

TOYAMA AP



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.

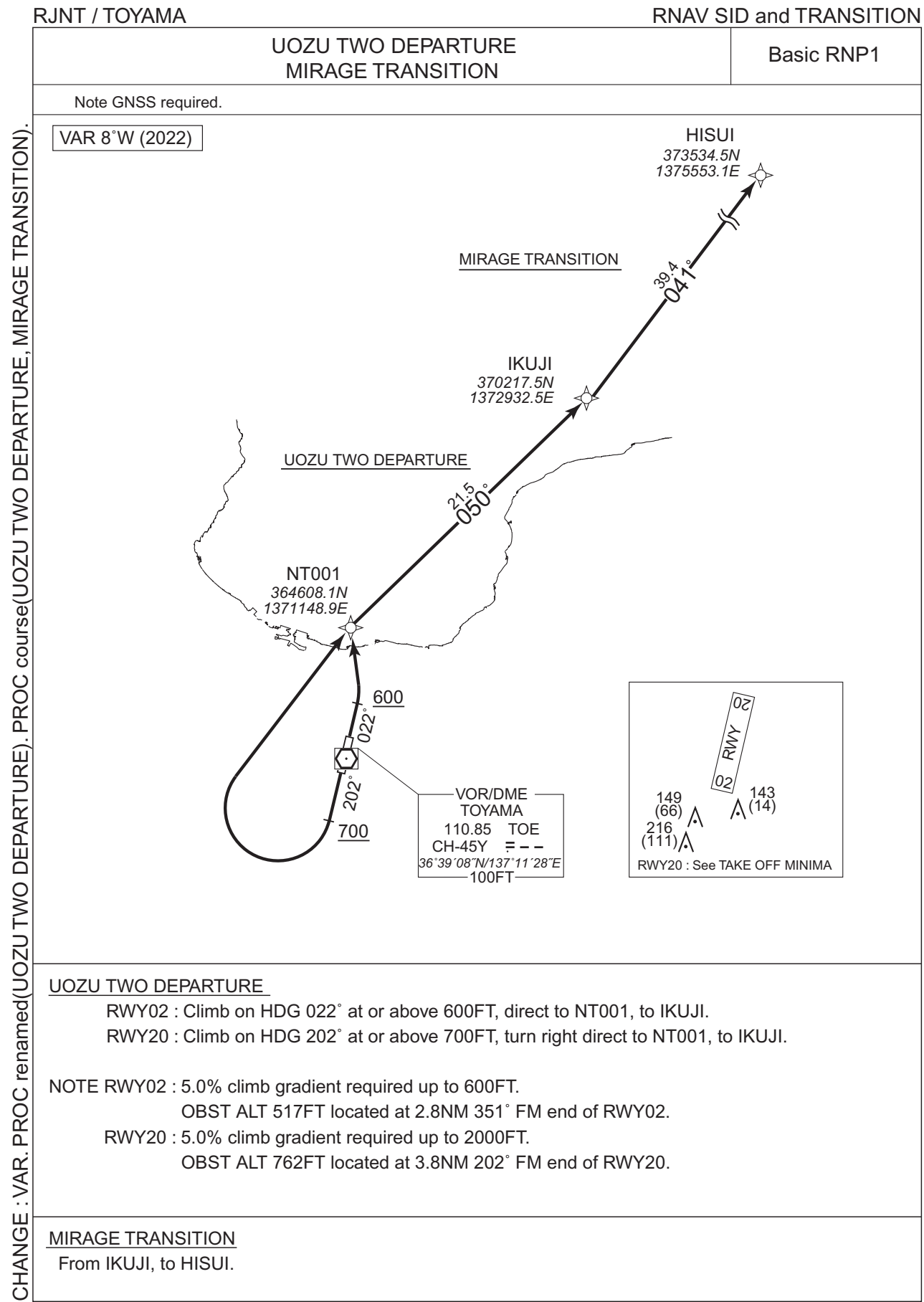
RWY20 : 5.0% climb gradient required up to 2000FT.

OBST ALT 762FT located at 3.8NM 202° FM end of RWY20.

URUSI REVERSAL FOUR DEPARTURE

CHANGE : Minor change

STANDARD DEPARTURE CHART -INSTRUMENT



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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	—	—	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

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

STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA

STAR

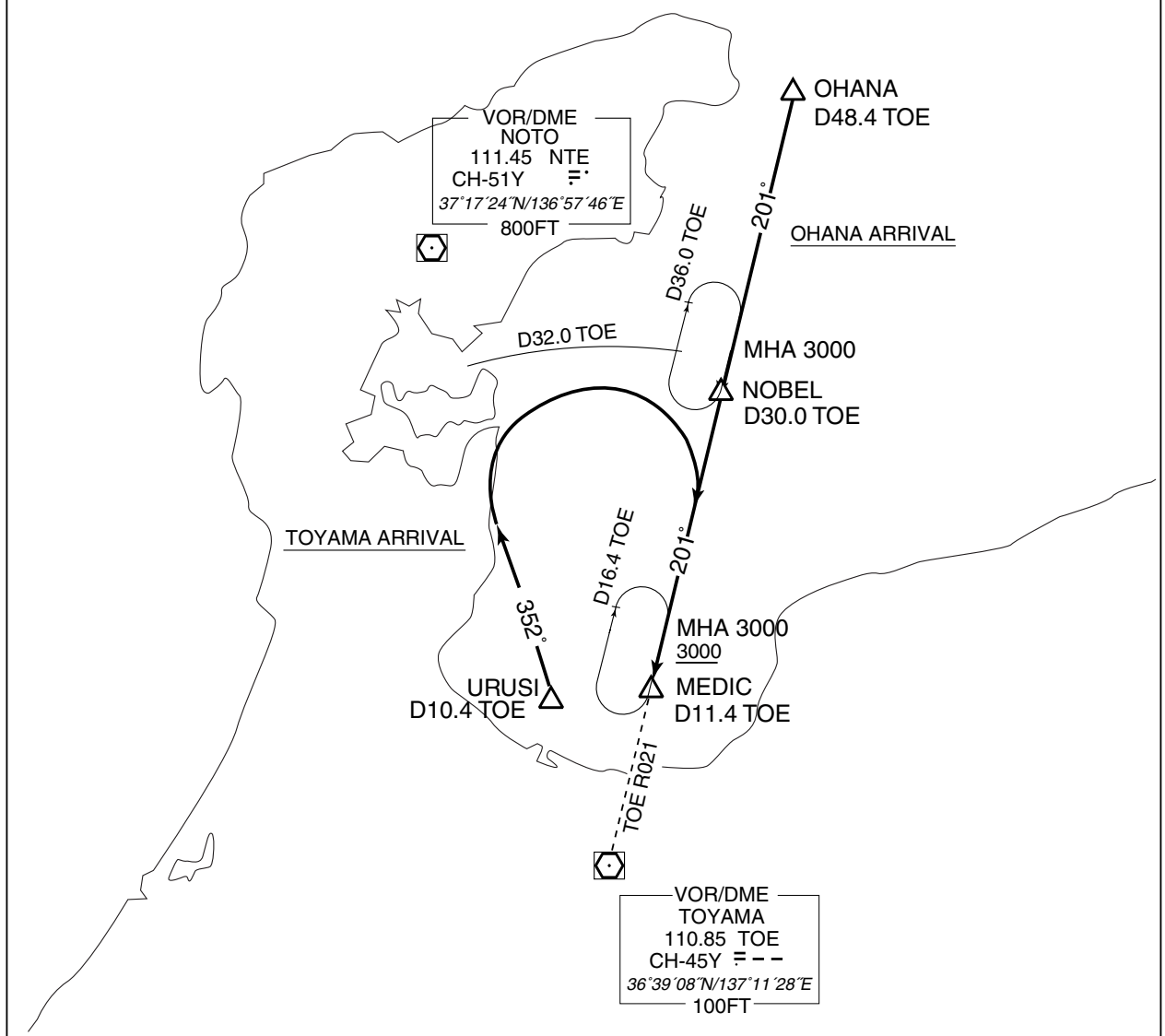
OHANA ARRIVAL

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

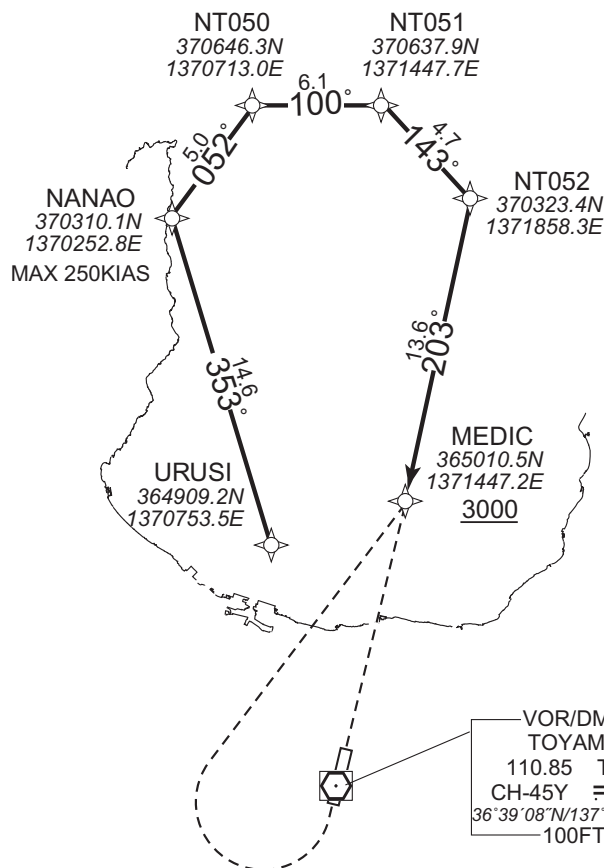
RNAV STAR

NANAO ARRIVAL

Basic RNP1

Note GNSS required.

VAR 8°W (2022)



NANAO ARRIVAL

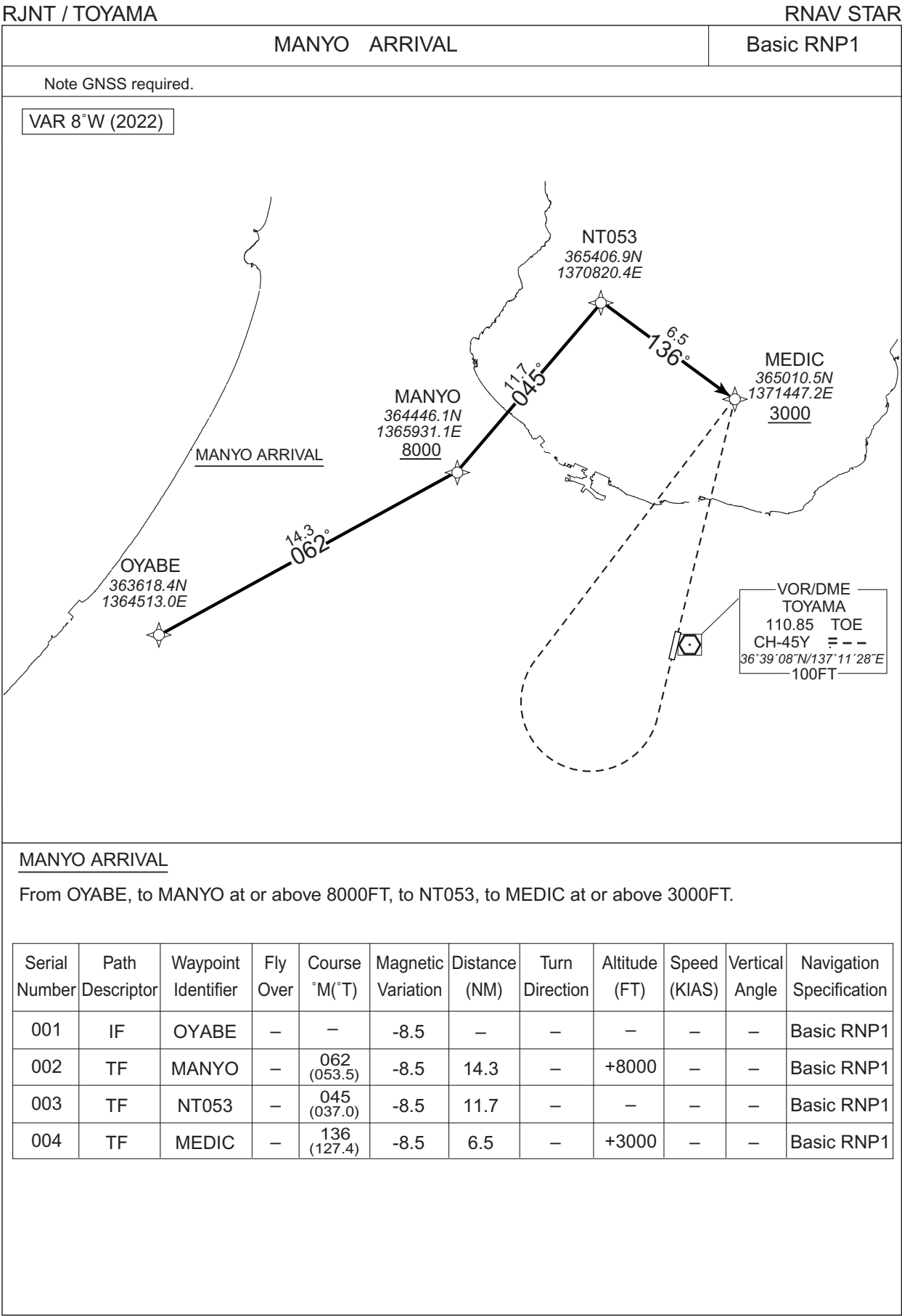
NANAO ARRIVAL

From URUSI, to NANA0, 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	NANA0	—	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



CHANGE : VAR. PROC course.

STANDARD ARRIVAL CHART -INSTRUMENT



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

CHANGE : Description of HLDG pattern.

RJNT / TOYAMA

LOC Z RWY20

TOKYO CONTROL 132.45-125.6 304.4 -317.1	LOC 109.3 ITO ≡-- LOC-DME CH-30X	TOYAMA TOWER 124.3-126.2	NO RADAR
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VAR 8°W (2014)

MSA 25NM

EQPT REQUIRED
DME
VOR

NOT TO SCALE

D17.0 TOE
MHA 3000
MAX 230KIAS

MEDIC (IF)
D11.4 TOE
D12.0 ITO

EBUSI (FAF)
D6.0 ITO

TOYAMA CITY

VOR/DME
TOYAMA
110.85 TOE
CH-45Y ---
36°39'08"N/137°11'28"E

MAPt D1.0 ITO

HDG 336°

LOC OFFSET 0.9°

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.

TOE

SDF

EBUSI (FAF)

MEDIC (IF)

MAPt VDP

MDA

3.0°

202°

202°

3000

1100 (1037)

510 (447)

773

1728

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%

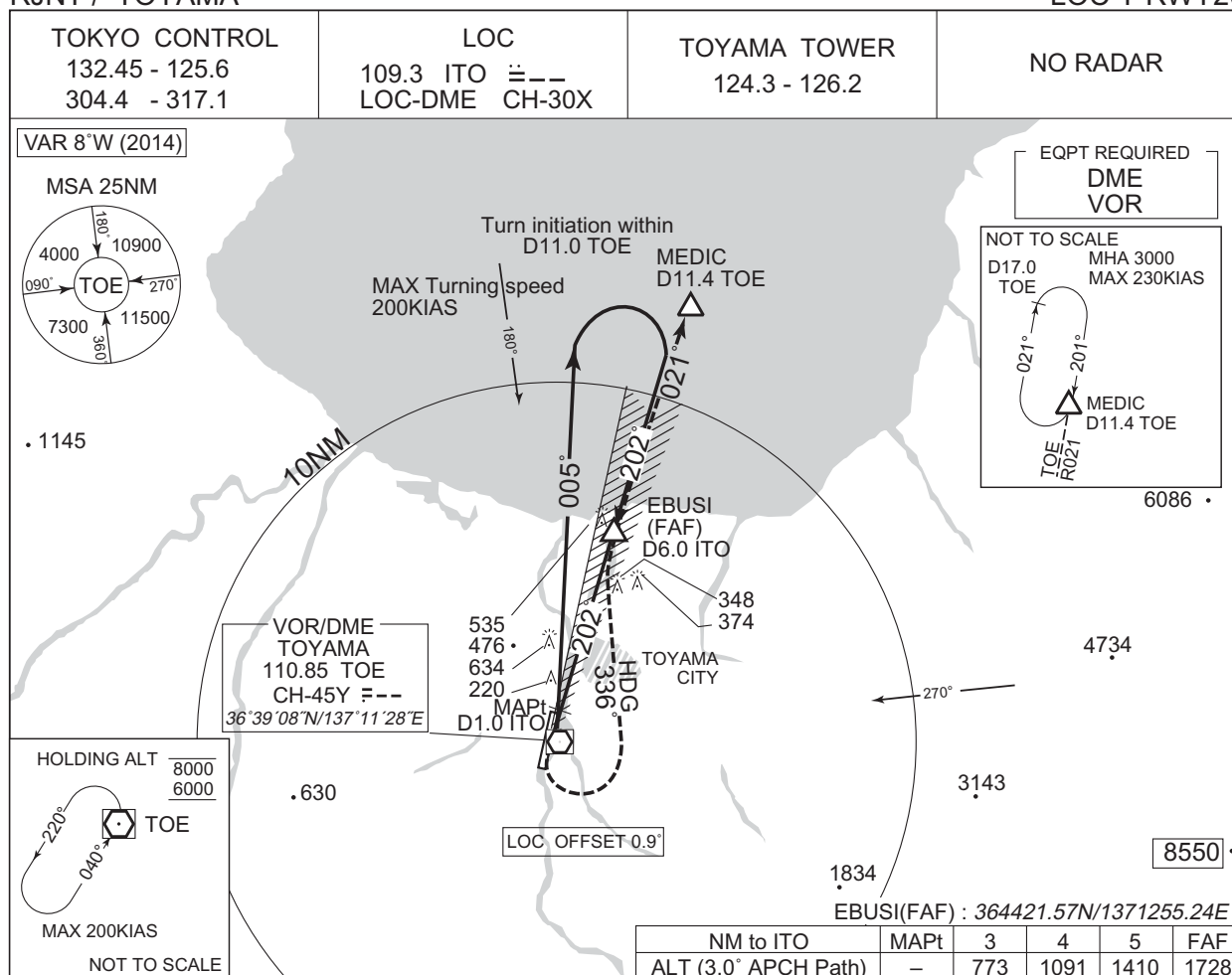
MINIMA	THR elev. 63	AD elev. 77		
CAT	MDA(H)	CMV	MDA(H)	VIS
A	470 (407)	900	590 (513)	1600
B		1000		
C		1400	630 (553)	2400
D				

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

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

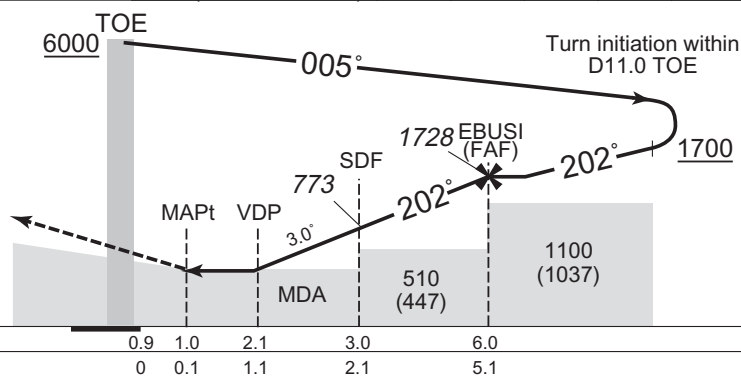
LOC Y RWY20



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.



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				

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

CHANGE : Description of HLDG pattern.

RJNT / TOYAMA

RNP Z RWY20



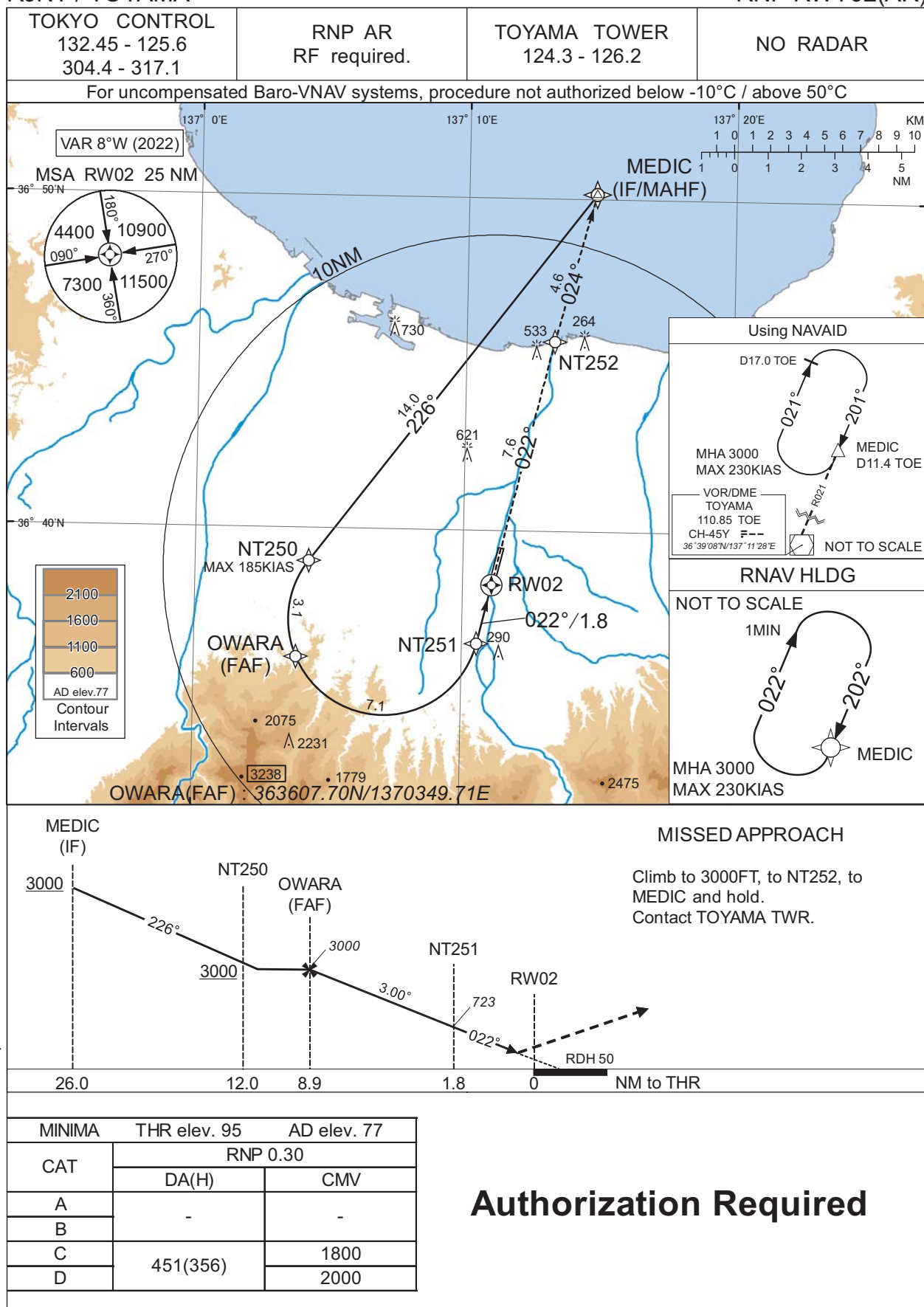
MINIMA		THR elev. 63		AD elev. 77		
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	470 (407)	900	470 (407)	900	590 (513)	1600
B		1000		1000		
C					1400	1400
D		3200				

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

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP RWY02(AR)



CHANGE : PROC renamed. Requirement for RNP.

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

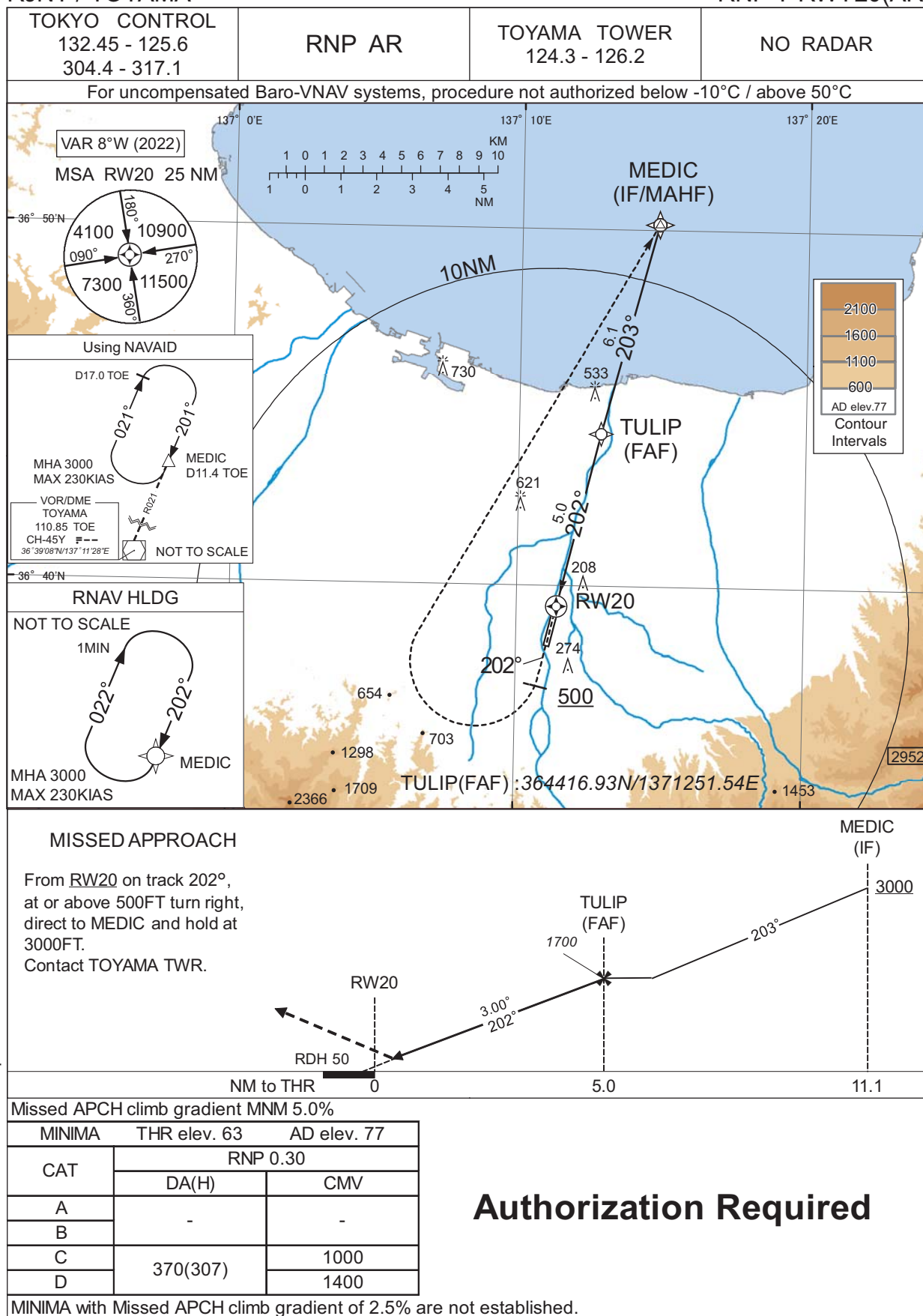
Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
MEDIC	365010.50N / 1371447.15E	NTRF1	363717.08N / 1370705.51E
NT250	363901.33N / 1370415.09E		
OWARA	363607.70N / 1370349.71E		
NT251	363636.65N / 1371033.43E		
RW02	363822.79N / 1371105.23E		
NT252	364543.55N / 1371317.58E		

CHANGE : PROC renamed.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP Y RWY20(AR)



CHANGE PROC renamed. Requirement for RNP.

Authorization Required

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

CHANGE : PROC renamed.

INSTRUMENT APPROACH CHART

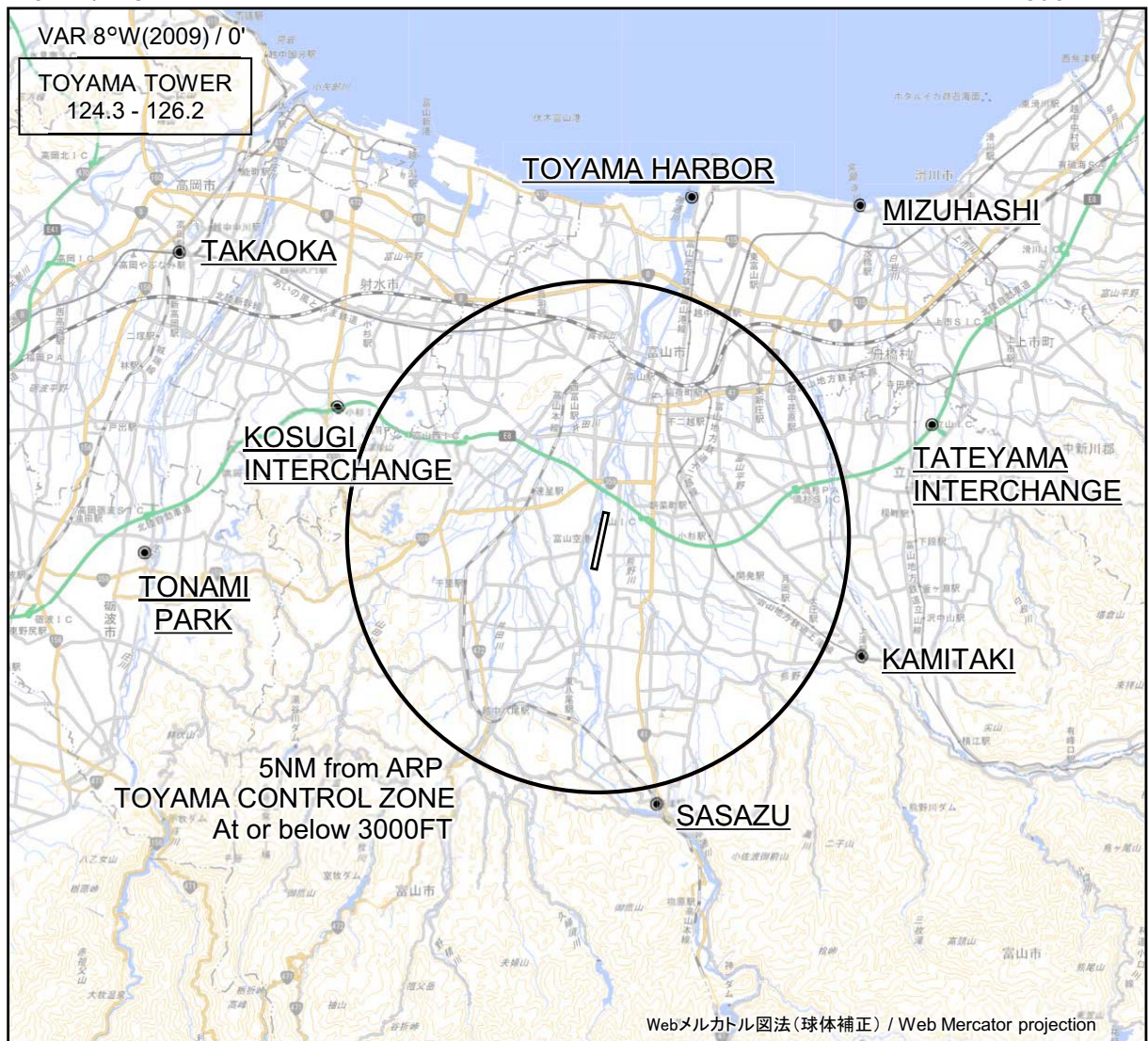
RJNT / TOYAMA

VOR A



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).

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

CHANGE : Map updated. BRG/DIST from ARP.

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

