

AD 2 AERODROMES

RJSR AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJSR - ODATE-NOSHIRO

RJSR AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|--|---|
| 1 | ARP coordinates and site at AD | 401131N/1402218E 109°/1.0km from RWY11 THR |
| 2 | Direction and distance from (city) | 8.3NM W FM OODATE City |
| 3 | Elevation/ Reference temperature | 276ft /31°C (1997-2008) |
| 4 | Geoid undulation at AD ELEV PSN | 126ft |
| 5 | MAG VAR/ Annual change | 8°W(2006) / 1'E |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Odate-Noshiro Airport Administration Office (Akita prefectural government) 21-144,Wakigami-aza,karamushi-tai,kita-Akita City,AKITA,018-3454 JAPAN. TEL:0186-63-1001 FAX:0186-63-1009 E-mail:oodatenoshiroukuukoujimusho@pref.akita.lg.jp |
| 7 | Types of traffic permitted (IFR/ VFR) | IFR/VFR |
| 8 | Remarks | Nil |

RJSR AD 2.3 OPERATIONAL HOURS

| | | |
|----|---------------------------|--|
| 1 | AD Administration | 2300 - 1030 |
| 2 | Customs and immigration | On request Customs: 018-845-0735 Immigration: 018-895-5221 |
| 3 | Health and sanitation | Quarantine(human): On request(018-846-8280) Quarantine(animal, plant): Nil |
| 4 | AIS Briefing Office | Nil |
| 5 | ATS Reporting Office(ARO) | Nil |
| 6 | MET Briefing Office | H24(SENDAI) |
| 7 | ATS | 2300 - 1030 Remarks: Airport Remote Mobile Communication Service provided by Sendai FSC |
| 8 | Fuelling | 2300 - 0930 |
| 9 | Handling | 2240 - 0900 |
| 10 | Security | 2300 - 1030 |
| 11 | De-icing | Nil |
| 12 | Remarks | Nil |

RJSR AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|---------------------------------|
| 1 | Cargo-handling facilities | AVBL up to B767 passenger plane |
| 2 | Fuel/ oil types | JET A1 |
| 3 | Fuelling facilities/ capacity | Fuel truck /200kl |
| 4 | De-icing facilities | Nil |
| 5 | Hangar space for visiting aircraft | Nil |
| 6 | Repair facilities for visiting aircraft | Nil |
| 7 | Remarks | Nil |

RJSR AD 2.5 PASSENGER FACILITIES

| | | |
|---|----------------------|------------|
| 1 | Hotels | Nil |
| 2 | Restaurants | At Airport |
| 3 | Transportation | Bus,Taxi |
| 4 | Medical facilities | Nil |
| 5 | Bank and Post Office | Nil |
| 6 | Tourist Office | Nil |
| 7 | Remarks | Nil |

RJSR AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

| | | |
|---|---|---|
| 1 | AD category for fire fighting | CAT 7 |
| 2 | Rescue equipment | Chemical fire fighting truck x 2 Emergency medical equipments conveyance truck x 1 |
| 3 | Capability for removal of disabled aircraft | Ask AD administration |
| 4 | Remarks | Nil |

RJSR AD 2.7 SEASONAL AVAILABILITY-CLEARING

| | | |
|---|-----------------------------|---|
| 1 | Types of clearing equipment | Snow plow x 4, Snow sweeper x 4, rotary x 4, spreader equipment x 1 |
| 2 | Clearance priorities | RWY, TWY, APRON |
| 3 | Remarks | Nil |

RJSR AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|-------------------------------------|---|
| 1 | Apron surface and strength | Surface: Concrete Strength: PCN 55/R/B/X/T |
| 2 | Taxiway width, surface and strength | Width 30m Surface: asphalt-Concrete Strength: PCN 75/F/C/X/T |
| 3 | ACL and elevation | Not available |
| 4 | VOR checkpoints | Not available |
| 5 | INS checkpoints | (Spot NR) 1 401142.42N,1402218.33E 2 401142.04N,1402220.50E 3 401141.71N,1402223.00E 5 401141.37N,1402225.50E |
| 6 | Remarks | Nil |

RJSR 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 | Nil |
| 2 | RWY and TWY markings and LGT | RWY:RWY 11/29 (Marking): RWY designation, RWY CL, RWY THR, RWY middle point, Aiming point, TDZ, RWY side stripe, RWY turn pad edge, RWY turn pad CL (LGT): RCLL, REDL, RTHL, RENL, RTZL(RWY11), WBAR, Turning point indicator LGT, RWY DIST marker LGT TWY: (Marking):TWY CL, RWY HLDG PSN, TWY side stripe (LGT):TWY edge LGT, TWY CL LGT, Taxiing guidance sign |
| 3 | Stop bars | Nil |
| 4 | Remarks | (Marking):Overrun area (LGT):Apron flood LGT |

RJSR / ODATE-NOSHIRO

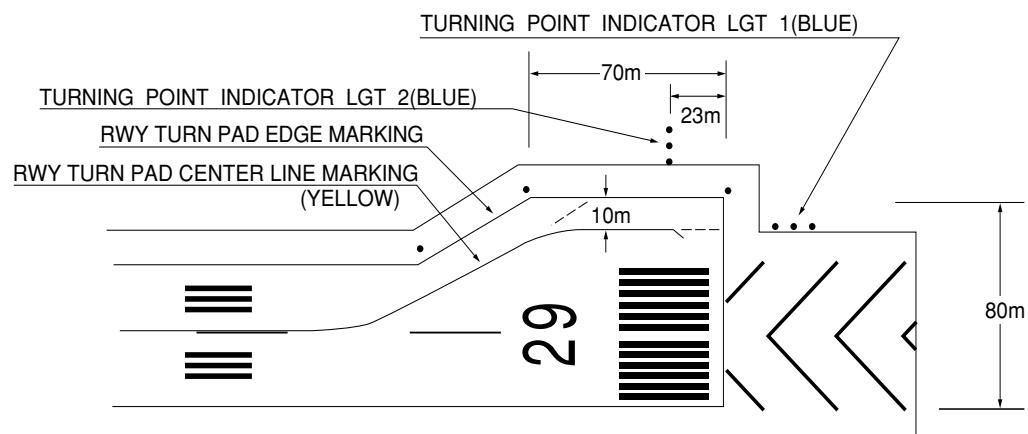
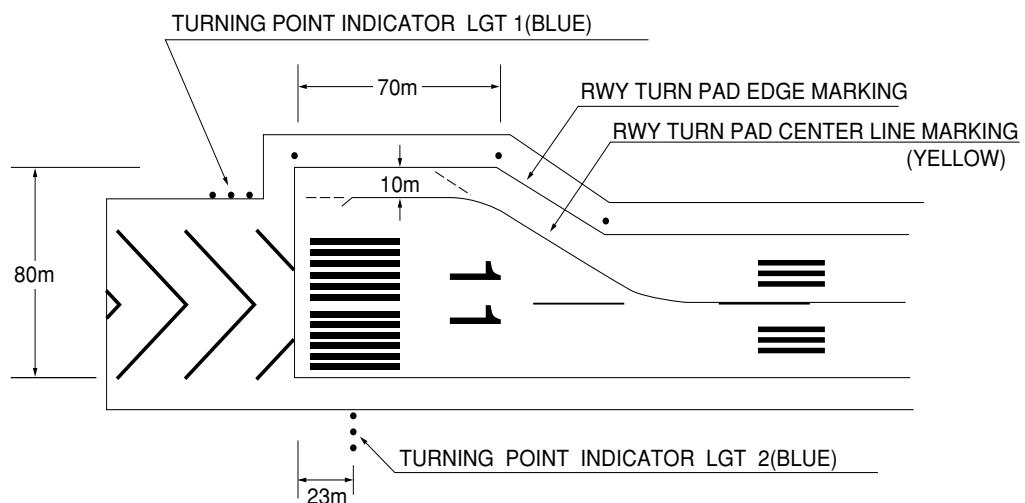
180° Turn on RWY

B767型機用の滑走路 180° 転回実施要領

1. 滑走路中心線からターニングパッド中心線標識に従って進行する。
2. 転回灯 1 が一直線に見えるように進行し、転回灯 2 が一直線に見えたとき転回を開始する。転回時は MAX STEERING ANGLE を使用する。

180° turn procedure on RWY for B767 aircraft

1. Proceed along the RWY Center Line to the starting point of the RWY Turn Pad Center Line Marking ; then
2. Proceed along the RWY Turn Pad Center Line Marking to see the Turning Point Indicator Light 1 on a straight line, then commence turn at the spot where you (pilot)can see the Turning Point Indicator Light 2 on a straight line at an angle of 9 o'clock. When turning, take MAX STEERING ANGLE.

ODEATE-NOSHIRO AP

RJSR AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

In Area3 To be developed

RJSR AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|--|--|
| 1 | Associated MET Office | SENDAI |
| 2 | Hours of service MET Office outside hours | H24(SENDAL) |
| 3 | Office responsible for TAF preparation Periods of validity | Nil |
| 4 | Trend forecast Interval of issuance | Nil |
| 5 | Briefing/ consultation provided | Briefing is available upon inquiry at SENDAI |
| 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 | REMOTE |
| 10 | Additional information(limitation of service, etc.) | Nil |

RJSR 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 |
| 11 | 100.30° | 2000x45 | PCN 75/F/C/X/T Asphalt-Concrete | 401136.37N 1402135.51E 125.7FT | THR ELEV:259.2FT TDZ ELEV:269FT |
| 29 | 280.30° | 2000x45 | PCN 75/F/C/X/T Asphalt-Concrete | 401125.10N 1402258.78E 126FT | THR ELEV:292.0FT |
| Slope of RWY | | Strip Dimensions(M) | RESA (Overrun) Dimensions (M) | | Remarks |
| 7 | 10 | | 11 | | 14 |
| See below figure | | 2120x300 2120x300 | 190x(MNM:149 MAX:297)* 40x(MNM:250 MAX:300)* | | RWY Grooving : 2000x45m |
| *For detail, ask airport administrator | | | | | |
| <u>LONGITUDINAL PROFILE OF RUNWAY</u> | | | | | |
| RWY 11 | | RWY 29 | | | |
| 259.18ft | | 291.99ft | | | |
| | | | | | |

RJSR AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 11 | 2000 | 2000 | 2000 | 2000 | Nil |
| 29 | 2000 | 2000 | 2000 | 2000 | Nil |

RJSR 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 |
| 11 | PALS (CAT I) 900m LIH | Green Green | PAPI 3.0°/Left 347.2m 61ft | 900m | 2000m 30m Coded color (White/Red) LIH | 2000m 60m Coded color (White/Yellow) LIH | Red | Nil (*2) |
| 29 | SALS (*1) 420m LIH | Green Nil | PAPI 3.0°/Left 414.9m 61ft | Nil | 2000m 30m Coded color (White/Red) LIH | 2000m 60m Coded color (White/Yellow) LIH | Red | Nil (*2) |
| Remarks | | | | | | | | |
| 10 | | | | | | | | |
| SALS with APCH LGT beacon(570m and 900m FM RWY 29 THR)(*1) Overrun area edge LGT(LEN:60m Color:Red) (*2) CGL for RWY 29 only | | | | | | | | |

RJSR AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|--|---|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 401148N/1402216E, White/Green EV4.3sec, HO |
| 2 | LDI location and LGT Anemometer location and LGT | LDI:Nil Anemometer : RWY11:300m from RWY11 THR. LGTD RWY29:300m from RWY29 THR. LGTD |
| 3 | TWY edge and centerline lighting | TWY edge and center line lights installed, see AD 2.9 |
| 4 | Secondary power supply/ switch-over time | Within 15sec : ALL LGT |
| 5 | Remarks | WDI LGT |

RJSR AD 2.16 HELICOPTER LANDING AREA

Nil

RJSR AD 2.17 ATS AIRSPACE

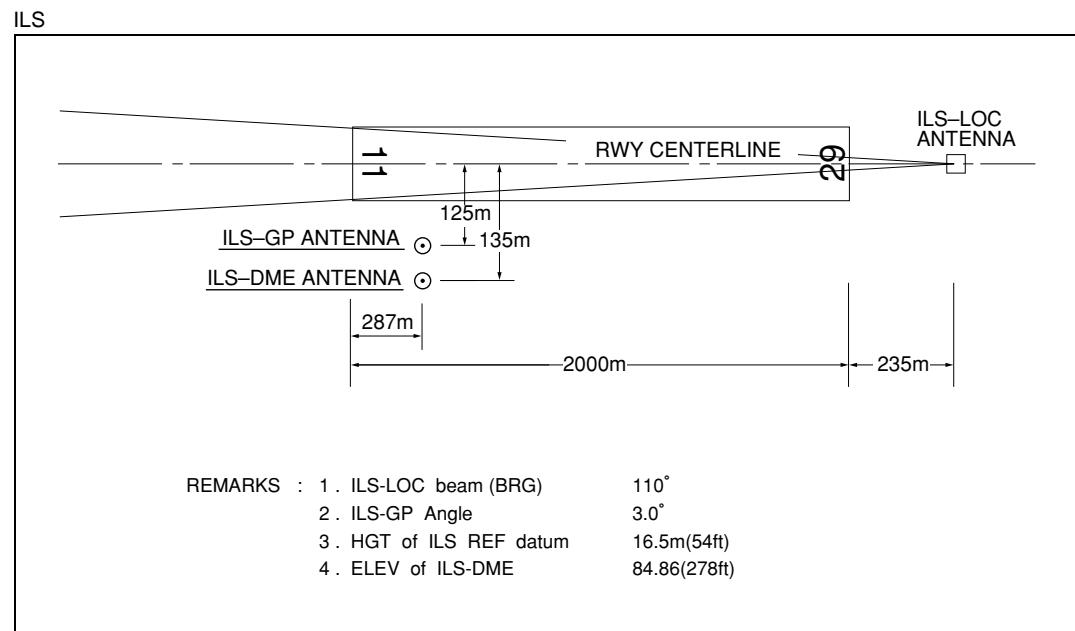
| Designation and lateral limits | | Vertical limits (ft) | Airspace classification | ATS unit call sign Language | Remarks |
|--------------------------------|--|----------------------|-------------------------|-----------------------------|---------|
| 1 | | 2 | 3 | 4 | 6 |
| Odate Noshiro information zone | Area within a radius of 9km(5NM) of Odate-Noshiro ARP. | 3,000 or below | E | Odate Remote En | |

RJSR AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|--------------|-----------|--------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| A/G | Odate Remote | 118.75MHz | 2300 - 1030 | RAG Controlled by Sendai FSC |

RJSR 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 (9°W/2015) | ODE | 114.75MHz | 2300 - 1030 | 401154.03N/ 1402142.68E | | VOR unusable: 010°-020° beyond 35nm BLW 8000ft. 100°-110° beyond 35nm BLW 6000ft. 110°-130° beyond 35nm BLW 9000ft. 150°-160° beyond 30nm BLW 8000ft. 320°-340° beyond 35nm BLW 6000ft. 340°-350° beyond 25nm BLW 6000ft. 350°-360° beyond 35nm BLW 8000ft. |
| DME | ODE | 1055MHz (CH-94Y) | 2300 - 1030 | 401154.03N/ 1402142.68E | 308ft | DME unusable: 100°-110° beyond 35nm BLW 6000ft. 110°-130° beyond 35nm BLW 9000ft. 150°-160° beyond 30nm BLW 8000ft. 320°-340° beyond 35nm BLW 6000ft. 340°-350° beyond 35nm BLW 6000ft. 350°-360° beyond 35nm BLW 8000ft. |
| ILS-LOC 11 | IOD | 110.15MHz | 2300 - 1030 | 401123.77N/ 1402308.57E | | LOC:235m(771ft) away FM RWY 29 THR, BRG(MAG)110°. |
| ILS-GP 11 | - | 334.25MHz | 2300 - 1030 | 401130.74N/ 1402146.51E | | GP:287m(942ft) inside FM RWY 11 THR. 125m(410ft) S of RCL. HGT of ILS REF datum 16.5m (54ft). GP angle 3.0°. |
| ILS-DME 11 | IOD | 1125MHz | 2300 - 1030 | 401130.42N/ 1402146.43E | 278ft | DME:287m(942ft) inside FM RWY 11 THR. 135m(443ft) S of RCL. |



RJSR AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

Nil

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

Nil

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

RJSR AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJSR AD 2.22 FLIGHT PROCEDURES**1.TAKE OFF MINIMA**

| | RWY | ACFT CAT | REDL & RCLL | | REDL or RCLL or RCL Marking | | NIL (DAYTIME ONLY) | |
|---|-----|------------|-----------------|-----------|-----------------------------|-----------|--------------------|-----------|
| | | | CEIL-RVR | CEIL-VIS | CEIL-RVR | CEIL-VIS | CEIL-RVR | CEIL-VIS |
| Multi-Engine ACFT with TKOF ALTN AP FILED | 11 | A, B, C, D | 200'-800m | 200'-800m | 200'-800m | 200'-800m | - | 200'-800m |
| | 29 | A, B, C, D | - | 200'-800m | - | 200'-800m | - | 200'-800m |
| OTHER | 11 | A, B, C, D | AVBL LDG MINIMA | | | | | |
| | 29 | A, B, C, D | | | | | | |

RJSR AD 2.23 ADDITIONAL INFORMATION

Nil

RJSR AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
 Standard Departure Chart - Instrument (ODATE REVERSAL)
 Standard Departure Chart - Instrument (LAGOON)
 Standard Arrival Chart - Instrument
 Instrument Approach Chart (ILS Z or LOC Z RWY11)
 Instrument Approach Chart (ILS Y or LOC Y RWY11)
 Instrument Approach Chart (VOR A)
 Instrument Approach Chart (RNAV(RNP) Z RWY29)
 Instrument Approach Chart (RNAV(RNP) Y RWY29)
 Other Chart (Visual REP)
 Other Chart (LDG CHART)
 Other Chart (MVA CHART)

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AD CHART



STANDARD DEPARTURE CHART -INSTRUMENT

RJSR / ODATE-NOSHIRO

SID

ODATE REVERSAL TWO DEPARTURE

RWY11 : Climb RWY HDG to 1800FT, turn right HDG332° to intercept and proceed...

RWY29 : Climb RWY HDG to ODE 3.0DME,...

...via ODE R287 to 6.0DME, turn left, direct to ODE VOR/DME.

Cross ODE VOR/DME at or above 6000FT.

Note RWY11 : 5.0% climb gradient required up to 1800FT.

OBST ALT 1313FT located at 4.3NM 093° FM end of RWY11.

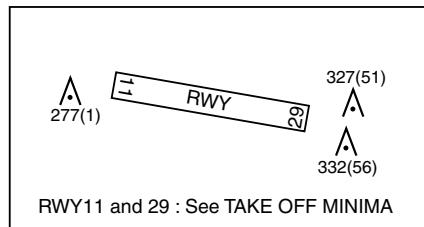
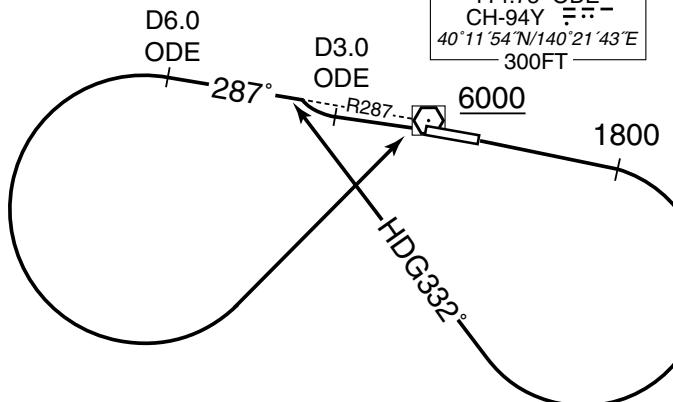
OBST ALT 2100FT located at 9.5NM 137° FM end of RWY11.

RWY29 : 4.0% climb gradient required up to 700FT.

OBST ALT 656FT located at 2.1NM 276° FM end of RWY29.

ODATE REVERSAL TWO DEPARTURE

VOR/DME
ODE
114.75 ODE
CH-94Y $\frac{1}{2} \cdot \frac{1}{2}$
40°11'54"N/140°21'43"E
300FT



STANDARD DEPARTURE CHART -INSTRUMENT

RJSR / ODATE-NOSHIRO

SID

LAGOON THREE DEPARTURE

RWY11 : Climb RWY HDG to 1800FT, turn right HDG332° to intercept and proceed...

RWY29 : Climb RWY HDG to ODE 3.0DME,...

...via ODE R287 to NOSSY, turn left, via UWE R360 to UWE VOR/DME.

Cross NOSSY at or above 3000FT.

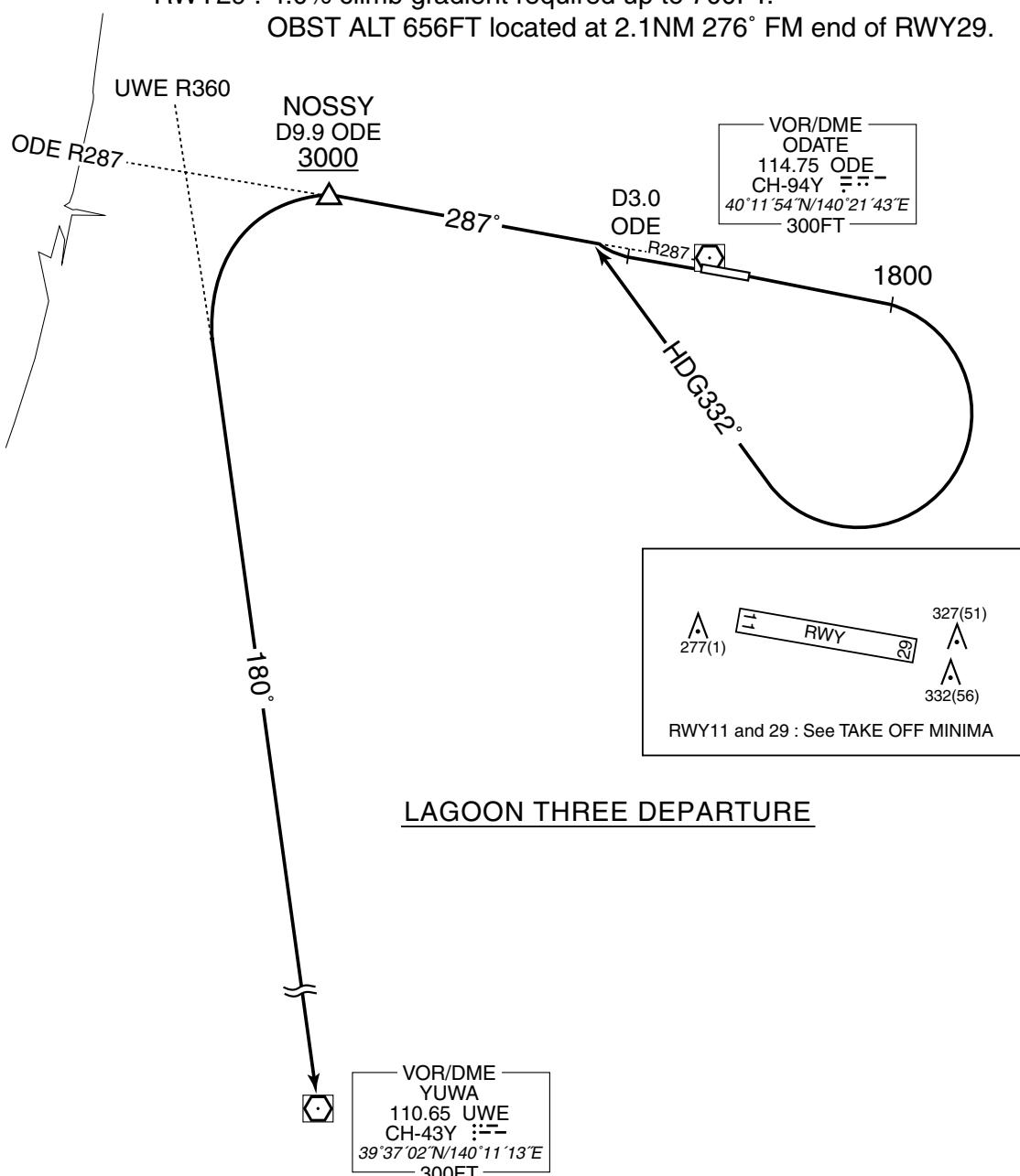
Note RWY11 : 5.0% climb gradient required up to 1800FT.

OBST ALT 1313FT located at 4.3NM 093° FM end of RWY11.

OBST ALT 2100FT located at 9.5NM 137° FM end of RWY11.

RWY29 : 4.0% climb gradient required up to 700FT.

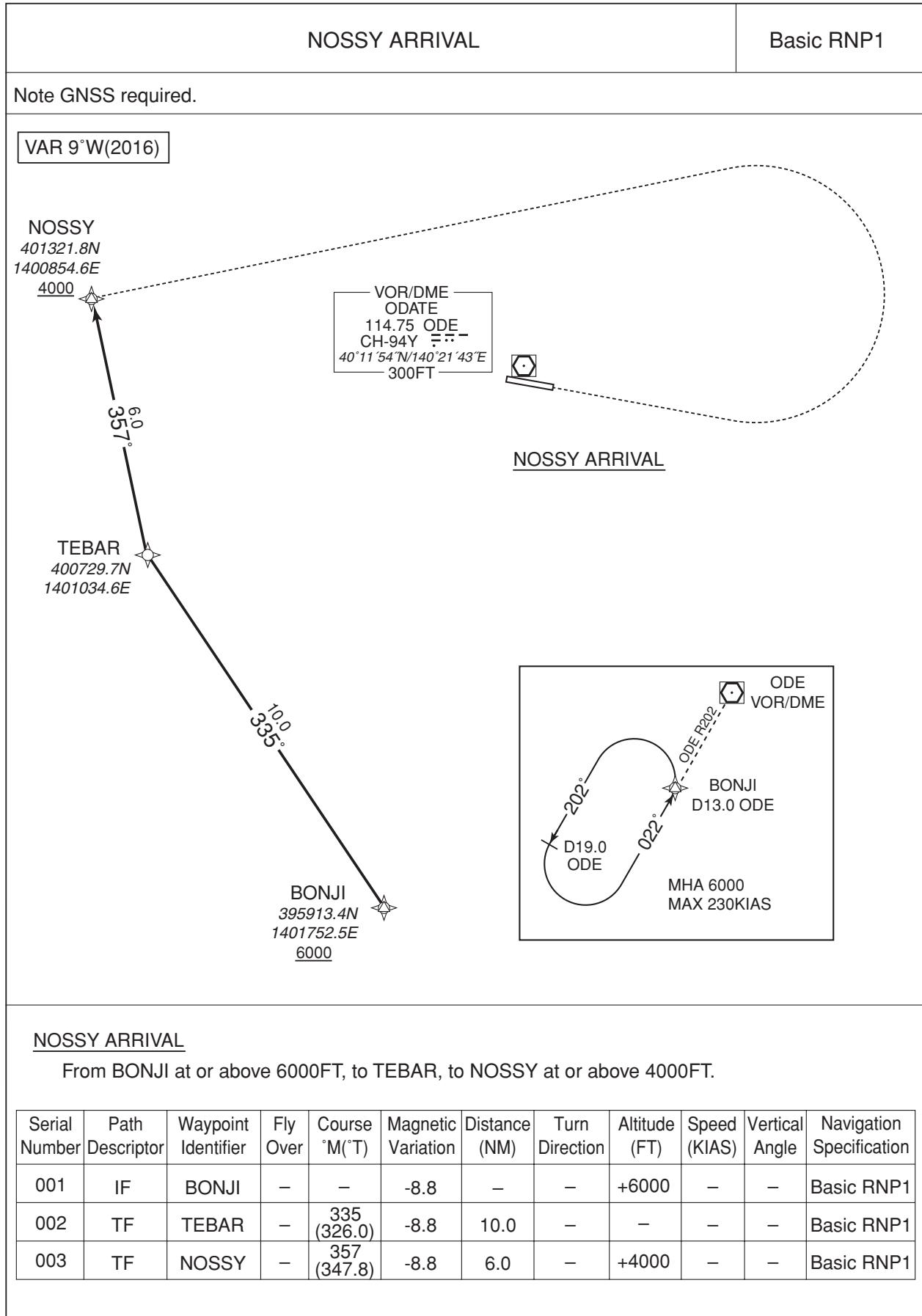
OBST ALT 656FT located at 2.1NM 276° FM end of RWY29.

LAGOON THREE DEPARTURE

STANDARD ARRIVAL CHART - INSTRUMENT

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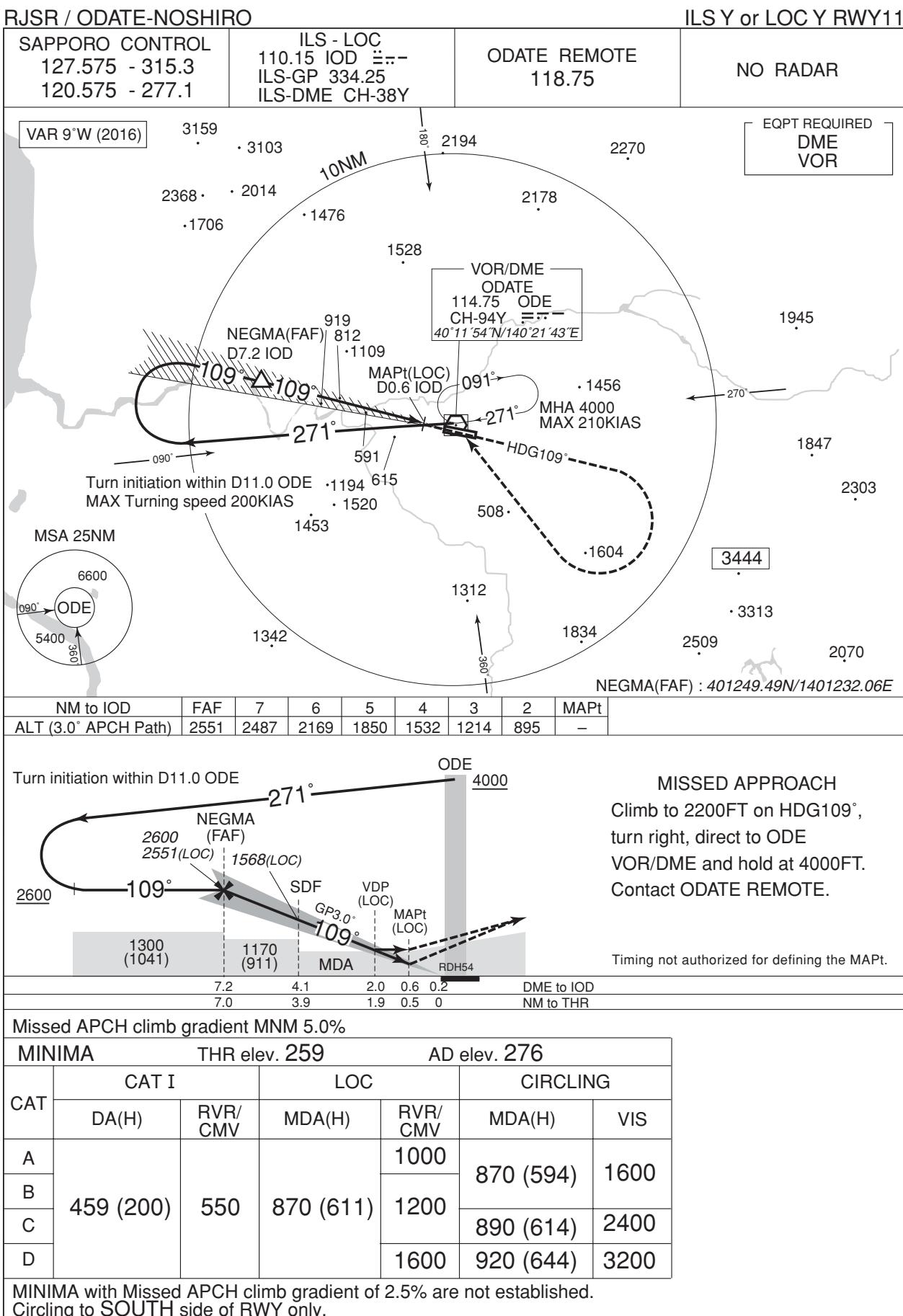
RNAV STAR RWY29



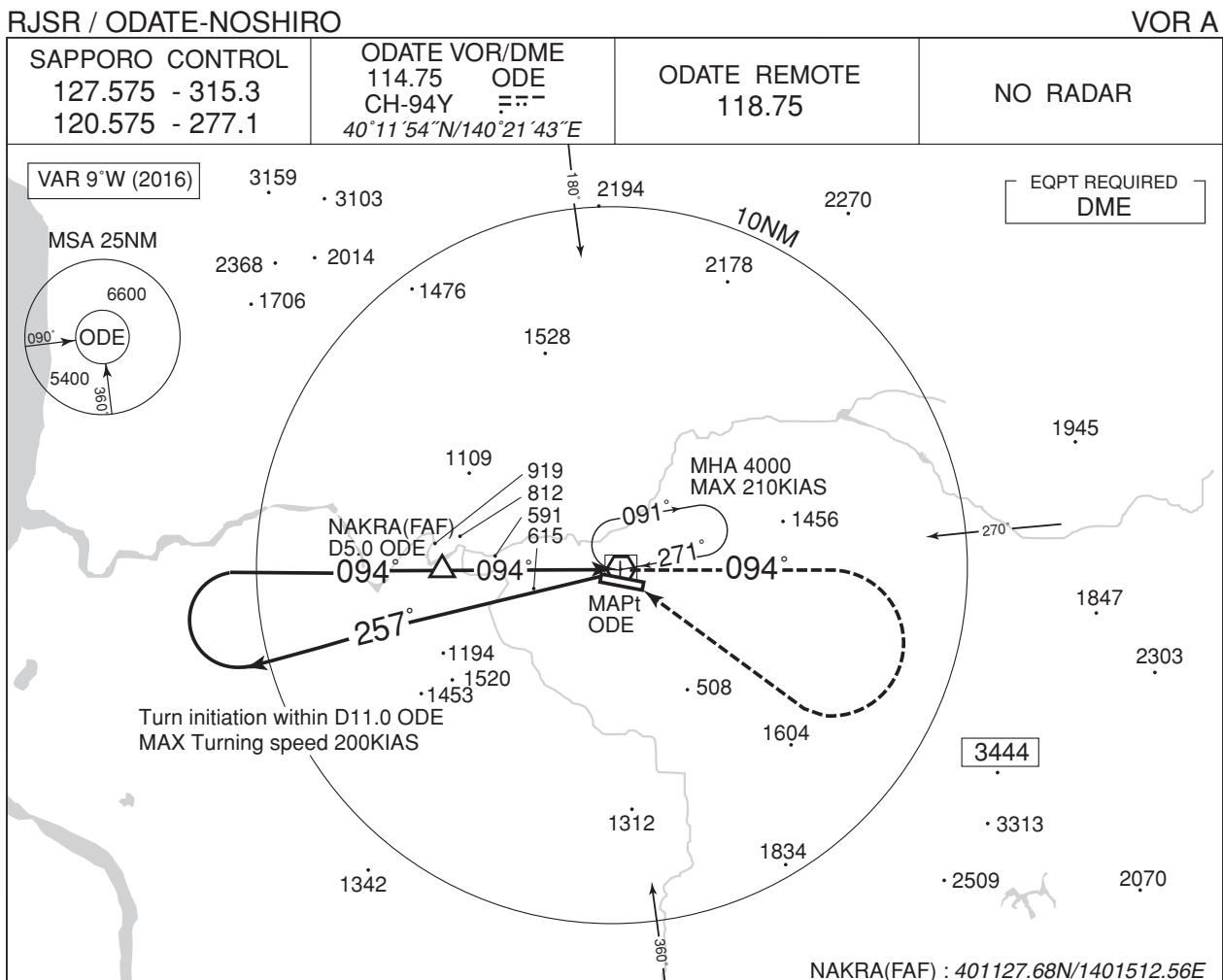
INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

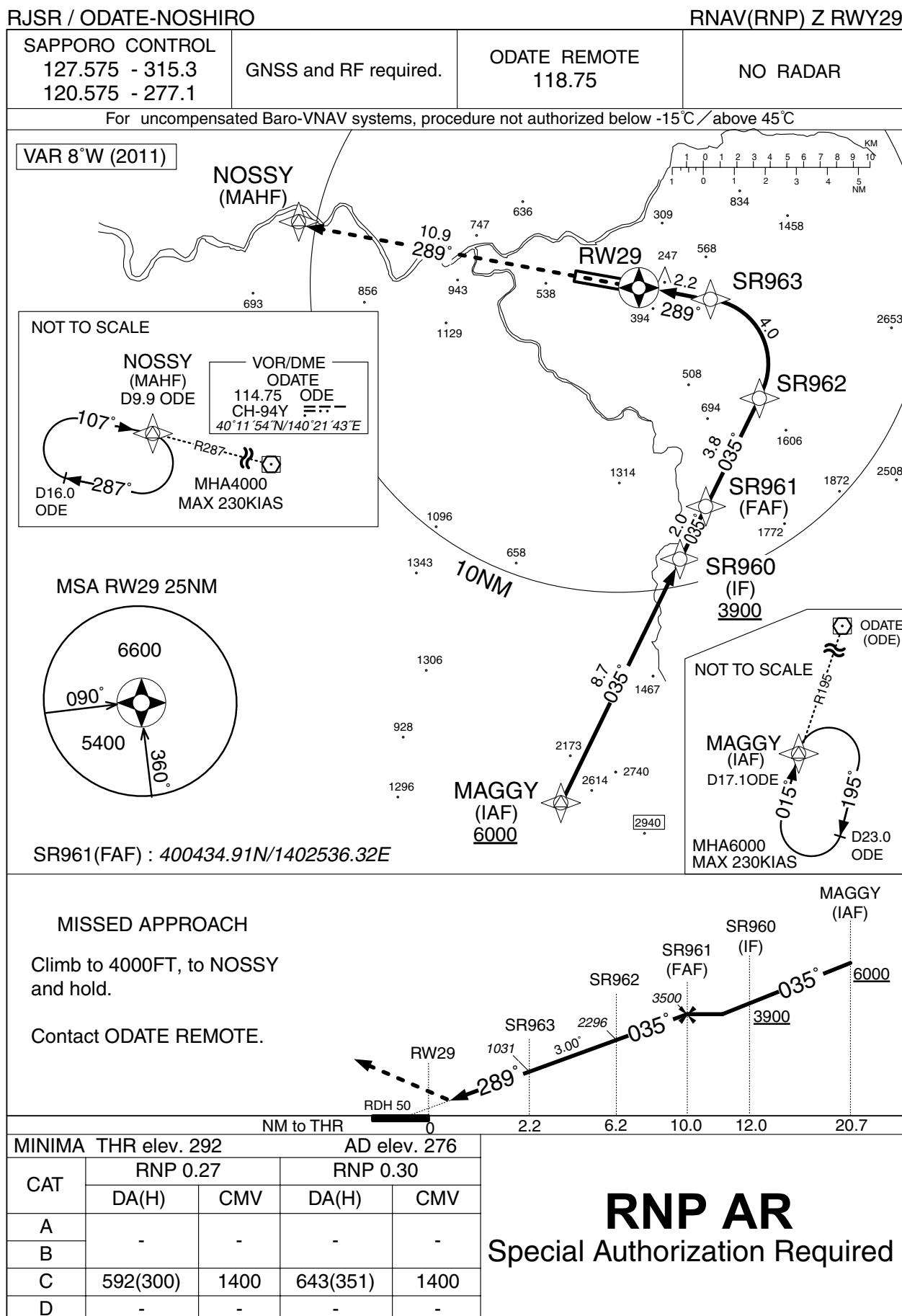


Missed APCH climb gradient MNM 4.0%

| MINIMA | | AD elev. 276 |
|--------|-----------|--------------|
| CAT | CIRCLING | |
| | MDA(H) | VIS |
| A | 870 (594) | 1600 |
| B | 890 (614) | 2400 |
| C | 920 (644) | 3200 |

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

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

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RNAV(RNP) Z RWY29

RNAV(RNP) Z RWY29

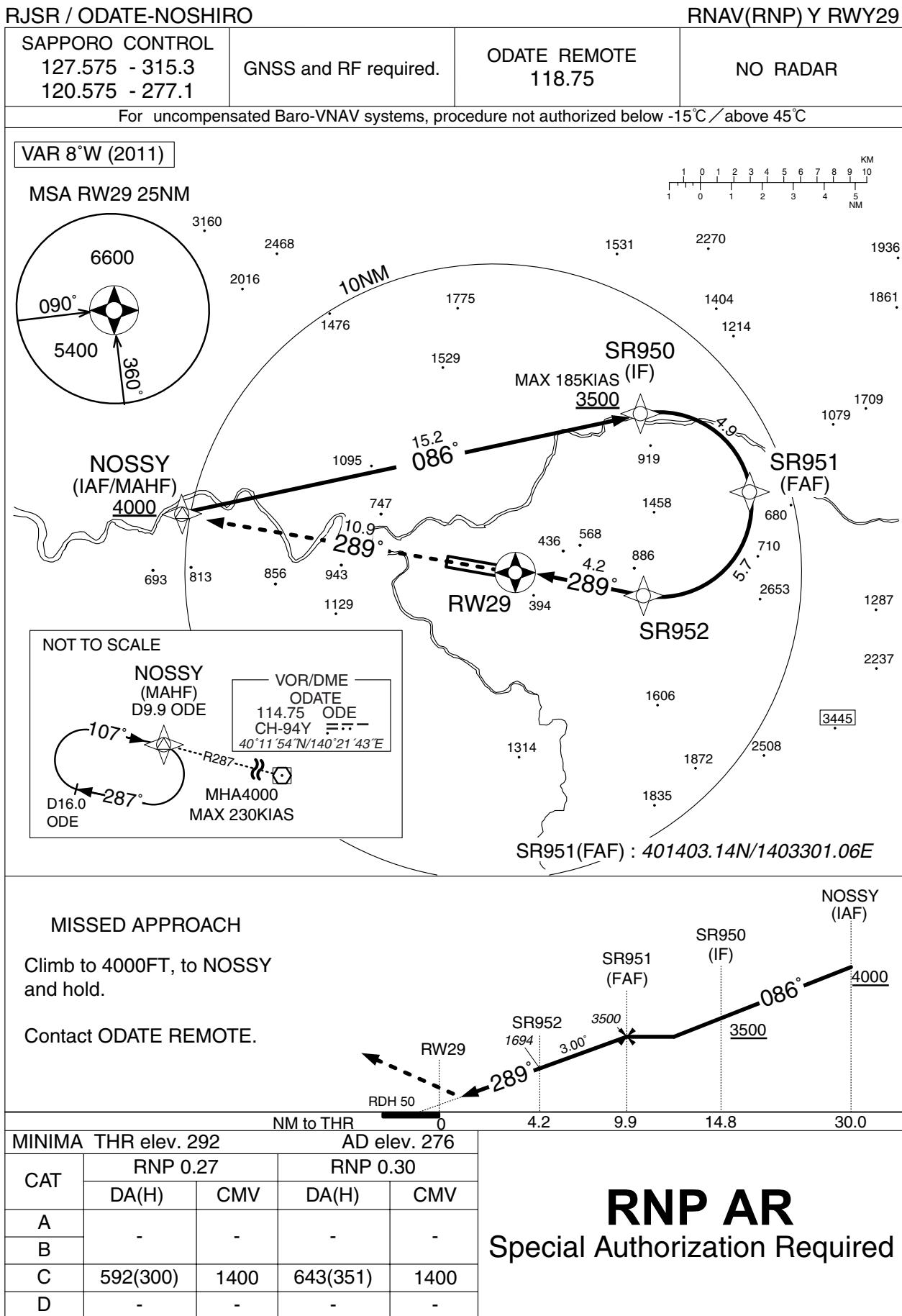
Coding Table

| 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 | MAGGY | — | — | -8.5 | — | — | +6000 | — | — | — |
| 002 | TF | SR960 | — | 035 (026.1) | -8.5 | 8.7 | — | +3900 | — | — | 1.0 |
| 003 | TF | SR961 | — | 035 (026.1) | -8.5 | 2.0 | — | 3500 | — | — | 1.0 |
| 004 | TF | SR962 | — | 035 (026.1) | -8.5 | 3.8 | — | 2296 | — | -3.00 | 0.27 0.30 |
| 005 | RF Center: SRRF1 r=2.15NM | SR963 | — | — | -8.5 | 4.0 | L | 1031 | — | -3.00 | 0.27 0.30 |
| 006 | TF | RW29 | Y | 289 (280.1) | -8.5 | 2.2 | — | 342 | — | -3.00/50 | 0.27 0.30 |
| 007 | TF | NOSSY | — | 289 (280.3) | -8.5 | 10.9 | — | 4000 | — | — | 1.0 |

Waypoint Coordinates

| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| MAGGY | 395456.61N / 1401926.80E | SRRF1 | 400855.54N / 1402516.24E |
| SR960 | 400247.11N / 1402427.29E | | |
| SR961 | 400434.91N / 1402536.32E | | |
| SR962 | 400758.60N / 1402746.93E | | |
| SR963 | 401102.48N / 1402545.54E | | |
| RW29 | 401125.10N / 1402258.78E | | |
| NOSSY | 401321.82N / 1400854.64E | | |

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJSR / ODATE-NOSHIRO

RNAV(RNP) Y RWY29

RNAV(RNP) Y RWY29

Coding Table

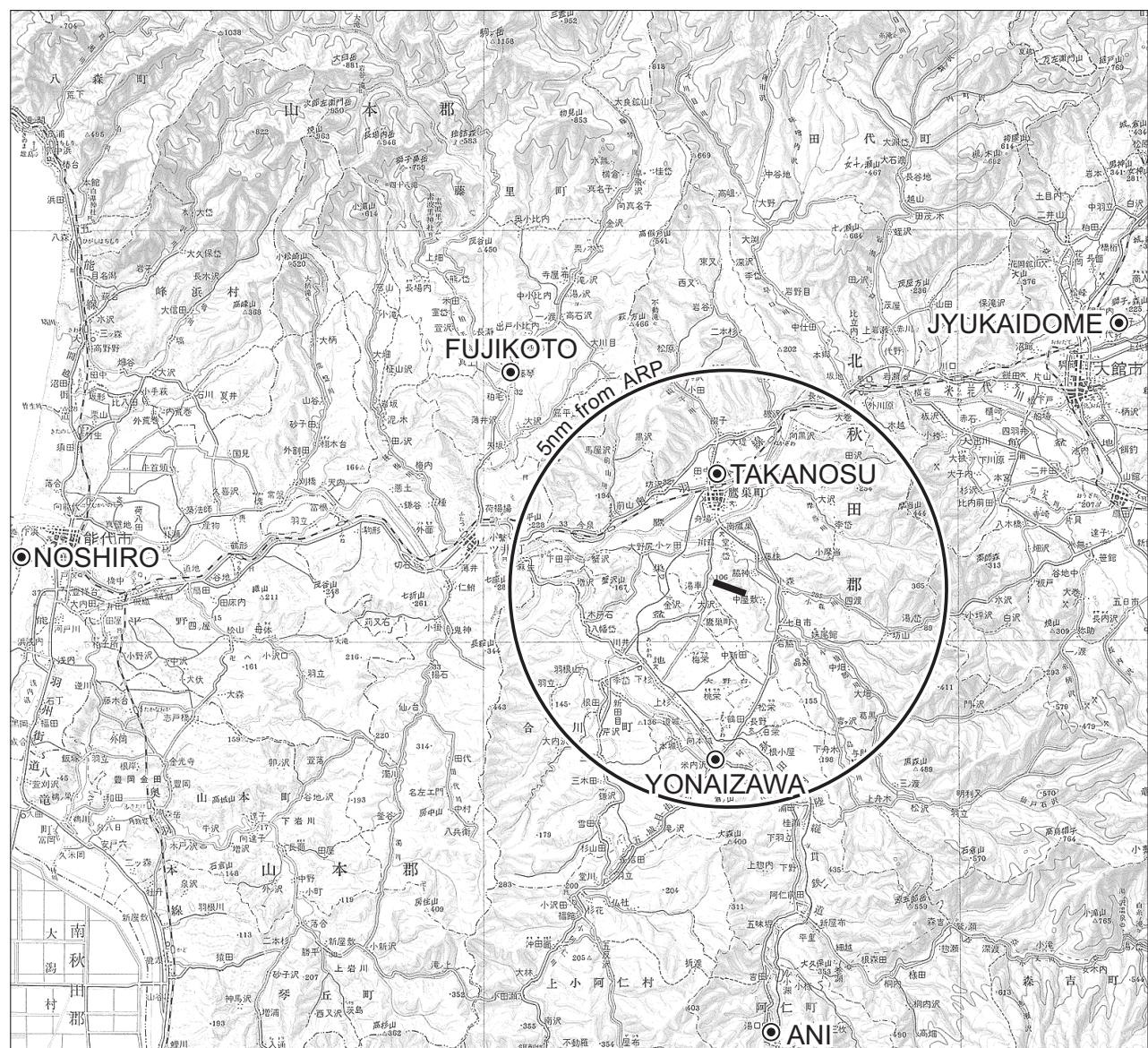
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course [°M(°T)] | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/RDH (°/FT) | RNP Value |
|---------------|---------------------------|---------------------|----------|-----------------|--------------------|---------------|----------------|---------------|--------------|----------------|-----------|
| 001 | IF | NOSSY | — | — | -8.5 | — | — | +4000 | — | — | — |
| 002 | TF | SR950 | — | 086 (077.7) | -8.5 | 15.2 | — | +3500 | -185 | — | 1.0 |
| 003 | RF Center: SRRF2 r=3.00NM | SR951 | — | — | -8.5 | 4.9 | R | 3500 | — | — | 1.0 |
| 004 | RF Center: SRRF2 r=3.00NM | SR952 | — | — | -8.5 | 5.7 | R | 1694 | — | -3.00 | 0.27 0.30 |
| 005 | TF | RW29 | Y | 289 (280.1) | -8.5 | 4.2 | — | 342 | — | -3.00/50 | 0.27 0.30 |
| 006 | TF | NOSSY | — | 289 (280.3) | -8.5 | 10.9 | — | 4000 | — | — | 1.0 |

Waypoint Coordinates

| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| SR950 | 401634.48N / 1402818.75E | SRRF2 | 401338.11N / 1402908.01E |
| SR951 | 401403.14N / 1403301.06E | | |
| SR952 | 401040.53N / 1402826.85E | | |
| RW29 | 401125.10N / 1402258.78E | | |
| NOSSY | 401321.82N / 1400854.64E | | |

RJSR/ODATE-NOSHIRO

Visual REP



| Call sign | BRG / DIST from ARP | Remarks |
|---------------------|---------------------|---|
| 鷹巣 Takanosu | 356°/ 3.0NM | JR駅北側 North of JR Station |
| 藤琴 Fujikoto | 316°/ 7.0NM | 粕毛川・藤琴川交点 Intersection Kasuge and Fujikoto River |
| 樹海ドーム JyukaiDome | 058°/11.9NM | 大館市白色ドーム White Dome Odate City |
| 米内沢 Yonaizawa | 181°/ 4.2NM | 内陸線米内沢駅南側米内沢橋 Bridge |
| 能代 Noshiro | 272°/17.4NM | 能代港 Noshiro Harbor |
| 阿仁 Ani | 173°/11.8NM | 内陸線阿仁合駅 Station |

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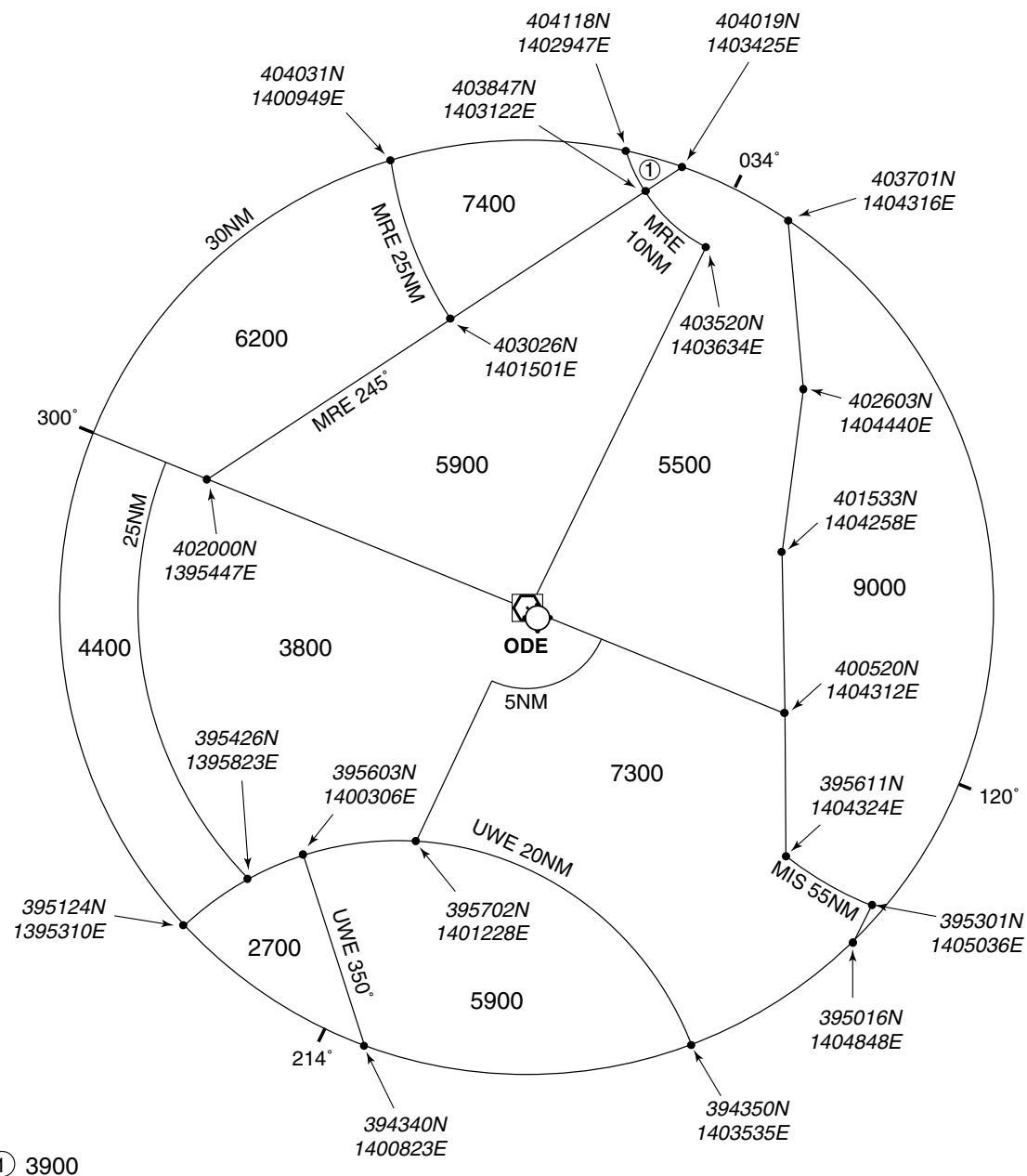
LDG CHART



RJSR / ODATE-NOSHIRO

Minimum Vectoring Altitude CHART

VAR 8°W (1998)



CENTER : 401154N/1402143E (ODE VOR/DME)