

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> ST LOUIS RGNL	<u>AIRPORT ID</u> KALN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 2B	<u>CITY</u> ALTON/ST LOUIS	<u>STATE</u> IL
<u>AIRPORT ELEVATION</u> 544	<u>TDZE</u> 539	<u>SUPERSEDED</u> RNAV (GPS) RWY 11	<u>ORIGINAL/AMENDMENT</u> 2A	<u>DATED</u> 03/05/2015	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 11 OCTOBER 2018	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2010

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>
HARDI	IAF	SQUAR	NOPT	TF	FB	1.00	112.55	18.68	2400
FASHE	IAF	SQUAR	NOPT	TF	FB	1.00	190.38	9.60	2400
SQUAR	IF/IAF	KEELS		TF	FB	1.00	114.20	6.80	2300
KEELS	FAF	HEDUV/1.80 NM TO RW11		TF	FB	0.30	114.28	3.59	
HEDUV/1.80 NM TO RW11		RW11	MAP	TF	FO	0.30	114.28	1.80	
RW11	MAP	794 MSL		CA			114.28		
794 MSL		QUNIE		DF	FO	1.00			2100

MISSED APPROACH

MAP:

LPV: DA
 LNAV/VNAV: DA
 LNAV: RW11

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2100 DIRECT QUNIE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD NW SQUAR, RT, 114.20 INBOUND, 2400 FT. IN LIEU OF PT (IAF), MAX 5000.

3. FAC: 114.28FAF: KEELS

DIST FAF TO MAP: 5.39

DIST FAF TO THLD: 5.39

4. MIN ALT: SQUAR 2400, KEELS 2300, HEDUV/1.80 NM TO RW11 1140*

5. DIST TO THLD FROM OM:MM:IM:150 HAT:255 HAT: 0.66GS ANT:

6. MIN GP INCPT: 2300GP ALT AT FAF : KEELS 2300OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 46.0

8. MSA FROM: RW11 2700

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C.

ADDITIONAL FLIGHT DATA:

CHART VDP AT 1.25 NM TO RW11*
*LNAV ONLY
WAAS CHANNEL #90417
REFERENCE PATH ID: W11A
CHART FAS OBST: 673 TANK 385323N/0900336W.
HOLD SE, RT, 294.51 INBOUND
LTP HAE: 132.6 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	794	7/8	255	794	7/8	255	794	7/8	255	794	7/8	255			
LNAV/VNAV DA	881	1 1/8	342	881	1 1/8	342	881	1 1/8	342	881	1 1/8	342			
LNAV MDA	980	1	441	980	1	441	980	1 3/8	441	980	1 3/8	441			
CIRCLING	1000	1	456	1000	1	456	1000	1 1/2	456	1100	2	556			



CHANGES - REASONS

1. CHANGED AIRPORT ELEVATION FROM 543 TO READ 544 - AIRNAV2 AIRPORT DATA RECORD UPDATE.
2. CHANGED MISSED APPROACH CA LEG ALTITUDE FROM 793 TO READ 794 IN TERMINAL ROUTES SECTION - LOWEST DA/MDA NOW 794 DUE TO USE OF TDZE TO COMPUTE DA INSTEAD OF THRE.
3. ADDED IS CLEAR TO 20:1 ON LINE 7 - REQUIRED BY CRITERIA.
4. ADDED RNP APCH TO PBN REQUIREMENTS NOTES SECTION - REQUIRED BY CRITERIA.
5. CHANGED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA TO READ CHART NOTE: RWY 11 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED IN NOTES SECTION - 34:1 VISUAL SURFACE PENETRATED.
6. REMOVED CHART NOTE: DME/DME RNP-0.3 NA FROM NOTES SECTION - DOCUMENTATION NO LONGER REQUIRED BY CRITERIA.
7. REMOVED UNCOMPENSATED BARO-VNAV CHART NOTE LOWER TEMPERATURE LIMIT FAHRENHEIT VALUE AND CHANGED UPPER TEMPERATURE LIMIT FROM 40C (104F) TO READ 54C IN NOTES SECTION - AFS LOW/HIGH TEMPERATURE LIMITS FOR BARO-VNAV PROCEDURES CALCULATOR CALCULATION/FAHRENHEIT VALUES ARE NO LONGER DOCUMENTED.
8. REMOVED *LNAV ONLY FROM NOTES SECTION - DUPLICATED IN ADDITIONAL FLIGHT DATA SECTION.
9. CHANGED CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LAMBERT-ST LOUIS INTL ALTIMETER SETTING AND INCREASE ALL DA 51 FEET AND ALL MDA 60 FEET, INCREASE LPV ALL CATS VISIBILITY 1/8 MILE AND LNAV/VNAV ALL CATS VISIBILITY 1/4 MILE TO READ CHART NOTE: USE ST LOUIS LAMBERT INTL ALTIMETER SETTING; INCREASE ALL DA 51 FEET, INCREASE LPV ALL CATS VISIBILITY AND LNAV/VNAV ALL CATS VISIBILITY 1/8 SM; INCREASE ALL MDA 60 FEET IN NOTES SECTION AND MOVED FROM NOTES SECTION TO 8260-9 GENERAL REMARKS SECTION - KALN AWOS-3 TRANSMITS TO WMSCR AND DOES NOT REQUIRE A PUBLISHED BACKUP ALTIMETER SOURCE/COMPUTED FOR CONTINGENCY.
10. CHANGED CHART NOTE: VDP AND BARO-VNAV NA WITH LAMBERT-ST. LOUIS INTL ALTIMETER SETTING TO READ CHART NOTE: BARO-VNAV, VDP, AND ALTERNATE MINIMUMS NA IN NOTES SECTION AND MOVED FROM NOTES SECTION TO 8260-9 GENERAL REMARKS SECTION - KALN AWOS-3 TRANSMITS TO WMSCR AND DOES NOT REQUIRE A PUBLISHED BACKUP ALTIMETER SOURCE/COMPUTED FOR CONTINGENCY.
11. REMOVED CHART NOTE: WHEN VGSi INOP, CIRCLING TO TO RWY 17/35 NA AT NIGHT FROM NOTES SECTION - DOCUMENTATION NO LONGER REQUIRED BY CRITERIA/NEW SURVEY, 20:1 PENETRATIONS REMOVED.
12. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT FASHE ON V9 NORTHEAST BOUND AND CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT HARDI ON V52 NORTHWEST BOUND FROM NOTES SECTION - AIRWAY HOLDING AT FASHE AND HARDI CHARTED.
13. CHANGED VDP DISTANCE FROM 1.24 TO READ 1.25 - ROUNDING FOR CHARTING.
14. CHANGED FAS OBSTACLE FROM 669 TANK TO READ 673 TANK IN ADDITIONAL FLIGHT DATA SECTION - NEW CONTROLLING OBSTACLE FOR LNAV STEPDOWN SEGMENT.
15. CHANGED CIRCLING CAT A CMDA/HAA FROM 980/435 TO READ 1000/456 IN MINIMUMS SECTION - NEW CONTROLLING OBSTACLE/AIRPORT ELEVATION NOW 544.
16. CHANGED CIRCLING CATS B/C HAA FROM 455 TO READ 456 AND CIRCLING CAT D HAA FROM 555 TO READ 556 IN MINIMUMS SECTION - AIRPORT ELEVATION NOW 544.
17. CHANGED LTP LONGITUDE FROM 0900317.8640W TO READ 0900317.8645W, FPAP LATITUDE FROM 385307.5000N TO READ 385307.4975N, FPAP LONGITUDE FROM 0900133.1000W TO READ 0900133.1025W, AND CRC REMAINDER FROM 9DDF4883 TO READ 39069AA3 IN FAS DATA BLOCK INFORMATION SECTION - AIRNAV2 AIRPORT DATA RECORD UPDATE.

PDF EDITS:

1. REMOVED ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED FROM GENERAL REMARKS SECTION.



AIRPORT
ST LOUIS RGNL

AIRPORT ID
KALN

PROCEDURE NAME
RNAV (GPS) RWY 11

ORIGINAL/AMENDMENT
2B

CITY
ALTON/ST LOUIS

STATE
IL

COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZKC, STL APP CON, ALN ATCT, AMGR

FLIGHT CHECKED BY

ANTHONY D VALLERA

Digitally signed by

DEZ SILAGYI

Aug 27, 2018

OFFICE

FICO

DATE

8/22/18

DEVELOPED BY

MICHAEL R. GARRITY JR.

Digitally signed by

MICHAEL GARRITY

Jun 29, 2018

OFFICE

AJV-5421

DATE

05/15/2018

APPROVED BY

JULIE MORGAN

Digitally signed by

DEZ SILAGYI

Aug 27, 2018

OFFICE

AJV-5420

DATE

TITLE

MANAGER

QUALITY
18
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KALN
RUNWAY	RW11
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W11A
LTP/FTP LATITUDE	385342.8605N
LTP/FTP LONGITUDE	0900317.8645W
LTP/FTP ELLIPSOIDAL HEIGHT	+01326
FPAP LATITUDE	385307.4975N
FPAP LONGITUDE	0900133.1025W
THRESHOLD CROSSING HEIGHT (TCH)	00046.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0280
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
 CRC REMAINDER	 39069AA3

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+01639
FPAP ORTHOMETRIC HEIGHT	+01639

