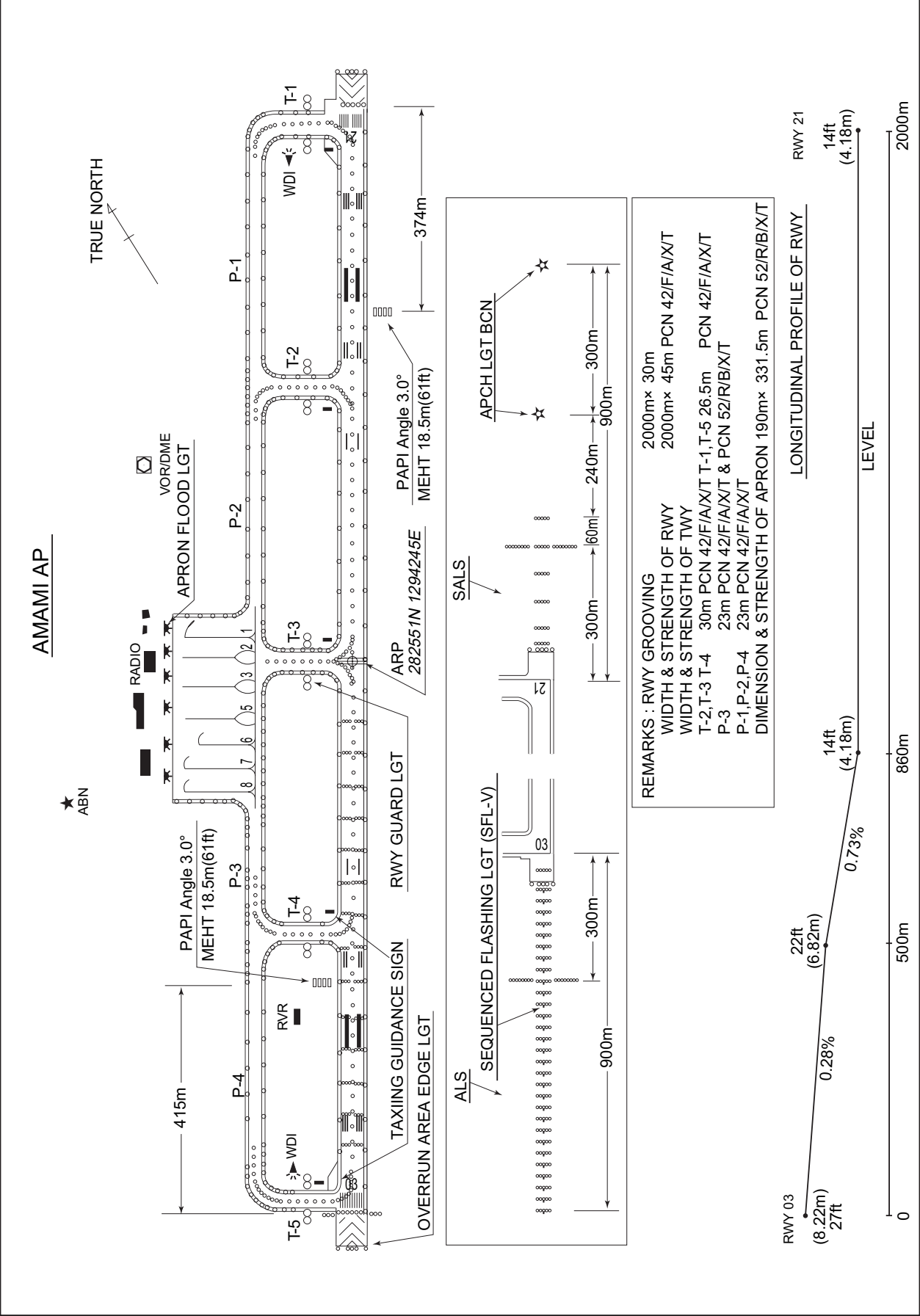


RJKA / AMAMI

AD CHART



STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

RNAV SID

RURIK TWO DEPARTURE

Basic RNP1

Note GNSS required.

VAR 6°W (2021)



RURIK TWO DEPARTURE

RWY03 : Climb on HDG032° at or above 500FT, direct to RURIK at or above 7000FT.

RWY21 : Climb on HDG212° at or above 500FT, turn left direct to KA102 at or above 4000FT, to RURIK at or above 7000FT.

NOTE RWY21 : 5.0% climb gradient required up to 500FT.

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

RNAV SID

RURIK TWO DEPARTURE

RWY 03

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	—	—	032 (025.8)	-6.2	—	—	+500	—	—	Basic RNP1
002	DF	RURIK	—	—	-6.2	—	—	+7000	—	—	Basic RNP1

RWY 21

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	—	—	212 (205.8)	-6.2	—	—	+500	—	—	Basic RNP1
002	DF	KA102	—	—	-6.2	—	L	+4000	—	—	Basic RNP1
003	TF	RURIK	—	028 (022.2)	-6.2	53.2	—	+7000	—	—	Basic RNP1

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

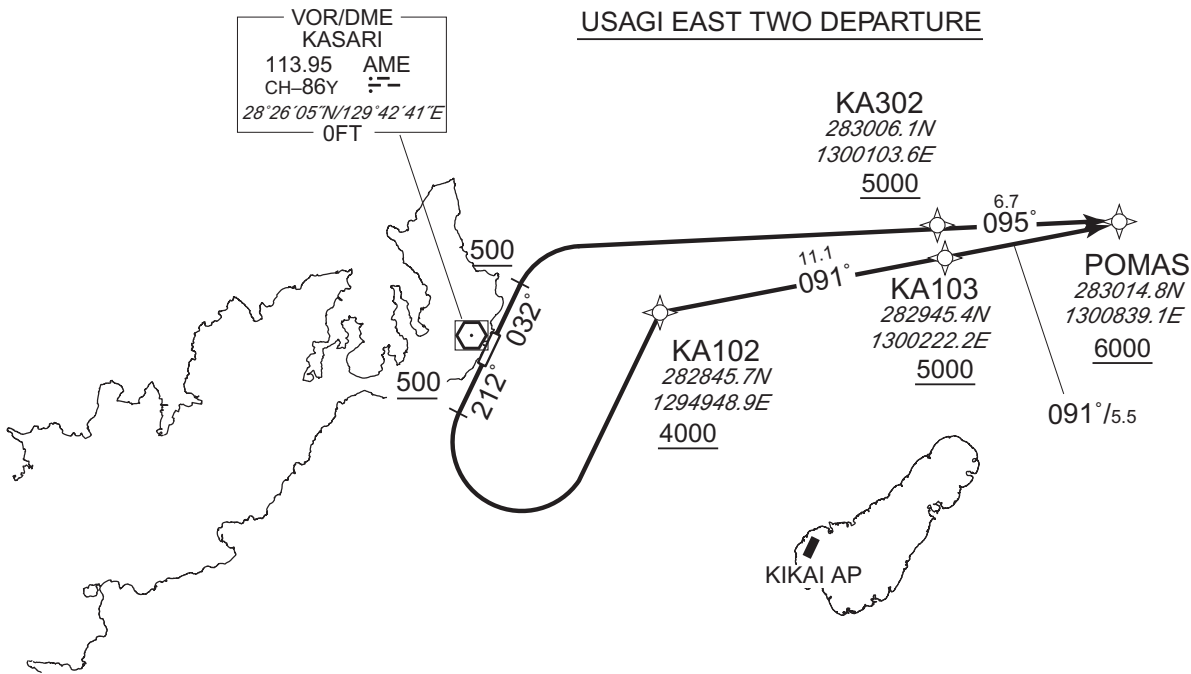
RNAV SID

USAGI EAST TWO DEPARTURE

Basic RNP1

Note GNSS required.

VAR 6°W (2021)



USAGI EAST TWO DEPARTURE

RWY03 : Climb on HDG032° at or above 500FT, turn right direct to KA302 at or above 5000FT, to POMAS at or above 6000FT.

RWY21 : Climb on HDG212° at or above 500FT, turn left direct to KA102 at or above 4000FT, to KA103 at or above 5000FT, to POMAS at or above 6000FT.

NOTE RWY21 : 5.0% climb gradient required up to 500FT.

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

RNAV SID

USAGI EAST TWO DEPARTURE

RWY 03

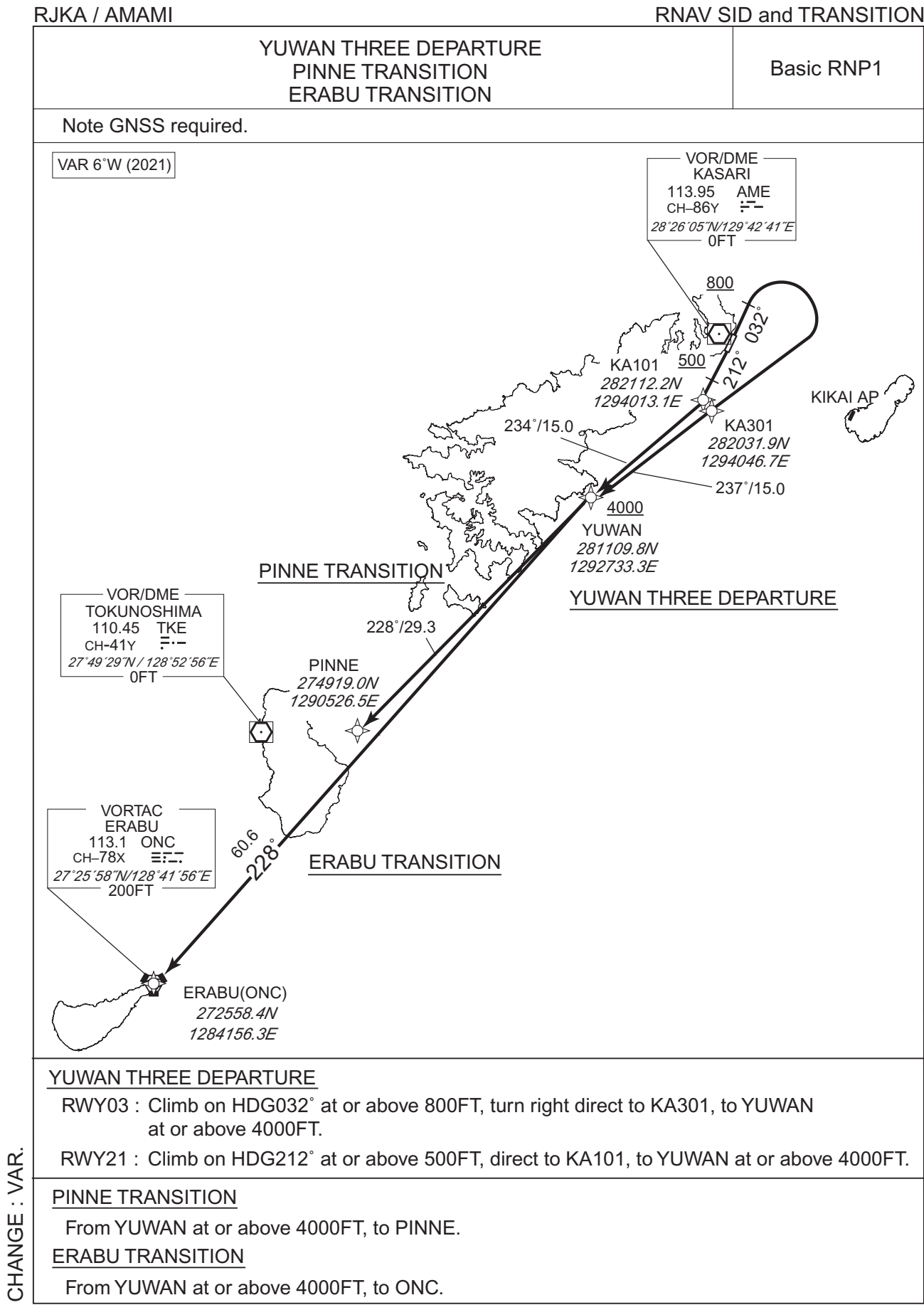
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	—	—	032 (025.8)	-6.2	—	—	+500	—	—	Basic RNP1
002	DF	KA302	—	—	-6.2	—	R	+5000	—	—	Basic RNP1
003	TF	POMAS	—	095 (088.7)	-6.2	6.7	—	+6000	—	—	Basic RNP1

RWY 21

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	—	—	212 (205.8)	-6.2	—	—	+500	—	—	Basic RNP1
002	DF	KA102	—	—	-6.2	—	L	+4000	—	—	Basic RNP1
003	TF	KA103	—	091 (084.8)	-6.2	11.1	—	+5000	—	—	Basic RNP1
004	TF	POMAS	—	091 (084.9)	-6.2	5.5	—	+6000	—	—	Basic RNP1

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT



STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

RNAV SID and TRANSITION

YUWAN THREE DEPARTURE

RWY 03

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	—	—	032 (025.8)	-6.2	—	—	+800	—	—	Basic RNP1
002	DF	KA301	—	—	-6.2	—	R	—	—	—	Basic RNP1
003	TF	YUWAN	—	237 (231.2)	-6.2	15.0	—	+4000	—	—	Basic RNP1

RWY 21

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	—	—	212 (205.8)	-6.2	—	—	+500	—	—	Basic RNP1
002	DF	KA101	—	—	-6.2	—	—	—	—	—	Basic RNP1
003	TF	YUWAN	—	234 (228.1)	-6.2	15.0	—	+4000	—	—	Basic RNP1

PINNE 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	YUWAN	—	—	-6.2	—	—	+4000	—	—	Basic RNP1
002	TF	PINNE	—	228 (221.9)	-6.2	29.3	—	—	—	—	Basic RNP1

ERABU 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	YUWAN	—	—	-6.2	—	—	+4000	—	—	Basic RNP1
002	TF	ONC	—	228 (221.9)	-6.2	60.6	—	—	—	—	Basic RNP1

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

RNAV SID

MUCHA ONE DEPARTURE

Basic RNP1

Note GNSS required.



MUCHA ONE DEPARTURE

RWY03 : Climb on HDG032° at or above 500FT, turn right direct to MUCHA at or above 3000FT.

RWY21 : Climb on HDG212° at or above 500FT, turn left direct to MUCHA at or above 3000FT.

MUCHA ONE DEPARTURE

RWY03

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	-	-	032 (025.8)	-6.2	-	-	+500	-	-	Basic RNP1
002	DF	MUCHA	-	-	-6.2	-	R	+3000	-	-	Basic RNP1

RWY21

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	-	-	212 (205.8)	-6.2	-	-	+500	-	-	Basic RNP1
002	DF	MUCHA	-	-	-6.2	-	L	+3000	-	-	Basic RNP1

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

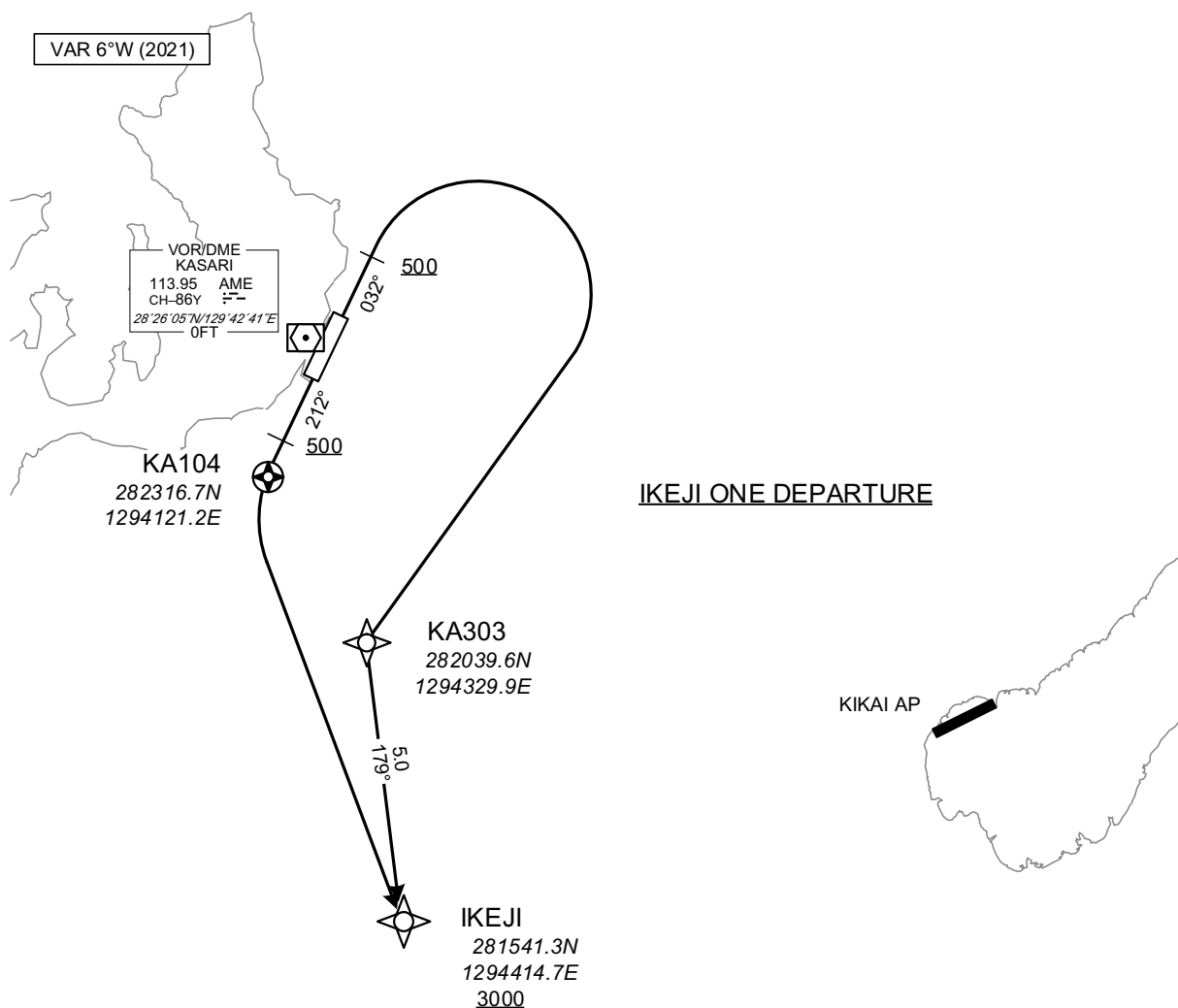
RJKA / AMAMI

RNAV SID

IKEJI ONE DEPARTURE

Basic RNP1

Note GNSS required.

IKEJI ONE DEPARTURE

RWY03 : Climb on HDG032° at or above 500FT, turn right direct to KA303, to IKEJI at or above 3000FT.

RWY21 : Climb on HDG212° at or above 500FT, direct to KA104, turn left direct to IKEJI at or above 3000FT.

NOTE RWY03 : 5.0% climb gradient required up to 500FT.

RWY21 : 5.0% climb gradient required up to 500FT.

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

RNAV SID

IKEJI ONE DEPARTURE

RWY03

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	-	-	032 (025.8)	-6.2	-	-	+500	-	-	Basic RNP1
002	DF	KA303	-	-	-6.2	-	R	-	-	-	Basic RNP1
003	TF	IKEJI	-	179 (172.5)	-6.2	5.0	-	+3000	-	-	Basic RNP1

RWY21

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	-	-	212 (205.8)	-6.2	-	-	+500	-	-	Basic RNP1
002	DF	KA104	Y	-	-6.2	-	-	-	-	-	Basic RNP1
003	DF	IKEJI	-	-	-6.2	-	L	+3000	-	-	Basic RNP1

CHANGE : VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

SID

PINNE FIVE DEPARTURE

RWY 03 : Climb RWY HDG to 700FT, turn right HDG273° to intercept and proceed...

RWY 21 : Climb RWY HDG to AME 3.0DME, turn right,...

... via AME R228 to PINNE.

Cross PINNE at or above 6000FT.

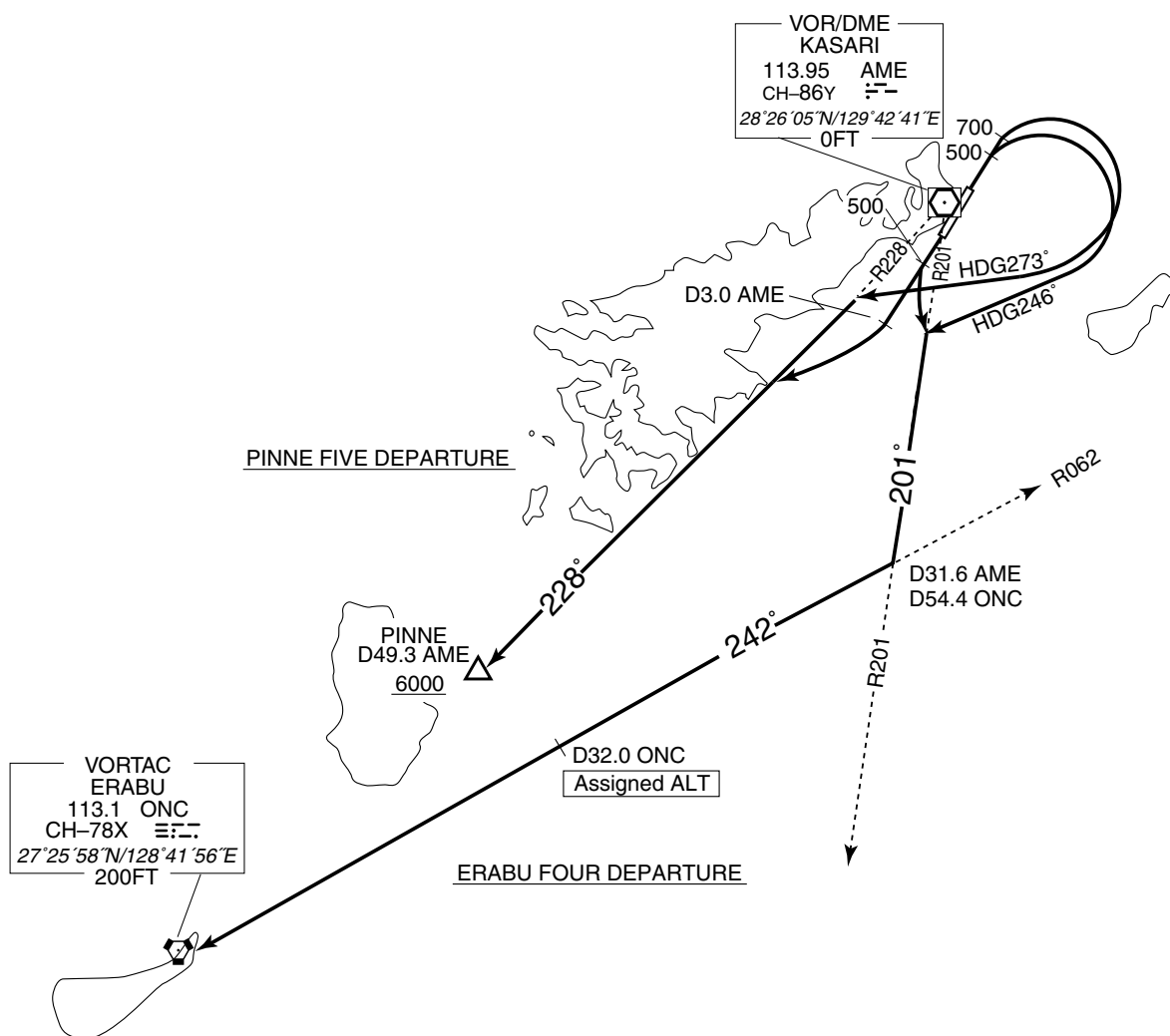
ERABU FOUR DEPARTURE

RWY 03 : Climb RWY HDG to 500FT, turn right HDG246° to intercept and proceed...

RWY 21 : Climb RWY HDG to 500FT, turn left,...

... via AME R201, via ONC R062 to ONC VORTAC.

Cross ONC R062/32.0DME at assigned altitude.



STANDARD DEPARTURE CHART -INSTRUMENT

RJKA / AMAMI

SID

KASARI REVERSAL TWO DEPARTURE

RWY03 : Climb RWY HDG to 1000FT, turn right,...

RWY21 : Climb RWY HDG to 1000FT, turn left,...

...direct to AME VOR/DME. Cross AME VOR/DME at or above 3000FT.

POMAS FOUR DEPARTURE

RWY03 : Climb RWY HDG to 500FT, turn right HDG130°...

RWY21 : Climb RWY HDG to 500FT, turn left HDG040°...

... to intercept and proceed via AME R085 to POMAS.

Cross POMAS at or above 6000FT.



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STANDARD ARRIVAL CHART-INSTRUMENT

RJKA / AMAMI

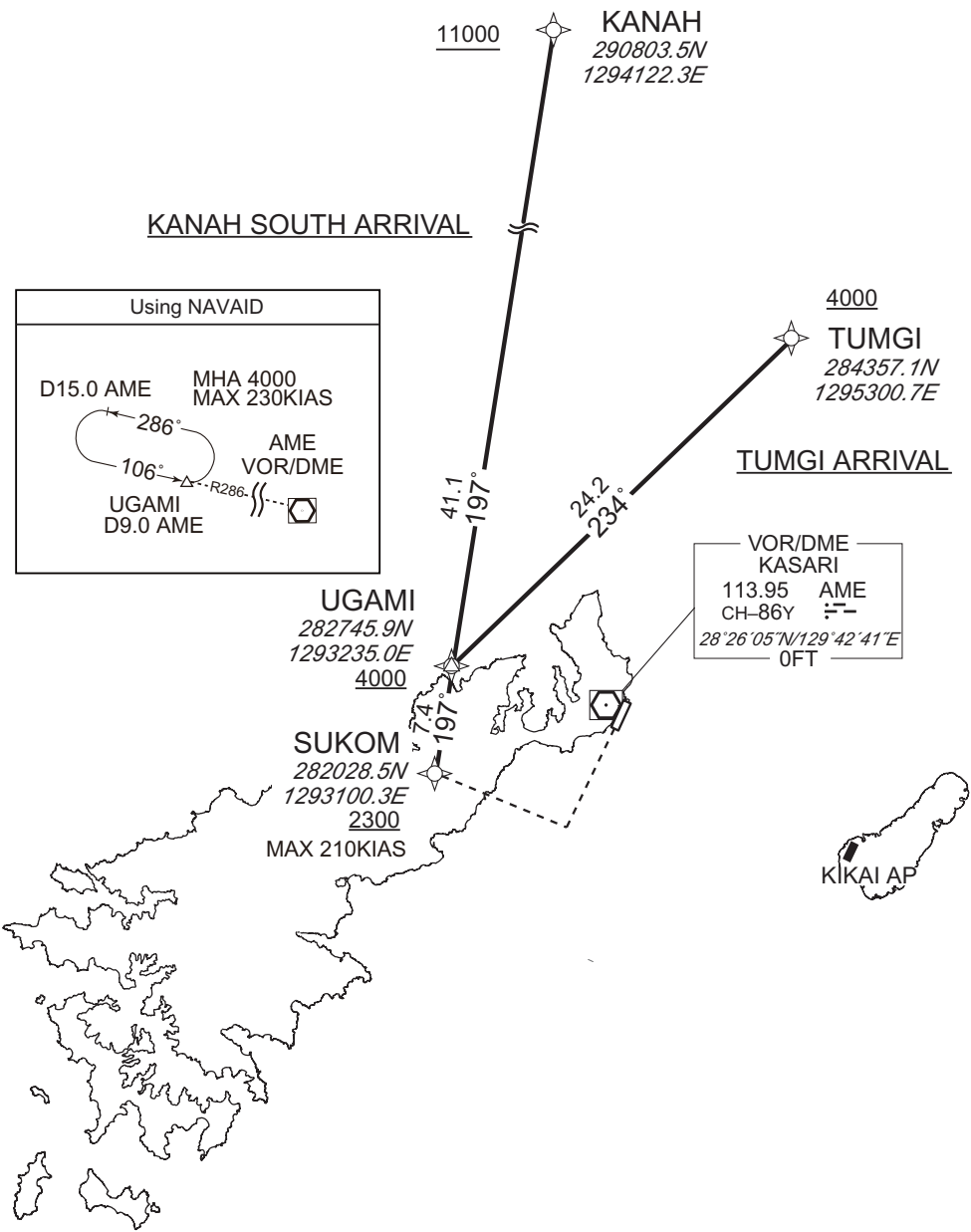
RNAV STAR RWY03

KANAH SOUTH ARRIVAL / TUMGI ARRIVAL

Basic RNP1

Note GNSS required.

VAR 6°W (2021)



CHANGE : VAR.

STANDARD ARRIVAL CHART-INSTRUMENT

RJKA / AMAMI

RNAV STAR RWY03

KANAH SOUTH ARRIVAL

From KANAH at or above 11000FT, to UGAMI at or above 4000FT, to SUKOM at or above 2300FT.

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	KANAH	—	—	-6.2	—	—	+11000	—	—	Basic RNP1
002	TF	UGAMI	—	197 (190.9)	-6.2	41.1	—	+4000	—	—	Basic RNP1
003	TF	SUKOM	—	197 (190.8)	-6.2	7.4	—	+2300	-210	—	Basic RNP1

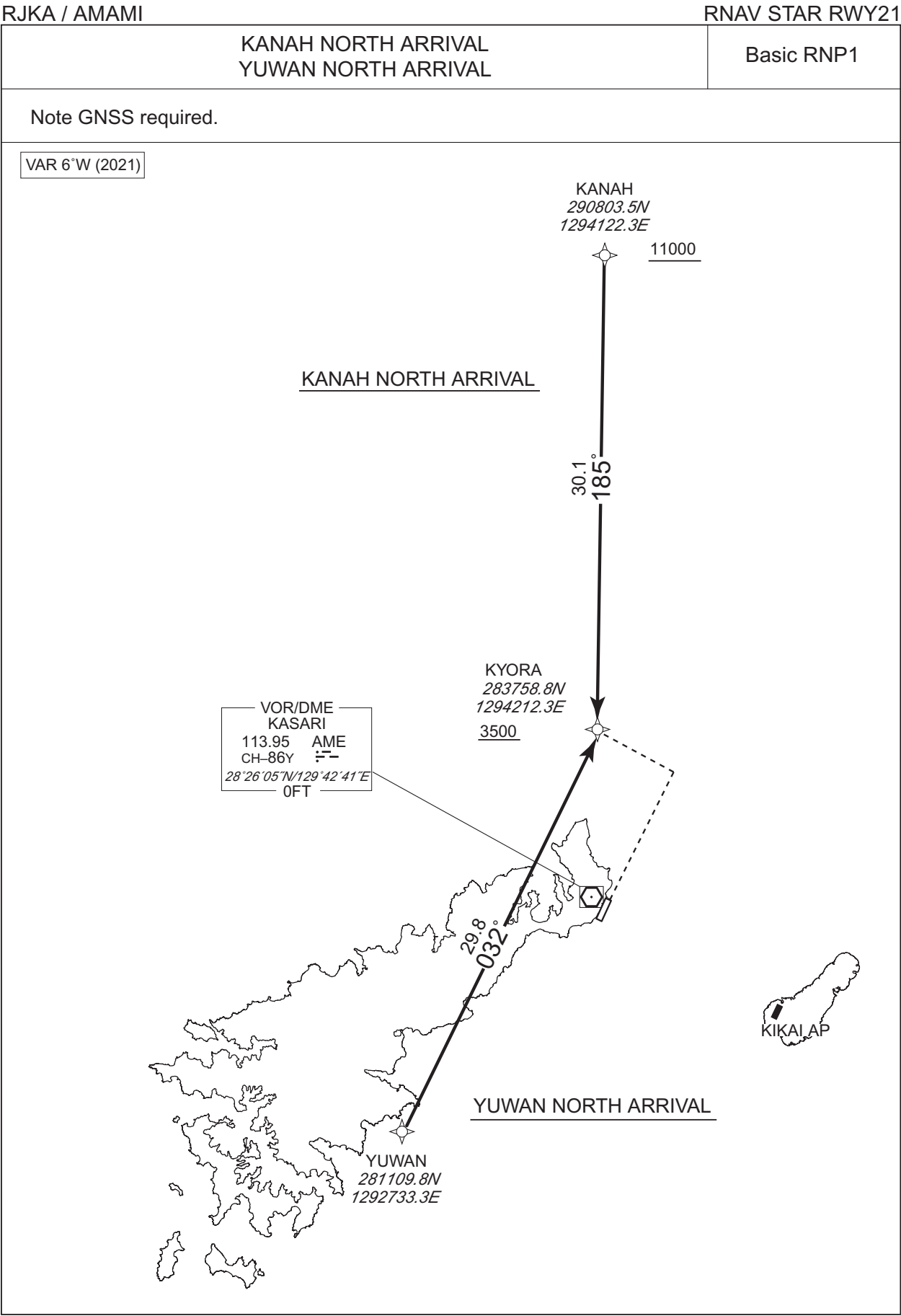
TUMGI ARRIVAL

From TUMGI at or above 4000FT, to UGAMI at or above 4000FT, to SUKOM at or above 2300FT.

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	TUMGI	—	—	-6.2	—	—	+4000	—	—	Basic RNP1
002	TF	UGAMI	—	234 (228.0)	-6.2	24.2	—	+4000	—	—	Basic RNP1
003	TF	SUKOM	—	197 (190.8)	-6.2	7.4	—	+2300	-210	—	Basic RNP1

CHANGE : VAR.

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJKA / AMAMI

RNAV STAR RWY21

KANAH NORTH ARRIVAL

From KANAH at or above 11000FT, to KYORA at or above 3500FT.

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	KANAH	—	—	-6.2	—	—	+11000	—	—	Basic RNP1
002	TF	KYORA	—	185 (178.6)	-6.2	30.1	—	+3500	—	—	Basic RNP1

YUWAN NORTH ARRIVAL

From YUWAN, to KYORA at or above 3500FT.

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	YUWAN	—	—	-6.2	—	—	—	—	—	Basic RNP1
002	TF	KYORA	—	032 (025.6)	-6.2	29.8	—	+3500	—	—	Basic RNP1

CHANGE : VAR. PROC course.

INSTRUMENT APPROACH CHART

RJKA / AMAMI

ILS Z or LOC Z RWY03



CHANGE : ATC call sign and FREQ.

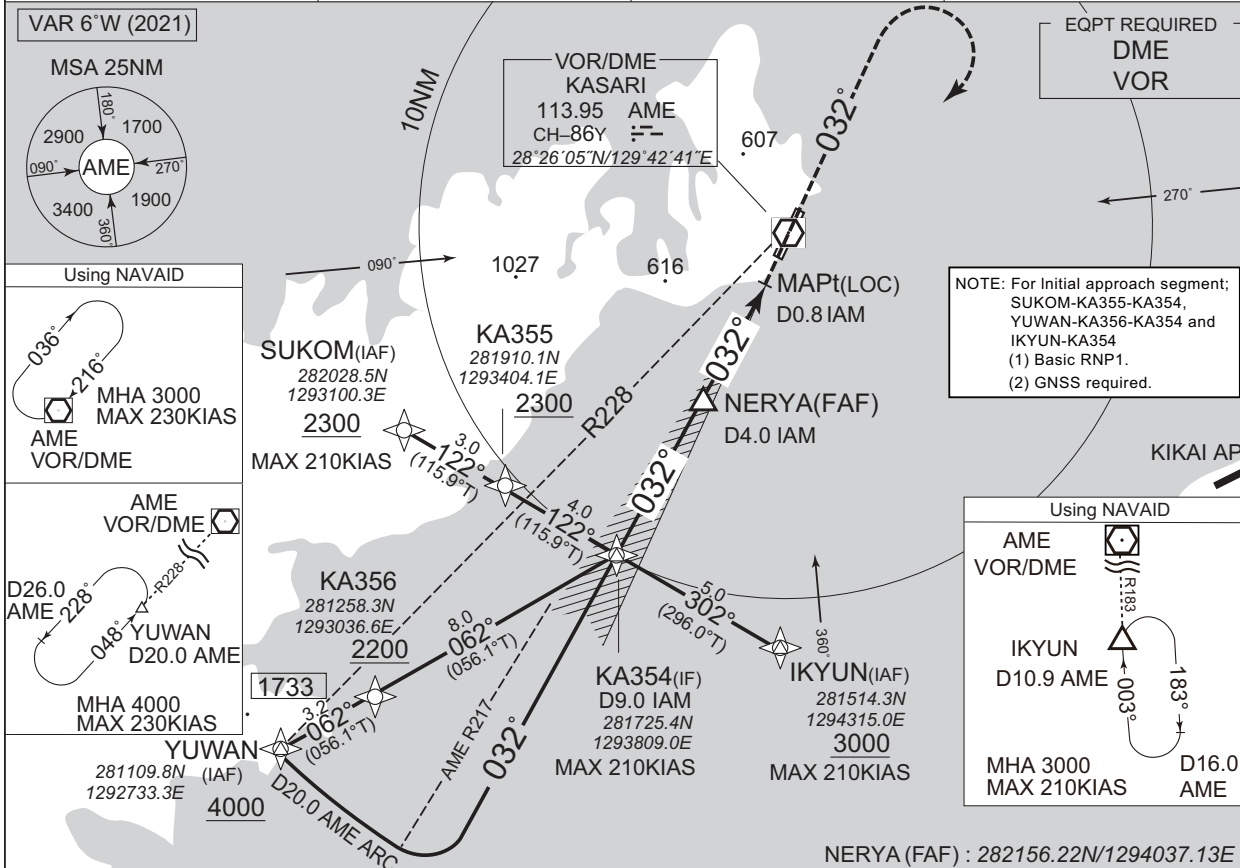
RJKA / AMAMI

NAHA APP
124.95 – 280.1

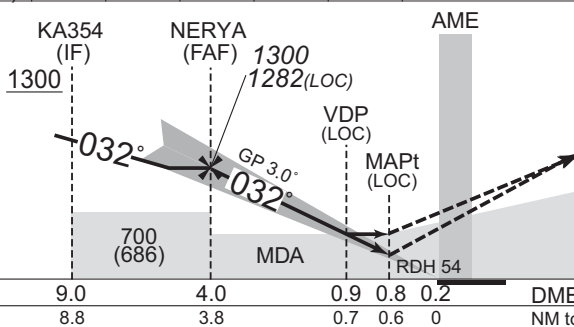
ILS - LOC
109.3 IAM 332.0
ILS-GP 332.0
ILS-DME CH-30x

AMAMI RADIO
118.15 - 126.2
AFIS provided
by Naha Airport Office

NO RADAR



NM to IAM	FAF	3	2	1	MAPt
ALT (3.0° APCH Path)	1282	976	657	338	—



MISSED APPROACH
Climb on HDG032° to 3000FT,
turn right, direct to AME
VOR/DME and hold.
Contact AMAMI RADIO.

Timing not authorized for defining the MAPt.

MINIMA		THR elev. 27		AD elev. 14		
CAT	CAT I		LOC		CIRCLING	
	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	227 (200)	550	280 (266)	800	500 (486)	1600
B						2400
C				1200	580 (566)	3200
D						

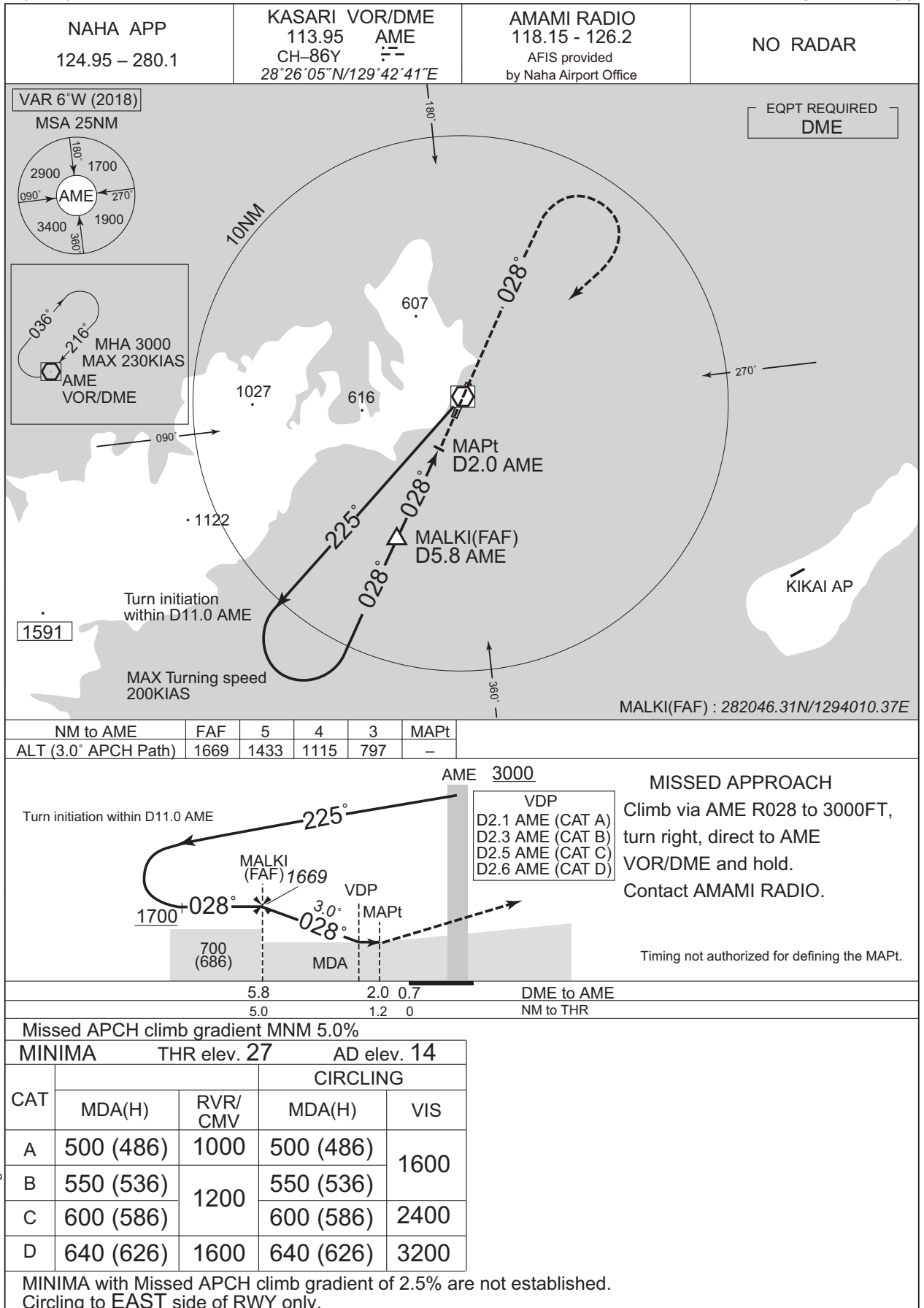
Circling to EAST side of RWY only.

CHANGE : ATC call sign and FREQ.

INSTRUMENT APPROACH CHART

RJKA / AMAMI

VOR RWY03



CHANGE : ATC call sign and FREQ.

INSTRUMENT APPROACH CHART

RJKA / AMAMI

VOR RWY21



CHANGE : ATC call sign and FREQ.

RJKA / AMAMI

RNAV(GNSS) Z RWY21

VAR 6°W (2021)

Baro-VNAV not authorized below 5°C

MSA 25NM

3400

ARP

ARP : 282551N / 1294245E

VOR/DME
KASARI
113.95 AME
CH-86Y
28°26'05"N/129°42'41"E

10NM

1027

616

1122

-090°

270°

D17.0 AME

MHA 3500
MAX 230KIAS

KYORA (IAF/MAHF)
D11.9 AME

D25.0 AME

MHA 3500
MAX 230KIAS

TUMGI (IAF)
R033/D20.1 AME

IMORE (IF)

HABUH (FAF)

KA151 (MAPt)

KA150 (MATF)

BOROS (IAF)
D12.0 AME

MHA 3000
MAX 210KIAS

D17.0 AME

KIKAI AP

NM to Next Fix	MAPt	1	2	3	4	FAF
ALT (3.0° APCH Path)	—	604	923	1241	1560	1700

BOROS 283258.61N
(IAF) 1295353.10E

TUMGI 284357.05N
(IAF) 1295300.74E

KYORA 283758.79N
(IAF/MAHF) 1294212.30E

IMORE 283528.82N
(IF) 1294802.84E

HABUH 283058.10N
(FAF) 1294534.11E

KA151 282657.70N
(MAPt) 1294322.24E

KA150 282415.22N
(MATF) 1294153.21E

MISSED APPROACH	AME	VDP 1.1NM to MAPt	
Climb to <u>KA150</u> , turn right, direct to			IMORE

CHANGE : ATC call sign and FREQ. VAR.

KYORA and hold at 3500FT.
Contact AMAMI RADIO.

(For using VOR/DME)
Climb on HDG211° to 900FT, turn right
HDG049° to intercept and proceed via
AME R004 to KYORA and hold at
3500FT.
Contact AMAMI RADIO.

NM to THR

0 0.7 5.2 10.2

RDH 50

MDA 700 (686)

VDP (LNAV)

KA151 (MAPt)

HABUH (FAF)

IMORE (IF)

1700

1200

3.00°

212°

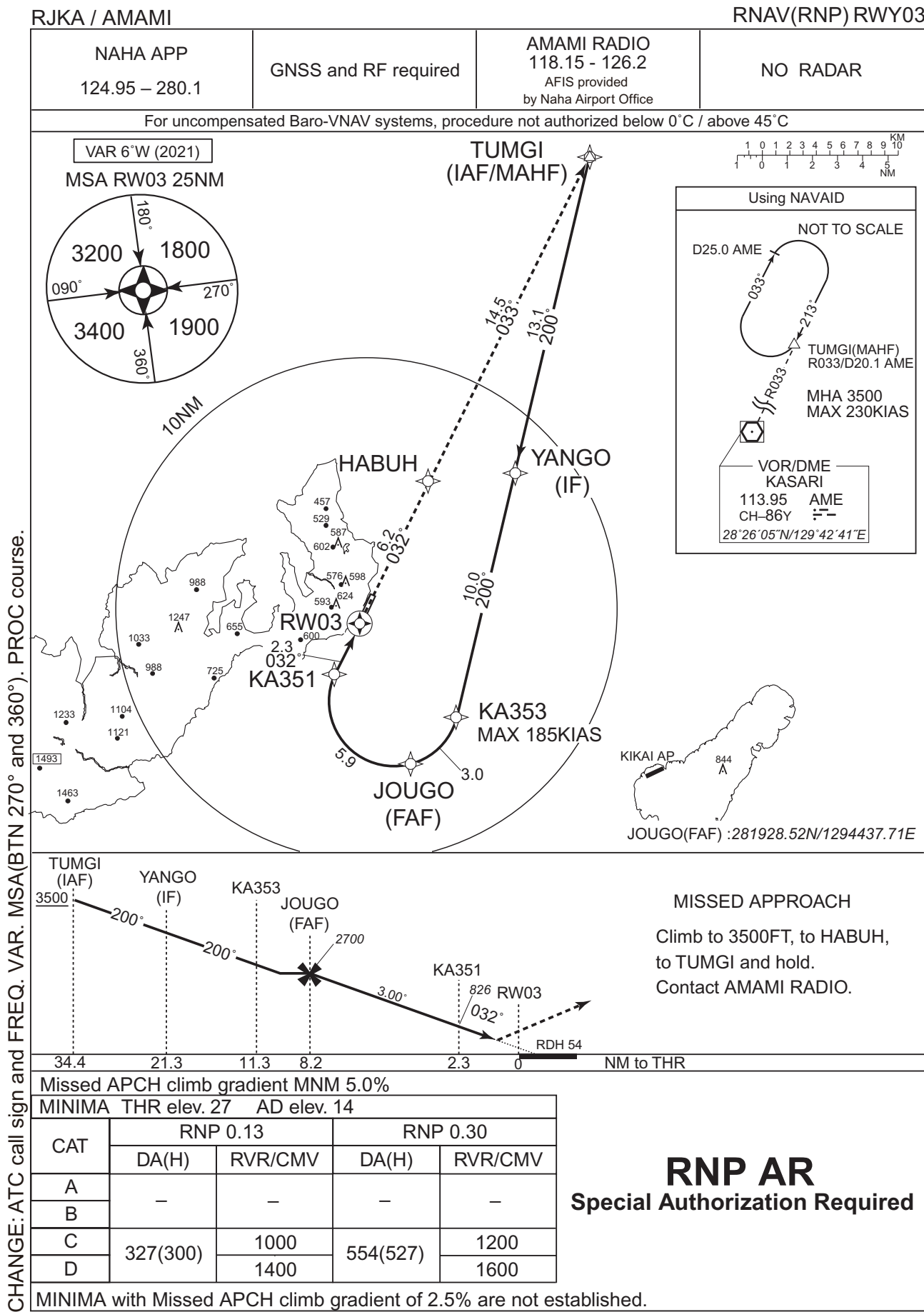
212°

Missed APCH climb gradient MNM 5.0%

MINIMA		THR elev. 14		AD elev. 14					
CAT	LNAV/VNAV		LNAV		CIRCLING				
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS			
A	600 (586)	1500	600 (586)	1500	600 (586)	1600			
B									
C							1800	1800	2400
D							2000	2000	3200

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

INSTRUMENT APPROACH CHART



CHANGE: ATC call sign and FREQ. VAR. MSA(BTN 270° and 360°). PROC course.

INSTRUMENT APPROACH CHART

RJKA / AMAMI

RNAV(RNP) RWY03

RNAV(RNP) RWY03Coding 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	TUMGI	—	—	-6.2	—	—	+3500	—	—	—
002	TF	YANGO	—	200 (193.3)	-6.2	13.1	—	—	—	—	1.0
003	TF	KA353	—	200 (193.3)	-6.2	10.0	—	+2700	-185	—	1.0
004	RF Center: KARF1 r=2.65NM	JOUGO	—	—	-6.2	3.0	R	2700	—	—	1.0
005	RF Center: KARF1 r=2.65NM	KA351	—	—	-6.2	5.9	R	826	—	-3.00	0.13 0.30
006	TF	RW03	Y	032 (025.7)	-6.2	2.3	—	81	—	-3.00/54	0.13 0.30
007	TF	HABUH	—	032 (025.7)	-6.2	6.2	—	—	—	—	1.0
008	TF	TUMGI	—	033 (026.7)	-6.2	14.5	—	3500	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates	RF Arc Center Identifier	Coordinates
TUMGI	284357.05N/1295300.74E	KARF1	282205.14N/1294402.59E
YANGO	283113.92N/1294935.29E		
KA353	282128.37N/1294658.25E		
JOUGO	281928.52N/1294437.71E		
KA351	282314.74N/1294120.10E		
RW03	282521.39N/1294229.46E		
HABUH	283058.10N/1294534.11E		

CHANGE : VAR. PROC course.

INSTRUMENT APPROACH CHART

RJKA / AMAMI

RNAV(RNP) Y RWY21

NAHA APP
124.95 – 280.1

GNSS required

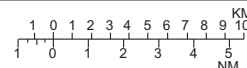
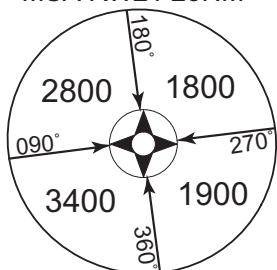
AMAMI RADIO
118.15 - 126.2
AFIS provided
by Naha Airport Office

NO RADAR

For uncompensated Baro-VNAV systems, procedure not authorized below 0°C/ above 45°C

VAR 6°W (2021)

MSA RW21 25NM



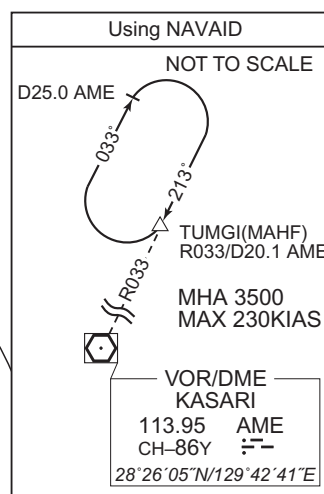
KA162

TUMGI
(IAF/MAHF)IMORE
(IF)HABUH
(FAF)

RW21

KA161

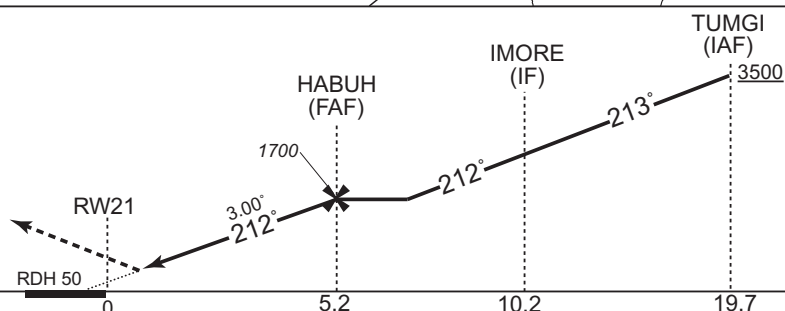
KA101



HABUH(FAF) : 283058.10N/1294534.11E

MISSED APPROACH

Climb to 3500FT, to KA101,
to KA161, to KA162, to
TUMGI and hold.
Contact AMAMI RADIO.



NM to THR

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 14 AD elev. 14

CAT	RNP 0.14		RNP 0.30	
	DA(H)	CMV	DA(H)	CMV
A	—	—	—	—
B	—	—	—	—
C	325(311)	1600	528(514)	1800
D		1800		2000

RNP AR
Special Authorization Required

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

CHANGE: PROC renamed. ATC call sign and FREQ. VAR. MISSED APPROACH course FM KA161 to KA162.

INSTRUMENT APPROACH CHART

RJKA / AMAMI

RNAV(RNP) Y RWY21

RNAV(RNP) Y RWY21Coding 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	TUMGI	—	—	-6.2	—	—	+3500	—	—	—
002	TF	IMORE	—	213 (207.2)	-6.2	9.5	—	—	—	—	1.0
003	TF	HABUH	—	212 (205.8)	-6.2	5.0	—	1700	—	—	1.0
004	TF	RW21	Y	212 (205.7)	-6.2	5.2	—	64	—	-3.00/50	0.14 0.30
005	TF	KA101	—	212 (205.7)	-6.2	5.7	—	—	—	—	1.0
006	TF	KA161	—	302 (295.9)	-6.2	11.0	—	—	—	—	1.0
007	TF	KA162	—	017 (010.7)	-6.2	10.0	—	—	—	—	1.0
008	TF	TUMGI	—	073 (067.1)	-6.2	20.9	—	3500	—	—	1.0

Waypoint Coordinates

Waypoint Identifier	Coordinates
TUMGI	284357.05N/1295300.74E
IMORE	283528.82N/1294802.84E
HABUH	283058.10N/1294534.11E
RW21	282619.79N/1294301.46E
KA101	282112.20N/1294013.10E
KA161	282600.04N/1292858.96E
KA162	283551.31N/1293105.90E

CHANGE: VAR. PROC renamed. MISSED APPROACH course FM KA161 to KA162.

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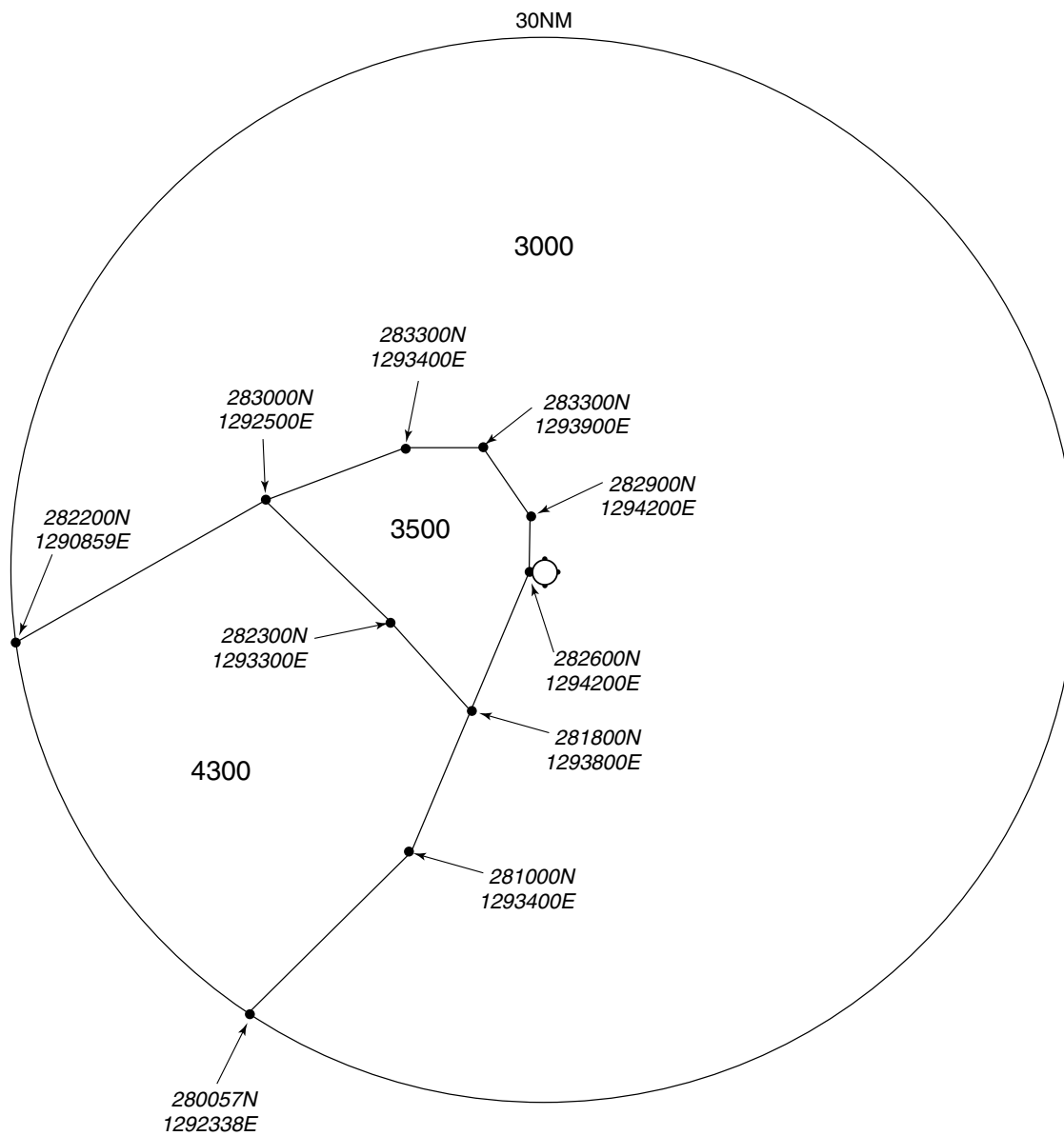
Visual REP



Call sign	BRG / DIST from ARP	Remarks
10NM NE	045°/10.0NM	海上 Over the sea
10NM NW	315°/10.0NM	海上 Over the sea
笠利崎 Kasarizaki	354°/ 6.2NM	灯台 Lighthouse
仲干瀬崎 Nakahosezaki	235°/11.3NM	岬 Cape
名瀬 Naze	262°/11.9NM	港 Harbor

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Minimum Vectoring Altitude CHART



CENTER : 282551N/1294245E (ARP)