

Scope of work

HMMH is conducting a study of airport ground noise exposure in the communities surrounding Seattle-Tacoma International Airport (SEA).

1. Ground Noise Data Research
 - Collection and analysis of aircraft flight and run-up statistics
 - Operator surveys
2. Noise Monitoring
 - Temporary noise monitoring east and west of airport to obtain data not captured by SEA's 24 permanent noise monitors
 - Identify aircraft types and operations that may cause community exposure to ground-based noise
 - Capture noise levels from various operating scenarios including north flow, south flow, taxiway noise, and ground run-ups
3. Identifying Mitigation Options
4. Reporting Project Results

Recommendations

- Start-of-takeoff roll on departure
 - Implement a policy to recommend airlines depart using rolling takeoffs
- Taxi
 - Work with operators to develop a policy of using one engine to taxi to the runway to depart
- Engine run-ups
 - Review our results to see if any areas exist to move the primary run-up locations that take advantage of existing structures to block the noise
- Reverse Thrust
 - Work with operators to improve voluntarily not applying reverse thrust during nighttime operations and amend chart language to all times of the day as possible
 - Conduct further outreach to the carriers to increase awareness
- Queue
 - Develop a policy and encourage the FAA to implement sequencing to reduce or eliminate aircraft queues to depart SEA
- APU
 - Continue to monitor developments in resolving power and AC issues at the gates, once resolved work with appropriate Port staff to monitor the use and rules enforcement

Next Steps

- Provide report documenting results of ground noise study
 - First draft expected in May 2022