

**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</u> SHELDON RGNL	<u>AIRPORT ID</u> KSHL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> 1D	<u>CITY</u> SHELDON	<u>STATE</u> IA
<u>AIRPORT ELEVATION</u> 1419	<u>TDZE</u> 1419	<u>SUPERSEDED</u> RNAV (GPS) RWY 33	<u>ORIGINAL/AMENDMENT</u> 1C	<u>DATED</u> 02/28/2019	<u>MAG VAR</u> 5E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 1995

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>
NEWRN		TUDUC		TF	FO	1.00	159.48	13.42	4000
COPYE		WOREB		TF	FB	1.00	089.50	5.82	4000
WOREB	IAF	TUDUC	NOPT	TF	FB	1.00	045.44	6.00	4000
RITTA	IAF	TUDUC	NOPT	TF	FB	1.00	269.45	16.42	4000
TUDUC	IF/IAF	ZOLUS		TF	FB	1.00	330.51	6.00	3000
ZOLUS	FAF	YEPUL/1.80 NM TO RW33		TF	FB	0.30	330.47	3.05	
YEPUL/1.80 NM TO RW33		RW33	MAP	TF	FO	0.30	330.47	1.80	
RW33	MAP	1696 MSL		CA			330.47		
1696 MSL		RINOC		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW33

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT RINOC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
6
CHECKED

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD SE TUDUC, RT, 330.51 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 330.47 FAF: ZOLUS DIST FAF TO MAP: 4.85 DIST FAF TO THLD: 4.85
4. MIN ALT: TUDUC 4000, ZOLUS 3000, YEPUL/1.80 NM TO RW33 2020*
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 277 HAT: 0.75 GS ANT: MM: IM:
6. MIN GP INCPT: 3000 GP ALT AT FAF : ZOLUS 3000 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 44.0
8. MSA FROM: RW33 3400

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 33 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NEWRN ON V462 NORTHWEST BOUND.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.09 NM TO RW33*
*LNAV ONLY
WAAS CHANNEL #82128
REFERENCE PATH ID: W33A
CHART FAS OBST: 1539 TREE 431046N/0954919W.
HOLD NW, RT, 150.36 INBOUND
LTP HAE: 403.6 M

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
LPV DA	1718	1	299	1718	1	299	1718	1	299		NA				
LNAV/VNAV DA	1696	1	277	1696	1	277	1696	1	277		NA				
LNAV MDA	1800	1	381	1800	1	381	1800	1 1/8	381		NA				
CIRCLING	1820	1	401	1880	1	461	1880	1 1/2	461		NA				



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSHL
RUNWAY	RW33
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W33A
LTP/FTP LATITUDE	431211.3350N
LTP/FTP LONGITUDE	0954948.5445W
LTP/FTP ELLIPSOIDAL HEIGHT	+04036
FPAP LATITUDE	431332.3800N
FPAP LONGITUDE	0955039.2100W
THRESHOLD CROSSING HEIGHT (TCH)	00044.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	9AAA0514

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04306
FPAP ORTHOMETRIC HEIGHT	+04306



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

<u>AIRPORT</u> SHELDON RGNL	<u>AIRPORT ID</u> KSHL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>AMDT NO.</u> 1D	<u>CITY</u> SHELDON	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1419	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
NEWRN

TO
TUDUC

<u>RNP</u>	<u>DISTANCE</u> 13.42	<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.AAO	431600.00N/0954621.00W		1739	164	98	4E	1000				AT1261	4000
2.TERRAIN	431500.00N/0954551.00W		1529 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:

FEEDER

FROM
COPYE

TO
WOREB

<u>RNP</u>	<u>DISTANCE</u> 5.82	<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.AAO	425933.00N/0955724.00W		1683	164	98	4E	1000				AT1317	4000
4.TERRAIN	425933.00N/0955724.00W		1483 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:



INITIAL

FROM
WOREB

TO
TUDUC

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	6.00											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	430209.00N/0954657.00W		1677	164	98	4E	1000				AT1323	4000
6.TERRAIN	430209.00N/0954657.00W		1477 (1500)								AS1500	3000

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM
RITTA

TO
TUDUC

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	16.42											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
7.TOWER (19-000227)	430251.20N/0953506.10W		1785	500	50	5D	1000				AT1215	4000
8.TERRAIN	430309.00N/0953215.00W		1582 (1600)								AS1500	3100

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE

FROM

TUDUC (IF/IAF)

TO

ZOLUS

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	6.00											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
9.AAO	430757.00N/0954548.00W		1693	164	98	4E	500				AC98	2300
10.TERRAIN	430757.00N/0954548.00W		1493 (1500)								AS1500	3000

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

ZOLUS

TO

RW33

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	4.85		DA									
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
11.TREE (KSHLT069)	431200.17N/0954935.29W		1461	50	20	2C		34:1			AC20 MA49	1718

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV/VNAV

FROM

ZOLUS

TO

RW33

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	4.85		DA		277							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
12.TREE (KSHLT067)	431126.68N/0954919.41W		1520	50	20	2C	150				XP6 AC20	1696

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

XP LNAV/VNAV: TO MATCH PREVIOUS DA

FINAL: LNAV

FROM

ZOLUS

TO

YEPUL/1.80 NM TO RW33

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	3.05											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
13.AAO	430822.90N/0954653.00W		1689	50	20	2C	250				RA47 DG34	2020

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV STEPDOWN

FROM

YEPUL/1.80 NM TO RW33

TO

RW33

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	1.80		RW33			381						
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
14.TREE (KSHLT000185)	431045.94N/0954919.17W		1539	20	3	1A	250					1800

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

TUDUC

TO

P-5

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
		P-5										
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
15.TOWER (19-003036)	425855.13N/0953610.95W		1773	50	20	2C	1000				AT1227	4000
16.TERRAIN	430506.00N/0953742.00W		1523 (1500)								AS1500	3000

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



HMAS
1503

RF CENTER FIX/DISTANCE

HMAS
1540

RF CENTER FIX/DISTANCE

QUALITY
6
CHECKED

MISSED APPROACH : LNAV

FROM

RW33

TO

RINOC

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1700					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				4000
18.AAO	432027.00N/0955157.00W		1729	164	98	4E	1000					2800
19.TERRAIN	432333.00N/0955406.00W		1523 (1500)								AS1500	3000

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											
12.TREE (KSHLT067)	431126.68N/0954919.41W	1.30	401	1520	50	20	2C	300			1820
CATEGORY B											
20.TOWER (19-002854)	431112.00N/0955119.00W	1.50	461	1569	50	20	2C	300			1880
CATEGORY C											
20.TOWER (19-002854)	431112.00N/0955119.00W	1.70	461	1569	50	20	2C	300			1880

CIRCLING REMARKS:



MSA

CENTER

RW33

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (27-000001)	433748.00N/0954043.00W	009	26.5	2307	500	50	5D	1000			3400

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

50 FT VEGETATION USED PER FPT.

TAA NOT DEVELOPED PER FPT.



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
ZMP ARTCC, FOD FSS

<u>WX SERVICE</u> AWOS	<u>LOCATION</u> KSHL	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KSHL	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS	<u>LOCATION</u> KSXK	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KSXK	<u>DISTANCE</u> 19.604	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 47

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
SKHL 1419, KSXK 1409
RA = 46.5.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW15 - MIRL (PCL), REIL (PCL), PAPI-2L (PCL)		NPI-G	
RW33 - MIRL (PCL), REIL (PCL), PAPI-2L (PCL)		NPI-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 1412.6	<u>TCH</u> 44.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 40.0
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FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u> -17C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -17C	<u>APT ISA</u> -30C
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CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 834 HIGH TEMP 1130.



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	RWY 33		
34:1			
1435 TREE (KSHLT072) 431205.02N/0954937.66W (1.33)		1461 TREE (KSHLT069) 431200.17N/0954935.29W (12.06)	
1497 TREE (KSHLT066) 431146.06N/0954927.43W (2.74)			

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

PROCEDURE HAS MULTIPLE VGS PENETRATIONS - LIGHT POLES. OBSTACLES ARE FIXED-BY-FUNCTION.

CONTINGENCY NOTES:
BARO-VNAV AND VDP NA WHEN USING SIOUX COUNTY ALTIMETER SETTING.

WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE SIOUX COUNTY ALTIMETER SETTING AND INCREASE LPV DA TO 1765 FEET; LNAV/VNAV DA TO 1743 FEET; INCREASE ALL MDA 60 FEET AND LNAV CAT C VISIBILITY 1/4 SM.



<u>AIRPORT</u> SHELDON RGNL	<u>AIRPORT ID</u> KSHL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 33	<u>AMDT NO.</u> 1D	<u>CITY</u> SHELDON	<u>STATE</u> IA	<u>AIRPORT ELEVATION</u> 1419	<u>FACILITY</u> RNAV
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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	THLD	TO 1000FT POINT	3.26
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	335.47
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1500
DISTANCE FROM	THLD	TO 1500FT POINT	4.85
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.13
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	335.47
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1500

THRESHOLD
COORDINATES
(IF STR-IN)

431211.34N/0954948.54W

ARP COORDINATES

431230.20N/0955000.30W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 15 DISTANCE 0.35 NM

FAF
COORDINATES

430746.77N/0954703.51W

FIX NAME
COORDINATES

REMARKS

QUALITY
6
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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AIRPORT
SHELDON RGNL

AIRPORT ID
KSHL

PROCEDURE NAME
RNAV (GPS) RWY 33

AMDT NO.
1D

CITY
SHELDON

STATE
IA

AIRPORT ELEVATION
1419

FACILITY
RNAV

PART E: PREPARED BY

NAME
WARDELL HENNING (RICHARD
CHRISTENSEN)

OFFICE
AJV-A432

DATE
11/26/2019

TITLE
AERONAUTICAL INFORMATION SPECIALIST

