

#### 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.



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

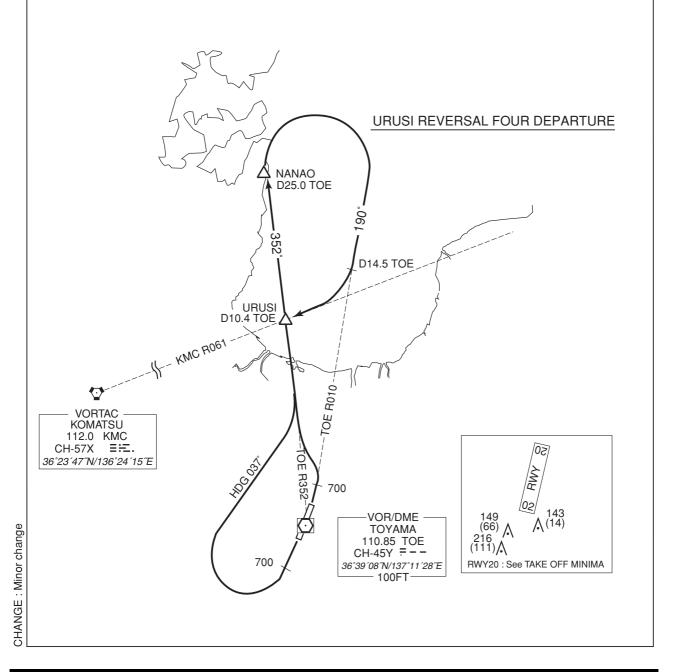
intercept and proceed via KMC R061 to URUSI.

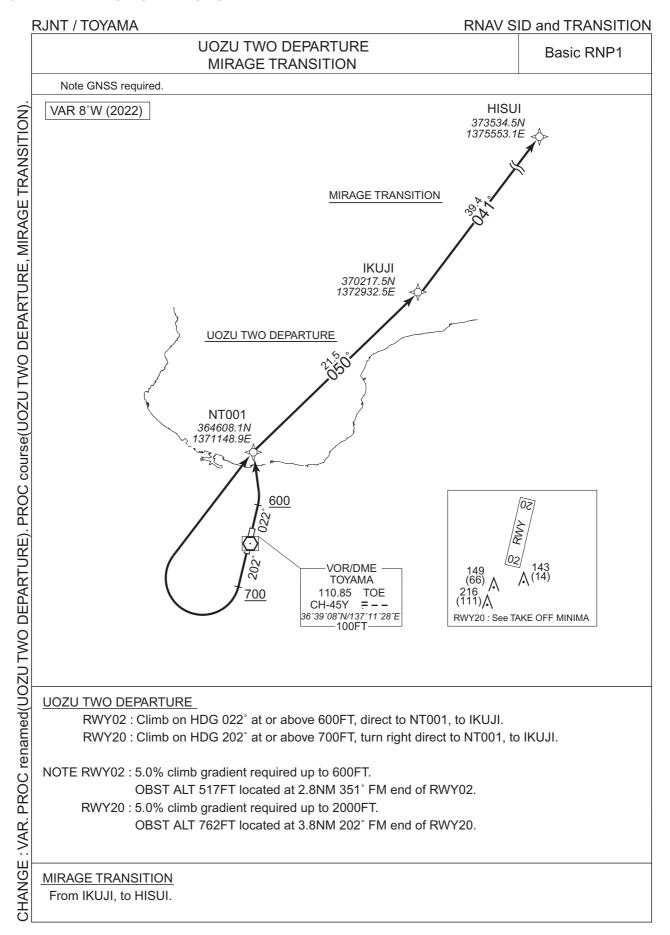
NOTE RWY02: 4.0% climb gradient required up to 1000FT.

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.





### RJNT / TOYAMA

# RNAV SID and TRANSITION

# **UOZU TWO DEPARTURE**

### RWY02

Serial Number	Path Descriptor	Waypoint Identifier	-				Turn Direction		•		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	_		Magnetic Variation		Turn Direction				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		-							l	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

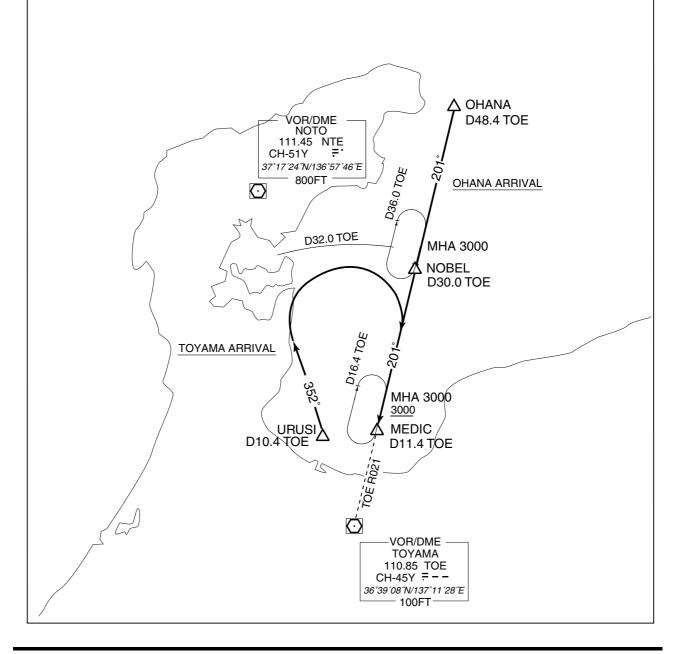
# OHANA ARRIVAL

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

# TOYAMA ARRIVAL

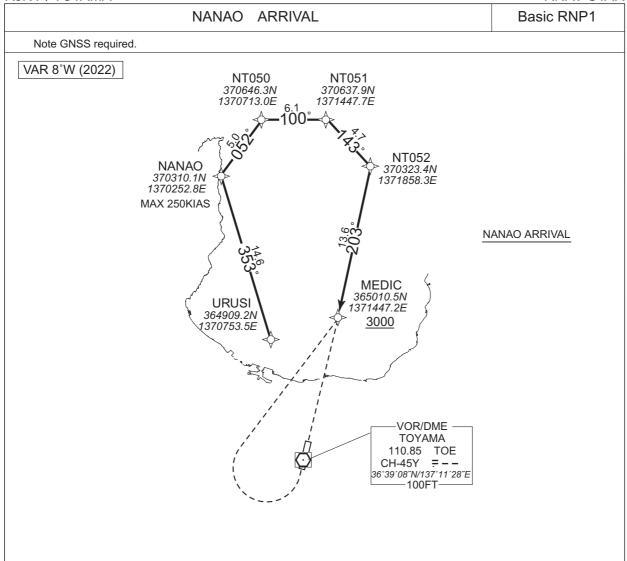
From over URUSI, proceed via TOE R352, turn right to intercept and proceed via TOE R021 to MEDIC within TOE 32.0DME.

Cross MEDIC at or above 3000FT.



#### STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA RNAV STAR



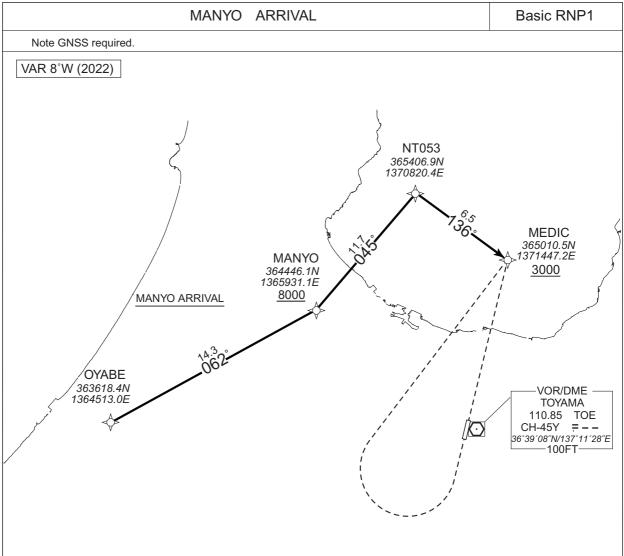
#### NANAO ARRIVAL

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	_	1	_	_	Basic RNP1
006	TF	MEDIC	_	203 (194.2)	-8.5	13.6	_	+3000	_	_	Basic RNP1

#### STANDARD ARRIVAL CHART -INSTRUMENT

RJNT / TOYAMA RNAV STAR



#### MANYO ARRIVAL

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

Serial	Path	Waypoint	Fly	Course	Magnetic	Distance	Turn	Altitude	Speed	Vertical	Navigation
Number	Descriptor	Identifier	Over	°M(°T)	Variation	(NM)	Direction	(FT)	(KIAS)	Angle	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

#### STANDARD ARRIVAL CHART -INSTRUMENT

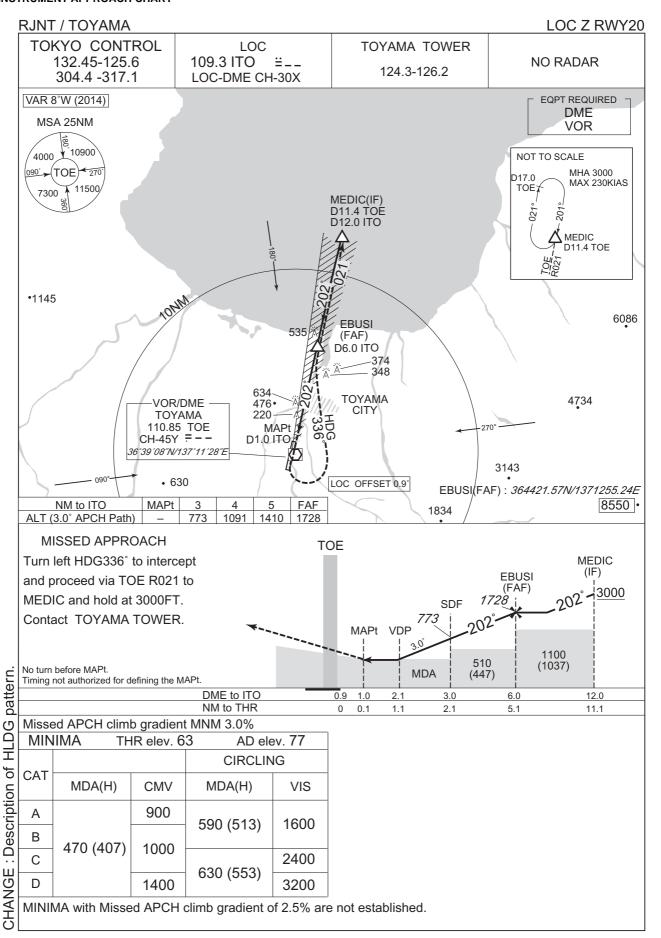
RJNT / TOYAMA **RNAV STAR** GENGE ARRIVAL Basic RNP1 Note GNSS required. VAR 8°W (2022) **GENGE** 373231.9N 1374600.9E GENGE ARRIVAL **NOBEL** 370817.9N 1372015.0E CHANGE: VAR. PROC course. RNAV HLDG established(NOBEL). HLDG for NAVAID abolished(NOBEL). **MEDIC** 365010.5N 1371447.2E 3000 NOT TO SCALE 1MIN NOBEL MHA 3000 MAX 230KIAS VOR/DME TOYAMA 110.85 TOE CH-45Y = -36°39′08″N/137°11′28″E

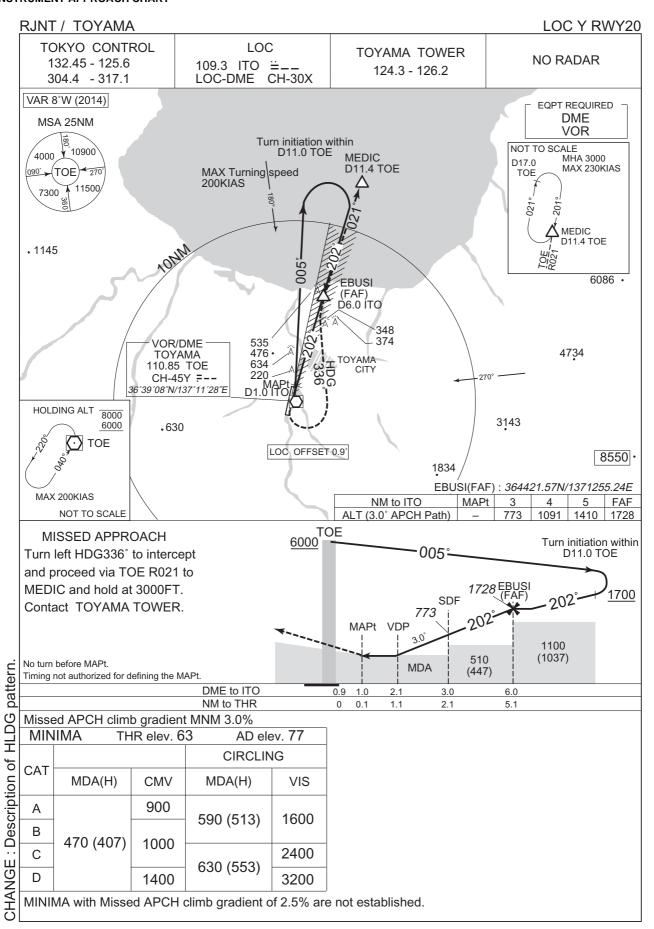
### **GENGE ARRIVAL**

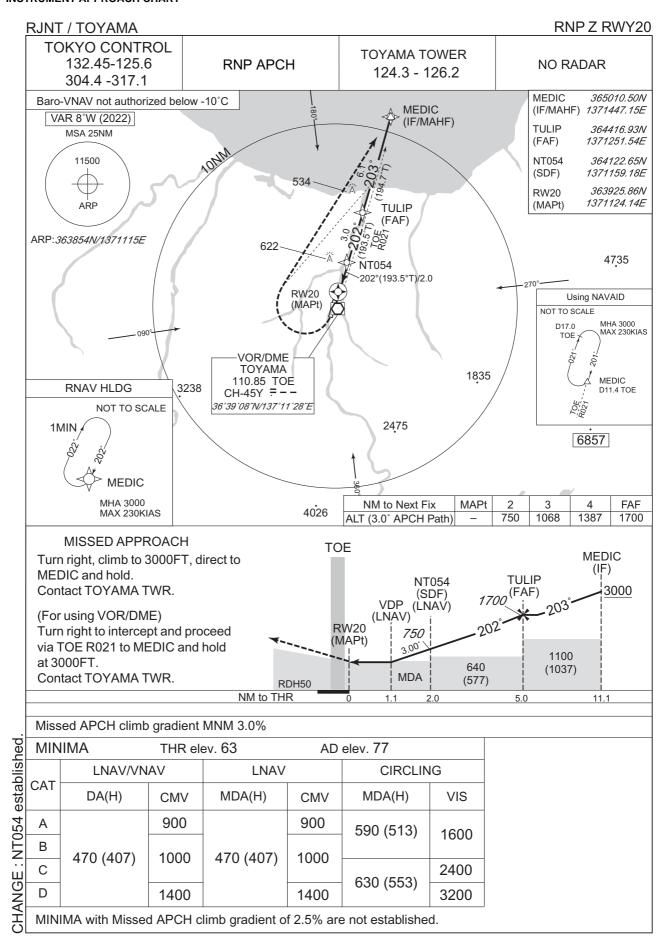
From GENGE, to NOBEL, to MEDIC at or above 3000FT.

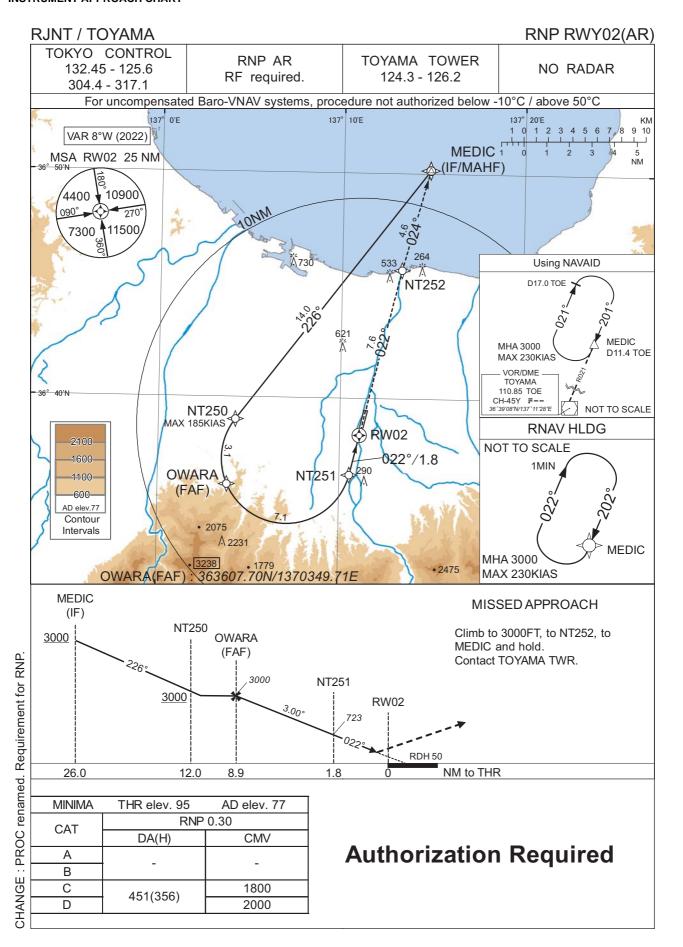
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation		Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	GENGE	_	_	-8.5	1	-	_	_	_	Basic RNP1
002	TF	NOBEL	_	229 (220.3)	-8.5	31.8	_	_	_	_	Basic RNP1
003	TF	MEDIC	_	202 (193.6)	-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









# RJNT / TOYAMA RNP RWY02(AR)

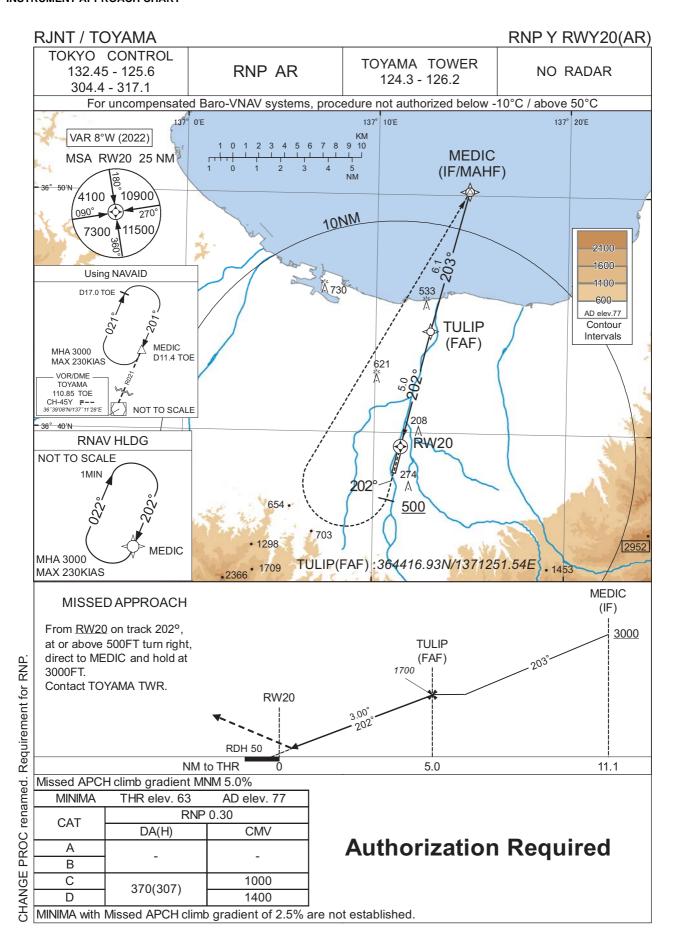
# **Coding Table**

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	1	1	-8.5	3.1	L	3000	1	,	1.0
004	RF Center: NTRF1 r=2.87NM	NT251	1	-	-8.5	7.1	L	723	-	-3.00	0.3
005	TF	RW02	Υ	022 (013.5)	-8.5	1.8	-	145	-	-3.00/50	0.3
006	TF	NT252	1	022 (013.5)	-8.5	7.6	-	ı	1	ı	1.0
007	TF	MEDIC	1	024 (015.0)	-8.5	4.6	-	3000	-	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Lime	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		



# RJNT / TOYAMA

# RNP Y RWY20(AR)

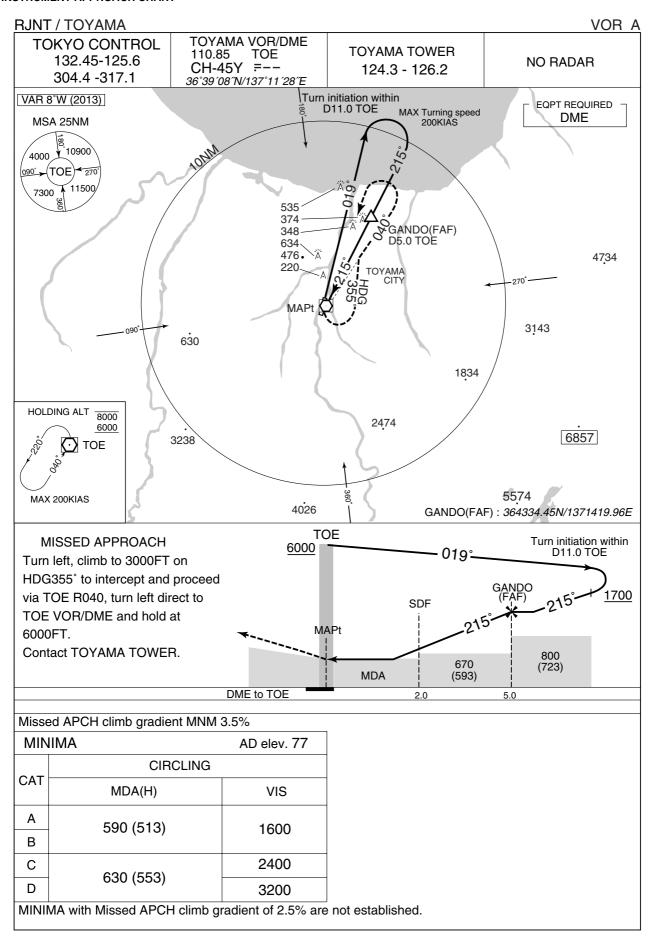
# Coding Table

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	1	-	-8.5	-	ı	+3000	-		-
002	TF	TULIP	1	203 (194.7)	-8.5	6.1	1	1700	-	1	1.0
003	TF	RW20	Υ	202 (193.5)	-8.5	5.0	ı	113	-	-3.00/50	0.3
004	FA	ı	1	202 (193.5)	-8.5	-	ı	+500	-	-	1.0
005	DF	MEDIC	1	-	-8.5	-	R	3000	-	-	1.0

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Lime	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





※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
ARP.	富山ハーバー Toyama harbor	016°T / 6.9NM	港 Harbor
from	水橋 Mizuhashi	039°T / 8.3NM	(常願寺川)河口 River-mouth
BRG/DIST	高岡 Takaoka	304°T / 10.0NM	JR駅 JR Station
J. BRG	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
pdated	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
Map updated.	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
CHANGE	笹津 Sasazu	167°T / 5.3NM	JR駅 JR Station

185 220 176 213 187 256 187 256 187 256 187 256 189 233 173 249 173 249 189 259 189 259 189 259 189 263 189 263 189 228 189 229 120 212 125 236 110 228 125 236 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 110 228 135 261 149 149					LDG CHART
185     220       176     213       45     97       187     256       178     249       179     263       189     263       189     263       189     263       189     263       189     282       189     282       189     283       125     228       126     231       103     222       132     270       135     286       136     283       137     243       138     283       120     266       120     266	OBSTRCTION NR	AGL (FT)	MSL (FT)	AERONAUTICAL OBSTRUCTIONS LIGHTS	DAY MARKINGS
176     213       45     97       187     256       159     233       173     249       189     259       189     262       189     263       189     263       189     263       189     263       189     263       120     212       125     236       126     238       127     228       132     270       135     286       136     288       137     243       120     266       120     266	٠	185	220	0	0
45       97         187       256         178       249         173       249         189       263         189       263         189       263         189       263         189       263         189       263         189       263         189       282         167       273         170       228         132       270         135       286         136       283         137       283         138       283         120       266         120       283         135       283         140       266	2	176	213	0	0
187     256       159     233       178     246       173     249       189     262       189     263       189     263       189     282       189     282       189     282       120     212       125     238       126     238       127     279       132     270       135     286       136     283       137     243       120     266	က	45	97	0	0
159     233       178     246       173     249       189     259       189     282       189     282       189     282       189     282       189     282       125     261       167     273       125     236       126     238       127     228       132     270       135     286       136     283       120     266       120     266	4	187	256	0	0
178       246         173       249         192       262         189       263         189       263         189       282         189       282         189       282         189       282         120       212         145       273         125       236         126       238         132       270         132       270         135       286         136       283         120       266         120       266	വ	159	233	0	0
173       249         192       262         189       259         189       263         189       263         189       282         120       212         125       236         126       238         127       273         128       284         129       222         132       270         132       270         135       286         136       283         120       266         120       266	9	178	246	0	0
192     262       189     259       189     263       189     282       189     282       120     212       135     261       145     273       125     238       126     238       127     273       128     222       132     270       132     270       135     286       136     283       120     266	2	173	249	İ	0
189     259       189     263       189     263       189     282       120     212       125     261       125     236       126     238       127     228       128     222       132     270       135     286       136     283       120     283       135     283       120     266       120     266	8	192	262	İ	0
189     263       189     282       189     282       120     212       135     261       167     273       125     236       126     238       127     228       103     222       132     279       135     286       71     243       120     266       120     266       120     266	6	189	259	0	0
189     282       189     282       180     299       120     212       145     273       125     236       126     238       127     228       128     249       132     222       132     270       135     286       136     283       120     266       120     266	10	189	263	İ	0
189     299       120     212       135     261       167     273       125     236       126     238       127     228       128     249       103     222       132     279       135     286       71     243       120     266       120     266       120     266	11	189	282	İ	0
120     212       135     261       167     273       125     236       126     238       110     228       120     231       132     270       132     270       135     286       136     286       137     243       120     266       47     149	12	189	299	0	0
135     261       167     273       125     236       125     236       110     228       120     221       120     231       103     222       132     270       135     286       51     223       71     243       120     266       47     149	13	120	212	I	0
167     273       125     236       126     238       110     228       120     231       120     231       132     270       132     270       135     286       51     223       71     243       120     266       47     149	14	135	261	0	0
125       236         125       238         110       228         120       224         120       231         103       222         132       270         135       286         71       243         120       266         47       149	15	167	273	0	0
125     238       110     228       125     249       120     231       103     222       132     270       135     286       71     243       120     266       47     149	16	125	236	I	0
110     228       125     249       120     231       103     222       132     270       132     279       135     286       51     223       71     243       120     266       47     149	17	125	238	0	0
125 249 120 231 103 222 132 270 135 286 51 223 71 243 120 266 47 149	18	110	228	I	0
120 231 103 222 132 270 135 286 51 223 71 243 135 283 120 266	19	125	249	0	0
103     222       132     270       132     279       135     286       51     223       71     243       120     266       47     149	20	120	231	0	0
132     270       132     279       135     286       51     223       71     243       135     283       120     266       47     149	21	103	222	0	0
132     279       135     286       51     223       71     243       120     266       47     149	22	132	270	I	0
135     286       51     223       71     243       135     283       120     266       47     149	23	132	279	_	0
51     223       71     243       135     283       120     266       47     149	24	135	286	_	I
71     243       135     283       120     266       47     149	25	51	223	-	I
135     283       120     266       47     149	26	71	243		Ι
120 266 47 149	27	135	283	I	I
47 149	28	120	266	I	I
:	29	47	149	0	0



