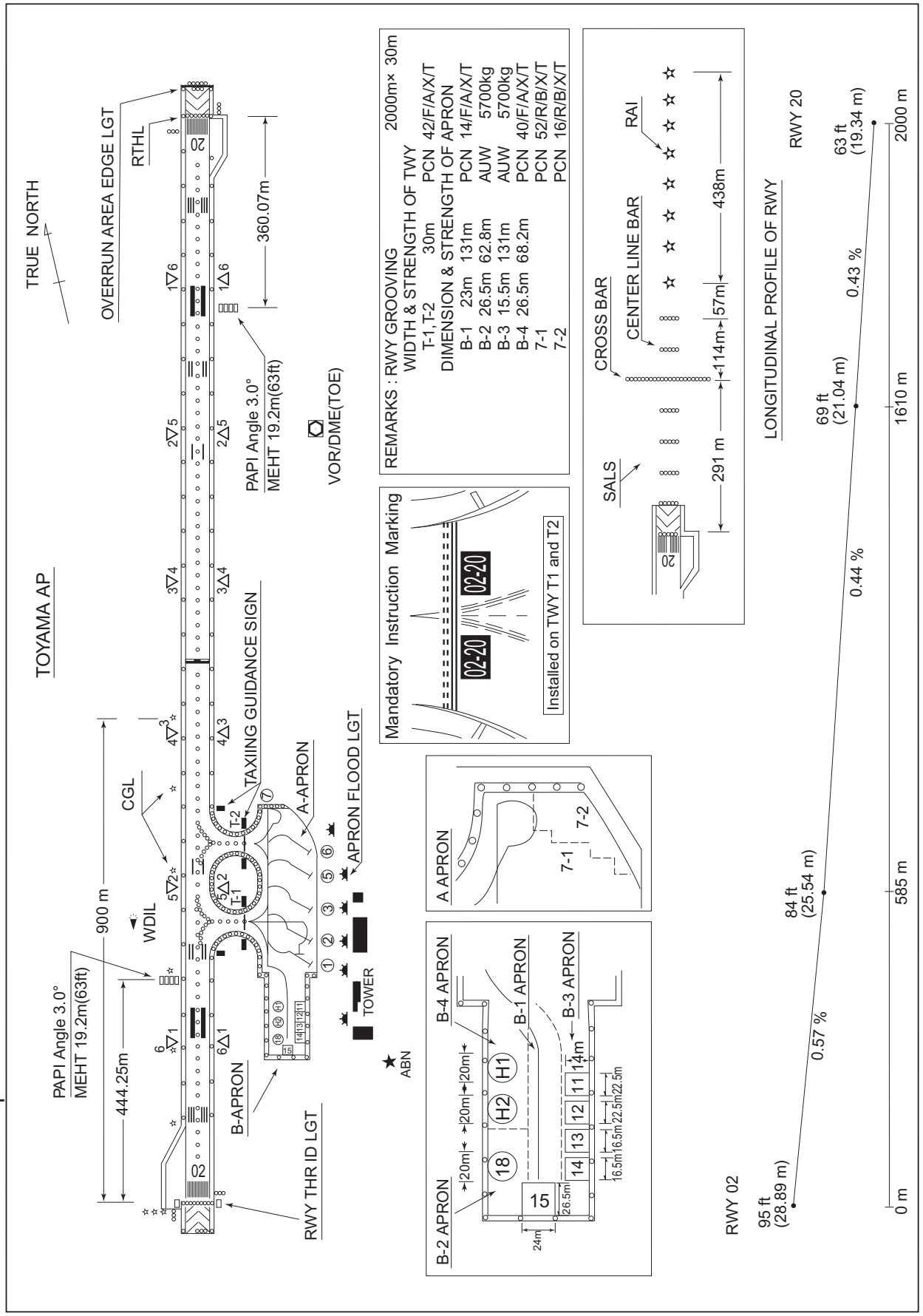
RJNT / TOYAMA AD CHART

CHANGE: Size of spot 15.



STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA SID and TRANSITION

IKUJI FIVE DEPARTURE

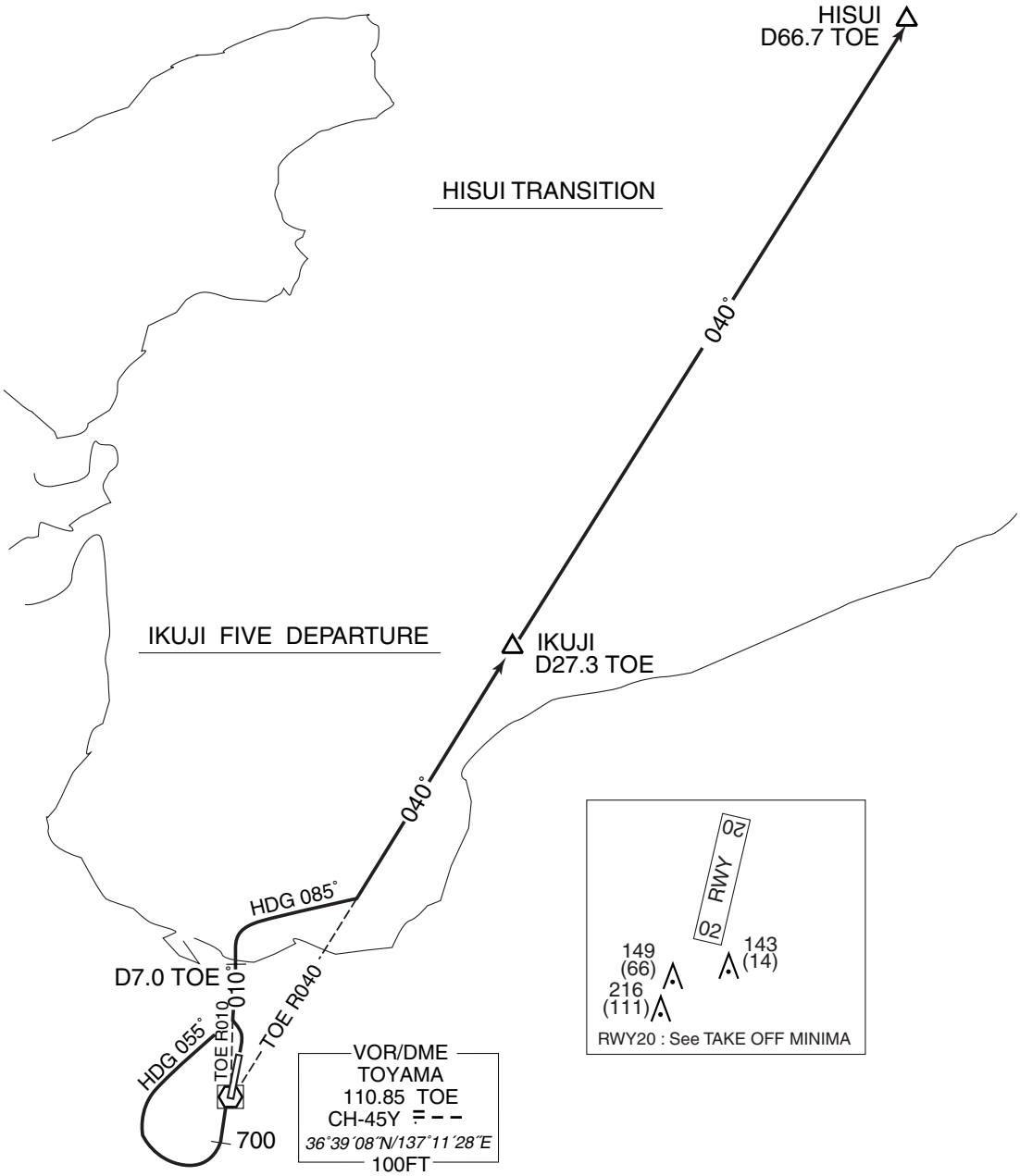
RWY02 : Climb via TOE R010 to 7.0DME...

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.



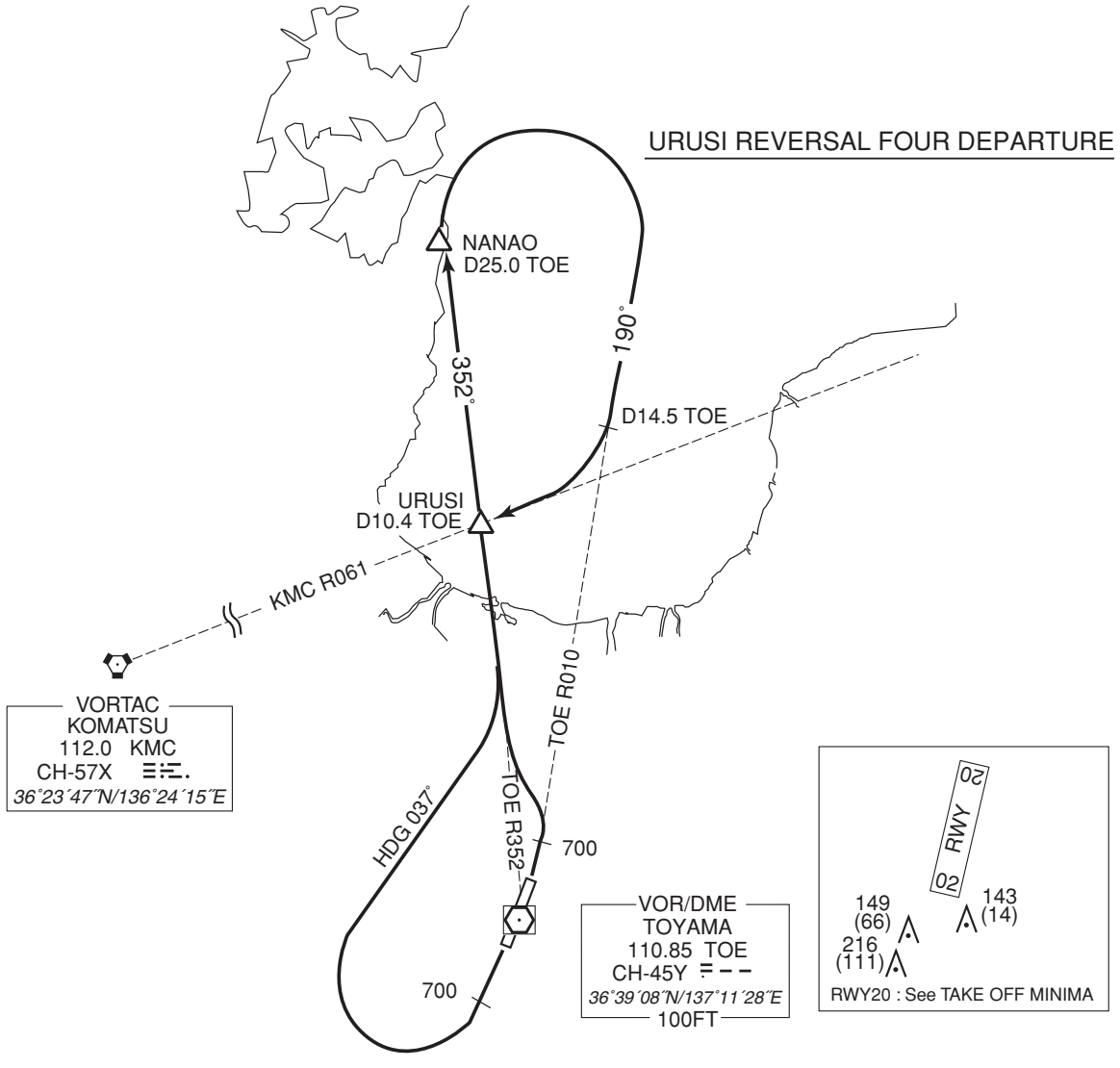
STANDARD DEPARTURE CHART -INSTRUMENT

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 : Minor change

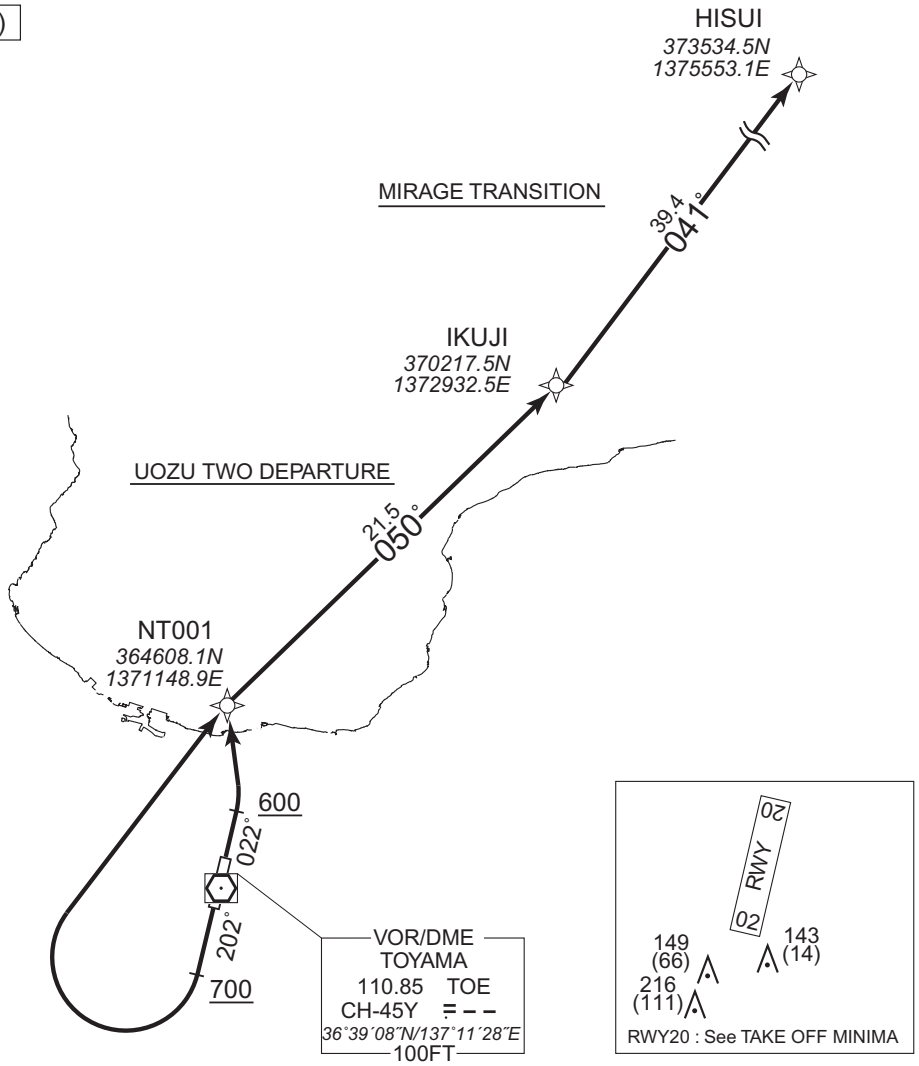
STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA — RNAV SID and TRANSITION

UOZU TWO DEPARTURE MIRAGE TRANSITION	Basic RNP1

Note GNSS required.

VAR 8˚W (2022)



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 : VAR. PROC renamed(UOZU TWO DEPARTURE). PROC course(UOZU TWO DEPARTURE, MIRAGE TRANSITION).

STANDARD DEPARTURE CHART -INSTRUMENT

RJNT / TOYAMA

RNAV SID and TRANSITION

CHANGE : VAR. PROC renamed(UOZU TWO DEPARTURE). PROC course(UOZU TWO DEPARTURE, MIRAGE 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	–	–	Basic RNP1
002	DF	NT001	–	–	-8.5	–	–	–	–	–	Basic RNP1
003	TF	IKUJI	–	050 (041.2)	-8.5	21.5	–	–	–	–	Basic 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	–	–	Basic RNP1
002	DF	NT001	–	–	-8.5	–	R	–	–	–	Basic RNP1
003	TF	IKUJI	–	050 (041.2)	-8.5	21.5	–	–	–	–	Basic 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	–	–	–	–	–	Basic RNP1
002	TF	HISUI	–	041 (032.1)	-8.5	39.4	–	–	–	–	Basic RNP1

STANDARD ARRIVAL CHART -INSTRUMENT

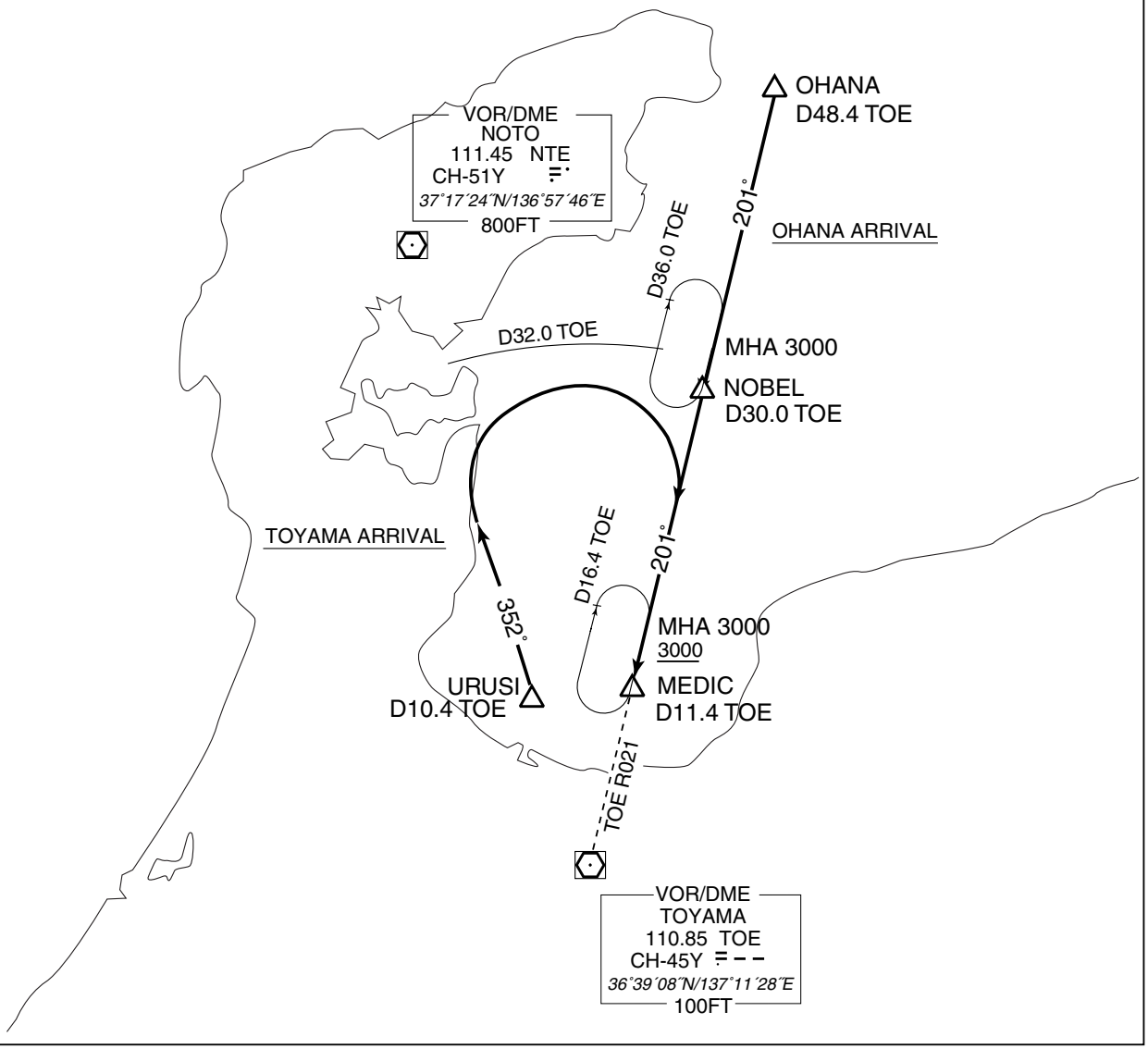
RJNT / TOYAMA STAR

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.



STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

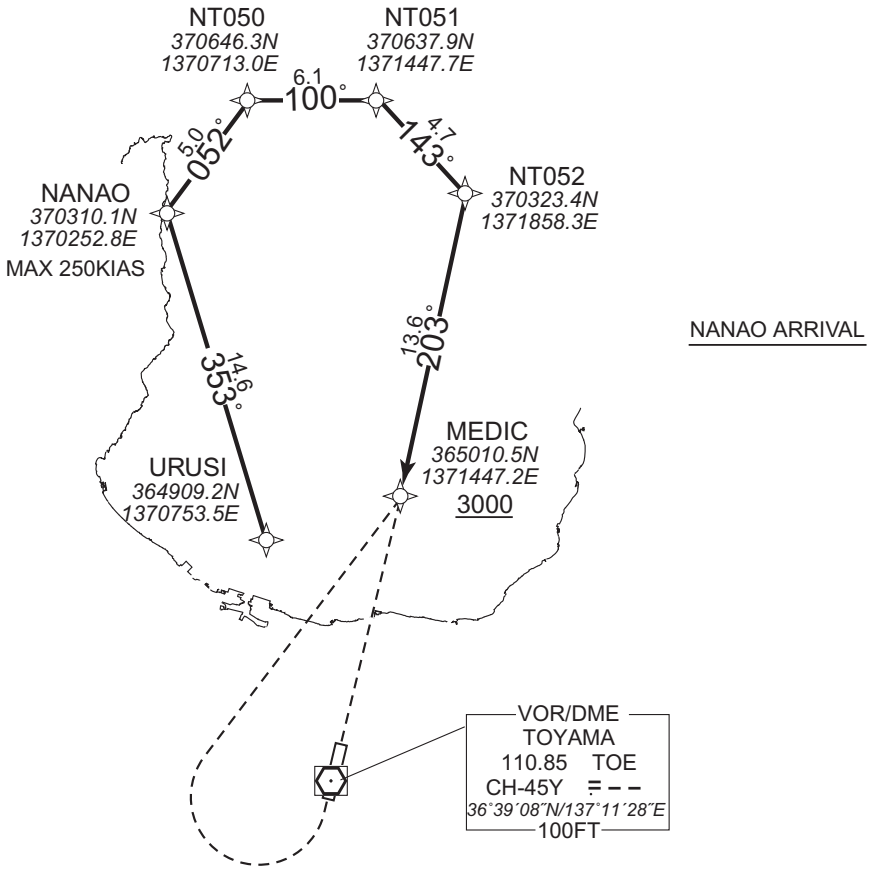
RNAV STAR

NANAO ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8˚W (2022)



NANAO ARRIVAL

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

CHANGE : VAR. PROC course.

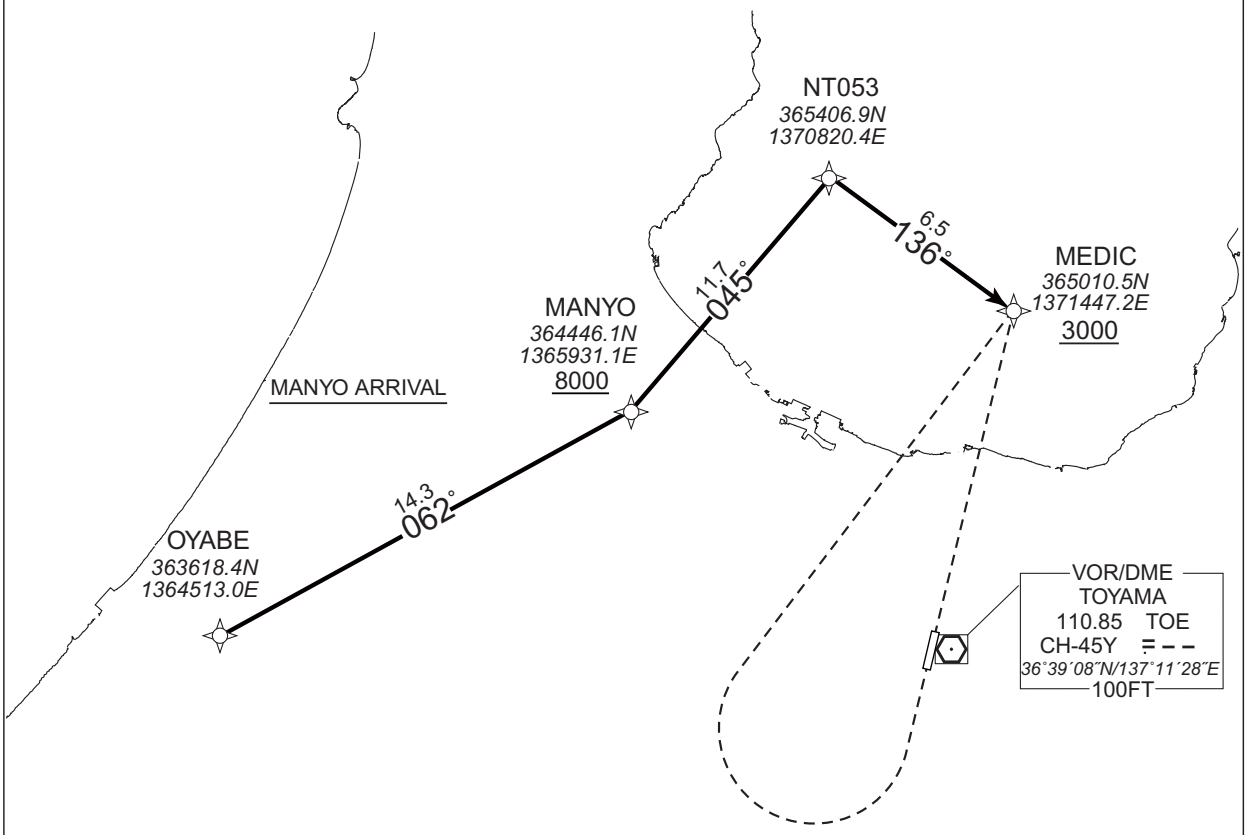
STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA — RNAV STAR

MANYO ARRIVAL	Basic RNP1

Note GNSS required.

VAR 8˚W (2022)



MANYO ARRIVAL

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

CHANGE : VAR. PROC course.

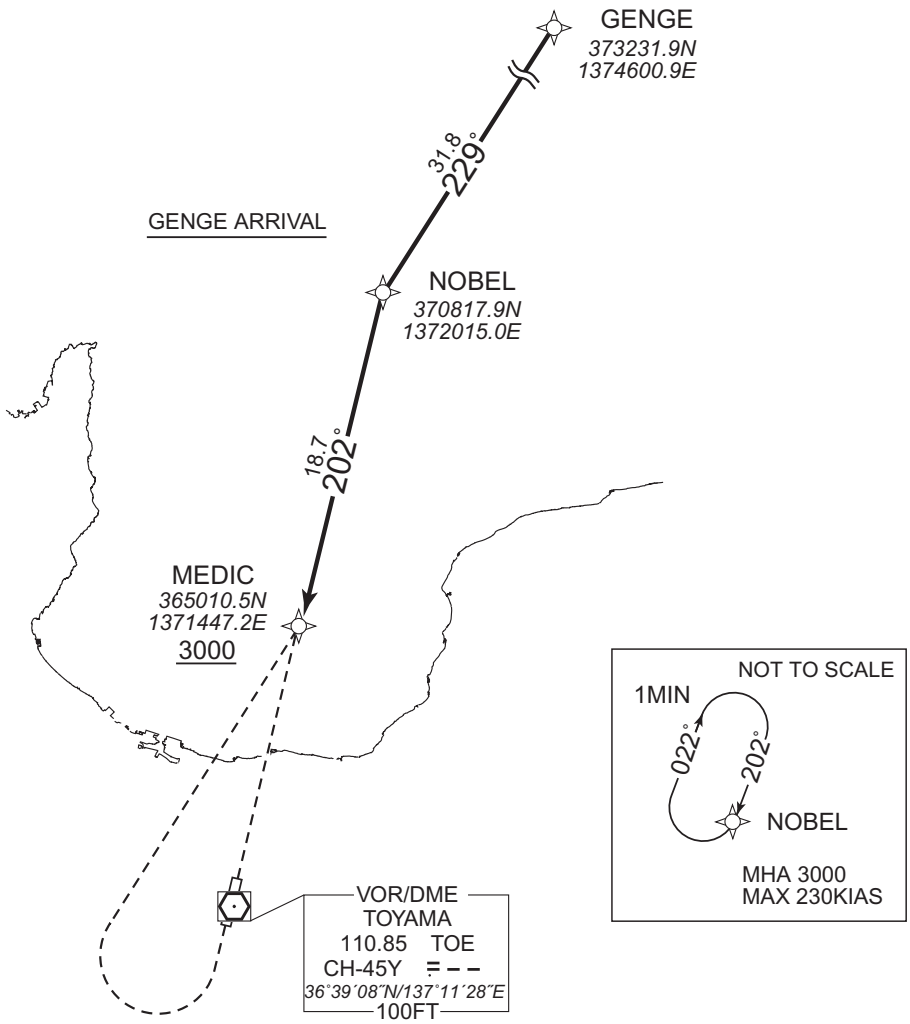
STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA — RNAV STAR

GENGE ARRIVAL — Basic RNP1

Note GNSS required.

VAR 8˚W (2022)



GENGE ARRIVAL

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

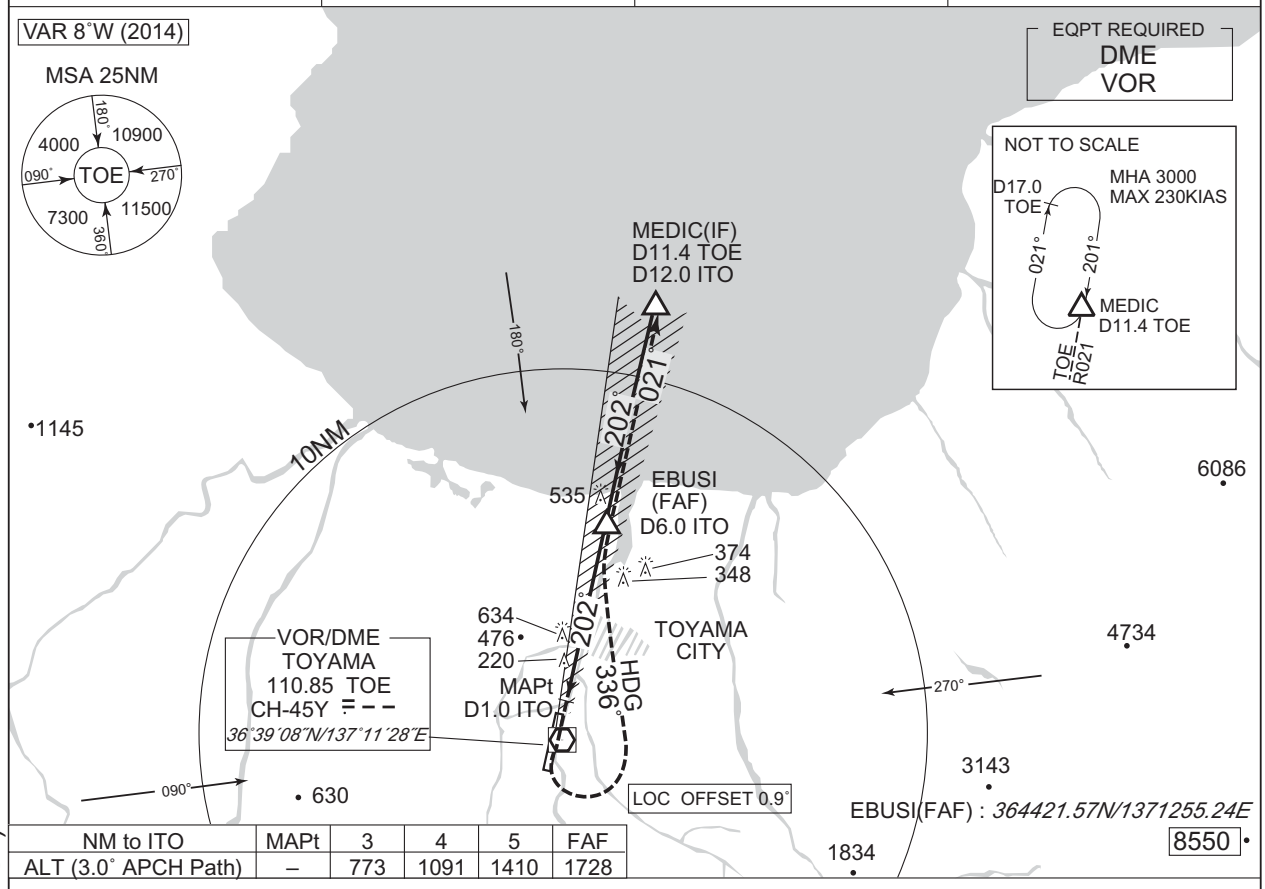
CHANGE : VAR. PROC course. RNAV HLDG established(NOBEL). HLDG for NAVAID abolished(NOBEL).

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

LOC Z RWY20

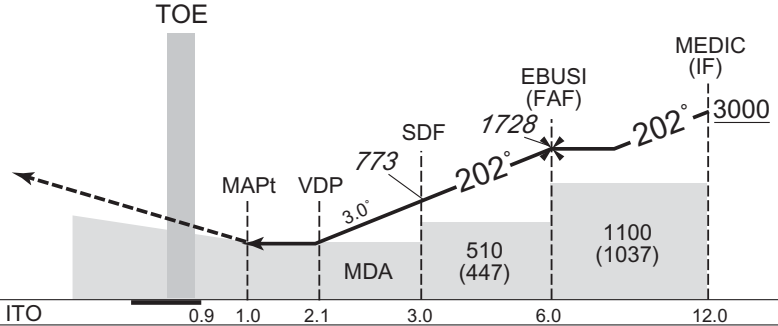
KOBE CONTROL	LOC	TOYAMA TOWER	NO RADAR
132.45-125.6 304.4 -317.1	109.3 ITO LOC-DME CH-30X	124.3-126.2	



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.

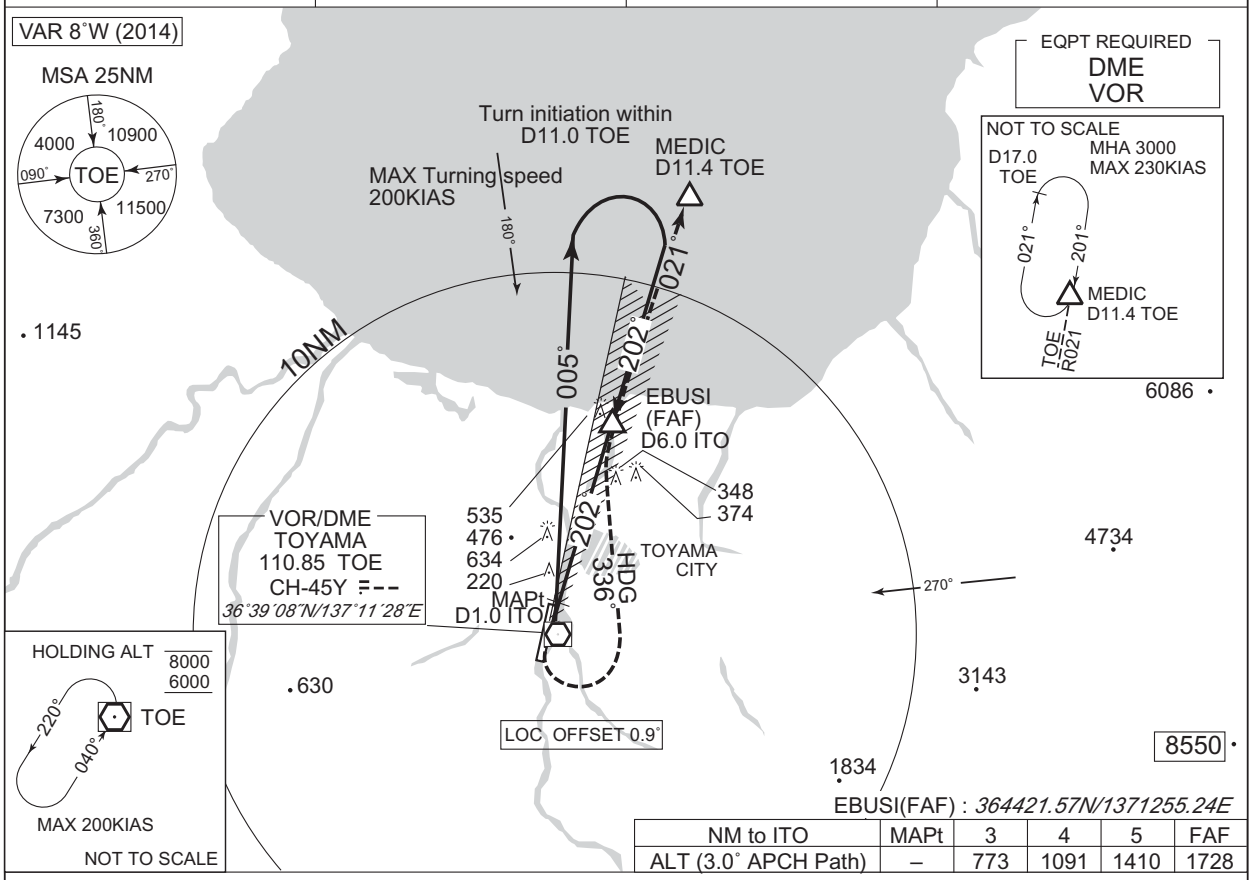
CHANGE : ATC call sign(TOKYO CONTROL → KOBE CONTROL).

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	

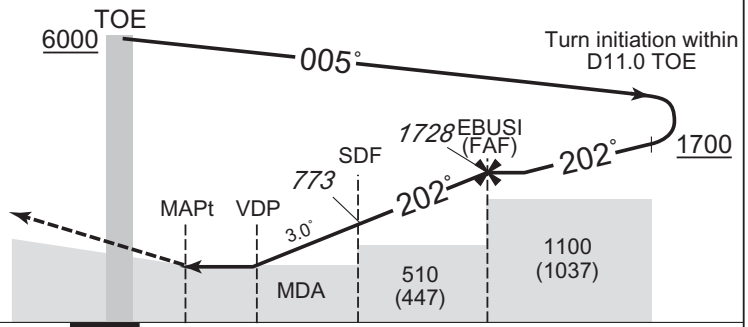


EBUSI(FAF) : *364421.57N/1371255.24E*

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.

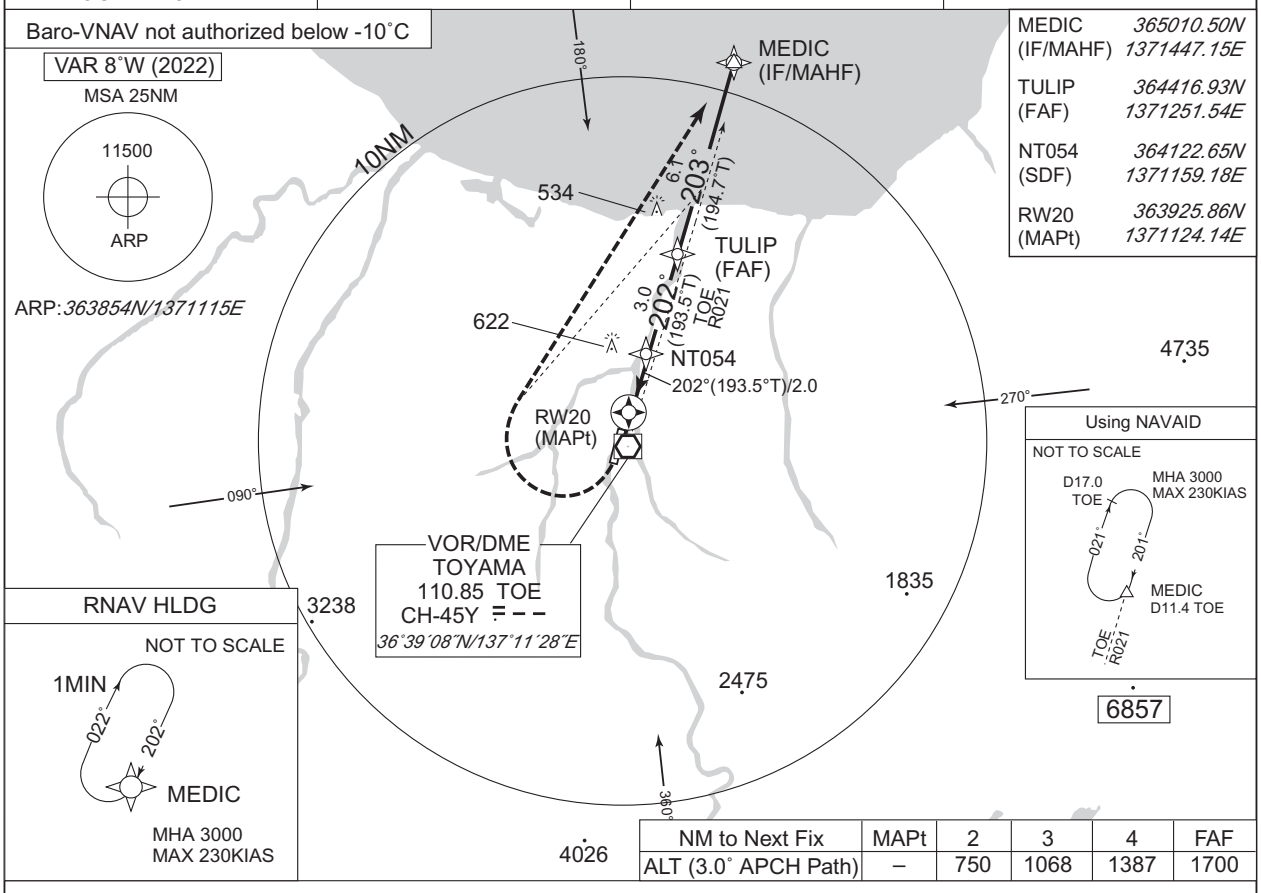
CHANGE : ATC call sign(TOKYO CONTROL → KOBE CONTROL).

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

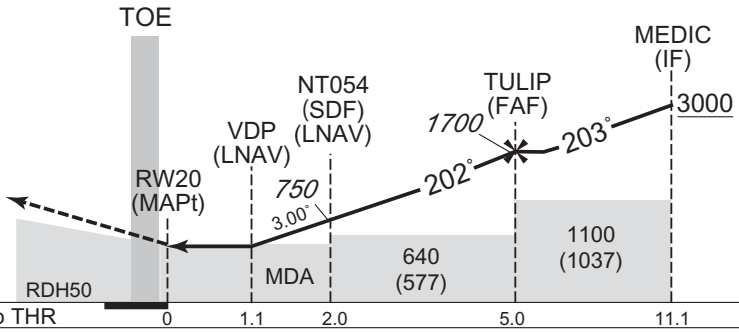


NM to Next Fix	MAPt	2	3	4	FAF
ALT (3.0˚ APCH Path)	–	750	1068	1387	1700

MISSED APPROACH

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

(For using VOR/DME)
Turn right to intercept and proceed via TOE R021 to MEDIC and hold at 3000FT.
Contact TOYAMA TWR.



Missed APCH climb gradient MNM 3.0%

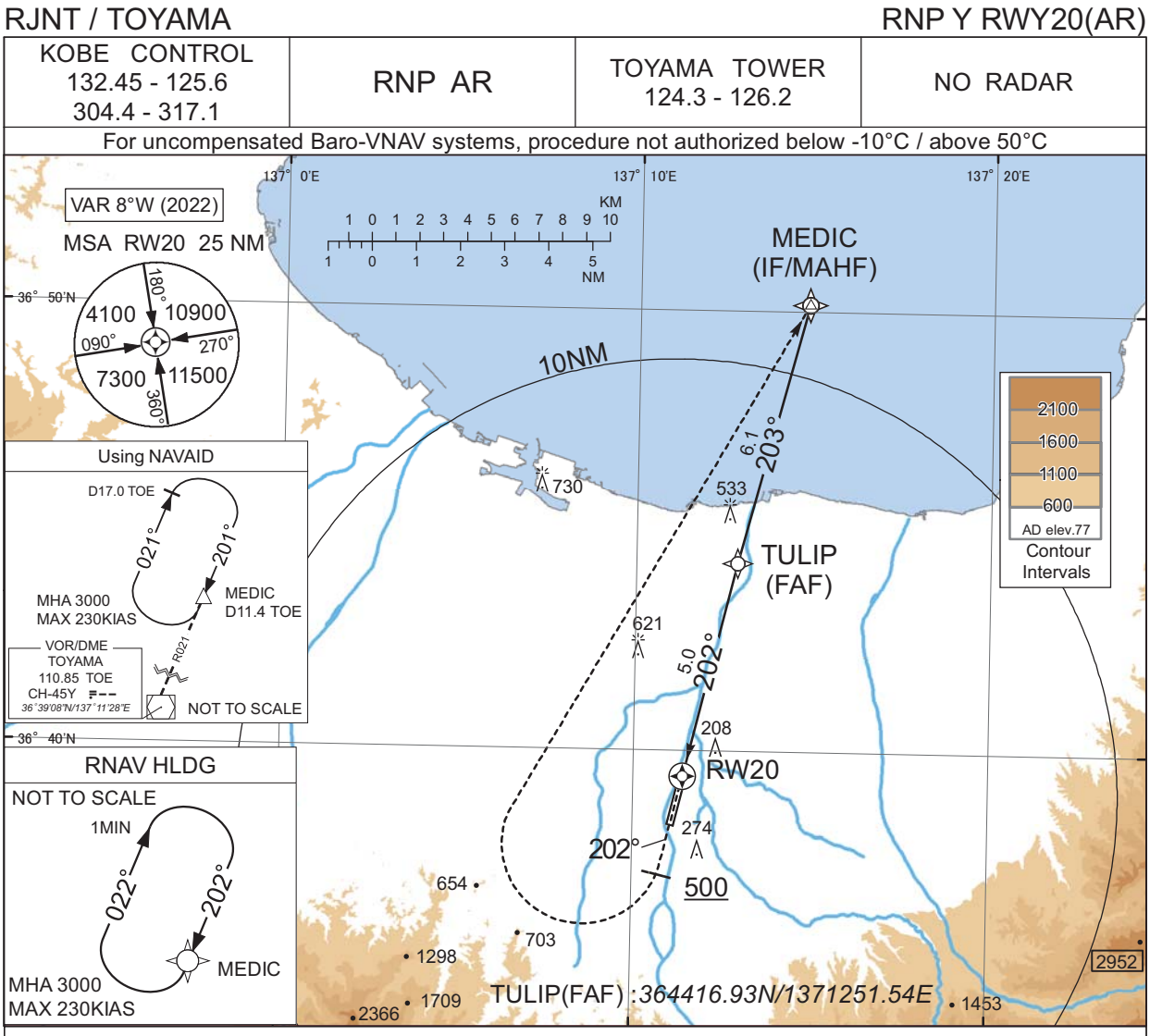
MINIMA THR elev. 63 AD elev. 77

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 : ATC call sign(TOKYO CONTROL → KOBE CONTROL).

INSTRUMENT APPROACH CHART



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*

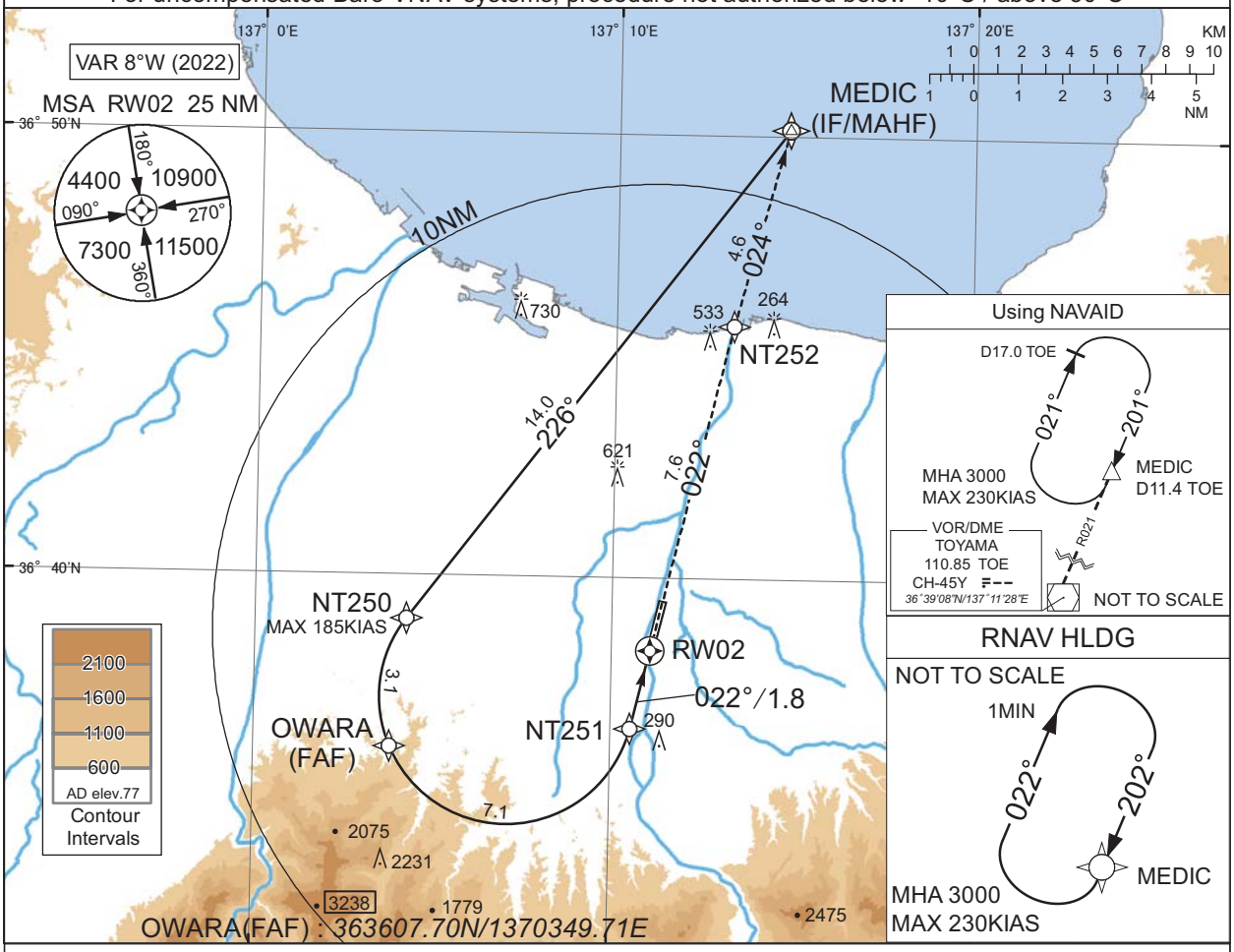
INSTRUMENT APPROACH CHART

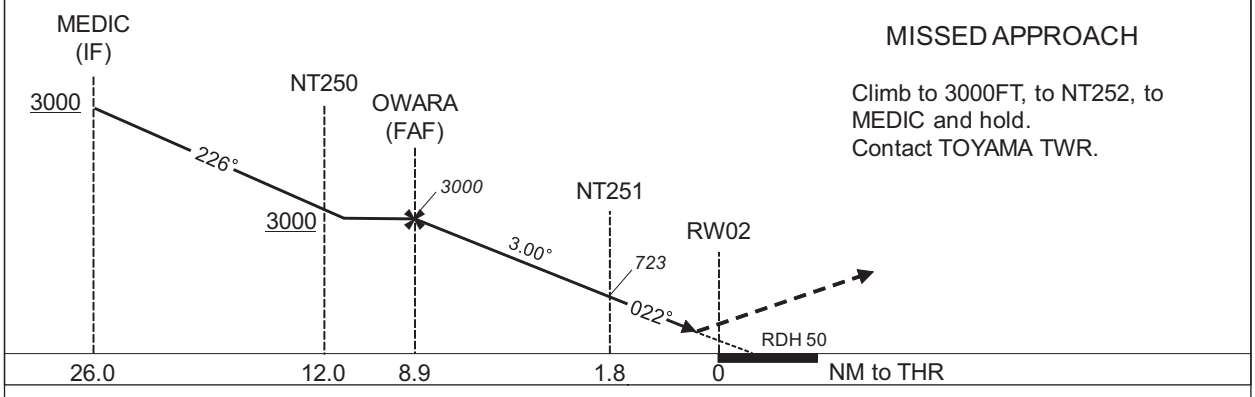
RJNT / TOYAMA

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 : ATC call sign (TOKYO CONTROL → KOBE CONTROL).

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

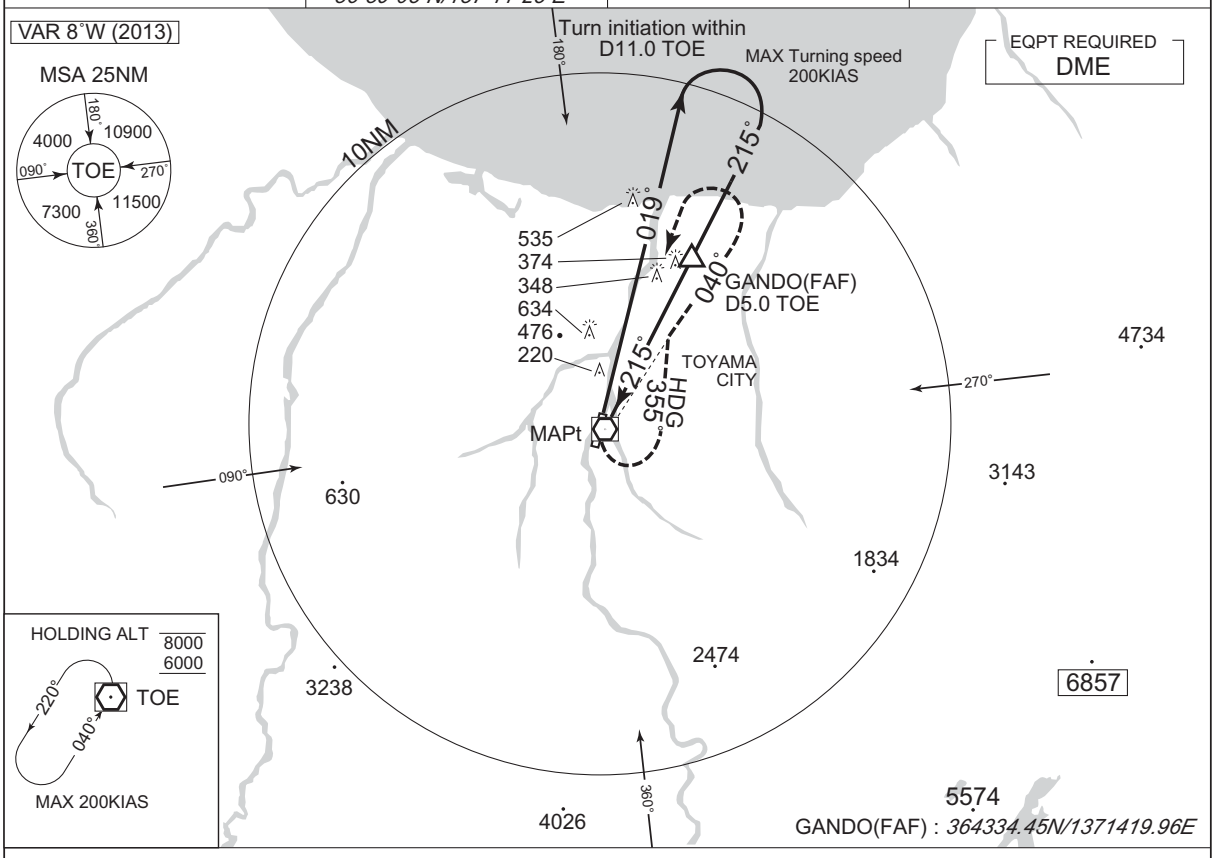
Waypoint Coordinates

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*		

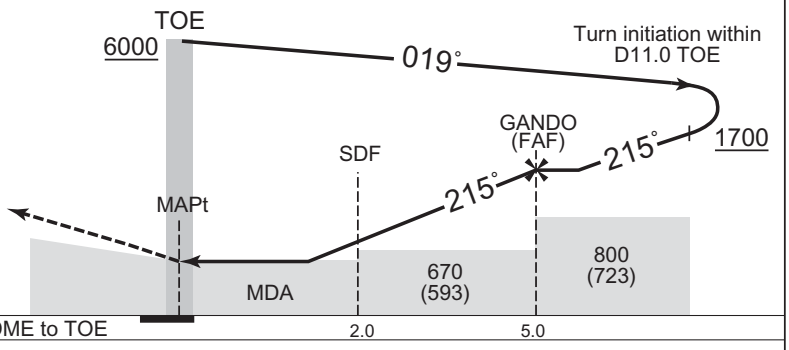
INSTRUMENT APPROACH CHART

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 B	590 (513)	1600
C	630 (553)	2400
D		3200

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

CHANGE : ATC call sign(TOKYO CONTROL → KOBE CONTROL).

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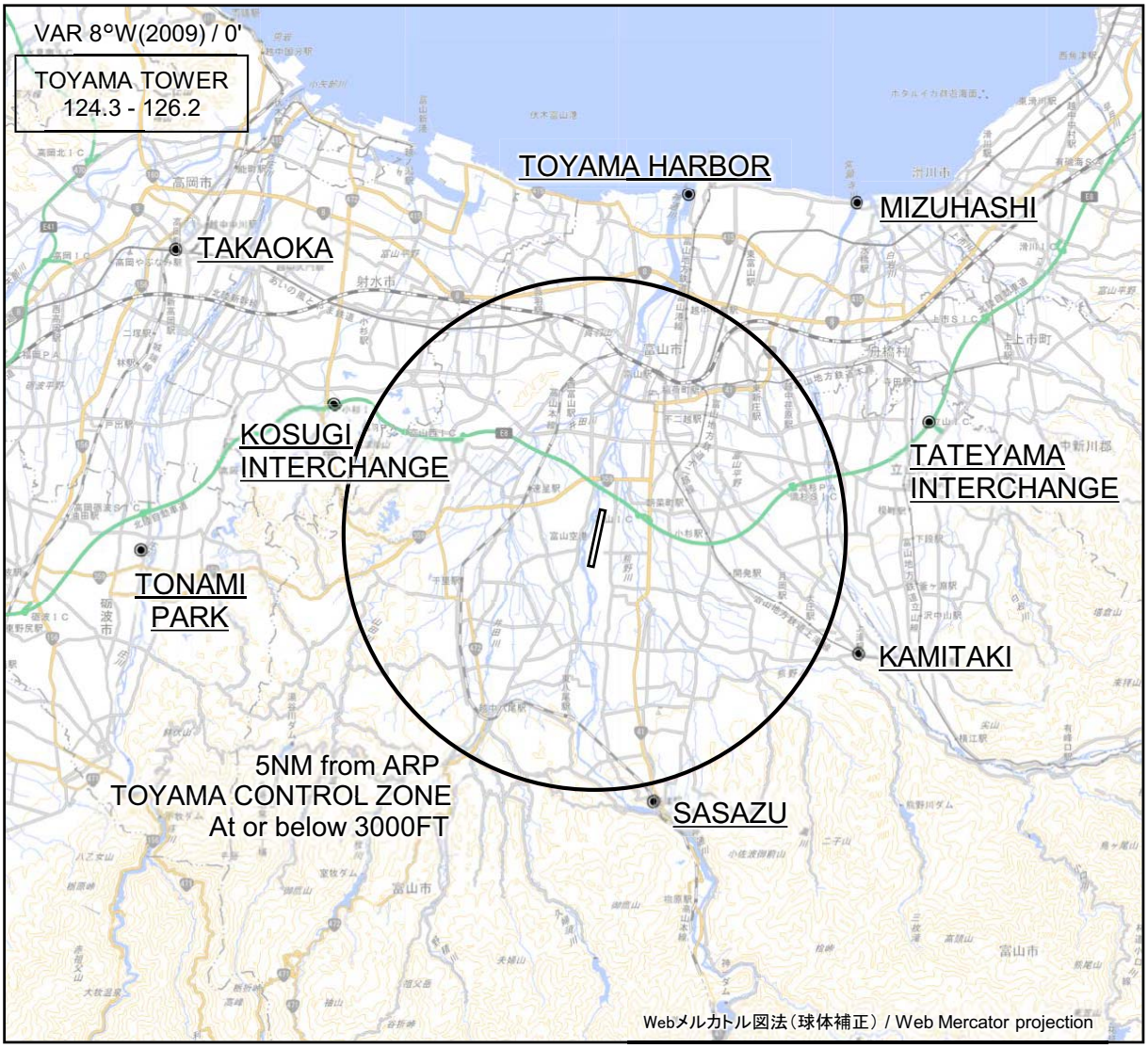
Visual REP



※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

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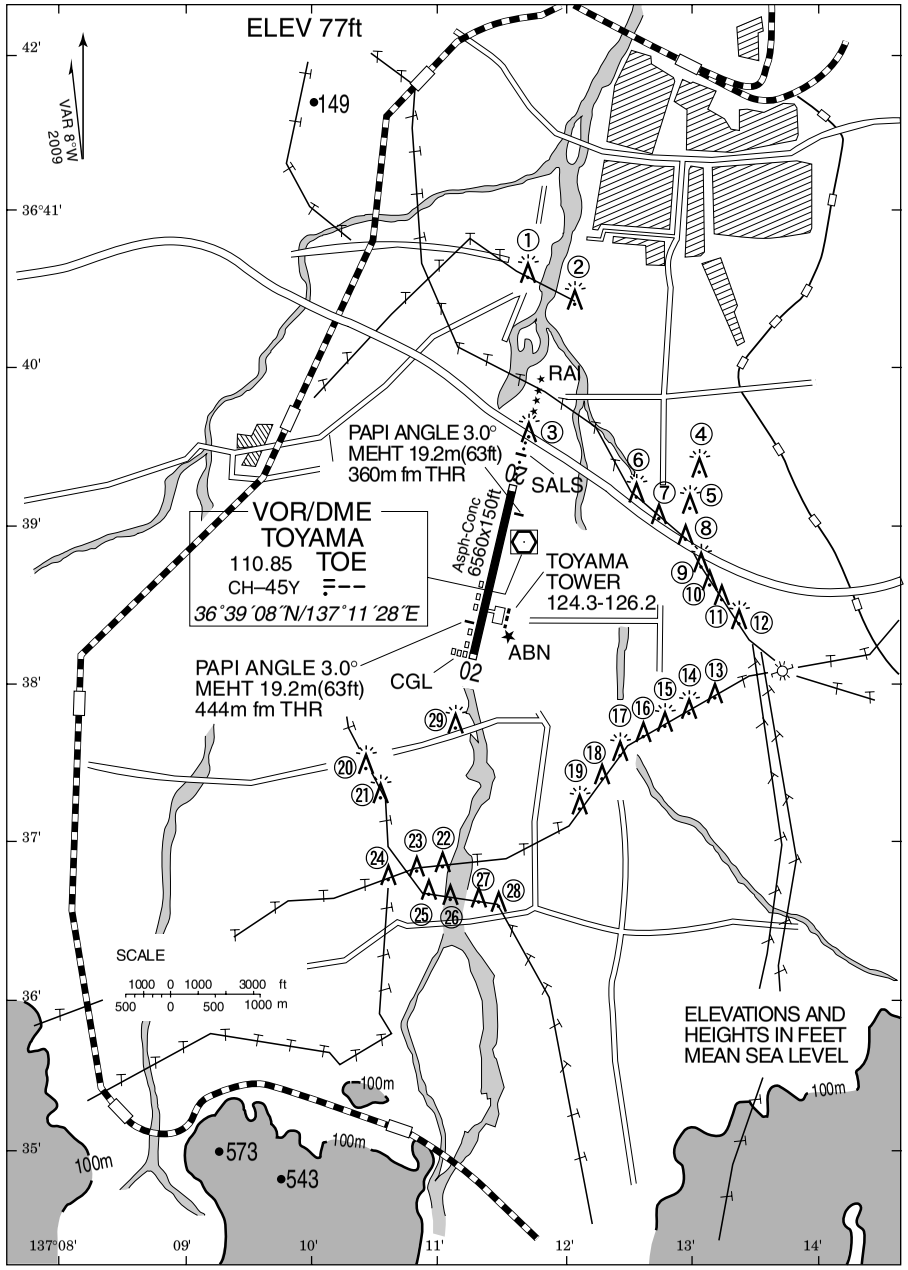

LDG CHART

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