Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: SID	Date Open: 06/19/2012	Task #: 2012061926422701001	Request #: 20120619264227
Procedure: SID HOPEA (RNAV) TWO NEW YORK NY KLGA		Airport ID: KLGA	Airport: LA GUARDIA		Reimbursable #:
City: NEW YORK	ST: NY	GPS #:		Estimated Chart Date: 01/10/2013	FICO #:
Fac ID:	Fac. Type: Proc D	Specialist: RONALD SALPINO			

Procedure Review

P2

	Rec'd	Rel'd	Full Name	Comments
Lead:	06/19/2012	09/25/2012	MARLON ROBINSON	
QA:	09/25/2012	10/03/2012	STEVEN SZUKALA	
Liaison:	10/03/2012		Spurlin	DME/DME - APPROVAL LETTER

DME / DME

Procedure Comments: ENROUTE **Remark Type:** INFORMATION

pg 1 of 2

NEW YORK, NY LA GUARDIA (KLGA) HOPEA TWO (RNAV) (SID) ENROUTE-NO FC: 11.13.12 PUB: 1.10.13

ATTACHED FORMS: 8260-15B; 8260-15C; 8260-2(S): ASALT-INT, REV 5; HOPEA, ORIG.

CONTACT: DON SMITH/MARLON ROBINSON-AJV-352 LEADS, 405.954.1036 / 405.954.3636.

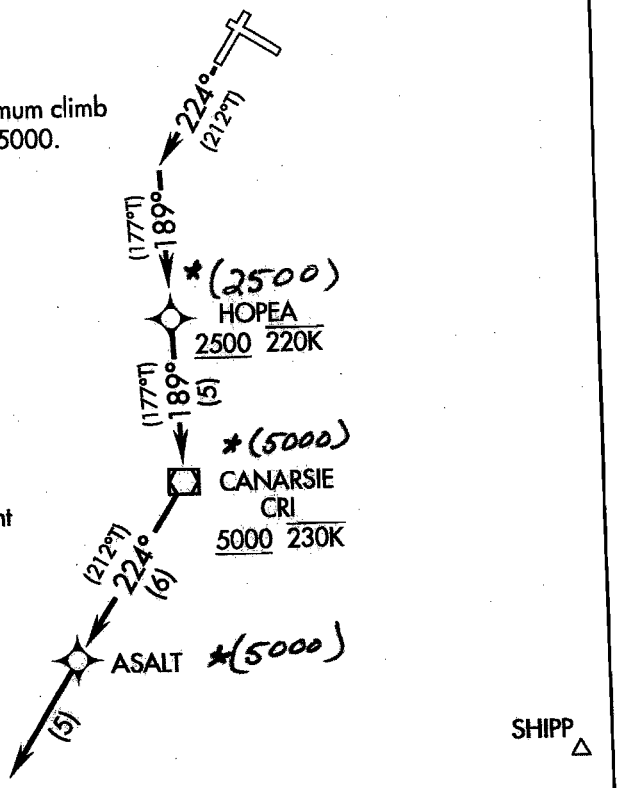
HOPEA TWO DEPARTURE (RNAV) NEW

ATIS
127.05
CLNC DEL
135.2
GND CON
121.7 263.0
LA GUARDIA TOWER
118.7 263.0
NEW YORK DEP CON
120.4 263.0

TAKEOFF MINIMUMS
Rwys 4, 13, 31: NA-ATC.
Rwy 22: Standard with minimum climb of 516' per NM to 5000.

* = FC ALTITUDES

TAKEOFF OBSTACLE NOTES
Rwy 22: Buildings and trees beginning 165' from DER, 150' left of centerline, up to 72' AGL/101' MSL. Blast fence, fence, stack on building, navaid and trees beginning 109' from DER, 138' right of centerline, up to 55' AGL/104' MSL. Tower 1.8 NM from DER, 566' right of centerline, 222' AGL/302' MSL.



PROTOTYPE-NOT FOR NAVIGATION

ASALT: 4031.655'/07357.836'
CRI: 4036.748'/07353.667'
HOPEA: 4041.429'/07353.956'

ROBBINSVILLE
RBV

DIXIE

WHITE

NOTE: For Turbojets only.
NOTE: DME/DME/IRU or GPS required.
NOTE: Radar required.
NOTE: RNAV 1.
NOTE: Do not exceed 220K until passing HOPEA.
NOTE: Do not exceed 230K until passing CRI VOR/DME.
NOTE: Strict compliance to track and altitude restrictions is mandatory. Aircraft performance may require reduced airspeed to comply with altitude restrictions. Advise ATC on initial contact if unable to comply with climb gradient requirements.
NOTE: Aircraft filed RBV VORTAC, WHITE, SHIPP, WAVEY, DIXIE expect vectors after ASALT.

NOTE: Chart not to scale.

DEPARTURE ROUTE DISCRIPTION

TAKEOFF RUNWAY 22: Climb heading 224° to intercept course 189° to cross HOPEA at or above 2500, then on track 189° to cross CRI VOR/DME at or above 5000, then on track 224° to ASALT, then on track 224° for vectors on course. Maintain 5000 or as assigned by ATC. Expect clearance to filed altitude/flight level 10 minutes after departure.

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HOPEA	TWO	HOPEA2.HOPEA	ONE	05/31/2012	

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RUNWAY 22: CLIMB HEADING 224.14 TO INTERCEPT COURSE 189.08 TO CROSS HOPEA AT OR ABOVE 2500, THEN ON TRACK 189.31 TO CROSS CRI VOR/DME AT OR ABOVE 5000, THEN ON TRACK 224.00 TO ASALT, THEN ON TRACK 224.00 FOR VECTORS ON COURSE. MAINTAIN 5000 OR AS ASSIGNED BY ATC. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: FOR TURBOJETS ONLY.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: RADAR REQUIRED.
NOTE: RNAV 1.
NOTE: DO NOT EXCEED 220 KIAS UNTIL PASSING HOPEA.
NOTE: DO NOT EXCEED 230 KIAS UNTIL PASSING CRI VOR/DME.
NOTE: STRICT COMPLIANCE TO TRACK AND ALTITUDE RESTRICTIONS IS MANDATORY. AIRCRAFT PERFORMANCE MAY REQUIRE REDUCED AIRSPEED TO COMPLY WITH ALTITUDE RESTRICTIONS. ADVISE ATC ON INITIAL CONTACT IF UNABLE TO COMPLY WITH CLIMB GRADIENT REQUIREMENTS.
NOTE: AIRCRAFT FILED RBV VORTAC, WHITE, SHIPP, WAVEY, DIXIE EXPECT VECTORS AFTER ASALT.

RWY 4, 13, 31 NA – ATC.
RWY 22, STANDARD WITH MINIMUM CLIMB OF 516 FT PER NM TO 5000.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 22, BUILDINGS AND TREES BEGINNING165 FT FROM DER, 150 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/101 FT MSL. BLAST FENCE, FENCE, STACK ON BUILDING, NAVAID AND TREES BEGINNING 109 FT FROM DER, 138 FT RIGHT OF CENTERLINE, UP TO 55 FT AGL/104 FT MSL. TOWER 1.8 NM FROM DER, 566 FT RIGHT OF CENTERLINE, 222 FT AGL/302 FT MSL.

CONTROLLING OBSTACLES:

RWY 22, 302 FT MSL TOWER 404437.82N/0735426.82W.

LOST COMMUNICATIONS PROCEDURES:

QUALITY A CHECK

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HOPEA	TWO	HOPEA2.HOPEA	ONE	05/31/2012	

ADDITIONAL FLIGHT DATA:

REFERENCE MAGVAR: KLGA 12W EPOCH YEAR 80. DME/DME ASSESSMENT: SAT (RNP 2.0)
CHART CROSSING RESTRICTIONS: HOPEA AT OR ABOVE 2500, CRI VOR/DME AT OR ABOVE 5000.
CHART: MAX 220 KIAS AT HOPEA.
CHART: MAX 230 KIAS AT CRI VOR/DME.

AIRPORTS SERVED:

LA GUARDIA NEW YORK, NY

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, TOWER, DEP CON

FIXES AND/OR NAVAIDS:

RBV VORTAC, WHITE, SHIPP, WAVEY, DIXIE.

REMARKS:

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HOPEA	TWO	HOPEA2.HOPEA	ONE	05/31/2012	

FLIGHT INSPECTED BY:
CURT E. DRAPER 12-12-12

REQUIRED EFFECTIVE DATE:
ROUTINE

DEVELOPED BY:
RONALD O. SALPINO AJV-352 09/05/2012

APPROVED BY:
SUSAN L. CRUMB AJV-352

COORDINATED WITH:
ATA, ALPA, APA, AOPA, NBAA, ZNY, ATCT, AMGR

CHANGES:

1. CHANGED CLIMB GRADIENTS FROM 321 FT/NM TO 540, THEN CG 585 FT/NM TO 2500, THEN CG 534 FT/NM TO 5000 TO 516 FT/NM TO 5000.
2. ADDED FIX ASALT AND ADDED FM LEG AFTER ASALT.
3. CHANGED LAST LEG TYPE FROM VM TO FM.

REASONS:

1. REDUCE CONFUSION AND CHART CLUTTER.
2. ATC REQUESTED DUE TO AIRSPACE CONSTRAINTS.

01/29/13: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 09/05/12.
1. CHANGED ITEM 1 IN THE CHANGES FROM CG FROM 518 FT/NM TO 5000 TO 516 FT/NM TO 5000.

03/18/13: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 03/01/13.
1. REMOVED DISTANCE ON FM LEG OF THE 8260-15C.

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HOPEA	TWO	HOPEA2.HOPEA	ONE		

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW22 (AER)	404707.57N/0735214.42W	N	-	-	-	-			
	404446.67N/0735410.80W	N	-	VI	212.14	2.77			CG 516 FT/NM TO 5000.
HOPEA	404125.73N/0735357.33W	Y	FB	CF	177.08	3.35	AT/ABOVE 2500	AT/BELOW 220K	VI CF PERMITTED
CRI VOR/DME	403644.90N/0735340.00W	Y	FB	TF	177.31	4.68	AT/ABOVE 5000	AT/BELOW 230K	
ASALT	403139.32N/0735750.18W	Y	FO	TF	212.00	6.00			
		Y	-	FM	212.00	-			

QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HOPEA (RNAV)	TWO	HOPEA2.HOPEA	ONE	05/31/2012	

ARINC PACKET - 424-18 - SID

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        CRI   K6011230VDTW N40364490W073534000    N40364490W073534000W0110000100     NARCANARSIE
        SUSAD        JFK   K6011590VDH  N40375840W073461700    N40375840W073461700W0120000112     NARKENNEDY

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   ASALT K60    C     N40313932W073575018                      W0130     NAR           ASALT
        SUSAEAENRT   HOPEA K60    W     N40412573W073535733                      W0131     NAR           HOPEA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KLGAK6ALGA     0     070YHN40463810W073522140W012000021         1800018000C    MNAR    LA GUARDIA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KLGAK6DHOPEA24RW22  010         0        VI                    2241                    18000
        SUSAP KLGAK6DHOPEA24RW22  020HOPEAK6EA0E    010CF JFK K6      3126006818910034D   + 02500          220               -
        SUSAP KLGAK6DHOPEA24RW22  030CRI  K6D 0V    010TF                    18930047    + 05000          230               -
        SUSAP KLGAK6DHOPEA24RW22  040ASALTK6EA0EY   010TF                    22400060
        SUSAP KLGAK6DHOPEA24RW22  050ASALTK6EA0EE      FM JFK K6      246401082240    D

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KLGAK6GRW22    0070012241 N40470757W073521442+0100    -0027900012000052150IIURD1    ITKDA
```

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HOPEA (RNAV)	TWO	HOPEA2.HOPEA	ONE	05/31/2012	

ARINC SUMMARY - 424-18 - SID

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RW22		010		VI		FB		224.1()			
	RW22	HOPEA	020		CF		FB	1.0	189.1()	003.4	AA 02500	AB 220
	RW22	CRI	030		TF		FB	1.0	189.3()	004.7	AA 05000	AB 230
	RW22	ASALT	040		TF		FO	1.0	224.0()	006.0		
	RW22	ASALT	050		FM		FB		224.0()			

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	CRI	N403644.90	W0735340.00	N4036.748	W07353.667
	JFK	N403758.40	W0734617.00	N4037.973	W07346.283
	ASALT	N403139.32	W0735750.18	N4031.655	W07357.836
	HOPEA	N404125.73	W0735357.33	N4041.429	W07353.956
	RW22	N404707.57	W0735214.42	N4047.126	W07352.240

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW22	00012	52

RADIO FIX AND HOLDING DATA RECORD

NAME: ASALT **STATE:** NY **COUNTRY:** US

LATITUDE/LONGITUDE: 403139.32N/0735750.18W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	CANARSIE	CRI	VOR/DME	T	223.00	212.00	6.00	6.00		2000	17500
2	SOLBERG	SBJ	VOR/DME	L	105.09	095.09		35.73		2000	17500

FIX RESTRICTIONS:
SPECIAL RNAV VISUAL RWY 13L, KJFK, NEW YORK, NY
SPECIAL RNAV VISUAL RWY 13R, KJFK, NEW YORK, NY
SPECIAL RNAV (RNP) RWY 13L, KJFK, NEW YORK, NY
SPECIAL RNAV (RNP) RWY 13R, KJFK, NEW YORK, NY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
CANARSIE (FAC 1) AND SOLBERG (FAC 2) USED TO ESTABLISH FIX COORDINATES
FAC 1 AND 2 2000 MRA USED PER ATC REQUEST FOR USE ON SPECIAL PROCEDURES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HOPEA (RNAV)			KLGA	NEW YORK	NY (US)
DP	NTHNS (RNAV)			KLGA	NEW YORK	NY (US)
IAP	RNAV (RNP) RWY 13L			KJFK	NEW YORK	NY (US)
IAP	RNAV (RNP) RWY 13R			KJFK	NEW YORK	NY (US)
IAP	RNAV VISUAL RWY 13L			KJFK	NEW YORK	NY (US)
IAP	RNAV VISUAL RWY 13R			KJFK	NEW YORK	NY (US)
IAP	VOR OR GPS RWY 13L/13R	1, 2		KJFK	NEW YORK	NY (US)

REQUIRED CHARTING: DP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 01/10/2013

REASON FOR REVISION:
UPDATED FIX USE.
UPDATED REQUIRED CHARTING TO INCLUDE DP.

DEVELOPED BY: **DATE:** 09/10/2012 **OFFICE:** AJV-352 **NAME:** RONALD SALPINO

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: EST
ARTCC: ZNY
ATC FACILITY: NYC APP CON
OTHER:

QUALITY CHECKED 3

RADIO FIX AND HOLDING DATA RECORD

NAME: HOPEA **STATE:** NY **COUNTRY:** US

LATITUDE/LONGITUDE: 404125.73N/0735357.33W **TYPE:** WP

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	HOPEA (RNAV)			KLGA	NEW YORK	NY (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 05/31/2012

DEVELOPED BY: **DATE:** 12/12/2011 **OFFICE:** AJV-352 **NAME:** DAVID PARKER

APPROVED BY: **DATE:** 04/09/2012 **OFFICE:** AJV-352 **NAME:** DARRYEL ADAMS

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: EST
ARTCC: ZNY
ATC FACILITY: N90
OTHER:

QUALITY CHECKED 3

Federal Aviation Administration

Memorandum

Date:

To: Manager, Flight Procedure Standards

From: Gregory Yamamoto
Manager, Terminal Products Group

Subject: **ACTION:** Approval Request

HOPEA (RNAV) Departure, New York/La Guardia, New York, NY.

Climb gradient exceeds 500 feet per NM, 8260.46D, paragraph 2-1d(2).

ATC requires minimum crossing altitudes of 2500 MSL at HOPEA and 5000 at CRI VOR/DME in order to de-conflict simultaneous operations at John F. Kennedy International and achieve airspace efficiencies in this historically congested and delay plagued region of the country.

The minimum climb required to clear obstacles in the ICA is 200 ft per NM. Procedure design requires a minimum 500 ft per NM climb to reach 500 feet above airport elevation (minimum LNAV engagement altitude) to execute the CF leg to KIWIE. Subsequent legs would require a 504 ft per NM climb to 2500, 535 ft per NM to 5000.

Request to publish takeoff minimums as standard with minimum climb 516 ft per NM to 5000. This initial minimum climb would ensure aircraft clear obstacles in the ICA, meet the minimum LNAV engagement altitude requirement, and reach the crossing restriction at HOPEA AND CRI VOR/DME.

This procedure is limited to turbojet aircraft which can reasonably be expected to meet or exceed these climb gradients during routine operations. A note has been added to the plan view instructing aircraft that are unable to meet the climb gradient to notify ATC for alternate instructions.

Attachments

Name:	DAVE COOK
Project Name:	KLGA HOPEA2 SID
Output File:	KLGA HOPEA2 SID RW22 ASALT 20120924_1640
Procedure Name:	HOPEA2
Software:	RNAV-Pro™
Version:	2.36v
Date/Time:	9/24/2012 4:40:37 PM
Input File:	KLGA HOPEA2 SID RW22 ASALT 20120618_1116.txt
Databases:	AVNIS Date: 02/07/2012
	Obstacle Date: 08/26/2011
	NFD Date: 09/30/2010
	DTED® (MAX) Date: 2002

Results Summary:

Flyability	✔	**Please Check Flyability Results**
DME/DME	✔	
Radars	✔	
Comms	?	
TERPS	?	

© 1996-2012 Air Traffic Simulation, Inc. All rights reserved. RNAV-Pro, DrawSpace and the ATSI logo are trademarks of Air Traffic Simulation, Inc. DTED® courtesy U.S. Geological Survey. DTED is a registered trademark of the National Geospatial-Intelligence Agency. Blue Marble imagery in this program produced by NASA and the Earth Observatory (http://earthobservatory.nasa.gov.) This product has not been endorsed or otherwise approved by the National Geospatial-Intelligence Agency, United States Department of Defense, or the United States Federal Aviation Administration. Portions of this product sponsored by the United States Federal Aviation Administration, DTFA-02-01-D-12906, DTFAAC-05-D-00013. Sectional charts should not be used for actual flight navigation.

RW22(AER)
RW04(DER)
GH22
HOPEA
CRI
ASALT
5 NM
© 2012 ATSI. All rights reserved. Imagery may be courtesy government agencies. See product infor for details.

Flight Plan

Return To Summary

Name	Type	Lat/Lon	Alt [Ft]	VNAV Mode	IAS [Kts]	Turn Type	Leg Type
RW22(A...	WP	N 40° 47' 7.57" W 73° 52' 14.42"	11.5	VNAV	0.0	Fly By	TF
RW04(D...	WP	N 40° 46' 8.99" W 73° 53' 2.83"	55.6	VNAV	130.0	Fly Over	VI
GH22:	WP	N 40° 44' 41.61" W 73° 54' 14.98"	540.0	VNAV	220.0	Fly By	CF - 176.1°
HOPEA	WP	N 40° 41' 25.73" W 73° 53' 57.33"	2500.0	VNAV	220.0	Fly By	TF
CRI	WP	N 40° 36' 44.90" W 73° 53' 40.00"	5000.0	VNAV	230.0	Fly By	TF
ASALT	WP	N 40° 31' 39.32" W 73° 57' 50.18"	5000.0	VNAV	180.0	Fly Over	TF

Flyability

Return To Summary

Settings:

Flight Type: Runway Departure
Selected Airport: KLGA
Aircraft Category: Cat D
Climb Gradient:

Table:

552.0 Ft/NM up to **710.0 Ft MSL**
615.0 Ft/NM up to **2500.0 Ft MSL**
354.0 Ft/NM up to **5000.0 Ft MSL**

Ground Speeds:

Departure: **120.0 Kts** out to **10.0 NM**
Table:

200.0 Kts up to **11000.0 Ft.**
240.0 Kts up to **18000.0 Ft.**
260.0 Kts up to **24000.0 Ft.**
340.0 Kts up to **99900.0 Ft.**

Wind Settings: *None assigned*
Descent During a Turn: Allowed
VNAV Mode: Flight Plan

Aircraft ALTITUDE at Fly-By WP GH22: too high.

Aircraft ALTITUDE at Fly-By WP CRI too low.

Flight Track comes into contact with terrain. Minimum AGL along route was -67.24 Ft.
Flight Track contacted terrain (DTED lvl 0 max) between AER and DER or within 2/3 NM of DER.

DME/DME

Return To Summary

Settings:

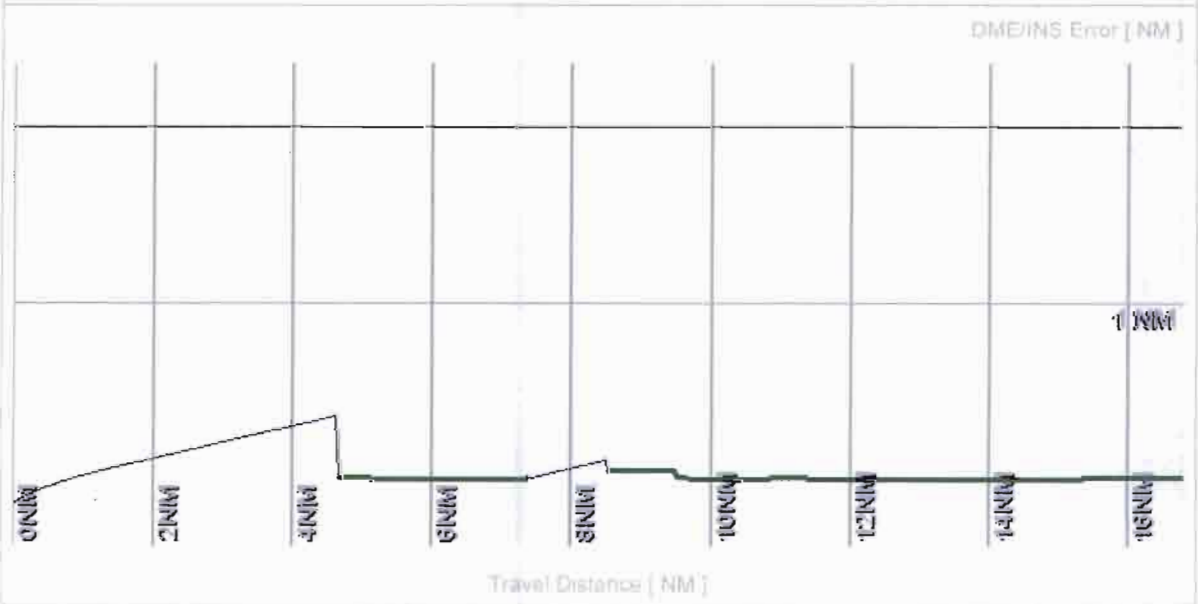
RNP: 2.0
Flight Mode: Manual
Line of Sight (DTED Level 0 Max): Evaluated
DME Restrictions: Evaluated
Inertial Drift: Enabled
Initial Drift: 0.165 NM
INS Drift Rate: 8.000 NM/Hour
Range Mode: OSV
Co-Frequencies: Evaluated
RNP Edges: Evaluated
Min DME Range: 3.0 NM
Allowed Gap Length: 4.0 NM
DME Types: VOR/DME , VORTAC , TACAN , and User
DME Include Angles: 30 to 150
Critical DMEs: Allowed
DoD Facilities: Not included
Foreign Facilities: Not included
Low & Terminal DMEs: Included
Flight Check DMEs: Selected
Higher Altitudes: Evaluated
Near Maximum Altitude: Evaluated
Minimum MSL DMEs Avail: 1623 Ft.

Total Number of DMEs Used: 5

Maximum DME Error: 0.541 NM.

No Critical DMEs were found.

Available DMEs: JFK, LGA, COL, SAX, CRI, TEB, DPK, RBV, SBJ



DME/DME (Continued.)

Return To Summary

DMEs Used

#	Name	Lat/Lon/MAGVAR	Range	Source	Critical	Err. [NM]	Status	Time	Distance
1	COL	N 40° 18' 41.88" W 74° 9' 35.02" W 11	L	Database	NO	0.863	Enabled	23.0 %	21.9 %
2	JFK	N 40° 37' 58.40" W 73° 46' 17.00" W 12	H	Database	NO	0.625	Enabled	24.0 %	24.0 %
3	TEB	N 40° 50' 55.40" W 74° 3' 44.10" W 11	T	Database	NO	0.541	Enabled	40.3 %	49.2 %
4	DPK	N 40° 47' 30.36" W 73° 18' 13.24" W 12	L	Database	NO	0.541	Enabled	26.1 %	34.5 %
5	RBV	N 40° 12' 8.65" W 74° 29' 42.09" W 10	H	Database	NO	0.541	Enabled	1.0 %	1.0 %

Flight Check DME Selection

Distance [NM]	Selected DMEs					Alternate
0.0						
1.2	JFK					
2.6	JFK	LGA	COL	SAX		
6.1	JFK	CRI	COL	DPK	TEB	LGA
10.5	JFK	LGA	RBV	DPK	TEB	COL

DME/DME (Continued.)

Return To Summary

Inertial Drift Segments

#	Start Location	End Location	Length [NM]
1	N 40° 47' 7.57" W 73° 52' 14.42"	N 40° 42' 55.09" W 73° 54' 6.57"	4.6
	VOR: CMK	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: COL	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: CRI	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: DPK	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: JFK	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: LGA	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: SAX	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: TEB	Available from N 40° 47' 7.57" W 73° 52' 14.42" to N 40° 42' 55.09" W 73° 54' 6.57"	
	VOR: SBJ	Available from N 40° 45' 18.61" W 73° 53' 44.41" to N 40° 42' 55.09" W 73° 54' 6.57"	

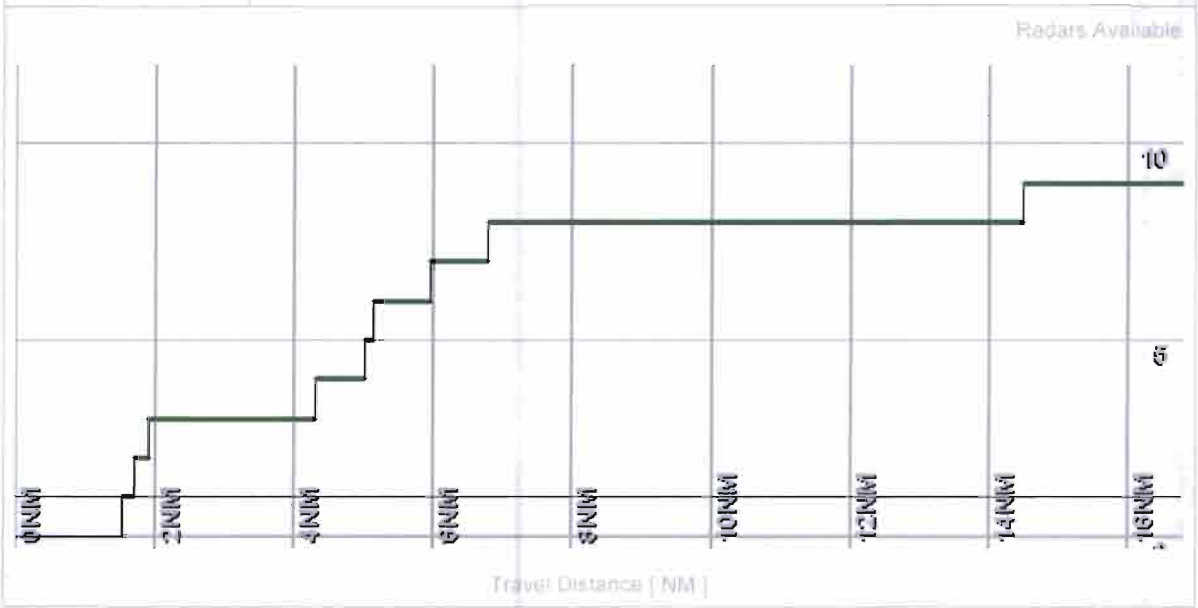
DME/DME (Continued.)

Return To Summary

Inertial Drift Segments (Continued.)

#	Start Location	End Location	Length [NM]
2	N 40° 40' 11.35" W 73° 53' 52.61"	N 40° 39' 3.38" W 73° 53' 48.45"	1.1
	VOR: CMK	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 27.37" W 73° 53' 49.92"	
	VOR: COL	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: CRI	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: DPK	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: JFK	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: LGA	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: RBV	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: SAX	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: SBJ	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	
	VOR: TEB	Available from N 40° 40' 11.35" W 73° 53' 52.61" to N 40° 39' 3.38" W 73° 53' 48.45"	

Radar Analysis

Return To Summary

Settings: **Radar Types:** ARSR and ASR