

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> CHICAGO/ROCKFORD INTL	<u>AIRPORT ID</u> KRFD	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> 1B	<u>CITY</u> CHICAGO/ROCKFORD	<u>STATE</u> IL	
<u>AIRPORT ELEVATION</u> 742	<u>TDZE</u> 736	<u>SUPERSEDED</u> RNAV (GPS) RWY 25	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 12/11/2014	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<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>
NUELG		UJAVO		TF	FB	2.00	343.25	14.83	2500
JVL VOR/DME		JOLNI		TF	FB	2.00	132.84	16.39	2500
SMULA	IAF	TONGE	NOPT	TF	FB	1.00	250.18	9.39	2500
JOLNI	IAF	TONGE	NOPT	TF	FB	1.00	196.09	6.30	2500
UJAVO	IAF	TONGE	NOPT	TF	FB	1.00	317.46	5.36	2500
TONGE	IF/IAF	SUGEE		TF	FB	1.00	248.59	5.98	2500
SUGEE	FAF	WUBUV/2.00 NM TO RW25		TF	FB	0.30	248.50	3.38	
WUBUV/2.00 NM TO RW25		RW25	MAP	TF	FO	0.30	248.50	2.00	
RW25	MAP	986 MSL		CA			248.50		
986 MSL		RUDGE		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW25

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT RUDGE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD E TONGE, RT, 248.59 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 248.50FAF: SUGEEDIST FAF TO MAP: 5.38DIST FAF TO THLD: 5.38
4. MIN ALT: TONGE 2500, SUGEE 2500, WUBUV/2.00 NM TO RW25 1400*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.63GS ANT:
6. MIN GP INCPT: 2500GP ALT AT FAF : SUGEE 2500OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 50.0
8. MSA FROM: RW25 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: RWY 25 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -25C OR ABOVE 39C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT NUELG ON V172 EASTBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON JVL VOR/DME AIRWAY RADIALS 044 CW 189.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SMULA ON V100 EASTBOUND.

ADDITIONAL FLIGHT DATA:

CHART: 1007 TOWER 421331N/0890252W.
CHART: ASR
CHART VDP AT 1.09 NM TO RW25*
*LNAV ONLY
WAAS CHANNEL #40128
REFERENCE PATH ID: W25A
CHART FAS OBST: 908 TRANSMISSION_LINE 421309N/0890325W.
HOLD W, RT, 068.24 INBOUND
LTP HAE: 191.1 M

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
LPV DA	986	5000	250	986	5000	250	986	5000	250	986	5000	250			
LNAV/VNAV DA	1191	1 3/8	455	1191	1 3/8	455	1191	1 3/8	455	1191	1 3/8	455			
LNAV MDA	1160	5500	424	1160	5500	424	1160	5500	424	1160	5500	424			
CIRCLING	1220	1	478	1240	1	498	1240	1 1/2	498	1320	2	578			



CHANGES - REASONS

- 1. MAG/VAR CHANGED FROM 0W/1990 TO 3W/2020 - UPDATE PROCEDURE TO MATCH CURRENT MAG/VAR.
- 2. ALL COURSES INCREASED BY 3 DEGREES - MAG/VAR UPDATE.
- 3. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV SYSTEMS NOTE - NO LONGER REQUIRED.
- 4. DELETED DME/DME RNP-0.3 NA NOTE - PUBLISHED PBN REQUIREMENT NOTE.
- 5. PUBLISHED PBN REQUIREMENT NOTE - NEW REQUIREMENT.
- 6. REMOVED ALL REFERENCES TO 20:1 PENETRATIONS - NEW VISI TRAPS FOR CATS A/B REFLECT NO PENETRATIONS.
- 7. LPV VISIBILITIES CHANGED FROM 1 SM TO RVR 5000 - RVR AVAILABLE FOR RWY.
- 8. LNAV/VNAV DA/HAT RAISED FROM 1049/313 TO 1191/455 - NEW CONTROLLING OBSTACLE IN FINAL.
- 9. LNAV CATS A/B VIS CHANGED FROM 1 SM TO RVR 5500 - RVR AVAILABLE FOR RWY.
- 10. UPDATED HELICOPTER REDUCTION NOTE TO REFLECT 3/4 SM - NEW FORMAT, 20:1 PENS DO NOT EXIST.
- 11. REMOVED VGSI MITIGATION NOTES FOR RWY 25 AT NIGHT - 20:1 PENS DO NOT EXIST.
- 12. CRC REMAINDER CHANGED FROM D6173560 TO 5AAEFB5A - UPDATED LTP AND FPAP COORDINATES.
- 13. CHANGED LNAV FINAL STEPDOWN (FAS) OBSTACLE FROM 903 TRNSMSN LINE TO 908 TRNSMSN LINE - DATA UPDATED FROM APT OBST TO STATE OBST.

10/31/18: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 8/22/2018.

- 1. CHANGED THRE 736 TO TDZE 736.



COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZAU ARTCC, RFD ATCT, AMGR, ATA

FLIGHT CHECKED BY

GREGORY S WIEBE

Digitally signed by

DONALD H LANIER

Nov 01, 2018

OFFICE

FICO

DATE

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AJV-5431

DATE

08/14/2018

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Nov 01, 2018

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AJV-5430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRFD
RUNWAY	RW25
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W25A
LTP/FTP LATITUDE	421205.9280N
LTP/FTP LONGITUDE	0890510.8880W
LTP/FTP ELLIPSOIDAL HEIGHT	+01911
FPAP LATITUDE	421124.8500N
FPAP LONGITUDE	0890711.8950W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0000
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER 5AAEFB5A

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02243
FPAP ORTHOMETRIC HEIGHT	+02243



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

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
CHICAGO/ROCKFORD INTL	KRFD	RNAV (GPS) RWY 25	1B	CHICAGO/ROCKFORD	IL	742	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM NUELG TO UJAVO

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	14.83										
<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	420227.00N/0883912.00W	1155	250	125	4E	1000					2200
2.TERRAIN	420227.00N/0883912.00W	955 (1000)								AS1500	2500

COMPUTATIONS

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

FEEDER

FROM JVL VOR/DME TO JOLNI

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	16.39										
<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	422633.00N/0885133.00W	1208	250	125	4E	1000					2300
4.TERRAIN	422633.00N/0885133.00W	1008 (1000)								AS1500	2500

COMPUTATIONS

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



SEGMENT
REMARKS:



FINAL: LNAV

FROM

SUGEE

TO

WUBUV/2.00 NM TO RW25

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>				<u>HMAS</u>				
	3.38											
<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>
15.TOWER (17-001975)	421342.66N/0890040.48W		1147	50	10	2B	250					1400

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:

FINAL: LNAV STEPDOWN

FROM

WUBUV/2.00 NM TO RW25

TO

RW25

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>				<u>HMAS</u>				
	2.00		RW25	424								
<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>
16.TRANSMISSION_LINE (17-026690)	421308.95N/0890325.38W		908	20	3	1A	250					1160

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:



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>RADIUS</u>	<u>HAA</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>
CATEGORY A											
21.TREE	421125.00N/0890340.00W	1.30	478	919	50	20	2C	300			1220
CATEGORY B											
22.TREE	421156.00N/0890311.00W	1.50	498	939	50	20	2C	300			1240
CATEGORY C											
22.TREE	421156.00N/0890311.00W	1.70	498	939	50	20	2C	300			1240
CATEGORY D											
23.TOWER (17-000303)	421331.00N/0890252.00W	2.30	578	1007	20	3	1A	300			1320

CIRCLING REMARKS:

MSA

CENTER

RADIUS

RW25

25

<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	TWR (17-000297)	421749.00N/0891422.00W	313	08.9	1549	250	50	4D	1000			2600

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

TAA NOT DEVELOPED PER ATC REQUEST.

VEGETATION HEIGHT USED: 100 FT PER FPO.

REMOTE ALTIMETER NOT REQUIRED, 24 HOUR ATC FACILITY WITH REDUNDANT SOURCES AVAILABLE.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1007 TOWER 421331N/0890252W.

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

RFD TOWER, ZAU ARTCC, RFD APP CON



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILIT</u>
CHICAGO/ROCKFORD INTL	KRFD	RNAV (GPS) RWY 25	1B	CHICAGO/ROCKFORD	IL	742	RNAV

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	KRFD	24	KRFD	0	Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>

WX REMARKS:

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW01 - TDZ, MALSR, HIRL (PCL), C/LINE	PIR-G	APPROACH
RW07 - TDZ, ALSF-2, HIRL, C/LINE, PAPI-4R	PIR-G	APPROACH, MIDPOINT, ROLL OUT
RW19 - HIRL, REIL, C/LINE, PAPI-4L	PIR-G	ROLL OUT
RW25 - HIRL, REIL, C/LINE, PAPI-4L	PIR-G	APPROACH, MIDPOINT, ROLL OUT

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	735.9	50.0			3.00	75.0

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>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-25C	+39C	-25C	+13.53C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 964 HIGH TEMP 1125.

"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	LPV, LNAV/VNAV, LNAV
34:1	
778 TREE (17-033614) 421208.89N/0890453.88W (10.07)	777 TREE (17-033553) 421209.11N/0890453.77W (8.58)
779 TREE (17-041639) 421215.39N/0890454.37W (4.01)	775 TREE (17-058947) 421210.29N/0890453.02W (3.61)
770 TREE (17-033611) 421208.60N/0890454.21W (3.10)	771 TREE (17-033554) 421209.36N/0890453.51W (1.75)
767 TREE (17-033219) 421208.03N/0890454.53W (1.45)	784 TREE (17-031712) 421215.66N/0890450.42W (0.73)

QUALITY
4
CHECKED

<u>AIRPORT</u>	<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>
CHICAGO/ROCKFORD INTL	KRFD	RNAV (GPS) RWY 25	1B	CHICAGO/ROCKFORD	IL	742	RNAV

771 TREE (17-033558) 421209.74N/0890452.99W (0.23)

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.



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	3.38
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	245.50
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	863
DISTANCE FROM	THLD	TO 1500FT POINT	5.37
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.00
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	245.50
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	863

THRESHOLD
COORDINATES
(IF STR-IN)421205.93N/0890510.89W

ARP COORDINATES421143.30N/0890550.00W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP RUNWAY 7 DISTANCE 1.06 NM

FAF
COORDINATES421420.07N/0885835.52W

FIX NAME
COORDINATES

REMARKS
NO ADDITIONAL AIRSPACE REQUIRED.



<u>AIRPORT</u>	<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>
CHICAGO/ROCKFORD INTL	KRFD	RNAV (GPS) RWY 25	1B	CHICAGO/ROCKFORD	IL	742	RNAV

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
KELLY DEAN	AJV-5431	08/14/2018	AERONAUTICAL INFORMATION SPECIALIST

