

**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 ID</u> KUGN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> CHICAGO/WAUKEGAN	<u>STATE</u> IL		
<u>AIRPORT ELEVATION</u> 728	<u>TDZE</u> 726	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>DATED</u> 12/07/2017	<u>MAG VAR</u> 3W	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 17 JUNE 2021	<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>
PLSNT	IAF	FOVOJ	NOPT	TF	FB	1.00	141.24	8.00	2400
JETRU	IAF	FOVOJ	NOPT	TF	FB	1.00	321.45	8.00	2400
FOVOJ	IF/IAF	BILCO		TF	FB	1.00	051.33	5.94	2400
BILCO	FAF	HIGEK/1.99 NM TO RW05		TF	FB	0.30	051.38	3.14	
HIGEK/1.99 NM TO RW05		RW05	MAP	TF	FO	0.30	051.38	1.99	
RW05	MAP	976 MSL		CA			051.38		
976 MSL		LIRIC		DF	FO	1.00			2300

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2300 DIRECT LIRIC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD SW FOVOJ, LT, 051.32 INBOUND, 2400 FT. IN LIEU OF PT (IAF), MAX 10000.

3. FAC: 051.38FAF: BILCODIST FAF TO MAP: 5.13DIST FAF TO THLD: 5.13

4. MIN ALT: FOVOJ 2400, BILCO 2400, HIGEK/1.99 NM TO RW05 1400

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.66GS ANT:

6. MIN GP INCPT: 2400GP ALT AT FAF : BILCOOM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 40.0

8. MSA FROM: RW05 2500

PBN REQUIREMENTS NOTE:

RNP APCH - GPS

NOTES:

CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: CIRCLING RWY 14, 32 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

HOLD NE, RT, 231.57 INBOUND.
CHART FAS OBST: 859 GRAIN_ELEVATOR (17-002419) 422314N/0875400W.
CHART VDP AT 1.12 NM TO RW05
WAAS CHANNEL # 81812
REFERENCE PATH ID: W05A
CHART CIRCLING ICON.
LTP HAE: 186.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 800-2 1/4, 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	976	3/4	250	976	3/4	250	976	3/4	250	976	3/4	250			
LNAV/VNAV DA	1013	7/8	287	1013	7/8	287	1013	7/8	287	1013	7/8	287			
LNAV MDA	1120	1	394	1120	1	394	1120	1 1/8	394	1120	1 1/8	394			
CIRCLING	1220	1	492	1220	1	492	1220	1 1/2	492	1400	2 1/4	672			

QUALITY
16
CHECKED

CHANGES - REASONS

1. LPV DA/HAT DECREASED FROM 990/265 TO 976/250; VISIBILITY DECREASED FROM 1 TO 3/4. - NEW OBSTACLE EVALUATION; NEW INOP VISIBILITY TABLE USED.
2. LNAV/VNAV DA/HAT DECREASED FROM 1140/415 TO 1013/287; VISIBILITY DECREASED FROM 1 1/2 TO 7/8. - NEW OBSTACLE EVALUATION; NEW INOP VISIBILITY TABLE USED.
3. LNAV MDA CAT D VISIBILITY DECREASED FROM 1 1/4 TO 1 1/8. - NEW INOP VISIBILITY TABLE USED.
4. TERMINAL ROUTES: REMOVED FEEDER PAPPI TO JETRU AND INITIAL KRENA TO FOVOJ. ADDED INITIAL PLSNT TO FOVOJ. - FPT REQUEST.
5. TERMINAL ROUTES: UPDATED INITIAL JETRU TO FOVOJ COURSE/DISTANCE FROM 321.37/5.00 TO 321.45/8.00. - FPT REQUEST EXTENSION OF INITIAL TO 8 NM.
6. TERMINAL ROUTES: UPDATED INTERMEDIATE FOVOJ TO BILCO COURSE/DISTANCE FROM 051.32/6.01 TO 051.33/5.94. - PFAF MOVED TO MAINTAIN GPA/TCH IAW 8260.58A.
7. TERMINAL ROUTES: UPDATED "BILCO TO HIGEK/1.87 NM TO RW05" TO "BILCO TO HIGEK/1.99 NM TO RW05;" COURSE/DISTANCE UPDATED FROM 051.39/3.19 TO 051.38/3.14. - PFAF AND STEPDOWN MOVED TO MAINTAIN GPA/TCH IAW 8260.58A.
8. TERMINAL ROUTES: UPDATED MISSED APPROACH CA LEG ALTITUDE FROM 990 MSL TO 976 MSL; COURSE UPDATED FROM 051.39 TO 051.38. - LPV DA DECREASED AND FINAL COURSE UPDATED.
9. PROFILE LINE 2: ADDED MAX ALTITUDE 10000. - IAW 8260.19I PARA 8-6-7 B(2).
10. PROFILE LINE 3: UPDATED FINAL APPROACH COURSE FROM 051.39 TO 051.38; DISTANCE FAF TO MAP/THLD FROM 5.06 TO 5.13. - PFAF MOVED TO MAINTAIN GPA/TCH IAW 8260.58A.
11. PROFILE LINE 4: UPDATED HIGEK/1.87 NM TO RW05 1360* TO HIGEK/1.99 NM TO RW05 1400. - STEPDOWN ALTITUDE INCREASED DUE TO NEW OBSTACLE EVALUATION.
12. PROFILE LINE 5: ADDED DISTANCE TO THLD FROM 250 HAT: 0.66; AND "DISTANCE TO THLD FROM 265 HAT: 0.71 NM" REMOVED FROM ADDITIONAL FLIGHT DATA. - LPV DA/HAT UPDATED.
13. PROFILE LINE 7: UPDATED 34:1 IS CLEAR TO 34:1 IS NOT CLEAR; ADDED 20:1 IS CLEAR. - 34:1 PENETRATIONS EXIST; NO 20:1 PENETRATIONS.
14. REMOVED CHART NOTE: DME/DME RNP-0.3 NA; ADDED PBN REQUIREMENTS NOTE: RNP APCH - GPS. - IAW 8260.58A TABLE 1-2-1.
15. UPDATED CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F) TO -16F TO 54C. - FAHRENHEIT REMOVED IAW 8260.19I.
16. REMOVED CHART NOTES: "PROCEDURE NA FOR ARRIVALS AT PAPPI ON V48 EASTBOUND" AND "PROCEDURE NA FOR ARRIVALS AT KRENA ON V24-100 WESTBOUND." - FEEDER PAPPI AND INITIAL KRENA REMOVED.
17. ADDED CHART NOTE: CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED. - 34:1 PENETRATIONS PRESENT.
18. UPDATED CHART NOTE: FROM "CIRCLING TO RWY 14, 32 NA AT NIGHT" TO "CIRCLING RWY 14, 32 NA AT NIGHT." - IAW 8260.19I 8-6-11 O(2)G.
19. UPDATED CHART FAS OBST: FROM 855 POWER LINES TO 859 GRAIN ELEVATOR. - NEW LNAV STEPDOWN CONTROLLING OBSTACLE.
20. UPDATED ADDITIONAL FLIGHT DATA: CHART VDP AT 1.10 NM TO RW05* UPDATED TO 1.12 NM TO RW05; *LNAV ONLY REMOVED. - STEPDOWN HIGEK MOVED; IAW 8260.19I 8-6-10 M.
21. FAS DATA: FPAP LONGITUDE UPDATED FROM 0875102.1600W TO 0875102.14200W. - NEW FPAP LOCATION.
22. FAS DATA: LTP/FPAP ORTHOMETRIC HEIGHT UPDATED FROM +02210 TO +02212. - FPAP LONGITUDE UPDATED.
23. FAS DATA: CRC REMAINDER UPDATED FROM AE11DD04 TO CCC0925C. - FPAP LONGITUDE AND LTP/FPAP ORTHOMETRIC HEIGHT UPDATED.
24. UPDATED AIRPORT ELEVATION FROM 727 TO 728; TDZE FROM 725 TO 726. - NEW AIRNAV DATA INCORPORATED.

COORDINATED WITH:A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER:**FLIGHT CHECKED BY**

MICHAEL A GREENWOOD

OFFICE

FICO

DATE

04/13/2021

Digitally signed by

DAVID TEFFETELLER

Apr 28, 2021

DEVELOPED BY

JON DENTON (BARBARA GORMAN)

Digitally signed by

DAVID TEFFETELLER

Apr 28, 2021

OFFICE

AJV-A432

DATE

02/03/2021

APPROVED BY

LONNIE EVERHART

Digitally signed by

DAVID TEFFETELLER

Apr 28, 2021

OFFICE

AJV-A430

DATE**TITLE**
MANAGERQUALITY
16
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KUGN
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	422457.0635N
LTP/FTP LONGITUDE	0875232.1755W
LTP/FTP ELLIPSOIDAL HEIGHT	+01868
FPAP LATITUDE	422556.1800N
FPAP LONGITUDE	0875102.1420W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0920
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	CCC0925C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02212
FPAP ORTHOMETRIC HEIGHT	+02212

