

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
VOR STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.23

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> WILLISTON BASIN INTL	<u>AIRPORT ID</u> KXWA	<u>PROCEDURE NAME</u> VOR RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> WILLISTON	<u>STATE</u> ND	
<u>AIRPORT ELEVATION</u> 2353	<u>TDZE</u> 2350	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 8E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> ISN	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 10/10/2019	<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>
ISN VOR/DME		JADPA/ISN 12.00 DME					122.61	12.00	4300
CIDIN/ISN 12.00 DME CCW	IAF	JADPA/ISN 12.00 DME					12.00 DME ARC (ISN LR-133)		4300
HASIP/ISN 12.00 DME CCW	IAF	JADPA/ISN 12.00 DME					12.00 DME ARC (ISN LR-133)		4300
JADPA/ISN 12.00 DME	IF/IAF	ZOPIV/ISN 4.35 DME					302.61	7.65 (ISN R-123)	3700

MISSED APPROACH

MAP:

WILAN/ISN 0.28 DME

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4300 THEN CLIMBING LEFT TURN TO 4300 DIRECT ISN VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF** (IAF)
2. HOLD SE JADPA, RT, 302.61 INBOUND, 4300 FT. IN LIEU OF PT (IAF), MAX 6000.
3. **FAC:** 302.61 **FAF:** ZOPIV/ISN 4.35 DME **DIST FAF TO MAP:** **DIST FAF TO THLD:** 4.07
4. **MIN ALT:** JADPA/ISN 12.00 DME 4300, ZOPIV/ISN 4.35 DME 3700
8. **MSA FROM:** ISN VOR/DME 4300

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON ISN VOR/DME AIRWAY RADIALS 077 CW 112.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-32 CATS C/D VISIBILITY TO 1 1/8 SM.



ADDITIONAL FLIGHT DATA:

CHART FAS OBST: 2429 TRANSMISSION LINE 481506N/1034241W
CHART CIRCLING ICON.
ZOPIV TO RW32: 3.01/50.
CHART PLANVIEW NOTE: FINAL APPROACH COURSE OFFSET 17.13 DEGREES.
CHART ISN R-146 AT CIDIN.
CHART ISN R-196 AT HASIP.
CHART VDP AT 1.34 DME
DISTANCE VDP TO THLD 1.06 NM
FAC CROSSES RWY C/L EXTENDED 3000 FT FROM THLD.
HOLD NW, RT, 125.00 INBOUND

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

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
S-32	2740	1/2	390	2740	1/2	390	2740	3/4	390	2740	3/4	390			
CIRCLING	2760	1	407	2820	1	467	2820	1 1/2	467	2920	2	567			

CHANGES - REASONS

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☒ NBAA ☒ OTHER: ZMP, ZLC, ARPT MGR

<u>FLIGHT CHECKED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
PENDING	DONALD H LANIER	FICO		
	May 23, 2019			
<u>DEVELOPED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	
KELLY DEAN	KELLY D DEAN	AJV-A431	04/22/2019	
	May 17, 2019			
<u>APPROVED BY</u>	<i>Digitally signed by</i>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
LONNIE EVERHART	DONALD H LANIER	AJV-A430		MANAGER
	May 23, 2019			



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

<u>AIRPORT</u> WILLISTON BASIN INTL	<u>AIRPORT ID</u> KXWA	<u>PROCEDURE NAME</u> VOR RWY 32	<u>AMDT NO.</u> ORIG	<u>CITY</u> WILLISTON	<u>STATE</u> ND	<u>AIRPORT ELEVATION</u> 2353	<u>FACILITY</u> ISN
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
ISN VOR/DME

TO
JADPA/ISN 12.00 DME

<u>RNP</u>	<u>DISTANCE</u> 12.00	<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>
1.TOWER (38-000348)	480924.00N/1032956.00W		2652	100	20	3C	1000				AT648	4300
2.TERRAIN	481512.00N/1034500.00W		2379 (2400)								AS1500	3900

COMPUTATIONS

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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SEGMENT REMARKS:

INITIAL: ARC

FROM
CIDIN/ISN 12.00 DME CCW

TO
JADPA/ISN 12.00 DME

<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>
3.TOWER (38-000722)	480642.00N/1032658.00W		2804	250	50	4D	1000				AT496	4300
4.TERRAIN	480650.00N/1032626.00W		2472 (2500)								AS1500	4000

COMPUTATIONS

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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SEGMENT REMARKS:



INITIAL: ARC

FROM

HASIP/ISN 12.00 DME CCW

TO

JADPA/ISN 12.00 DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
3.TOWER (38-000722)	480642.00N/1032658.00W	2804	250	50	4D	1000				AT496	4300	
4.TERRAIN	480650.00N/1032626.00W	2472 (2500)								AS1500	4000	

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

INTERMEDIATE

FROM

JADPA/ISN 12.00 DME (IF/IAF)

TO

ZOPIV/ISN 4.35 DME

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
	7.65											
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT	
1.TOWER (38-000348)	480924.00N/1032956.00W	2652	100	20	3C	500				AT548	3700	
5.TERRAIN	480915.00N/1033003.00W	2346 (2300)								AS1000	3300	

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



FINAL

FROM

ZOPIV/ISN 4.35 DME

TO

WILAN/ISN 0.28 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>						
	4.07		WILAN/ISN 0.28 DME	390							
<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>
6.TRANSMISSION_LINE (38-031541)	481505.63N/1034240.58W	2429	250	50	4D	250				AC50	2740

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

HOLD-IN-LIEU OF PT

FROM

JADPA

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-5	<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>
3.TOWER (38-000722)	480642.00N/1032658.00W	2804	250	50	4D	1000				AT496	4300
7.TERRAIN	480509.00N/1032409.00W	2474 (2500)								AS1500	4000

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



MISSED APPROACH

FROM

WILAN/ISN 0.28 DME

TO

ISN VOR/DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 2490					
<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>
								ASC				4300
8.AAO	481936.00N/1040051.00W		2740	164	98	4E	1000					3800
9.TERRAIN	481936.00N/1050051.00W		2540 (2500)								AS1500	4000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
10.TRANSMISSION_LINE (38-031540)	481521.89N/1034240.81W	1.33	407	2451	50	20	2C	300			2760
CATEGORY B											
10.TRANSMISSION_LINE (38-031540)	481521.89N/1034240.81W	1.89	467	2451	50	20	2C	300		HAA	2820
CATEGORY C											
10.TRANSMISSION_LINE (38-031540)	481521.89N/1034240.81W	2.98	467	2451	50	20	2C	300		HAA	2820
CATEGORY D											
11.AAO	481727.63N/1050406.99W	3.90	567	2610	50	20	2C	300			2920

CIRCLING REMARKS:



<u>SECTOR</u>	<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>BEARING</u>	<u>DISTANCE</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
360-360	TOWER (38-000003)	480802.00N/1035138.00W	204	08.4	3219	250	50	4D	1000			4300

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT</u> WILLISTON BASIN INTL	<u>AIRPORT ID</u> KXWA	<u>PROCEDURE NAME</u> VOR RWY 32	<u>AMDT NO.</u> ORIG	<u>CITY</u> WILLISTON	<u>STATE</u> ND	<u>AIRPORT ELEVATION</u> 2353	<u>FACILITY</u> ISN
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PART D: AIRSPACE

DOCKET # 17-AGL-3

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

DISTANCE FROM	FACILITY*	TO 1000FT POINT	4.28
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	2.43
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	310.61
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	2366
DISTANCE FROM	FACILITY*	TO 1500FT POINT	11.00
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	7.18
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	310.61
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	2346

THRESHOLD COORDINATES (IF STR-IN)481507.82N/1034434.53W

ARP COORDINATES481535.22N/1034502.01W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

RUNWAY 14 DISTANCE 0.68 NM

FAF COORDINATES481222.42N/1034006.18W

FIX NAME COORDINATES

REMARKS

MAP COORDINATES WILAN: 481501.31N/1034443.2W

*WILLISTON VOR/DME: 481512.3N/1034502.4W

QUALITY

22

CHECKED

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PART E: PREPARED BY

<u>NAME</u> KELLY DEAN	<u>OFFICE</u> AJV-A431	<u>DATE</u> 04/22/2019	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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QUALITY
22
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