Federal Aviation Administration

Finding of No Significant Impact (FONSI)
&
Record of Decision (ROD)

For the Implementation of an Area Navigation (RNAV) Standard Instrument Departure (SID) for Runway 33L at Boston-Logan International Airport

May 2013

I. INTRODUCTION

This document serves as the Federal Aviation Administration's (FAA) Finding of No Significant Impact and Record of Decision (FONSI/ROD) and provides final agency determinations and approval for the proposed action, namely the implementation of an Area Navigation (RNAV) Standard Instrument Departure (SID) procedure for Runway 33 Left (L) at Boston-Logan International Airport. This FONSI/ROD is based on the information and analysis contained in the Final Environmental Assessment (Final EA) dated May 2013 attached hereto.

Furthermore, this FONSI/ROD:

- Completes the FAA's required environmental review and decision-making process. It is prepared and issued to announce and document a Federal action and decision in compliance with the National Environmental Policy Act of 1969 (NEPA) [42 U.S.C. Section 4321, et seq.], the implementing regulations of the Council on Environmental Quality (CEQ) [40 CFR Parts 1500-1508] and FAA directives [Order 1050.1E, Change 1, *Environmental Impacts: Policies and Procedures* (March 20, 2006)]. This FONSI/ROD is also used by the FAA to demonstrate and document its compliance with all applicable

environmental laws and requirements, including interagency and intergovernmental coordination and consultation, public involvement and documentation requirements;

- Provides the final Federal determination and approval based on environmental analysis and findings in the attached Final EA. The FAA's decision is based on the information and analysis contained in the Final EA and all other applicable documents which were available and considered, and which constitute the administrative record; and
- Approves a Federal action to implement the proposed RNAV procedure. Implementation of the Proposed Action will not result in airport-related development.

In reaching its determination, FAA has given consideration to 49 U.S.C. 40101(d)(4), which governs FAA's responsibility to carry out its mission while considering safety and the public interest when controlling the use of navigable airspace and regulating civil and military operations in that airspace in the interest of safety and efficiency of both of these operations. Additionally, consideration has been given to 49 U.S.C. 40103(b)(2) which authorizes and directs the FAA Administrator to prescribe air traffic rules and regulations governing the flight of aircraft, for the navigation, protection, and identification of aircraft, and the protection of persons and property on the ground, and for the efficient utilization of the navigable airspace, including rules as to safe altitudes of flight and rules for the prevention of collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects.

Furthermore, the FAA has given careful consideration to: the aviation safety and operational objectives of the project in light of the various aeronautical factors and judgments presented; the need to enhance efficiency of the national air transportation system; and the potential environmental impacts of the project.

II. PROPOSED ACTION

The Proposed Action evaluated in the attached Final EA is the implementation of a new RNAV SID procedure from Runway 33L at Boston-Logan International Airport (BOS or Logan Airport). The Proposed Action (an RNAV SID from Runway 33L) will instruct jet aircraft to takeoff from Runway 33L, climb on a heading of 331 degrees to at or above 520', (aircraft will remain on a 331-degree heading and will continue to climb to published altitudes or as assigned by ATC), then intercept a 314-degree course to the TEKKK waypoint (TEKKK waypoint is 5.88 NM from the BOS very high frequency (VHF) Omni-directional Range (VOR) and 4.25 NM from the end of the runway). Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS, BLZZR and REVSS).

The RNAV SID overlays as closely as possible (given existing RNAV design criteria) the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKK, then transitions to join the RNAV routes from the other BOS runways. The LOGAN SIX is presently in use and will remain in use for non-RNAV capable jet aircraft and turboprop aircraft. Jet aircraft that depart Runway 33L on the LOGAN SIX climb via a 331 degree heading until reaching a point two nautical miles (NM) from the BOS VOR/Distant Measuring Equipment (DME), then turn to a heading of 316 degrees. After reaching 3,000 feet or 5NM from the BOS VOR/DME, air traffic control provides instructions (via radar vector) to the pilot. Aircraft then diverge to various departure exit fixes (HYLND, PATSS, LBSTA, CELTK, BRUWN, SSOXS,

BLZZR and REVSS). Turboprop aircraft departing Runway 33L fly an assigned heading upon departure and remain at a lower altitude, following air traffic control instructions

Figures 1-8, 2-1, and 2-2 in the Final EA depict the Proposed Action RNAV SID design and conventional departure flight tracks representing the LOGAN SIX departure procedure.

III. PURPOSE AND NEED FOR THE PROPOSED ACTION

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world. The purpose of the Proposed Action is to increase the efficiency of air traffic control procedures at BOS and in the Boston Terminal Radar Control (TRACON) facility's adjoining/overlying airspace by using Next Generation Air Transportation System (NextGen) technology.

As stated in Section 1.3.1 of the attached Final EA, NextGen is the FAA's plan to modernize the National Airspace System (NAS) through 2025. Through NextGen, the FAA is addressing the impact of air traffic growth by increasing NAS capacity and efficiency while simultaneously improving safety, reducing environmental impacts, and increasing user access to the NAS. Part of FAA's effort to achieve NextGen goals is to implement new Performance–Based Navigation (PBN) procedures such as RNAV, at airports across the country including Logan Airport. In basic terms, NextGen represents an evolution from an air traffic control system that is primarily ground-based to an air traffic management system that is satellite-based.

Currently, Runway 33L is the only major runway at Logan Airport that does not have an RNAV SID. Establishing an RNAV SID will provide the pilots and controllers with a predictable procedure that will automatically guide the aircraft to the previously established exit fixes that currently transition aircraft departing Runways 4R, 9, 15R, 22 L/R and 27 from Boston TRACON's airspace up to 14,000' Mean Sea Level (MSL) to the adjoining overlying airspace controlled by the Boston Air Route Traffic Control Center (Boston Center).

This procedure will simplify BOS departure procedures by allowing aircraft to depart any runway on the same departure procedure. It will enhance safety by eliminating the potential for flight deck confusion and subsequent radio frequency congestion, experienced between air traffic controllers and pilots as a result of changing departure procedures depending on the runway in use.

IV. ALTERNATIVES

A potential alternative is one that might accomplish the Purpose and Need for the Proposed Action. In addition, FAA Order 1050.1E, Chapter 4, Section 405(d) states that there "is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA. An EA must consider the proposed action and a discussion of the consequences of taking no action and may limit the range of alternatives to action and no-action when there are no unresolved conflicts concerning alternative uses of available resources."

In order to merit further consideration, it is necessary that an alternative provide PBN technology from Runway 33L at Logan Airport for reasons as described in the Purpose and Need chapter. Alternatives that involve other modes of transportation, use of other airports, or changes in airport use may have the potential to decrease air travel or shift traffic to other airports, but these alternatives do not meet the project's Purpose and Need for the Proposed Action. Likewise, improvements in air traffic control technology may provide overall benefits to the operating environment, but would not meet the Purpose and Need of providing an RNAV SID for Runway 33L departures.

In this case, the FAA determined that the No Action and Proposed Action Alternatives represented a reasonable range of alternatives to be evaluated in the EA. FAA based this on experience learned in the Boston Logan Airport Noise Study (BLANS). Starting in 2008, FAA had previously evaluated four other RNAV SID designs for Runway 33L in the BLANS with the Logan Airport Community Advisory Committee (CAC) and the Massachusetts Port Authority (Massport). Ultimately, all of the four "measures" were dismissed in the BLANS process, because they were not operationally feasible or did not provide noise reduction per the purpose of the BLANS. Based on the outcome of the previous designs, FAA determined an overlay up to the first turn point at TEKKK, with transitions to join the RNAV routes from the other BOS runways would be operationally feasible and possibly provide a greater noise reduction when compared to other measures studied in the BLANS. Although preliminary noise analysis on the Proposed Action still showed populations being added to the 65 Day-Night Average Sound Level (DNL), overall noise increases were less than those measures modeled in the BLANS and would minimize impacts to new populations/communities.

During the preparation of the Draft EA, the final noise modeling results using 2010 U.S. Census data showed no populations were being added to the 65 DNL and 67,846 fewer people would be exposed to noise levels above 45 DNL. In addition, there were no significant or reportable noise increases, per FAA Order 1050.1E as further described in the Section VI of this FONSI/ROD. The minimal nature of the impact and overall reduction in noise further substantiated that the No Action and Proposed Action represented a reasonable range of alternatives commensurate with the nature of the proposed action as stated in FAA Order 1050.1E, 405d.

Following a detailed environmental analysis and coordination with the public and agencies (see Chapters 4 and 5 of the attached Final EA), the FAA selected the Proposed Action be carried forward for implementation. The Proposed Action overlays as closely as possible (given existing RNAV design criteria), the Runway 33L conventional vector procedure (LOGAN SIX) until the first turn point at TEKKK, then transitions to join the RNAV routes from the other Logan runways.

V. AFFECTED ENVIRONMENT

Study Area

A study area is defined as the geographic area potentially environmentally impacted by a proposed action. According to FAA Order 1050.1E, the altitude ceiling for environmental

consideration regarding airspace actions is 10,000' AGL. The Study Area encompasses roughly a 20 nautical mile (NM) radius around Logan Airport, generally corresponding to BOS Class B airspace and including an altitude up to 14,000' mean sea level (MSL). The 1,500 square mile Study Area and altitude ceiling is consistent with the study area used for the on-going BLANS as shown in **Figure 1-2** in the attached Final EA. The same noise modeling protocol used in the BLANS was used in this assessment to allow for consistent evaluation of noise impacts including cumulative impacts resulting from procedural changes from both projects.

VI. ENVIRONMENTAL CONSEQUENCES

The potential environmental impacts from the Proposed Action were evaluated in the attached Final EA for each of the following impact categories. No significant impacts to the quality of the human or natural environment were identified for any of the categories. Therefore, no Environmental Impact Statement is required to be, or has been, prepared.

Noise

There is no change to the number of aircraft operations or types of operations, nor does overall runway use change. The noise analysis therefore reflects changes in noise exposure only due to the implementation of an RNAV SID from Runway 33L (the Proposed Action), as compared to the No Action Alternative.

A comparison of the 2015 No Action and 2015 Proposed Action Alternatives noise exposure for populated centroids indicates there are no significant impacts (increases of 1.5 decibels (dB) in areas that would experience DNL noise levels of 65 or above). Although not required to be evaluated (when no significant impact is found), the Proposed Action does not result in increases of 3 DNL in population centroids between 60 and 65 DNL. In addition, the Proposed Action does not result in increases of 5 DNL for population centroids between 45 and 60 DNL. **Figure 4-3** and **Figure 4-4** in the attached Final EA depict noise exposure greater than 45 DNL at population centroids due to the implementation of the Proposed Action. In addition, as shown in **Table 4-6** in the attached Final EA, 67,846 fewer people will be exposed to noise above 45 DNL with the Proposed Action.

Thus, the Proposed Action will not cause significant noise impacts as the change in noise exposure does not exceed the threshold of significance. Accordingly, no mitigation is warranted per 1050.1E, Appendix A, paragraph 14.4c.

Compatible Land Use

Because the Proposed Action does not result in significant noise impacts, it can be concluded that there will be no significant impacts to compatible land use. Additionally, existing non-compatible land uses currently exposed to noise levels greater than or equal to 65 DNL will not experience significant increases in noise levels as a result of the Proposed Action and no additional populations will be added to the 65 DNL.

Socioeconomic Impacts and Environmental Justice

The Proposed Action will not involve any construction of physical facilities or change in noise exposure levels in excess of the applicable thresholds of significance. There would be no acquisition of real estate, no relocation of residents or community businesses, no disruption to local traffic patterns, no loss in community tax base, and no changes to the fabric of the community. Accordingly, there would be no socioeconomic impacts.

Because there are no significant impacts as a result of the Proposed Action, there are no adverse human health or environmental effects associated with the Proposed Action (including the noise, air quality, or cultural resource categories), which would exceed applicable thresholds of significance. As such, no persons of low income or minority populations would be affected at a disproportionately higher level than would other population segments. Accordingly, there would be no significant environmental justice impacts.

Children's Environmental Health and Safety Risks

There are no impacts associated with the Proposed Action (including the noise, air quality, or cultural resource categories) which would exceed applicable thresholds of significance. The Proposed Action would not affect products or substances that a child is likely to come into contact with, ingest, use, or be exposed to, and would not result in environmental health and safety risks that could disproportionately affect children. Accordingly, there would be no significant impacts related to children's environmental health and safety risks.

Historical, Architectural, Archaeological, and Cultural Resources

The Proposed Action involves air traffic control routing changes for airborne aircraft only and does not involve any ground-based impacts. Therefore, there would be no direct impacts on properties listed on or eligible to be listed on the National Register of Historic Places (NRHP). The Proposed Action Area of Potential Effect (APE), which is the same as the NEPA Study Area, encompasses approximately 1,500 square miles. Changes in noise exposure were calculated at over 84,000 grid points in the study area including 2,176 properties listed in the NRHP. None of the properties listed in the NRHP would experience a 1.5 DNL increase in areas of noise exposure of 65 DNL. In addition, none of the properties in the NRHP that may include a quiet setting as a generally recognized feature or attribute of the resource's significance would experience reportable increases of 3 DNL in population centroids between 60 and 65 DNL or 5 DNL for population centroids between 45 and 60 DNL. Because there were also no significant or reportable increases at any of the 84,000 plus grid points calculated for noise within the study area, there would be no significant impacts to properties that are eligible for listing in the NRHP.

According to FAA Order 1050.1E, Appendix A, the visual sight of aircraft, aircraft contrails, or aircraft lights at night, particularly at a distance that is not normally intrusive, should not be assumed to constitute an adverse impact, per Order 1050.1E, Change 1, Appendix A, Paragraph 12.2b. FAA designed the RNAV SID as close to an overlay as possible of the jet tracks that currently depart Runway 33L and therefore these areas currently experience

overflights from Runway 33L. Consequently, the Proposed Action would not result in significant visual impacts.

Thus, there will be no adverse effects to historic properties resulting from implementation of the Preferred Alternative. Appendix B in the attached Final EA includes the Massachusetts State Historic Preservation Officer's written concurrence with both the definition of the APE and the finding of no adverse effect, in accordance with the Section 106 of the National Historic Preservation Act.

Department of Transportation Act Section 4(f), and Land and Water Conservation Fund Act Section 6(f)

Noise exposure was calculated for over 22,000 points representing Section 4(f) resources. In addition, noise levels were calculated for grid points at equal intervals throughout the larger Section 4(f) properties. Grid spacing was 1,000 feet for potential Section 4(f) resources with a size of 100 acres or more. For those less than 100 acres, (i.e. smaller parks and monuments), noise exposure was calculated as a single point located in the center of the park. While a 1.5 DNL increase within the 65 DNL may result in a constructive use to all types of 4(f) properties, reportable impacts (increases of 3.0 DNL between the 60 and 65 DNL or 5.0 DNL between the 45 and 60 DNL) are intended to address those section 4(f) properties with a quiet setting as an attribute. No Section 4(f) resources located in areas of noise exposure of 65 DNL or higher would experience a 1.5 dB DNL increase in noise, according to the criteria of significance and no reportable increases would occur under the Proposed Action. Therefore, the FAA determined that the Proposed Action would not cause any constructive use of any 4(f) or 6(f) resource. See Section 4.3 in the attached Final EA.

Federally Threatened and Endangered Species and Migratory Birds

The Proposed Action involves ATC routing changes for airborne aircraft only and does not involve any ground-based impacts. Thus, it will not destroy or modify critical habitat for any species.

There are two threatened or endangered avian species known to or believed to exist in the Study Area. The Piping Plover is designated a federally threatened species, and the Roseate Tern is a federally endangered species. The Proposed Action will not introduce aircraft to new areas; aircraft depart Runway 33L in the same general direction currently. Therefore, the Proposed Action is not expected to impact any threatened or endangered species. The U.S. Fish and Wildlife Service concurred with FAA's determination per letter dated February 19, 2013.

Migratory birds do not generally fly at altitudes greater than 10,000 feet and the majority (92 percent) of the bird strikes to commercial aircraft occur at or below 3,500 feet AGL and occur during the approach and landing roll.

Any changes to flight paths/patterns due to the Proposed Action Alternative would occur above 3,500 feet AGL, at a higher altitude than where the majority of bird strikes occur. Additionally, the Proposed Action will not change the arrival and departure flows at Logan Airport so the

approaches and departures are not expected to differ from those today. Therefore, based on the available information from the FAA National Wildlife Strike Database, it is concluded that the impacts to migratory bird patterns resulting from the Proposed Action would be minimal.

Air Quality

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for ambient (i.e., outdoor) concentrations of a number of "criteria pollutants". On July 30, 2007, the FAA issued a list of actions "presumed to conform" under General Conformity [72 Fed.Reg. 41565 (July 30, 2007)]. In the aforementioned notice, the FAA summarized documentation and analysis which demonstrated that certain actions will not exceed the applicable *de minimis* emissions levels for nonattainment and maintenance areas as specified under 40 CFR 93.153(b). The FAA includes air traffic control activities and adopting approach, departure and enroute procedures for air operations in their list of "presumed to conform" actions thereby indicating that these types of actions will not exceed *de minimis* emissions levels.

The Proposed Action includes minimal changes in routes above the mixing height (generally 3,000' AGL) that are needed to enhance safety and increase the efficient use of airspace by reducing congestion, balancing controller workload and improving coordination between controllers handling existing air traffic. The FAA's "presumed to conform" list is therefore applicable to the Proposed Action. Since the Proposed Action is presumed to conform and would have a negligible effect on vehicle traffic no further analysis is required.

Climate

Although there are no federal standards for aviation-related Green House Gases (GHG) emissions, it is well-established that GHG emissions can affect climate. The CEQ has indicated that climate should be considered in NEPA analyses. As noted by CEQ, however, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand."

GHG emissions are commensurate with fuel consumption. Because the Proposed Action is generally an overlay of the existing Runway 33L SID procedure, implementation of the Proposed Action is not anticipated to increase fuel consumption and consequently, Carbon Dioxide (CO_2) emissions. It is possible that, because the use of RNAV procedures increase the reliance on on-board avionics to control the speed, thrust, and flap settings of an aircraft, fuel consumption could be reduced, thereby causing a net reduction in CO_2 emissions.

Natural Resources and Energy Supply

The Proposed Action would not require the need for unusual natural resources and materials, or those in short supply. The Proposed Action would not increase the number of aircraft operations or runway use compared to the No Action Alternative, nor does implementation of the RNAV SID increase the overall flying distance for Runway 33L departures. Therefore the Proposed Action would have minimal impact to natural resources and energy supply and no further analysis is required.

Light Emissions and Visual Impacts

Lighting associated with the Proposed Action should be evaluated to identify if it would create an annoyance among people in the vicinity or interfere with their normal activities. However, lighting associated with NAVAIDS and air traffic typically represent relatively low levels of light intensity, light emissions impacts are unlikely to have an adverse impact on human activity or the use or characteristics of the Section 4(f) properties. No change from the No Action Alternative would be expected to occur; therefore no further analysis is required.

Federal guidance does not identify thresholds of significance for visual impacts. Because the Proposed Action does not represent a change in the location of aircraft departing from Runway 33L, no significant visual impact would occur.

Cumulative Impacts

The Proposed Action, when added to other past, present or reasonably foreseeable future actions is not expected to cause significant impacts. As previously stated, the Proposed Action does not result in ground-based construction, increase the numbers of departures to Runway 33L or add operations to the airport. Because it is as close to an overlay of existing conditions as possible, it does not increase noise to underlying areas by significant or reportable levels based on FAA criteria. Overall, the Proposed Action reduces the number of people exposed to noise levels above 45 DNL and has a positive cumulative noise impact. This positive impact adds to the noise abatement procedures that were implemented as part of Phase 1 of the BLANS from 2008 to 2010. In addition, the next phase of the BLANS will evaluate potential changes in runway use with a goal to further reduce noise within the Study Area. Also, noise modeling confirmed that there were no cumulative significant or reportable impacts to incorporate the WYLYY ONE Runway 27 RNAV SID into the existing RNAV SIDs at BOS. In addition, no airport capital improvement projects (CIP) that would be anticipated to cause an environmental impact related to the Proposed Action (i.e. an action, such as an airspace redesign, opening of a new runway, runway extension, etc.) are anticipated to occur within the CIP five year planning horizon.

Inapplicable Impact Categories

Implementation of the Proposed Action involves aircraft route changes, and does not involve any physical construction activities. As such, many of the resource impact categories listed and described in FAA Order 1050.1E, Chapter 4, Paragraph 403, Impact Categories, and Appendix A, Analysis of Environmental Impact Categories, would not be affected. A brief description of the categories and the rationale for dismissing the impact category is provided in Chapter 3, Section 3.2 of the attached Final EA. The impact categories excluded from analysis of the Proposed Action's potential effects to the environment include Coastal Resources, Construction Impacts, Farmlands, Floodplains, Hazardous Materials, Pollution Prevention, Solid Waste, Water Quality, Wetlands, and Wild and Scenic Rivers. Due to the nature and location of the Proposed Action, it is the FAA's determination that the Proposed Action would not have any significant effect on the above-noted impact categories.

Other Considerations

The Proposed Action involves air traffic control routing changes for airborne aircraft only. The United States Government has exclusive sovereignty of airspace in the United States. 49 U.S.C. §40103(a). Congress has provided extensive and plenary authority to the FAA concerning the efficient use and management of the navigable airspace, air traffic control, air navigation facilities, and the safety of aircraft and persons and property on the ground. 49 U.S.C. Section 40103(b)(l) & (2). Therefore, any applicable community planning initiatives may be preempted by Federal law. To the extent applicable, and as there are no significant impacts under noise or compatible land use, the Proposed Action is consistent with the plans, goals and policies for the area and with the applicable regulations and policies of Federal, State and local agencies.

Mitigation

Thresholds of significance for any environmental impact category will not be exceeded due to the Proposed Action, therefore, no mitigation is being proposed as part of this project.

VII. PUBLIC INVOLVEMENT

Public participation occurred throughout the duration of the project. Starting in October 2012 FAA held three teleconferences/meetings with the CAC and Massport. CAC had previously requested that FAA coordinate with them regarding an RNAV procedure for Runway 33L after the FAA had rejected CAC's recommended measure in the BLANS. The purpose of the teleconferences/meetings was to advise Massport and CAC of FAA's Proposed Action and to receive feedback regarding the draft scope of work, the proposed RNAV design and methods of public consultation. CAC provided input on graphics, public involvement and requested that noise exposure population numbers be reported in the Draft EA by community. In addition, coordination and input from the aviation industry occurred during the PBN development and design process of the Proposed Action.

On January 14, 2013 the Draft EA was published and notice of its availability was provided via Public Notice published in the Boston Globe, Boston Herald, and MetroWest Daily News. The public notice included the project website address as well as the libraries in which the document could be reviewed and a comment period end date of February 15, 2013. The project website (www.BostonRNAVEA.com) provided interested parties the opportunity to review the Draft EA, information about the public comment period, and supplemental information (e.g. an overview of the NAS and a summary of noise and its effects on people). The website also provided information related to the ongoing BLANS project.

On January 24, 2013, FAA presented the findings of the Draft EA to interested members of the CAC to allow CAC members an opportunity to ask FAA questions to facilitate more informed comment on the Draft EA. In late January, FAA started to receive numerous comments from the general public on the Draft EA. At the request of state and federal representatives, Massport, with FAA support, presented information related to the Proposed Action to a group of elected officials and staff at the Massachusetts State House on February 5, 2013. Approximately 23 state, federal and local representatives attended. On February 7, 2013, Massport attended the

Town of Milton Board of Selectmen meeting in response to their request. The presentation given by Massport was similar to that given on February 5, but also included additional information related to aircraft overflights over Milton. Due to a high level of interest from public and elected officials, (including specific requests to extend the comment period), FAA extended the comment period to March 15, 2013. During the comment period, FAA received 384 comments, including a petition with over 1,000 signatures, submitted both via postal mail and electronically to the FAA's environmental specialist. Details of the comments received and FAA responses to those comments are contained in Chapter 5 and Appendix B of the attached Final EA.

VIII. THE AGENCY'S FINDINGS

A. Environmental Findings:

The environmental findings are based upon a careful review of the attached Final EA, comments on the Draft EA, the supporting administrative record and appropriate supporting information.

1. **The FAA has given the Proposed Action the independent and objective evaluation required by the Council on Environmental Quality (40 CFR Section 1506.5).** This environmental analysis was prepared by a contractor on behalf of the FAA. The FAA's environmental process included the rigorous exploration and objective evaluation of reasonable alternatives and probable environmental consequences, and regulatory agency consultations, and public involvement. FAA furnished guidance and participated in the preparation of the EA by providing input, advice, and expertise throughout the planning and technical analysis, along with administrative direction and legal review of the EA. FAA has independently evaluated the EA, and takes responsibility for its scope and content.

2. **The Proposed Action does not result in a significant noise impact over noise sensitive areas.** There are no noise sensitive areas exposed to DNL 65 or higher that experience a 1.5 DNL increase.

3. **The Proposed Action does not include a direct or constructive use of any resources protected under Sections 4(f) ad 6(f) of the DOT Act.** No physical development or land acquisition is associated with the Proposed Action, thus there is no potential for direct use of any Section 4(f) or 6(f) resource. No Section 4(f) resources located in areas of noise exposure of 65 DNL or higher would experience a 1.5 dB DNL increase in noise, according to the criteria of significance and no reportable increases would occur that could affect areas for which a quiet setting is a recognized feature of the property. Therefore, the FAA determined that the Proposed Action would not cause any constructive use of any 4(f) or 6(f) resource.

4. **The Proposed Action does not affect any Historical, Architectural, Archaeological or Cultural Resources.** None of the properties listed in the

NRHP would experience a 1.5 DNL increase in areas of noise exposure of 65 DNL. In addition, none of the properties in the NRHP that may include a quiet setting as a generally recognized feature or attribute of the resource's significance would experience reportable increases of 3 DNL in population centroids between 60 and 65 DNL or 5 DNL for population centroids between 45 and 60 DNL. Therefore the FAA determined that there is no effect on any Historical, Architectural, Archaeological or Cultural Resources. In addition, the Massachusetts State Historic Preservation Officer has concurred with this determination.

5. **The Proposed Action Alternative does not have a significant impact on Air Quality.** The Proposed Action is listed as presumed to conform, under General Conformity [FR 41565]. Therefore the Proposed Action has already been demonstrated to have *de minimis* emission levels under 40 CFR 93.153(b).

6. **All practicable means to avoid or minimize environmental harm from the Proposed Action have been adopted.** PBN design considerations for an RNAV SID for Runway 33L took place over several years, starting with the BLANS. FAA had detailed knowledge of the CAC's desires to try and reduce noise where possible within the Study Area. Although the final design for the Proposed Action was independent of the BLANS with an operational purpose instead of a noise reduction purpose, FAA was able to meet its operational purpose and provide overall noise reduction within the Study Area at the same time. Since there are no significant impacts, mitigation is not required.

B. Findings Pursuant to the Purpose and Need:

In establishing the Proposed Action, the Boston TRACON and Boston Center airspace would be managed more efficiently, adequately accommodating today's level of air traffic and positioning the Boston complex airspace to better accommodate future levels of air traffic.

Based on the Final EA prepared for the proposed action, this FONSI/ROD is issued. Both the Final EA and the FONSI/ROD are hereby incorporated into this decision.

IX. DECISIONS AND ORDERS

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action, namely the implementation of an RNAV SID for Runway 33L at Logan Airport, is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements and is not a major federal action significantly affecting the quality of the human environment or otherwise, including any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

I, the undersigned, have reviewed the attached Final EA including the evaluation of the purpose and need that this Proposed Action would serve, the alternative means of achieving the purpose and need, and the environmental impacts associated with these alternatives. I find the Proposed

Action described in the Final EA is reasonably supported and issuance of a finding of no significance is appropriate. Therefore, an environmental impact statement will not be prepared.

I have carefully considered the FAA's statutory mandate under 49 U.S.C. §40103 to ensure the safe and efficient use of the national airspace system as well as the other aeronautical goals and objectives discussed in the Final EA.

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve and direct that actions be taken which will enable implementation of the Proposed Action. This consists of the development of an RNAV SID for Runway 33L at Boston-Logan Airport, to establish and maintain safe and efficient handling and movement of traffic into and out of the Boston TRACON and Boston Center Airspace.

Approved: William A. Davis for 6/04/2013

Elizabeth L. Ray
Vice President, Mission Support Services

Date

RIGHT OF APPEAL

This FONSI/ROD constitutes a final order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.