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>	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	<u>CITY</u>	-	<u>STATE</u>
LAGUARDIA	KLGA	RNAV (GPS) Z RWY 31	1F	NEW YC		NY
AIRPORT ELEVATION	<u>TDZE</u>	SUPERSEDED	ORIGINAL/AMENDMENT	DATED	MAG VAR	EPOCH YEAR
21	7	RNAV (GPS) RWY 31	1E	09/13/2018	12W	1980
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 28 FEBRUARY 2019	REQUIRED EFFECTIVE DATE 02/28/2019	CANCEL/SUSPE	<u>IND</u>	

TERMINAL ROUTES

FROM	FIX TYPE	<u>T0</u>	FIX TYPE	LEG TYPE	FO/FB	<u>RNP</u>	COURSE	DISTANCE	ALTITUDE
CHALN	IF	ZARID		TF	FB	1.00	314.27	6.00	1700
ZARID	FAF	RW31	MAP	TF	FO	0.30	314.20	4.99	
RW31	MAP	700 MSL		CA			314.20		700
700 MSL		CEPOG		DF	FO	1.00			2000

MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

(DO NOT EXCEED 220 KIAS UNTIL CEPOG) CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT CEPOG AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:								
1. PT	SIDE OF COURSE	OUTBOUND	FT W	THIN	MILES OF (IAF)			
2. PROFIL	E STARTS AT CHALN							
3. FAC:	314.20 FAF: ZARIE	D D	IST FAF TO MAP:	4.99	DIST FAF TO	THLD: 4.99		
4. MIN ALT: CHALN 2000, ZARID 1700								
5. DIST TO	O THLD FROM OM:	MM:	IM: 1	50 HAT:	323 HAT: 0.83	GS ANT:		
6. MIN GP	INCPT: 1700	GP ALT AT FAF : ZAI	RID 1700		OM:		MM:	IM:
7. GP ANG	GLE: 3.10	34:1: IS NOT CLEAR	20:1: IS NOT C	LEAR TO	CH: 50.0			
8. MSA FR	OM: RW31 2900							

AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	<u>CITY</u>	STATE
LAGUARDIA	KLGA	RNAV (GPS) Z RWY 31	1F	NEW YORK	NY

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12°C OR ABOVE 48°C. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}). CHART NOTE: CIRCLING NA FOR CAT D NW OF RWY 4 AND SW OF RWY 13.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON. WAAS CHANNEL #48928 REFERENCE PATH ID: W31A CHART FAS OBST: 380 BLDG 404410N/0734828W. HOLD SW, RT, 044.00 INBOUND LTP HAE: -29.4 M

MINIMUMS:

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

ALTERNATE: NA

STANDARD

CATEGORY:	A		В		С		D		E						
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA									
LPV DA	330	5000	323	330	5000	323	330	5000	323	330	5000	323			
LNAV/VNAV DA	618	1 3/4	611	618	1 3/4	611	618	1 3/4	611	618	1 3/4	611			
LNAV MDA	640	5500	633	640	5500	633	640	1 3/4	633	640	1 3/4	633			
CIRCLING	680	1	659	680	1	659	1080	3	1059	1080	3	1059			

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LAGUARDIA	KLGA	RNAV (GPS) Z RWY 31	1F	NEW YORK	NY

CHANGES - REASONS

1. CHANGED PROCEDURE NAME FROM RNAV (GPS) RWY 31 TO RNAV (GPS) Z RWY 31 - ADDITIONAL RNAV APPROACH CREATED TO RWY 31.

2. CHANGED CHART NOTE FROM: CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -11°C (13°F) OR ABOVE 33°C (91°F) TO: CHART NOTE: FOR

UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12°C OR ABOVE 48°C - NEW TEMPERATURE DATA, CURRENT NOTATION PER 8260.19H 8-7-1C.

3. CHANGED CIRCLING MDA/HAA CAT A/B FROM 640/619 TO 680/659, CAT C FROM 640/619 TO 1080/1059, CAT D FROM 700/679 TO 1080/1059 - NEW CONTROLLING OBSTACLES, INCORPORATING P-NOTAM 8/4521.

4. CHANGED CIRCLING VISIBILITY CAT C FROM 1 3/4 SM TO 3 SM, CAT D FROM 2 1/4 SM TO 3 SM - 8260.3D TABLE 3-3-7.

5. REMOVED CHART NOTE: DME/DME RNP -0.3 NA AND ADDED EQUIPMENT REQUIREMENTS NOTE: RNP APCH - CURRENT NOTATION PER 8260.19H.

6. REMOVED CHART NOTE: RADAR REQUIRED - INCORPORATING P-NOTAM 8/4521.

7. REMOVED CHART PLANVIEW NOTE AT CEPOG: LIMIT MISSED APPROACH TO 220 KIAS AND CHANGED MISSED APPROACH INSTRUCTIONS FROM: CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT CEPOG AND HOLD TO: (DO NOT EXCEED 220 KIAS UNTIL CEPOG) CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 2000 DIRECT CEPOG AND HOLD - SPEED RESTRICTION NOW IN MISSED APPROACH INSTRUCTIONS, 8260.19H 4-6-10G.

8. CHANGED MSA FROM 3000 TO 2900 - NEW CONTROLLING OBSTACLE.

9. CHANGED THRE 7 TO TDZE 7 - IAW AFS-400 MEMO DATED 2/21/2014.

10. ALTERNATE MINIMUMS CHANGED FROM STANDARD EXCEPT CAT D 800-2 1/4 TO STANDARD EXCEPT CAT C AND D 1100-3 - 8260.3D 3-4-1.

11. ADDED CHART NOTE: CIRCLING NA FOR CAT D NW OF RWY 4 AND SW OF RWY 13 - NEW OBSTACLE (36-146586) 949 BUILDING.

12. CHANGED LNAV/VNAV DA/HAT ALL CATS FROM 567/560 TO 618/611 - NEW CONTROLLING OBSTACLE.

13. CHANGED LNAV/VNAV VISIBILITY ALL CATS FROM 1 7/8 SM TO 1 3/4 SM - 8260.3D TABLE 3-3-1.

14. FPAP LATITUDE/LONGITUDE CHANGED FROM 404706.8800N/0735304.9200W TO 404706.8740N/0735304.9240W - TARGETS DERIVED.

15. CHART FAS OBSTACLE CHANGED FROM 380 BLDG 404410N/0734828W, 214 BLD 404526N/0735003W TO 380 BLDG 404410N/0734828W - NEW CONTROLLING OBSTACLE.

16. CRC REMAINDER CHANGED FROM 6FF3EB4E TO 3BA5B038 - ROUTE INDICATOR Z ADDED, FPAP LAT/LONG CHANGED.

COORDINATED WITH:

A4A X ALPA X AOPA X	APA X HAI NBAA X OTHER: ZNY	/, N90, LGA ATCT, APT MGR		
FLIGHT CHECKED BY	Digitally signed by ROBERT G HAMILTON	OFFICE	DATE	
PENDING	Dec 11, 2018 Digitally signed by			
DEVELOPED BY DAVID DANNER (JOHN BURCH)	ROBERT G HAMILTON	OFFICE AJV-5421	<u>DATE</u> 09/27/2018	
APPROVED BY JULIE MORGAN	Dec 11, 2018 Digitally signed by ROBERT G HAMILTON	OFFICE AJV-5420	DATE	<u>TITLE</u> MANAGER
	Dec 11, 2018			

QUALITL 42 CHECKER

AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	<u>CITY</u>	STATE
LAGUARDIA	KLGA	RNAV (GPS) Z RWY 31	1F	NEW YORK	NY
FAS DATA BLOCK INFORMATION					
DATA FIELD	DATA				
OPERATION TYPE	0				
SBAS SERVICE PROVIDER IDENTIFIER	0				
AIRPORT IDENTIFIER	KLGA				
RUNWAY	RW31				
APPROACH PERFORMANCE DESIGNATOR	0				
ROUTE INDICATOR	Z				
REFERENCE PATH DATA SELECTOR	0				
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A				
LTP/FTP LATITUDE	404619.45	570N			
LTP/FTP LONGITUDE	0735125.6	6015W			
LTP/FTP ELLIPSOIDAL HEIGHT	-00294				
FPAP LATITUDE	404706.87	740N			
FPAP LONGITUDE	0735304.9	9240W			
THRESHOLD CROSSING HEIGHT (TCH)	00050.0				
TCH UNITS SELECTOR (METERS OR FEET USED)) F				
GLIDEPATH ANGLE (GPA)	03.10				
COURSE WIDTH AT THRESHOLD	106.75				
LENGTH OFFSET	0616				
HORIZONTAL ALERT LIMIT (HAL)	40.0				
VERTICAL ALERT LIMIT (VAL)	50.0				
CRC REMAINDER	3BA5B03	8			
ADDITIONAL PATH POINT RECORD INFORMATIC	<u>DN</u>				
ICAO CODE	K6				
LTP ORTHOMETRIC HEIGHT	+00020				

+00020

LTP ORTHOMETRIC HEIGHT FPAP ORTHOMETRIC HEIGHT