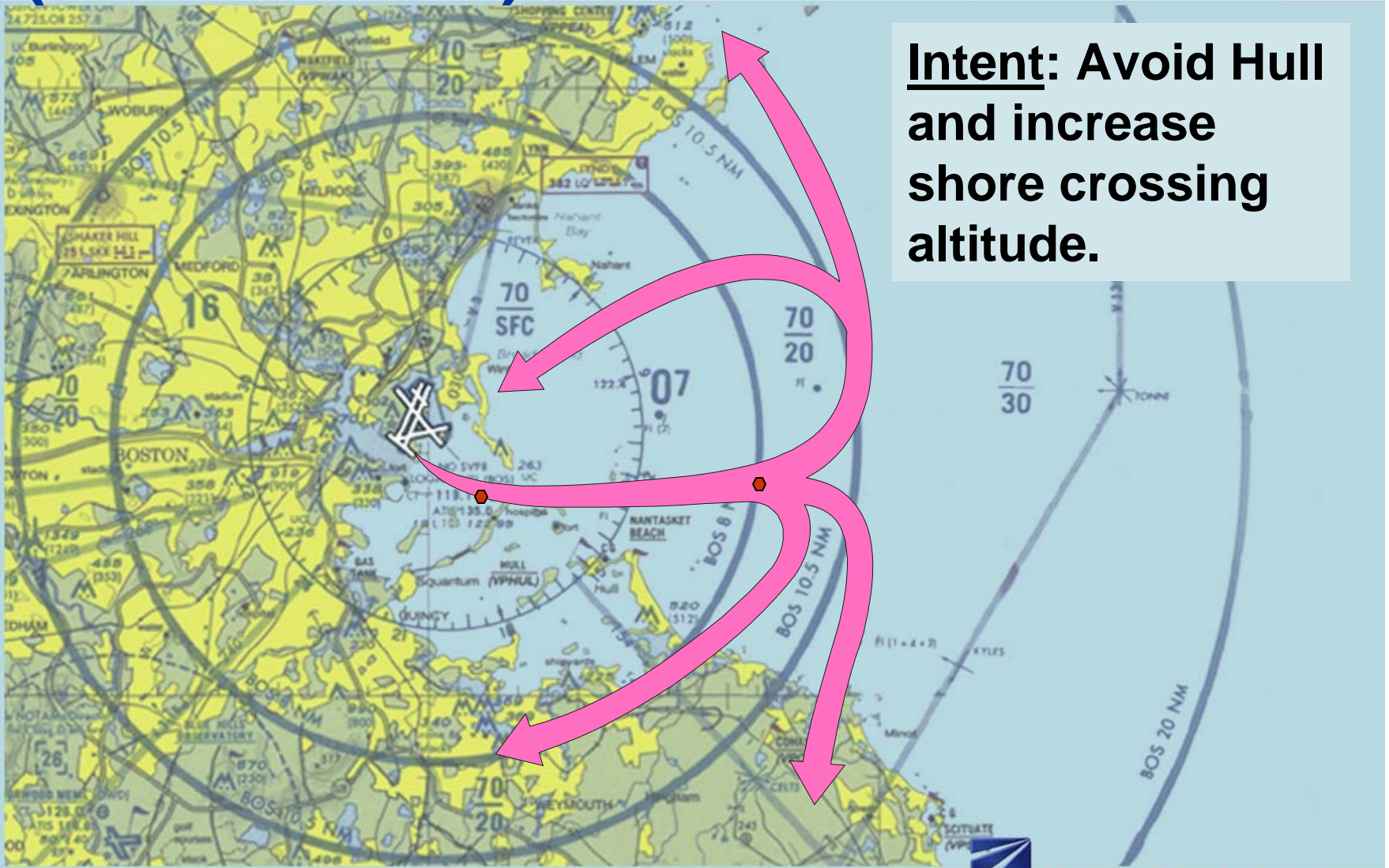




Phase 2 Alternatives

Alternative 1E RNAV/FMS or DME Departure Procedure from Runway 14 to Increase Altitudes Over Land (Alternative 4)



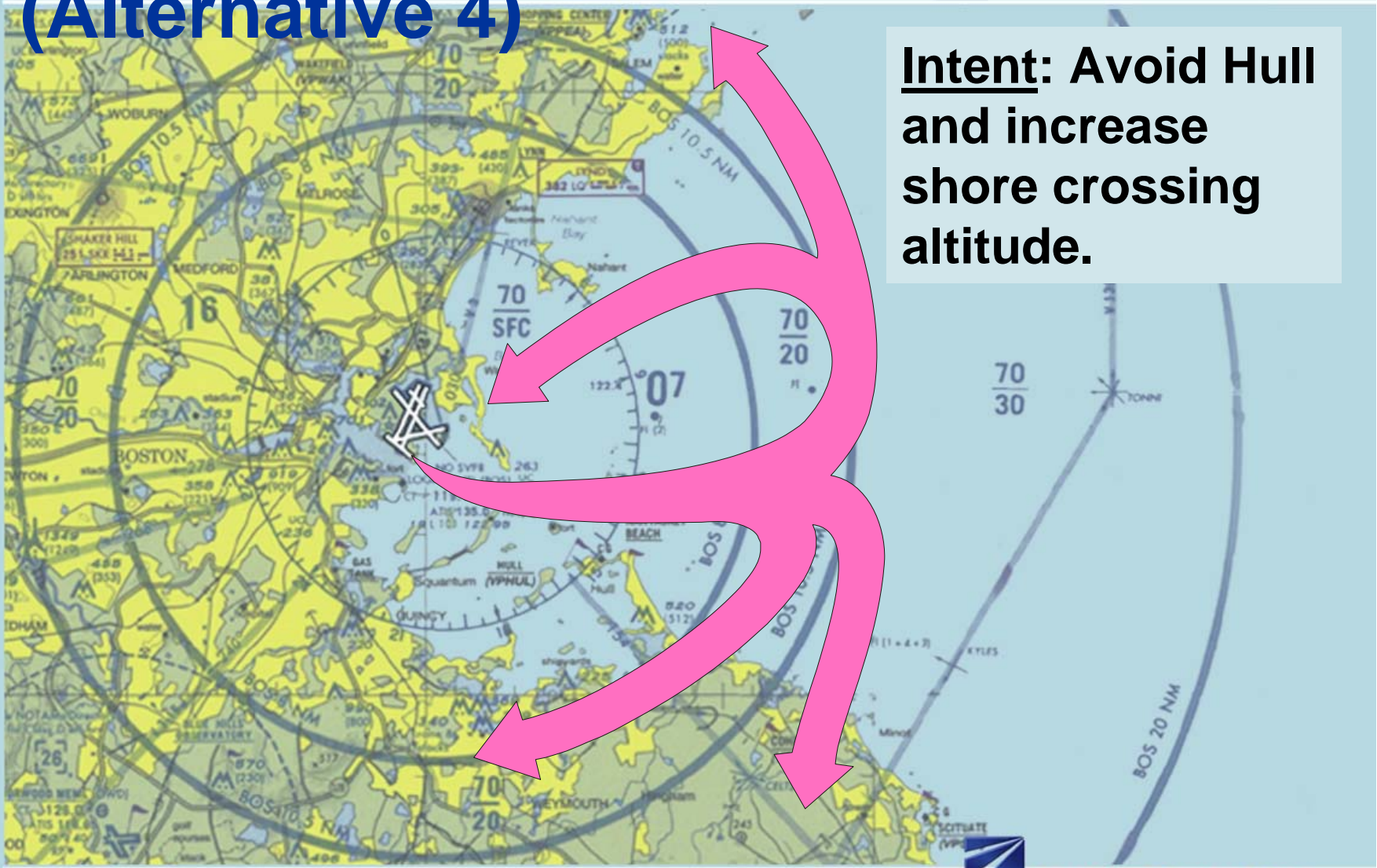
Intent: Avoid Hull and increase shore crossing altitude.



Alternative 2E

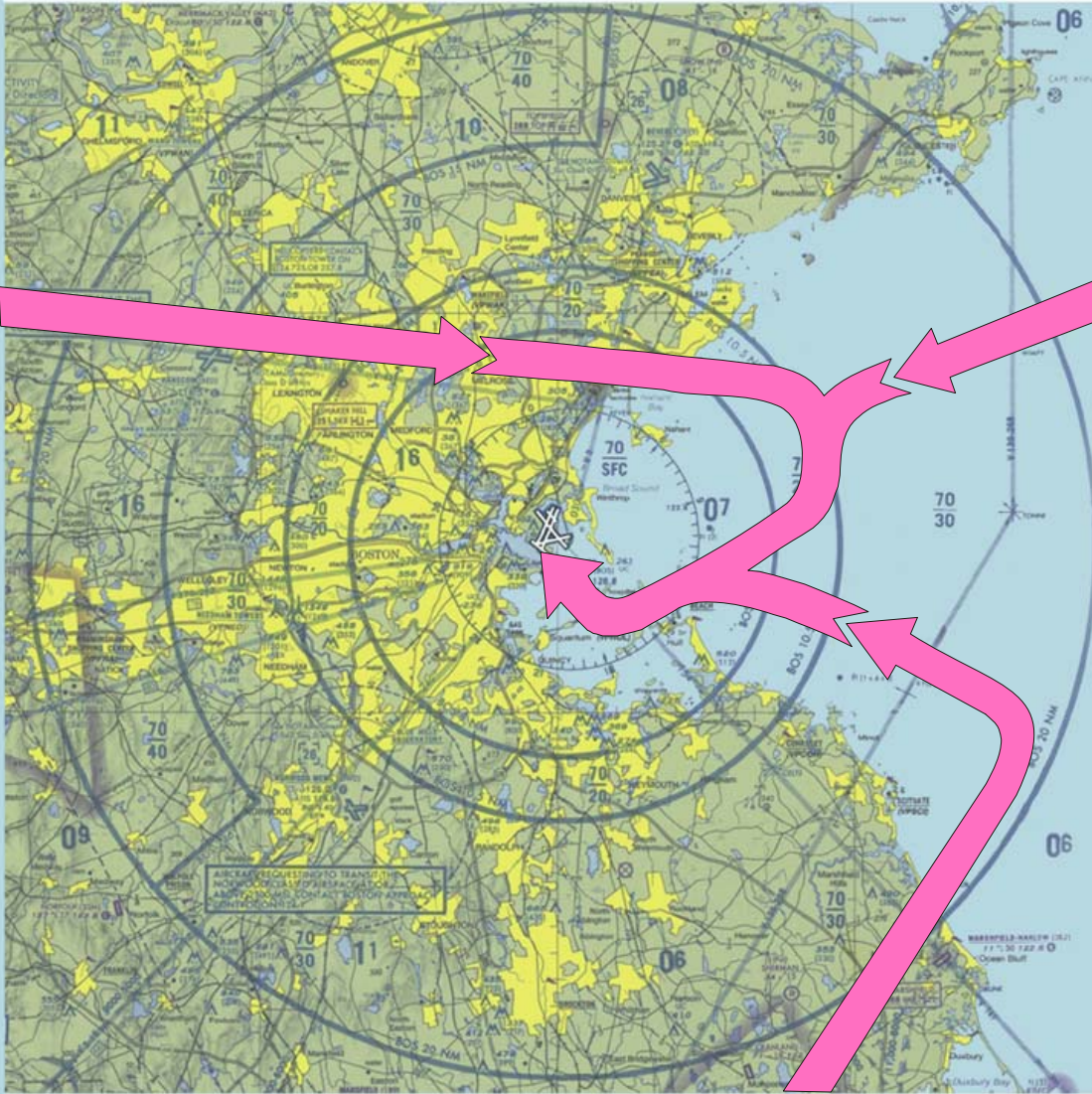
Develop Classic Procedure for non-FMS/GPS Equipped Aircraft To Increase Altitudes Over Land When Departing Runway 14

(Alternative 4)



Intent: Avoid Hull and increase shore crossing altitude.

Alternative 4D Runway 32 - Develop RNAV Approach Procedure That Maximizes Flight Over Water (Alternative 16)

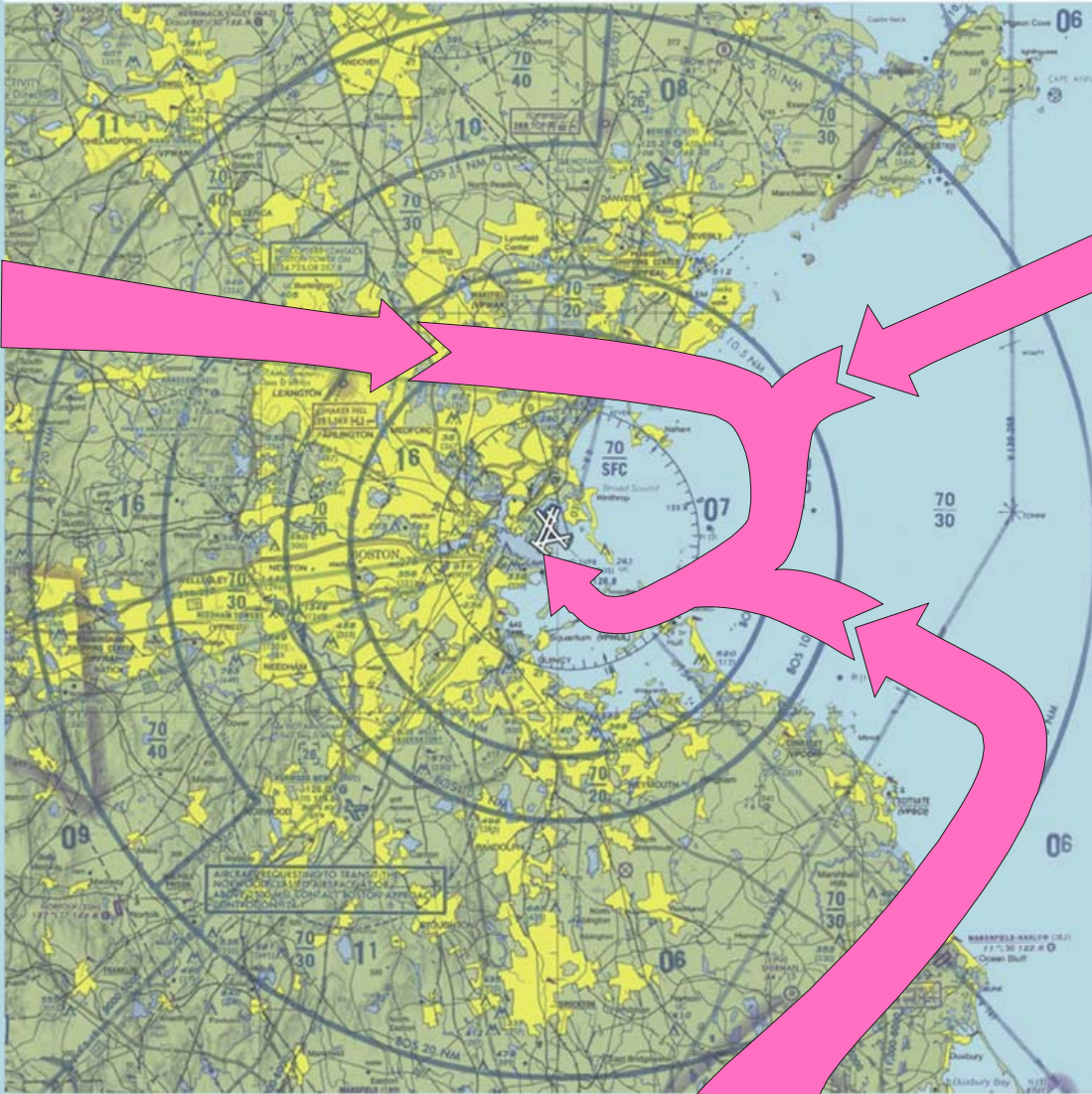


Intent: Minimize noise to South Shore communities.



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Alternative 6D Runway 32 - Develop Classic Arrival Procedures to Mirror RNAV Arrival Procedures (Alternative 16)

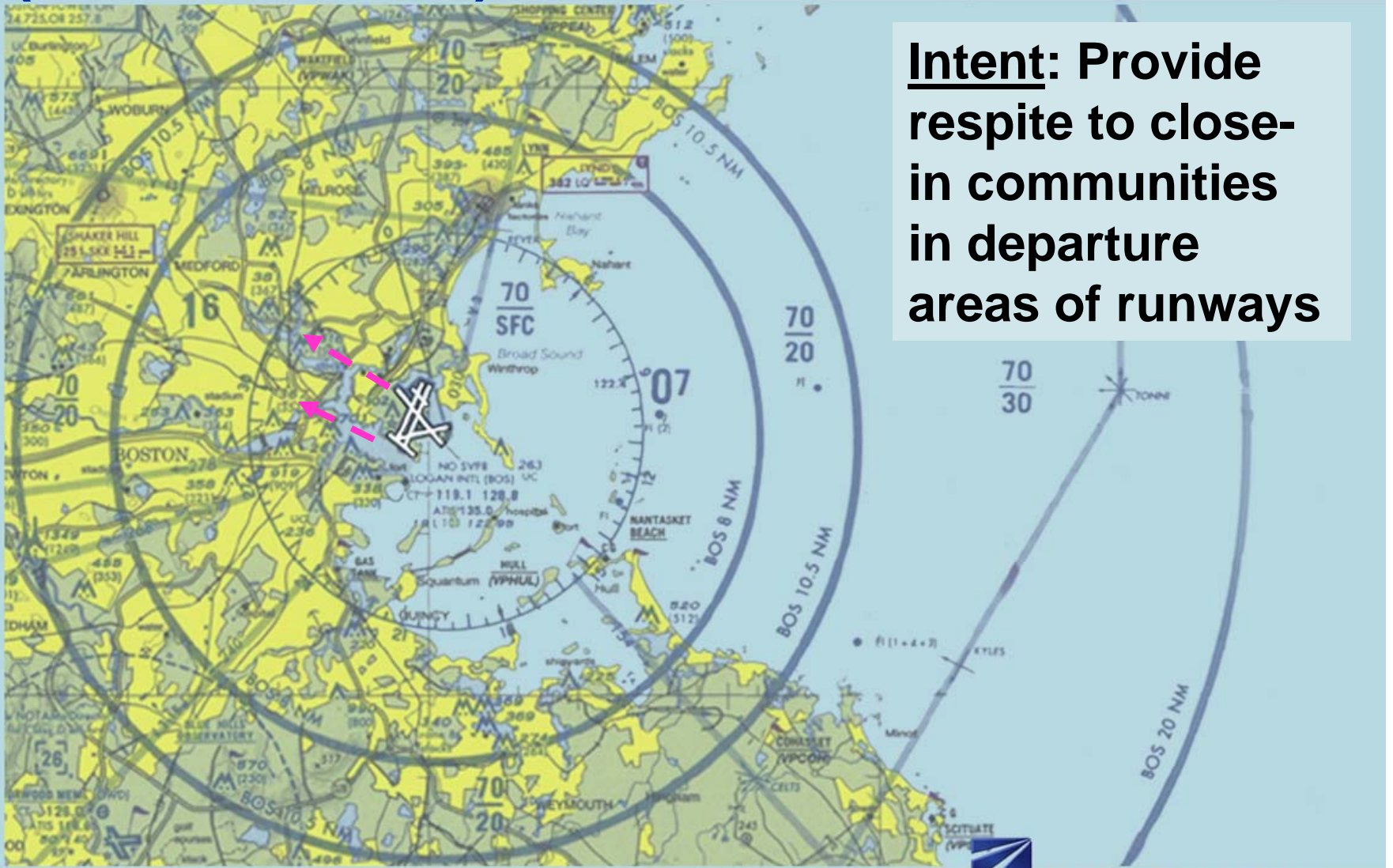


Intent: Minimize noise to South Shore communities.



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Alternative 3 Runways 27 and 33 – Develop RNAV/FMS and Classic Departure Procedures for Fanning (Alternative 17)



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Alternative 9 All Runways - apply cockpit alternatives for thrust and climb management to benefit certain nearby communities through implementation of close-in noise abatement departure procedures.

(Alternative 18)



Intent: Minimize noise to close-in communities.



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Alternative 9 (continued)

Cockpit Alternatives – Takeoff Runways 22 & 15 (and perhaps 9)

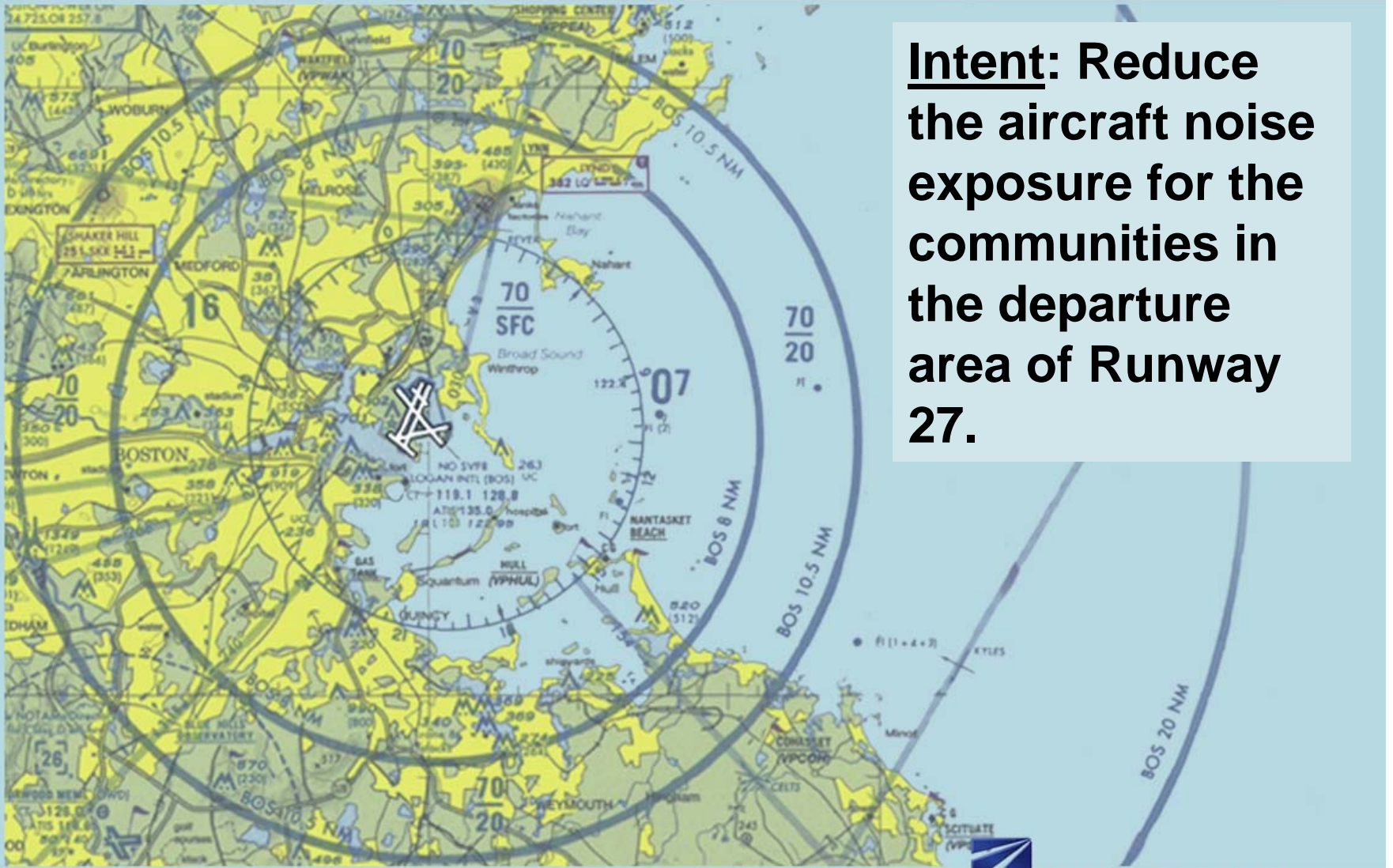
(Alternative 18)



Intent: Minimize noise to far out communities.

Alternative 27 Alter runway use to provide a more equal balance in the number of departures between Runway 27 and 33.

(Alternative 19)



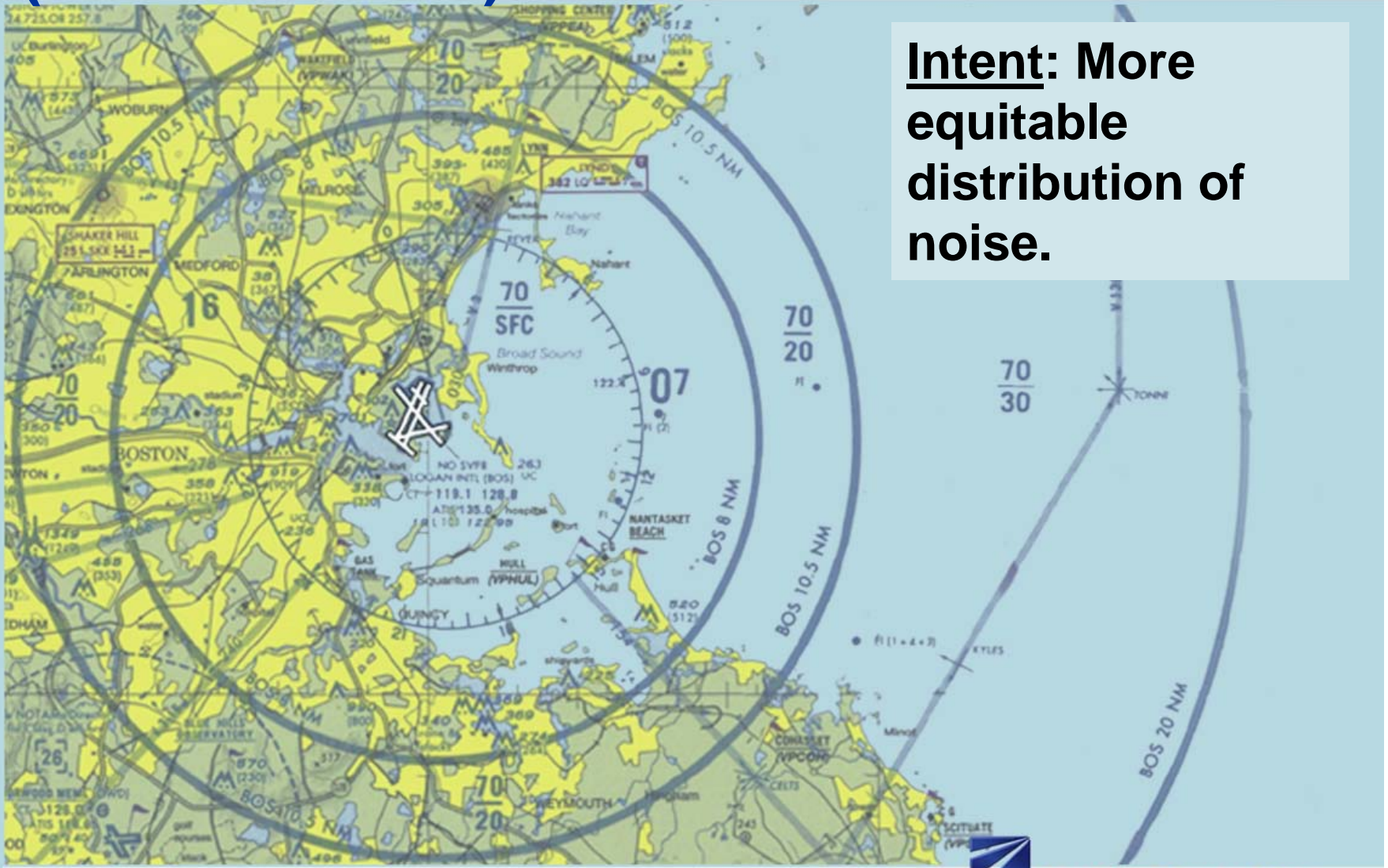
Intent: Reduce the aircraft noise exposure for the communities in the departure area of Runway 27.



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Alternative 18 Runway 4L and 22R – Remove Noise Emission restriction to Achieve More Utilization of This Runway (Alternative 20)



Intent: More equitable distribution of noise.



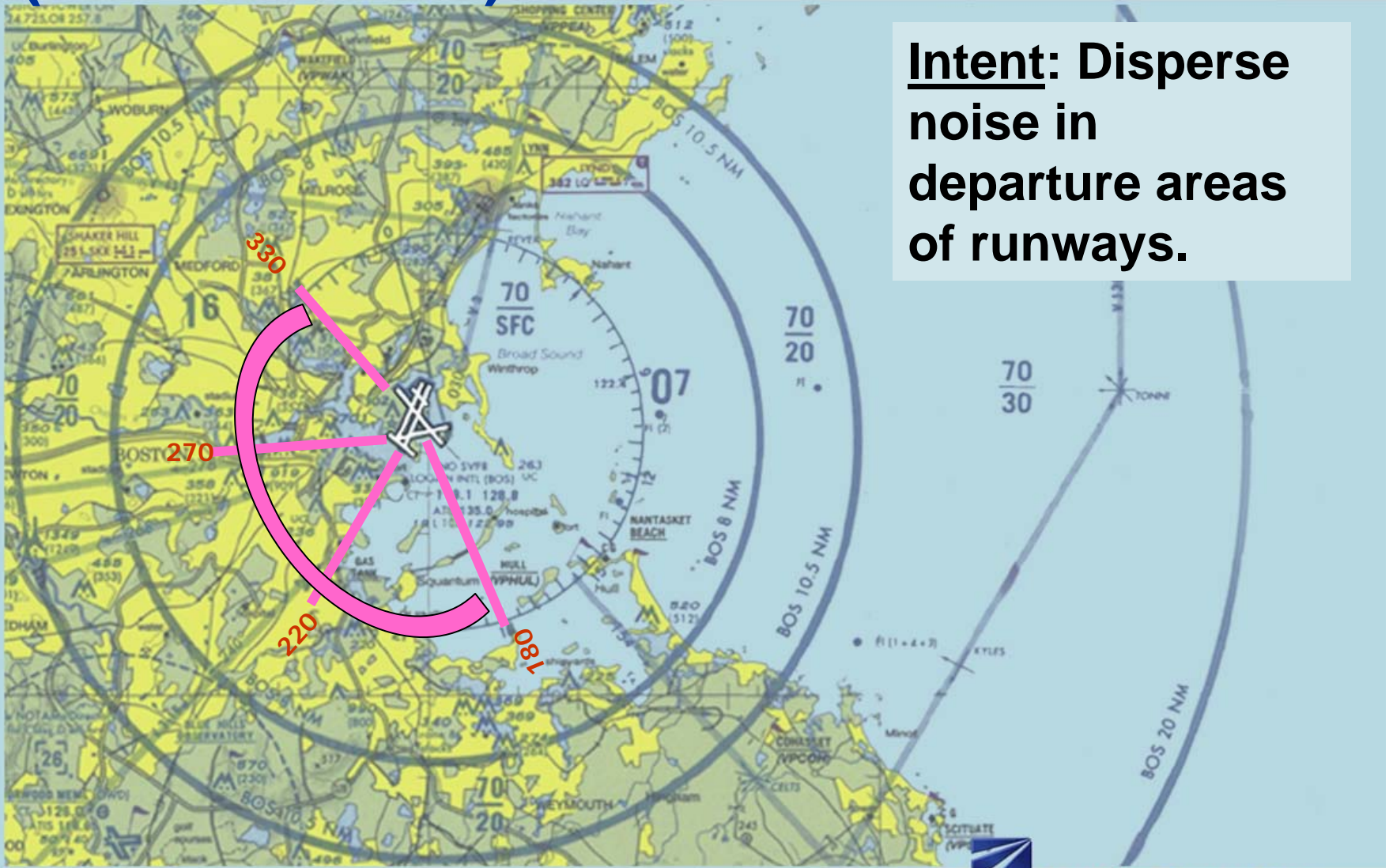
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Alternative 19

All Runways – Develop Fanning Departure Procedures Based on Route of Flight

(Alternative 21)



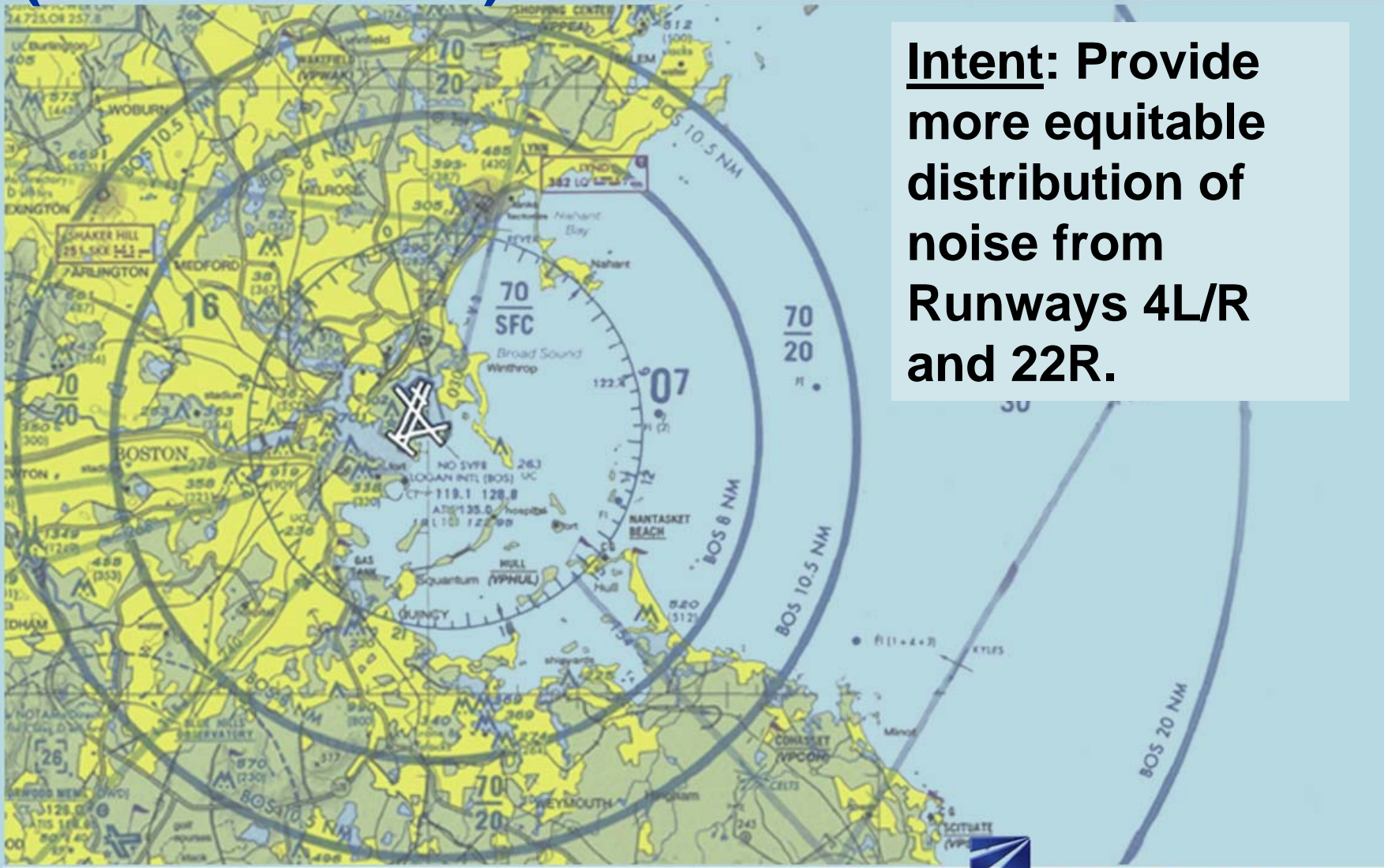
Intent: Disperse noise in departure areas of runways.



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Alternative 20 Runway 4L/R and 22R – Develop Runway Use Procedure to More Evenly Use These Runways in Small Tailwind Component (Alternative 22)



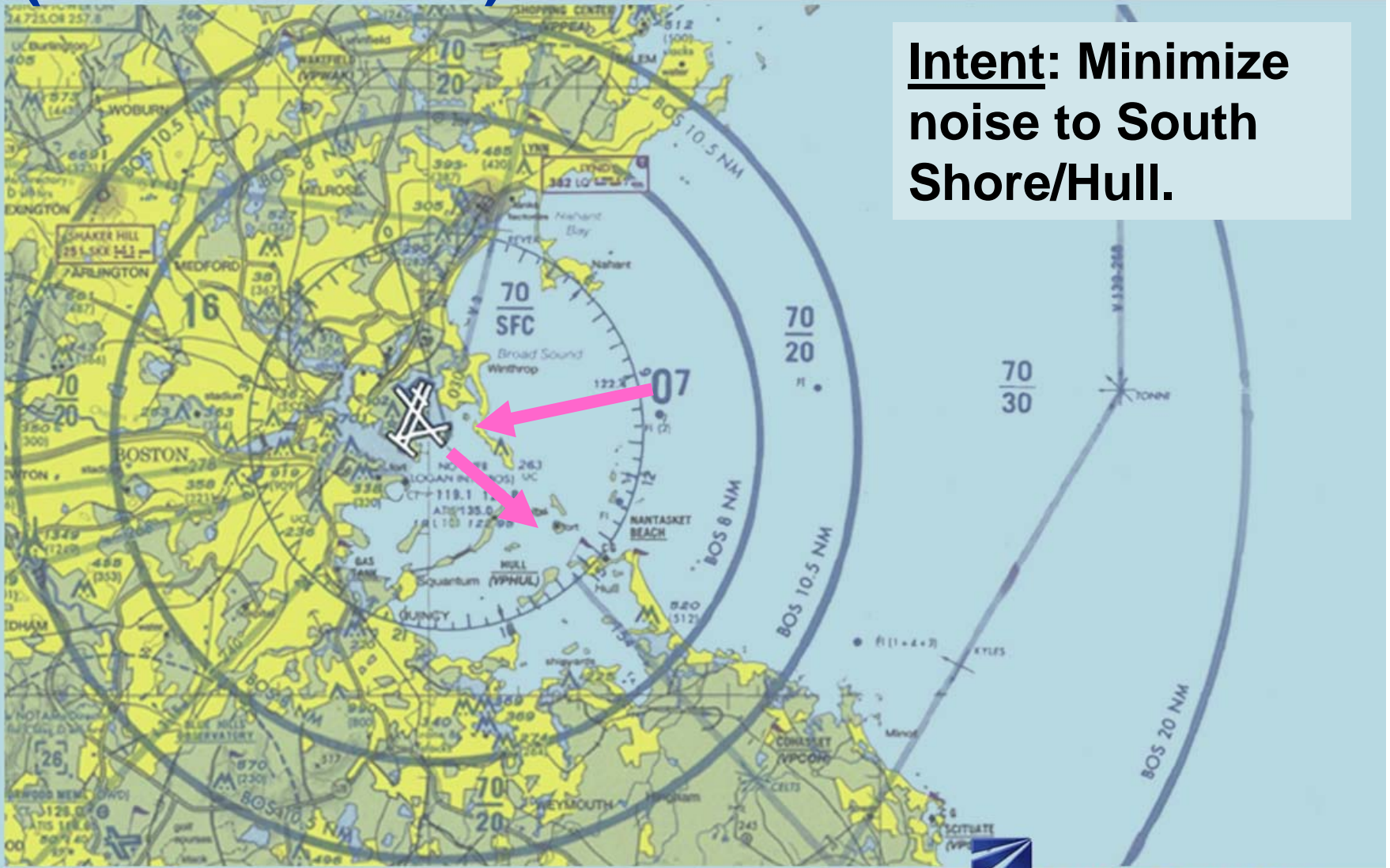
Intent: Provide more equitable distribution of noise from Runways 4L/R and 22R.



Alternative 21

Arrive on Runway 27 and depart on Runway 15 During Late Night Hours

(Alternative 23)



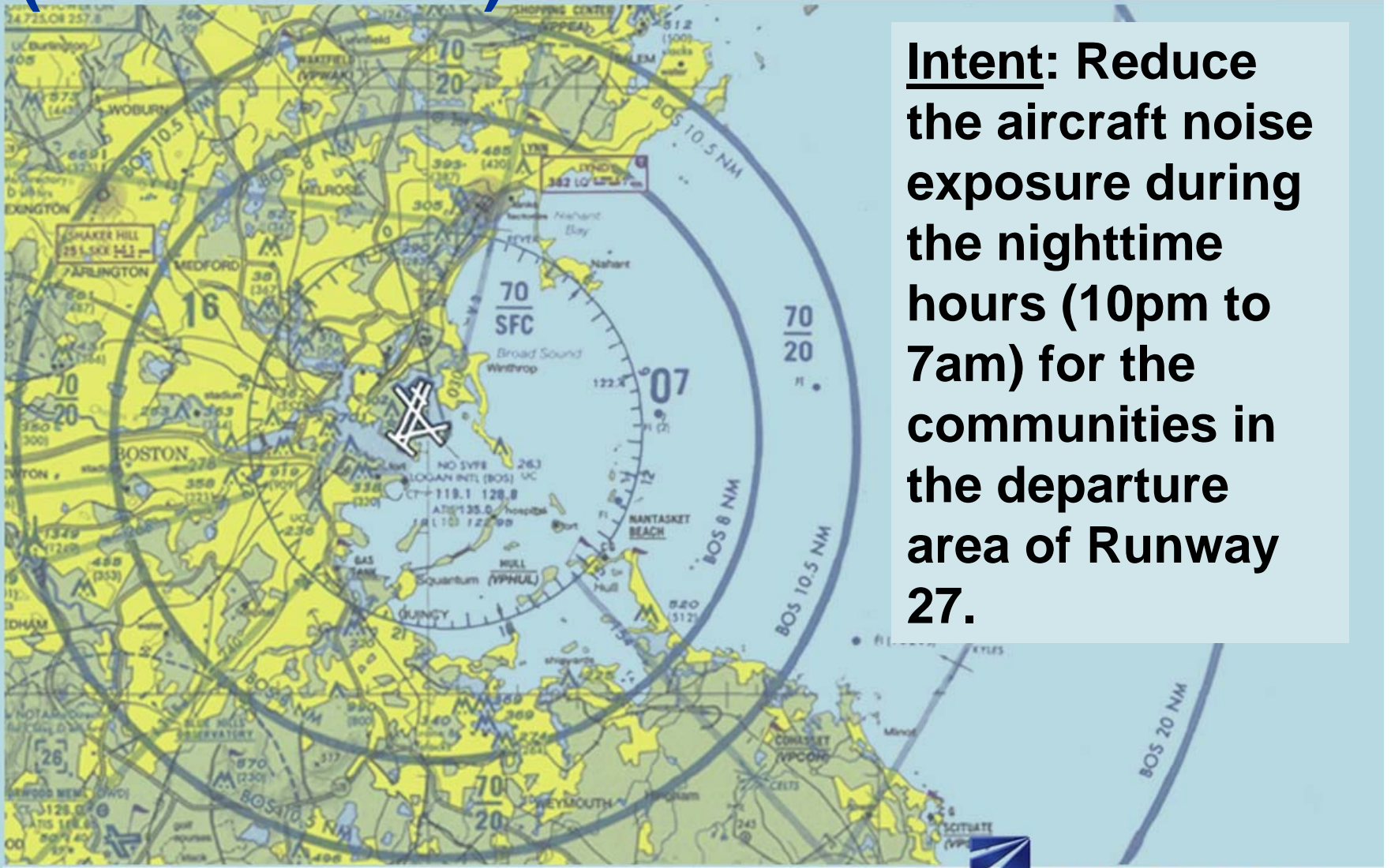
Intent: Minimize noise to South Shore/Hull.



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Alternative 25 - Implement a preferential runway use procedure during the 10pm to 7am period that places all departures on Runway 15R, unless winds exceed 11 knots or operations exceed 60 per hour.

(Alternative 24)



Intent: Reduce the aircraft noise exposure during the nighttime hours (10pm to 7am) for the communities in the departure area of Runway 27.



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Alternative 16

- ▶ Runway 4R/L – Develop Offset Approaches From the East and West (Alternative 27)



Intent: Minimize noise to communities under the existing approach to 4L/R.

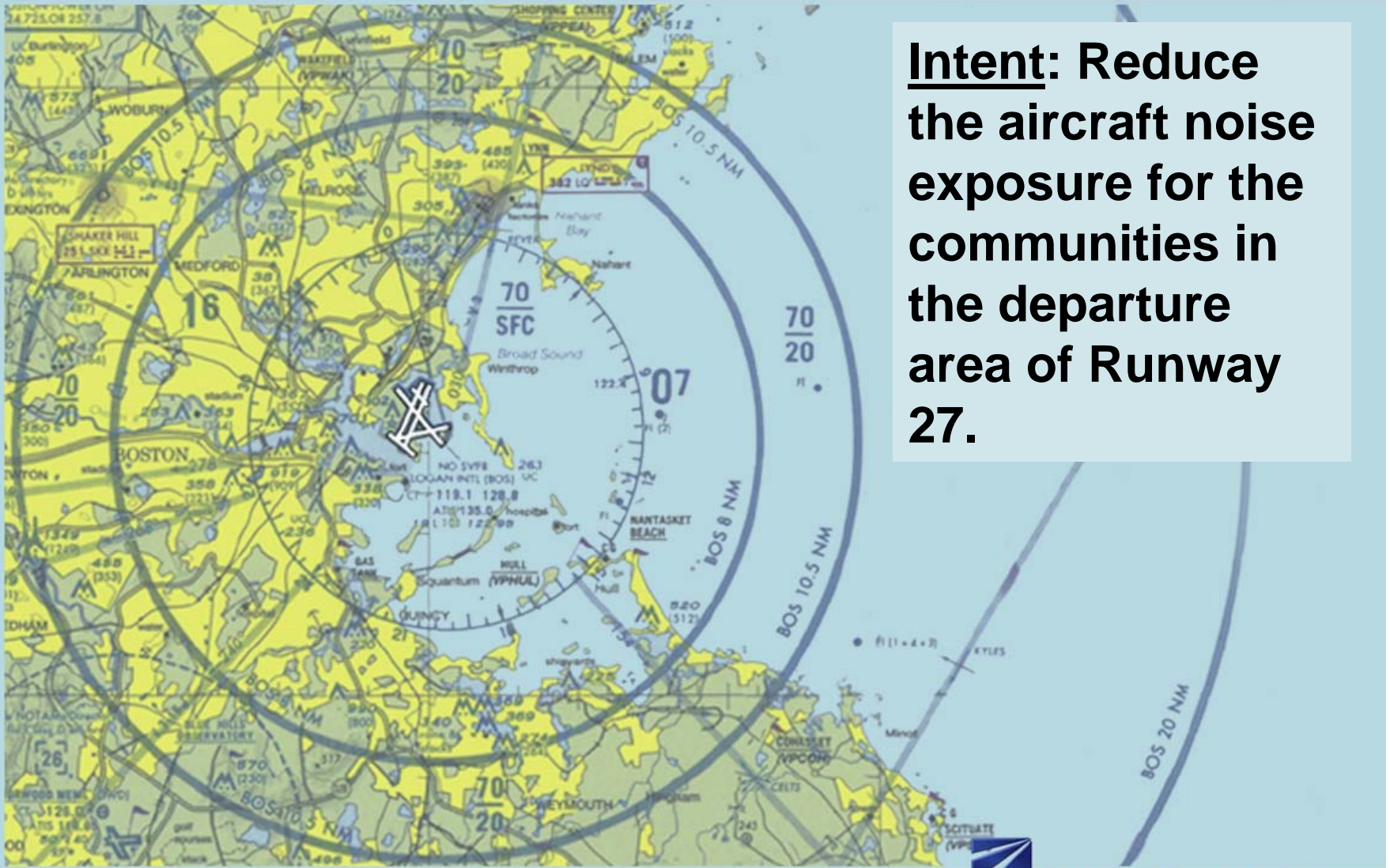


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Alternative 28 Modify the Runway 27 WYLYY departure procedure so that aircraft are fanned after the 2nd gate.

(Alternative 28)



Intent: Reduce the aircraft noise exposure for the communities in the departure area of Runway 27.



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