

Summary of Runway Use Restrictions

NOISE AND OPERATIONAL RESTRICTIONS	SOURCE JUSTIFICATIONS	PROCESS FOR REVIEW AND POSSIBLE REVISION
I. MASSACHUSETTS PORT AUTHORITY (MASSPORT) NOISE RULES AND REGULATIONS		
<p>1. (a) Takeoffs from Runway 4L shall be limited to aircraft with a takeoff noise emission level of 73 dBA or less and landings on Runway 22R shall be limited to aircraft with a landing specified noise emission level of 78 dBA or less. For purposes of this section the term "specified noise level" shall mean the noise level for the type of operation in question (i.e., landing or takeoff) as published in the then current FAA Advisory Circular. (Included in FAA BOS ATCT Noise Abatement Tower Order 7040.1H)</p> <p>(b) Takeoffs on 4L and landings on 22R are prohibited between the hours of 11:00 p.m. to 6:00 a.m. (Included in FAA BOS ATCT Noise Abatement Tower Order 7040.1H)</p> <p>(c) An exemption from the prohibitions set forth in sections 24.05(10)(a) and/or (b) may be granted by the Executive Director under unusual operating circumstances such as when alternative runways are closed or otherwise unavailable or as required to accommodate emergencies.</p> <p>2. Intersection takeoffs by jet aircraft or aircraft exceeding 30,000 pounds maximum certificated gross takeoff weight are prohibited, except for departures from Runway 15R. (Included in FAA BOS ATCT Noise Abatement Tower Order 7040.1H)</p>	<p>Massport - Logan International Airport Noise Abatement Rules and Regulations found at 740 CMR 24:00, dated July 1, 1986. The 1986 Noise Rules stand on their own, and do not incorporate by reference or otherwise any earlier rules.</p>	<p>Massport – Amending the Massport Noise Rules would involve a state regulatory process prescribed by the Massachusetts Administrative Procedures Act, MGL Ch. 30A (and its implementing regulations); as well as an environmental review process under the Massachusetts Environmental Policy Act (MEPA).</p> <p>Massport MOU with City of Boston after removal of Blast Fence commits Massport to keeping this noise rule.</p> <p>FAA – See Section III below for Massport noise rules contained in the FAA BOS ATCT Order 7040.1H.</p>
II. RUNWAY 14-32		
<p>1. Runway 14-32 Unidirectional Limitation. The Runway 14-32 component of the Preferred Alternative has been conceived and proposed by Massport to accommodate unidirectional operations only. All aircraft arrivals will occur over Boston Harbor to the Runway 32 approach end. All departures will take off from the Runway 14 end heading out over Boston Harbor.</p> <p>Given these physical and environmental considerations, Massport as airport proprietor proposes to limit Runway 14-32 to unidirectional operations only. FAA agrees to and will develop air traffic control procedures that will ensure the safe and efficient use of the runway in a manner consistent with Massport's intent of unidirectional use, subject to variance that may be required to accommodate particular aircraft emergencies. Refer also to FAA Boston Tower Standard Operating Procedures (SOP) Order 7110.11M dated October 3, 2014.</p>	<p>Massport - Massport's state and federal environmental permits allow for only unidirectional operations. In addition, the state court order authorizing the construction and operation of Runway 14/32, which had been the subject of a court imposed injunction for approximately 30 years, authorized only unidirectional operation of the runway. The runway has been constructed, marked and lighted to enable its unidirectional use only, in accordance with the court's order modifying the injunction, the FAA ROD and the MEPA certificate applicable to Runway 14-32.</p>	<p>Massport/FAA- New state and federal environmental process and modification by state court of the existing injunction affecting Runway 14/32 to authorize the re-design and operation as a bi-directional runway. It would also involve the design and implementation by the FAA of new procedures, to address issues of safety and efficiency, obstruction and airspace compatibility.</p>

2. **Wind-Restricted Use of Runway 14-32.** Massport, with support from FAA, has committed to reassess the PRAS program, which establishes runway end utilization goals, as part of its Section 61 Findings. Given the reassessment of PRAS, it is reasonable to maintain **historic** runway utilization patterns rather than use Runway 14-32 to change runway use patterns, particularly when such changes are not necessary to achieve the principal delay-reduction benefit of the runway. Therefore, FAA may use Runway 14-32 when winds are 10 knots or greater from the northwest or southeast, in accordance with parameters explained later in this section. As designed, this mitigation measure for the Preferred Alternative will prevent Runway 14-32 from causing shifts in runway utilization from what currently occurs.

The wind restriction will limit the use of Runway 14-32 to those times when winds are equal to or greater than 10 knots from the northwest or southeast (between 275 degrees and 005 degrees, or 095 degrees and 185 degrees respectively). Since this wind restriction does not materially change runway utilization when compared to calendar year 2000 runway end use, the 10-knot wind restriction also reduces the total number of people within the 65 DNL contour when compared to the No Action Alternative.

The 10-knot wind restriction achieves the purpose and need of the Airside Project because it is predicted to reduce delays during northwest wind conditions. At the same time, a 10-knot wind restriction, as designed, prevents Runway 14-32 from changing overall runway utilization patterns at Logan, enhances consistency of the Project with City of Boston land use planning objectives, and thus addresses some of the public's concerns regarding Runway 14-32. The 10-knot wind restriction enhances consistency with local planning by removing all but a small area of piers on the South Boston waterfront from the 65 DNL contour, under the long-term 37.5 Million High RJ Fleet, when compared to the unrestricted Preferred Alternative (Figure 3.8-17 of Final EIS).

FAA - The 10-knot wind restriction is contained in the FAA's 2002 Record of Decision for the Airside Improvements Planning Project, Section VIII Mitigation Measures. The purpose of the wind restriction is to allow a reduction in delays during Northwest wind conditions, while preventing an overall change in runway use at the Airport.

FAA - Eliminating the 10-knot wind restriction is considered a federal action that is subject to the National Environmental Policy Act (NEPA). The FAA would need to evaluate the potential environmental impacts of removing the wind-restriction to determine the appropriate NEPA document required per FAA Order 1050.1F Environmental Impacts: Policies and Procedures dated: July 16, 2015. Eliminating the wind restriction will likely generate substantial public and political interest and require FAA to conduct extensive public outreach. The time and effort to do this will require resources; including funding which could delay the time it takes to initiate this action and complete the environmental review process.

III. FAA NOISE ABATEMENT TOWER ORDER

1. When practical and traffic permits, the preferable runway configuration between the hours of midnight and 6:00 a.m. is Land Runway 33 L, Depart Runway 15R.¹

Massport - AIRPORT/FACILITY DIRECTORY NORTHEAST US: Airport remarks: "Between 0500 – 1100Z Rwy 15R is preferential night rwy for tkof and Rwy 33L is preferential night rwy for ldg". The purpose of BOS ATCT Noise Abatement Order 70401H is to describe the rules and imposed regulations required by Massport to meet their noise abatement/mitigation commitments to surrounding communities
Massport preference for late night noise abatement.

FAA – See Section I. In addition, if Massport decides to modify its noise rules and regulations, the FAA would review the changes in light of the Aviation Noise and Capacity Act (ANCA) FAR Part 150 and Massport's grant assurances, as well as the National Environmental Policy Act (NEPA). Modifications to existing noise abatement procedures will likely generate substantial public and political interest and require extensive public outreach. The time and effort to do this will require resources,

2. See Section I. 1. (a) & (b) and 2 for a list of Massport runway noise and operational restrictions contained in the BOS ATCT Noise Abatement Order.

Massport – Massport 1986 Noise Rules. The purpose of BOS ATCT Noise Abatement Order 7040.1H is to describe the rules and imposed regulations required by Massport to meet their noise abatement / mitigation commitments to surrounding communities.

including funding from FAA and/or **Massport**, which could delay the time it takes to initiate the changes and complete the environmental review process.

IV. NON-USE OF RUNWAY 9 FOR ARRIVALS

1. There are no instrument approaches, current configurations or standard operating procedures or letters of agreement that would define how to safely use Runway 9 for arrivals. It is only used in the event to prevent a go around by a Runway 4L arrival for smaller more maneuverable aircraft proceeding visually to it.

FAA – FAA determined not to use Runway 9 for arrivals for safety and efficiency reasons except to prevent a go around to Runway 4L. Safety and efficiency reasons are as follows: (1) tall buildings of the City of Boston are directly in the way (safety) , (2) ILS RWY 4R and ILS RWY 15R approaches have restrictions on circling toward the city – because of the buildings – which would prevent someone circling from either of these approaches to land RWY 9 (safety), and (3) Because of the physical layout of the airport, RWY 9 arrivals would impact operations on every other runway at BOS. (Efficiency)

FAA - For safety and efficiency reasons the FAA has no intention of implementing an arrival procedure to Runway 9. If safety and efficiency reasons did not exist, implementing a new arrival procedure to Runway 9 is considered a federal action that is subject to the National Environmental Policy Act (NEPA). The FAA would need to evaluate the potential environmental impacts of implementing a new procedure where none exists today to determine the appropriate NEPA document required per FAA Order 1050.1F Environmental Impacts: Policies and Procedures dated: July 16, 2015. This would generate substantial public and political interest, require FAA to conduct extensive public outreach and likely result in significant impacts requiring the preparation of an environmental impact statement (EIS) The time and effort to do this will require resources; including funding which could delay the time it takes to initiate this action likely for several years based on similar previous projects at Boston.

V. BOSTON TRACON STANDARD OPERATING PROCEDURES MANUAL

1. 2. KBOS Procedures. b. Arrivals. (4) RWY 22R. Must be limited to aircraft with a noise emission level of 78 dBA or less. Examples of these aircraft can be found in the A90 ACE-IDS.

FAA/Massport - Derived from a Massport noise rule based on decibel limits. See I. 1 (a) above.

Massport/FAA – See Section I. In addition, if Massport decides to modify its noise rules and regulations, the FAA would review the changes in light of the Aviation Noise and Capacity Act (ANCA) FAR Part 150 and Massport’s grant assurances, as well as the National Environmental Policy Act (NEPA). Modifications to existing noise abatement procedures will likely generate substantial public and political interest and require extensive public outreach. The time and effort to do this will require resources, including funding from FAA and/or **Massport**, which could delay the time it takes to initiate the changes and complete the environmental review process.

Notes:

^{1/2}Items not included in the Massport Noise Rules and Regulations.

SOURCES: The following documents referenced in this table have been posted to the Boston Logan Airport Noise Study website at: http://www.bostonoverflightnoisestudy.com/phase3_documents.aspx.

Massport Noise Rules and Regulations, Effective July 7, 1986 (Massport Noise Rules and Regulations); Federal Aviation Administration, *Record of Decision, Airside Improvements Project, Logan International Airport*, August 2, 2002. (Runway 14-32); Federal Aviation Administration, *BOS ATCT Noise Abatement Order 7040.1H*, dated October 28, 2007; Federal Aviation Administration, *BOS ATCT Order 7110.11M, Standard Operating Procedures (SOP) dated October 3, 2014*; Federal Aviation Administration, Boston Consolidated Terminal Radar Approach Control Standard Operating Procedures (SOP) *Order A90 TRACON 7110.11K, effective date January 20, 2015*.

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