Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office

April 25, 2024

Alexander Strysky, MEPA Analyst for the Project
100 Cambridge Street, Suite 900
Boston MA 02114

Re: Draft Environmental Impact Report (DEIR)
EEA No. 16654, L.G. Hanscom Field North Airfield Development

Dear Secretary Tepper and Mr. Strysky:

Thank you for the opportunity to submit public comments on the Draft Environmental Impact Report (DEIR) for the proposed North Airfield Development at L.G. Hanscom Field in Bedford, EEA No. 16654. We also extend our appreciation for the bold and ambitious climate goals you have set forth for our Commonwealth.

We write to highlight a pressing environmental concern regarding the proposed North Airfield expansion at Hanscom Airport and its potential contradiction to the state's climate objectives. The Draft Environmental Impact Report does not propose to include measurement or analysis of the full impact of greenhouse gases or ultrafine particulate matter ($PM_{0.1}$) from aircraft operations departing from or arriving at Hanscom Airport.

The proponents, Runway Realty Ventures LLC and North Airfield Ventures LLC, state that the DEIR will include "an air quality analysis consistent with the analyses presented in the Massport 2017 ESPR." The proponents then state that "The 2017 ESPR analyzed six criteria pollutants that are regulated by the National Ambient Air Quality Standards (NAAQS) set by the U.S. EPA and Massachusetts Ambient Air Quality Standards (MAAQS) set by the Massachusetts Department of Environmental Protection (MassDEP). These six criteria pollutants, which include carbon monoxide (CO), lead (Pb), nitrogen oxides, ozone (O_3), particulate matter [PM_{10} and $PM_{2.5}$], and sulfur dioxide (SO_2), are generated from aircraft operations and vehicular traffic." And finally, the proponents state that "Aircraft operations emissions estimated for this analysis include emissions below the default 3,000-foot mixing height."

We respectfully request that greenhouse gas emissions (CO_2e) and ultrafine particulate matter ($PM_{0.1}$) be added to the list of criteria pollutants measured for aircraft operations. In addition, we request that a comprehensive and accurate Environmental Impact Review (EIR) include greenhouse gas emissions (CO_2e) for the entire flight of aircraft operations departing from or arriving at Hanscom Airport, not just for the portion of the flight below 3,000 feet, which is typically only 1 minute of an average 100 minute flight time.

Our towns have been diligently working hand-in-hand with the State government to achieve our greenhouse gas emission reduction targets. The Commonwealth should require that the full impact of aircraft operations resulting from the proposed North Airfield expansion be considered, as we believe those emissions directly contradict the climate goals of our towns, the Commonwealth, and the nation.

Jet engine exhaust is a significant source of ultrafine particles and aviation-related emissions can adversely impact air quality over large areas surrounding airports.[1] Studies have shown that ultrafine particulate matter ($PM_{0.1}$) can cross biological boundaries (entering the circulatory system) due to their extremely small size. Exposure to $PM_{0.1}$ is associated with inflammation biomarkers, oxidative stress and cardiovascular disease.[2] Additional research documents the adverse health effects of aviation related ultrafine particles ranging from pre-term birth[3] to toxicity assessments[4]. The EPA adopted a particle number based regulatory standard in the US for aircraft engines.[5] Preliminary measurements already show that concentrations experienced by residents near Hanscom Field exceed WHO guidelines.[6] We thus respectfully request that a comprehensive and accurate Environmental Impact Review (EIR) include a full assessment of $PM_{0.1}$ emissions for aircraft operations departing from, taxiing, or arriving at Hanscom Airport.

In addition, the Proponent's assessment of the Project's impact on the local environment is based largely on the assumptions, projections, and models featured in the 2017 Environmental Status & Planning Report (ESPR). The 2022 ESPR is due from Massport in May 2024 after the DEIR comment period deadline. Given the significant impact of the Project on airport operations and on the built and natural environments at Hanscom, it is prudent that the DEIR and any further environmental assessments be based on the most current data available.

We ask that the Proponent review all its assessments and models against the 2022 ESPR once it is published, and that the EEA's review of this DEIR pause until that publication and review take place. We would also request that HATS Towns be provided with a sixty day period of time to review the 2022 ESPR before providing final comments on the DEIR following the newly released MassDEP guidance for Conducting Cumulative Impact Analysis.

We respectfully request your support in opposing private jet hanger expansion at Hanscom or elsewhere, emphasizing the urgent need for all sectors, in all locations, to work collaboratively towards reducing CO_2 emissions and meeting our critical climate goals.

Sincerely yours,

Mark Sandeen
Town of Lexington Select Board Member

Emily Mitchell
Town of Bedford Select Board Member

Jim Hutchinson
Town of Lincoln Select Board Member

Linda Escobedo
Town of Concord Select Board Member

CC:
Edward C. Freni, Interim CEO, Massport
Melissa Hoffer, Office of Climate Innovation and Resilience
Senator Elizabeth Warren
Senator Ed Markey
Congresswoman Katherine M. Clark
Congresswoman Lori Trahan
Congressman Seth Moultan
Sen. Michael J. Barrett
Sen. Cindy F. Friedman
Rep. Michelle L. Ciccolo
Rep. Kenneth I. Gordon
Rep. Alice H. Peisch
Rep. Simon Cataldo
Rep. Carmine L. Gentile
Rep. Thomas M. Stanley

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   Environmental Science & Technology **2018** *52* (4), 1765-1772
   DOI: 10.1021/acs.est.7b05593 https://www.sciencedirect.com/science/article/pii/S0360132322002347
2. Schraufnagel, D.E. **The health effects of ultrafine particles.** *Exp Mol Med* **52**, 311–317 (2020). https://doi.org/10.1038/s12276-020-0403-3
3. Wing SE, Larson TV, Hudda N, Boonyarattaphan S, Fruin S, Ritz B. **Preterm Birth among Infants Exposed to *in Utero* Ultrafine Particles from Aircraft Emissions.** Environ Health Perspect. 2020 Apr;128(4):47002. doi: 10.1289/EHP5732. Epub 2020 Apr 2. PMID: 32238012; PMCID: PMC7228090. https://pubmed.ncbi.nlm.nih.gov/32238012/
4. Hulda R. Jonsdottir, Mathilde Delaval, Zaira Leni, Alejandro Keller, Benjamin T. Brem, Frithjof Siegerist, David Schönenberger, Lukas Durdina, Miriam Elser, Heinz Burtscher, Anthi Liati, Marianne Geiser. **Non-volatile particle emissions from aircraft turbine engines at ground-idle induce oxidative stress in bronchial cells**. *Communications Biology*, 2019; 2 (1) DOI: 10.1038/s42003-019-0332-7 https://pubmed.ncbi.nlm.nih.gov/30854482/
5. https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-aircraft-engines
6. https://www.ncbi.nlm.nih.gov/books/NBK574595/box/ch4.box15/?report=objectonly