

INITIAL CAC NOISE ABATEMENT CONCEPTS

THE FOLLOWING LISTS PROVIDE A SERIES OF NOISE ABATEMENT CONCEPTS ACCEPTED BY THE CAC AS WORTHY OF FURTHER CONSIDERATION. THE NOISE MANAGEMENT EFFECTS OF EACH MUST BE JUDGED UPON ITS MERITS FOR IMPACT REDUCTION, AT WHICH TIME FURTHER CONSIDERATION WILL BE GIVEN BY THE CAC TO THE SUPPORT OR OPPOSITION TO ANY INDIVIDUAL MEASURE.,

GROUND NOISE MEASURES

- G-A. Tow aircraft to the runway ends before takeoff
- G-B. Single engine taxi on aircraft side away from nearest communities
- G-C. Use Taxiway November for 22R traffic, use the Centerfield Taxiway for 22L traffic*
- G-D. Runway 4R arrivals taxi in on the Centerfield Taxiway*
- G-E. Add fillets for 4R arrival egress - curve the fillet from the high speed exit taxiways Y and R onto the Centerfield Taxiway*
- G-F. Limit use of reverse thrust during landing on all runways
- G-G. Erect noise barriers on the community side of the shoreline
- G-H. Place floating foam noise barriers in the water adjacent to November taxiway.
- G-I. Build a dedicated hush house building for run-ups.
- G-J. Seek a location on the airport for a hold apron/penalty box to park aircraft as they await takeoff queuing onto Taxiway N.
- G-K. Replace Ground Power Unit and Aircraft Power Units with electric power hook ups at all gates
- G-L. Change the national on-time departure rules so that can aircraft remain at the gate without penalizing the airline's on time performance (intended to reduce taxiway queues on Taxiway N).
- G-M. Erect noise barrier for 15R departures – northwest end of 15R/33L along East Boston shoreline.

* This does not constitute endorsement by the CAC of the Centerfield Taxiway.

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FLIGHT NOISE ABATEMENT MEASURES**APPROACH ROUTING**

- F-A. Establish Continuous Descent Approach to Runways 4R/L, 27, 33L, 32, 22R/L and 15R
- F-B. Move the DRUNK Intersection further east over the ocean, as opposed to remaining over land at Marshfield.
- F-C. Raise the arrival crossing altitude at the DRUNK Intersection from 6,000 feet to 7,000 or 8,000 feet.
- F-D. Spread out arrivals at the DRUNK Intersection by creating additional "way points". (The intent of this concept is to reduce some of the noise impacts from having the arrivals concentrated into a narrow flight corridor by Alternatives 6, 7 and 11 under Phase 1).
- F-E. Move the arrival flight corridor over DRUNK, as adopted under Alternatives 6, 7 and 11 of Phase 1, to the south, so that the altitude of the arrivals can be raised to reduce or eliminate noise impacts over land at Marshfield and Duxbury.
- F-F. Phase 1 Carry Over Measure 16 - Runway 32 Arrivals: develop approach procedure that maximizes flight over water
- F-G. Establish an over water visual or RNAV arrival to Runways 33L/32 over harbor mouth during night hours to increase distance north from Point Allerton.
- F-H. When Runway 32 is used for arrival in conjunction with Runway 27 arrivals, (if an over harbor approach is not used per Concept 6 or 7) leave Runway 32 arrivals where they are indicated by the Runway 14/32 EIS (approximately 4000 feet west of the Runway 33L approach course) when used in conjunction with Runway 33L arrivals. The intent of this measure is to maintain an offset approach to Runway 32 west of Hull at all times, instead of a straight in approach to Runway 32).
- F-I. Maintain 3 mile in-trail separation intervals between all aircraft on arrival to Runways 22R/L – never let the 2.5 mile exemption to the separation rule be applied
- F-J. Place note on approach plate that if assigned Visual approach, maintain last assigned altitude until intercepting the final approach course.

DEPARTURE ROUTING

- F-K. Extend Runway 27 departure gates farther south to I-95/R128/Dedham area before turning to enroute courses
- F-L. Seek improvements of compliance with 1996 EIS goals for Runway 27 departure procedure through the application of new technology (RNAV, RNP, etc.)

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- F-M. Phase 1 Carry Over Measure 4 - Runway 14 Departures: develop departure procedures to increase altitudes of aircraft over land by establishing course guidance to route traffic north of Hull, when used in conjunction with Runway 27 arrivals.
- F-N. Establish a departure waypoint from Runway 15R for use at night to move departures farther north of Hull than established by Phase 1 Alternative 3.
- F-O. If Phase 1 Runway 22R/L RNAV departure waypoint north of Hull does not keep the departures from flying over Hull, then change the departure headings to route 50% of the departures southward over Quincy Bay or replace the RNAV route with a conventional departure that routes all jet departures from 22RL north of Hull
- F-P. Establish a departure route from Runway 33L that follows the Mystic River and compatible lands along the River before turning on course – follow Mystic River, industrial area toward Wellington Station for 5-6 NM from DME and 5000 MSL before turn.
- F-Q. Turn departures from Runway 9 to the right (approximately 120 degree outbound radial from the Boston VORTAC) at or before the runway end to pass over Deer Island sewage treatment plant, then resume 093 departure course of Phase 1, Alternative 2.
- F-R. Shift Runway 4R Phase 1 Alternative 1 RNAV initial fix to east to pass more over water away from Revere Beach (moves track closer to Nahant).

COCKPIT PROCEDURES

- F-S. Phase 1 Carry Over Measure 18 - Departure Runways 27, 33L, 4R, 9: apply cockpit alternatives for thrust and climb management to benefit certain nearby communities through implementation of close-in or distant noise abatement departure procedures. Evaluate each measure for noise reduction effects off the end of each runway. Effects may vary from Runways 27, 33L and 4R, while Runway 9 is expected to achieve greater benefit from a close-in (special) departure procedure).

LOCAL CONTROL PROCEDURES OVER DOWNTOWN

- F-T. Establish altitude floor for local VFR traffic under Tower control not on approach or initial climb to increase altitudes over downtown
- F-U. Establish required helicopter routings within downtown area airspace for all users, including hospitals, businesses and media
- F-V. Extend initial departure course for turboprop aircraft to 2,000 MSL before initiating turns over populated areas

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Runway Use Measures

Judgment is reserved as to the acceptability of any runway use concept proposed for evaluation. The CAC is unprepared, at this time, to propose runway use actions. It is the CAC's position that it is preferable to see the effects of the noise abatement actions listed for ground noise and flight procedures prior to defining runway use preferences, if any.

REJECTED MEASURES

The measures carried over from Phase 1 and listed below are rejected by the CAC as undesirable for noise abatement in the communities surrounding Boston Logan International Airport.

1. Phase 1 Carry Over Measures 17/21 - Runways 27 Departures: develop departure procedures for fanning. The intent of this measure is to provide respite to close-in communities in departure areas of these runways. Measure rejected because it runs counter to CAC goal to not spread significant noise into new communities.
2. Phase 1 Carry Over Measures 17/21 - Runways 33L Departures: develop departure procedures for fanning. The intent of this measure is to provide respite to close-in communities in departure areas of these runways. Measure rejected because it runs counter to CAC goal to not spread significant noise into new communities.
3. Phase 1 Carry Over Measures 17/21 - Runways 4R Departures: develop departure procedures for fanning. The intent of this measure is to provide respite to close-in communities in departure areas of these runways. Measure rejected because it runs counter to CAC goal to not spread significant noise into new communities.
4. Phase 1 Carry Over Measure 27 - Runways 4R/4L LDA Approaches: develop offset approaches from the east and west. The intent of this measure is to reduce noise to communities under the existing approach to 4R/4L. Measure rejected because it runs counter to CAC goal to not spread significant noise into new communities.
5. Phase 1 Carry Over Measure 28 - Runway 27 Departures: modify Runway 27 departure procedure to an initial right turn in order to direct aircraft over the Charles River basin and away from heavily populated areas. The intent of this measure is to reduce the aircraft noise exposure for the communities in the departure area of Runway 27. Measure rejected because it runs counter to CAC goal to not spread significant noise into new communities.

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