

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION CATEGORICAL EXCLUSION
DECLARATION**

Description of Federal Action: The Federal Aviation Administration (FAA) will conduct an air traffic test to move waypoint ADAXE, 784 feet southwest, and establish a new waypoint REVGE as part of the publication of a new departure procedure called HOLT B. The HOLT B departure procedure supports safe and efficient airspace usage for departing aircraft north from Reagan International Airport (DCA). The proposed action was developed because of a longstanding concern caused by airlines penetrating the Prohibited Area P-56 that protects a portion of Washington, D.C. and the White House. Due to these incursions, the U.S. Secret Service requested that the FAA Administrator identify and implement changes for aircraft operating out of DCA to eliminate aircraft violations of the Prohibited Area P-56. **Attachment A** contains the letter from The U.S. Secret Service that requests FAA's assistance. FAA used Aviation Environmental Design Tool (AEDT) software to conduct a noise screening study for the proposed action, which showed no reportable or significant noise increases would be introduced. **Attachment B** contains the noise screening report for the proposed action. The noise screening report assumed that 100% of north-flow departures would utilize the new waypoint REVGE, which was an extremely conservative assumption for this proposed action, which is only expected to be used by 10% of departures. The FAA plans to publish the HOLT B procedure on January 30, 2020 and evaluate the effectiveness of the amendment. **Attachment C** contains a depiction of the proposed amended procedure. If FAA deems the amended HOLT B meets the purpose and need of reducing incursions into P-56, the FAA will propose the permanent implementation of the HOLT B as well as an amendment to the remaining existing north-flow departure procedures at DCA so that all aircraft follow the new REVGE waypoint. Any such proposal would be subject to a separate environmental review process under NEPA and any other applicable environmental laws or requirements. The current proposed action has independent utility because it is solely intended to determine the safety and effectiveness of the incorporation of REVGE. Once that determination has been made, the FAA will consider the environmental effects of permanently using the REVGE waypoint for all of its north-flow departures.

Basis for this Determination: An environmental review and noise screening study was conducted to ensure that the Federal action is in compliance with the National Environmental Policy Act (NEPA) and its implementing regulations. This review was conducted in accordance with policies and procedures in Department of Transportation Order 5610.1C, "Procedures for Considering Environmental Impacts" and FAA Order 1050.1F.

Declaration of Exclusion: The FAA has reviewed the above referenced Federal action and it has been determined, by the undersigned, to be categorically excluded from further environmental documentation according to FAA Order 1050.1F. The implementation of this action will not result in any extraordinary circumstances in accordance with FAA Order 1050.1F, Paragraph 5-2.

The applicable categorical exclusion is: FAA Order 1050.1F, Paragraph 5-6.5 (n): "Tests of air traffic departure or arrival procedures conducted under 3,000 feet above ground level (AGL), provided that: (1) the duration of the test does not exceed six months; (2) the test is requested by an airport or launch operator in response to mitigating noise concerns, or initiated by the FAA for safety or efficiency of proposed procedures; and (3) the test data collected will be used to assess the operational and noise impacts of the test."

Consideration of Extraordinary Circumstances: Based on the FAA's noise screening study that indicated no reportable noise increases would occur as a result of our proposed action, the FAA considered the extraordinary circumstances set forth in FAA Order 1050.1F § 5-2(b) and determined none of them to be present.

Section 106 of the National Historic Preservation Act: The FAA has also considered the potential for this action to cause adverse effects to historic resources. The FAA determined this is not the type of activity that

has the potential to cause effect on historic properties, assuming such historic properties were present, and therefore the FAA has no further obligations under Section 106. 36 C.F.R. § 800.3(a). The FAA reached this conclusion based on a number of considerations, including the following: the limited duration of the proposed action; the proposed action is only expected to be used by approximately 10% of departures; the noise screen determined the proposed action will not cause any reportable or significant noise increases; the proposed action will not introduce any audible or visual effects to the area; according to MWAAs Noise Exposure Map, the area of change already falls within the 45 DNL contour (at a minimum) and therefore any resources recognized for their quiet attributes would not be affected by this action.

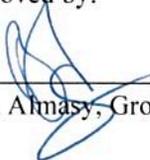
Concurrence by:

Andrew Pieroni

Date: November 25, 2019

Andy Pieroni, Environmental Protection Specialist, Eastern Service Center, Operations Support Group

Approved by:



Date: 11/25/19

Ryan Almasy, Group Manager, Eastern Service Center, Operations Support Group

ATTACHMENT A – Secret Service Request Letter



DIRECTOR

U.S. Department of Homeland Security
UNITED STATES SECRET SERVICE

Washington, D.C. 20223

August 15, 2018

Mr. Daniel K. Elwell
Acting Administrator
U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, D.C. 20591

Dear Mr. Elwell:

I am writing you to discuss flight incursions into the Prohibited Area P-56, District of Columbia. The proximity of Ronald Reagan Washington National Airport (KDCA) to the White House and Naval Observatory, creates a significant security risk for the U.S. Secret Service (Secret Service). Pursuant to Title 18, Section 3056, of the United States Code, the Secret Service is responsible for implementing appropriate security procedures for the President, Vice President, and visiting heads of state. In accordance with these responsibilities, the Secret Service must ensure the security of the airspace above the White House and the Naval Observatory, both of which fall within the Prohibited Area P-56. Over the past few years the Secret Service has observed an increase in flight violations into the Prohibited Area P-56 from aircraft departing and arriving KDCA, resulting in an annual incursion increase of approximately thirty percent. The increased numbers of aircraft violating the Prohibited Area P-56 has caused great concern for the Secret Service.

Pursuant to 14 CFR Part 73 [Airspace Docket No. 98-AWA-4] Change of Using Agency for Prohibited Area P-56, from the Administrator of the Federal Aviation Administration to the Secret Service, I would respectfully request that the Federal Aviation Administration identify and implement new procedures for aircraft operating out of KDCA. The objective of the Secret Service, regarding this request, is to reduce and ultimately eliminate aircraft violations of the Prohibited Area P-56. Each incursion provokes a significant coordinated response from the Department of Defense and numerous federal agencies, including the Secret Service, causing the expenditure of valuable resources while also affecting commercial and other air traffic in the National Capital Region. Additionally, this request will reduce the exposure to potential liability which commercial airlines, air charter companies, and individual pilots face for each incursion.

Thank you for any assistance you can provide with this request. Should you wish to discuss this matter further, please do not hesitate to contact Deputy Assistant Director, Special Operations, James Lewis on 202-406-5452.

Sincerely,

Randolph D. "Tex" Alles

ATTACHMENT B – Noise Screening Results

Noise Screening Analysis Report

For

Ronald Reagan Washington National Airport

KDCA

Washington, DC

Prepared by:

ATO, AJV-114, Environmental Policy Team

Thursday, November 21, 2019

DCA Noise Screening Analysis Report *For Official Internal Use Only*

This Noise Screening Report was prepared by the FAA to assess noise exposure from the proposed project under consideration. Even though the data and results contained in the report are accurate, the report is a preliminary document, potentially subject to revision, until the FAA makes a final environmental decision related to the proposed project.

Summary

Noise analysis was completed to assess potential impacts resulting from proposed air traffic actions at Ronald Reagan Washington National Airport (DCA) in Washington, DC, using the Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS) Environmental Plug-in tool and the Aviation Environmental Design Tool (AEDT).

Historical radar track data was used to create a baseline scenario. After the baseline scenario was built, aircraft operations assigned to the proposed procedure were modeled as flying the proposed procedure, which provides the alternative scenario. Selections for track assignments were made based on historical flight paths, and RNAV capable aircraft were assigned to the procedure nearest to their historical tracks in the alternative scenario.

Once the baseline and alternative scenarios were built, the TARGETS Environmental Plug-in Tool was used to generate noise outputs for both scenarios. In the case of DCA, there was no significant or reportable increase in noise resulting from the proposed action.

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Purpose

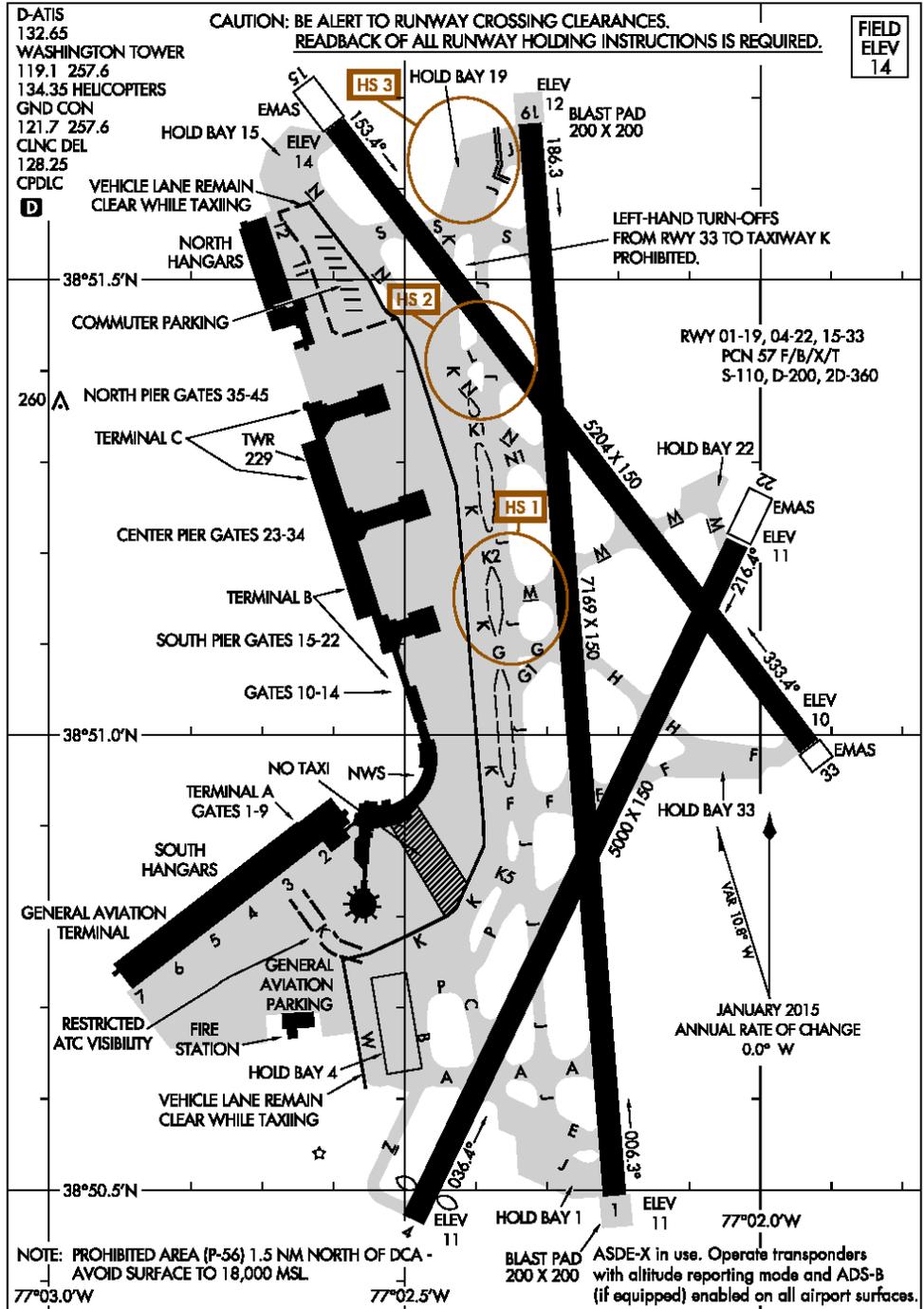
The purpose of this report is to document the process used to analyze the noise impact of proposed air traffic actions at Ronald Reagan Washington National Airport (DCA) in Washington, DC and to present the results of that analysis. The analysis of the instrument flight procedures at DCA was performed using the Terminal Area Route Generation, Evaluation, and Traffic Simulation (TARGETS) Environmental Plug-in tool and the Aviation Environmental Design Tool (AEDT).

Figure 1 shows the airport diagram for DCA, which provides the runway layout and the airport's field elevation. Table 1 shows the procedure name, type and publication date. Figures depicting the procedure changes are shown in Appendix A.

Table 1: Proposed Procedures Modeled for DCA

Procedure Name	Procedure Type
CLTCH TWO	RNAV SID
HORTO THREE	RNAV SID
JDUBB TWO	RNAV SID
REBLL FOUR	RNAV SID
SCRAM FOUR	RNAV SID
WYNGS FOUR	RNAV SID

19283 **AIRPORT DIAGRAM** RONALD REAGAN WASHINGTON NATIONAL (DCA)
 AL-443 (FAA) WASHINGTON, D.C.



AIRPORT DIAGRAM WASHINGTON, D.C.
 19283 RONALD REAGAN WASHINGTON NATIONAL (DCA)

Figure 1: Airport Diagram of DCA

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Methods

Noise screening was completed using the TARGETS Environmental Plug-in tool to calculate Day-Night Average Sound Levels (DNL) from existing operations (baseline) and modeled operations to replicate the proposed action (alternative). Historical radar track data for DCA was obtained from the Performance Data Analysis and Reporting System (PDARS). After concurrence of the dates to be used by the environmental specialist and air traffic facility, 60 days of random radar track data were selected for the DCA analysis representing a range of temperature and wind conditions as well as being representative of the average runway usage. A list of the tracks selected for analysis are shown in Appendix B.

After the removal of overflights, incomplete track segments, and other unusable tracks, 24,743 tracks were used for the analysis. The altitude of the historical tracks was considered and a range ring was set to contain the area where most of the tracks reached above 10,000 feet Above Field Elevation (AFE). This established the study area and the tracks outside of the study area were removed from the analysis. In the case of DCA, the study area is a circle with a radius of 40 nautical miles (nm) centered over the airport.

The randomly selected dates are presumed to represent average traffic counts and traffic flows through various seasons and peak travel times for DCA. There were no significant runway outages or significant conditions that would otherwise result in abnormal traffic counts or traffic flows. In order to calculate the Average Annual Day (AAD) impacts, traffic counts for average daily departures and arrivals used for annualization in this analysis were obtained through the FAA's AFS Data Analytics Runway Usage Module.

Historical radar track data was used to create a baseline noise exposure, which provides lateral path definition, aircraft fleet mix, departure/arrival stream proportions for each runway, and day/night traffic ratios. The alternative scenario was built by taking aircraft operations and assigning them to the proposed procedure instead of their historical tracks. RNAV capable aircraft were assigned to the procedure based on their historical tracks, proximity to other procedures, and any additional usage information from the Environmental Specialist. In the case of DCA, all operations departing from runways 01 and 03 were assigned to a proposed procedure.

The analysis does not take into account terrain. All calculations were made in reference to the airport's field elevation. The altitude controls were based on AEDT standard aircraft profiles. With respect to lateral distribution, a 0.5 nm dispersion for RNAV procedures was used and a 0.3 nm dispersion for RNP procedures was used based standard methods for noise screening. For tracks near the runway where dispersion is normally less than 0.3 nm, dispersion was based on historical track data.

Once the baseline and alternative scenarios were built, the TARGETS Environmental Plug-in Tool was used to generate noise outputs for both scenarios. The Environmental Plug-in Tool uses the Aviation Environmental Design Tool to calculate noise. The noise output files from AEDT for both the baseline and alternative noise exposures consist of a series of equally spaced grid points, each showing the DNL value. The noise grid (receptor set) is a square grid extending 30 nm in each direction of the airport with grid points (receptors) spaced 0.25 nm apart. The noise results of the baseline and alternative scenarios were then compared to test for potential noise impacts.

The noise impact is a comparison between the baseline and the alternative noise exposure that depicts reportable and significant noise changes at all affected locations per the criteria indicated in FAA Order 1050.1F and Chapter 32 of FAA Order 7400.2K. The reportable and significant noise increases and decreases (if any) are then depicted on an aerial map.

Results

1. Noise Exposure

The baseline and alternative noise exposure is shown in Figure 3-1 and Figure 3-2, which depicts the levels and locations of the noise produced by the historical radar track data for arrivals and departures.

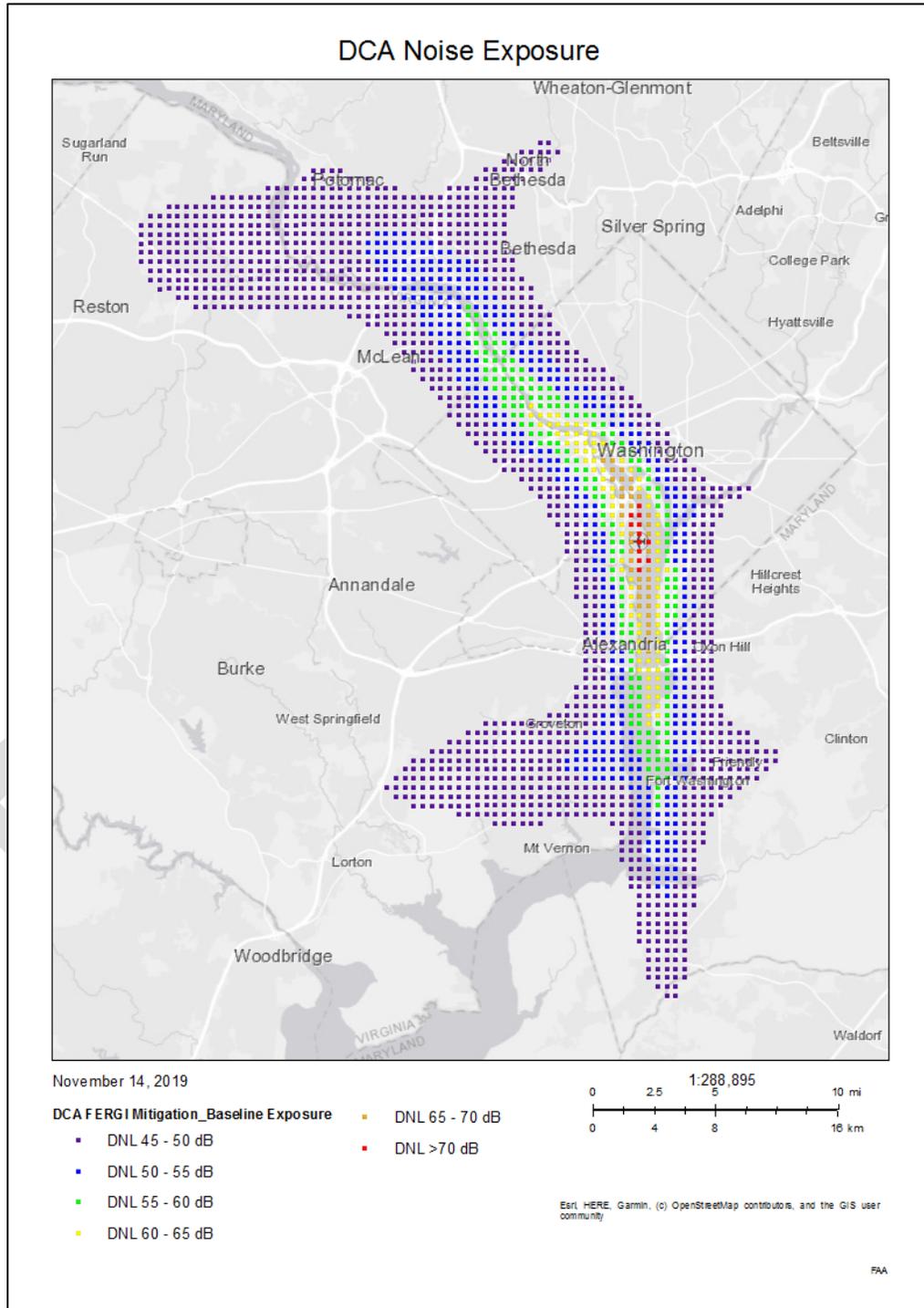


Figure 3-1: Baseline Noise Exposure in TARGETS

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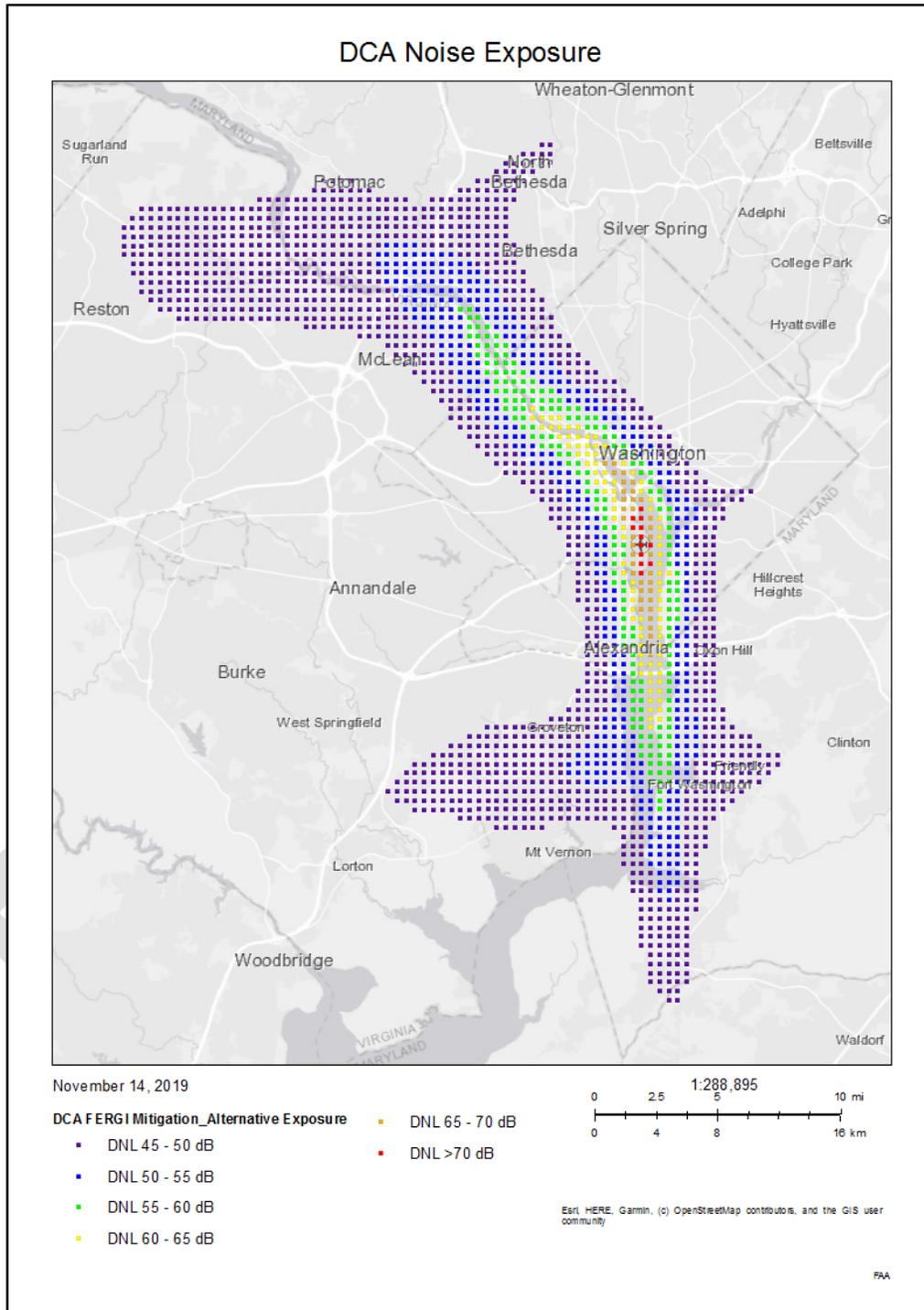


Figure 3-2: Alternative Noise Exposure for the Proposed Procedures in TARGETS

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2. Noise Impacts

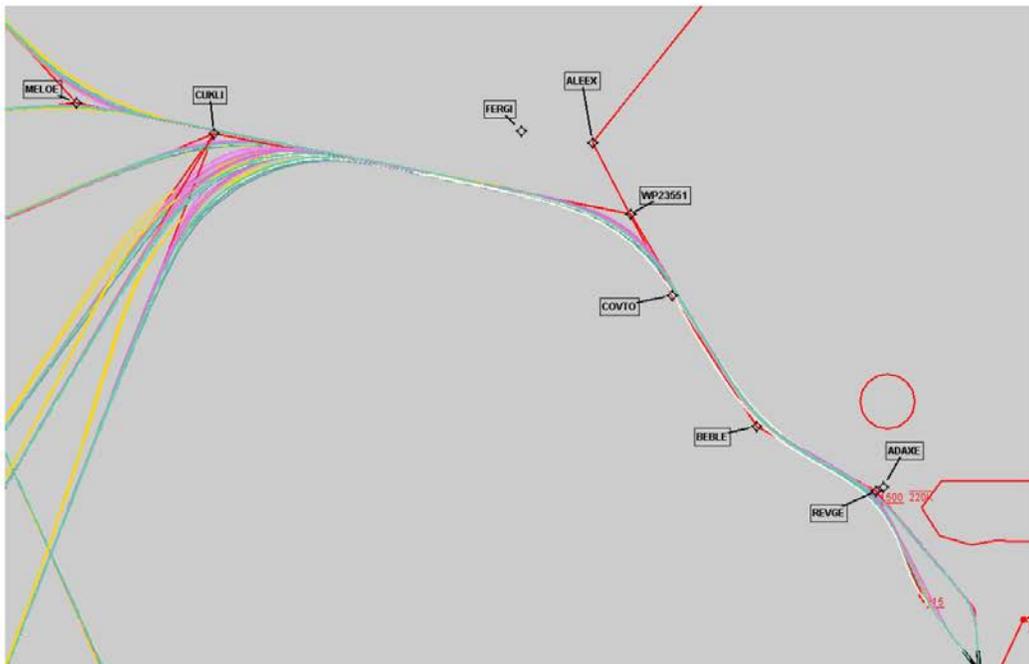
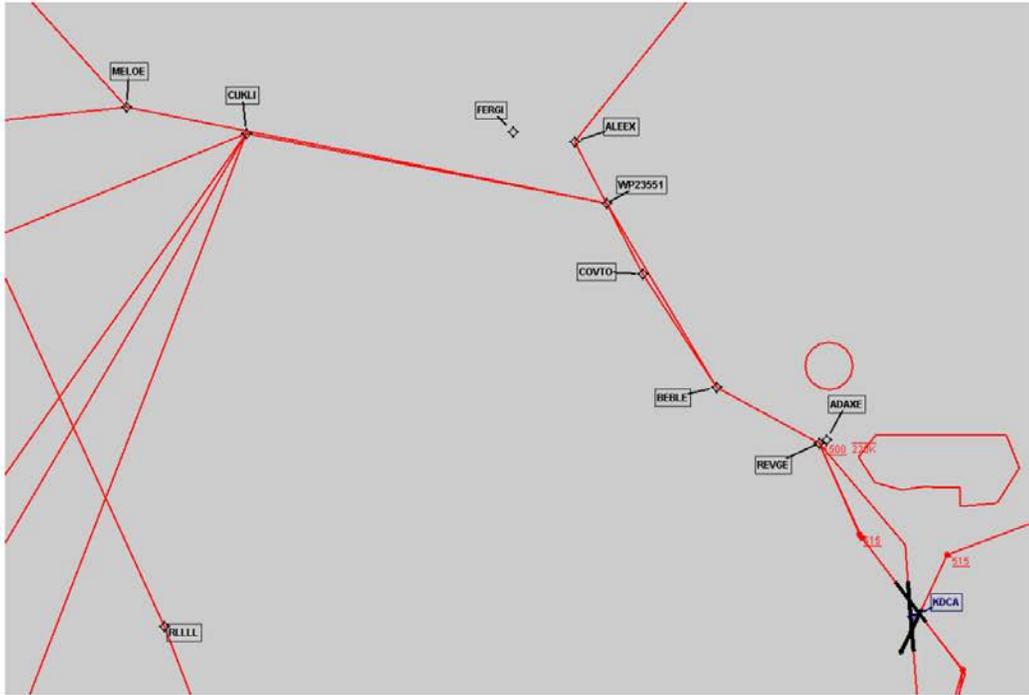
A comparison of the baseline and alternative scenarios by the TARGETS Environmental plug-in determines the noise impacts of the proposed action. Significance of noise impacts is defined by FAA Order 1050.1F¹ which establishes the threshold for significant increases in noise exposure. Where the proposed action results in a noise impact, TARGETS graphically displays a noise impact layer that indicates the locations of reportable and significant changes. When applicable, these impacts are shown overlaying a map view of the area surrounding the airport. In the case of DCA, there was **no significant increase in noise resulting from the proposed action.**

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¹ According to Exhibit 4-1 of FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, a noise impact is significant if “*The action would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.*”

Appendix A Proposed Changes to DCA SIDS

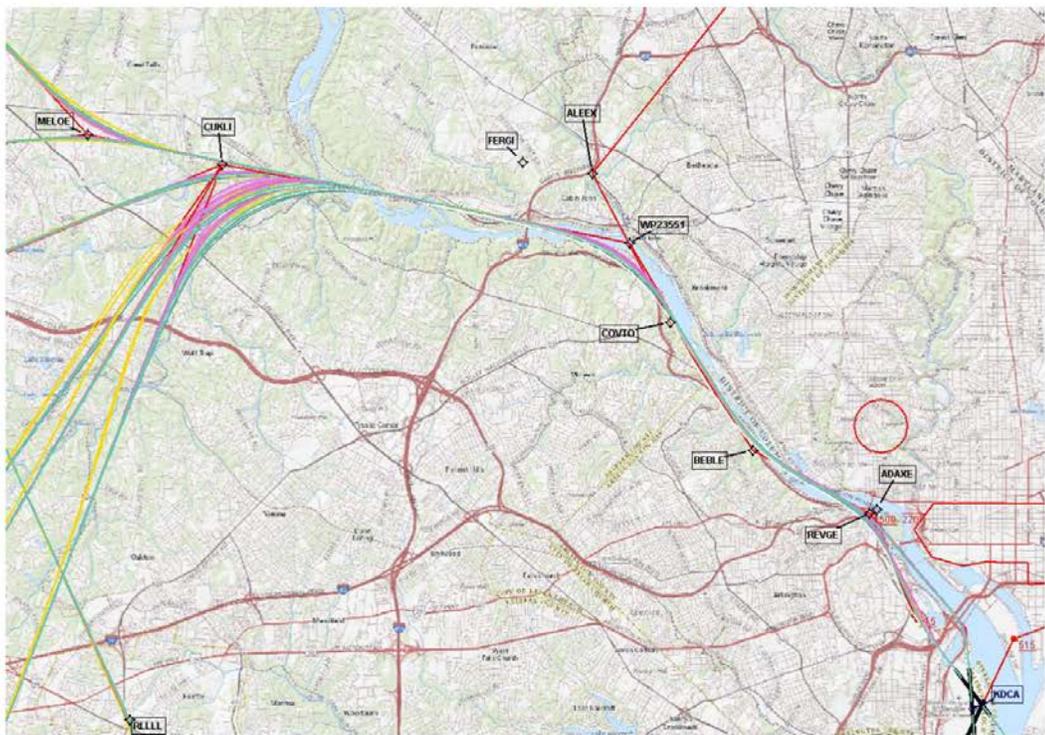
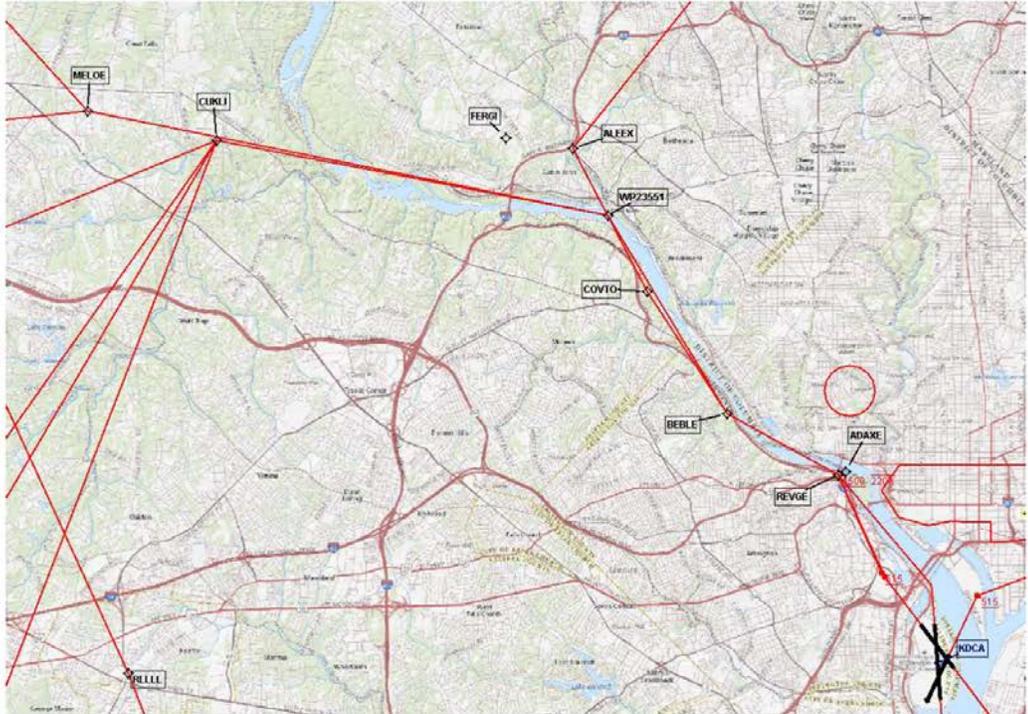
DCA SIDS - ALTERNATIVE ROUTE FROM BEBLE TO CUKLI/MELOE



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Appendix B Random Tracks Used for Analysis

1	7/9/2018
2	7/21/2018
3	7/23/2018
4	7/24/2018
5	7/26/2018
6	8/1/2018
7	8/5/2018
8	8/18/2018
9	8/20/2018
10	8/27/2018
11	8/29/2018
12	8/30/2018
13	9/1/2018
14	9/9/2018
15	9/11/2018
16	9/19/2018
17	10/8/2018
18	10/9/2018
19	10/14/2018
20	10/16/2018
21	10/17/2018
22	10/19/2018
23	10/21/2018
24	10/31/2018
25	11/7/2018
26	11/12/2018
27	12/1/2018
28	12/4/2018
29	12/7/2018
30	12/11/2018

31	12/12/2018
32	12/13/2018
33	12/18/2018
34	12/23/2018
35	12/27/2018
36	12/31/2018
37	1/3/2019
38	1/28/2019
39	1/30/2019
40	2/4/2019
41	2/5/2019
42	2/6/2019
43	2/8/2019
44	2/15/2019
45	2/18/2019
46	2/25/2019
47	3/9/2019
48	3/12/2019
49	3/20/2019
50	3/26/2019
51	3/27/2019
52	3/28/2019
53	4/25/2019
54	4/26/2019
55	4/27/2019
56	5/1/2019
57	5/3/2019
58	5/6/2019
59	5/23/2019
60	5/28/2019

ATTACHMENT C – Amended HOLT/B Procedure Depiction

