DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
DOCUMENTED CATEGORICAL EXCLUSION
RECORD OF DECISION

Boston Logan International Airport, Boston, Massachusetts
Phase 1 Procedures/Alternatives Recommended for Implementation from Boston Overflight Noise Study

I. Introduction

This Categorical Exclusion (CATEX) Record of Decision (ROD) approves implementation of noise abatement arrival and departure procedures for turbojet aircraft arriving and departing at Boston Logan International Airport (Logan Airport). These procedures will reduce noise for residents of some of the communities to the northeast and southeast of the airport at day-night sound level (DNL) 45 decibels (dB) and above. The FAA is taking this action in accordance with Item 6 in Section VIII, entitled "Mitigation Measures," of the Logan International Airport, Airside Improvements Planning Project; Record of Decision (Airside ROD) dated August 2, 2002. Item 6 committed the FAA to work with Massport and the Logan Airport Community Advisory Committee (CAC) to jointly develop enhancements to existing or new noise abatement measures applicable to aircraft arriving and departing from Logan Airport, sometimes called "overflights." (See Appendix A, Attachment 1, for relevant excerpts from the Airside ROD. It states "Noise abatement proposals that FAA considers safe and efficient and that will not adversely affect other communities will be implemented. These proposals will be implemented to the extent feasible prior to completion of the noise abatement study.")

To meet the commitment in the Airside ROD, the FAA engaged with Massport and the CAC, primarily as part of the Boston Technical Advisory Committee (BOS/TAC), in a study of the flight tracks for aircraft arriving and departing at Logan Airport called the Boston Overflight Noise Study (BONS). The documents that comprise the BONS are available on a special website, www.bostonoverflightnoisestudy.com. The documents, together with their analyses and findings, are hereby incorporated by reference. The BONS was structured in three phases. This CATEX ROD concludes Phase 1 of the BONS. Phase 2 has been renamed the Boston Logan Airport Noise Study (BLANS). The BLANS will address additional noise abatement alternatives that may require detailed analysis to meet FAA environmental requirements, which will be addressed as part of Phase 3 of the study. Based on the results of Phase 1 of the BONS, the CAC voted to support implementation of noise abatement procedures from a combination of nine different alternatives.

II. Description of Proposed Federal Action

The FAA proposes to implement new and revised conventional (vector-based), RNAV (Area Navigation), and charted visual arrival and/or departure procedures as described below for various runways at Logan Airport. Based on information from specialists in the agency, we estimate full implementation of all feasible procedures/alternatives will take approximately two

years.[1] To visualize real time operations at Logan Airport, including existing approach and departure procedures and flight paths (the no action alternative), see www4.passur.com/bos.html. Most of the alternatives include both a conventional and RNAV procedure to accommodate the different navigational equipment onboard the aircraft, because not all aircraft operating at Logan Airport have the navigational equipment onboard to fly satellite (RNAV) based procedures. In addition, Alternatives 1, 2, 3, and 5 were combined with Alternatives 14 and 15 which include changes at substantial distances from the runway ends and at higher altitudes. Specifically, Alternative 14 is designed to increase the altitude of the shoreline crossings and Alternative 15 is designed to keep southbound departures east of Minot's Light prior to crossing the shoreline. Appendix A, Attachment 2, includes graphics that illustrate the intent and visual expectations of the different alternatives described below.

- Runway 4R Jet Departures – RNAV and Conventional (Alternatives 1/14/15) (CATEX Order 1050.1E, paragraph 311g, 311i and 311p);

Intent: To increase the accuracy and narrow the track of departures over the Nahant Causeway and reduce aircraft noise to North Shore communities (Alternative 1). The intent is also to increase the altitude of shore crossings (Alternative 14) and keep southbound departures east of Minot's Light prior to crossing the shoreline (Alternative 15).

Route Change Description: Establish an RNAV Standard Instrument Departure (SID) for all turbojet aircraft departing from Runway 4R at the airport. This SID requires the development of appropriate RNAV procedures and waypoints to route aircraft over the causeway north of Nahant and south of Swampscott, then east over the water. For shoreline crossings (northwest, northeast, west, or south departure flows), an RNAV route design will provide the maximum altitude possible for aircraft crossing the shoreline, provide aircraft dispersion where possible, and, if possible, route aircraft over non-noise sensitive areas. In addition, a conventional procedure (vector-based) design will approximate the published RNAV SID to accommodate non-RNAV-capable aircraft.

- Runway 9 Jet Departures – RNAV and Conventional (Alternatives 2 /14/15) (CATEX Order 1050.1E, paragraph 311g, 311i and 311p);

Intent: To increase the altitude of jet aircraft departures from Runway 9 at the airport (Alternative 2). The intent is also to increase the altitude of aircraft crossings over the South and North Shores (Alternative 14) and to keep southbound departures east of Minot's Light prior to crossing the shoreline (Alternative 15).

[1] Note; the procedures are subject to more detailed review and design by the FAA prior to implementation (e.g. safety risk analyses and the RNAV 18-Step Process). The 18-Step process is a standardized, systematic FAA process that oversees the publication of RNAV procedures. It advances a draft procedure to ensure all technical and safety criteria meet FAA requirements within all FAA lines of business, as well as ensure coordination efforts with the affected airline users. Once begun, the publication timeline for the procedure in the 18-Step process assumes no extenuating circumstances and may take up to seven to ten months to complete; cumulating with the procedure being published and available for use by the affected airline users. We estimate full implementation of all alternatives in approximately two years.

Route Change Description: Establish an RNAV SID for all Runway 9 turbojet aircraft. This departure requires development of appropriate RNAV procedures and waypoints. For shoreline crossings (northwest, northeast, west, and south departure flows), an RNAV route design will provide the maximum altitude possible for aircraft crossing the shoreline, provide aircraft dispersion where possible, and, if possible, route aircraft over non-noise sensitive areas. In addition, a conventional procedure (vector-based) design will approximate the published RNAV SID to accommodate non-RNAV-capable aircraft.

- Runway 15R Jet Departures – RNAV and Conventional (Alternatives 3/14/15) (CATEX Order 1050.1E, paragraph 311g, 311i and 311p);

Intent: To avoid, to the extent practicable, Runway 15R departure overflights of the Hull peninsula (Alternative 3). The intent is also to increase the altitude of crossings over the South and North Shores (Alternative 14) and to keep southbound departures east of Minot's Light prior to crossing the shoreline (Alternative 15).

Route Change Description: Establish an RNAV SID for all turbojet aircraft departing on Runway 15R. This SID requires development of appropriate RNAV procedures and waypoints. For shoreline crossings (northwest, northeast, west, and south departure flows), an RNAV route design will provide the maximum altitude possible for aircraft crossing the shoreline, provide aircraft dispersion where possible, and, if possible, route aircraft over non-noise sensitive areas. In addition, a conventional procedure (vector-based) design will approximate the published RNAV SID to accommodate non-RNAV-capable aircraft.

- Runways 22L/R Jet Departures – RNAV and Conventional (Alternatives 5/14/15) (CATEX Order 1050.1E, paragraphs 311g, 311i and 311p);

Intent: To avoid, to the extent practicable, overflights of the Hull peninsula (Alternative 5). The intent is also to increase the altitude of aircraft crossings over the South and North Shores (Alternative 14) and to keep southbound departures east of Minot's Light prior to crossing the shoreline (Alternative 15).

Route Change Description: Establish an RNAV-based SID for all Runway 22L/R turbojet departures. This SID requires development of appropriate RNAV procedures and waypoints. For shoreline crossings (northwest, northeast, west, and south departure flows), an RNAV route design will provide the maximum altitude possible for aircraft crossing the shoreline, provide aircraft dispersion where possible, and, if possible, route aircraft over non-noise sensitive areas. In addition, a conventional procedure (vector-based) design would approximate the published RNAV SID to accommodate non-RNAV-capable aircraft.

- Runways 22L Jet Aircraft Arrivals – Conventional (Alternative 6) (CATEX Order 1050.1E, paragraphs 311i);

Intent: To reduce noise exposure for the communities located under the NORWICH Standard Terminal Arrival Route (STAR) left downwind arrival route to Runway 22L south

of the airport by relocating aircraft at the DRUNK intersection (located about 25 nautical miles southeast of the airport near the shoreline in Marshfield) from the NORWICH STAR.

Route Change Description: The Alternative 6 flight route focuses on jet aircraft routed along the Providence arrival fix (PVD) that use the NORWICH STAR, routed along the left downwind arrival route to Runway 22L, and landing on Runway 22L at the airport. Right downwind arrivals (west side of the airport) from PVD to Runway 22L were not evaluated as part of this alternative.

- Runway 27 Jet Aircraft Arrivals - Conventional (Alternative 7) (CATEX Order 1050.1E, paragraphs 311i and 311p);

Intent: To reduce noise exposure for communities located south of the airport under the NORWICH STAR south arrival route to Runway 27.

Route Change Description: Alternative 7 focuses on jet aircraft routed along the Providence arrival fix (PVD) that use the NORWICH STAR, and land on Runway 27 at the airport. Under this alternative, the NORWICH STAR would be adjusted as appropriate to extend the STAR to the DRUNK intersection through either radar vectoring or other conventional means of navigation (located about 25 miles southeast of the airport near the shoreline in Marshfield). Aircraft would pass the DRUNK intersection at or above 6,000 feet (ft) mean sea level.

- Runway 33L Arrivals – Charted Visual Flight Procedure and RNAV (Alternative 11) (CATEX Order 1050.1E, paragraphs 311g, 311i and 311p).

Intent: To reduce noise exposure for South Shore communities.

Route Change Description: Establish a charted visual approach to Runway 33L for jet aircraft using traditional navigation augmented by RNAV derived waypoints, which may be coded into a Flight Management System (FMS) database to assist pilots in conducting the visual approach. Visual landmarks will be charted to assist pilots in navigating the procedure. This alternative focuses on jet aircraft routed along the Gardner (GDM) arrival fix, the Providence (PVD) arrival fix, and the SCUPP intersection, and landing on Runway 33L at the airport. The RNAV waypoints are provided to those airlines who may wish to develop a special procedure that mimics the charted visual approach. The special procedure used by an airline is intended to enhance the ability to accurately fly along the charted visual approach.

A. The BONS Process:

Identification of Alternatives

Initially 55 airspace and operational alternatives were developed as part of the BONS. Each alternative was analyzed on the basis of operational feasibility and impact on aviation safety and efficiency, and its environmental benefit, consistent with applicable legal requirements. In

addition, as part of Phase 1 of the BONS, the FAA analyzed how each alternative would change noise exposure levels in areas surrounding Logan Airport. Consistent with the 2002 Airside ROD the FAA also examined if each alternative would "adversely affect other communities." Following an initial screening process, 18 of those alternatives were eliminated. The remaining 37 alternatives were examined during a second screening process. Of these, 23 were identified in Phase 1 as Early Implementation Alternatives and were eventually combined into 13 alternatives that were identified as appropriate to consider implementing under a categorical exclusion. Of these 13, the CAC voted to support implementation of nine alternatives (1, 2, 3, 5, 6, 7, 11, 14 and 15) evaluated during Phase 1, which resulted in the elimination of another four alternatives. Ultimately, nine alternatives (1, 2, 3, 5, 6, 7, 11, 14 and 15) were identified that met the requirements set forth in the Airside ROD at Section VIII, Mitigation Measures in Item 6. They are described above.

Any alternatives related to Runway 14/32 and other alternatives that were considered viable, but that were found to potentially cause significant impacts (1.5 dB or greater increase within the DNL 65 dB contour), were carried over for inclusion in the evaluation process of Phase 2. If carried forward, these additional alternatives will receive the appropriate level of environmental review as part of Phase 3.

B. Noise Analysis

FAA used the Integrated Noise Model (INM) to predict the individual and cumulative noise impacts of the nine alternative noise abatement measures. The noise benefits of each alternative are described in detail in the Early Implementation Alternative Summary report. Additionally, the cumulative effects analysis is contained in the BONS Phase 1 Combined Alternatives Specific Grid Point Analysis Tables. Both of these documents can be found on the BONS website at www.bostonoverflightnoisestudy.com. See also, Appendix A, Attachment 3 for graphical depictions from the Grid Point Analysis Tables document of the runways and grid point locations (Figures A and B) and the runways with the existing noise contours (Figure 3).

The noise analysis indicated that these nine alternatives qualify for categorical exclusion from further environmental analysis. Specifically, none of these alternatives result in a 1.5 dB, or greater, increase within the 65 DNL noise contour over a noise-sensitive area as described below.

C. Categorical Exclusion of Proposed Actions

The proposed action qualifies for categorical exclusion under Paragraphs 311g, 311i and 311p of FAA Order 1050.1E, Environmental Impacts: Policies and Procedures. Categorical exclusions are types of Federal actions that meet the criteria contained in 40 CFR 1508.4, which states, "a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (§ 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required." The use of a CATEX assists the agency in reducing paperwork and reducing delay. Paragraph 311g of FAA Order 1050.1E provides that the FAA may categorically exclude establishment of "...RNAV, or essentially similar systems, that use overlay of existing procedures"; paragraph

311i provides categorical exclusion of the "establishment of new or revised air traffic procedures at 3,000 ft or more above ground level (AGL)"; while, paragraph 311p provides categorical exclusion for the "establishment of new procedures that routinely route aircraft over non-noise sensitive areas."

Even if the proposed actions falls into an established categorical exclusion, it is further examined to determine if any extraordinary circumstances exist that would prevent the proposed action from being classified as categorically excluded under the Order. See, paragraph 304 of FAA Order 1050.1E for a discussion of extraordinary circumstances.

The proposed action involves changes to arrival and departure procedures at Logan Airport to implement new and revised noise abatement procedures. Implementation of these alternatives does not require any construction or ground disturbing activities.

The analysis revealed that:

a. There would be no potential for effects on historic or cultural resources protected under the National Historic Preservation Act. (Order 1050.1E, Paragraph 304a);

b. There would be no use of properties protected under section 4(f) of the Department of Transportation Act, previously 49 U.S.C. Section 303(c). Although there is a 1.5 dB increase within the 65 DNL contour, the area of increase is over a portion of Deer Island, within the Boston Harbor Islands National Recreation Area. When this area was established, the National Park Service included in the enabling statute that noise would not be considered a 303(c) impact. A portion of that text is restated here and can be read in its' entirety at www.nps.gov/boha/parkmgmt/park-legislation.htm. "(d) Administration of recreation area... (6) Relationship of recreation area to Boston-Logan International Airport. With respect to the recreation area, the present and future maintenance, operation, improvement and use of Boston-Logan International Airport and associated flight patterns from time to time in effect shall not be deemed to constitute the use of publicly owned land of a public park, recreation area, or other resource within the meaning of section 303(c) of title 49, United States Code, and shall not be deemed to have a significant effect on natural, scenic, and recreation assets within the meaning of section 47101(h)(2) of title 49, United States Code..." (Paragraph 304b);

c. There would be no impact to threatened or endangered species protected under the Endangered Species Act or species protected under the Fish and Wildlife Coordination Act or of concern under state law (Paragraph 304c);

d. There would be no division, disruption, or inconsistency with any established community (Paragraph 304d);

e. There would be no increase in surface transportation and thus no increase in congestion from surface transportation (Paragraph 304e);

f. There would be no impact on noise levels for noise-sensitive areas (Paragraph 304f). The detailed noise modeling conducted as part of the BONS confirms that there is no potential for significant noise impacts. It indicated that none of the proposed alternatives would result in a 1.5 dB, or greater, increase within the DNL 65 dB noise contour over noise sensitive areas;

g. There would be no impact on air quality for the following reasons:

1. Air Traffic changes above 3,000 ft AGL are exempt from review and presumed to conform under the general conformity regulations. (Determining Conformity of General Federal Actions to State or Federal Implementation Plans, Final Rule, 58 Fed. Reg. 63214, 63229, November 30, 1993.) (FAA, Final Notice, Fed. Reg. Vol. 72, No. 145, pp 41565-41580, July 30, 2007.);
2. There are no proposed increases in operations associated with implementation of these alternatives;
3. The only change is a narrowing of the flight tracks, below the air quality mixing height established as 3,000 ft AGL, while there is no change in the length of the flight paths over the ground; and,
4. Review of the Massport Logan Airport Environmental Programs website revealed that seven of the nine MA Department of Environmental Protection (DEP) monitors in Eastern MA and all of those in Middlesex County have measured no violations of the National Ambient Air Quality Standards (NAAQS) since 1996. However, Eastern MA was classified as a non-attainment area for the one-hour NAAQS for ozone, as of 2005 (the date of the data contained on the website.

   In 1998, the MA DEP amended the State Implementation Plan (SIP) for ozone which referenced the 1-hour NAAQS as 0.12 ppm (parts per million). In 2004, the Environmental Protection Agency (EPA) implemented a new 8-hour nationwide standard for ozone, as 0.08 ppm averaged over 8 hours. The 8-hour standard took effect June 15, 2004, although the 1-hour standard was not phased out until April 2005. Because there have been no violations for the Logan Airport since the new 8-hour standard took effect (through 2005), the "EPA has proposed that MA submit a request to be redesignated as an attainment/maintenance area." (See, www.massport.com/logan/airpo_envir.html.)

   Therefore, because of the above reasons, there will be no impact to the local air quality standards and no regionally significant impacts from implementation of the alternatives identified in this CATEX/ROD. (Paragraph 304g);

h. There would be no impact on water quality (Paragraph 304h);

i. There is no high degree of controversy on environmental grounds because there is no substantial dispute as to the size, nature, or effect of the proposed Federal action. As discussed in detail below under Response to Comments, there are several letters expressing opposition to implementation of the proposed action. However, based upon the noise analysis of the cumulative effects with implementation of all nine alternatives, and consultation with the Office of Environment and Energy, the opposition does not qualify as controversy on environmental grounds within the meaning of in paragraph 304i. For a proposed action to qualify as highly controversial on environmental grounds, it would mean that reasonable disagreement exists over the project's risk of causing environmental harm.

Under well-established federal land use compatibility guidelines, the DNL 65 dB is the level of noise incompatible with residential land uses. Also, changes of noise exposure by 1.5 dB or greater within the DNL 65 dB range or higher are defined as significant under FAA Order 1050.1E. The proposed action does not result in any potentially significant noise or other environmental impacts. The noise levels in areas whose residents have expressed opposition to implementation of the alternatives range from DNL 35 dB to 55 dB. The proposed action decreases noise in areas subject to DNL 45 dB and above and results in minor increases in areas at levels below DNL 45 dB. Therefore, it was determined that the proposed action is not highly controversial on environmental grounds within the meaning of paragraph 304i;

j. There is no likelihood that the proposed action is inconsistent with Federal, State, Tribal, or local laws (Paragraph 304j); and,

k. There is no likelihood for these alternatives to create, directly, indirectly, or cumulatively, a significant impact on the human environment (Paragraph 304k). When combined, the noise impacts associated with these nine alternatives are not significant and there is no indication of other potentially significant environmental impacts.

III. Public Comments and Responses:

In accordance with the Council on Environmental Quality (CEQ) regulations and FAA Order 1050.1E, there is no requirement for soliciting general public comment on Federal actions that meet the requirements for categorical exclusion. However, the BONS has been an open process from the beginning, as evidenced by the participation of the CAC. Therefore, the FAA has considered public comments and is including, as part of this documented categorical exclusion and ROD, a summary of the comments received, by letter, and the FAA responses to those comments. Copies of the comments are included in Appendix A as Attachment 4, to this document.

A. Resident, Town of Marshfield Comment: - A resident from the Town of Marshfield, Massachusetts (MA), indicated that the proposed changes would cause "significant effects" on the human environment in the Town of Marshfield and would otherwise "adversely affect" Marshfield. The Town of Marshfield is a community about 20 miles to the southeast of Logan

Airport and is a member of the CAC. The resident indicated that extraordinary circumstances existed with the proposed alternatives that would prevent use of the categorical exclusion for implementation. The letter received by FAA cited Section 304 of FAA Order 1050.1E, paragraphs a, b, c, d, f, g, i, and j.

Response: – Six (6) ground points used in the analysis of the nine alternatives studied in Phase 1 of the BONS are located in Marshfield (see the Phase 1 Combined Alternatives Specific Grid Point Analysis Tables, dated March 2007 on the BONS website). Three (3) points were identified as representing the Marshfield South Shoreline and numbered as PT071, PT072, and PT073. The other three (3) were identified as representing Marshfield South Shoreline inset 2 miles and numbered as PT078, PT079, and PT080. The existing condition noise for these six (6) points indicates levels of DNL as 39.7, 37.7, 35.3, 38.7, 37.3, and 36.1 dB, respectively. The predicted noise levels for these points associated with the above combined alternatives indicate levels of DNL at 37.4, 36.3, 35.5, 37.0, 35.6, and 35.9 dB, respectively. All of the points in Marshfield are well below the DNL 65 dB level at which residential land uses are compatible as defined in FAA Order 1050.1E, Appendix A, Section 14.3 and 14 CFR Part 150. Additionally, all of the points included in the study show a noise decrease except PT073, which shows a slight noise increase of only 0.2 dB. These noise levels and resultant change from the combined alternatives are well below the level of significance (increase of DNL 1.5 dB or greater in the DNL 65 dB or greater noise level). The FAA has determined, therefore, that there will be no significant effects to the human environment or otherwise adverse effect to Marshfield from implementation of these alternatives.

B. Manager, Town of Hull Comment: – The Manager of the Town of Hull, MA, a community approximately 5 to 8 miles southeast of Logan Airport and also a member of the CAC, submitted a letter indicating that "sites in northern Hull, including the Hull High School noise monitor site, and the Point Allerton measurement site, are at risk of significant noise increases resulting from these proposals." The letter indicated an issue with lateral aircraft separation for Alternatives 3 and 5. The letter also asserts, "[t]he potential for a significant noise increase undoubtedly exists." The letter also questions the usefulness of a Number of Events above the 60 dB metric. Additionally, the Town Manager indicated that, "[w]ith an inadequate and questionable noise analysis based on an essentially-non-existent airspace evaluation, the consultants have not laid the groundwork for a categorical exclusion for either Alternative 3 or Alternative 5."

Response: - The FAA's cumulative effects analysis of the changes in noise as a result of implementing the alternatives shows that there are no noise increases at any of the five (5) points included in the noise analysis. The points are identified as PT021, Hull Elementary School, PT023 Hull, PT037 Hull South Shoreline, PT098, Hull 33L ILS approach course, and S26, Hull Noise Monitoring Site 26. All of these points within Hull fall within the DNL contours at less than 55 dB. At the DNL 45-50 dB level, the change in noise exposure, which would be noticeable, is 5 dB. There are no noise increases in the Hull area associated with these alternatives at any of the points included in the cumulative effects analysis. Additionally, the only change of 5 dB or greater is a noise decrease of 6.1 dB at PT037.

Regarding the lateral separation for Alternatives 3 and 5, the proposed RNAV procedure path leg does not begin until the aircraft is north and east of the Hull peninsula for alternative 5 only. The

separation requirement at that point is for the outbound aircraft to be at least 3 miles from the inbound traffic and also 1.5 miles from the airspace sector boundary used by the Boston Terminal Radar Approach Control (TRACON) facility, which is the air traffic control facility that has responsibility for maintaining separation between aircraft departing and arriving at Logan Airport. The comment used an incorrect separation standard.

Lastly, the FAA does not use the Number of Events above a Single Event Noise Level (SEL) metric to determine a level of significance or whether or not an alternative could qualify for a categorical exclusion. The SEL 60 dB metric, along with several others, were chosen by the CAC to assist their membership in understanding the potential noise effects associated with the various alternatives. "The data provided by the Primary Consultant, taken in conjunction with the qualitative and quantitative reviews provided by the Independent Consultant, should provide membership of the CAC with the information necessary to determine the general effects of each alternative on their respective communities." (See, Independent Consultant Review, Noise Related Effects Associated with Phase One Alternatives of Boston Logan Airport Noise Study on Boston Area Communities, dated October 12, 2006 as revised December 8, 2006.) (This report can be found at www.bostonoverflightnoisestudy.com and is incorporated by reference.)

C. Town Manager, Duxbury Comment: - Correspondence was submitted by the Town Manager for the Town of Duxbury, MA, a community approximately 25 miles to the southeast of Logan Airport and also a CAC member, that mirrored the letter submitted by the Town of Marshfield. The comment indicated that the proposed changes would cause "significant effects" on the human environment in the Town of Duxbury and would otherwise "adversely affect" Duxbury. The letter indicated that extraordinary circumstances existed with the proposed alternatives that would prevent use of the categorical exclusion for implementation. The letter received by FAA cited Section 304 of FAA Order 1050.1E, paragraphs a, b, c, d, f, g, i, and j.

Response: - Two (2) points included in the BONS were located in Duxbury, the Duxbury South Shoreline, PT074 and the Duxbury South Shoreline inset 2 miles PT081. The existing condition noise for both of these two locations is DNL 34.0 dB. The predicted noise change with the above combined alternatives is indicated as DNL 32.9 and 34.7 dB. PT074 receives a reduction in noise of 1.1 dB, while PT081 would receive an increase in noise of 0.7 dB. These noise levels and resultant change from the combined alternatives are well below and outside the level of significance as defined in FAA Order 1050.1E, Appendix A, Section 14.3. As a result, the FAA has determined that there will be no significant effects to the human environment or otherwise adverse effect to Duxbury from implementation of these alternatives.

D. Representative Frank M. Hynes Comments: - Correspondence received from Massachusetts State Representative Frank M. Hynes states that "these highly controversial new alternatives will have a definite adverse noise impact on the southern portion of the communities surrounding Logan, in particular Marshfield and Duxbury." It further stated, "...the recommended new flight tracks have not been fully vetted to meet the standards of the Certificate and Record of Decision cited." The Certificate referenced in the comment is the Certificate of the Secretary of Environmental Affairs, issued by the State of Massachusetts, dated June 15, 2001. The letter requested that the categorical exclusion process be bypassed and that the alternatives receive a full environmental review due to the potential negative impacts on Marshfield and Duxbury.

Response: - The alternative flight procedures recommended for implementation by Phase 1 of the BONS do not fall within the coverage of the Massachusetts Executive Office of Environmental Affairs Certificate. The 2002 Airside ROD does not discuss the level of environmental documentation required for these noise abatement alternatives. Legal and regulatory requirements do not require a full environmental analysis of the alternatives where the changes in noise levels are not considered adverse or significant in accordance with FAA Order 1050.1E. Both Marshfield and Duxbury are located well outside the nationally recognized threshold for significance, DNL 65 dB, as both are located in areas of DNL 40 dB or less. Therefore, the FAA has determined that a full environmental analysis of the effect that the alternatives may have on Duxbury and Marshfield is not required.

E. Marshfield vs. Massport Litigation: - The FAA became aware that a lawsuit was commenced against Massport seeking to enjoin Massport from taking actions related to "the proposed re-routing of substantial airplane traffic" over the Town of Marshfield. The complaint seeks a declaratory judgment that Massport has not complied with the provisions of the Massachusetts Environmental Policy Act…."

Response to Marshfield vs. Massport Litigation: – The FAA is not a party to this litigation. The plaintiff elected to proceed against Massport, as the operator of the airport, and not the FAA. While the FAA has generally asked the airport sponsor to request changes to arrival and departure routes for noise abatement, in this case there is no requirement for Massport to recommend to FAA the implementation of any noise abatement proposals identified as part of Phase 1 of the noise study (Section VIII, Item 6 of the 2002 Airside ROD). The Airside ROD states, "[t]hese proposals will be implemented to the extent feasible prior to completion of the noise abatement study."

As such, the FAA has responsibility for implementation of these alternative procedures related to the arrival and departure of aircraft.

F. Concerns Raised Related to an Increase of Departures from Runway 33L: In recent months, a concern has been expressed by certain communities and elected officials related to an increase in Runway 33L (RWY 33L) jet departures. It has been suggested that the increased operations relate to the November 2006 opening of Runway 14/32 (RWY 14/32).

Departures from RWY 33L have increased from January-July 2007 as compared to the same period in 2006. Charts that were compiled by Massport support this finding. (See, Appendix A, Attachment 5, Massport Presentation to City of Somerville on R33L Use at Boston Logan International Airport, dated August 17, 2007.) Wind conditions may be a factor in the increased departures from RWY 33L. Massport has indicated that the percentage of time the winds have been from the northwest has increased every month in 2007, with the exception of March, when compared to the same period in 2006.

There have been no changes (except implementation of the 10-knot restriction on RWY 14/32 in accordance with the 2002 Airside ROD, Section VIII Mitigation Measures Item 2) in policy

regarding runway selection by the FAA control tower supervisor. To date, there have been no violations of the RWY 14/32 wind restriction usage criteria.

Thus, until at least one year of cumulative data has been gathered and analyzed, it would be premature to determine if departures off of RWY 33L have increased for the entire year. Therefore, FAA concludes that the increase in departures from RWY 33L over the first 6 months of 2007 is not a factor that prevents the FAA from implementing the Phase 1 procedures/alternatives identified in this CATEX/ROD. The FAA notes that as part of Phase 2 of the Boston Logan Airport Noise Study, the preferential runway advisory system (PRAS) will be evaluated. The concern related to increased departures from RWY 33L will be better addressed at that time because the evaluation of the PRAS will include all the runways at Logan Airport.

NOTE: See Appendix A for copies of the following supporting documentation, some of which may also be found on the website:

1. Items 2 and 6 from the 2002 Airside ROD;
2. Graphics that illustrate the intent and visual expectations of the procedures recommended for implementation;
3. Boston Overflight Noise Study, Phase 1 Combined Alternatives Specific Grid Point Analysis Tables - Figures A and B, which graphically depict the runways and grid point locations, and Figure 3, which graphically depicts the runways and noise contours;
4. Public Comments; and,
5. Massport, Presentation to City of Somerville on R 33L Use at Boston Logan International Airport, dated August 17, 2007

IV. Decision and Order

Basis for this Determination:

The FAA has reviewed the above referenced proposed action and determined, by the undersigned that it is categorically excluded from further environmental documentation according to FAA Order 1050.1E in accordance with paragraphs 303a, 311g, 311i and 311p, without limitation. Additionally, the implementation of this action will not result in any extraordinary circumstances in accordance with Order 1050.1E paragraph 304.

The FAA Air Traffic Organization, Office of Airspace and Aeronautical Information Management, Environmental Programs Group conducted this Environmental Review. It was conducted in accordance with policies and procedures in the Department of Transportation Order 5610.1C, "Procedures for Considering Environmental Impacts" and FAA Order 1050.1E, "Environmental Impacts: Policies and Procedures, Change 1."

Decision

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action does not require preparation of an environmental assessment (EA) or

Paragraphs 303a, 311g , 311i and 311p. The implementation of the nine alternatives will not individually or cumulatively have a significant effect on the human environment. The FAA has examined possible extraordinary circumstances that would warrant preparation of an EA or EIS and determined that no such circumstances exist.

Having carefully considered aviation safety and efficiency, environmental benefits and the operational impacts of this action in conjunction with the 2002 Airside ROD requirement "not to adversely affect other communities," under the authority delegated to me by the Administrator of the FAA, I find that the action is reasonably supported, and, I, therefore, direct the Boston Overflight Noise Study Phase 1 Alternatives as described above in Section II, proceed forward in the implementation process. Implementation will begin as soon as practicable after the ROD.

Recommended by:

Date: 10/16/2007

Ernestine Gatewood,
Acting Manager
Environmental Programs Group
Air Traffic Organization

Approved by:

Date: 10/16/07

John McCartney,
Director, Terminal Operations Eastern Service Area Office
Terminal Services,
Air Traffic Organization

Right of Appeal:

This decision is taken pursuant to 49 U.S.C. §§ 40101 *et seq.*, and constitutes a final order of the Administrator that is subject to review by the United States Circuit Court of Appeals in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay the implementation of this CATEX/ROD must file an application with the FAA prior to seeking judicial relief in the form of a stay, as provided in Rule 18(a), Federal Rules of Appellate Procedure.