

**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> LAGUARDIA	<u>AIRPORT ID</u> KLGA	<u>PROCEDURE NAME</u> RNAV (GPS) Y RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> NEW YORK	<u>STATE</u> NY
<u>AIRPORT ELEVATION</u> 21	<u>TDZE</u> 7	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u>	<u>DATED</u>	<u>MAG VAR</u> 12W <u>EPOCH YEAR</u> 1980
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> 02/28/2019	<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>
FEDEM	IAF	DRIES		TF	FB	1.00	059.45	11.46	4000
DRIES	IAF	WASBO		TF	FB	1.00	069.23	11.79	3000
WASBO	IAF	JABAD		TF	FB	1.00	158.29	5.63	3000
JABAD	IAF	BIPKE		TF	FB	1.00	248.27	6.95	3000
BIPKE	IAF	GEMKE		TF	FB	1.00	248.09	4.71	2000
GEMKE	IF	NYJET		TF	FB	1.00	248.43	5.62	1700
NYJET		MANLL		TF	FB	1.00	301.92	1.89	1200
MANLL	FAF	RW31	MAP	TF	FO	0.30	313.03	3.47	
RW31	MAP	700 MSL		CA			313.03		700
700 MSL		CEPOG		DF	FO	1.00			2000

**MISSED APPROACH**

**MAP:**

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 WITHIN

MILES OF (IAF)

2. PROFILE STARTS AT GEMKE

3. FAC: 313.03

FAF: MANLL

DIST FAF TO MAP: 3.47

DIST FAF TO THLD: 3.47

4. MIN ALT: GEMKE 2000, NYJET 1700, MANLL 1200

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

611 HAT: 1.71

GS ANT:

6. MIN GP INCPT: 1200

GP ALT AT FAF : MANLL 1200

OM:

MM:

IM:

7. GP ANGLE: 3.10

34:1: IS NOT CLEAR

20:1: IS NOT CLEAR

TCH: 50.0

8. MSA FROM: RW31 2900

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.  
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.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -12°C OR ABOVE 48°C.  
CHART SPEED ICON IN PLANVIEW AT WASBO: MAX 210 KIAS.  
CHART SPEED ICON IN PLANVIEW AT GEMKE: MAX 180 KIAS.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.  
CHART PLANVIEW NOTE: FINAL APPROACH OFFSET 1.15 DEGREES.  
CHART FAS OBST: 379 BUILDING 404410N/0734828W.  
HOLD SW, RT, 044.00 INBOUND

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C, D 1100-3

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
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			

CHANGES - REASONS

ORIGINAL PROCEDURE.



COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZNY, N90, LGA ATCT, APT MGR

FLIGHT CHECKED BY

PENDING

*Digitally signed by*  
**ROBERT G HAMILTON**

OFFICE

DATE

Dec 11, 2018

DEVELOPED BY

DAVID DANNER (JOHN BURCH)

*Digitally signed by*

**ROBERT G HAMILTON**

OFFICE

AJV-5421

DATE

09/27/2018

APPROVED BY

JULIE MORGAN

*Digitally signed by*

**ROBERT G HAMILTON**

OFFICE

AJV-5420

DATE

TITLE  
MANAGER

Dec 11, 2018

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

AIRPORT  
LAGUARDIA

AIRPORT ID  
KLGA

PROCEDURE NAME  
RNAV (GPS) Y RWY 31

AMDT NO.  
ORIG

CITY  
NEW YORK

STATE  
NY

AIRPORT ELEVATION  
21

FACILITY  
RNAV

**PART A: OBSTRUCTION DATA SEGMENTS**

**INITIAL**

**FROM**  
FEDEM

**TO**  
DRIES

**RNP**

**DISTANCE**  
11.46

**PAT**

**MAP**

**HAT**

**HMAS**

<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.BUILDING (36-001304)	404449.00N/0735640.00W	689	500	50	5D	1000				AT2311	4000
2.TERRAIN	404421.00N/0735430.00W	141 (100)								AS1000	1100

**COMPUTATIONS**

**ALT**

**KIAS**

**KTAS**

**HAA**

**VKTW**

**TR**

**BA**

**DTA**

**COURSE CHANGE**

**DVEB**

**VEB OCS**

**RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

**INITIAL**

**FROM**  
DRIES

**TO**  
WASBO

**RNP**

**DISTANCE**  
11.79

**PAT**

**MAP**

**HAT**

**HMAS**

<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	405303.00N/0733636.00W	401	164	98	4E	1000				AT1599	3000
4.TERRAIN	405303.00N/0733636.00W	201 (200)								AS1000	1200

**COMPUTATIONS**

**ALT**

**KIAS**

**KTAS**

**HAA**

**VKTW**

**TR**

**BA**

**DTA**

**COURSE CHANGE**

**DVEB**

**VEB OCS**

**RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

QUALITY  
42  
CHECKED

INITIAL

FROM

WASBO

TO

JABAD

<u>RNP</u>	<u>DISTANCE</u> 5.63	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
<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>
5.AAO	405218.00N/0732409.00W		414	164	98	4E	1000				AT1586	3000
6.TERRAIN	405324.00N/0732403.00W		190 (200)								AS1000	1200

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

JABAD

TO

BIPKE

<u>RNP</u>	<u>DISTANCE</u> 6.95	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
<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>
7.AAO	404830.00N/0733139.00W		538	164	98	4E	1000				AT1462	3000
8.TERRAIN	404830.00N/0733139.00W		338 (300)								AS1000	1300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



INITIAL

FROM

BIPKE

TO

GEMKE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	4.71										
<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>
9.AAO	404815.00N/0733509.00W	568	164	98	4E	1000				AT432	2000
10.TERRAIN	404815.00N/0733509.00W	368 (400)								AS1000	1400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

GEMKE

TO

NYJET

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	5.62										
<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>
11.BUILDING (36-000454)	404526.00N/0734254.00W	604	250	50	4D	500				AT546 AC50	1700
12.TERRAIN	404633.00N/0734124.00W	289 (300)								AS1000	1300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:





FINAL: LNAV

FROM

MANLL

TO

RW31

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	3.47		RW31		633						
<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.BUILDING (36-000388)	404410.00N/0734828.00W	379	100	20	3C	250					640

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

MISSED APPROACH : LNAV/VNAV

FROM

DA

TO

CEPOG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
							457				
<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>
							ASC				2000
17.BUILDING (36-020555)	405444.50N/0734653.30W	561	500	50	5D	1000				AC50	1700
18.TERRAIN	405257.00N/0735115.00W	184 (200)								AS1000	1200

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





MISSED APPROACH : LNAV

FROM  
RW31

TO  
CEPOG

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u> 540				
<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>
							ASC				2000
17.BUILDING (36-020555)	405444.50N/0734653.30W	561	500	50	5D	1000				AC50	1700
18.TERRAIN	405257.00N/0735115.00W	184 (200)								AS1000	1200

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											
19.BUILDING (36-029754)	404533.02N/0735124.72W	1.30	659	376	20	3	1A	300			680
CATEGORY B											
19.BUILDING (36-029754)	404533.02N/0735124.72W	1.81	659	376	20	3	1A	300			680
CATEGORY C											
20.BLDG 2015-AEA-4715	404500.99N/0735609.05W	2.84	1059	778	20	3	1A	300			1080
CATEGORY D											
21.BUILDING (36-000895)	404805.96N/0735608.10W	3.70	1059	388	20	3	1A	300		XP392	1080

CIRCLING REMARKS:  
XP: INCREASED TO MATCH CAT C CMDA/HAA.



MSA

CENTER  
RW31

RADIUS  
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	BUILDING (36-020633)	404246.75N/0740047.27W	256	08.0	1806	20	3	1A	1000			2900

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:





"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	LNAV/VNAV AND LNAV		
20:1			
19 NAVAID (36-022763) 404617.39N/0735121.28 (2.66)			
Final Type	LNAV/VNAV AND LNAV		
34:1			
97 CRANE (36-020663) 404611.93N/0735058.89W (33.08)		97 CRANE (36-020664) 404611.04N/0735057.92 (29.81)	
103 STACK (36-002308) 404608.76N/0735051.19W (19.3)		97 BUILDING (36-002451) 404603.99N/0735049.01W (1.57)	
226 BUILDING (36-030253) 404536.41N/0735003.70W (0.07)			

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.  
  
100 FT VEGETATION PER FPT.  
  
VDP NOTESTABLISHED - OBSTACLES PENETRATE 20:1 SURFACE.  
  
ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



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	3.17
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.85
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	301.03
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	115
DISTANCE FROM	FAF	TO 1500FT POINT	7.11
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	236.43
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	289

THRESHOLD  
COORDINATES  
(IF STR-IN)404619.46N/0735125.60W

ARP COORDINATES404638.10N/0735221.40W

RUNWAY APCH END  
AND DIST FURTHEST  
FROM ARP RUNWAY 31 DISTANCE 0.77 NM

FAF  
COORDINATES404431.99N/0734730.51W

FIX NAME  
COORDINATES

REMARKS



