

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 7	<u>ORIGINAL/AMENDMENT</u> 1C	<u>CITY</u> CHICAGO/ROCKFORD	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 742	<u>TDZE</u> 742	<u>SUPERSEDED</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 05/29/2014	<u>MAG VAR</u> 3W
<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> 2020

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>
DAYVL	IAF	RUDGE	NOPT	TF	FB	1.00	345.42	8.42	2500
PLL VOR/DME	IAF	RUDGE	NOPT	TF	FB	1.00	042.55	10.83	2500
LENAS	IAF	RUDGE	NOPT	TF	FB	1.00	127.08	19.83	2500
RUDGE	IF/IAF	CUDUP		TF	FB	1.00	068.24	6.94	2500
CUDUP	FAF	ZEVBV/2.10 NM TO RW07		TF	FB	0.30	068.34	3.23	
ZEVBV/2.10 NM TO RW07		RW07	MAP	TF	FO	0.30	068.38	2.10	
RW07	MAP	942 MSL		CA			068.38		
942 MSL		TONGE		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT TONGE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD W RUDGE, RT, 068.24 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 068.34FAF: CUDUPDIST FAF TO MAP: 5.33DIST FAF TO THLD: 5.33

4. MIN ALT: RUDGE 2500, CUDUP 2500, ZEVBV/2.10 NM TO RW07 1460*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.44GS ANT:

6. MIN GP INCPT: 2500GP ALT AT FAF : CUDUP 2500OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 60.0

8. MSA FROM: RW07 2600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE 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 ARRIVAL ON PLL VOR/DME AIRWAY RADIALS 040 CW 119.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT LENAS ON V100 WESTBOUND AND V216 SOUTHWEST BOUND.
CHART NOTE: ASR.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.35 NM TO RW07*
*LNAV ONLY
WAAS CHANNEL #53621
REFERENCE PATH ID: W07A
CHART FAS OBST: 909 TREE 421133N/0890824W.
HOLD E, RT, 248.59 INBOUND
LTP HAE: 192.9 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	942	2400	200	942	2400	200	942	2400	200	942	2400	200			
LNAV/VNAV DA	1167	4500	425	1167	4500	425	1167	4500	425	1167	4500	425			
LNAV MDA	1240	2400	498	1240	2400	498	1240	5000	498	1240	5000	498			
CIRCLING	1240	1	498	1240	1	498	1240	1 1/2	498	1320	2	578			

CHANGES - REASONS

1. CHANGED THRESHOLD ELEVATION TO TOUCHDOWN ZONE ELEVATION. - P-NOTAM 4/7059.

2. ADDED 3 DEGREES TO ALL COURSES AND HEADINGS. - AIRPORT MAGNETIC VARIATION CHANGED FROM 0°E/EPOCH YEAR 1990 TO 3°W /EPOCH YEAR 2020.

3. CHANGED NOT COINCIDENT NOTE TO CURRENT FORMAT. - FAAO 8260.19H PARAGRAPH 8-6-9.

4. CHANGED LTP/FTP ELLIPSOIDAL HEIGHT FROM +01930 TO +01929, FPAP COORDINATES FROM 421205.9300N/0890510.8800W TO 4211205.9200N/0890510.8900W AND CRC REMAINDER FROM 286185AF TO101A474E. - NEW SIAP PULL.



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<u>COORDINATED WITH:</u>					
A4A <input type="checkbox"/> ALPA <input checked="" type="checkbox"/> AOPA <input checked="" type="checkbox"/> APA <input type="checkbox"/> HAI <input type="checkbox"/> NBAA <input checked="" type="checkbox"/> <u>OTHER:</u> ZAU ARTCC, RFD ATCT, AMGR, ATA					
<u>FLIGHT CHECKED BY</u>			<u>OFFICE</u>	<u>DATE</u>	
<u>DEVELOPED BY</u> <i>Digitally signed by</i>			<u>OFFICE</u>	<u>DATE</u>	
LIAM DONAHUE <i>LIAM DONAHUE</i>			AJV-5431	08/06/2018	
<u>APPROVED BY</u> Aug 24, 2018			<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
PATRICK MULQUEEN			AJV-5430		MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRFD
RUNWAY	RW07
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W07A
LTP/FTP LATITUDE	421124.8245N
LTP/FTP LONGITUDE	0890711.7215W
LTP/FTP ELLIPSOIDAL HEIGHT	+01929
FPAP LATITUDE	421205.9200N
FPAP LONGITUDE	0890510.8900W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
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)	35.0
CRC REMAINDER	101A474E

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02262
FPAP ORTHOMETRIC HEIGHT	+02262



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 7	1C	CHICAGO/ROCKFORD	IL	742	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM DAYVL TO RUDGE

RNP DISTANCE PAT MAP HAT HMAS

8.42

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
1.COOL TWR (17-001213)	420434.00N/0891643.00W	1376	100	20	3C	1000				AT124	2500
2.TERRAIN	420145.00N/0892212.00W	922 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT
REMARKS:

INITIAL

FROM PLL VOR/DME TO RUDGE

RNP DISTANCE PAT MAP HAT HMAS

10.83

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
3.TOWER (17-002439)	420419.00N/0892508.00W	1194	500	50	5D	1000				AT306	2500
4.TERRAIN	420536.00N/0892618.00W	942 (900)								AS1500	2400

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											
16.TREE	421125.00N/0890340.00W	1.30	498	919	50	20	2C	300		SI	1240
CATEGORY B											
17.TREE	421156.00N/0890311.00W	1.50	498	939	50	20	2C	300			1240
CATEGORY C											
17.TREE	421156.00N/0890311.00W	2.30	498	939	50	20	2C	300			1240
CATEGORY D											
18.TOWER (17-000303)	421331.00N/0890252.00W	4.50	578	1007	20	3	1A	300			1320

CIRCLING REMARKS:

MSA

CENTER

RADIUS

RW07

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TWR (17-000297)	421749.00N/0891422.00W	320	08.3	1549	250	50	4D	1000			2600

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

KRFD ASOS ON SERVICE A.

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

VGSI DATA: 3.00/69.4

LPV:
FINAL OCS SLOPE: 34:1
LNAV/VNAV:
FINAL OCS SLOPE: 23.44:1

VEGETATION HEIGHT USED: 100 FT PER FPO.

ISA DEVIATION: -25
AVERAGE COLD TEMPERATURE BASED ON 5 YEAR HISTORY (2006-2010)

TAA NOT DEVELOPED PER ATC REQUEST.



Page 8 of 10

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	3.13
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	065.34
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	801
DISTANCE FROM	THLD	TO 1500FT POINT	4.93
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.76
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	065.34
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	801

THRESHOLD
COORDINATES
(IF STR-IN)421124.82N/0890711.72W

ARP COORDINATES421143.30N/0890550.00W

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

FAF
COORDINATES565601.96N/1325410.32W

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 7	1C	CHICAGO/ROCKFORD	IL	742	RNAV

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
LIAM DONAHUE	AJV-5431	08/06/2018	AERONAUTICAL INFORMATION SPECIALIST

