

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>ORIGINAL/AMENDMENT</u>	<u>CITY</u>	<u>STATE</u>	
BTB	RNAV (GPS) Z RWY 33	1	BURLINGTON	VT	
<u>AIRPORT ELEVATION</u>	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>DATED</u>	<u>MAG VAR</u>	<u>EPOCH YEAR</u>
335	334	RNAV (GPS) Z RWY 33	11/03/2022	15W	2005
<u>FACILITY</u>	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u>	<u>CANCEL/SUSPEND</u>	
RNAV			ROUTINE		

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 236/30 CW 056/30	NOPT	RASLE	IF/IAF	6300
2. 056/30 CW 146/30		RASLE	IF/IAF	6300
3. 146/30 CW 236/30		146/10 CW 236/10		6600
4. 146/10 CW 236/10		VAMPY	IAF	6300

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
VAMPY	IAF	RASLE	NOPT	TF	FB	1.00	236.19	10.55	6300
RASLE	IF/IAF	BOBOH		TF	FB	1.00	326.08	5.00	5400
BOBOH		PAKOY		TF	FB	1.00	326.02	2.20	4700
PAKOY		EHIKO		TF	FB	1.00	325.99	2.93	3800
EHIKO	FAF	RW33	MAP	TF	FO	0.30	325.95	10.04	
RW33	MAP	584 MSL		CA	FB		325.95		
584 MSL		STAEV		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT STAEV AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	HOLD SE RASLE, RT, 326.08 INBOUND, 6300 FT. IN LIEU OF PT (IAF), MAX 10000.														
3.	FAC:	325.95	FAF:	EHIKO	DIST FAF TO MAP:	10.04	DIST FAF TO THLD:	10.04							
4.	MIN ALT:	RASLE 6300, BOBOH 5400, PAKOY 4700, EHIKO 3800													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		275 HAT:	0.57	GS ANT:				
6.	MIN GP INCPT:	3800	GP ALT AT PFAF:	EHIKO 3800			OM:				MM:			IM:	
7.	GP ANGLE:	3.20	34:1:	IS NOT CLEAR	20:1:	IS CLEAR	TCH:	55.2							
8.	MSA FROM:														

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25°C OR ABOVE 37°C.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 145.67 INBOUND.
FAS OBST: 1540 AAO 442227N/0725841W.
CHART R-6501 A & B.
CHART VDP AT 4.69 NM TO RW33.
WAAS CHANNEL # 65812
REFERENCE PATH ID: W33A
LTP HAE: 73 M

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ CAT A, B, C, D, E 1700-5

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	584	4000	250	584	4000	250	584	4000	250	584	4000	250	584	4000	250
LNAV/VNAV DA	1782	5	1448	1782	5	1448	1782	5	1448	1782	5	1448	1782	5	1448
LNAV MDA	2000	1 1/4	1666	2000	1 1/4	1666	2000	3	1666	2000	3	1666	2000	3	1666



CHANGES - REASONS

1. TAA 1: CHANGED FROM "236/30 CW 056/30, NOPT, JANUD, IF/IAF, 6000" TO " 236/30 CW 056/30, NOPT, RASLE, IF/IAF, 6300" - FIX JANUD MOVED AND WAS RENAMED/NEW TAA OBSTACLE.
2. TAA 2: CHANGED FROM "056/30 CW 146/30, DONGY, IAF, 6400" TO "056/30 CW 146/30, RASLE, IF/IAF, 6300" – REMOVED IAF SEGMENT FROM DONGY PER ATC/ENVIRONMENTAL TO AVOID WILDLIFE REFUGE.
3. TAA 3: CHANGED FROM "146/30 CW 236/30, 146/5 CW 236/5, 6700" TO "146/30 CW 236/30, 146/10 CW 236/10, 6600" – IAF SEGMENT EXTENDED FROM 5 NM TO 10 NM/NEW TAA OBSTACLE.
4. TAA 4: CHANGED FROM "146/5 CW 236/5, ALOKY, IAF, 6000" TO "146/10 CW 236/10, VAMPY, IAF, 6600" – IAF MOVED MORE THAN 1 NM/RENAMED.
5. TERMINAL ROUTES: SEGMENT DONGY TO JANUD, REMOVED SEGMENT - REMOVED IAF SEGMENT FROM DONGY PER ATC/ENVIRONMENTAL TO AVOID WILDLIFE REFUGE.
6. TERMINAL ROUTES: SEGMENT ALOKY TO JANUD, CHANGED FROM "ALOKY TO JANUD" TO "VAMPY TO RASLE", COURSE CHANGED FROM "236.14" TO "236.19", DISTANCE CHANGED FROM "6.00" TO "10.55", AND ALTITUDE CHANGED FROM 6000 TO 6300 – FIXES ALOKY AND JANUD MOVED AND WERE RENAMED TO MEET RNAV SEGMENT LENGTH REQUIREMENTS/NEW CONTROLLING OBSTACLES.
7. TERMINAL ROUTES: SEGMENT JANUD TO NIDUQ, CHANGED FROM "JANUD TO NIDUQ" TO "RASLE TO BOBOH", AND CHANGED DISTANCE FROM "4.95" TO "5.00" – FIXES JANUD AND NIDUQ WERE MOVED AND RENAMED TO MEET SEGMENT LENGTH CRITERIA.
8. TERMINAL ROUTES: SEGMENT NIDUQ TO HONIB, CHANGED FROM "NIDUQ TO HONIB" TO "BOBOH TO PAKOY" AND COURSE CHANGED FROM "325.99" TO "326.02", AND ALTITUDE CHANGED FROM "4800" TO "4700" – FIXES NIDUQ AND HONIB MOVED AND WERE RENAMED TO MEET COURSE ALIGNMENT CRITERIA/LOWERED ALTITUDE TO PRECLUDE EXCESSIVE DG WAIVER.
9. TERMINAL ROUTES: SEGMENT HONIB TO EHIKO, CHANGED FROM "HONIB TO EHIKO" TO "PAKOY TO EHIKO", CHANGED COURSE FROM "326" TO "325.99", CHANGED DISTANCE FROM "3.19" TO "2.93" – FIX HONIB MOVED AND WAS RENAMED AND FIX EHIKO MOVED TO MEET COURSE ALIGNMENT CRITERIA, TO MAINTAIN GPA AND MINIMIZE DESCENT GRADIENT.
10. TERMINAL ROUTES: SEGMENT EHIKO TO RW33, CHANGED DISTANCE FROM "9.78" TO "10.04" – FIX EHIKO MOVED ON THE ILS TO MAINTAIN COINCIDENT GLIDEPATH AND VGSI DESCENT ANGLES.
11. PROFILE LINE 2: CHANGED FROM "HOLD SE JANUD, RT, 326.08 INBOUND, 6000 FT. IN LIEU OF PT (IAF), MAX 10000" TO "HOLD SE RASLE, RT, 326.08 INBOUND, 6000 FT. IN LIEU OF PT (IAF), MAX 10000." – RENAMED FIX JANUD TO RASLE.
12. PROFILE LINE 3: CHANGED DIST FAF TO MAP AND DIST FAF TO THLD FROM "9.78" TO "10.04" – FAF EHIKO MOVED.
13. PROFILE LINE 4: MIN ALT CHANGED FROM "JANUD 6000, NIDUQ 5400, HONIB 4800, EHIKO 3800" TO "JANUD 6300, RASLE 6300, BOBOH 5400, PAKOY 4800, EHIKO 3800" – FAF AND SDFS MOVED AND WERE RENAMED FOR COURSE ALIGNMENT.
14. PROFILE LINE 5: CHANGED FROM "250 HAT 0.56" TO "275 HAT: 0.57" – NEW EVALUATION.
15. PROFILE LINE 7: GP ANGLE CHANGED FROM "3.28" TO 3.20" – ALIGNED WITH VGSI AND ALLOWS FAF AT FIX EHIKO TO MATCH ILS RWY 33.
16. NOTES: CHANGED FROM "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25°C OR ABOVE 37°C" – NEW TEMP CALCULATIONS.
17. NOTES: CHANGED FROM "RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED" TO "RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED" – VIS IS RVR.
18. ADDITIONAL FLIGHT DATA: FAS OBSTACLE CHANGED FROM "CHART FAS OBST: 1559 TREE 442227N/0725840W" TO "FAS OBST: 1540 AAO 442227N/0725841W" – NEW CONTROLLING OBSTACLE.
19. CRC REMAINDER CHANGED FROM "C3BEFCCB" TO "78F37CF3" – FPAP CHANGED FROM "442850.4400N/0730957.1800W" TO "442858.1985N/0731009.7330W", GPA CHANGED FROM "3.28" TO "3.20", COURSE WIDTH AT THRESHOLD CHANGED FROM "106.50" TO "106.75".

COORDINATED WITH:

A4A

☒

ALPA

☒

AOPA

☒

APA

☒

HAI

☐

NBAA

☒

OTHER: ZBW, BTV APP CON, BTV ATCT, ARPT MGR, USAF/ANG

FLIGHT CHECKED BY

DANIEL KIRBY

Digitally signed by
JOSEPH L ZEDER
Sep 06, 2024

OFFICE

FPO

DATE

08/14/2024

DEVELOPED BY

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DATE

06/22/2024

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Sep 06, 2024

OFFICE

AJV-A432

DATE

TITLE
MANAGER



AIRPORT ID
BTV

PROCEDURE NAME
RNAV (GPS) Z RWY 33

ORIGINAL/AMENDMENT
1

CITY
BURLINGTON

STATE
VT

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KBTV
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Z
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	442759.9565N
LTP/FTP LONGITUDE	0730835.5625W
LTP/FTP ELLIPSOIDAL HEIGHT	+00730
FPAP LATITUDE	442858.1985N
FPAP LONGITUDE	0731009.7330W
THRESHOLD CROSSING HEIGHT (TCH)	00055.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.20
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0368
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	78F37CF3
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+01019
FPAP ORTHOMETRIC HEIGHT	+01019

QUALITY
35
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
BTV	RNAV (GPS) Z RWY 33	1	BURLINGTON	VT	335	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM 236/30 CW 056/30 **TO** RASLE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>				<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	440936.00N/0725545.00W	4269	164	98	4E	2000					6300
TERRAIN	440715.00N/0725609.00W	3966 (4000)								AS1500	5500

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM 056/30 CW 146/30 **TO** RASLE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>				<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	440936.00N/0725545.00W	4269	164	98	4E	2000					6300
TERRAIN	440936.00N/0725545.00W	4068 (4100)								AS1500	5600

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

QUALITY
35
CHECKED

RIGHT BASE AREA

FROM

146/30 CW 236/30

TO

146/10 CW 236/10

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	443236.00N/0724854.00W	4567	164	98	4E	2000					6600
TERRAIN	443236.00N/0724854.00W	4366 (4400)								AS1500	5900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

RIGHT BASE AREA

FROM

146/10 CW 236/10

TO

VAMPY

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	441912.00N/0725312.00W	4239	164	98	4E	2000					6300
TERRAIN	442654.00N/0725021.00W	3700 (3700)								AS1500	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

VAMPY

TO

RASLE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	10.55										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	442406.00N/0723836.00W	3803	164	98	4E	1000				PR220 AT1277	6300
TERRAIN	442333.00N/0723903.00W	3185 (3200)								AS1500	4700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

RASLE (IF/IAF)

TO

BOBOH

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	5.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	441909.00N/0725306.00W	4019	164	98	4E	500				AC98 PR220 AT563	5400
TERRAIN	441736.00N/0725303.00W	3681 (3700)								AS1500	5200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INTERMEDIATE: STEPDOWN

FROM

BOBOH

TO

PAKOY

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
1.00	2.20				

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TERRAIN	441912.00N/0725312.00W	4088 (4088)	50	20	2C	500				PR78	4700
TERRAIN	441912.00N/0725312.00W	4038 (4000)								AS0	4000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

USED 78 PPV/PR - APPROVAL SUBMITTED
USED 0 FT AIRSPACE - HIGH TERRAIN AND ENTIRE SEGMENT IN CLASS E TERMINAL AREA EXTENSION
USED 0 FT AAO OUTSIDE AAO EXEMPT AREA - WAIVER SUBMITTED

INTERMEDIATE: STEPDOWN

FROM

PAKOY

TO

EHIKO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
1.00	2.93				

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	441910.64N/0725425.82W	3220	50	20	2C	500				PR78	3800
TERRAIN	441930.00N/0725524.00W	2477 (2500)								AS1000	3500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

USED PPV/PR 78 - APPROVAL SUBMITTED



FINAL: LPV

FROM

EHIKO

TO

RW33

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	10.04		DA		250						
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TREE (50-042049)	442758.12N/0730825.15W	371	20	3	1A		31.88:1				584

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

EHIKO

TO

RW33

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	10.04		DA		1448						
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TREE (50-040683)	442551.34N/0730554.94W	951	20	3	1A		22.97:1				1782

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV

FROM

EHIKO

TO

RW33

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
0.30	10.04		RW33	1666	

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	442227.38N/0725840.60W	1540	50	20	2C	250				XL202	2000

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

USED 100 FT AAO OUTSIDE AAO EXEMPT AREA - WAIVER SUBMITTED

HOLD-IN-LIEU OF PT

FROM

RASLE

TO

P-9

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
		P-9			

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	441912.00N/0725312.00W	4239	164	98	4E	1000				PR220	5500
TERRAIN	441912.00N/0725312.00W	4038 (4000)								AS1500	5500

COMPUTATIONS

ALT KIAS KTAS HAA VKTW TR BA DTA COURSE CHANGE DVEB VEB OCS RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LPV

FROM

DA

TO

STA EV

RNP 0.30-1.00	DISTANCE	PAT	MAP		HAT		HMAS 391				
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
AAO	442533.00N/0730521.00W	1070	164	98	4E	1000					2100
TERRAIN	442533.00N/0730521.00W	869 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

STA EV

RNP 0.30-1.00	DISTANCE	PAT	MAP		HAT		HMAS 1621				
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
AAO	442533.00N/0730521.00W	1070	164	98	4E	1000					2100
TERRAIN	442533.00N/0730521.00W	869 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSSED APPROACH: LNAV

FROM

RW33

TO

STA EV

RNP

0.30-1.00

DISTANCE

PAT

MAP

HAT

HMAS

1698

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
AAO	442533.00N/0730521.00W	1070	164	98	4E	1000					2100
TERRAIN	442533.00N/0730521.00W	869 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MSA/ESA

CENTER

RADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZBW ARTCC, BTV APP CON, BTV TOWER

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
ASOS	BTV	24	BTV	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

WX REMARKS:

NO BACK-UP ALTIMETER - REDUNDANT ALTIMETER SOURCE AT KBTV.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
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APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW19 - MIRL (PCL), PAPI-4R	BSC-G	
RW01 - MIRL (PCL), PAPI-4L (PCL)	NPI-G	
RW15 - MALSR (PCL), HIRL (PCL), PAPI-4R (PCL)	PIR-G	APPROACH, ROLL OUT
RW33 - MALSF (PCL), HIRL (PCL), PAPI-4R	PIR-G	APPROACH, ROLL OUT

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.20	334.2	55.2			3.20	53.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	X	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	500
ON CENTERLINE	X	FT FROM CENTERLINE		

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
-25C	+37C	-25C	+14.34C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2018-2022).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 1521 HIGH TEMP 1665.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	LNAV, LNAV/VNAV
34:1	
948 TREE (50-040412) 442552.1700N/0730555.9700W (113.17)	951 TREE (50-040683) 442551.3400N/0730554.9400W (112.89)
948 TREE (50-021415) 442551.6200N/0730555.7000W (111.66)	937 TREE (50-041550) 442551.8000N/0730545.9100W (85.21)
1917 POLE (50-041479) 442550.1800N/0730555.8100W (78.03)	903 TREE (50-042116) 442556.6600N/0730552.9600W (72.06)



<u>AIRPORT ID</u>		<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
BTV		RNAV (GPS) Z RWY 33	1	BURLINGTON	VT	335	RNAV
925 TREE (50-040246) 442545.2000N/0730548.7000W (64.85)				944 TREE (50-041005) 442541.4000N/0730541.5000W (64.83)			
909 TREE (50-041427) 442553.3300N/0730547.6600W (63.02)				929 TREE (50-041742) 442546.4200N/0730541.6200W (59.8)			
946 TREE (50-040308) 442545.2900N/0730531.7300W (58.64)				980 TREE (50-034236) 442533.2400N/0730520.5300W (51.08)			
865 TREE (50-040436) 442555.7400N/0730600.8100W (44.94)				852 TREE (50-040488) 442556.0900N/0730601.0800W (33.06)			
903 TREE (50-040368) 442550.3900N/0730533.1000W (27.79)				905 TREE (50-041122) 442552.9100N/0730526.7000W (24.37)			
905 TREE (50-021188) 442552.7300N/0730526.4300W (23.58)				830 TREE (50-042037) 442555.3400N/0730607.9900W (20.75)			
951 TREE (50-041547) 442528.6200N/0730524.3000W (19.16)				914 TREE (50-041246) 442539.3500N/0730533.0600W (17.21)			
934 TREE (50-041676) 442538.2800N/0730519.9400W (13.95)				847 TREE (50-040989) 442557.8100N/0730545.8100W (6.76)			
866 TREE (50-040267) 442553.0200N/0730539.1900W (5.74)				360 TREE (50-041176) 442755.2500N/0730823.6200W (3.24)			
FINAL TYPE		LPV					
34:1							
360 TREE (50-041176) 442755.25N/0730823.62W (3.24)							
<u>PENETRATIONS REMARKS:</u>							

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

<u>PENETRATIONS REMARKS:</u>

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

APPROVED WAIVER ON FILE FOR 0 FT AAO ON CAMELS HUMP MOUNTAIN. STATE AVIATION OPERATIONS SPECIALIST SUBMITTED LETTER WITH WAIVER VERIFYING NOTHING EXISTS ON CAMELS HUMP MOUNTAIN TOP. MOUNTAIN TOP IS ROUTINELY INSPECTED AND AUTHORIZATION TO BUILD MUST BE SUBMITTED THROUGH THE STATE AVIATION OPERATIONS SPECIALIST

WAIVER SUBMITTED FOR 100 FT AAOS OUTSIDE AAO EXEMPT AREA ON FINAL (LNAV ONLY).

WAIVER SUBMITTED FOR FINAL SEGMENT LENGTH - 10.04 NM EXCEEDS 10.00 NM.

APPROVAL LETTER SUBMITTED FOR PPV EVALUATION IN LIEU OF FULL PR VALUES.

100 FT VEGETATION PER FPT.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1740 AAO 442113N/0725837W.



PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	MAP	TO 1000FT POINT	14.57
WIDTH OF	INTERMEDIATE	SEGMENT AT 1000FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1000FT POINT	311.02
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1000FT POINT	4000
DISTANCE FROM	THLD	TO 1500FT POINT	15.17
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	311.02
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	4000

THRESHOLD COORDINATES (IF STR-IN)442759.96N/0730835.56W

ARP COORDINATES442819.04N/0730911.79W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

FAF COORDINATESRUNWAY 15 DISTANCE 0.75 NM

FIX NAME COORDINATES442125.66N/0725800.32W

REMARKS

IAF VAMPY 442243.39N 0723741.49W 30 NM RADIUS
IF/IAF RASLE 441446.62N 0724721.42W 30 NM RADIUS
THLD DISPLACED 500FT, ACTUAL COORDINATES: 442756.73N/0730830.35W

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
APRIL SARMENTO	AJV-A432	06/22/2024	AERONAUTICAL INFORMATION SPECIALIST

