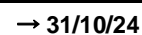


## AD CHART



STANDARD DEPARTURE CHART-INSTRUMENT

RJSC / YAMAGATA

SID

YAMAGATA FOUR DEPARTURE

RWY01 : Climb RWY HDG to 2000FT, via YTE R017 to 22.0DME, turn left, via YTE R003 to YTE VOR/DME.

RWY19 : Climb RWY HDG to 2000FT, turn right, direct to YTE VOR/DME, cross YTE VOR/DME at or above 4000FT, via YTE R017 to 15.0DME, turn left, via YTE R354 to YTE VOR/DME.

Note RWY01: 5.0% climb gradient required up to 2000FT.

OBST ALT 1182FT located at 4.2NM 033° FM end of RWY01.

RWY19: 5.0% climb gradient required up to 2000FT.

OBST ALT 788FT located at 3.1NM 181° FM end of RWY19.

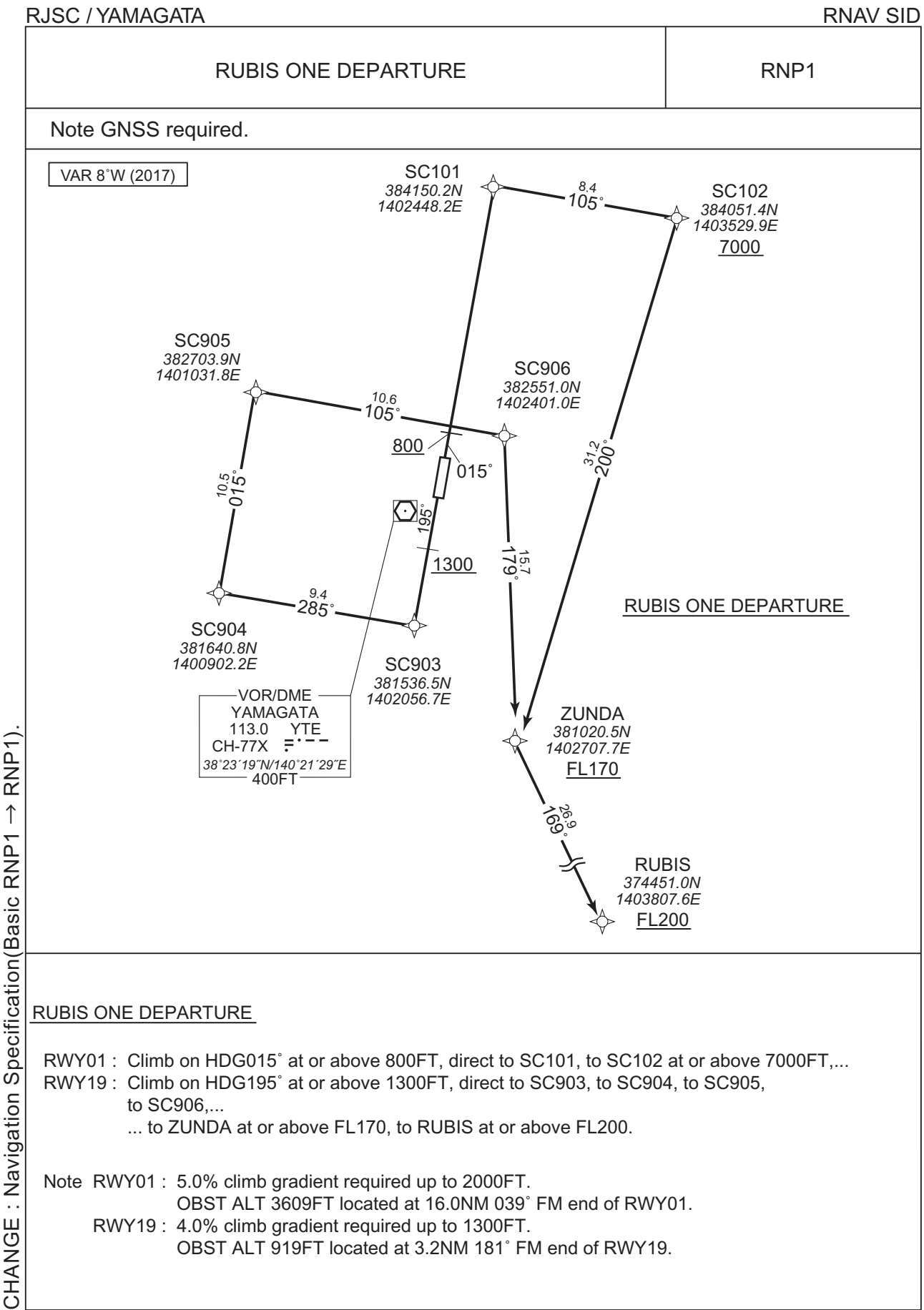
Note No turn before DER.

For RWY01

For RWY19



STANDARD DEPARTURE CHART-INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART-INSTRUMENT

RJSC / YAMAGATA

RNAV SID

RUBIS ONE DEPARTURE

RWY01

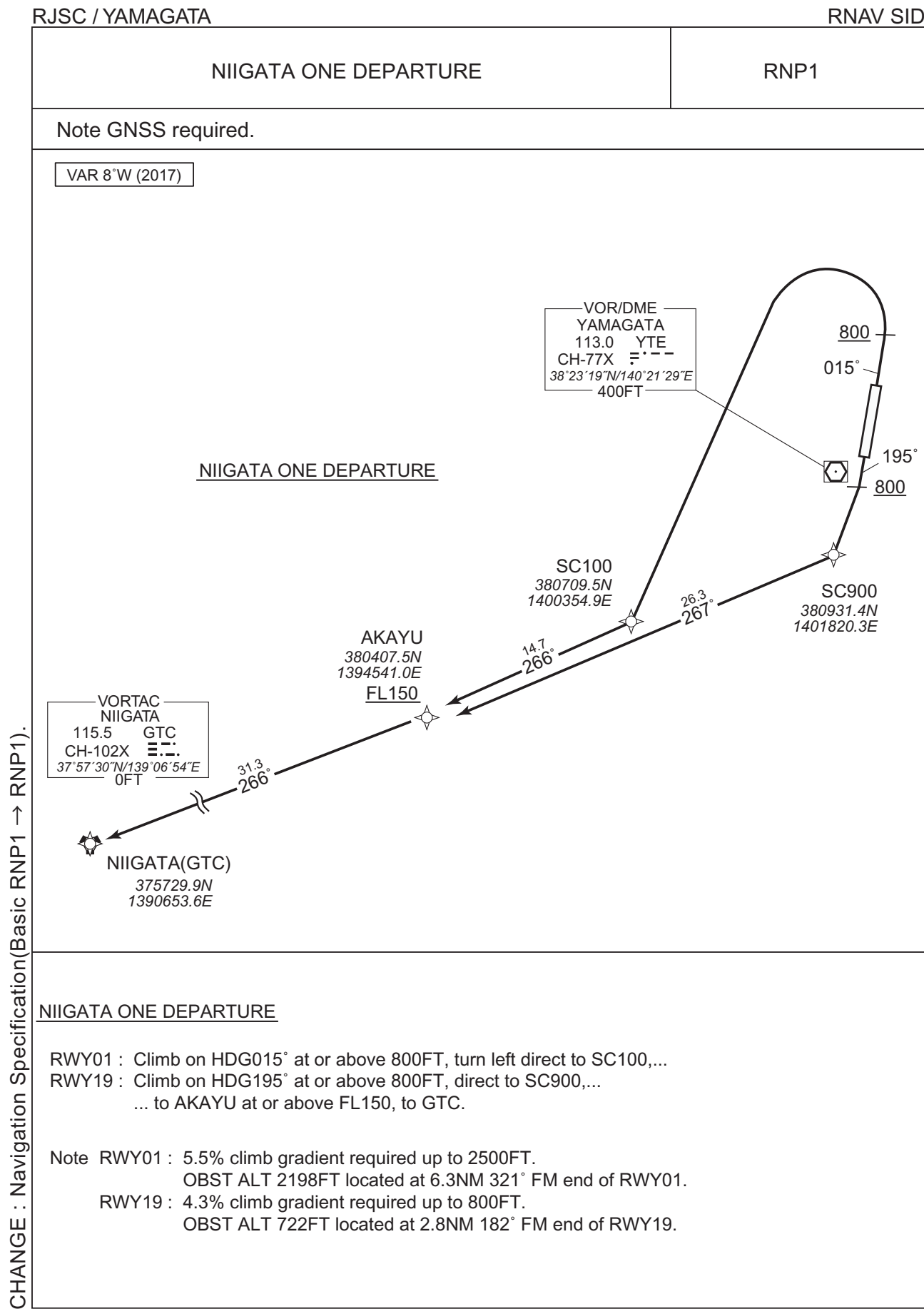
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	015 (006.6)	-8.2	-	-	+800	-	-	RNP1
002	DF	SC101	-	-	-8.2	-	-	-	-	-	RNP1
003	TF	SC102	-	105 (096.6)	-8.2	8.4	-	+7000	-	-	RNP1
004	TF	ZUNDA	-	200 (192.2)	-8.2	31.2	-	+FL170	-	-	RNP1
005	TF	RUBIS	-	169 (161.2)	-8.2	26.9	-	+FL200	-	-	RNP1

RWY19

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	-	-	195 (186.6)	-8.2	-	-	+1300	-	-	RNP1
002	DF	SC903	-	-	-8.2	-	-	-	-	-	RNP1
003	TF	SC904	-	285 (276.6)	-8.2	9.4	-	-	-	-	RNP1
004	TF	SC905	-	015 (006.4)	-8.2	10.5	-	-	-	-	RNP1
005	TF	SC906	-	105 (096.5)	-8.2	10.6	-	-	-	-	RNP1
006	TF	ZUNDA	-	179 (171.0)	-8.2	15.7	-	+FL170	-	-	RNP1
007	TF	RUBIS	-	169 (161.2)	-8.2	26.9	-	+FL200	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART-INSTRUMENT



STANDARD DEPARTURE CHART-INSTRUMENT

RJSC / YAMAGATA											RNAV SID
NIIGATA ONE DEPARTURE											
RWY01											
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	-	-	015 (006.6)	-8.2	-	-	+800	-	-	RNP1
002	DF	SC100	-	-	-8.2	-	L	-	-	-	RNP1
003	TF	AKAYU	-	266 (258.2)	-8.2	14.7	-	+FL150	-	-	RNP1
004	TF	GTC	-	266 (258.0)	-8.2	31.3	-	-	-	-	RNP1
RWY19											
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	-	-	195 (186.6)	-8.2	-	-	+800	-	-	RNP1
002	DF	SC900	-	-	-8.2	-	-	-	-	-	RNP1
003	TF	AKAYU	-	267 (258.3)	-8.2	26.3	-	+FL150	-	-	RNP1
004	TF	GTC	-	266 (258.0)	-8.2	31.3	-	-	-	-	RNP1
CHANGE : Navigation Specification(Basic RNP1 → RNP1).											

STANDARD DEPARTURE CHART-INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART-INSTRUMENT

RJSC / YAMAGATA

RNAV SID

HANKA ONE DEPARTURE											
RWY01											
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	-	-	015 (006.6)	-8.2	-	-	+800	-	-	RNP1
002	DF	SC902	-	-	-8.2	-	-	-	-	-	RNP1
003	TF	HANKA	-	029 (020.8)	-8.2	18.9	-	+13000	-	-	RNP1
RWY19											
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	-	-	195 (186.6)	-8.2	-	-	+1300	-	-	RNP1
002	DF	SC901	-	-	-8.2	-	R	-	-	-	RNP1
003	TF	SC902	-	029 (020.7)	-8.2	20.1	-	-	-	-	RNP1
004	TF	HANKA	-	029 (020.8)	-8.2	18.9	-	+13000	-	-	RNP1
CHANGE : Navigation Specification(Basic RNP1 → RNP1).											



YOZAN WEST ARRIVAL / YOZAN NORTH ARRIVAL

RNP1

Note GNSS required.

VAR 8°W (2017)

YOZAN WEST ARRIVAL

YOZAN NORTH ARRIVAL

ELDAK  
380133.9N  
1394540.4E  
FL150

SUGGY  
380424.9N  
1400035.7E  
11000

YOZAN  
380617.1N  
1400922.8E  
9000

IMONY  
381111.6N  
1401005.0E  
MAX 250KIAS

YAMAGATA (YTE)  
382319.0N  
1402128.6E

VOR/DME  
YAMAGATA  
113.0 YTE  
CH-77X  
38°23'19"N/140°21'29"E  
400FT

12.1  
085°

7.2  
083°

4.9  
195°

15.1  
225°

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

RJSC / YAMAGATA

RNAV STAR RWY01

STANDARD ARRIVAL CHART - INSTRUMENT

RJSC / YAMAGATA

RNAV STAR RWY01

YOZAN WEST ARRIVAL

From ELDAK at or above FL150, to SUGGY at or above 11000FT,  
to YOZAN at or above 9000FT.

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	ELDAK	-	-	-8.2	-	-	+FL150	-	-	RNP1
002	TF	SUGGY	-	085 (076.3)	-8.2	12.1	-	+11000	-	-	RNP1
003	TF	YOZAN	-	083 (074.8)	-8.2	7.2	-	+9000	-	-	RNP1

YOZAN NORTH ARRIVAL

From YTE, to IMONY, to YOZAN at or above 9000FT.

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	YTE	-	-	-8.2	-	-	-	-	-	RNP1
002	TF	IMONY	-	225 (216.5)	-8.2	15.1	-	-	-250	-	RNP1
003	TF	YOZAN	-	195 (186.4)	-8.2	4.9	-	+9000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART - INSTRUMENT



STANDARD ARRIVAL CHART - INSTRUMENT

RJSC / YAMAGATA

RNAV STAR RWY19

MEDET WEST ARRIVAL

From ELDAK at or above FL150, to QDARI at or above 8000FT,  
to MEDET at or above 7000FT.

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	ELDAK	-	-	-8.2	-	-	+FL150	-	-	RNP1
002	TF	QDARI	-	039 (030.3)	-8.2	17.1	-	+8000	-	-	RNP1
003	TF	MEDET	-	039 (030.4)	-8.2	27.1	-	+7000	-	-	RNP1

MEDET SOUTH ARRIVAL

From IBELU at or above 9000FT, to MOGMI, to MEDET at or above 7000FT.

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	IBELU	-	-	-8.2	-	-	+9000	-	-	RNP1
002	TF	MOGMI	-	002 (353.7)	-8.2	29.3	-	-	-	-	RNP1
003	TF	MEDET	-	015 (006.5)	-8.2	11.5	-	+7000	-	-	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

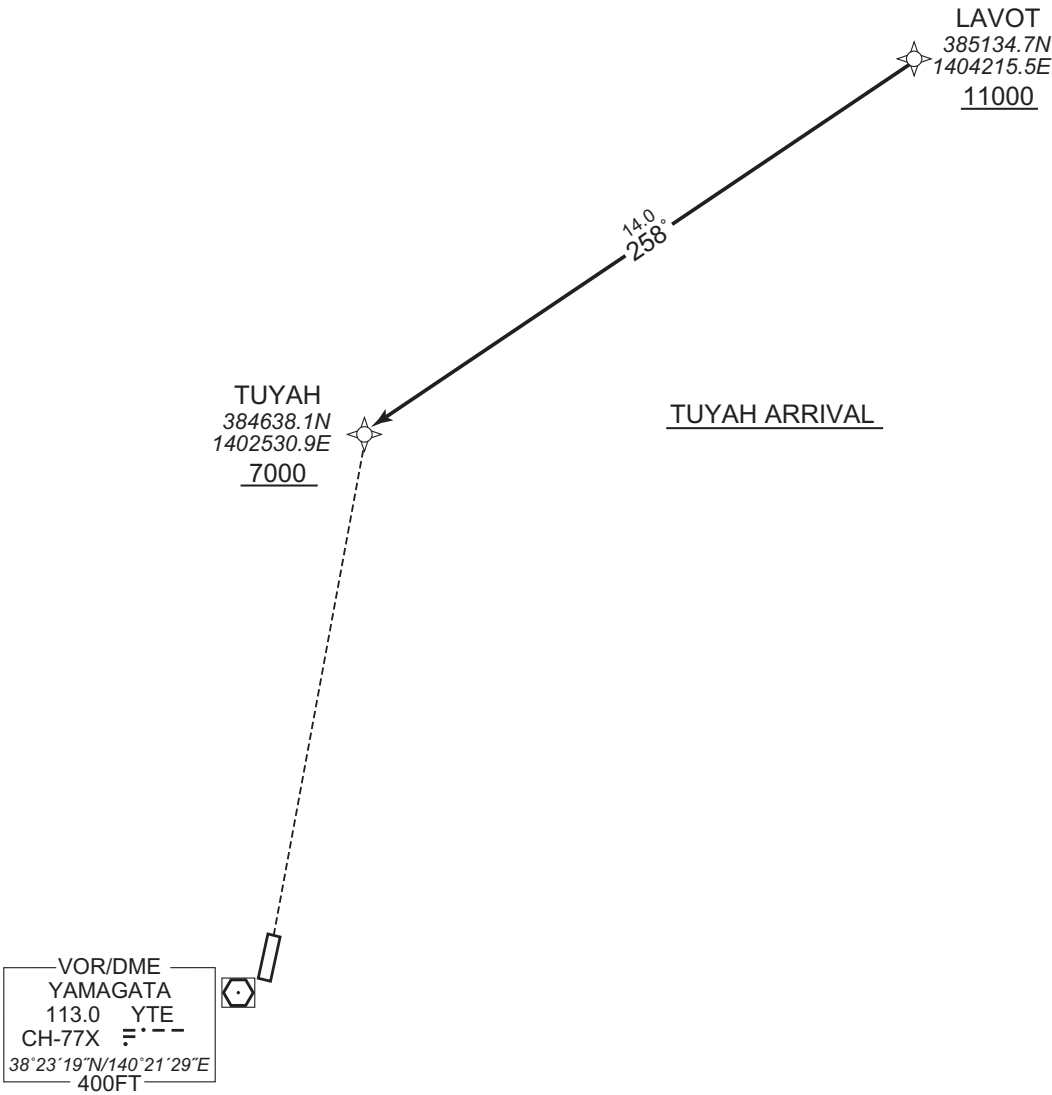
STANDARD ARRIVAL CHART - INSTRUMENT

RJSC / YAMAGATARNAV STAR RWY19

TUYAH ARRIVAL	RNP1
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Note GNSS required.

VAR 8°W (2017)



TUYAH ARRIVAL

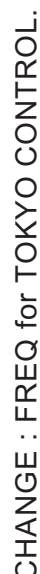
From LAVOT at or above 11000FT, to TUYAH at or above 7000FT.

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	LAVOT	—	—	-8.2	—	—	+11000	—	—	RNP1
002	TF	TUYAH	—	258 (249.3)	-8.2	14.0	—	+7000	—	—	RNP1

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

## RJSC / YAMAGATA

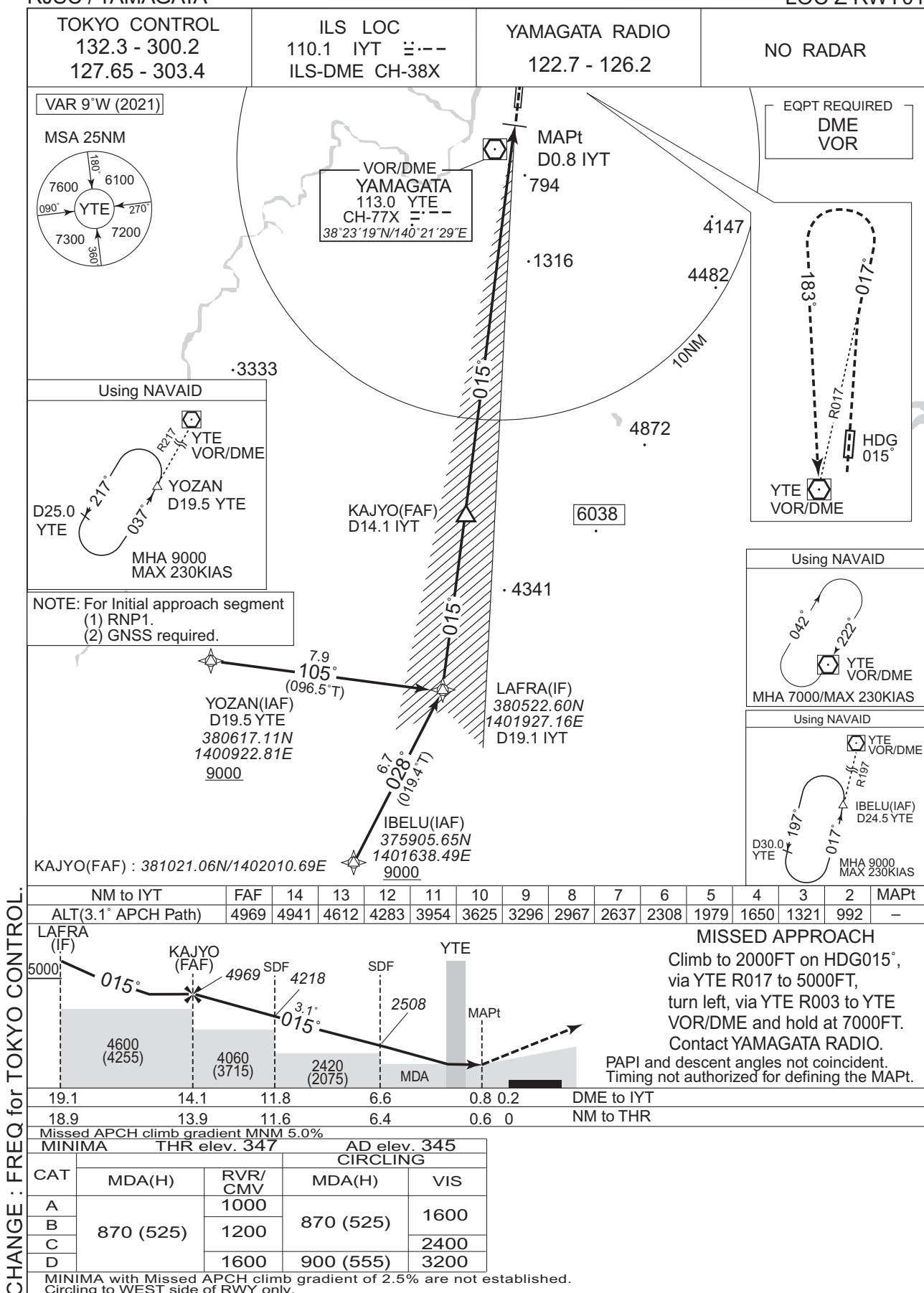
ILS Z RWY01



## INSTRUMENT APPROACH CHART

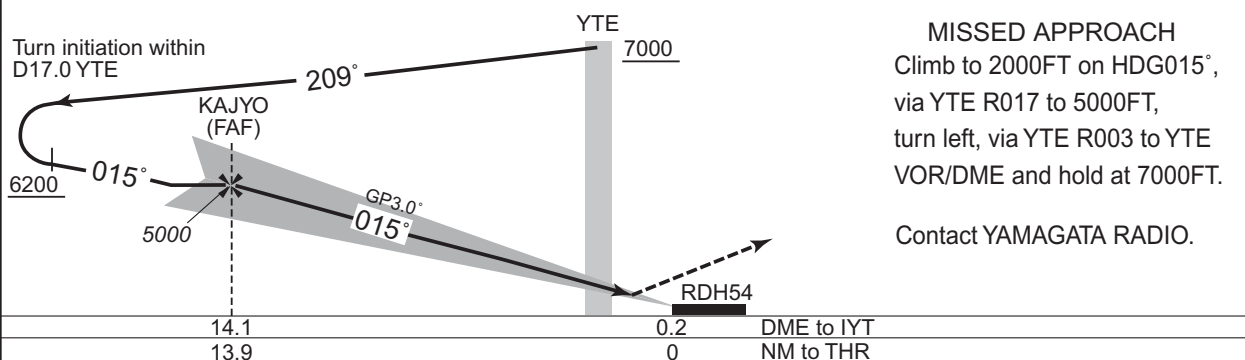
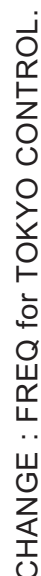
RJSC / YAMAGATA

LOC Z RWY01



## RJSC / YAMAGATA

ILS Y RWY01

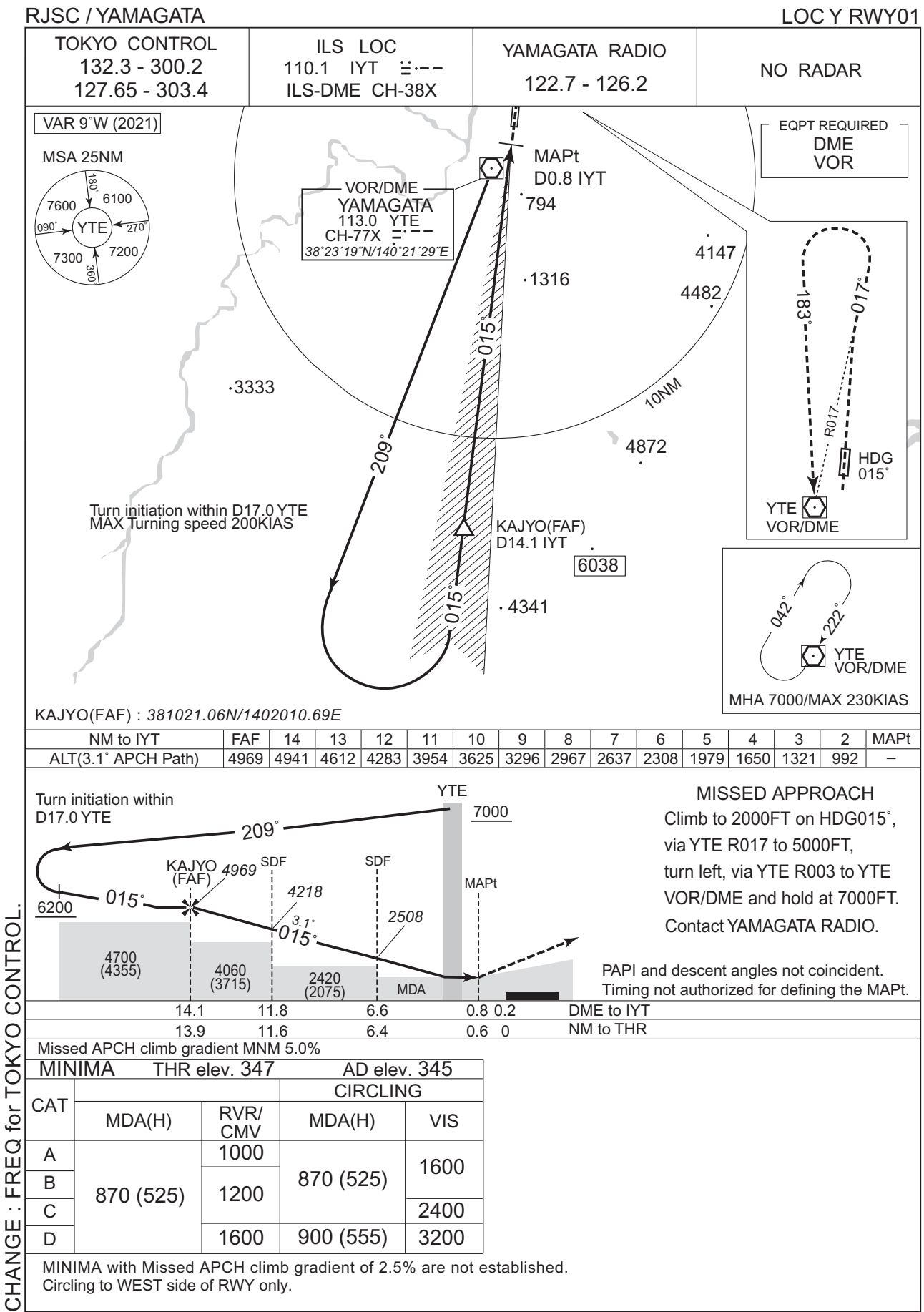


Missed APCH climb gradient MNM 5.0%				
MINIMA		THR elev. 347		AD elev. 345
CAT	CAT I		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	VIS
A	547 (200)	550	790 (445)	1600
B			800 (455)	
C				2400
D			900 (555)	3200

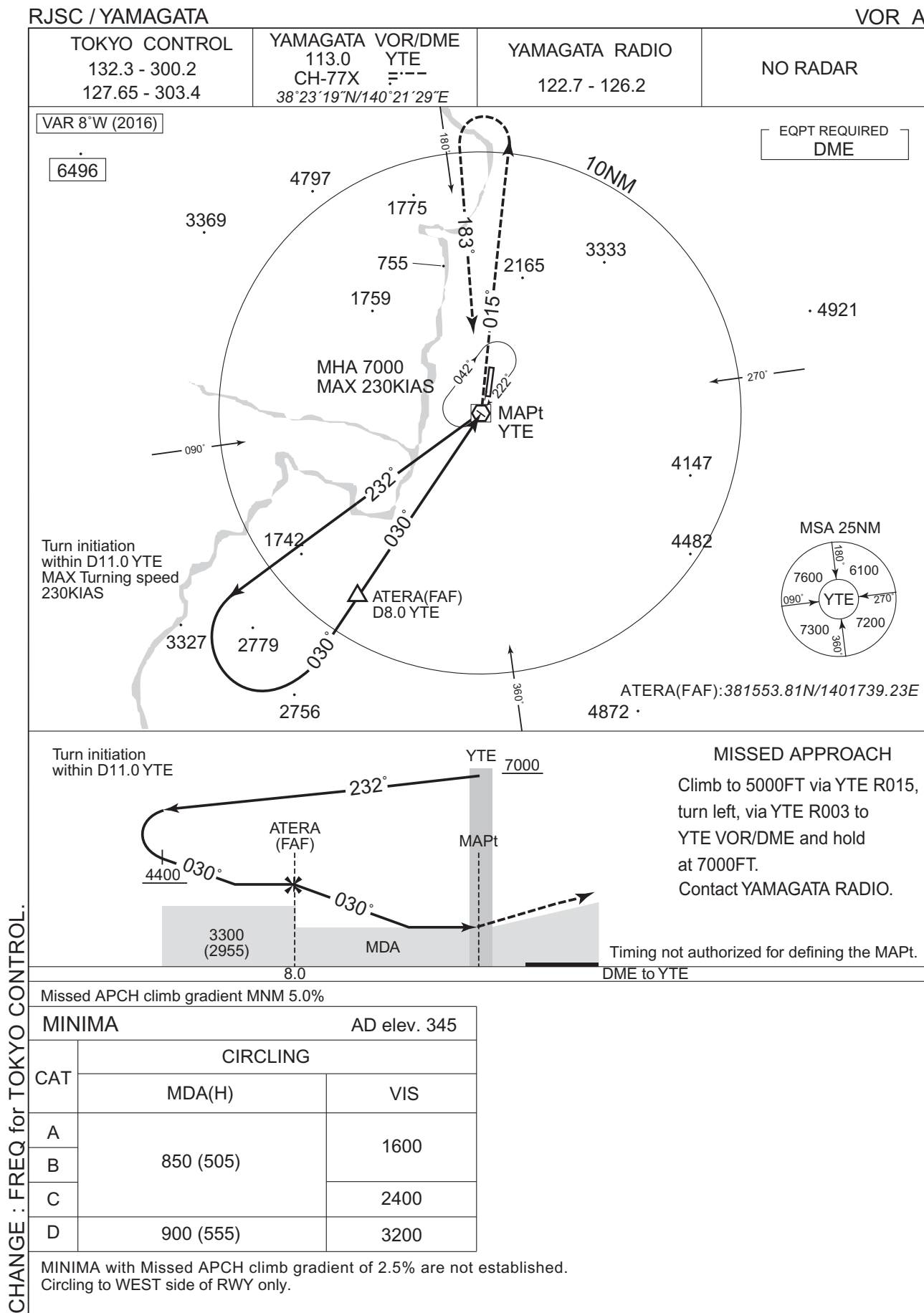
MINIMA with Missed APCH climb gradient of 2.5% are not established.  
Circling to WEST side of RWY only.



INSTRUMENT APPROACH CHART



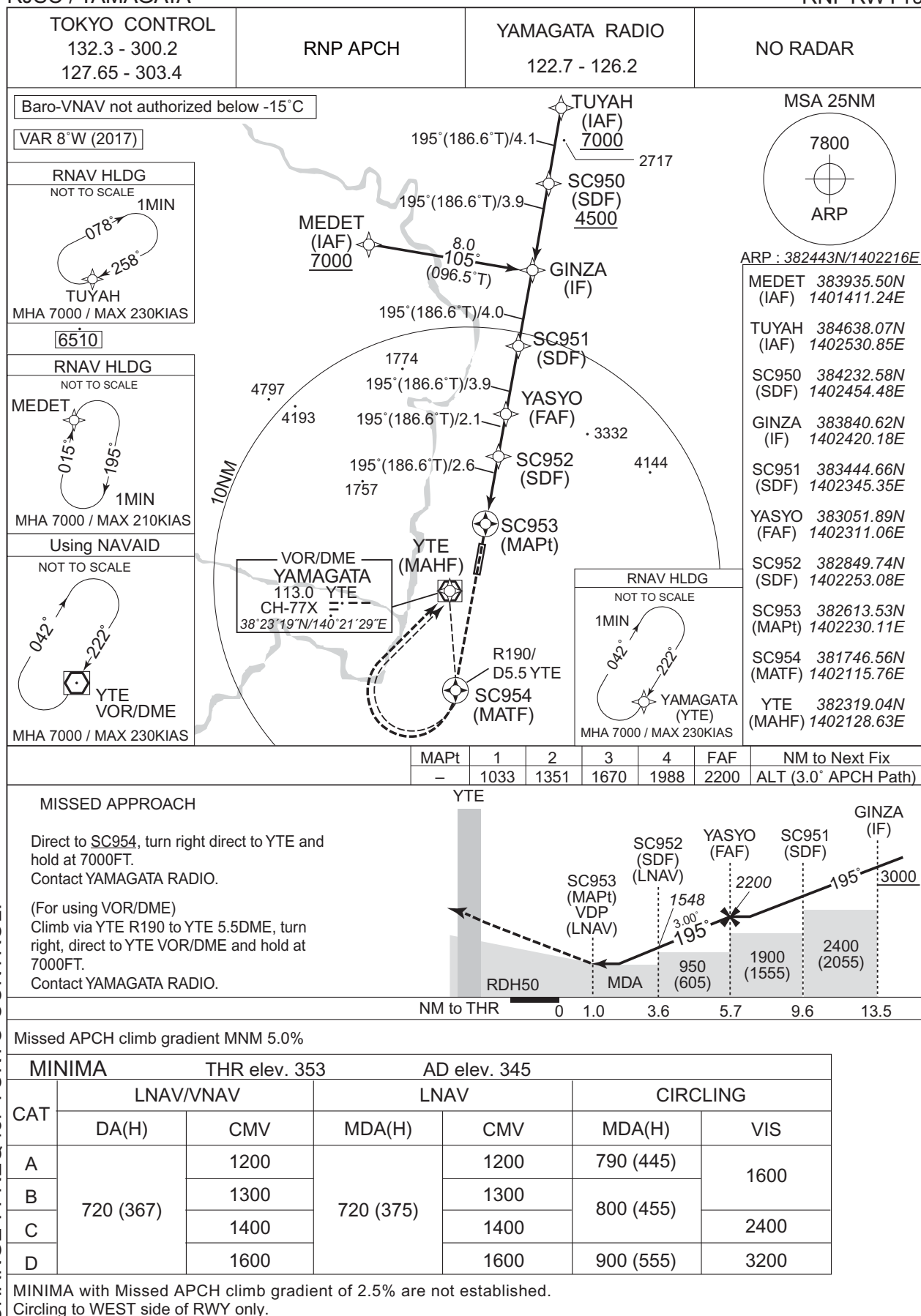
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJSC / YAMAGATA

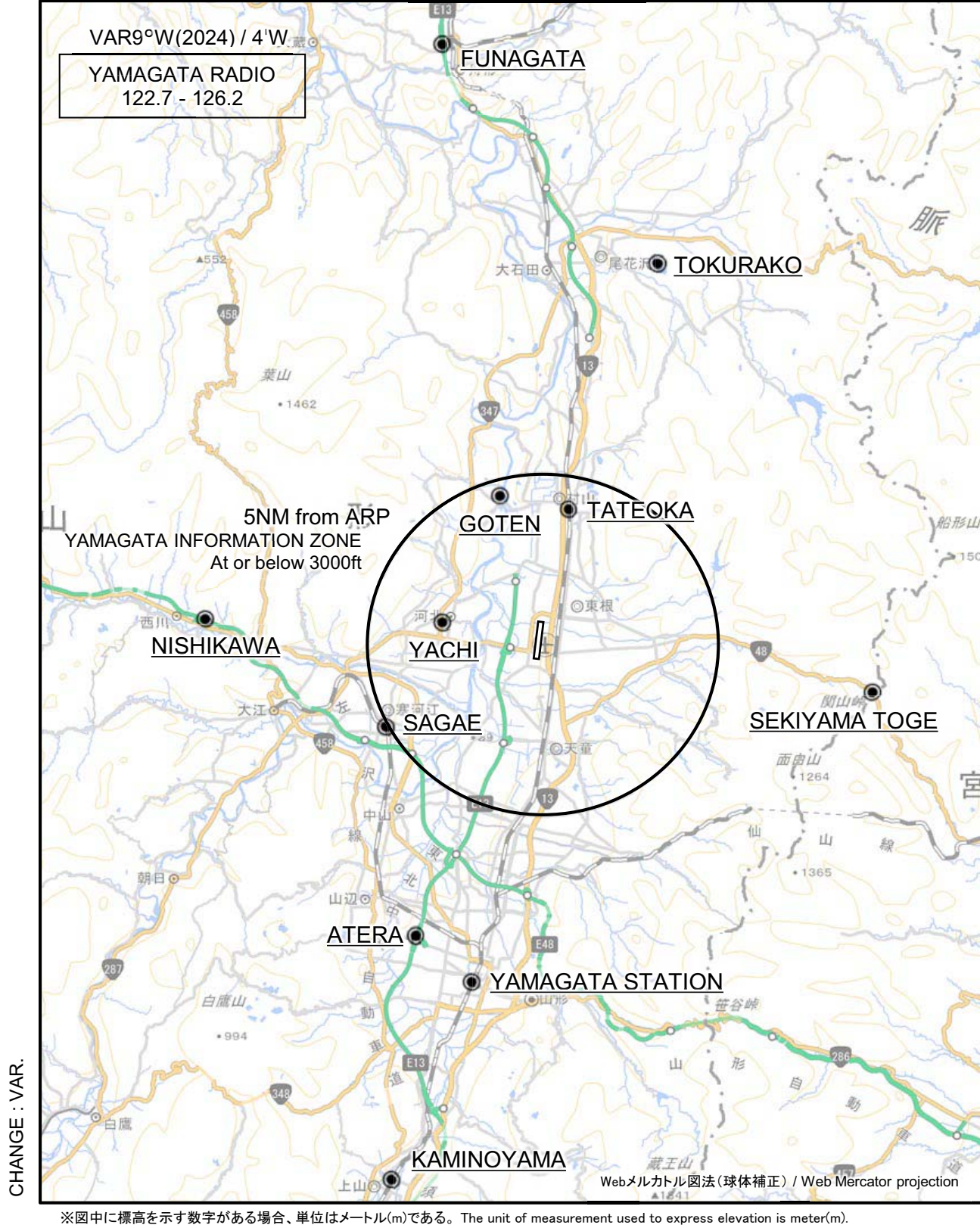
RNP RWY19



CHANGE : FREQ for TOKYO CONTROL.

RJSC / YAMAGATA

Visual REP



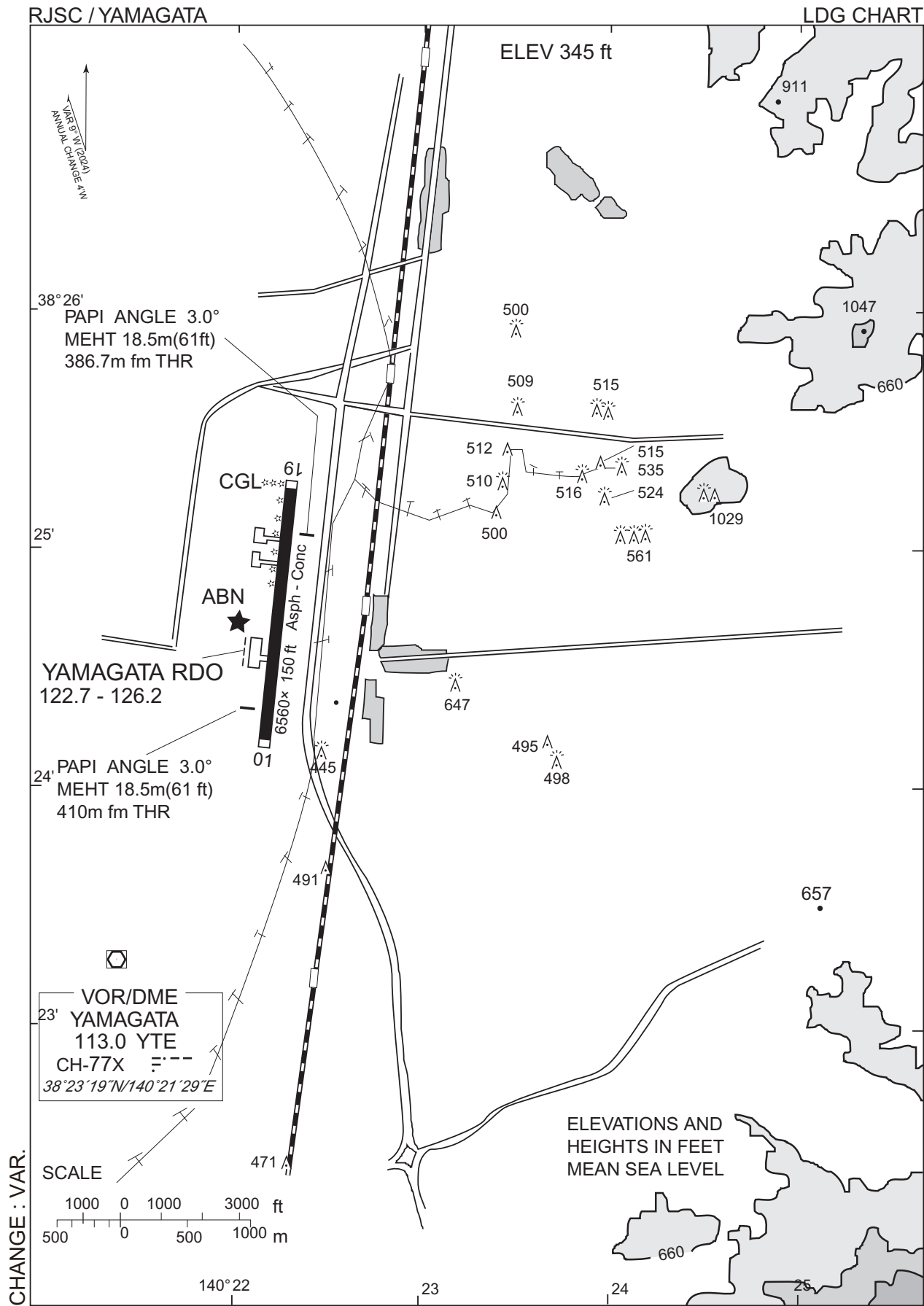
RJSC / YAMAGATA

Visual REP

Call sign	BRG / DIST from ARP	Remarks
舟形 Funagata	351°T / 17.7NM	舟形インターチェンジ Interchange
徳良湖 Tokurako	017°T / 11.5NM	徳良湖 Lake
基点 Goten	344°T / 4.5NM	村山市民体育館 Gymnasium
楯岡 Tateoka	010°T / 4.0NM	村山駅(旧楯岡駅) JR station
西川 Nishikawa	274°T / 9.8NM	西川インターチェンジ Interchange
谷地 Yachi	282°T / 3.0NM	谷地高校 School
関山峠 Sekiyama Toge	100°T / 9.5NM	関山トンネル Tunnel
寒河江 Sagae	242°T / 5.1NM	寒河江駅 JR station
アテラ Atera	203°T / 9.3NM	山形中央インターチェンジ Interchange
山形ステーション Yamagata Station	192°T / 10.0NM	山形駅 JR station
上山 Kaminoyama	196°T / 16.2NM	かみのやま温泉駅 JR station

CHANGE : Kaminoyama(Remarks).





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Minimum Vectoring Altitude CHART



CENTER : 382443N/1402216E (ARP)