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|---|------------------------------|---|-------------------------------------|---|--|
| Flight Procedures Cover Page | Task Action: FLIGHT CHECK | Task Type: IAP | Estimated Chart Date: 02/23/2023 | APWS Task ID: 6C7CEDAED7DD4955A84C8ADB67C5F845 | APWS Project ID: 1037E4BE869545878EE4D686308EA724 |
| Procedure: RNAV (GPS) X RWY 31 AMDT 0A | | Enroute: NO | Specialist: Dean, Kelly | | Agreement Number: |
| Airport ID: KLGA | | | Airport City: NEW YORK | | State: NY |
| Facility ID: | Facility Type: | Flight Inspection Remark Type: New FC Slot | | | |
| <div>Procedure Comments: FLT CK: REQUEST TABLE TOP</div> <div>POC FOR THIS ACTION IS ERIC SUSKI 405-954-7331</div> <div><div>Digitally signed by ERIC N SUSKI Nov 16, 2022</div><div>J ZEDER 11/09/2022</div><div><div>QUALITY 16 CHECKED</div><div>QUALITY 41 CHECKED</div></div></div> | | | | | |

| FIPC BASIC FORM | | | | | | |
|---|---|----------------------------------|--|---|--|--|
| PROCEDURE: RNAV (GPS) X RWY 31 AMDT 0A | | | AIRPORT NAME: LAGUARDIA | | AIRPORT ID: KLGA | SPECIAL CONTROL NO: YG-11-134-22 |
| FAC ID: KLGA31X | | CITY: NEW YORK | | | ST: NY | ORIG CHART DATE: 02/23/2023 |
| DFL TYPE: PROC/G | THIRD PARTY: <input type="checkbox"/> YES | EST. TIME ON SITE: 0.5 | REIMB. NUMBER: | PTS TASK ID: 6C7CEDAED7DD4955A84C8ADB67C5F845 | | |
| PREFLIGHT NOTES | | | | | | |
| REVIEWER: | | | | | DATE: | |
| COMMENTS: | | | | | CHECK ONE: | |
| | | | | | <input type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT | |
| | | | | | | YES |
| | | | | | CPV COMPLETE? | |
| | | | | | X | |
| PROCEDURE RESULTS | | | | | | |
| INSPECTION DATE: 12/01/2022 | CREW #: VN484 | N #: | INSTRUMENT PROCEDURE STATUS: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT | | ARINC CODING: <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT | |
| FLIGHT INSPECTOR SIGNATURE: jeremy r virts @ 12/06/2022 19:44 | | | PRINTED NAME: VIRTS, JEREMY RYAN | | | NOTAM INITIATED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| FLIGHT INSPECTOR REMARKS: | | | | | | |
| | | | | | | |
| IN-FLIGHT OBSTACLE REPORT | | | | | | |
| OBSTRUCTION ID #: | COORDINATES OR LOCATION: | GNSS ALTITUDE (MSL): | BAROMETRIC ALTITUDE (MSL): | HEIGHT ABOVE GROUND LEVEL: | | |

NEW YORK, NEW YORK

OLD

22251

| | | |
|-------------|----------|-------------|
| APP CRS | Rwy Idg | 7003 |
| 089° | TDZE | 7 |
| | Apt Elev | 21 |

RNAV (GPS) X RWY 31

LAGUARDIA (LGA)

RNP APCH-GPS. RADAR required.



Rwy 31 helicopter visibility reduction below 3/4 SM NA.

MISSED APPROACH: (Do not exceed 165K until Rwy 31 then do not exceed 210K until GREKO). Climb to 2000 on FMS lateral path to RW31, then climbing right turn direct GREKO and hold. If unable to follow the FMS lateral path, turn left heading 025° and climb to 2000 direct GREKO and hold.

D-ATIS ARR **125.95**
D-ATIS DEP **127.05**

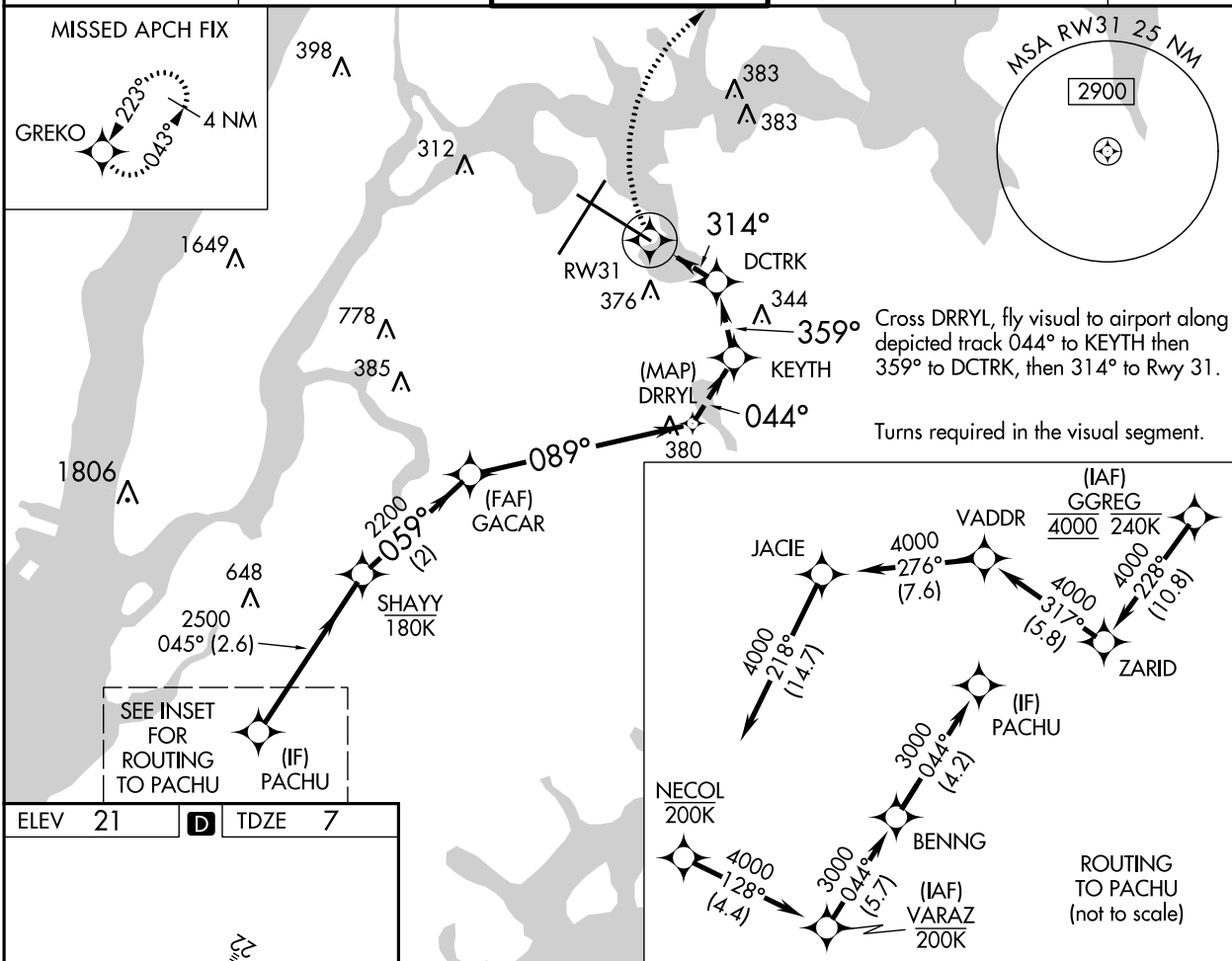
NEW YORK APP CON
120.8 263.0

LAGUARDIA TOWER
118.7 263.0

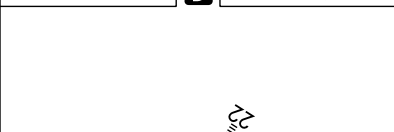
GND CON
121.7 263.0

CLNC DEL
135.2

CPDLC



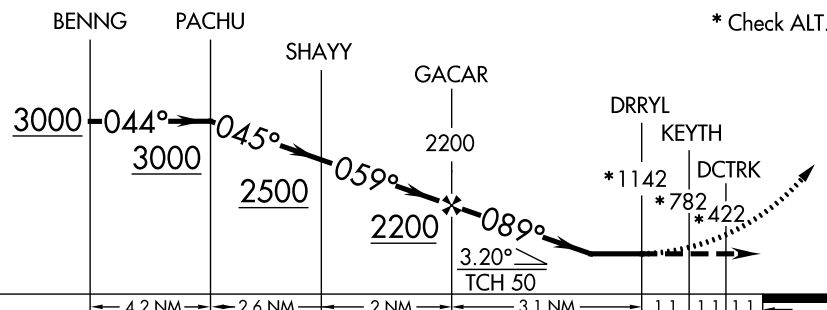
ELEV 21 TDZE 7



VGSI and descent angle not coincident
(VGSI Angle 3.00/TCH 71).



* Check ALT.



| | | | | |
|-----------|--------|---------------|---|---|
| CATEGORY | A | B | C | D |
| LN AV MDA | 1160-4 | 1153 (1200-4) | | |

NEW YORK, NEW YORK

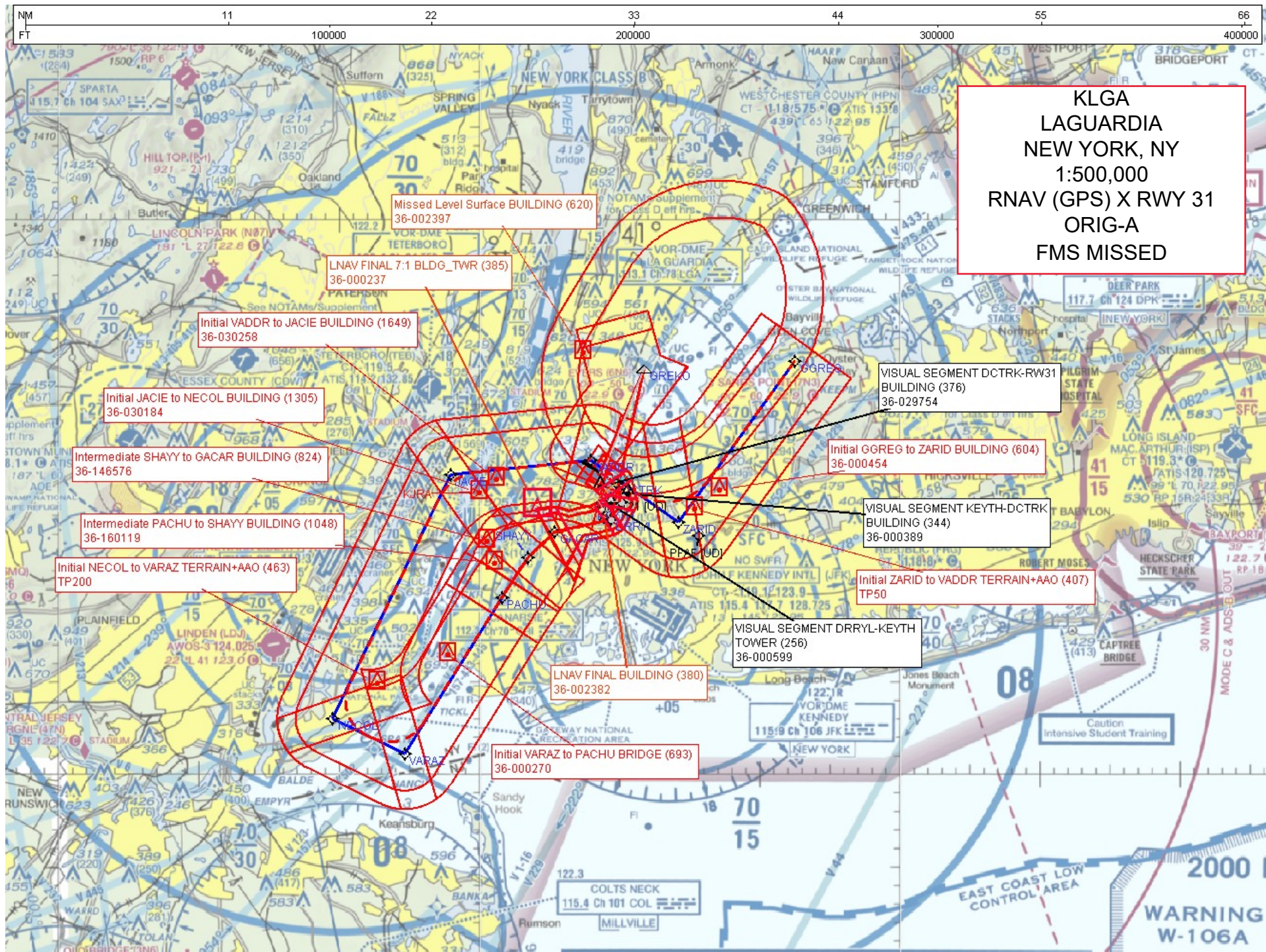
Orig 24MAR22

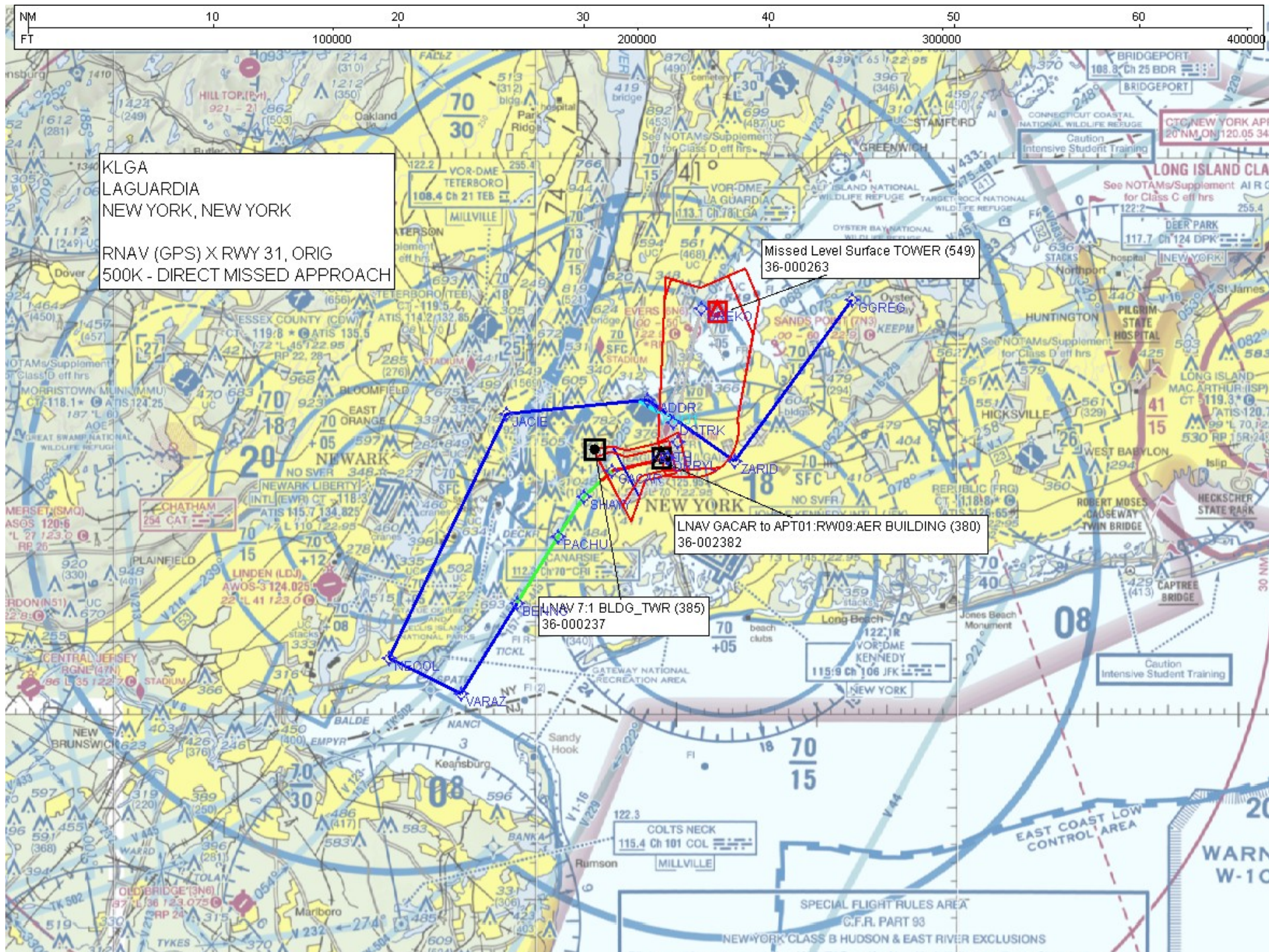
40°47'N-73°52'W

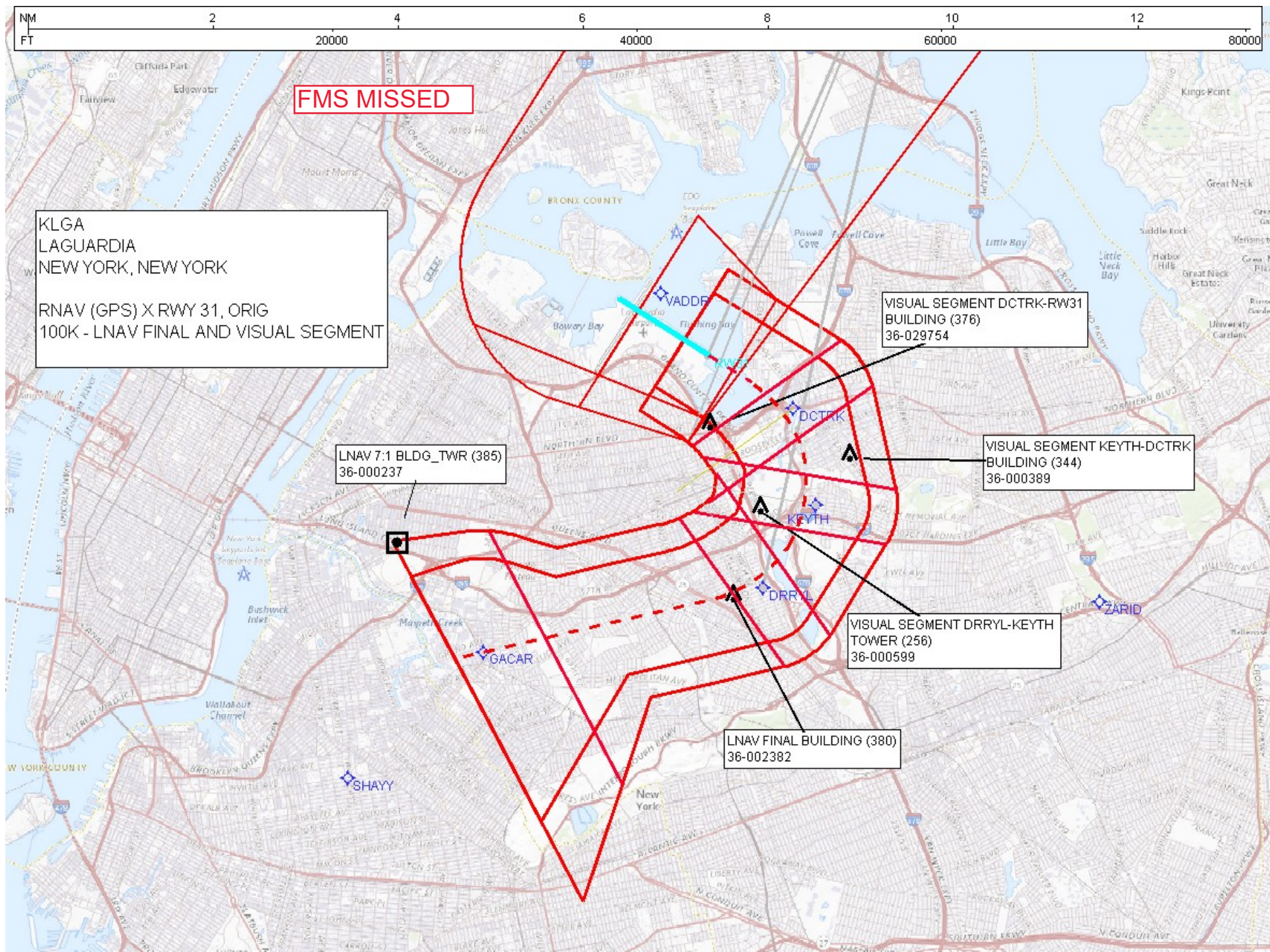
LAGUARDIA (LGA)

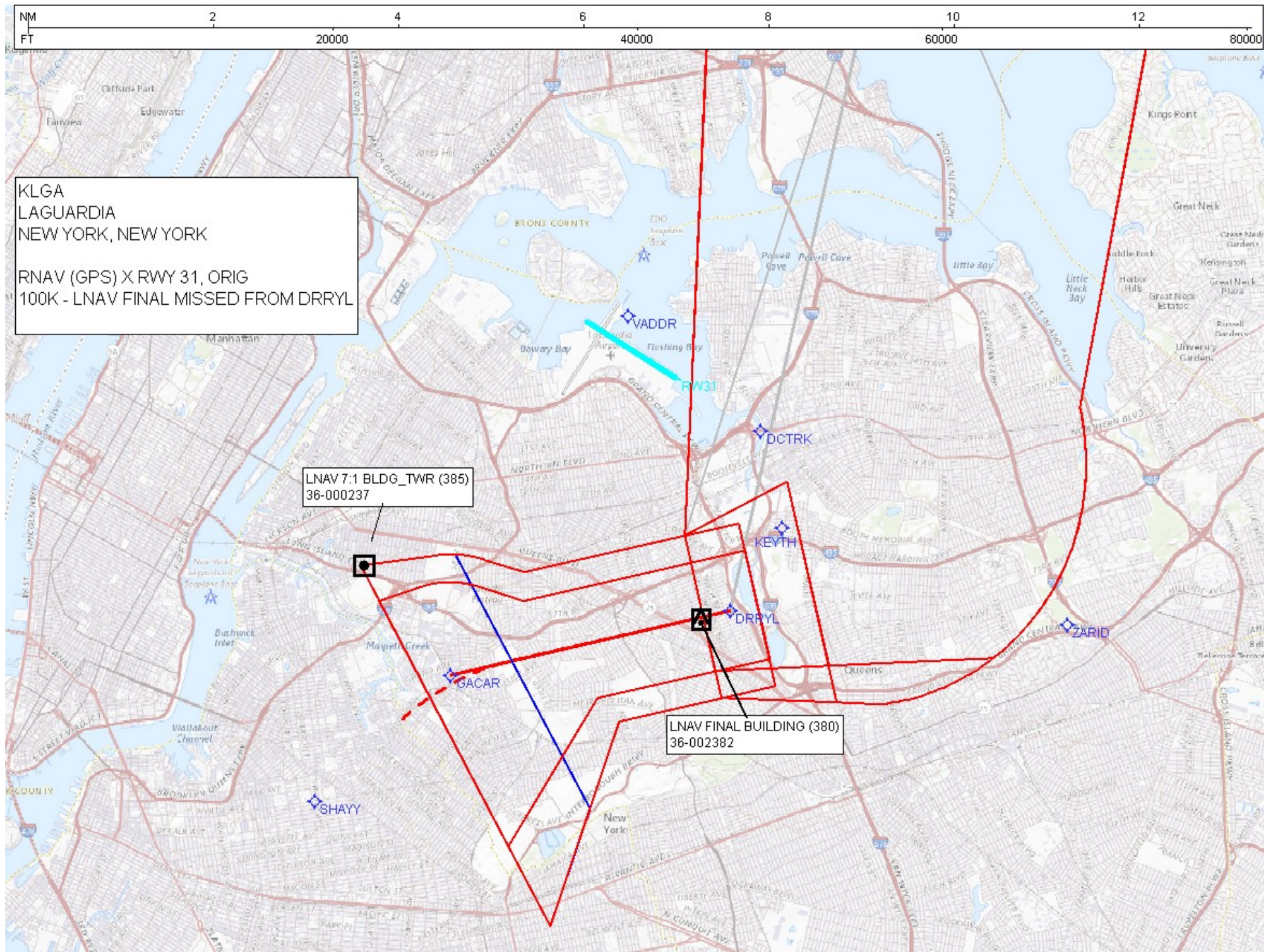
RNAV (GPS) X RWY 31

NE-2, 06 OCT 2022 to 03 NOV 2022











Federal Aviation Administration

Memorandum

To: Christopher J Hope, Manager, Flight Technologies and Procedures Division
THRU: Romana Wolf, Acting Manager, Flight Procedures and Airspace Group

From: Bev Bordy, Manager, Instrument Flight Procedures (IFP) Coordination Team,
AJV-A45

Subject: Waiver Request: LaGuardia, New York, NY (KLGA)

Digitally signed by
ANDI LAU
Feb 09, 2022

The attached waivers for LaGuardia, New York, NY (KLGA) are forwarded for your review and approval. Please return a signed copy for our files.

8260-1 RNAV (GPS) X RWY 31, ORIG

Please respond as soon as possible.

Attachment

INFO ONLY

1. FLIGHT PROCEDURE IDENTIFICATION:

RNAV (GPS) X RWY 31
LaGuardia
New York City, New York

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

8260.58 para 1-2-5 c (3)(d) FB turns only: The lesser of one-half the track change (five degrees minimum) or the applicable low/high altitude transition bank angle. Where operationally beneficial (e.g., to reduce leg length) an exception to the one-half track change rule is authorized at a fix when the XTT for the outbound leg is not less than 1.0, a succeeding turn fix uses the applicable low/high altitude transition bank angle, and/or the succeeding leg meets minimum length requirements.

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

Since the 8260.58 does not yet address TF turns in the final approach segment, in this case the turns are in the visual segment from the FAF to the MAP RWY 31. These three turns are required, the first turn is 44.97°, the second is 44.99° and the third is 44.99° which by criteria 22.50° of bank angle. Due to airspace constraints with LGA RWY 31 butting up against JFK's airspace to the east and south and the only 40% of the aircraft are RF equipped TF turns are the only way to bring aircraft into RWY 31 from the south without causing an airspace reconfiguration, and to obtain the geometry that is required the need to use 25.49° of bank is required. Currently there is two procedure that is in place, and they are the Expressway Visual RWY 31 and the (Special Procedure) RNAV Visual RWY 31. The RNAV Visual is the only procedure of the two that provides lateral and vertical guidance. As stated before only 40% of the aircraft the fly into LGA are RF equipped and running both of these procedures has become a safety concern to N90 and LGA tower with aircraft cutting each other off with the possible loss of separation.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

1. All aircraft that fly into LGA can command up to 30° of bank.
2. Highest structure within the visual segment is provided 250' of Required Obstruction Clearance (ROC) until aligning with the runway.
3. RADAR is required with this procedure.
4. With the MDA at 1160 ft/MSL the closest OBS 910' or above is 5.58NM west of DRRYL the missed approach point of the procedure.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Due to the type of aircraft that utilizes LGA and the tight airspace constraints no other option is available that provide lateral and vertical guidance.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

AFS-420, N90, LGA TWR, Industry, EFPT and AJV-A

7. SUBMITTED BY:

| DATE | OFFICE IDENTIFICATION | TITLE |
|------|-----------------------|-------|
| | AJV-A423 | MGR |

SIGNATURE
Digitally signed by
ALLAN WILL
Jan 19, 2022

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

Approved Based on the Equivalent Level of Safety in Block 4.

DATE ROUTING SYMBOL SIGNATURE

Romana Wolf
Signed By: Romana Wolf Fri Feb 11
2022 09:40:20 GMT-06:00:00
(Central Standard Time)

1. FLIGHT PROCEDURE IDENTIFICATION:

RNAV (GPS) X RWY 31
LaGuardia
New York City, New York

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

8260.19 para 8-6-4 a (6)(d) The LTP, or for offset procedures, the FTP in the "TO" column; e.g., RW18R for the LTP or a CNF for the FTP. Normally, the LTP/FTP will be designated as a fly-over waypoint; e.g., RW36R (MAP) (TF) (FO) or (CFWTY) (MAP) (TF) (FO). However, when RNP is required for the missed approach course and the RNP necessary is less than 1.0 [see Order 8260.58, chapter 4], the LTP/FTP must be coded as a fly-by waypoint; e.g., RW08R (MAP) (TF) (FB) or (CFYWZ) (MAP) (TF) (FB).

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

Due the design of the MAP leading into a TF turn for the visual phase of flight a FB waypoint is required for design construction.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

1. The missed approach obstacle evaluation is clear, with a MDA of 1160 MSL The highest obstacle within 5 NM from this approach path is 441' MSL building that is 1.37 NM south of DARRL.
2. The starting height of the missed approach surface at DARRL is 910' MSL based on a MDA of 1160 which is 469' above the 441' MSL building

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

No other construction criteria would allow this flightpath. RNAV Visuals and Charted visuals will not allow for operation below weather minimums of 3000-5 and still comply with LGA's noise abatement and airspace.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

LGA TWR, N90, AFS-400

7. SUBMITTED BY:

| DATE | OFFICE IDENTIFICATION | TITLE |
|------|-----------------------|---------|
| | AJV-A423 | MANAGER |

SIGNATURE
Digitally signed by
ALLAN WILL
Jan 19, 2022

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

Approved Based on the Equivalent Level of Safety in Block 4.

| DATE | ROUTING SYMBOL | SIGNATURE |
|------|----------------|---|
| | | Romana Wolf Signed By: Romana Wolf Fri Feb 11 2022 09:40:20 GMT-06:00:00 (Central Standard Time) |

1. FLIGHT PROCEDURE IDENTIFICATION:

RNAV (GPS) X RWY 31
LaGuardia
New York City, New York

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

8260.58 1-2-5 c. Obstacle Evaluation Area (OEA) and Flight Path Construction and Turn Perimeters & TABLE 1-2-2
Minimum airspeed restriction.

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

Due to airspace constraints of the LaGuardia Airport and John K. Kennedy Airport requires an aircraft to maintain CAT D final approach speed of 165 KIAS while following the Visual path to RWY 31 threshold. Then they can increase speed to 210 KIAS to the clearance limit.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

1. Speed will be coded into the FMS
2. Chart will be marked with the speed restriction visible for the flight crew to see.
3. An OBS that is equal or greater to the MDA of 1160 MSL is a 1465 building 6.5 NM west of DRRYL missed approach point.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

No other construction would allow this procedure to be built.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

PARC, AFS 420, N90

7. SUBMITTED BY:

| DATE | OFFICE IDENTIFICATION | TITLE |
|------|-----------------------|---------|
| | AJV-A423 | MANAGER |

SIGNATURE
Digitally signed by

ALLAN WILL

Jan 19, 2022

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

Approved Based on the Equivalent Level of Safety in Block 4.

| DATE | ROUTING SYMBOL | SIGNATURE |
|------|----------------|---|
| | | Romana Wolf Signed By: Romana Wolf Fri Feb 11 2022 09:40:21 GMT-06:00:00 (Central Standard Time) |

1. FLIGHT PROCEDURE IDENTIFICATION:

RNAV (GPS) X RWY 31
LaGuardia
New York City, New York

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

8260.58 paragraph 3-1-5: TF turns are not authorized in the final segment

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

This RNAV (GPS) procedure will allow for N90 to use R31 as a straight-in procedure with straight-in minimums while still on a North and when needed East flow simultaneously for JFK. This procedure is required to comply with New York noise abatement requirements and will allow for an advisory vertical guidance and a lateral path to the runway which the current Expressway Visual procedures does not provide. This RNAV (GPS) X RWY 31 procedure design with a more repeatable ground track for a safe air traffic flow in the congested New York metropolitan airport area than the current Expressway Visual RWY 31 and the RNAV Visual RWY 31

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

1. RADAR will be required, which will allow to the controller to see and correct any deviation from path.
2. Planview note stating the Turns in visual segment required.
3. With a MDA of 1160 feet MSL (1153 HAT) and the highest OBS to the primary area (FINAL) is Building (36-002653) 441 feet MSL is located 1.37 NM South of final course. Next highest OBS is a building (36-029754) 376 feet MSL is located 0.76NM South of final course.
5. Flight Management Systems (FMS) manufacturers report if FMS unable to process this procedure, the procedure will not be selectable nor displayed.
6. Per N90's email attached, Air Traffic will start coordinating runway change and flow of traffic when the weather is goes below 2000-5 and the wind at 2000 ft AGL is greater than 20 KTS from the south

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Due the type of aircraft that utilizes LGA and the the tight airspace constants no other option is available that provide lateral and vertical guidance.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

LGA ATCT, N90, AFS-400, Industry, EFPT

7. SUBMITTED BY:

| DATE | OFFICE IDENTIFICATION | TITLE |
|------|-----------------------|---------|
| | AJV-A423 | MANAGER |

SIGNATURE
Digitally signed by
ALLAN WILL
Jan 19, 2022

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

See JFK Weather actions Email that stated they start looking to change the runway configurations to discontinue the RNAV (GPS) Z RWY 13L procedure.

Approved Based on the Equivalent Level of Safety in Block 4.

| DATE | ROUTING SYMBOL | SIGNATURE |
|------|----------------|---|
| | | Romana Wolf Signed By: Romana Wolf Fri Feb 11 2022 09:40:21 GMT-06:00:00 (Central Standard Time) |

INFO ONLY

1. FLIGHT PROCEDURE IDENTIFICATION:

RNAV (GPS) X RWY 31
LaGuardia
New York City, New York

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

8260.3 para 3-3-2 c Determine visibility based on evaluation of the visual portion of the final approach segment. Apply the offset visual area to evaluate the visual portion of a straight-in approach that is not aligned with the runway centerline (more than ± 0.03 degrees). These evaluations determine if visibility minimums and/or night operations must be restricted. A modification of this visual area construction with an offset final is required.

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

The Visual area of this procedure contains Track To Fix (TF) segments legs that are not covered in this paragraph but is essential to insure that the 34:1 and the 20:1 surface is evaluated.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

The construction of this visual area starts as described in the 8260.3 para 3-3-2 c (2), 200 feet from LTP and in this case extends to DRRYL the procedures charted missed approach point. The Width: beginning width is 200 feet either side of the runway Center Line (RCL). The right side splays is based on formula $(1/2 W = (0.2625 \times D) + 200)$ is continued to each fix in the visual segment until it reaches DRRYL which is connected at the 1/2 width at the MAP (0.60nm). The left side starts at the point 200 feet from threshold and 200 feet from RCL and and splays per the formula above but also adds the distance from the radius tangent point of the turn fix. The inside turn consideration of the connects at the 1/2 width of the final approach primary area at DRRYL. This formal takes in a greater area than the formula 3-3-1 in the 8260.3.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Procedure could not be designed in criteria do to noise abatement and environmental issues .

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

AFS-420, N90, EFPT

7. SUBMITTED BY:

| DATE | OFFICE IDENTIFICATION | TITLE |
|------|-----------------------|---------|
| | AJV-A423 | MANAGER |

SIGNATURE

Digitally signed by

ALLAN WILL

Feb 09, 2022

8. AFS ACTIONS:

☒ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

Approved Based on the Equivalent Level of Safety in Block 4.

| DATE | ROUTING SYMBOL | SIGNATURE |
|------|----------------|---|
| | | Romana Wolf Signed By: Romana Wolf Fri Feb 11 2022 09:40:21 GMT-06:00:00 (Central Standard Time) |



FAA

Aviation Safety

Memorandum

Date:

To: Manager, Instrument Flight Procedures Coordination Team

From: Manager, Flight Technologies and Procedures Division

Prepared by: Flight Procedures & Airspace Group

Subject: Approval Request; Memorandum Dated 02/09/2022

Romana Wolf
Signed By: Romana Wolf Fri Feb 11
2022 09:40:21 GMT-06:00:00
(Central Standard Time)

Your request to publish Missed Approach speed restriction of 200 KIAS on the base turn for the "RNAV (GPS) X RWY 31, ORIG" at LaGuardia Airport, New York, NY was discussed at the Flight Standards Procedure Review Board meeting on 01/27/2022 is approved and forwarded for your action.

Please direct all inquiries to Victor B. Naso, PRB Lead, Flight Procedures and Airspace Group, at (405) 954-5181.

Attachments



Federal Aviation Administration

Memorandum

To: Chris Hope, Manager, Flight Technologies and Procedures Division
THRU: Romana Wolf, Acting Manager, Flight Procedures and Airspace
Group

From: Bev Bordy, Manager, Instrument Flight Procedures (IFP)
Coordination Team, AJV-A45

Subject: Approval Request: for Initial Minimum Speed of 200 KIAS

Digitally signed by
ANDI LAU
Feb 09, 2022

Due the tight airspace surrounding LaGuardia Airport (LGA) with Newark Intl Airport and Teterboro Airport (TEB) to the west and John F. Kennedy Intl Airport (JFK) to the east the need for a route that can be used from the north that will deliver an aircraft for the RNAV (GPS) X RWY 31 procedure and also RNAV legs from the north for the ILS or LOC RWY 4 and the RNAV (GPS) Y RWY 4. To accomplish this turn from the downwind leg to the Base Leg and then to the north a speed of 200 KIAS is required. This request is based on the 8260.58 Table 1-2-2 that states that 210 KIAS is the minimum airspeed for the initial segment but 200 KIAS is required below the Class B which in this case is not. So it seems that we have two minimum airspeed standards for Initial segments and Departure segments. This approval request is to use 200 KIAS on the base turn which will also be needed at the IAF from the south so all aircraft are at the same speeds on the same segment.

**FAA****Aviation Safety****Memorandum**

Date:

To: Manager, Instrument Flight Procedures Coordination Team

From: Manager, Flight Technologies and Procedures Division

Prepared by: Flight Procedures & Airspace Group

Subject: Approval Request; Memorandum Dated 02/09/2022

Your request to publish Missed Approach speed restriction of 200 KIAS on the base turn for the "RNAV (GPS) X RWY 31, ORIG" at LaGuardia Airport, New York, NY was discussed at the Flight Standards Procedure Review Board meeting on 01/27/2022 is approved and forwarded for your action.

Please direct all inquiries to Victor B. Naso, PRB Lead, Flight Procedures and Airspace Group, at (405) 954-5181.

Attachments

CONCURRENCES

ROUTING SYMBOL
AFS-410 MANAGER

INITIALS/SIG

DATE

ROUTING SYMBOL
AFS-420 C MANAGER

INITIALS/SIG

DATE

ROUTING SYMBOL
AFS-420 E MANAGER

INITIALS/SIG

Christopher P Harris
Signed By: Christopher P Harris Thu
Feb 10 2022 16:25:45 GMT-06:00:00
(Central Standard Time)ROUTING SYMBOL
AFS-420 S MANAGER

INITIALS/SIG

Thomas J Nichols
Signed By: Thomas J Nichols Thu
Feb 10 2022 17:24:08 GMT-06:00:00
(Central Standard Time)ROUTING SYMBOL
AFS-420 W MANAGER

INITIALS/SIG

DATE

ROUTING SYMBOL
AFS-410 B MANAGER

INITIALS/SIG

Merrill Armstrong
Signed By: Merrill Armstrong Fri Feb
11 2022 08:37:02 GMT-06:00:00
(Central Standard Time)

DATE

ROUTING SYMBOL

INITIALS/SIG

DATE

ROUTING SYMBOL

INITIALS/SIG

DATE

CONCURRENCES

ROUTING SYMBOL
AFS-410 MANAGER