AD 2 AERODROMES

RJNT AD 2.1 AERODROME LOCATION INDICATOR AND NAME

RJNT - TOYAMA

RJNT AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	*363854N/1371115E* 201°/1.0km FM RWY 20 THR
2	Direction and distance from (city)	3NM SSW FM Toyama city
3	Elevation/ Reference temperature	77ft / 32°C(2003-2007)
4	Geoid undulation at AD ELEV PSN	127ft
5	MAG VAR/ Annual change	8° W(2009) / 0’
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Toyama pref. Public AP. Toyama Airport Administration Office 30, Akigashima, Toyama city, Toyama Pref. 939-8252 Japan Tel: 076-495-3055 Fax: 076-495-3064
7	Types of traffic permitted(IFR/ VFR)	IFR/VFR
8	Remarks	Toyama Airport Office(CAB) 35 Akigashima, Toyama city, Toyama Pref. 939-8252 Japan Tel: 076-495-3088 Fax: 076-429-6762

RJNT AD 2.3 OPERATIONAL HOURS

1	AD Administration	2200 - 1230
2	Customs and immigration	2330 - 0815
3	Health and sanitation	Quarantine(human): 2330-0815 Quarantine(animal, plant): INTL SKED FLT hours only
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (TOKYO)
7	ATS	2200 - 1230
8	Fuelling	2100 - 1230
9	Handling	2100 - 1230
10	Security	2100 - 1230
11	De-icing	
12	Remarks	Nil

RJNT AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	AVBL up to B777-200 ACFT
2	Fuel/ oil types	Fuel: JET A1, Oil: Turbine grades
3	Fuelling facilities/ capacity	Fuel truck : 28 liter/sec
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJNT AD 2.5 PASSENGER FACILITIES

1	Hotels	Nil
2	Restaurants	At airport
3	Transportation	Buses and Taxi
4	Medical facilities	First aid treatment: hospital in Toyama city 5km
5	Bank and Post Office	Nil
6	Tourist Office	At airport
7	Remarks	Nil

RJNT 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, Emergency medical equipments conveyance truck
3	Capability for removal of disabled aircraft	Ask AD administration
4	Remarks	Nil

RJNT AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Snow removal equipments: Snow sweeper x 2, Snow plow x 6, Rotary snow remover x 3
2	Clearance priorities	RWY 02/20 TWY T1,T2 APRON
3	Remarks	Seasonal availability: All seasons Snow removal will be commenced, if the RWY and TWY are covered with a depth of 3cm snow or more. TWY/APN to measure the coefficient of friction: TWY T1, T2, A-APRON

RJNT AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	A-Apron: 7-1 / Surface:Concrete Strength: PCR 785/R/B/W/T 7-2 / Surface:Concrete Strength: PCR 576/R/B/W/T B-Apron: B-1 / Surface:Asphalt Strength: PCR 177/F/A/X/T B-2 / Surface:Asphalt Strength: AUW 5700kg/0.28MPa B-3 / Surface:Asphalt Strength: AUW 5700kg/0.28MPa B-4 / Surface:Asphalt Strength: PCR 325/F/A/X/T
2	Taxiway width, surface and strength	TWY T1,T2 Width: 30m Surface:Asphalt Strength: PCR 741/F/A/X/T
3	ACL and elevation	Not available
4	VOR checkpoints	Not Available
5	INS checkpoints	Spot NR 1:*363834.76N/1371117.92E* 2:*363836.74N/1371118.52E* 3:*363838.61N/1371119.08E* 5:*363840.35N/1371119.53E* 6:*363842.20N/1371119.92E* 7:*363845.06N/1371117.44E*
6	Remarks	Nil

RJNT AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands	Aircraft stand identification signs: Spot 1,2,3,5,6,7
2	RWY and TWY markings and LGT	RWY: RWY02/20 (Marking) RWY designation, RWY CL, RWY THR, RWY middle point, Fixed DIST, RWY side stripe, RWY turn pad edge, RWY turn pad CL (LGT) RCLL, REDL, RTHL, RENL, RWY DIST marker, Turning point indicator LGT TWY: (Marking) TWY CL, RWY HLDG PSN, TWY side stripe,Mandatory instruction (LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area (LGT) APN flood LGT

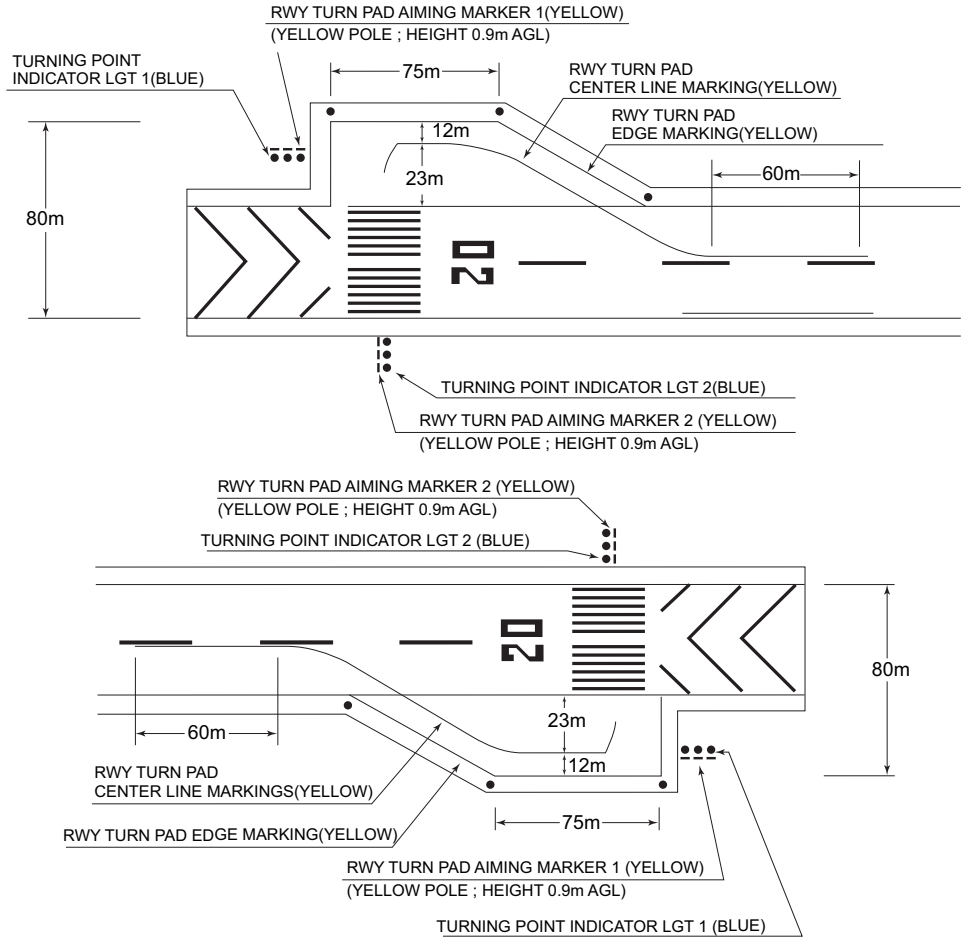
180° Turn on RWY

B777-200型機の滑走路180転回実施要領

1. 滑走路中心線からターニングパット中心線標識に従って進行する。
2. 経路目標標識1または転回灯1が一直線に見えるように進行し，経路目標標識2または転回灯2が一直線に見えたとき転回を開始する。転回時のSTEERING ANGLE は59度以上を使用する。

Procedure of 180° turn on RWY of B777-200 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 RWY Turn Pad Aiming Marker 1 or Turning Point Indicator Light 1 on a straight line, then commence turn at the spot where you (pilot) can see the RWY Turn Pad Aiming Marker 2 or Turning point Indicator Light 2 on a straight line at an angle of 9 o'clock. When turning, take 59° or more steering angle.



RJNT AD 2.10 AERODROME OBSTACLES

See AD2.24 LDG Chart

In approach/TKOF areas

RWY/Area affected	Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
RWY 02	Pylon	*363702N/1371050E*	270ft	Marking/ -	OBST NR 22
RWY 02	Pylon	*363701N/1371037E*	279ft	Marking/ -	OBST NR 23
RWY 02	Factory	*363753N/1371059E*	149ft	- /LIL	OBST NR 29
RWY 20	Pylon	*364046N/1371131E*	220ft	Marking/LIL	OBST NR 1
RWY 20	Pylon	*364036N/1371152E*	213ft	Marking/LIL	OBST NR 2
RWY 20	Bridge	*363947N/1371130E*	97ft	Marking/LIL	OBST NR 3

In circling area and at AD

Obstacle type	Coordinates	Elevation	Markings/LGT	Remarks
Pylon	*363947N/1371244E*	256ft	Marking/LIL	OBST NR 4
Pylon	*363938N/1371249E*	233ft	Marking/LIL	OBST NR 5
Pylon	*363921N/1371224E*	246ft	Marking/LIL	OBST NR 6
Pylon	*363914N/1371231E*	249ft	- /LIL	OBST NR 7
Pylon	*363908N/1371243E*	262ft	- /LIL	OBST NR 8
Pylon	*363901N/1371249E*	259ft	Marking/LIL	OBST NR 9
Pylon	*363854N/1371255E*	263ft	- /LIL	OBST NR 10
Pylon	*363844N/1371303E*	282ft	- /LIL	OBST NR 11
Pylon	*363835N/1371311E*	299ft	Marking/LIL	OBST NR 12
Pylon	*363805N/1371256E*	212ft	- /LIL	OBST NR 13
Pylon	*363801N/1371247E*	261ft	Marking/LIL	OBST NR 14
Pylon	*363756N/1371236E*	273ft	Marking/LIL	OBST NR 15
Pylon	*363747N/1371219E*	236ft	- /LIL	OBST NR 16
Pylon	*363740N/1371211E*	238ft	Marking/LIL	OBST NR 17
Pylon	*363733N/1371204E*	228ft	- /LIL	OBST NR 18
Pylon	*363719N/1371151E*	249ft	Marking/LIL	OBST NR 19
Pylon	*363743N/1371013E*	231ft	Marking/LIL	OBST NR 20
Pylon	*363729N/1371024E*	222ft	Marking/LIL	OBST NR 21

RJNT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

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

RJNT AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCR) 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
02	013.59°	2000×45	PCR 741/F/A/X/T Asphalt-Concrete	*363822.79N* *1371105.23E* 127ft	THR ELEV: 95ft
20	193.59°	2000×45	PCR 741/F/A/X/T Asphalt-Concrete	*363925.86N* *1371124.14E* 127ft	THR ELEV: 63ft

Slope of RWY	Strip Dimensions(M)	RESA(Overrun) Dimensions(M)	Remarks
7	10	11	14
See AD2.24 AD chart	2120×150	43x(MNM:120 MAX:150)*	RWY Grooving: 2000×30m
See AD2.24 AD chart	2120×150	43x(MNM:117 MAX:150)*	RWY Grooving: 2000×30m
		*For detail, ask airport administrator	

RJNT AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
02	2000	2000	2000	2000	Nil
20	2000	2000	2000	2000	Nil

RJNT 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
02	-	Green	PAPI 3.0/LEFT 444.25m 63ft	-	2000m 30m Coded color (White/Red) LIH	2000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
20	SALS 405m (*1)	Green	PAPI 3.0/LEFT 360.07m 63ft	-	2000m 30m Coded color (White/Red) LIH	2000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
Remarks								
10								
SALS with RAI(LEN:495m)(*1) Overrun area edge LGT(LEN:60m Color:Red)(*2) CGL for RWY 02 RWY THR ID LGT for RWY 02 THR(Color : White)								

RJNT AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN:*363828N/1371122E*, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI:Nil Anemometer: RWY20 : 190m FM RWY 20 THR, LGTD RWY02 : 240m FM RWY 02 THR, LGTD
3	TWY edge and center line lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 15 sec: All lights
5	Remarks	WDI LGT

RJNT AD 2.16 HELICOPTER LANDING AREA

Nil

RJNT 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
TOYAMA CTR	Area within a radius of 5nm(9km) of TOYAMA ARP (*3639N/13711E*)	3,000 or below	D	TOYAMA TWR En	

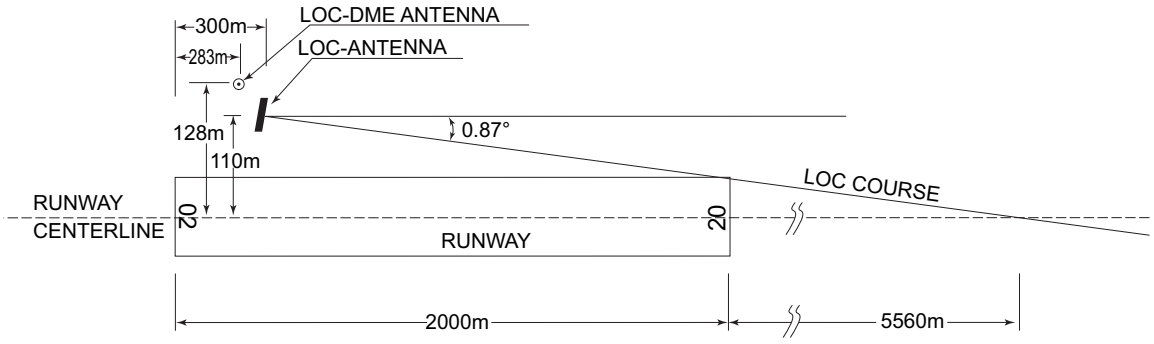
RJNT AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	Toyama Tower	124.3MHz(1) 126.2MHz	2200 - 1230	(1)Primary

RJNT 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/2011)	TOE	110.85MHz	2200 - 1230	*363907.88N/ 1371128.00E*	-	
DME	TOE	1132MHz (CH-45Y)	2200 - 1230	*363907.88N/ 1371128.00E*	116ft	
LOC 20	ITO	109.3MHz	2200 - 1230	*363833.11N/ 1371103.77E*	-	LOC : 300m (984ft) inside FM RWY 02 THR, 110m(361ft) W of RCL. BRG (MAG) 201°. Off set angle 0.87°.
LOC-DME 20	ITO	991MHz (CH-30X)	2200 - 1230	*363832.69N/ 1371102.88E*	98ft	DME : 283m(928ft) inside FM RWY 02 THR, 128m(420ft) W of RCL.
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based

TOYAMA AIRPORT



REMARKS : 1.LOC OFF SET ANGLE 0.87°
2.LOC beam BRG(MAG) 201°
3.ELEV of LOC-DME 29.8m(98 ft)

RJNT AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

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.

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

RJNT AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJNT AD 2.22 FLIGHT PROCEDURES

1.TAKE OFF MINIMA

	RWY	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAY ONLY)	
		RVR	CEIL-VIS	RVR	CEIL-VIS	RVR	CEIL-VIS
Multi-Engine ACFT with TKOF ALTN AP filed	02	-	0'-400m	-	0'-400m	-	0'-500m
	20	-	200'-800m	-	200'-800m	-	200'-800m
OTHER	02	AVBL LDG MINIMA					
	20						

RJNT AD 2.23 ADDITIONAL INFORMATION

Nil

RJNT AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Standard Departure Chart - Instrument (IKUJI)
Standard Departure Chart - Instrument (URUSI REVERSAL)
Standard Departure Chart - Instrument (UOZU-RNAV)
Standard Arrival Chart - Instrument (OHANA, TOYAMA)
Standard Arrival Chart - Instrument (NANAO-RNAV)
Standard Arrival Chart - Instrument (MANYO-RNAV)
Standard Arrival Chart - Instrument (GENGE-RNAV)
Instrument Approach Chart (LOC Z RWY 20)
Instrument Approach Chart (LOC Y RWY 20)
Instrument Approach Chart (RNP Z RWY20)
Instrument Approach Chart (RNP Y RWY20(AR))
Instrument Approach Chart (RNP RWY02(AR))
Instrument Approach Chart (VOR A)
Other Chart (Visual REP)
Other Chart (LDG Chart)
Other Chart (MVA Chart)

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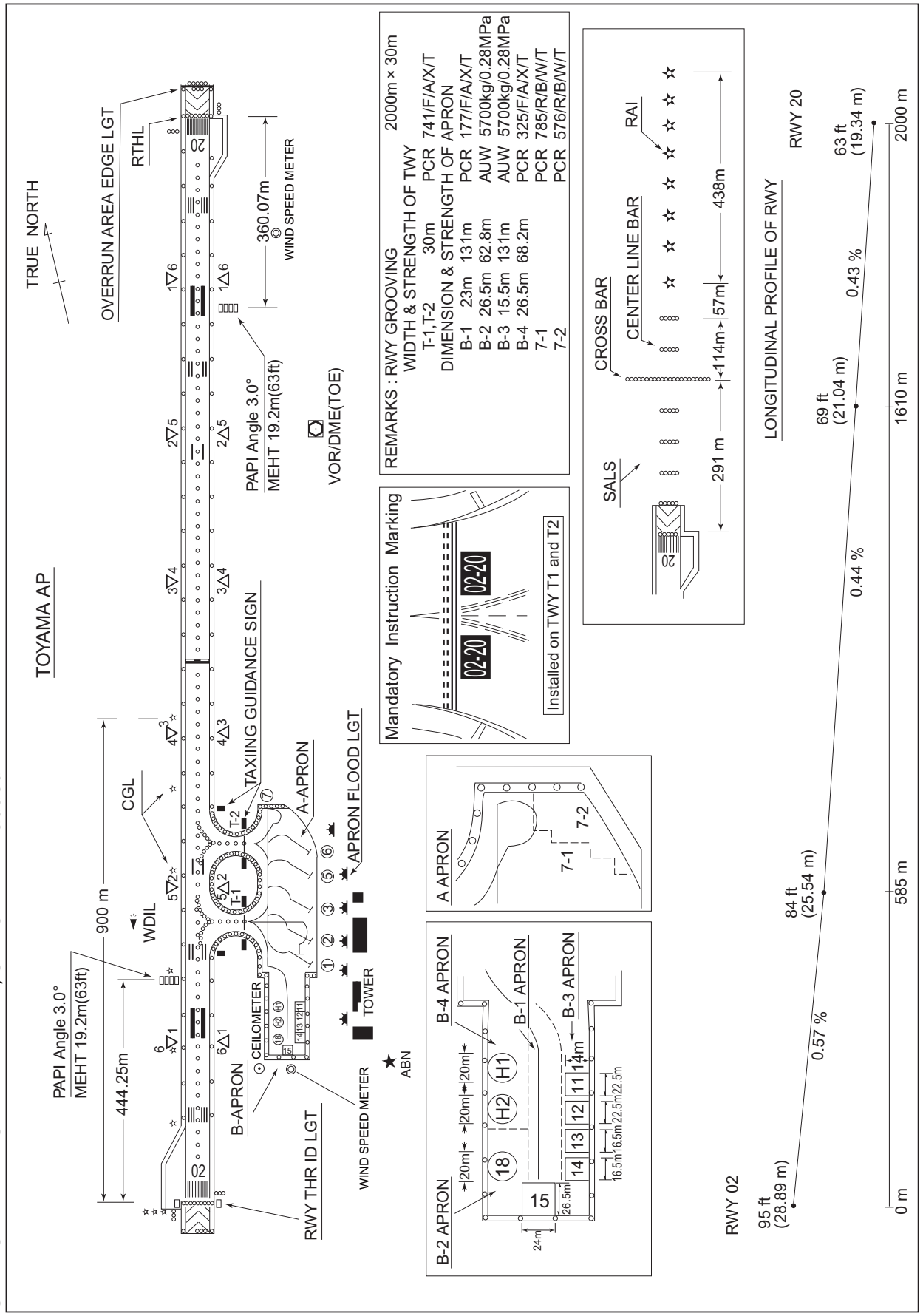
RJNT / TOYAMA AD CHART

CHANGE : WIND SPEED METER, CEILOMETER added.



STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA SID and TRANSITION

IKUJI FIVE DEPARTURE

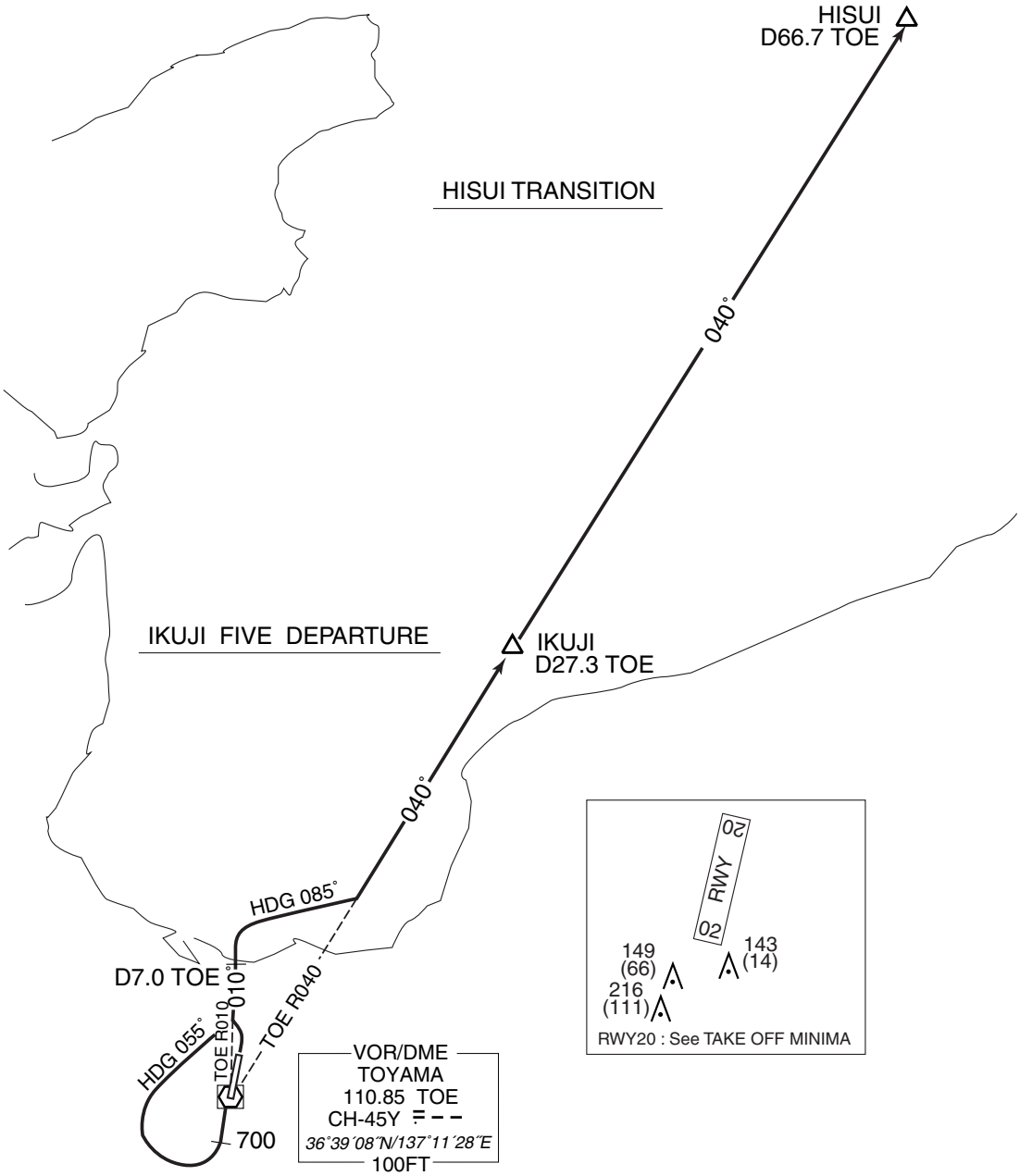
RWY02 : Climb via TOE R010 to 7.0DME...

RWY20 : Climb RWY HDG until 700FT, turn right HDG 055˚ to intercept and proceed via TOE R010 to TOE 7.0DME...
...turn right HDG 085˚ to intercept and proceed via TOE R040 to IKUJI.

NOTE RWY20 : 5.0% climb gradient required up to 2000FT.
OBST ALT 762FT located at 3.8NM 202˚ FM end of RWY20.

HISUI TRANSITION

From over IKUJI, climb via TOE R040 to HISUI.



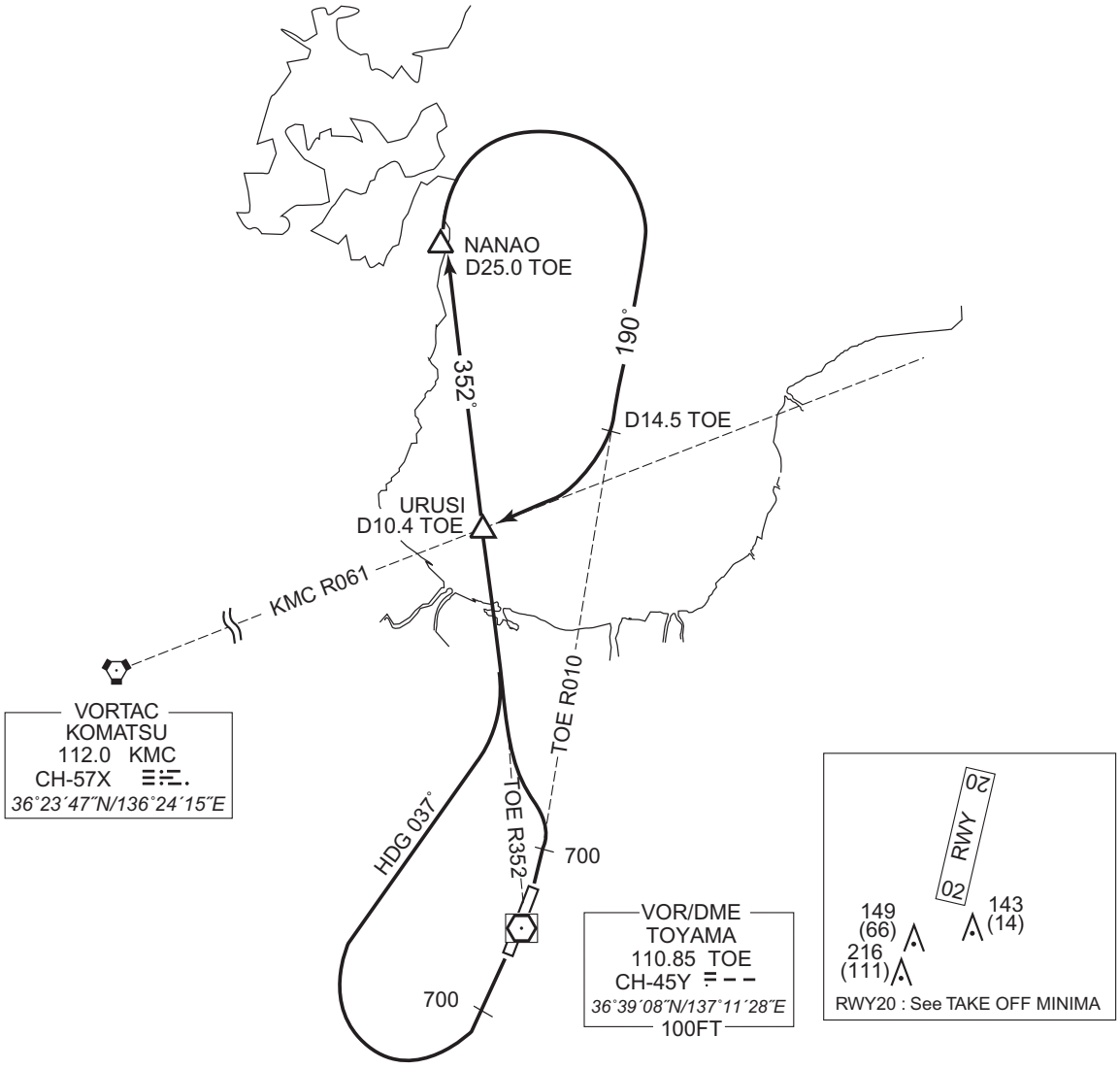
STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA SID

URUSI REVERSAL FOUR DEPARTURE

RWY02 : Climb RWY HDG until 700FT, turn left, climb...
RWY20 : Climb RWY HDG until 700FT, turn right HDG 037˚ to intercept and proceed...
...via TOE R352 to NANAO, turn right, proceed via TOE R010 to intercept and proceed via KMC R061 to URUSI.

NOTE RWY02 : 4.0% climb gradient required up to 1000FT.
OBST ALT 621FT located at 2.8NM 345˚ FM end of RWY02.
RWY20 : 5.0% climb gradient required up to 2000FT.
OBST ALT 762FT located at 3.8NM 202˚ FM end of RWY20.



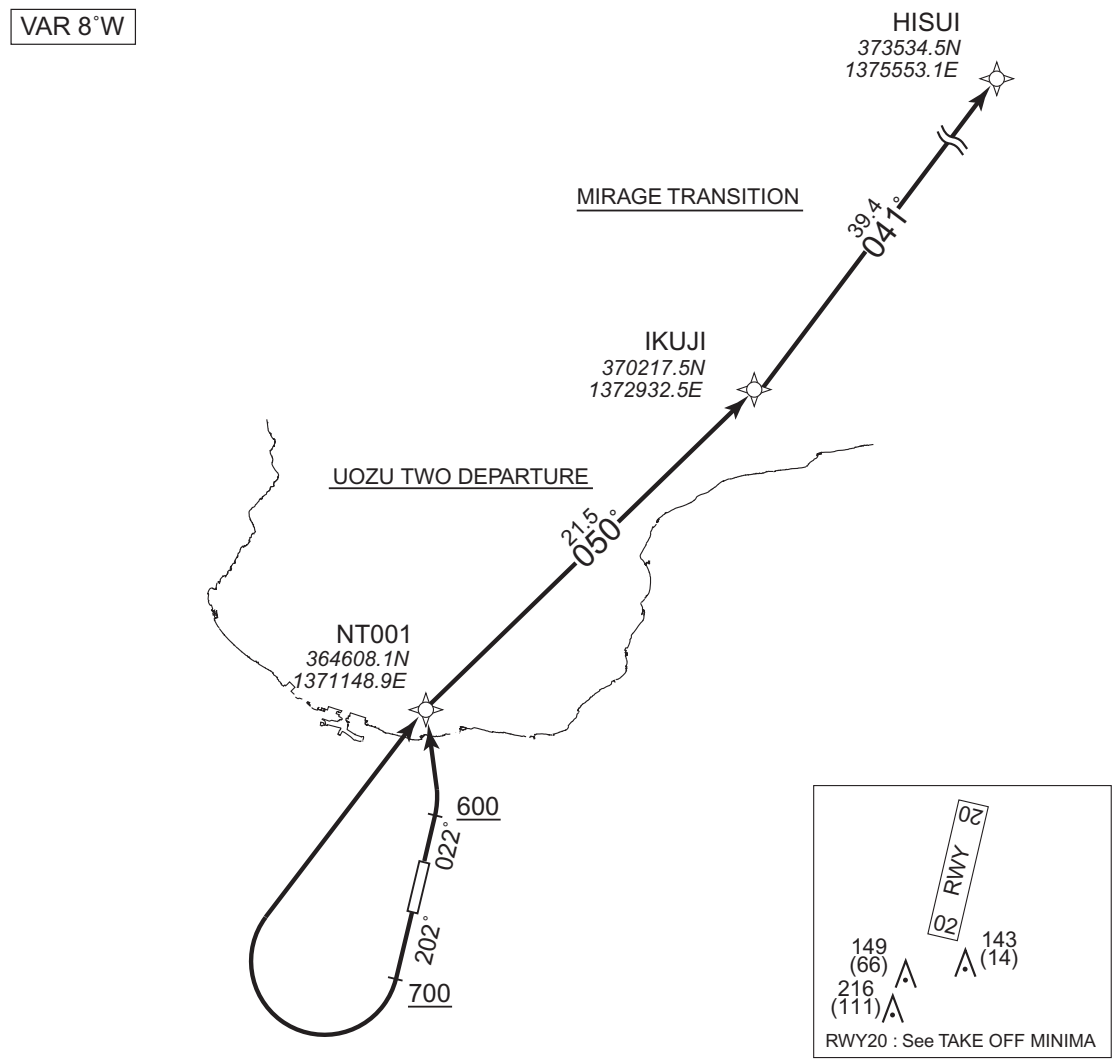
CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA — RNAV SID and TRANSITION

UOZU TWO DEPARTURE MIRAGE TRANSITION	RNP1

Note GNSS required.



UOZU TWO DEPARTURE

RWY02 : Climb on HDG 022˚ at or above 600FT, direct to NT001, to IKUJI.

RWY20 : Climb on HDG 202˚ at or above 700FT, turn right direct to NT001, to IKUJI.

NOTE RWY02 : 5.0% climb gradient required up to 600FT.
OBST ALT 517FT located at 2.8NM 351˚ FM end of RWY02.

RWY20 : 5.0% climb gradient required up to 2000FT.
OBST ALT 762FT located at 3.8NM 202˚ FM end of RWY20.

MIRAGE TRANSITION

From IKUJI, to HISUI.

CHANGE : Description of VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA RNAV SID and TRANSITION

UOZU TWO DEPARTURE

RWY02

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	-	-	022 (013.5)	-8.5	-	-	+600	-	-	RNP1
002	DF	NT001	-	-	-8.5	-	-	-	-	-	RNP1
003	TF	IKUJI	-	050 (041.2)	-8.5	21.5	-	-	-	-	RNP1

RWY20

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	-	-	202 (193.5)	-8.5	-	-	+700	-	-	RNP1
002	DF	NT001	-	-	-8.5	-	R	-	-	-	RNP1
003	TF	IKUJI	-	050 (041.2)	-8.5	21.5	-	-	-	-	RNP1

MIRAGE 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	IKUJI	-	-	-8.5	-	-	-	-	-	RNP1
002	TF	HISUI	-	041 (032.1)	-8.5	39.4	-	-	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT

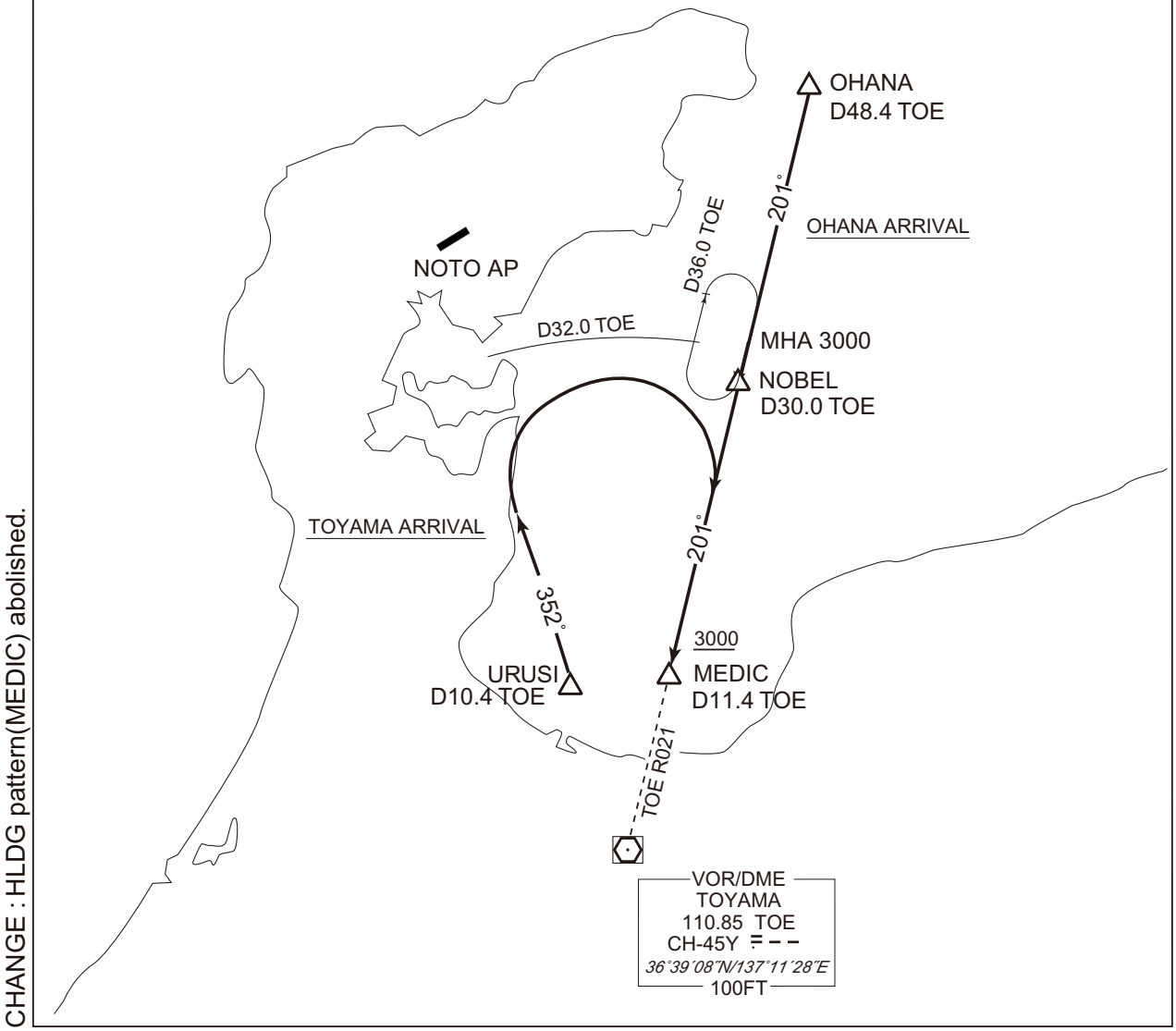
RJNT / TOYAMA STAR

OHANA ARRIVAL

From over OHANA, proceed via TOE R021 to MEDIC.
Cross MEDIC at or above 3000FT.

TOYAMA ARRIVAL

From over URUSI, proceed via TOE R352, turn right to intercept and proceed via TOE R021 to MEDIC within TOE 32.0DME.
Cross MEDIC at or above 3000FT.



CHANGE : HLDG pattern(MEDIC) abolished.

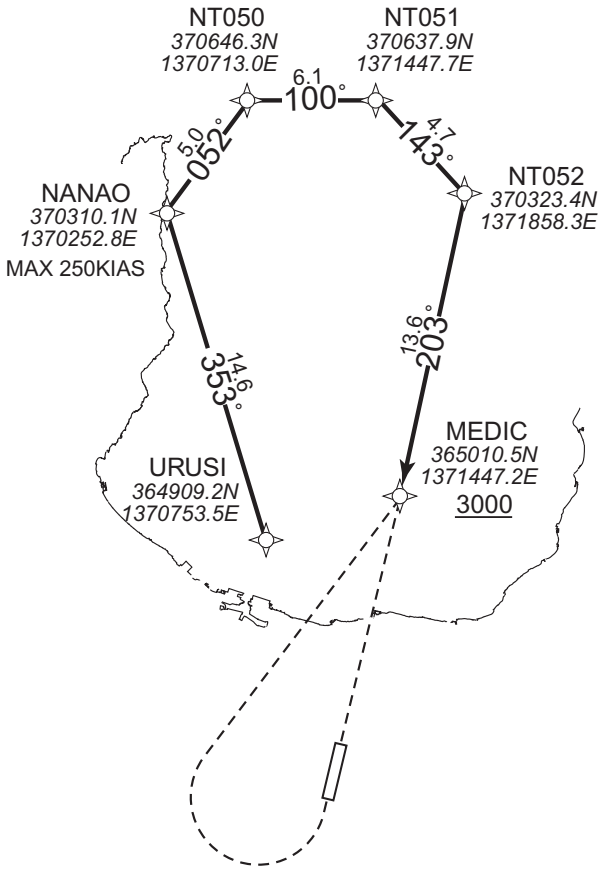
STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA RNAV STAR

NANAO ARRIVAL	RNP1

Note GNSS required.

VAR 8˚W



From URUSI, to NANAO, to NT050, to NT051, to NT052, to MEDIC at or above 3000FT.

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	URUSI	–	–	-8.5	–	–	–	–	–	RNP1
002	TF	NANAO	–	353 (344.1)	-8.5	14.6	–	–	-250	–	RNP1
003	TF	NT050	–	052 (043.8)	-8.5	5.0	–	–	–	–	RNP1
004	TF	NT051	–	100 (091.3)	-8.5	6.1	–	–	–	–	RNP1
005	TF	NT052	–	143 (134.2)	-8.5	4.7	–	–	–	–	RNP1
006	TF	MEDIC	–	203 (194.2)	-8.5	13.6	–	+3000	–	–	RNP1

CHANGE : Description of PROC name and VAR.

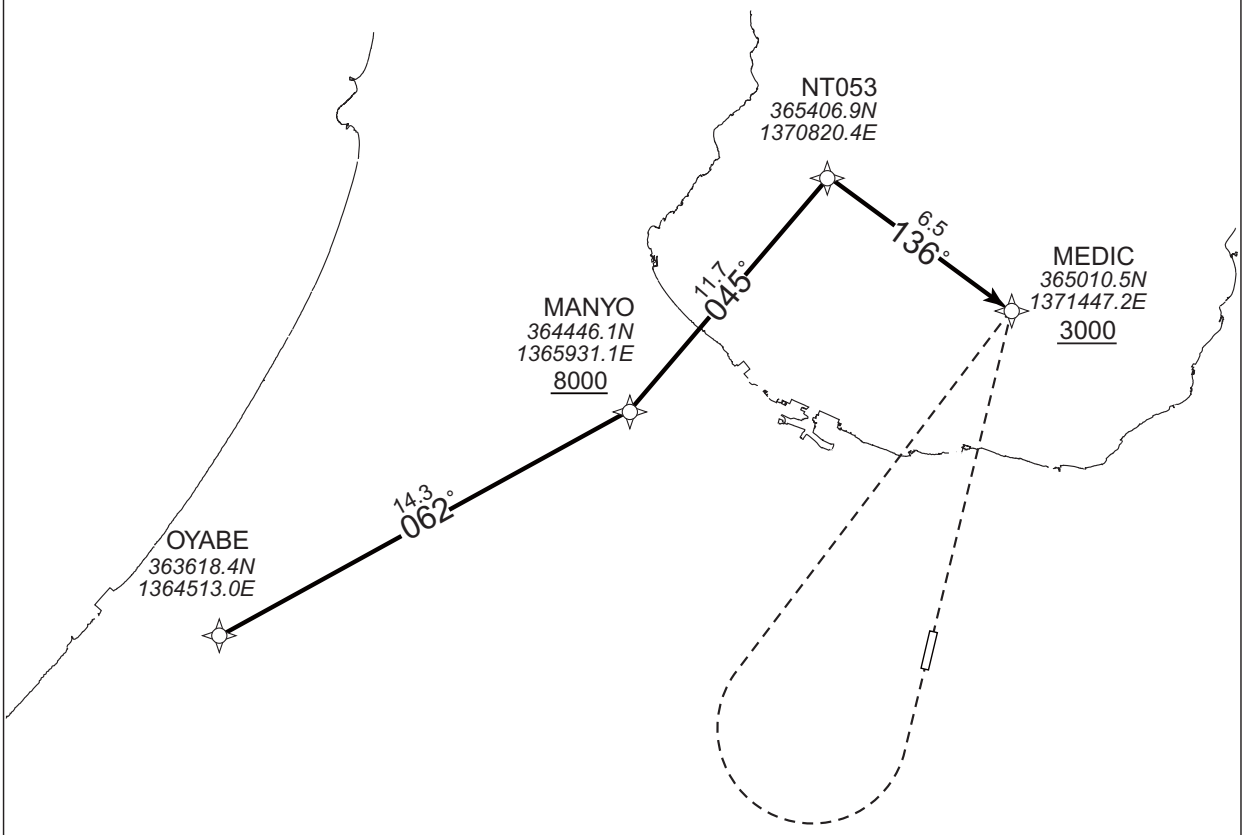
STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA RNAV STAR

MANYO ARRIVAL | RNP1

Note GNSS required.

VAR 8˚W



CHANGE : Description of PROC name and VAR.

From OYABE, to MANYO at or above 8000FT, to NT053, to MEDIC at or above 3000FT.

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	OYABE	–	–	-8.5	–	–	–	–	–	RNP1
002	TF	MANYO	–	062 (053.5)	-8.5	14.3	–	+8000	–	–	RNP1
003	TF	NT053	–	045 (037.0)	-8.5	11.7	–	–	–	–	RNP1
004	TF	MEDIC	–	136 (127.4)	-8.5	6.5	–	+3000	–	–	RNP1

STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

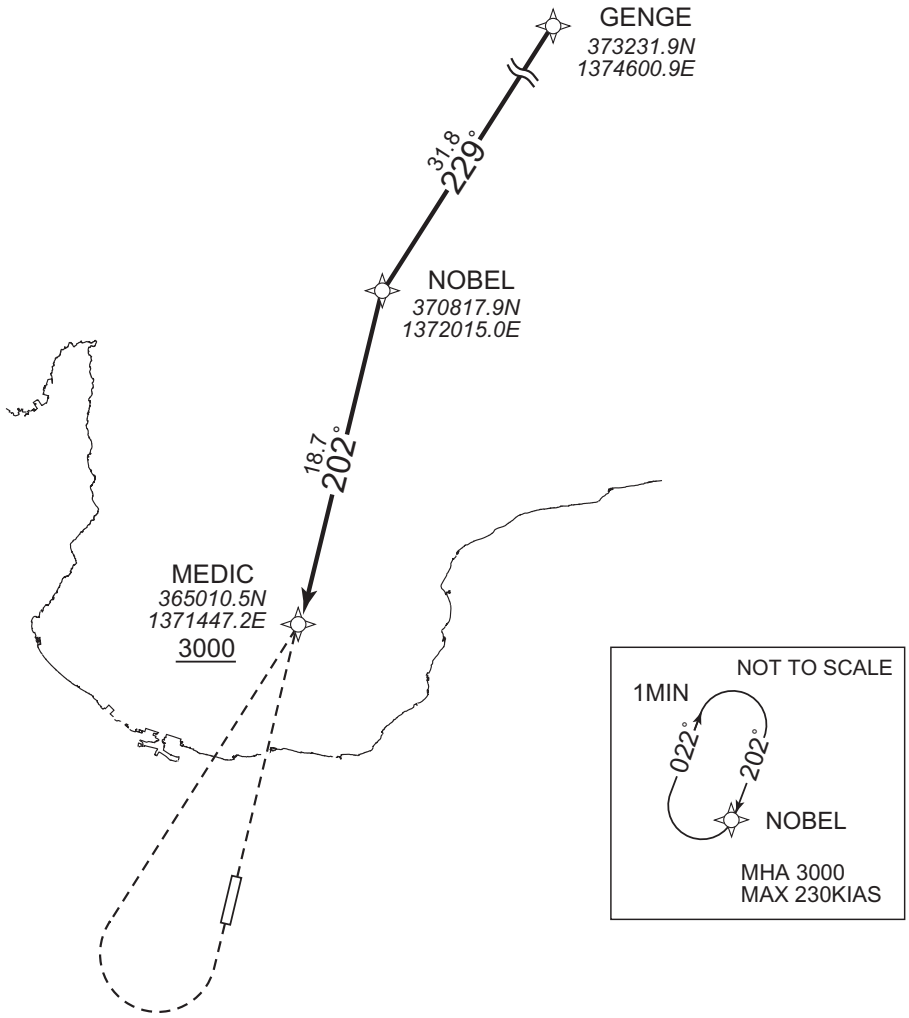
RNAV STAR

GENGE ARRIVAL

RNP1

Note GNSS required.

VAR 8˚W



From GENGE, to NOBEL, to MEDIC at or above 3000FT.

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	GENGE	–	–	-8.5	–	–	–	–	–	RNP1
002	TF	NOBEL	–	229 (220.3)	-8.5	31.8	–	–	–	–	RNP1
003	TF	MEDIC	–	202 (193.6)	-8.5	18.7	–	+3000	–	–	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	NOBEL	202 (193.6)	-8.5	1.0(-14000)	R	3000	FL140	-230(-14000)	RNP1

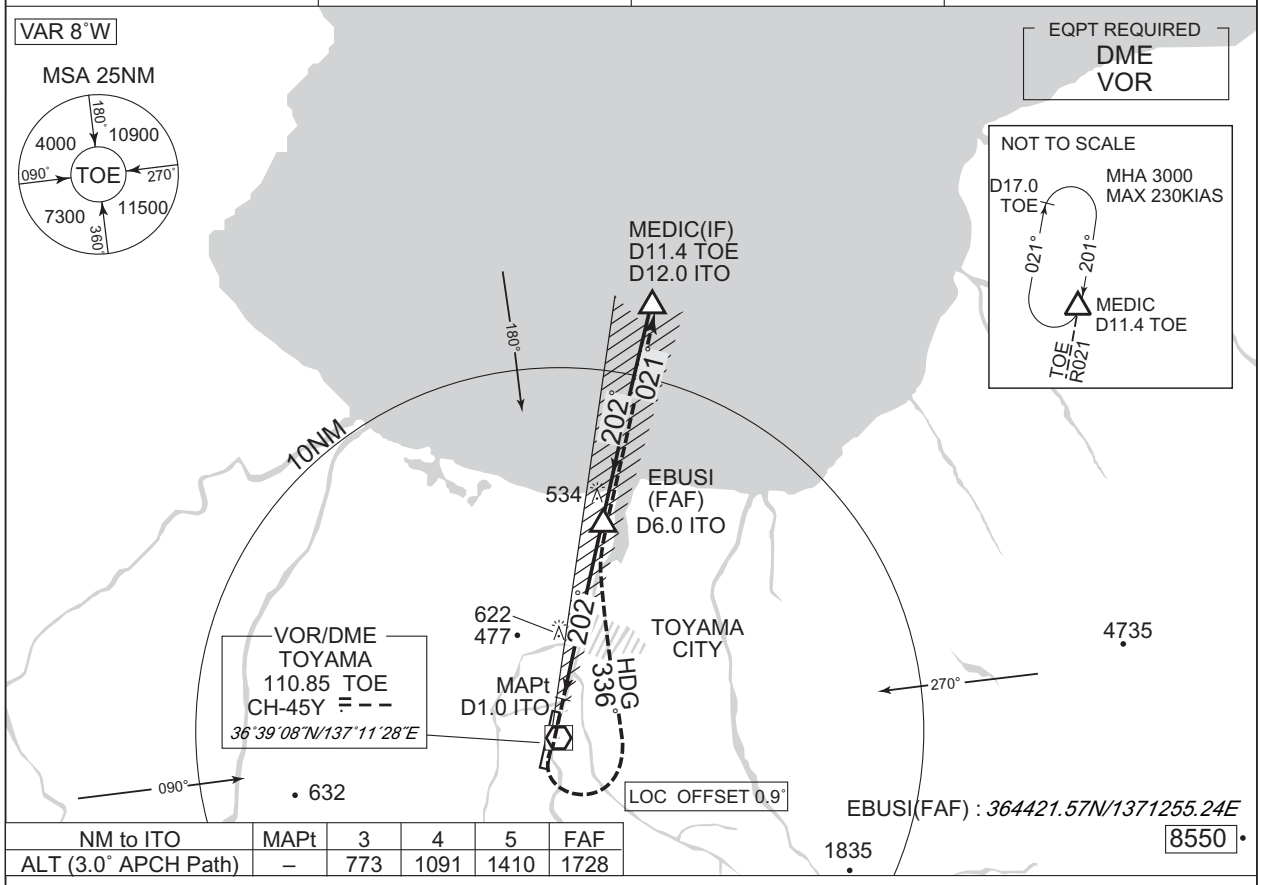
CHANGE : Description of PROC name and VAR.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

LOC Z RWY20

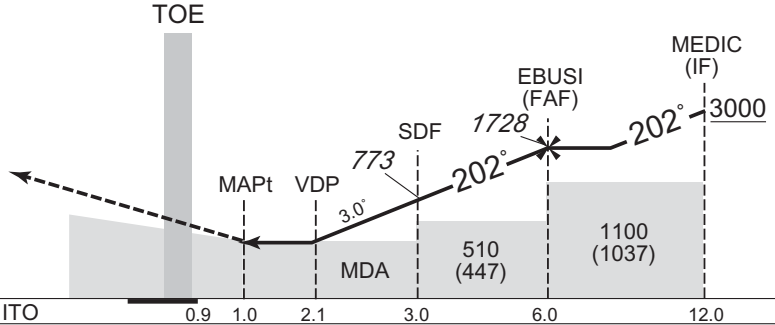
KOBE CONTROL	LOC	TOYAMA TOWER	NO RADAR
132.45-125.6 304.4 -317.1	109.3 ITO LOC-DME CH-30X	124.3-126.2	



NM to ITO	MAPt	3	4	5	FAF
ALT (3.0˚ APCH Path)	–	773	1091	1410	1728

MISSED APPROACH
Turn left HDG336˚ to intercept
and proceed via TOE R021 to
MEDIC and hold at 3000FT.
Contact TOYAMA TOWER.

No turn before MAPt.
Timing not authorized for defining the MAPt.



DME to ITO	0.9	1.0	2.1	3.0	6.0	12.0
NM to THR	0	0.1	1.1	2.1	5.1	11.1

Missed APCH climb gradient MNM 3.0%

MINIMA THR elev. 63 AD elev. 77

CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	470 (407)	900	590 (513)	1600
B		1000		
C			630 (553)	2400
D		1400		3200

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

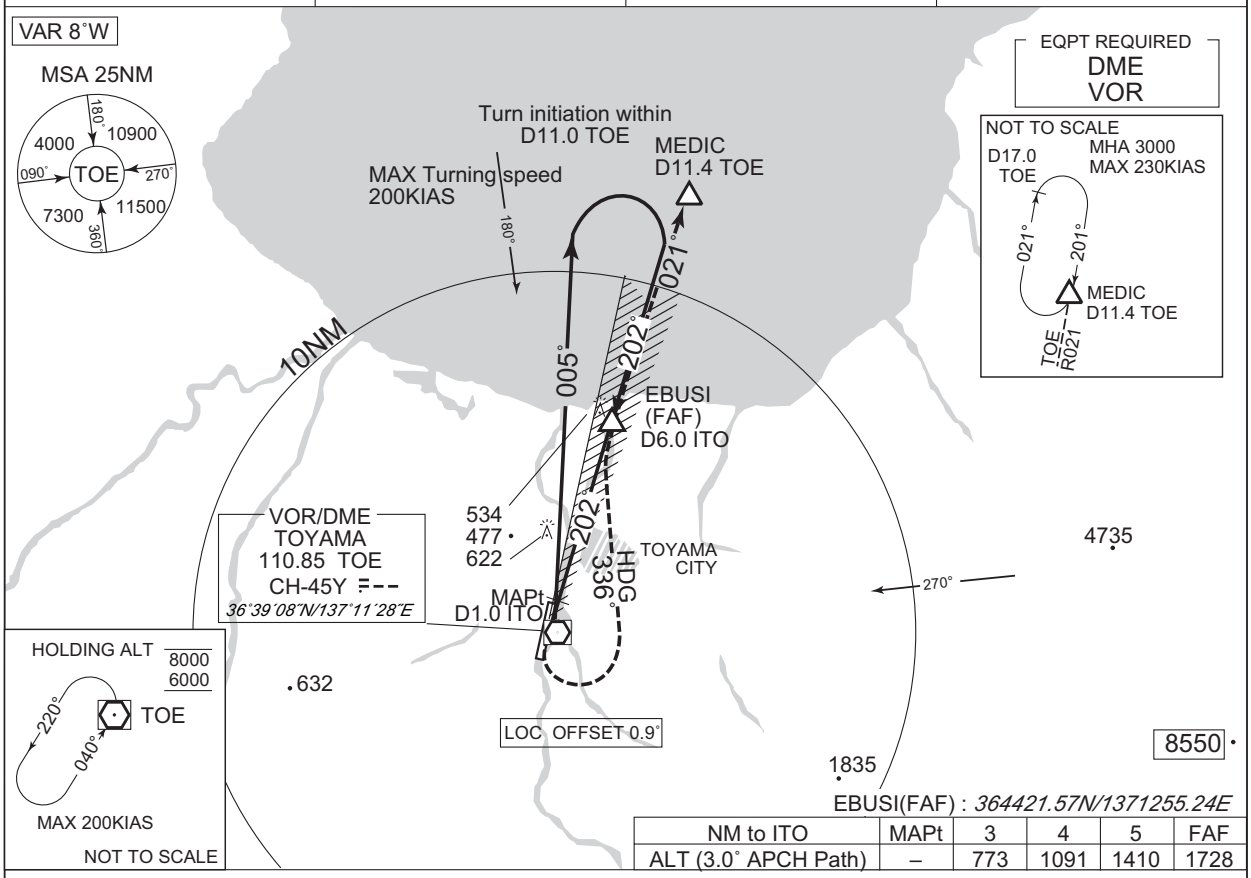
CHANGE : Description of VAR.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

LOC Y RWY20

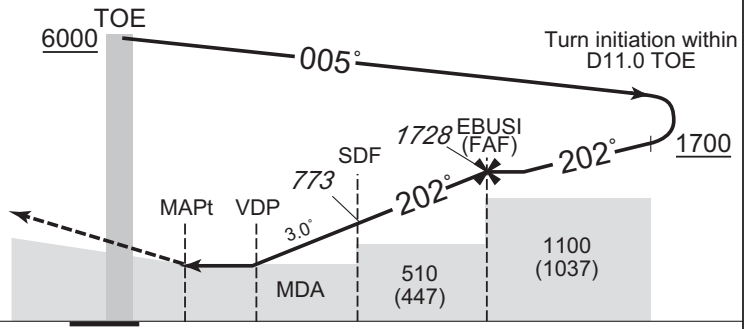
KOBE CONTROL	LOC	TOYAMA TOWER	NO RADAR
132.45 - 125.6 304.4 - 317.1	109.3 ITO LOC-DME CH-30X	124.3 - 126.2	



NM to ITO	MAPt	3	4	5	FAF
ALT (3.0˚ APCH Path)	–	773	1091	1410	1728

MISSED APPROACH
Turn left HDG336˚ to intercept and proceed via TOE R021 to MEDIC and hold at 3000FT.
Contact TOYAMA TOWER.

No turn before MAPt.
Timing not authorized for defining the MAPt.



DME to ITO	0.9	1.0	2.1	3.0	6.0
NM to THR	0	0.1	1.1	2.1	5.1

Missed APCH climb gradient MNM 3.0%

MINIMA THR elev. 63 AD elev. 77

CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	470 (407)	900	590 (513)	1600
B		1000		
C			630 (553)	2400
D		1400		3200

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

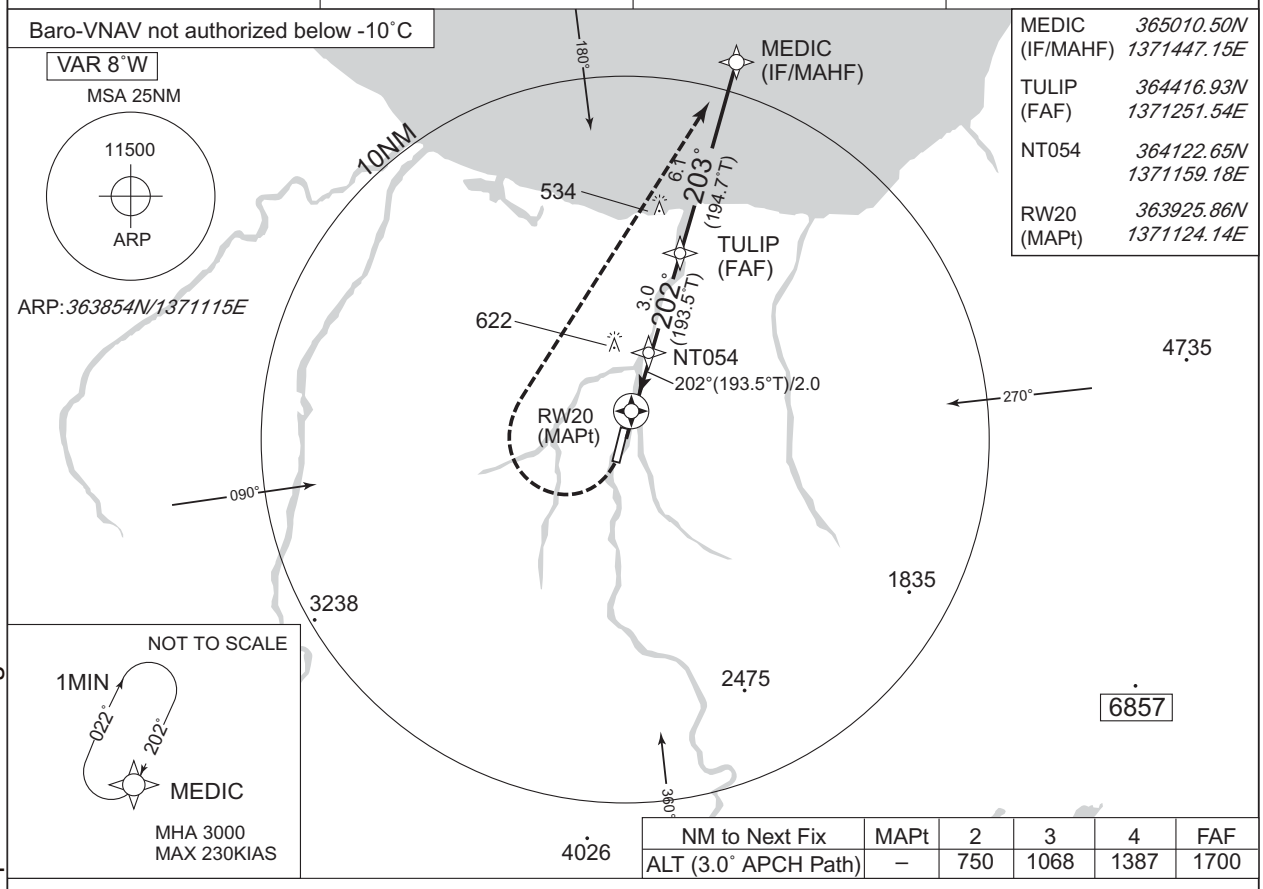
CHANGE : Description of VAR.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

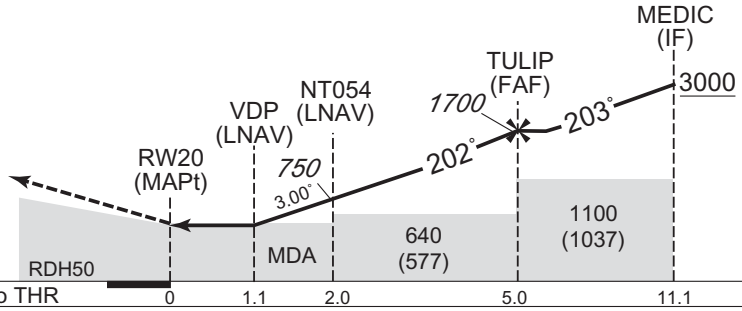
RNP Z RWY20

KOBE CONTROL 132.45-125.6 304.4 -317.1	RNP APCH	TOYAMA TOWER 124.3 - 126.2	NO RADAR



NM to Next Fix	MAPt	2	3	4	FAF
ALT (3.0˚ APCH Path)	–	750	1068	1387	1700

MISSED APPROACH
Turn right, climb to 3000FT, direct to MEDIC and hold.
Contact TOYAMA TWR.



Missed APCH climb gradient MNM 3.0%

MINIMA THR elev. 63 AD elev. 77

CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	470 (407)	900	470 (407)	900	590 (513)	1600
B		1000		1000		
C					630 (553)	2400
D		1400		1400		3200

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

CHANGE : Missed APCH for using VOR/DME abolished. HLDG pattern for using NAVAID abolished.

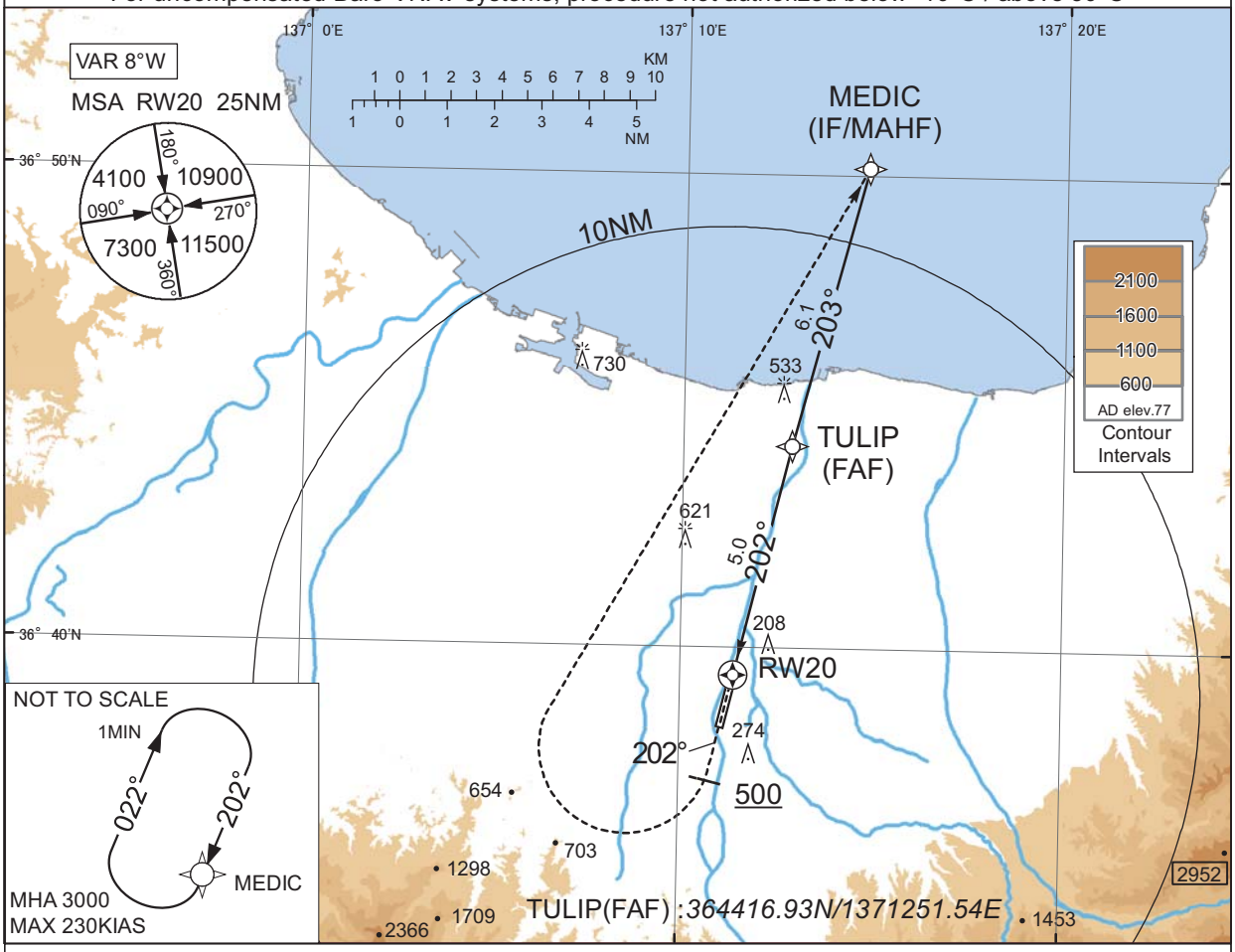
INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP Y RWY20(AR)

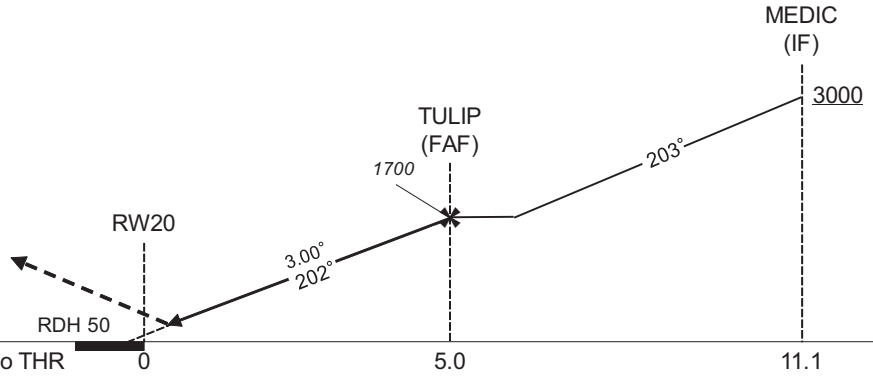
KOBE CONTROL 132.45 - 125.6 304.4 - 317.1	RNP AR	TOYAMA TOWER 124.3 - 126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -10°C / above 50°C



MISSED APPROACH

From RW20 on track 202°,
at or above 500FT turn right,
direct to MEDIC and hold at
3000FT.
Contact TOYAMA TWR.



Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 63	AD elev. 77
CAT	RNP 0.30	
	DA(H)	CMV
A	-	-
B		
C	370(307)	1000
D		1400

Authorization Required

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

CHANGE : HLDG pattern for using NAVAID abolished.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA RNP Y RWY20(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	MEDIC	-	-	-8.5	-	-	+3000	-	-	-
002	TF	TULIP	-	203 (194.7)	-8.5	6.1	-	1700	-	-	1.0
003	TF	RW20	Y	202 (193.5)	-8.5	5.0	-	113	-	-3.00/50	0.3
004	FA	-	-	202 (193.5)	-8.5	-	-	+500	-	-	1.0
005	DF	MEDIC	-	-	-8.5	-	R	3000	-	-	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	MEDIC	202 (193.6)	-8.5	1.0 (-14000)	R	3000	FL140	-230 (-14000)	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates
MEDIC	*365010.50N / 1371447.15E*
TULIP	*364416.93N / 1371251.54E*
RW20	*363925.86N / 1371124.14E*

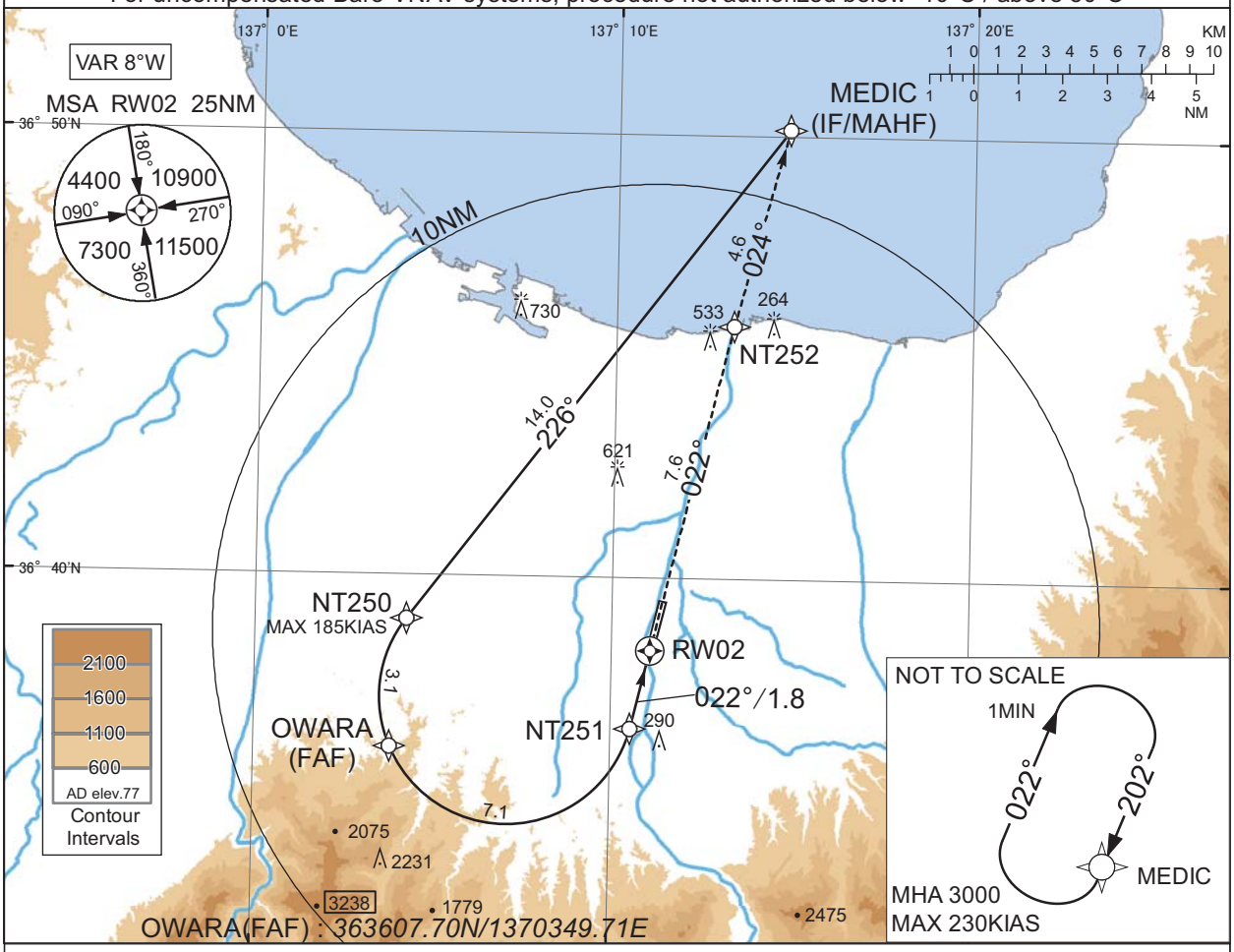
INSTRUMENT APPROACH CHART

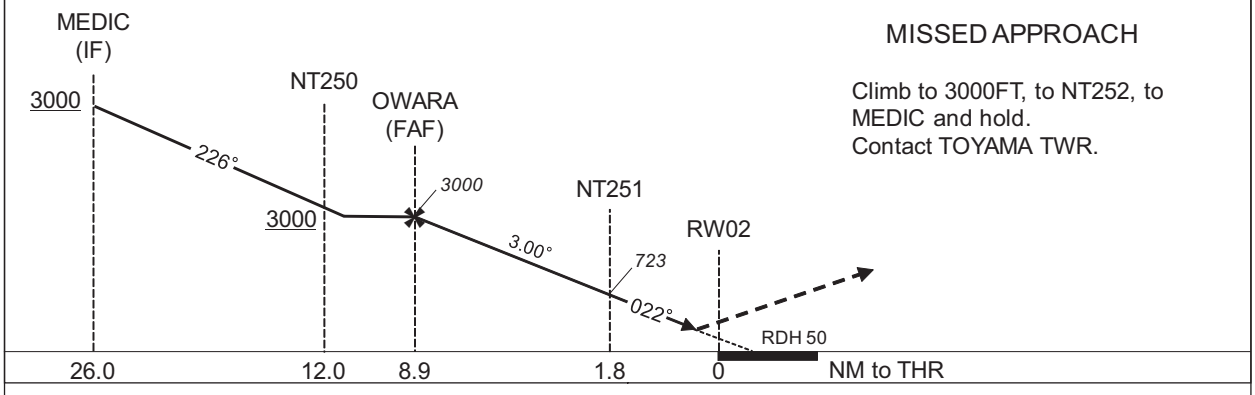
RJNT / TOYAMA

RNP RWY02(AR)

KOBE CONTROL 132.45 - 125.6 304.4 - 317.1	RNP AR RF required.	TOYAMA TOWER 124.3 - 126.2	NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below -10°C / above 50°C





MISSED APPROACH

Climb to 3000FT, to NT252, to
MEDIC and hold.
Contact TOYAMA TWR.

MINIMA	THR elev. 95	AD elev. 77
CAT	RNP 0.30	
	DA(H)	CMV
A	-	-
B		
C	451(356)	1800
D		2000

Authorization Required

CHANGE : HLDG pattern for using NAVAID abolished.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA RNP RWY02(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	MEDIC	-	-	-8.5	-	-	+3000	-	-	-
002	TF	NT250	-	226 (217.2)	-8.5	14.0	-	+3000	-185	-	1.0
003	RF Center: NTRF1 r=2.87NM	OWARA	-	-	-8.5	3.1	L	3000	-	-	1.0
004	RF Center: NTRF1 r=2.87NM	NT251	-	-	-8.5	7.1	L	723	-	-3.00	0.3
005	TF	RW02	Y	022 (013.5)	-8.5	1.8	-	145	-	-3.00/50	0.3
006	TF	NT252	-	022 (013.5)	-8.5	7.6	-	-	-	-	1.0
007	TF	MEDIC	-	024 (015.0)	-8.5	4.6	-	3000	-	-	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	MEDIC	202 (193.6)	-8.5	1.0 (-14000)	R	3000	FL140	-230 (-14000)	1.0

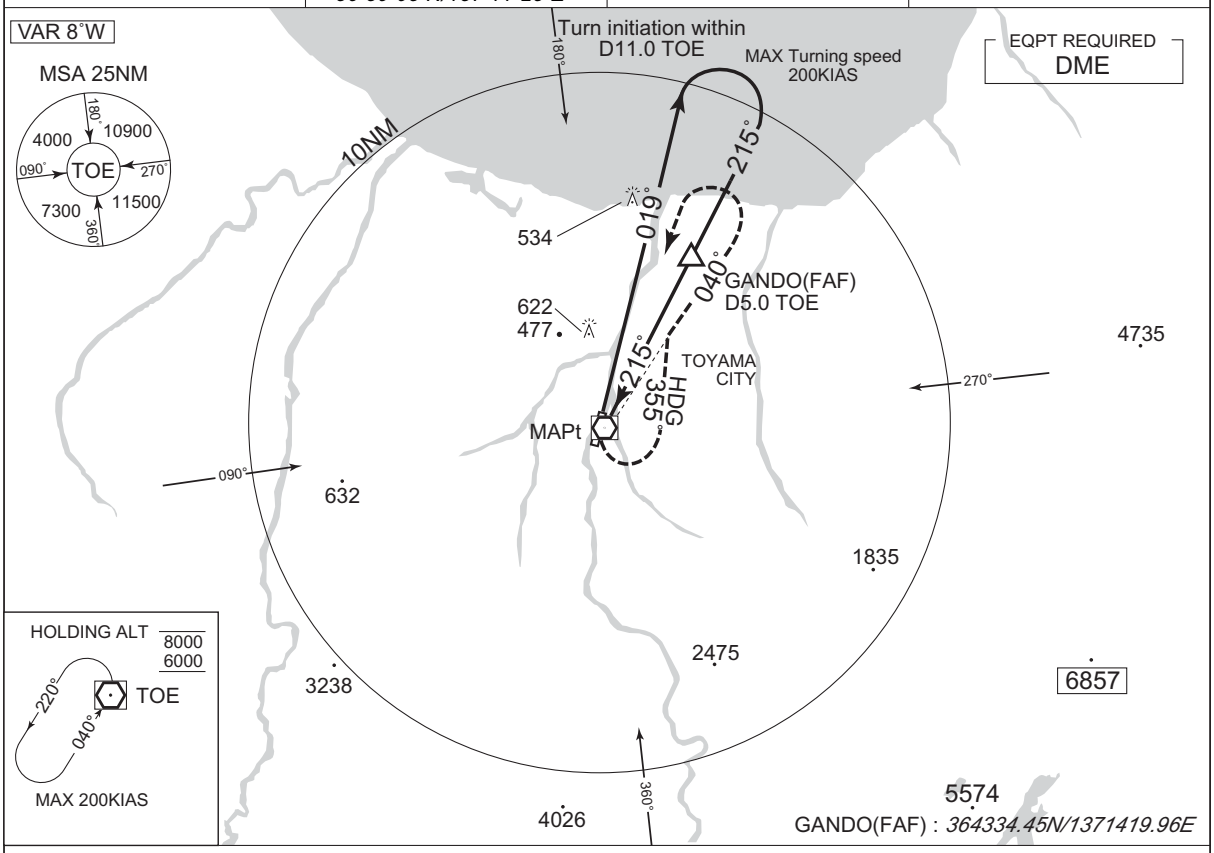
Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
MEDIC	*365010.50N / 1371447.15E*	NTRF1	*363717.08N / 1370705.51E*
NT250	*363901.33N / 1370415.09E*		
OWARA	*363607.70N / 1370349.71E*		
NT251	*363636.65N / 1371033.43E*		
RW02	*363822.79N / 1371105.23E*		
NT252	*364543.55N / 1371317.58E*		

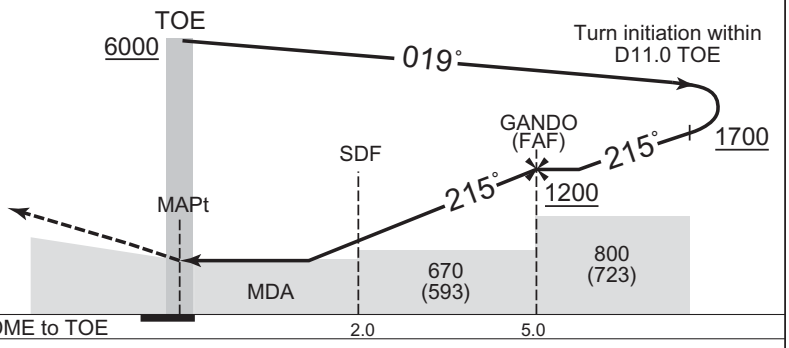
INSTRUMENT APPROACH CHART

RJNT / TOYAMA VOR A

KOBE CONTROL	TOYAMA VOR/DME	TOYAMA TOWER	NO RADAR
132.45-125.6 304.4 -317.1	110.85 TOE CH-45Y *36°39'08"N/137°11'28"E*	124.3 - 126.2	



MISSED APPROACH
Turn left, climb to 3000FT on HDG355° to intercept and proceed via TOE R040, turn left direct to TOE VOR/DME and hold at 6000FT.
Contact TOYAMA TOWER.



Missed APCH climb gradient MNM 3.5%

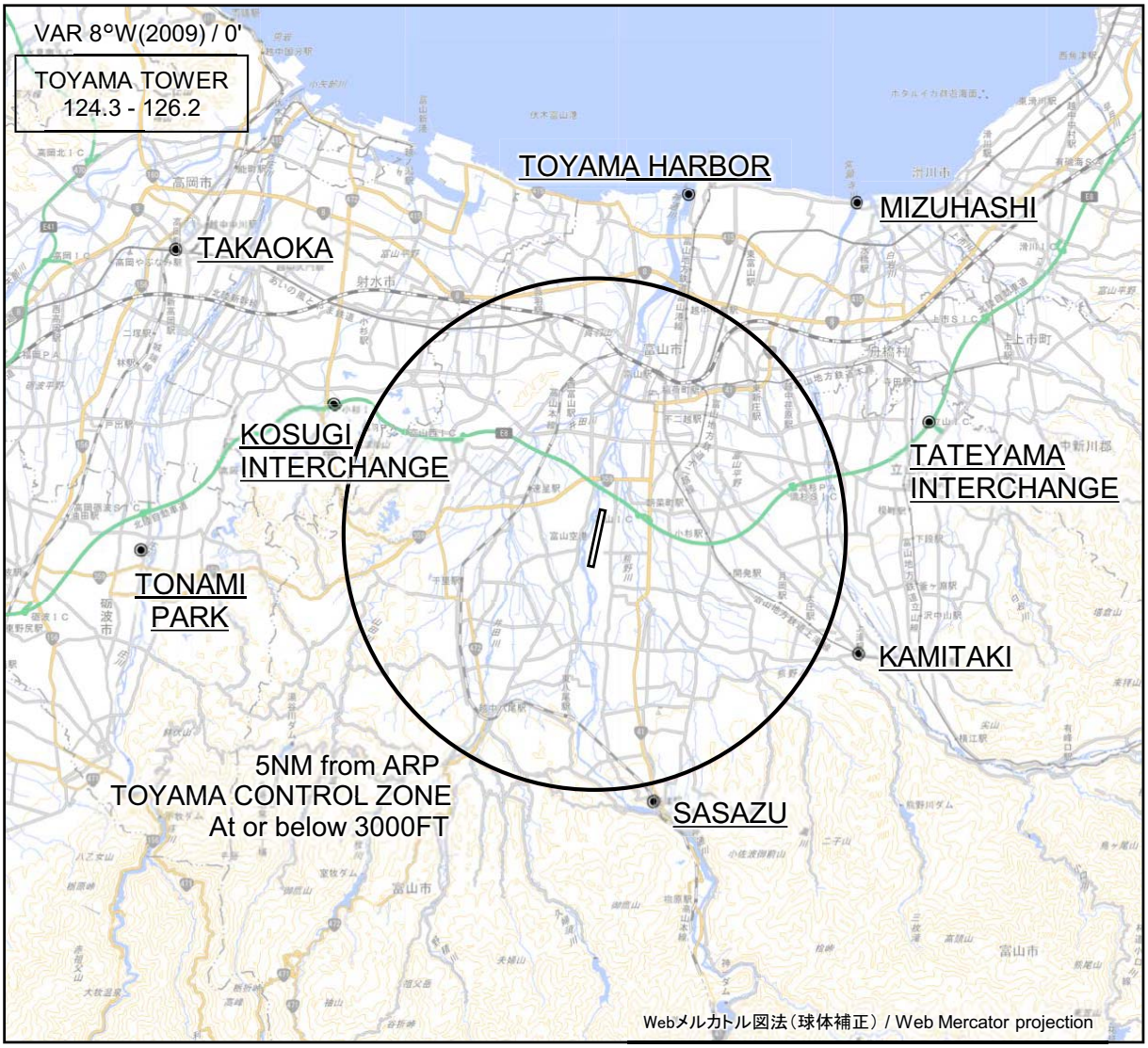
MINIMA		AD elev. 77
CAT	CIRCLING	
	MDA(H)	VIS
A	590 (513)	1600
B		
C	630 (553)	2400
D		3200

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

CHANGE : ALT restriction at GANDO established.

RJNT / TOYAMA

Visual REP

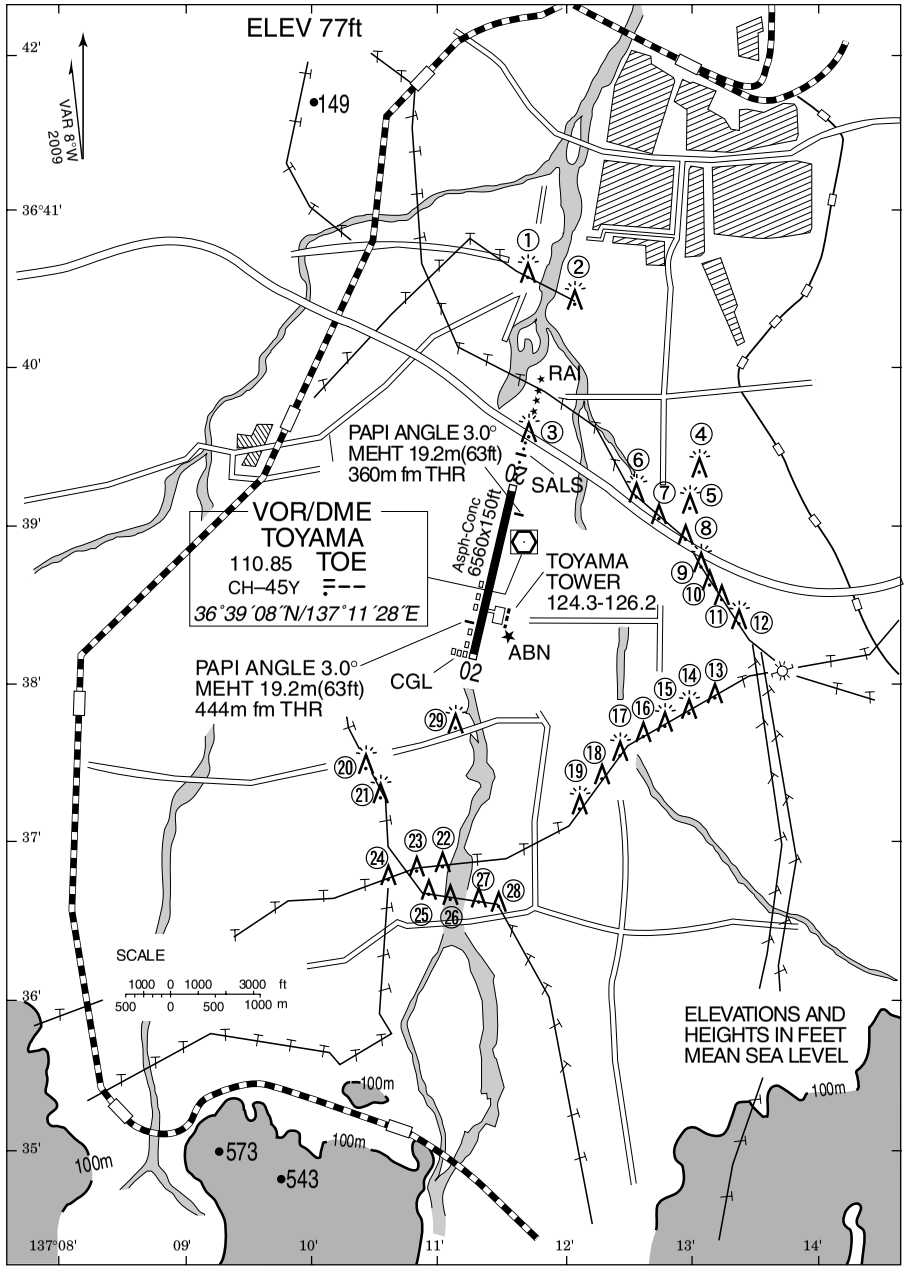


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : Map updated. BRG/DIST from ARP.

Call sign	BRG / DIST from ARP	Remarks
富山ハーバー Toyama harbor	016°T / 6.9NM	港 Harbor
水橋 Mizuhashi	039°T / 8.3NM	(常願寺川)河口 River-mouth
高岡 Takaoka	304°T / 10.0NM	JR駅 JR Station
小杉インターチェンジ Kosugi Interchange	296°T / 5.8NM	北陸自動車道インターチェンジ Interchange
立山インターチェンジ Tateyama Interchange	072°T / 7.0NM	北陸自動車道インターチェンジ Interchange
砺波パーク Tonami Park	268°T / 9.0NM	砺波総合運動公園 Park
上滝 Kamitaki	114°T / 5.7NM	駅 Station
笹津 Sasazu	167°T / 5.3NM	JR駅 JR Station

RJNT / TOYAMA



LDG CHART

OBSTRCTION NR	AGL (FT)	MSL (FT)	AERONAUTICAL OBSTRUCTIONS LIGHTS	DAY MARKINGS
1	185	220	○	○
2	176	213	○	○
3	45	97	○	○
4	187	256	○	○
5	159	233	○	○
6	178	246	○	○
7	173	249	—	○
8	192	262	—	○
9	189	259	○	○
10	189	263	—	○
11	189	282	—	○
12	189	299	○	○
13	120	212	—	○
14	135	261	○	○
15	167	273	○	○
16	125	236	—	○
17	125	238	○	○
18	110	228	—	○
19	125	249	○	○
20	120	231	○	○
21	103	222	○	○
22	132	270	—	○
23	132	279	—	○
24	135	286	—	—
25	51	223	—	—
26	71	243	—	—
27	135	283	—	—
28	120	266	—	—
29	47	149	○	○

RJNT / TOYAMA Minimum Vectoring Altitude CHART