## Aviation Technologies from MIT Lincoln Laboratory

## June 1, 2021 10:00 am - 12:15 pm

10:00 AM	Introduction of MIT Lincoln Lab - video time stamp starts at: 2:06
	Jennifer Falciglia Program Manager, Technology Venture's Office <u>MIT Lincoln Laboratory</u>
10:15 AM	Lincoln Laboratory ATC Mission Area Overview- video time stamp starts at: 10:55
	James K. Kuchar Assistant Head of the Homeland Protection and Air Traffic Control Division MIT Lincoln Laboratory
	MIT Lincoln Laboratory has been supporting technology research and development for the nation's air traffic control system for 50 years. Example contributions include aircraft surveillance systems, collision avoidance and safety assessment technology, unmanned aircraft integration, weather radar enhancements, and decision support systems to improve air traffic flow efficiency and safety. This presentation will provide a brief overview of recent accomplishments and an outline of current technology development programs.
10:35 AM	Small Airport Surveillance Sensor- video time stamp starts at: 35:42
	Matthew Edwards Assistant Group Leader <u>MIT Lincoln Laboratory</u>
	The U.S. National Airspace System (NAS) depends on a robust, redundant surveillance system to ensure safe aircraft separation in the air and on the ground. However, the existing NAS surveillance network prioritizes coverage in areas and at airports with a large number of operations, so there is a surveillance gap at and around smaller airports where aircraft operations converge in a small area, potentially creating a safety hazard. Safety can be enhanced with a surveillance capability at these smaller airports, but existing airport surveillance systems are expensive to procure and maintain. Lincoln Laboratory has been working with the FAA to design and test a smaller, simpler, lower cost radar surveillance system based on phased array radar technology and modern signal processing, called the

Small Airport Surveillance Sensor (SASS). This seminar will provide an overview of the

SASS system concept, enabling technology, and recent test results.

Unmanned Aircraft Airspace Integration Technologies - video time stamp starts at: 51:25

## Wesley Olson Leader of the Surveillance Systems Group <u>MIT Lincoln Laboratory</u>

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