

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (RNP) 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</u> BUFFALO NIAGARA INTL	<u>AIRPORT ID</u> KBUF	<u>PROCEDURE NAME</u> RNAV (RNP) Z RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>CITY</u> BUFFALO	<u>STATE</u> NY	
<u>AIRPORT ELEVATION</u> 727	<u>TDZE</u> 726	<u>SUPERSEDED</u> RNAV (RNP) Z RWY 23	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 05/24/2018	<u>MAG VAR</u> 11W	<u>EPOCH YEAR</u> 2015
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 13 SEPTEMBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>		

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>
SUSKE	IAF	BUFST		TF	FB	1.00	063.15	6.65	5500
BUFST		FOTBL		TF	FB	1.00	063.23	4.55	5000
TRAVA	IAF	BUULS		TF	FB	1.00	235.07	5.57	2700
FOTBL	IF	ZADUM		TF	FB	1.00	054.89	3.45	3900
COZZS	IF	EFFCT		TF	FB	1.00	055.00	3.14	4000
WNGGS	IF	JEDAR		TF	FB	1.00	351.85	3.00	3200
ZADUM		JABET		RF	FB	1.00	(2.49 NM RADIUS CW (CFQFT))	4.12	2700
EFFCT		JEDAR		RF	FB	1.00	(2.49 NM RADIUS CCW (CFNBR))	2.75	3200
JEDAR		ZUDAT		RF	FB	1.00	(2.62 NM RADIUS CCW (CFHSN))	2.00	2600
JABET		BIILS		RF	FB	1.00	(2.02 NM RADIUS CW (CFJJB))	3.00	1800
BUULS	IF	BIILS	PFAF	TF	FB	1.00	235.02	3.00	1800
ZUDAT		BIILS		RF	FB	1.00	(2.02 NM RADIUS CCW (CFJRZ))	2.57	1800
BIILS	PFAF	RW23	MAP	TF	FO	0.30	234.98	3.21	
		WABUS		TF	FO	1.00	234.95	13.50	3000



MISSED APPROACH

MAP:

RNP: DA

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 ON THE RNAV MISSED APPROACH ROUTE TO WABUS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2.	PROFILE STARTS AT BIILS				
3. FAC:	234.98	PFAF: BIILS	DIST PFAF TO MAP:	DIST PFAF TO THLD:	
4. MIN ALT:	BILLS 1800				
5. DIST TO THLD FROM OM:	3.21	MM:	IM:	150 HAT:	388 HAT: 1.06
6. MIN GP INCPT:	1800	GP ALT AT PFAF :	OM:	GS ANT:	
7. GP ANGLE:	3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 51.1#	MM: IM:
8. MSA FROM:	RW23 3900				

PBN REQUIREMENTS NOTES:

RNP AR APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -18C OR ABOVE 54C.
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART PLANVIEW NOTE ADJACENT TO SUSKE IAF, WNNGS IF, COZZS IF: RF REQUIRED.
CHART SPEED ICON IN PLANVIEW AT FOTBL, BUULS, WNNGS, COZZS: MAX 210 KIAS
CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.10 ALL CATS VISIBILITY TO 1 1/4
CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.20 ALL CATS VISIBILITY TO 1 1/2
CHART NOTE: FOR INOPERATIVE ALSF, INCREASE RNP 0.30 ALL CATS VISIBILITY TO 1 3/4

ADDITIONAL FLIGHT DATA:

#TCH 777.0 MSL (DO NOT CHART)
ROUTE TYPE: A, H
ROUTE TYPE QUALIFIER 1: F
ROUTE TYPE QUALIFIER 2: S
CHART MANDATORY 5000 AT FOTBL
CHART MANDATORY 5000 AT COZZS
CHART MANDATORY 4000 AT WNNGS
CHART MANDATORY 2700 AT BUULS
CHART MINIMUM 5500 AT SUSKE
CHART MINIMUM 3500 AT TRAVA
HOLD SW, RT, 054.81 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD



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
AUTHORIZATION REQUIRED															
RNP 0.10 DA	1114	4500	388	1114	4500	388	1114	4500	388	1114	4500	388			
RNP 0.20 DA	1170	5500	444	1170	5500	444	1170	5500	444	1170	5500	444			
RNP 0.30 DA	1228	1 1/4	502	1228	1 1/4	502	1228	1 1/4	502	1228	1 1/4	502			

CHANGES - REASONS

ADDED "STANDARD" TO ALTERNATE MINIMUMS - IAW 8260.19H PARA 8-6-11B(4).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: AIRPORT MANAGER, AVIATION MANAGER, ZOB ARTCC, BUF APP CON, ATA
Digitally signed by

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.

DEVELOPED BY

DAVID TEFFETELLER (KWEKU DONKOR)

APPROVED BY

PATRICK MULQUEEN

Digitally signed by
ADOLFO D URRUTIA
May 23, 2018

OFFICE

OFFICE

AJV-5433

OFFICE

AJV-5430

DATE

DATE

05/01/2018

DATE

ADOLFO D URRUTIA
May 23, 2018

Digitally signed by
ADOLFO D URRUTIA
May 23, 2018

TITLE

MANAGER

