

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29**

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> YEAGER	<u>AIRPORT ID</u> KCRW	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 31A	<u>CITY</u> CHARLESTON	<u>STATE</u> WV	
<u>AIRPORT ELEVATION</u> 947	<u>TDZE</u> 931	<u>SUPERSEDED</u> ILS OR LOC RWY 23	<u>ORIGINAL/AMENDMENT</u> 31	<u>DATED</u> 01/03/2019	<u>MAG VAR</u> 6W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> I-CRW	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
HVQ VOR/DME		STILT/I-CRW 5.50 DME/RADAR					070.83	13.05	3500
GLAZE/HVQ 19.88 DME	IAF	JIXAR/I-CRW 10.62 DME	NOPT				155.00 & 234.60	3.16 (HDG) & 1.84 (I-CRW)	3000
CAMMA/HVQ 21.00 DME	IAF	JIXAR/I-CRW 10.62 DME	NOPT				304.00 & 234.60	2.19 (HDG) & 1.80 (I-CRW)	3000
JIXAR/I-CRW 10.62 DME	IF	STILT/I-CRW 5.50 DME/RADAR					234.60	5.12 (I-CRW)	2400

MISSED APPROACH

MAP:

ILS: DA

LOC: 4.54 NM AFTER STILT/I-CRW 5.50 DME/RADAR OR AT ULZIW/I-CRW 0.96 DME FIX

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 THEN CLIMBING RIGHT TURN TO 3000 DIRECT HVQ VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD NE STILT, RT, 234.60 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 5000.
3. FAC: 234.60 FAF: STILT/I-CRW 5.50 DME/RADAR DIST FAF TO MAP: 4.54 DIST FAF TO THLD: 4.54
4. MIN ALT: STILT/I-CRW 5.50 DME/RADAR 2400
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT: 870
6. MIN GS INCPT: 2400 GS ALT AT FAF: STILT/I-CRW 5.50 DME/RADAR 2400 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: 20:1: TCH: 56.6
8. MSA FROM: HVQ VOR/DME 090-180 4000, 180-090 3600

QUALITY
6
CHECKED

EQUIPMENT REQUIREMENTS NOTES:

DME OR RADAR REQUIRED.

NOTES:

CHART NOTE: AUTOPILOT COUPLED APPROACH NA BELOW 1700.

CHART NOTE: RWY 23 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.

CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-ILS 23.

CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HVQ VOR/DME AIRWAY RADIALS 019 CW 119.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 23 CAT A/B VISIBILITY TO RVR 5500, AND CAT C/D TO 2 SM.

ADDITIONAL FLIGHT DATA:

HOLD W, RT, 081.00 INBOUND.

CHART FAS OBST: 1384 TOWER 382528N/0813156W.

CHART VDP AT 3.10 DME*

DISTANCE VDP TO THLD 2.14 NM.

*LOC ONLY.

FAC CROSSES RWY C/L EXTENDED 2758 FT FROM THLD.

CHART PLANVIEW NOTE: LOC OFFSET 1.46 DEGREES.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD; LOC: STANDARD

<u>CATEGORY:</u>	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-ILS 23	1181	4000	250	1181	4000	250	1181	4000	250	1181	4000	250			
S-LOC 23	1640	4000	709	1640	4000	709	1640	1 5/8	709	1640	1 5/8	709			

CHANGES - REASONS

1. CHANGE CHART NOTE FROM "AUTOPILOT COUPLED APPROACH NA BELOW 1450" TO "AUTOPILOT COUPLED APPROACH NA BELOW 1700" - INCREASE DUE TO GLIDESLOPE REVERSAL.
2. DELETED CHART NOTE: INOP TABLE DOES NOT APPLY TO S-LOC 23 CATS C/D - NOTE NOT REQUIRED. 8260.3D, CHAPTER 3.
3. CHANGED CHART NOTE FROM "FOR INOP ALS, INCREASE S-LOC 23 CAT A/B VISIBILITY TO RVR 5500" TO "FOR INOP ALS, INCREASE S-LOC 23 CAT A/B VISIBILITY TO RVR 5500, AND CAT C/D TO 2 SM" - COMPUTED USING 8260.3D, CHAPTER 3 VISIBILITY TABLES.
4. CHANGED S-LOC 23 CAT C/D VISIBILITY FROM "4000 RVR" TO "1 5/8 SM" - COMPUTED USING 8260.3D, CHAPTER 3 VISIBILITY TABLES.
5. DELETED CIRCLING MINIMA FROM PROCEDURE - NPA CIRCLING CANCELLATION.
6. ADDED ADDITIONAL FLIGHT DATA FAS OBST: 1384 TOWER 382528N/0813156W - NOT SHOWN IN PREVIOUS AMENDMENT.

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZID, CRW ATCT, CRW APP CON, ARPT MGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJF-10) MEMO, APRIL 29, 2020, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

DEVELOPED BY

JAMES LAFFERTY

Digitally signed by

JAMES LAFFERTY

Digitally signed by

DONALD H LANIER

OFFICE

AJV-A433

DATE

04/13/2020

APPROVED BY

GEORGE DAVIS

Jul 17, 2020

Jul 23, 2020

OFFICE

AJV-A430

DATE

TITLE
MANAGER

Digitally signed by

DONALD H LANIER

Jul 23, 2020

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

<u>AIRPORT</u> YEAGER	<u>AIRPORT ID</u> KCRW	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>AMDT NO.</u> 31A	<u>CITY</u> CHARLESTON	<u>STATE</u> WV	<u>AIRPORT ELEVATION</u> 947	<u>FACILITY</u> I-CRW
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PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
HVQ VOR/DME

TO
STILT/I-CRW 5.50 DME/RADAR

<u>RNP</u>	<u>DISTANCE</u> 13.05	<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 (54-000037)	382402.00N/0814419.00W		1462	100	20	3C	2000					3500
2.TERRAIN	382539.00N/0813536.00W		1273 (1300)								AS1500	2800

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM
GLAZE/HVQ 19.88 DME

TO
JIXAR/I-CRW 10.62 DME

<u>RNP</u>	<u>DISTANCE</u> 3.16/1.84	<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 (54-000578)	383146.00N/0812412.00W		1572	500	125	5E	1000				AT428	3000
4.TERRAIN	382618.00N/0811903.00W		1372 (1400)								AS1500	2900

COMPUTATIONS

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

SEGMENT REMARKS:



INITIAL

FROM
CAMMA/HVQ 21.00 DME

TO
JIXAR/I-CRW 10.62 DME

RNP	DISTANCE 2.19/1.80	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
3.TOWER (54-000578)	383146.00N/0812412.00W		1572	500	125	5E	1000				AT428	3000
5.TERRAIN	382612.00N/0811936.00W		1359 (1400)								AS1500	2900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM
JIXAR/I-CRW 10.62 DME

TO
STILT/I-CRW 5.50 DME/RADAR

RNP	DISTANCE 5.12	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
6.TOWER (54-000889)	382923.62N/0812606.42W		1483	20	3	1A	500				AT417	2400
7.TERRAIN	382609.00N/0812345.00W		1224 (1200)								AS1000	2200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: ILS

FROM

STILT/I-CRW 5.50 DME/RADAR

TO

RW23

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
	4.54		DA	250								
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC			XP50	1181

COMPUTATIONS

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

XP: LOC OFFSET MINIMUM HAT ALLOWED 250

FINAL: LOC

FROM

STILT/I-CRW 5.50 DME/RADAR

TO

4.54 NM AFTER STILT/I-CRW 5.50 DME/RADAR OR AT ULZIW/I-CRW 0.96 DME FIX

RNP	DISTANCE	PAT	MAP	HAT	HMAS							
	4.54		4.54 NM AFTER STILT/I-CRW 5.50 DME/RADAR OR AT ULZIW/I-CRW 0.96 DME FIX	709								
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
8.TOWER (54-000859)	382528.45N/0813156.11W		1384	20	3	1A	250					1640

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
STILT

TO
P-6

RNP	DISTANCE	PAT P-6	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
3.TOWER (54-000578)	383146.00N/0812412.00W		1572	500	125	5E	1000					2600
9.TERRAIN	382230.00N/0812754.00W		1280 (1300)								AS1000	2300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH : ILS

FROM
DA

TO
HVQ VOR/DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 956					
<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				3000
1.TOWER (54-000037)	382402.00N/0814419.00W		1462	100	20	3C	1000					2500
10.TERRAIN	381800.00N/0814521.00W		1221 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH : LOC

FROM

4.54 NM AFTER STILT/I-CRW 5.50 DME/RADAR OR AT ULZIW/I-CRW 0.96 DME FIX

TO

HVQ VOR/DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1390					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				3000
1.TOWER (54-000037)	382402.00N/0814419.00W		1462	100	20	3C	1000					2500
10.TERRAIN	381800.00N/0814521.00W		1221 (1200)								AS1500	2700

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

MSA

CENTER

HVQ VOR/DME

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
090-180	AAO	375848.00N/0812339.00W	144	28.4	2986	164	98	4E	1000			4000
180-090	TWR (54-000005)	382428.00N/0815412.00W	302	07.2	2549	250	50	4D	1000			3600

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
CRW APP CON, CRW TOWER, ZID ARTCC

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

WX REMARKS:
BACKUP ALTIMETER NOT USED DUE TO REDUNDANT SOURCES AT AIRPORT.

PRIMARY NAVAID I-CRW	MONITOR POINT CRW ATCT	HRS OPERATION 24	CAT 1
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW23 - ALSF-1, HIRL, C/LINE, VASI-4R		NSTD-G	APPROACH
RW05 - HIRL, REIL, C/LINE, PAPI-4L		PIR-G	APPROACH

GLIDESLOPE ANGLE 3.00	ELEV RWY THRESHOLD 897.1	TCH 56.6	ELEV GS ANTENNA 906.1	DISTANCE FROM RWY 870	VGSI ANGLE 3.00	TCH 56.4
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FINAL APPROACH COURSE AIMING						
RUNWAY THRESHOLD	<input type="checkbox"/>	2758	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	500.422	
ON CENTERLINE	<input checked="" type="checkbox"/>		FT FROM CENTERLINE			

CRITICAL TEMPERATURES			
CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	RWY 23
34:1	
1074 TREE (54-054718) 382336.30N-0813401.79W (0.53)	



HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

100 FOOT VEGETATION HEIGHT PER FPT.

WAIVER ON FILE FOR OFFSET FINAL 1.46 DEGREES, FINAL APPROACH COURSE DOES NOT INTERSECT EXTENDED RUNWAY CENTERLINE AT A POINT 1100 TO 1200 FEET TOWARD THE LTP FROM THE DA POINT.



<u>AIRPORT</u> YEAGER	<u>AIRPORT ID</u> KCRW	<u>PROCEDURE NAME</u> ILS OR LOC RWY 23	<u>AMDT NO.</u> 31A	<u>CITY</u> CHARLESTON	<u>STATE</u> WV	<u>AIRPORT ELEVATION</u> 947	<u>FACILITY</u> I-CRW
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PART D: AIRSPACE

DOCKET # NOT REQUIRED

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	3.91
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.06
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	228.6
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1172
DISTANCE FROM	THLD	TO 1500FT POINT	9.06
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	228.6
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	1224
THRESHOLD COORDINATES (IF STR-IN)	382252.86N/0813508.12W		
ARP COORDINATES	382233.36N/0813534.80W		
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 23 DISTANCE 0.56 NM		
FAF COORDINATES	382553.69N/0813048.57W		
FIX NAME COORDINATES			
REMARKS	THLD DISPLACED 500.422FT, ACTUAL COORDINATES: 382256.22N/0813503.51W.		

QUALITY
6
CHECKED

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

Electronic Version

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PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
JAMES LAFFERTY	AJV-A433	04/13/2020	AERONAUTICAL INFORMATION SPECIALIST

