

## Board Report:

# Aeronautics Year in Review – FY21 Accomplishments, 117th Congress Aviation Bills Under Consideration & Unmanned Aircraft Systems Support for MBTA Snow Removal Program

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*Presented to:*

■ Board of Directors

*Presented by:*

■ Aeronautics Division

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# Aeronautics Year in Review - FY21 Project Accomplishments



## Drones Used to Perform Rail line Inspections

Airborne LiDAR provides an efficient and safe technique for collecting precise data for asset management, inspection, construction, survey, planning and progress monitoring



## Sustainable Vegetation Management Equipment Purchases

To date, Aeronautics has invested \$350K in commercial grade battery equipment and \$450K in larger propane equipment. The outlay is saving airports between \$3,000-\$5,000 per airport, each year in gasoline costs while lowering their carbon footprint



## Taunton Municipal Airport Groundbreaking

Taunton Municipal Airport breaks ground on the construction of a new airport administration building. The new 5,500 Sq ft facility replaces an outdated building that has reached the end of its useful service life

# Aeronautics Year in Review - FY21 Project Accomplishments



## Turners Falls Municipal Airport Solar Carport Charging Station

Aeronautics funded the installation of the first general aviation solar carport Electric Vehicle (EV) charging station in Massachusetts. The carport provides 25,000 watts of power to the grid and will support 100% of the Airport's EV use



## Statewide Airport Markings & Pavement Repair Program

Engineering staff aided in design, funding and construction of crack repair/seal, surface treatment, and remarking of runways achieving significant cost savings by extending pavement life



## Harriman & West Airport - North Adams Taxiway Removal

Taxiway A2 at Harriman & West Airport was removed to eliminate direct access from the parking apron to the runway to enhance the safety of flight operations

# 117<sup>th</sup> Congress Aviation Bills Under Consideration



Bill No.	Title	Bill Summary	Intro Date	Sponsor	Category
H.R.6270	Advanced Aviation Infrastructure Modernization Act (AAIM Act)	The bill would direct the Secretary of Transportation to establish a pilot program to provide grants related to advanced air mobility infrastructure.	12/14/2021	Rep. Rick Larsen (D-WA-02)	Advanced Air Mobility (AAM)
S.3125	Aviation Emissions Reduction Opportunity (AERO) Act	The bill would authorize a new federal grant program to help reduce aviation emissions. Specifically, the bill would provide \$1 billion over five years in grants, with 30 percent of grants going to entities focused on developing, demonstrating, or applying low-emission aviation technology, and 70 percent of the funding dedicated to producing, transporting, or storing sustainable aviation fuels.	11/2/2021	Sen. Raphael Warnock (D-GA)	Sustainable Aviation Fuel (SAF)
H.R.5315	Drones Infrastructure Inspection Grant Act	The bill would direct the Secretary of Transportation to establish in the U.S. Department of Transportation a drone infrastructure inspection grant program and a drone education and training grant program.	9/21/2021	Rep. Greg Stanton (D-AZ-09)	Drones

# 117<sup>th</sup> Congress Aviation Bills Under Consideration



Bill No.	Title	Bill Summary	Intro Date	Sponsor	Category
S.2459	"Hangars Accelerate National Growth And Regional Stability Act"	The bill would establish a hangar grant program at the U.S. Department of Transportation and Economic Development Administration.	7/22/2021	Sen. Jim Inhofe (R-OK)	Hangars
H.R.4161	To amend title 49, US Code, to allow additional funds to be provided under the AIP program for certain noise projects, and for other purposes.	The bill would amend title 49, United States Code, to allow additional funds to be provided under the airport improvement program for certain noise mitigation projects, and for other purposes.	6/25/2021	Rep. Adam Smith (D-WA-09)	Airport Improvement Program (AIP)
H.R.4042	Aviation Stability Act of 2021	Allows the FAA to continue to draw from the Airport and Airway Trust Fund during a lapse of appropriations to sustain all of the agency's programs for up to 30 days.	6/23/2021	Rep. Peter DeFazio (D-OR-04)	FAA



# 117<sup>th</sup> Congress Aviation Bills Under Consideration



Bill No.	Title	Bill Summary	Intro Date	Sponsor	Category
H.R.3062	To establish an exemption from a limitation on the use of certain airport funds for safety projects at a non-hub airport or small hub airport, and for other purposes.	The bill would allow the Secretary of Transportation to distribute not more than \$50,000,000 per fiscal year from the discretionary fund established under section 47115 for terminal development projects that are a necessary component of a program to bring a non-hub airport, or a small hub airport that is eligible to receive discretionary funds under section 47108(e)(3), into compliance with airport safety design standards	5/7/2021	Rep. Jimmy Panetta (D-CA-20)	AIP
H.R.2719	Rebuilding America's Airport Infrastructure Act	The bill would increase the PFC by one dollar a year starting in 2023, for four years, then indexes the fee to inflation every year thereafter	4/21/2021	Rep. Earl Blumenauer (D-OR-3)	PFC
S.73	American Security Drone Act of 2021	The bill would prohibit the US government from purchasing drones manufactured in countries identified as national security threats, like Iran and China.	1/27/2021	Sen. Rick Scott (R-FL)	Drones

# Unmanned Aircraft Systems Support for MBTA Snow Removal Program



- Effective management of snow removal across all MBTA infrastructure is essential to providing uninterrupted service despite severe winter weather
- High-resolution maps of MBTA bus yard and parking facilities can be provided within hours of a snow event, with the potential to evaluate removal results against established vendor removal areas and measure snow pile volume
- Data allows MBTA officials to analyze post-storm snow removal for assessing:
  - Vendor performance and accountability
  - Resource allocation based on performance, snow volume and snow accumulation
- Benefits include bus safety/mobility, cost savings, improved customer service, and performance metrics

