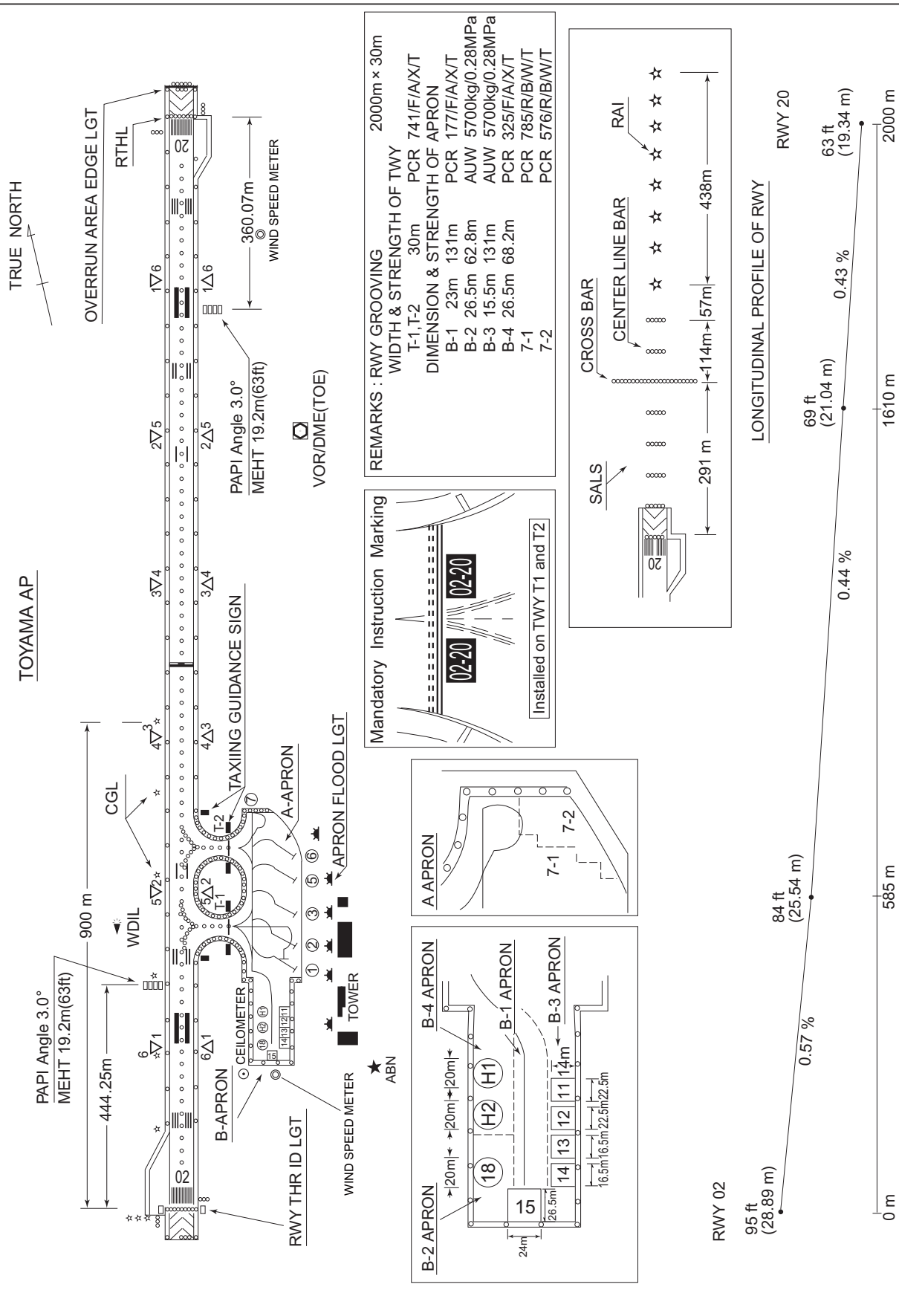


TOYAMA AP



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...

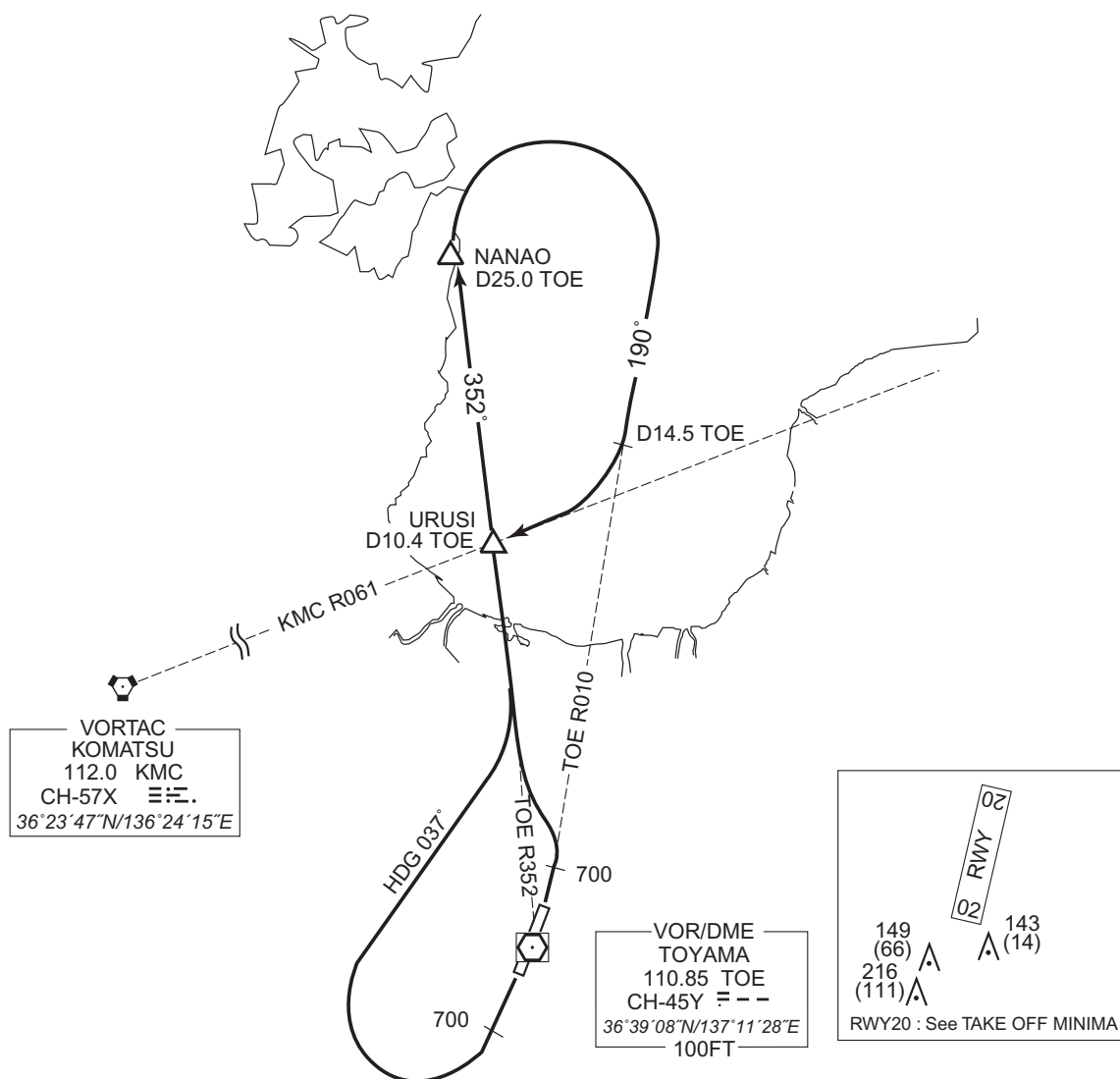
RWY20 : Climb RWY HDG until 700FT, turn right HDG 037° to intercept and proceed...
...via TOE R352 to NANAO, turn right, proceed via TOE R010 to
intercept and proceed via KMC R061 to URUSI.

NOTE RWY02 : 4.0% climb gradient required up to 1000FT.

OBST ALT 621FT located at 2.8NM 345° FM end of RWY02.

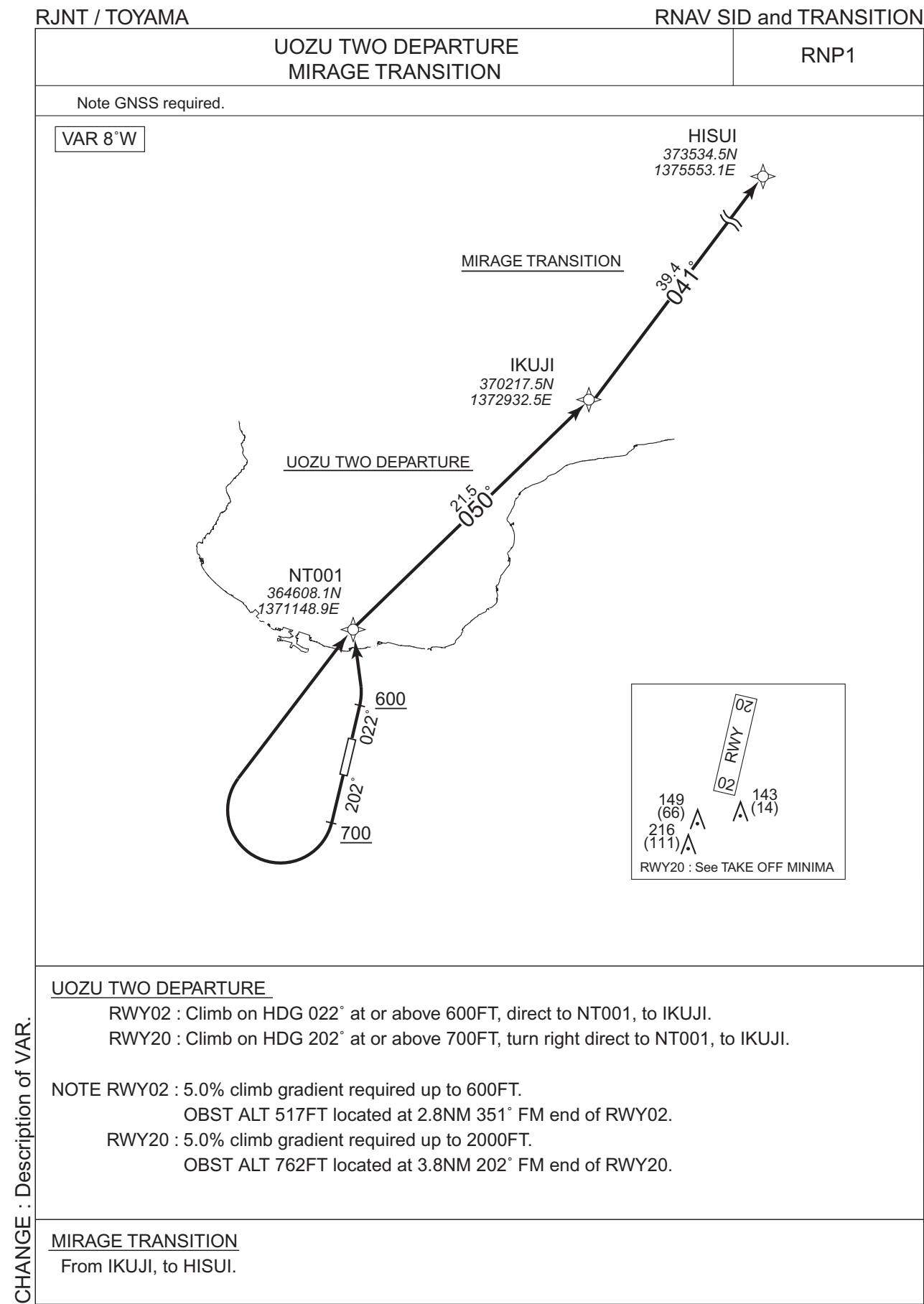
RWY20 : 5.0% climb gradient required up to 2000FT.

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



CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT



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

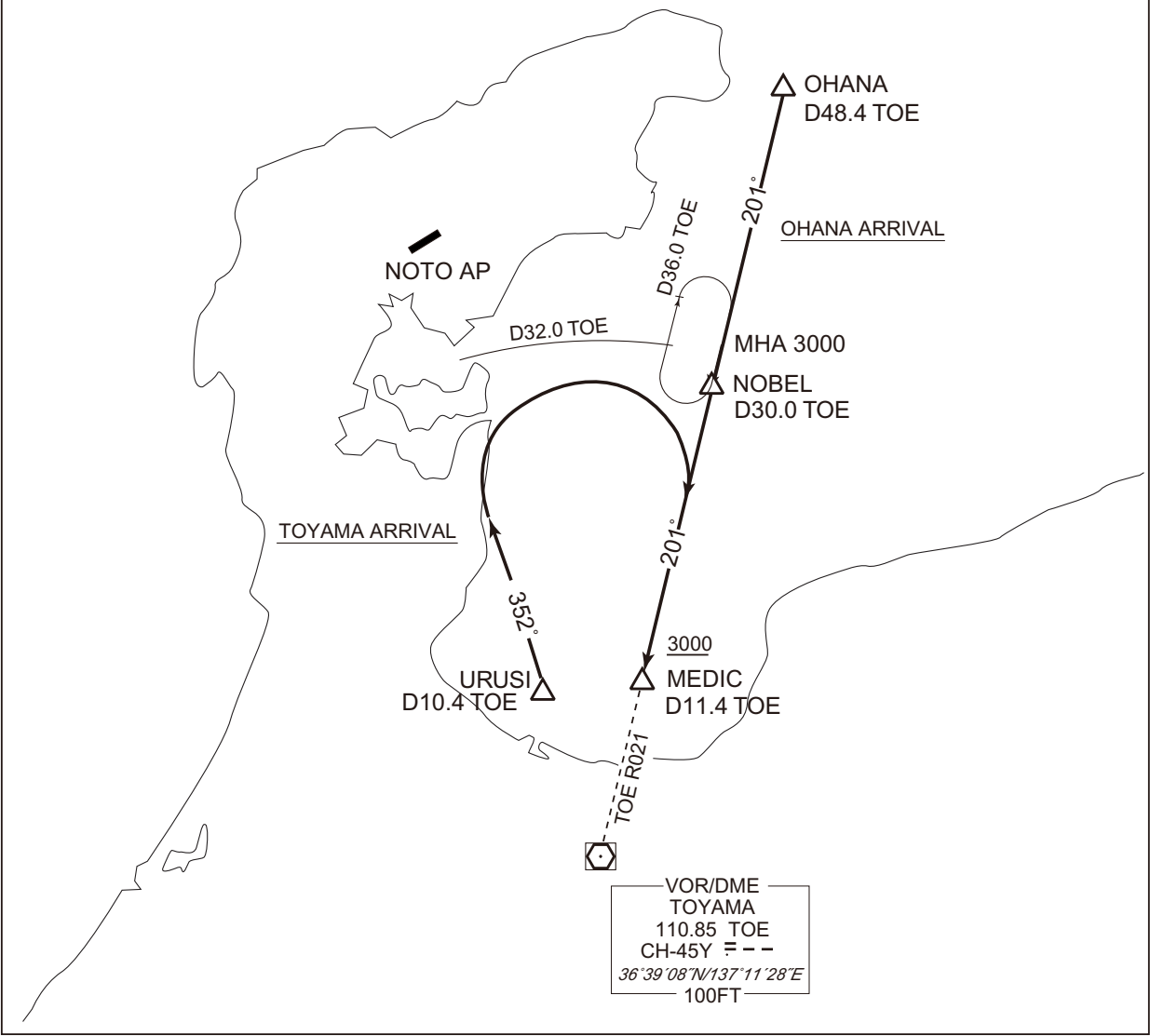
OHANA ARRIVAL

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

The chart displays the NANAO ARRIVAL RNAV STAR procedure. It includes a map of the Toyama region with the following waypoints and their coordinates:

- NANOAO: 370310.1N, 1370252.8E, MAX 250KIAS
- URUSI: 364909.2N, 1370753.5E
- NT050: 370646.3N, 1370713.0E
- NT051: 370637.9N, 1371447.7E
- NT052: 370323.4N, 1371858.3E
- MEDIC: 365010.5N, 1371447.2E, 3000

The flight path is defined by the following segments:

- From URUSI to NANOAO: 14.6 NM, 353° (194.2°), -250 KIAS.
- From NANOAO to NT050: 5.0 NM, 052° (043.8°), -250 KIAS.
- From NT050 to NT051: 6.1 NM, 100° (091.3°), -250 KIAS.
- From NT051 to NT052: 4.7 NM, 143° (134.2°), -250 KIAS.
- From NT052 to MEDIC: 13.6 NM, 203° (194.2°), +3000 FT.

A dashed line indicates the arrival path from the south, passing through a rectangular box.

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

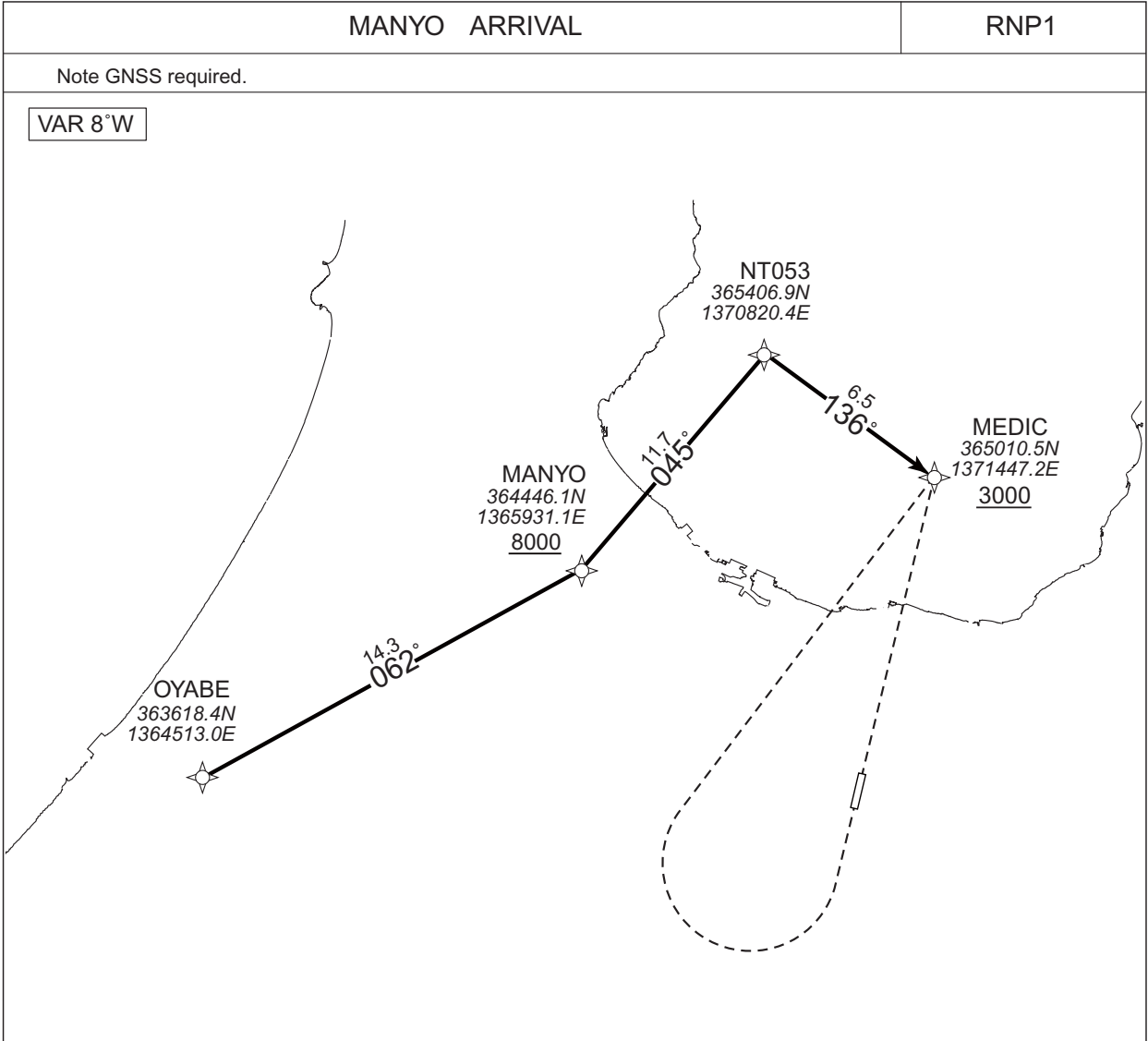
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	URUSI	—	—	-8.5	—	—	—	—	—	RNP1
002	TF	NANAO	—	353 (344.1)	-8.5	14.6	—	—	-250	—	RNP1
003	TF	NT050	—	052 (043.8)	-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

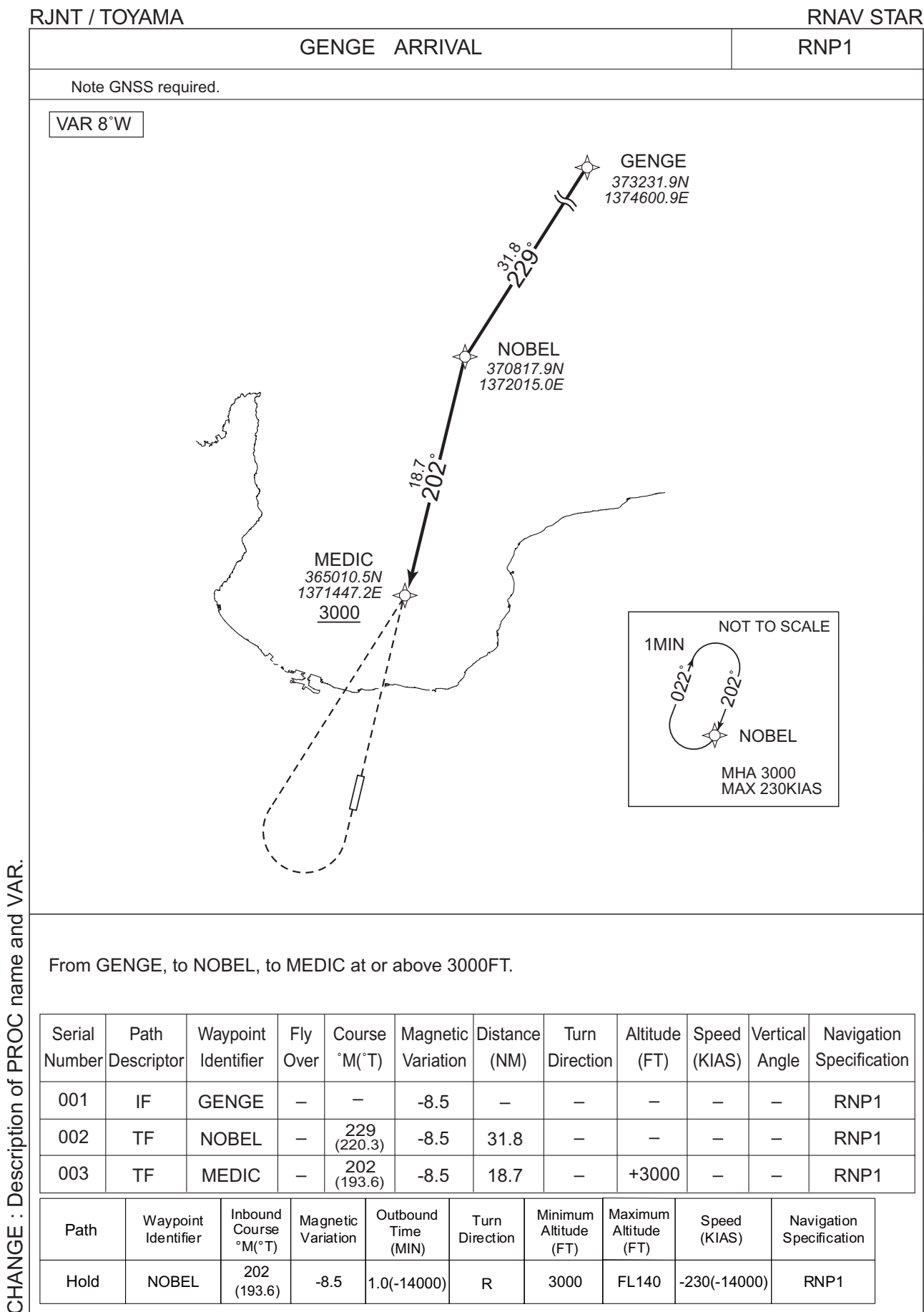


CHANGE : Description of PROC name and VAR.

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

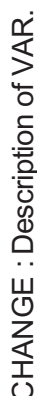
STANDARD ARRIVAL CHART -INSTRUMENT



CHANGE : Description of PROC name and VAR.

RJNT / TOYAMA

LOC Z RWY20



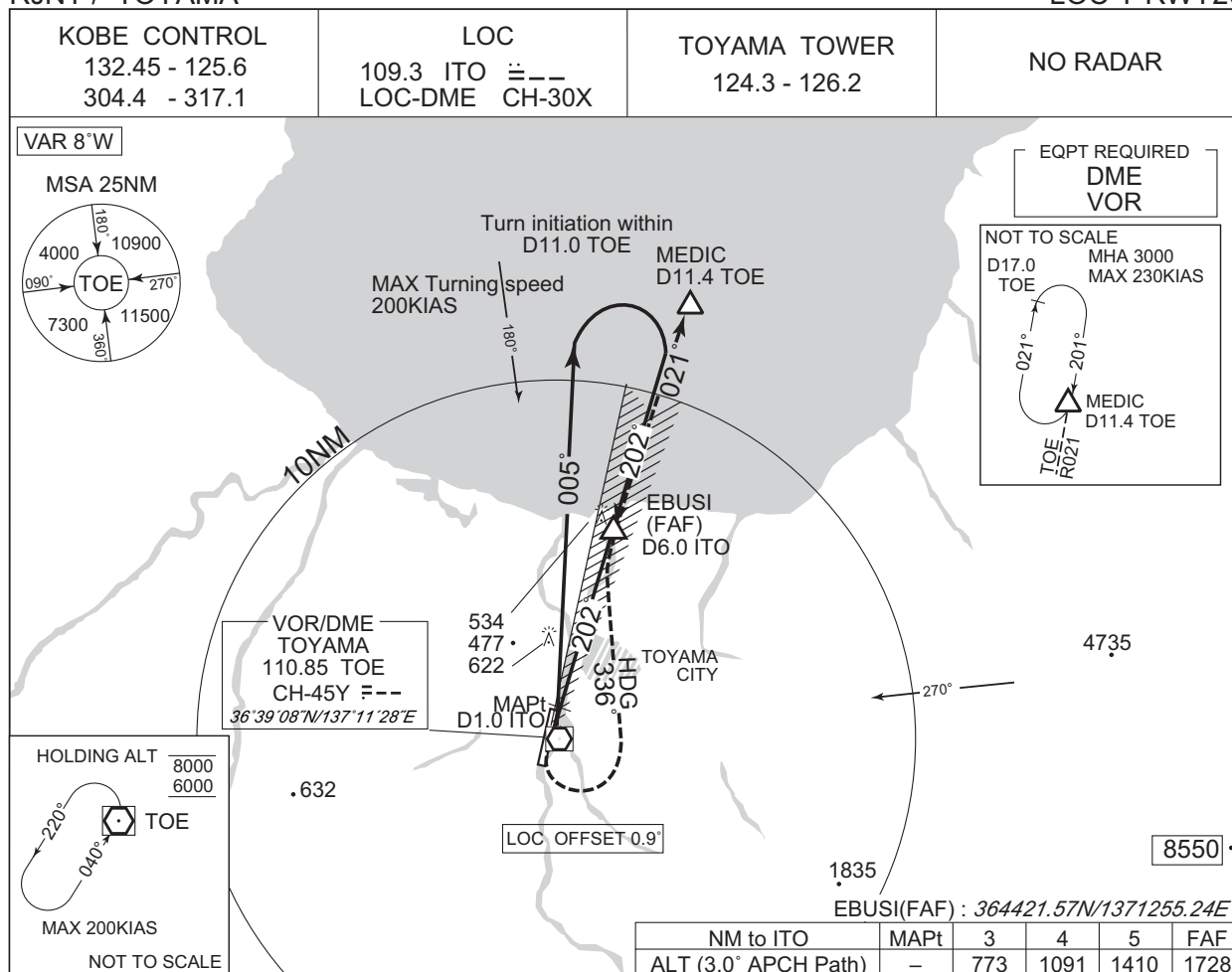
Missed APCH climb gradient MNM 3.0%				
MINIMA		THR elev. 63	AD elev. 77	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	470 (407)	900	590 (513)	1600
B		1000		
C			630 (553)	2400
D				1400

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

INSTRUMENT APPROACH CHART

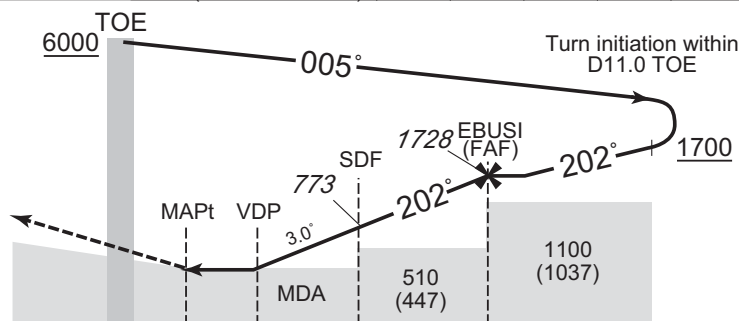
RJNT / TOYAMA

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.



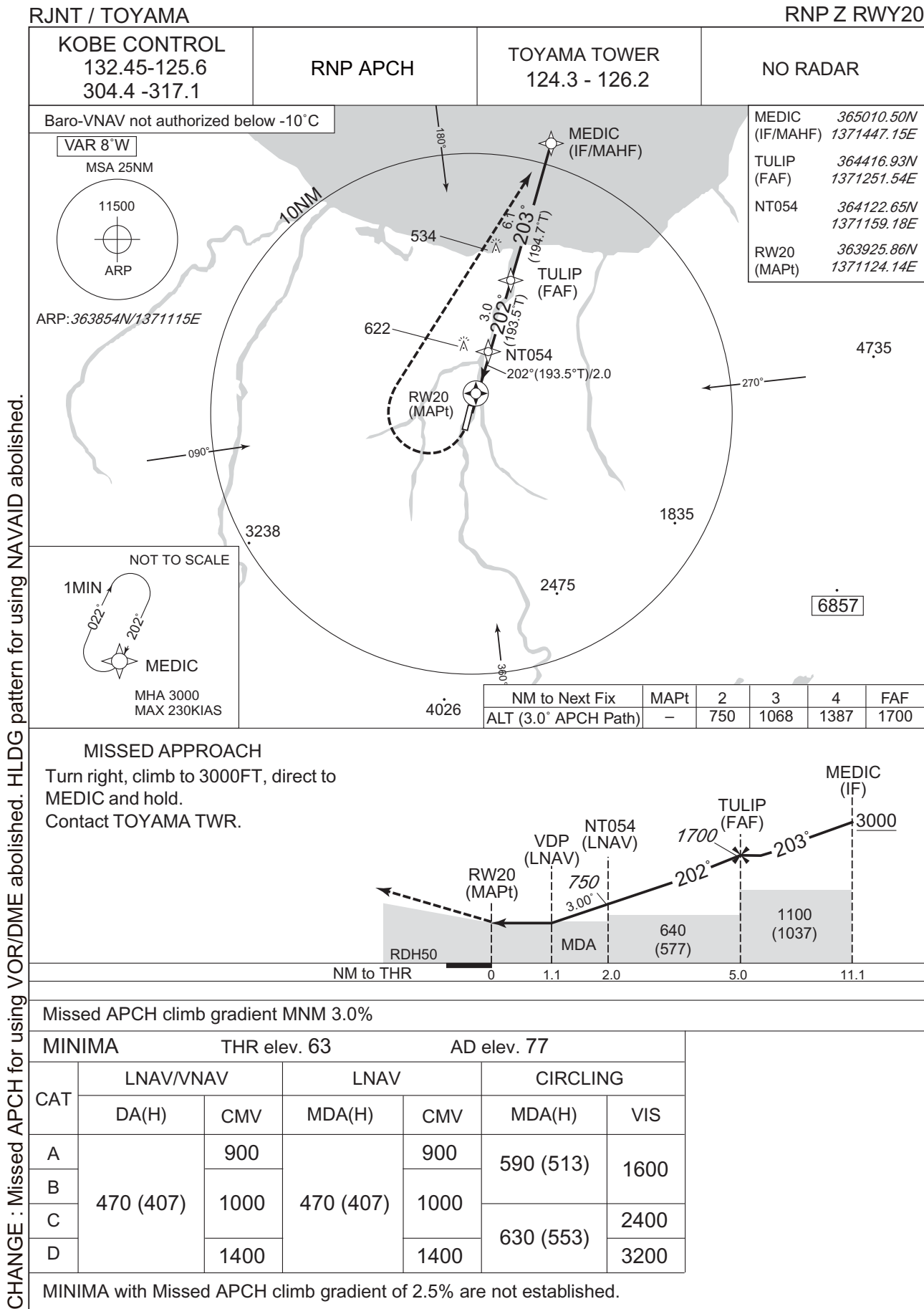
DME to ITO	0.9	1.0	2.1	3.0	6.0
NM to THR	0	0.1	1.1	2.1	5.1

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		

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

INSTRUMENT APPROACH CHART

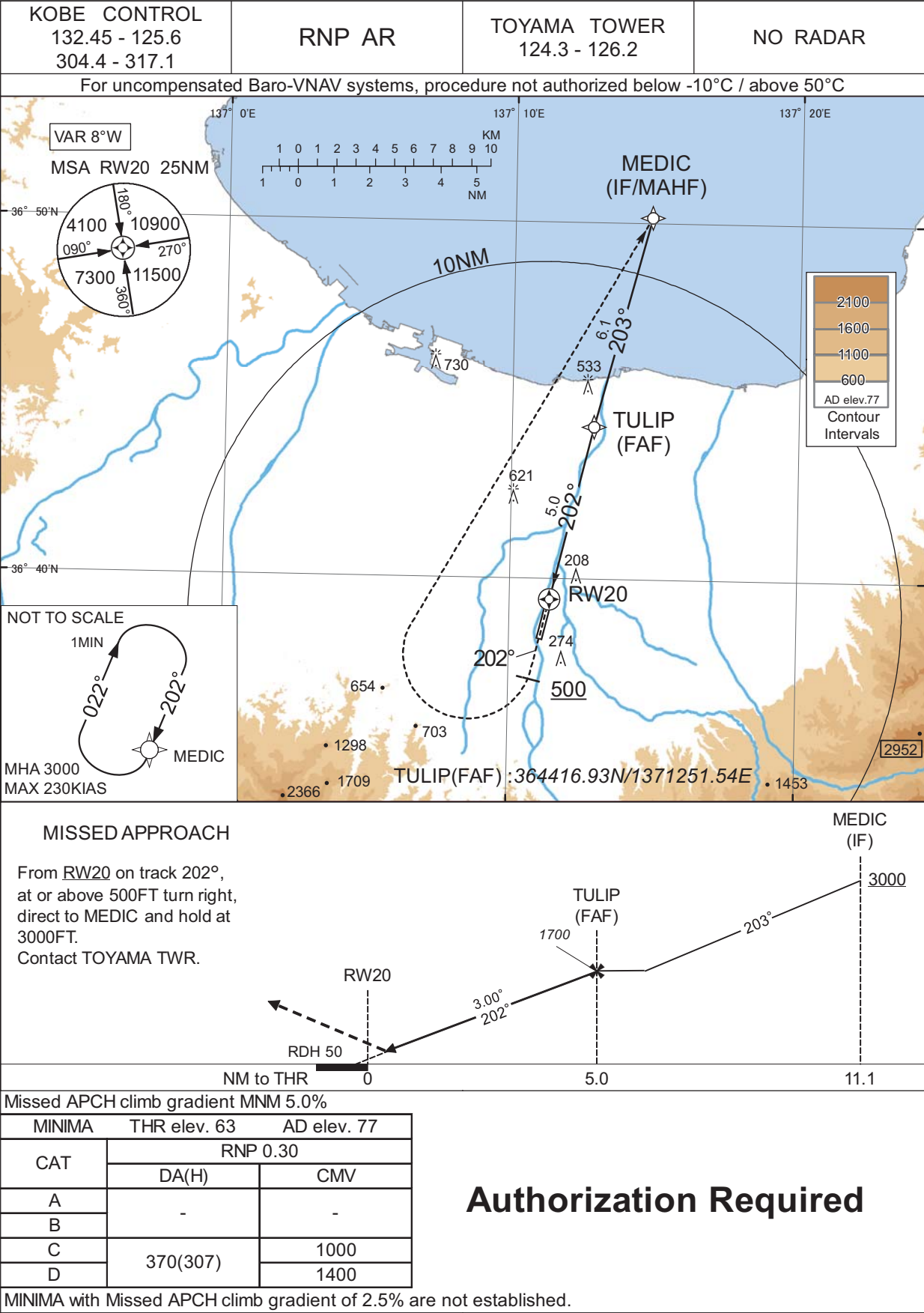


CHANGE : Missed APCH for using VOR/DME abolished. HLDG pattern for using NAVAID abolished.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP Y RWY20(AR)



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

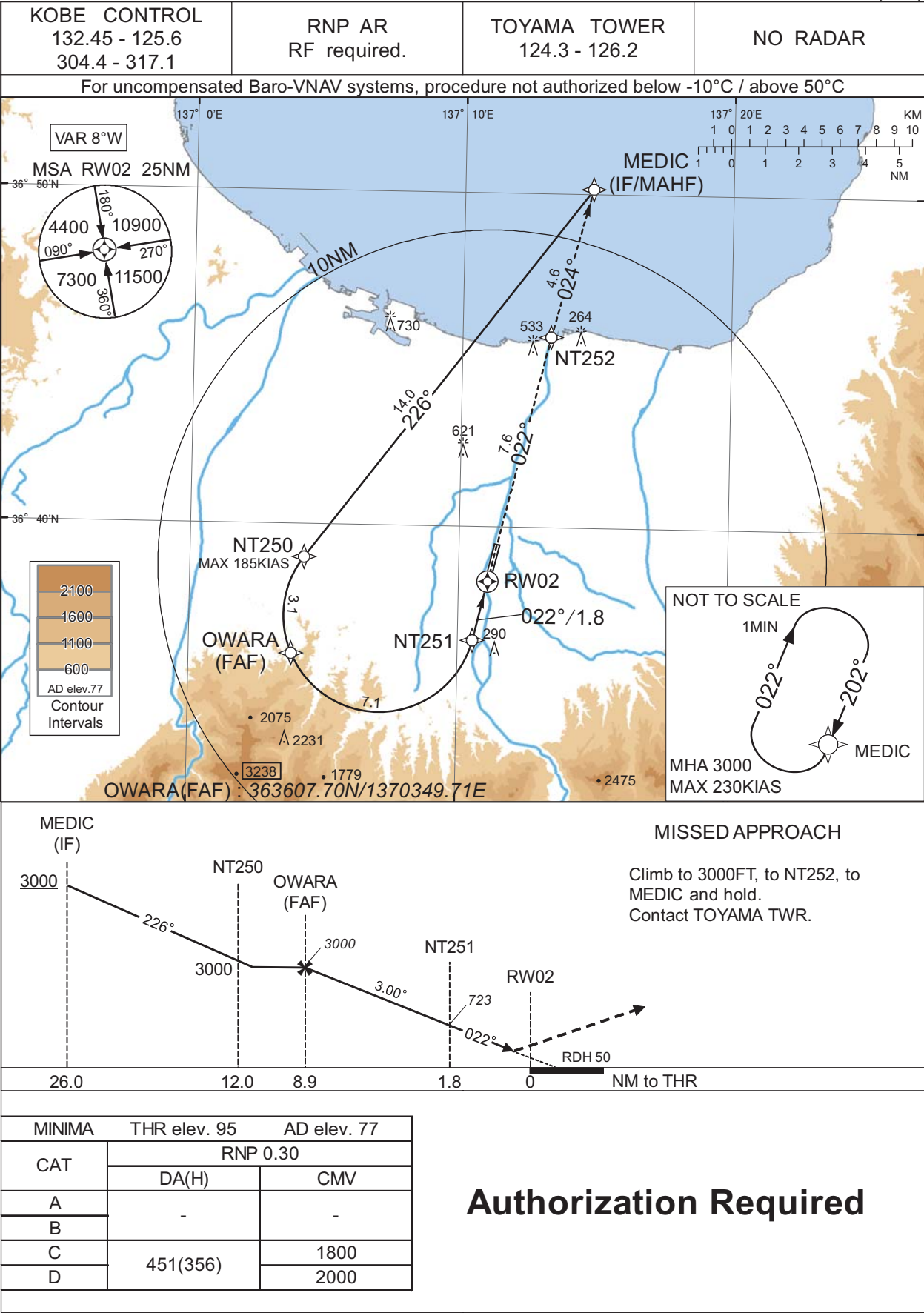
Waypoint Coordinates

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)



CHANGE : HLDG pattern for using NAVAID abolished.

INSTRUMENT APPROACH CHART

RJNT / TOYAMA

RNP RWY02(AR)

Coding Table

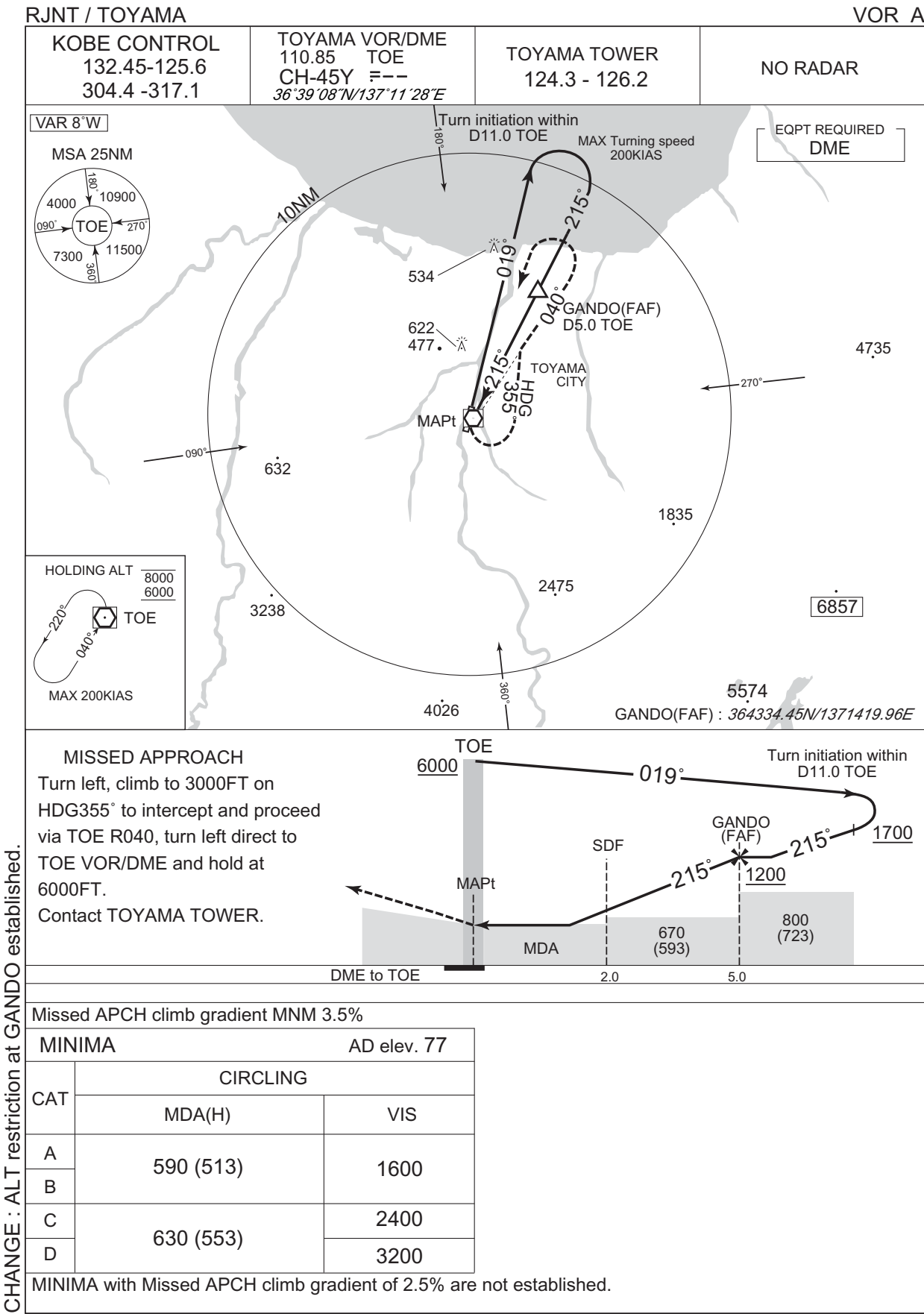
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	VPA/ RDH (°/FT)	RNP Value
001	IF	MEDIC	-	-	-8.5	-	-	+3000	-	-	-
002	TF	NT250	-	226 (217.2)	-8.5	14.0	-	+3000	-185	-	1.0
003	RF Center: NTRF1 r=2.87NM	OWARA	-	-	-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		

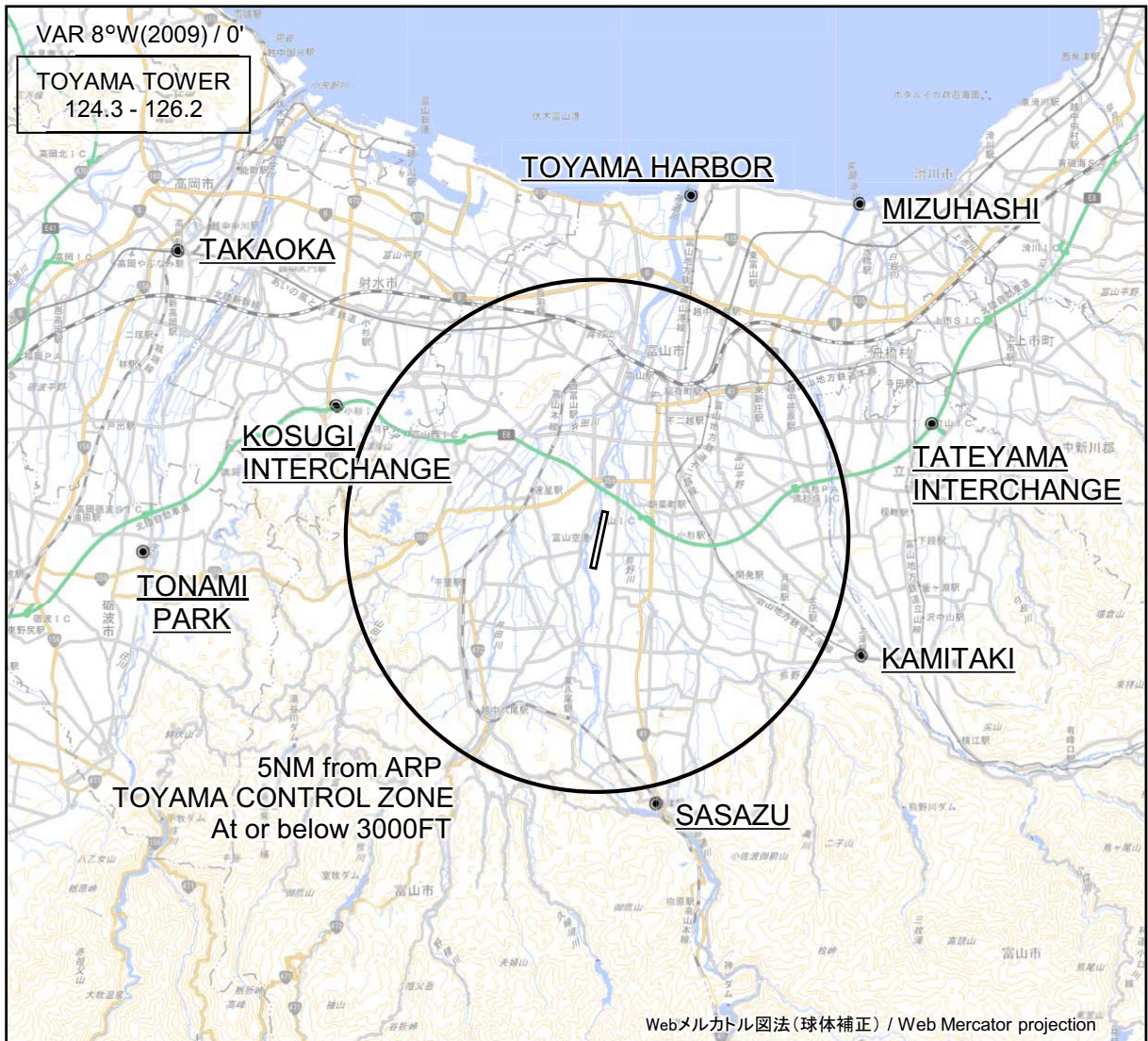
INSTRUMENT APPROACH CHART



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).

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

