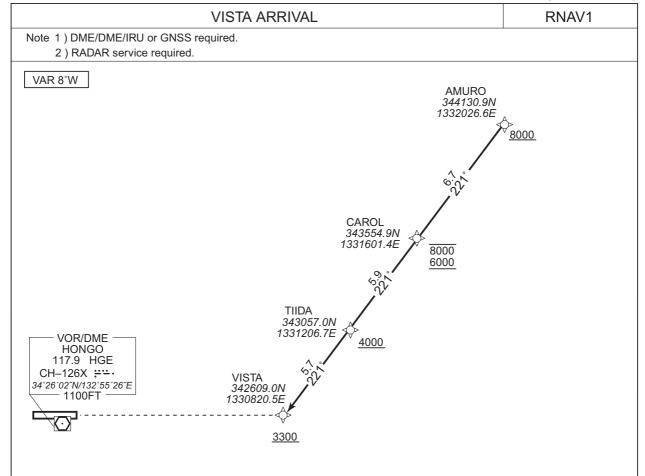


From AMURO at or above 8000FT, to MIATA at or above 7000FT, to DEMIO at or above 5500FT.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | | Turn Direction | | Speed (KIAS) | I | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|-------|-----------------|---|-----------------------------|
| 001 | IF | AMURO | _ | _ | -8.1 | _ | _ | +8000 | _ | _ | RNP1 |
| 002 | TF | MIATA | _ | 255 (247.4) | -8.1 | 6.3 | _ | +7000 | _ | _ | RNP1 |
| 003 | TF | DEMIO | _ | 255 (247.3) | -8.1 | 16.2 | _ | +5500 | _ | _ | 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 | MYE : CAROL - 4.0NM to TIIDA |
|-----------------------|--|
| Chilical Divie | OYE : CAROL - 5.0NM to TIIDA |
| DME GAP | 4.0NM to TIIDA - VISTA |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1. |

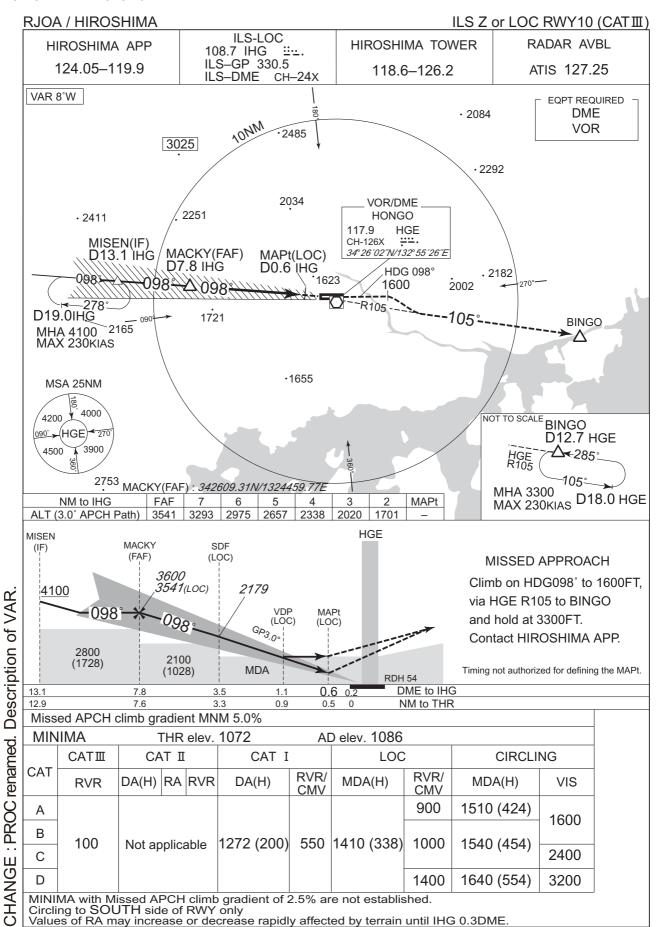
| Serial | Path | Waypoint | Fly | Course | Magnetic | Distance | Turn | Altitude | Speed | Vertical | Navigation |
|--------|------------|------------|------|----------------|-----------|----------|-----------|----------------|--------|----------|---------------|
| Number | Descriptor | Identifier | 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 | _ | +4000 | _ | _ | RNAV1 |
| 004 | TF | VISTA | _ | 221 (212.9) | -7.6 | 5.7 | _ | +3300 | _ | _ | RNAV1 |

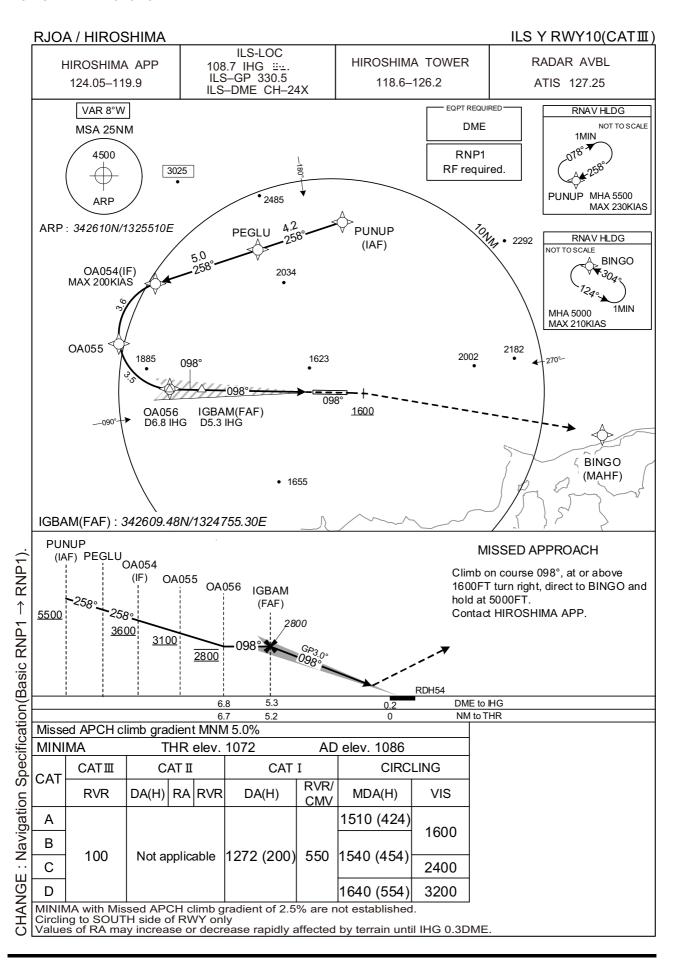
STANDARD ARRIVAL CHART -INSTRUMENT

RJOA / HIROSHIMA **RNAV STAR RWY10 PUNUP ARRIVAL** RNP1 Note GNSS required. **AMURO** VAR 8°W 344130.9N 1332026.6E AVDAK 343921.5N 1331302.9E <u>8000</u> 15.3 -259 **PUNUP** <u>7000</u> 343413.0N 1325532.4E <u>5500</u> VOR/DME HONGO 117.9 HGE CH–126X ∺⊶ 34°26′02″N/132°55′26″E 1100FT

From AMURO at or above 8000FT, to AVDAK at or above 7000FT, to PUNUP at or above 5500FT.

| 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 | - | | -8.1 | _ | _ | +8000 | - | _ | RNP1 |
| 002 | TF | AVDAK | _ | 259 (250.5) | -8.1 | 6.5 | _ | +7000 | _ | _ | RNP1 |
| 003 | TF | PUNUP | _ | 259 (250.4) | -8.1 | 15.3 | _ | +5500 | _ | _ | RNP1 |





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ILS Y RWY10(CATⅢ)

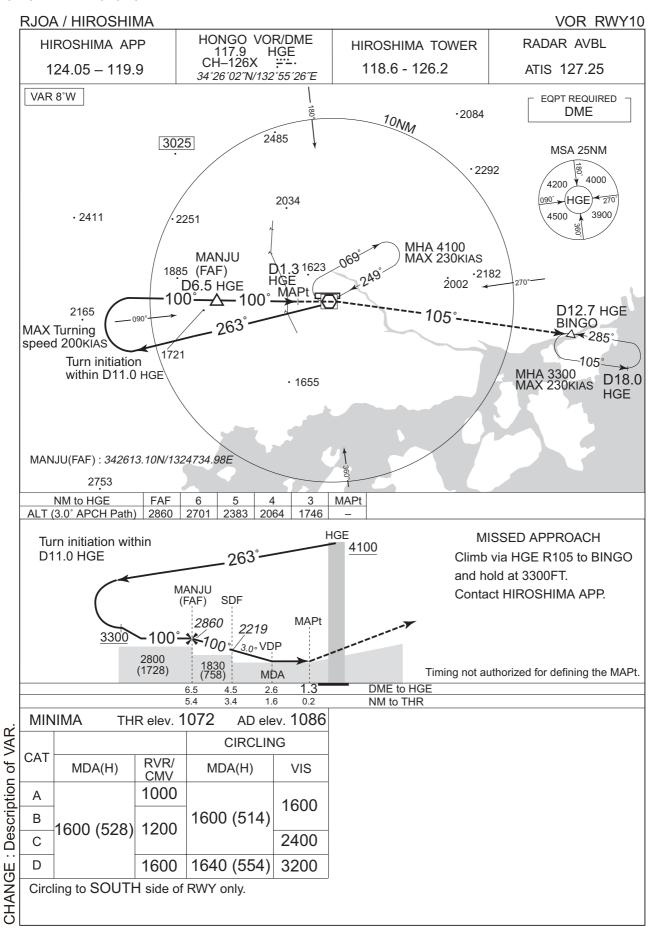
Coding Table

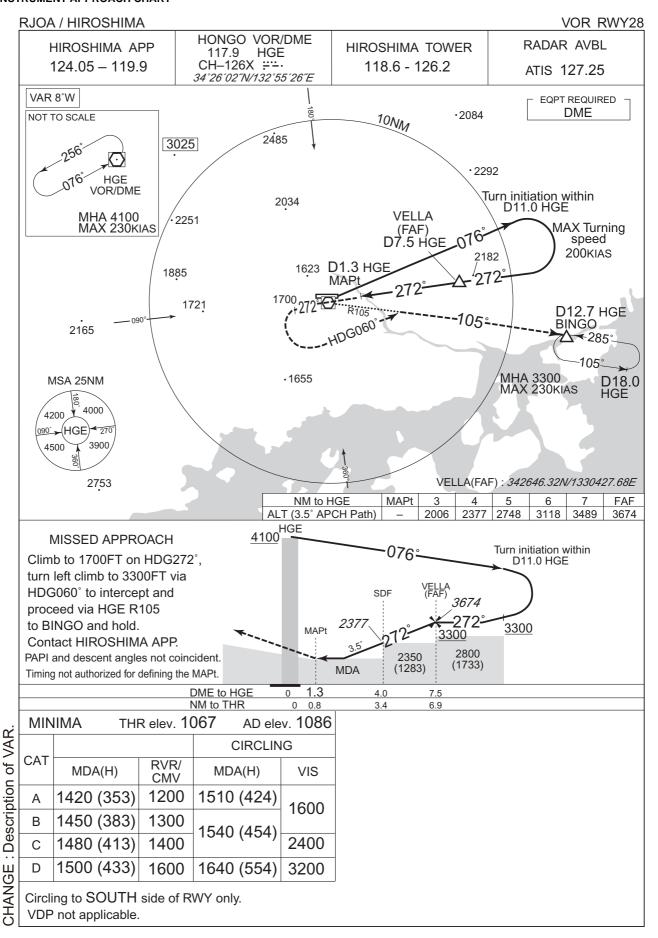
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|------------------------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001 | IF | PUNUP | 1 | - | -8.1 | - | - | +5500 | - | - | RNP1 |
| 002 | TF | PEGLU | - | 258 (250.3) | -8.1 | 4.2 | - | - | - | - | RNP1 |
| 003 | TF | OA054 | - | 258 (250.2) | -8.1 | 5.0 | - | +3600 | -200 | - | RNP1 |
| 004 | RF Center: OARF3 r=2.55NM | OA055 | 1 | - | -8.1 | 3.6 | L | +3100 | - | - | RNP1 |
| 005 | RF Center: OARF3 r=2.55NM | OA056 | - | - | -8.1 | 3.5 | L | 2800 | - | - | RNP1 |
| | | | | 098 | l | | | | | | |
| 001 | CA | - | - | (090.0) | -8.1 | - | - | +1600 | - | - | RNP1 |
| 002 | DF | BINGO | 1 | - | -8.1 | - | R | 5000 | ı | - | RNP1 |

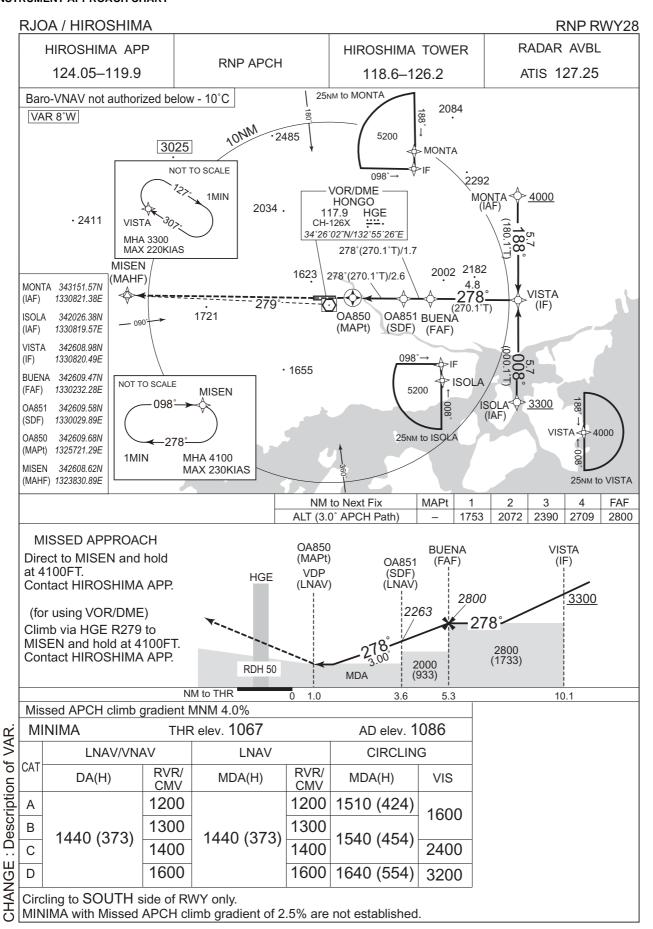
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | lime | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|------|------------------------|-----------------------------|-----------------------|--------------|-------------------|-----------------------------|-----------------------------|------------------|-----------------------------|
| Hold | PUNUP | 258 (250.3) | -8.1 | 1.0 (-14000) | R | 5500 | FL140 | -230 (-14000) | RNP1 |
| Hold | BINGO | 304 (296.1) | -8.1 | 1.0 (-14000) | L | 5000 | FL140 | -210 (-14000) | RNP1 |

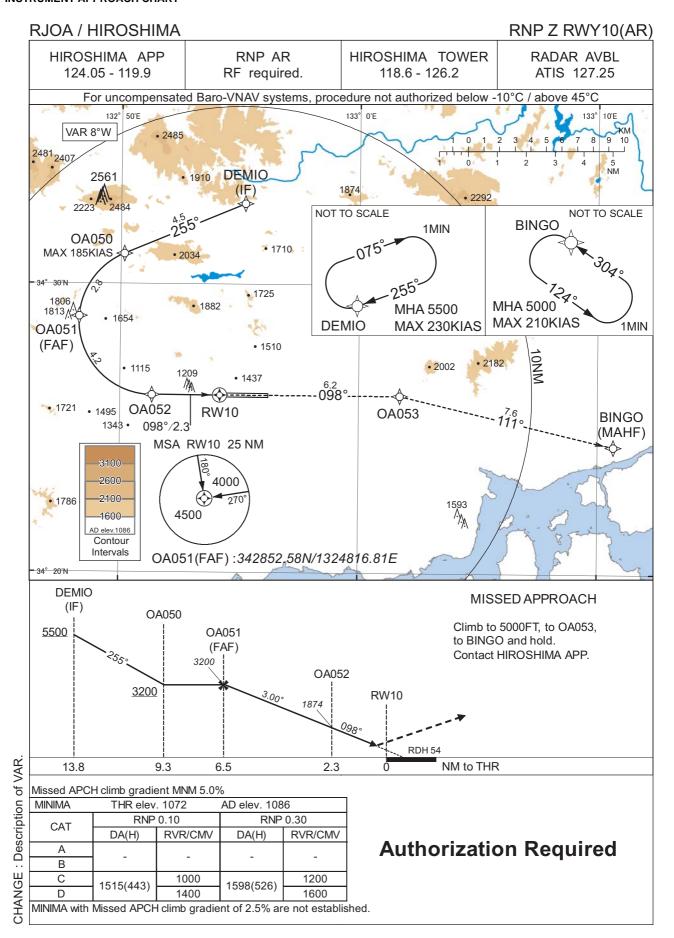
Waypoint Coordinates

| | Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---|---------------------|--------------------------|--------------------------|--------------------------|
| | PUNUP | 343412.97N / 1325532.36E | OARF3 | 342842.60N / 1324606.23E |
| | PEGLU | 343248.19N / 1325045.55E | | |
| | OA054 | 343106.85N / 1324503.74E | | |
| | OA055 | 342814.80N / 1324304.26E | | |
| | OA056 | 342609.36N / 1324606.51E | | |
| | BINGO | 342425.72N / 1331040.68E | | |
| ı | | | - | |









RJOA / HIROSHIMA

RNP Z RWY10(AR)

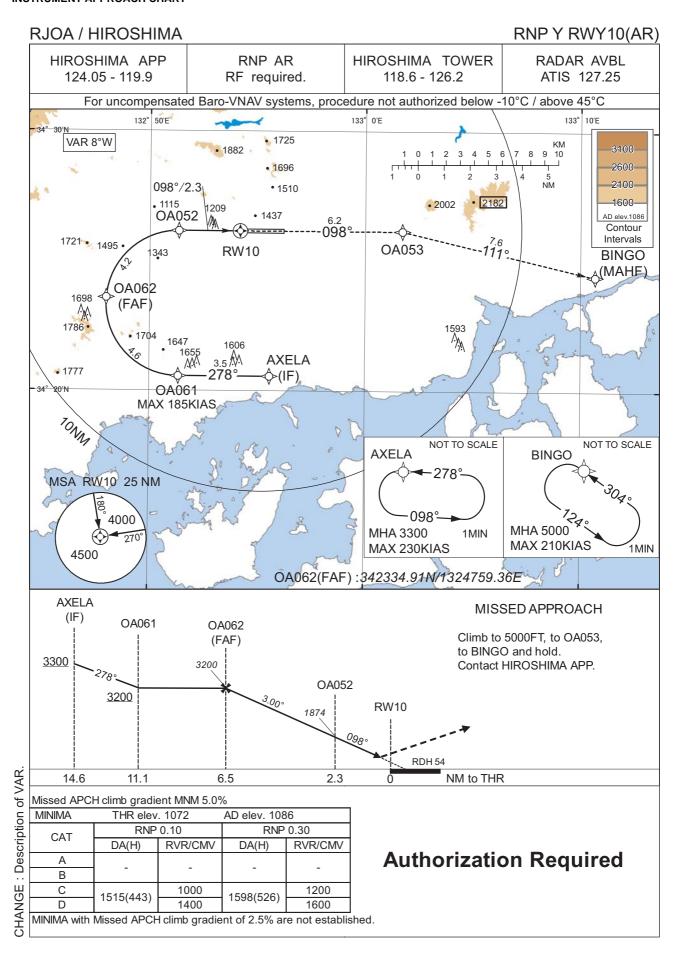
Coding Table

| 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 | - | - | -8.1 | - | - | +5500 | - | - | - |
| 002 | TF | OA050 | - | 255 (247.1) | -8.1 | 4.5 | - | +3200 | -185 | - | 1.0 |
| 003 | RF Center: OARF1 r=2.54NM | OA051 | 1 | - | -8.1 | 2.8 | L | 3200 | - | • | 1.0 |
| 004 | RF Center: OARF1 r=2.54NM | OA052 | ı | 1 | -8.1 | 4.2 | L | 1874 | ı | -3.00 | 0.10 0.30 |
| 005 | TF | RW10 | Υ | 098 (090.0) | -8.1 | 2.3 | i | 1126 | ı | -3.00/54 | 0.10 0.30 |
| 006 | TF | OA053 | - | 098 (090.0) | -8.1 | 6.2 | | - | ı | ı | 1.0 |
| 007 | TF | BINGO | - | 111 (103.2) | -8.1 | 7.6 | - | 5000 | - | ı | 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 | 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 | ı | - | -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 | 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 | Altitude | 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 | | |



※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 |
|---------|-----------------------|---------------------|------------------------------|
| | 白竜 Hakuryu | 345°T / 4.3NM | 湖 Lake |
| | 小佐木 Kosagi | 115°T / 10.1NM | 小佐木島 Kosagi - Island |
| VAR. | 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 |
| CHANGE: | 新庄 Shinjo | 209°T / 2.9NM | 新庄交差点 Shinjo Intersection |

