Assessment of Recommendations from the Hanscom Noise Workgroup

Reinier Beeuwkes, Concord and Michael Bahtiarian, Bedford (personal comments based on NWG participation)

- "...Massport should commit to form a workgroup... to determine and agree upon
- 1. an appropriate baseline...
- 2. The metric, or set of metrics, that best describe...
- 3. Mitigation for agreed upon levels of increases in noise impacts...
- 4. The content and form of the noise discussion... in the 2000 GEIR update."

(GEIR Update Certificate, June 30, 1997)

Noise Workgroup (NWG) History

- <u>June 1997</u>: MEPA Certificate on '95 GEIR issued calling for the formation of the NWG.
- <u>April 1998 to Sept 1999</u>: NWG conducts 10 full meetings & 21 subcommittee meetings which included 17 members from four towns, HFAC, MMNHP, Air Force, HART & ShhAir.
- <u>Sept 1999</u>: Final NWG Report issued to Massport.
- <u>Nov 1999</u>: NWG presents recommendations to four towns.
- <u>April 2000</u>: NWG presents recommendations to MEPA.
- <u>Sept 2000</u>: Preliminary Massport Review of Metrics Recommend.
- <u>Feb 2001</u>: NWG members testify at FICAN Meeting in California.
- <u>Nov 2001</u>: Massport Final Comments Issued.

Summary of NWG Report

- Over 100 Pages Long.
- Unanimous Approval by all members.
- Two Sections:
 - <u>Metrics</u>: 14 Recommendations
 - Addresses methods for computing, analyzing, measuring and evaluating noise impacts for Hanscom Field.
 - Abatement & Mitigation: 21 Recommendations
 - Addresses methods for reducing aircraft noise by use of education, flight paths & communication.

Metrics Recommendations Adopted by Massport, Included in ESPR, & Adequately Treated

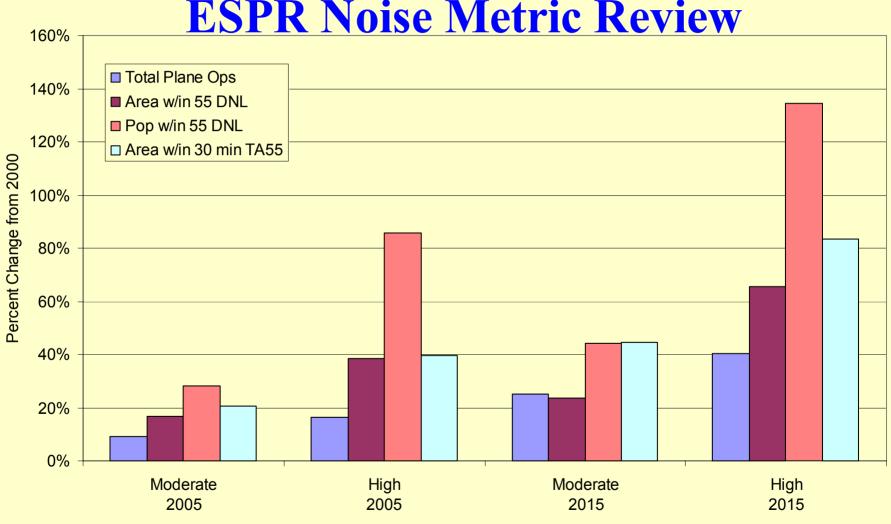
- M1: Continued Efforts.
 - HATS ESC de-facto committee for continued efforts.
- *M3*: Single Event Level Distribution.
 - Figure 7-27 provided SEL/D for base year and four growth scenarios.
- *M*7: INM input data & assumptions.

Metrics Recommendations Adopted by Massport, Included in ESPR, but NOT Adequately Treated

- M6: Community Summary Metrics.
 - DNL & TA Contours provided, but data dispersed through report. Loud Event Count not provided.
- *M10*: Changes to INM Software.
 - Only provided short paragraph on effect of recent changes. No year-to-year comparisons provided in ESPR.

Metrics Recommendations Adopted by Massport, Included in ESPR, but NOT Adequately Treated

- M2: Time Above (TA) Contours.
 - TA contours and areas within TA contours provided, but the ESPR does not present or discuss location or growth of contours.
- *M5*: Discussion of EPA 55 dB DNL.
 - ESPR discusses Federal EPA's 55 dB threshold level only to disparage it. ESPR still relies on FAA level of 65 dB DNL.



ESPR Noise Metric Review

11/25/02

MEPA ESPR Hearing

Metrics Recommendations Adopted by Massport, but <u>NOT Included in ESPR</u>

- M9: Short term variations in DNL.
 - ESPR included max, min & average levels from monitoring sites. But the NWG intent was for variation from predicted noise levels.

Metrics Recommendations NOT Adopted by Massport

- M4: Linear dimensionless noise metric.
- *M8*: Error bands on noise estimates.
- *M11*: Move 3 of 6 noise monitoring sites.
- *M12*: New noise monitoring sites.
- M13: Correlate flight events to noise.
- *M14*: Post noise data on Massport website.

* Per Massport Letter to MEPA, dated November 15, 2001

Massport Score Card on Metrics Recommendations

Recommendations Adopted = 8 out of 14
Recommendations in ESPR = 7 out of 14
Recommendations Adequately Covered = 3 out of 14

GRADE = 21%

Noise Workgroup MITIGATION Recommendations

- 17 recommendations made
- Most focused on general aviation
- Did <u>NOT</u> address noise mitigation for commercial aviation noise
- Did <u>NOT</u> address "...mitigation for agreed upon levels of increases in noise impacts..."

Mitigation Recommendations Already Completed

- *A1*: Voluntary Noise Abatement Procedures (*VNAP*).
- *A2*: Distribute VNAP to flight schools.
- A3: Distribute Information Page Markers.
- A4: Flight Schools display NAP.
- *A5*: Distribute VNAP to AFB Aero Club.
- *A6*: Distribute VNAP to transient pilots.

Mitigation Recommendations Already Completed

- A9: Brief Hanscom AFB Officials.
- *A10*: Distribute VNAP to military pilots.
- A12: ESC issue post event press releases.
- *A14*: Massport distribute AOPA Video.
- *A15*: Provide support to user groups.
- *A16*: NWG Brief Four Towns.

Mitigation Recommendations <u>Not</u> Completed

- A7: Post VNAP on Massport Website.
- A8: VNAP on ATIS Broadcast.
- All: Post VNAP on ESC Website.
- A13: Post flight operations on ESC Website.
- A17: Consider Part 150 Study.

Mitigation Recommendations <u>Not</u> Completed

- A18: Consider Model Quiet Airport Study.
- A19: Formation of Non-profit Organization.
- A20: Consider Noise Abatement Officer.
- A21: Consider Noise Overlay Zoning.

Comments on ESPR Noise Mitigation

- Chapter 12 implies that ESPR mitigation plan is based on NWG mitigation plan.
 - NWG recommendations were largely (12 of 17) for significantly smaller aircraft as used in general aviation.
 - These recommendations have already been completed, so cannot be mitigation for future aircraft operations.
 Chapter 12 of ESPR makes no Massport statements or future commitments to any of the other NWG mitigation recommendations.

Comments on ESPR Noise Mitigation Plan

- Chapter 12
 - ESPR "Plan" is completely inadequate to mitigate noise impact of commercial aviation scenarios outlined by Massport out to 2015.
 - Mitigation must be triggered by agreed upon levels of noise impacts, with full respect to EPA 55 dB residential standard.
 - *Mitigation must be based on and verified with quantitative data.*