

The State of Hanscom

July 2022



Massachusetts Port Authority

THE STATE OF HANSCOM

MASSACHUSETTS PORT AUTHORITY

The Massachusetts Port Authority (Massport) is the owner and operator of Laurence G. Hanscom Field. Massport also operates Boston Logan International Airport, Worcester Regional Airport, the Port of Boston's Conley Container Terminal and Flynn Cruiseport Boston. These facilities provide safe, secure, and efficient transportation resources for travelers and businesses and enable Massachusetts and New England to compete successfully in the global marketplace.

Massport's facilities are essential to the citizens of the Commonwealth and provide economic benefits throughout the region. At the same time, Massport strives to minimize the impact of its operations on surrounding communities. Massport is diligent in abiding by all environmental regulations and is a leader in promoting voluntary environmental initiatives. Massport implements and participates in outreach programs that encourage an open and timely exchange of information and ideas. It is Massport's goal to understand and integrate the concerns of the community into its projects and plans whenever and wherever possible.

HANSCOM FIELD BACKGROUND

In 1941, the Commonwealth of Massachusetts purchased land northwest of Boston to build an airport, and the State Senate and House of Representatives passed resolutions "...relative to the designation of the proposed Boston Auxiliary Airport as Laurence G. Hanscom Field, Boston Auxiliary Airport at Bedford". Control of Hanscom passed to a number of different agencies until 1956, when the legislature placed Hanscom Field under Massport's jurisdiction. Although the land has always been controlled by the Commonwealth, the airfield was leased and maintained by the military until 1974.

Today, Hanscom Field is the region's premier full-service general aviation (GA) airport, and it serves a vital role in New England's regional aviation system as a GA reliever for Logan International Airport. Aircraft operations at Hanscom have traditionally included commuter, business, charter, light cargo, personal aircraft, air taxi, medical, military and flight school activity. Hanscom Field serves the diverse flying needs of the region's high technology corporations and educational institutions and is an important resource for Hanscom Air Force Base (HAFB), a federal research and development facility abutting the airfield. The airport provides easy access to the Greater Boston area and suburbs and has three first-class fixed-base operators (FBO). These FBOs provide flight support services, including aircraft fueling; maintenance, repair and overhaul; aircraft storage; passenger services; and flight crew facilities. The airport's facilities have been essential to the economic development of the region, powering connections to new business opportunities, products, customers, and leisure travel.

The State of Hanscom is presented annually to the Hanscom Field Advisory Commission (HFAC), a legislatively created body comprised of representatives from the surrounding residential communities, the aviation community, and area-wide organizations. State elected officials, and representatives from HAFB, the Federal Aviation Administration, Minute Man National Historical Park, and Massport serve as resources to the commission.

In presenting *The State of Hanscom*, Massport provides an opportunity for a wide range of interested parties to discuss the airport's role in the regional transportation system and to discuss Massport's objectives for the facility. *The State of Hanscom* presents the airport's operational activity, financial performance, and economic benefits. It discusses Massport's 2021 accomplishments at Hanscom, as well as plans for 2022.

SECTION I - AIRCRAFT ACTIVITY

Table 1 shows total aircraft activity levels at Hanscom Field for 7 a.m. to 11 p.m. operations in 2020 and 2021 based on Federal Aviation Administration (FAA) tower counts, fleet mix data, and estimates. The 2021 data are preliminary and will be finalized before publication of the 2021 noise report. The 2021 report presents information for the second year of the COVID-19 pandemic.

TABLE 1
Hanscom Field Aircraft Activity
2020

FROM FAA TOWER REPORTS & ESTIMATES (7 A.M.-11 P.M)

MONTH	CIVILIAN						MILITARY	TOTAL
	LOCAL	SINGLES	TWIN PISTON	TURBO	JET	HELI		
January	3167	1704	232	523	2461	774	43	8,904
February	3124	1769	246	446	2640	715	58	8,998
March	2515	1371	253	369	2224	737	38	7,507
April	624	102	177	150	605	640	60	2,358
May	717	446	217	271	1167	776	58	3,652
June	2970	1841	338	533	1654	787	16	8,139
July	4286	2615	303	601	1628	808	32	10,273
August	4608	2913	358	556	1840	809	39	11,123
September	4154	2726	370	647	1793	807	74	10,571
October	3754	2271	357	538	2057	790	93	9,860
November	3566	2498	329	428	2077	738	43	9,679
December	2998	1807	283	429	2374	755	15	8,661
TOTAL	36,483	22,063	3,463	5,491	22,520	9,136	569	99,725

2021

FROM FAA TOWER REPORTS & ESTIMATES (7 A.M.-11 P.M)

MONTH	CIVILIAN						MILITARY	TOTAL
	LOCAL	SINGLES	TWIN PISTON	TURBO	JET	HELI		
January	2780	1410	223	330	2193	721	28	7,685
February	2174	1133	231	314	1949	632	47	6,480
March	3174	2005	293	398	2952	804	67	9,693
April	2959	1935	325	464	2536	806	36	9,061
May	4032	2885	425	641	2866	860	65	11,774
June	4676	3491	453	721	2871	866	113	13,191
July	3706	2467	443	844	2632	853	53	10,998
August	4085	2929	532	812	2867	870	81	12,176
September	2874	2636	480	791	2900	840	200	10,721
October	3781	2781	462	807	3394	822	230	12,277
November	3416	2672	397	634	3388	777	167	11,451
December	2646	1621	317	468	3081	839	87	9,059
TOTAL	40,303	27,965	4,581	7,224	33,629	9,690	1,174	124,566

Note: The 2021 figures are preliminary. All 2021 data will be reviewed before publication of the 2021 annual noise report.

The FAA tower counts are traditionally used to report the official number of operations for an airport; at Hanscom Field, they do not include nighttime operations between 11 p.m. and 7 a.m. when the FAA Tower is closed. In addition to the 7 a.m. to 11 p.m. aircraft activity, there were 2,191 nighttime operations in 2021, an increase from 1,495 in 2020 during the first year of the COVID-19 pandemic.

The airport's activity levels have historically been closely aligned with the economic health of Massachusetts' high technology industry in the Routes 128/95 and 495 areas. Activity levels have generally mirrored national trends.

The data in Table 1 show 124,566 operations for 2021. This indicates a 25% increase as compared to 2020, but does not reach pre-pandemic levels, which show a 3.2% decrease when compared to 2019. Although total annual operations have been below 200,000 in the past 18 years, they were well above 200,000 for the 30 years prior to 1993, and they exceeded 300,000 in 1970.

Consistent with activity for the past 39 years, the civilian portion of the 2021 aircraft operations comprised approximately 99% of the total aviation activity. The largest component of the total activity, 54.8%, consisted of single engine piston (SEP) operations ("Local" plus "Singles" in Table 1). The 68,268 estimated SEP flights indicate that their activity increased 14.7% as compared to 2020. This included a 10.5% increase in touch and go/local traffic and a 21.3% increase in non-touch-and-go/local operations by SEPs.

Touch-and-go/local activity comprised 59% of the SEP operations. Each touch-and-go consists of a practice landing and take-off and is counted as two operations. Touch-and-goes are not allowed in aircraft over 12,500 pounds at Hanscom; they are most commonly conducted by flight schools using SEP aircraft.

The 4,581 estimated twin engine piston operations indicate an increase of 33.8% as compared to 2020. They represented 3.7% of the 2021 operations. The 9,690 estimated helicopter operations indicate a 6.6% increase as compared to 2020, and they represented 7.8% of the total. Estimated turboprop aircraft activity, representing 5.8% of the 2021 total activity, increased 45.7%.

The 33,629 civilian jet operations that were conducted in 2021 represented 27% of the total activity and indicated a 51.9% increase, as compared to 2020.

All of the 2021 data used to create Table 1 will be reviewed for the 2021 annual noise report, which will be prepared later in the year and presented to HFAC. The noise report will include a more detailed analysis of operations and trends as well as a full analysis of noise exposure using EXP, a metric developed to track changes in Hanscom's noise environment.

SECTION II - FINANCIAL RESULTS FOR FISCAL YEAR 2021

Massport continues its commitment to operating a first-class facility while striving to improve Hanscom's financial performance. Massport's fiscal year (FY) begins on July 1 and ends on June 30.

Table 2 demonstrates the fluctuations in revenues and expenses over the last five years. Comparing FY21 to FY20, operating revenues decreased 1.3% and expenses decreased 9.8%, leaving Hanscom with an operating surplus of \$745,000. Amortization increased to \$5.2 million, resulting in a \$4.5 million deficit in FY21.

Massport recognizes that controlling Hanscom's deficit requires an aggressive multi-faceted approach. On the cost side, every expenditure and project is scrutinized for its financial implications, and cost-saving measures continue to be explored. On the revenue side, a regular review of rates and charges, followed by appropriate adjustments, has been adopted. Expanding sources of revenue through development, as discussed later in this report, is another avenue for controlling the deficit. Massport also recognizes that commercial and/or air taxi services generate revenue and are allowed activities under federal law. While Massport may not actively solicit scheduled air service at Hanscom Field, it must accept and appropriately process applications for such service from entities that may seek to operate such air service at Hanscom Field.

TABLE 2
Hanscom Five Year Financial Summary
Fiscal Years (FY) FY17 –FY21

YEAR	FY17	FY18	FY19	FY20	FY21
RENTALS					
Terminal	324,304	359,911	327,951	314,126	284,592
Non-Terminal	2,267,539	2,080,170	2,103,065	2,188,945	2,523,813
Ground	3,527,693	4,548,012	4,625,322	5,080,386	5,360,365
Utilities	106,268	136,317	123,514	100,753	92,529
SUBTOTAL	6,225,804	7,124,409	7,179,853	7,684,210	8,261,299
FEES					
Landing Fees	1,146,436	1,276,601	1,372,312	1,195,566	1,204,153
Customs Fees	725,664	760,699	800,248	642,197	377,803
Night Field Use Fees	750,075	813,743	805,663	574,280	430,426
Parking Fees	103,860	108,840	114,000	109,185	114,640
Other	768,408	1,602,080	1,187,629	1,035,349	908,218
SUBTOTAL	3,494,443	4,561,963	4,279,852	3,556,577	3,035,240
COMMISSIONS					
Rental Cars	208,010	203,481	186,123	176,986	147,067
Flight Schools	25,302	28,181	26,720	27,365	36,414
Ground Servicing	149,442	115,201	117,854	129,931	99,083
Fuel Flowage	1,901,628	2,023,986	2,198,468	1,882,793	1,868,433
Other	867,264	1,009,514	1,123,099	1,155,521	971,557
SUBTOTAL	3,151,645	3,380,362	3,652,265	3,372,596	3,122,554
TOTAL REVENUES	12,871,892	15,066,734	15,111,970	14,613,383	14,419,093
OPERATING EXPENSES					
Admin, Maint., Security Staff	6,339,974	6,832,241	7,734,657	9,096,809	8,533,309
Supplies & Materials	456,909	463,920	545,476	304,169	248,517
Repairs	572,637	1,616,457	552,742	584,346	564,066
Services	2,431,577	2,531,912	2,745,207	1,691,326	1,302,598
Utilities	301,872	355,775	318,336	283,542	257,976
Insurance	194,806	199,539	205,041	196,180	234,537
Miscellaneous	1,036,678	1,093,728	1,150,989	1,346,221	1,135,975
General & Administration	1,219,911	1,440,106	1,631,665	1,655,033	1,396,974
TOTAL OPERATING EXPENSES	12,554,363	14,533,678	14,884,113	15,157,626	13,673,953
OPERATING SURPLUS/DEFICIT	317,529	533,057	227,857	(544,244)	745,140
AMORTIZATION					
Total Costs (oper + Amort.)	15,712,775	18,302,130	19,079,595	19,368,337	18,912,451
SURPLUS/DEFICIT	(2,840,882)	(3,235,395)	(3,967,625)	(4,754,955)	(4,493,358)

SECTION III - ECONOMIC BENEFITS OF HANSCOM ACTIVITY

Massport's facilities enable the region's residents and leading industries to make connections with new markets, products, customers, family, and friends. In just about every aspect of life in Massachusetts, Massport is supporting economic growth.

Located off Route 128/95, Hanscom Field has been a vital link to domestic and international destinations for individual pilots, commuter airlines and local employers, including high technology corporations, research and development firms, and educational institutions. Businesses look for accessible air travel when deciding where to locate, and Hanscom provides local businesses with easy access to corporate travel opportunities.

In FY21 Massport invested \$2.05 million in airfield, terminal, equipment and other facility improvements required to maintain the airport. Past and future investments ensure that Hanscom will continue to be prepared to support future economic growth by serving the diverse needs of users who operate a wide variety of aircraft.

Periodically, there is an examination of the economic impacts of Massport's facilities. The Massachusetts Department of Transportation/Aeronautics Division conducted its most recent statewide airport economic impact study in 2019. That report determined that there were 2,243 full-time equivalent jobs related to Hanscom Airfield activity. Annual wages for those workers whose employment is directly related to airport activity are \$133 million. Hanscom generated estimated economic benefits of \$679 million when all the direct, indirect, and induced economic benefits of the airport were considered. Estimated economic benefits described above do not include economic benefits generated by Hanscom Air Force Base.

SECTION IV - 2021 ACCOMPLISHMENTS AND 2022 OBJECTIVES

Massport's primary responsibility at Hanscom Field is to maintain a safe, secure, and efficient regional airport while minimizing the environmental impact of its operations. Improvements are made in accordance with these guiding principles. While Massport is committed to maintaining Hanscom as a first class, full service airport, maintenance and improvements at the airport are consistently coupled with a variety of environmental initiatives, programs, and policies. During the COVID-19 pandemic, many projects were postponed in order to maintain economic resiliency.

Maintain and Improve Airfield—Annual Airfield Improvement Program

Most projects at Hanscom are part of maintaining a safe and efficient airfield, and these may be eligible for full or partial federal funding under the FAA's Airport Improvement Program (AIP).

Airfield Pavement Maintenance: There is an on-going program for reconstructing pavement on the airfield.

In 2021: Massport rehabilitated Taxiway November and installed LED taxiway lights.

In 2022: Massport will perform a pavement maintenance and crack seal of Taxiway Romeo.

Safety and Security on and off the Airfield

Safety and security are the two most critical components of operating an airport, and there is a continual multi-level emphasis on both at Hanscom. Massport's commitment to operating a safe and secure airport helps safeguard its host communities as well as those who use the airport.

- 1. Obstruction Removal:** A high priority for Massport is maintaining compliance with FAA certification and safety requirements regarding obstructions within runway approach and departure surfaces. Massport uses aerial photogrammetric mapping of those surfaces to identify vegetation that is penetrating, or close to penetrating, these surfaces. The state established vegetation removal guidelines in the *Generic Environmental Impact Report (GEIR) for Vegetation Removal at Public Use Airports* and the *1999 GEIR/Generic Environmental Notification Form Update*. Historically, a vegetation removal project has been required every five years at Hanscom. The first Five Year Vegetation Management Plan (VMP) began in 2002.

Consistent with the approved plans, Massport has continued maintenance of the vegetation removal areas. New aerial photogrammetric mapping of the airport was last performed in 2018 as part of fourth VMP update for 2019-2023. Massport received Orders of Conditions for vegetation removal in 2020, and work began as prescribed in the 2019-2023 VMP Update

In 2021: Massport continued vegetation management as prescribed in the 2019-2023 VMP Update.

In 2022: Massport will continue vegetation management as prescribed in the 2019-2023 VMP Update.

- 2. Annual Emergency Exercise:** One of Hanscom's FAA Part 139 certification requirements is to conduct an annual exercise to ensure an effective response in the event of an aircraft emergency. A tabletop exercise is conducted two out of every three years. On the third year, a simulated full-scale emergency is conducted on the airport.

In 2021: Massport conducted a tabletop exercise.

In 2022: Massport will conduct full-scale exercise in October.

- 3. Airport Rescue and Fire Fighting (ARFF) and Customs and Border Protection (CBP) Facilities:** Massport has standardized ARFF procedures across all three Massport-owned airports in order to enhance safety and coordination efforts. This allows Massport Fire-Rescue to leverage additional resources from across the state for use at Hanscom Field. Massport Fire-Rescue began permanent, full-time operations at Hanscom Field in November 2015. Design of a new ARFF facility began in 2016 and staff moved into the facility in 2019. The former CBP facility was an aging trailer on the east side of the airfield. To meet updated Customs and Border Protection facility guidelines, a new facility was completed in 2019 and staff moved into the facility in 2020.

In 2021: Massport signed a new agreement with CBP for Customs Services. At ARFF, an enhanced structural fire response was added, in addition to aircraft response.

In 2022: ARFF will replace fire hydrants as needed throughout the airport property.

- 4. Wildlife Control:** Wildlife on an airfield can be a serious safety hazard for aircraft. The U.S. Department of Agriculture (USDA) regularly conducts field visits at Hanscom to monitor and evaluate wildlife on the airfield, with a particular focus on assisting Massport in evaluating and minimizing wildlife strike hazards.

In 2021: Massport continued to implement all aspects of its Wildlife Hazard Management Plan.

In 2022: Massport will continue to implement all aspects of its Wildlife Hazard Management Plan, including regular upgrades to airfield fencing.

- 5. Security:** Unescorted access to the airfield requires a background security check in order to obtain a badge, and badges must be displayed at all times on the airfield. A variety of other measures has been adopted as the result of an on-going process of evaluating and implementing new security programs, as appropriate.
- 6. Safety Inspections and Meetings:** In addition to the FAA's annual inspection, Massport's Safety Office staff conducts regular safety inspections, and monthly safety meetings are held with tenants and the FAA tower personnel to facilitate the identification of safety concerns. Every year, Massport reviews its snow removal plan with the FAA tower staff and Hanscom tenants to ensure effective communication and coordination during snow removal operations.

Maintain and Improve Facilities

Hanscom's critical role in the regional transportation system demands appropriate maintenance programs and responsible development of airport facilities. Anticipating future needs and meeting the needs of existing users of Hanscom Field creates challenges that require careful analysis and flexibility. Massport adjusts its projects based on local demand and changes in the aviation industry.

- 1. Massport Controlled Facilities:** In addition to the airfield, Massport owns and manages the Civil Air Terminal, a number of corporate hangars that are leased, t-hangars and tie-down spots for owners of small aircraft, the central parking lot, and the entrance areas to the airfield. There is a continual process of maintaining and upgrading these facilities and areas. The Civil Air Terminal is home to a number of aviation-related businesses, including Hanscom's flight schools.

In 2021: Plans to relocate the Pine Hill T-hangars from the current site to the North Airfield area began.

In 2022: Construction of the replacement North Airfield hangars began, with completion expected in October 2022.

- 2. Third Party Development:** Based on demand, Massport responds to and solicits third party development and management for new aviation-related facilities that support Hanscom's role in the regional transportation system as a full service general aviation airport. Most of Hanscom's

hangars, with associated office space, are owned or leased by tenants who are responsible for maintaining the facilities.

Potential development sites are identified and analyzed in Hanscom's periodic *Environmental Status and Planning Reports* (ESPRs), which serve as planning tools when considering future development at Hanscom. The latest ESPR addressed calendar year 2017 and the next ESPR is expected to address calendar year 2022.

West Ramp: The West Ramp is located at the south central portion of the airport, and contains the Civil Air Terminal, multiple corporate hangars and two Fixed Based Operators. In 2020, Signature Flight Support began a Campus Redevelopment plan. The project will include a replacement FBO facility and demolition of the existing facility upon completion. In addition, Signature will renovate five other leased hangars located on the West Ramp and the East Ramp.

In 2021: Signature began construction of a LEED certified replacement FBO facility, and repairs and renovations to existing hangars.

In 2022: Signature is expected to complete construction of the FBO facility and continue renovations of existing hangars.

- **East Ramp:** The East Ramp, located on the southeast side of the airfield, was identified in the 2012 and 2017 ESPRs as a potential site for corporate hangars. The ramp area is an impervious surface that is used for storage and movement of aircraft.

In 2021: Signature Flight Support began planning for renovations of three leased hangars in the East Ramp area.

In 2022: Signature Flight Support began renovations of the three leased hangars.

- **Pine Hill Site:** The Pine Hill site is located on the southwest side of the airfield and currently houses t-hangars. In 2017, the parcel was identified as a site that could support additional hangar facilities. Massport released an RFP that included the Pine Hill area in 2018, and Ross-Rectrix (now Atlantic Aviation), was the selected developer. Massport and Atlantic Aviation signed a lease and began design in 2020.

In 2021: Massport approved the design for the Atlantic Aviation corporate hangar facility.

In 2022: Atlantic Aviation began construction of the hangar facility at Pine Hill.

3. **North Airfield Property:** Massport owns a parcel that comprises approximately 29 acres of partially developed land. Contained within the property is a system of roads and concrete pads that were used by the Air Force for a trailer park until 2011.

In 2021: Massport prepared to relocate the Pine Hill T-hangars to the North Airfield, in order to accommodate the development at Pine Hill. Massport also released a RFP for third party development in the North Airfield.

In 2022: Massport will complete construction of hangars to replace hangars at the Pine Hill site. Massport also designated a developer for the North Airfield RFP site.

Monitor and Respond to Environmental Issues

Massport has consistently maintained high environmental standards while complying with state and federal environmental regulations. In addition to complying with mandated requirements, Massport has elected to participate in programs that use environmentally friendly technologies and innovations to minimize operational impacts. There is a continual effort to extend and improve Hanscom's environmental performance.

- 1. Environmental Status and Planning Reports (ESPRs):** In 1978, Massport prepared the Hanscom Field Master Plan and Environmental Impact Statement, which triggered the adoption of General Rules and Regulations for Laurence G. Hanscom Field, effective July 31, 1980. Since 1985, Massport has prepared a series of increasingly comprehensive environmental assessments for Hanscom Field that identify the environmental effects of current conditions and activity at the airport, compare these conditions to historical data, and present and evaluate the potential cumulative environmental effects of potential future scenarios. These studies serve as planning tools for future development.

The Massachusetts Environmental Policy Act (MEPA) Office approved the 2017 ESPR in 2019. The 2017 ESPR is posted on the Massport website. In 2022, Massport began work on the next ESPR that will analyze calendar year 2022.

- 2. Environmental Programs and Audits:** In 2001, Massport brought its environmental commitment to a new level when Hanscom Field became the first U.S. airport to attain ISO 14001 certification. To become certified, Massport developed and implemented an *Environmental Management System* (EMS) that meets international performance standards. The EMS provided a framework that fostered the use of environmentally sustainable practices for operating the field. It created an auditable system for tracking, managing, and improving environmental performance. Massport continues to meet environmental commitments utilizing a series of programs that include monitoring activities at Hanscom to ensure compliance with environmental regulations and the use of pollution prevention practices. Ongoing practices include:
 - Participating in the Massachusetts State Sustainability Program to promote environmentally sustainable practices and in the Massachusetts' Leading By Example Program – Decarbonizing and Minimizing Environmental Impacts of State Government (Executive Order No. 594);
 - Inspecting Massport facilities to ensure environmental compliance
 - Reviewing and updating the Spill Prevention Control and Countermeasure (SPCC) Plan, which outlines steps to be taken by Massport employees in the event of a spill of fuel or other hazardous materials
 - Implementing and encouraging tenants to utilize Best Management Practices (BMPs) as discussed in the National Pollutant Discharge Elimination System (NPDES) multi-sector permit for storm water discharges at Hanscom Field
 - Conducting periodic water quality inspections at Massport's storm water outfall locations
 - Participating in an aggressive recycling program for tenant and Massport offices
 - Identifying opportunities during Massport capital program project design development to reduce

storm water runoff and peak flows

- Identifying opportunities for development projects to control storm water runoff. For example, if a project results in an increase in impervious surface, Massport requires compensatory storage for storm water in order to avoid increasing peak storm water run-off rates. This policy is incorporated into all Hanscom Field development
- Utilizing Massport's Sustainable Design Guidelines and Standards for use by architects, engineers, and planners when working on capital projects at any Massport facility
- Requiring new development projects to meet or exceed LEED Silver certification requirements
- Regular updating and training for Hanscom's Storm water Pollution Prevention Plan (SWPPP) to include best management practices for storm water management and snow removal

Massport recently published an Authority-wide *Roadmap to Net Zero* that is aimed at decarbonizing Massport owned and operated facilities and power purchases. An implementation plan for the Roadmap is underway and will include Hanscom Field.

Community Outreach

Massport strives to build positive community relations and public confidence by maintaining open communications and by supporting programs that assist in addressing the concerns of Hanscom's stakeholders and host communities.

1. **Community Meetings:** Massport staff regularly attends monthly community meetings to inform the public of airport planning and policy developments. Massport also sponsors informational meetings with the communities and other interested parties when appropriate. Massport staff regularly attend the following monthly meetings:
 - *The Hanscom Field Advisory Commission (HFAC):* The HFAC was established by the legislature in 1980 to review Massport decisions regarding its goals, policies and plans for the airport. It includes representatives from the aviation and residential communities as well as advisory members who represent the Minute Man National Historical Park, Hanscom Air Force Base, the FAA, and Massport. Massport staff members provide HFAC with information regarding Massport's goals, policies and plans for the airport. Additionally, staff members prepare and present monthly aircraft activity and noise reports, capital program and third party development status reports, as well as the annual State of Hanscom report and the annual Noise Report.
 - *The Hanscom Area Towns Committee (HATS):* HATS was created to consider matters of common interest to the four towns that are contiguous to Hanscom Field and Hanscom Air Force Base. One select-board member from each town serves on HATS along with planning board representatives and at-large members from the towns. HATS representatives consider regional traffic, planning, land use and other issues.
2. **Noise Metrics and Noise Abatement/Mitigation:** Aircraft noise is a concern for many Hanscom area residents and the Minute Man National Historical Park. Massport recognizes the importance of pro-actively addressing this issue and is committed to continuing its current noise-related programs while exploring appropriate new initiatives.

In response to the residential community's aircraft noise and operational concerns, Massport adopted regulations (Part F of the General Rules and Regulations for Laurence G. Hanscom Field) in 1980. Most of these programs could not be duplicated or changed under current federal law. They include:

- A nighttime field use fee to help discourage activity between 11 p.m. and 7 a.m.
- A restriction on scheduled commercial air carrier service to aircraft with no more than 60 seats.
- Restrictions on touch-and-go activity by weight of aircraft and time of day. Touch-and-Goes are aircraft operations conducted to practice landing and departing techniques.
- Limitations on Auxiliary Power Unit (APU) and Ground Power Unit (GPU) use.

Although Massport began supporting the use of the National Business Aviation Association's (NBAA's) noise abatement procedures for jet aircraft in the mid-1980s, the Fly Friendly program at Hanscom provided an opportunity to broaden such efforts. Massport expanded its support of quiet arrival and departure techniques by publicizing the Aircraft Owners and Pilot Association's (AOPA's) noise abatement procedures for piston aircraft and by developing and publicizing quiet flying procedures for helicopters. Part of this effort included the development of a multi-faceted publicity program that results in pilots being exposed and re-exposed to the importance and understanding of the quiet-flying techniques, as follows:

- Handouts for pilots, outlining the procedures are distributed at the FBOs, the flight schools, and in Massport's Hanscom offices.
- Videos describing the techniques for both jet and piston aircraft are incorporated into the training required to qualify for a Hanscom security badge.
- Descriptions of these quiet flying procedures are posted on Massport's website.
- Signage on the airfield provides a last minute reminder to departing pilots to use quiet flying techniques.

In late 2009, Massport staff began using flight track data created by the new noise monitoring system to identify potential opportunities for reducing touch-and-go traffic over the Hartwell Tavern area in the Minute Man National Historical Park. Massport also initiated communications with the FAA and the Hanscom flight schools to identify practical recommendations and help create an implementation program. By working together, new touch-and-go patterns for each runway were devised to safely increase the number of flights that fly over the airport. This inherently minimizes aircraft noise for the Park's visitors. An aggressive publicity program was implemented, including the display of framed posters, mailings, and meetings with pilots and flight instructors, as well as local press coverage. Massport staff continues to work with local pilots and the FAA to reduce the number of flights over the MMNHP. Flight track data is reported quarterly. Results of the touch and go program are shared with pilots, certified flight instructors, the FAA and MMNHP staff. Massport also communicates MMNHP special events to local pilots and encourages the flying community to review Hanscom's Fly Friendly recommendations. The result is an average of 15% fewer flights over the Park since the inception of the program in 2009. Massport has expanded the program to reach pilots at Hanscom Air Force Base.

- 3. Sound Initiative:** The Airport Noise and Capacity Act of 1990 required the phase out of noisier Stage 1 and 2 aircraft¹ weighing over 75,000 pounds. In 2005, Massport joined Sound Initiative, a coalition that was formed to encourage the extension the 1990 Airport Noise and Capacity Act to phase out Stage 1 and 2 aircraft weighing 75,000 pounds or less that were exempt from the original Act. The effort was promoted by a group of airport managers and neighbors at corporate airports where older aircraft accounted for an inordinate number of noise complaints. In 2012, Congress passed the FAA Modernization and Reform Act, which included the phase out of all non-stage 3 aircraft by December 31, 2015. Section 506 of the Act prohibits the operation, within the 48 contiguous states, of jets weighing 75,000 pounds or less that do not comply with Stage 3 noise levels. In 2020, Hanscom Field recorded the lowest levels of sound in airport history. Noise levels for 2021 will be vetted and published in the 2021 Annual Noise Report later this year.
- 4. Noise Monitoring System:** To facilitate the understanding of noise impacts on the communities neighboring Hanscom, Massport installed a noise monitoring system at Hanscom in the early 1990s. The system includes six microphones—one off each of the runway ends in each of the four contiguous towns and two others on the airfield at the ends of Runway 11/29. Data from the system are shared with the communities on a monthly basis.
- 5. Airport Activity Monitor/PublicVue:** Massport staff worked with ITT - Exelis to implement a user-friendly, interactive website that can be used to research a noise event or flight, log a noise disturbance, and track correspondence related to a logged noise disturbance. The “Airport Activity Monitor” was launched in December 2012 on the Massport website. In 2015, Massport and ITT – Exelis optimized the MLAT system and it was re-calibrated to perform for Hanscom activity alone. Exelis also began upgrading the initial Airport Activity Monitor website to the new “PublicVue Portal” product, which will contains all the current options that exist on Airport Activity Monitor. ITT-Exelis was purchased by Harris Corporation in 2015, and the product was upgraded again in 2016 with better graphics, maps and accessibility across multiple platforms and devices. The product has been continuously improved since the upgrade. In late 2018, a Request for Proposals to provide Noise and Operations Management System coverage for Massport was released, and a new contract with Harris was finalized in 2019. In 2019, Harris was purchased by L3 Technologies. In 2020, L3Harris continued to make improvements to the system, and in 2021, L3 Harris upgraded all Massport permanent Noise Monitoring terminals as well as replaced an aircraft radar sensor at Hanscom Field. L3Harris continuously makes improvements to the product.
- 6. Community Contributions:** Massport’s Charitable Contribution, Scholarship, Summer Internship and Community Summer Jobs Programs benefit organizations located in communities that host its facilities. The organizations serve a diverse constituency and a variety of worthwhile purposes.

In 2021: Massport sponsored summer internship positions at various municipal departments in the Hanscom surrounding towns.

¹ Stage 1 and 2 aircraft were manufactured before today’s stringent noise standards were adopted for new airplanes. The use of Stage 1 and 2 aircraft weighing over 75,000 pounds was phased out nationally by 2000, but most of Hanscom’s jets weigh less than 75,000 pounds.

SECTION V – CAPITAL PROJECTS FOR FY21 THROUGH FY25

Each year, capital projects for Hanscom Field are evaluated for funding. Table 3 outlines the projects that have been identified for FY22 through FY26. The list does not include projects that have already been completed. Most projects focus on safety, security and maintenance. Estimated project costs are included.

The capital programs list is fluid and is adjusted periodically. Circumstances may change the year in which a project is started or completed, the estimated amount to be expended, or whether a project is ultimately implemented.

**TABLE 3
Proposed Hanscom Field FY22 to FY26 Capital Projects**

PROJECTS - Funded and Proposed	Current Funding Years	Cost FY22 -FY26 (in 000s)
Relocate Pine Hill T-Hangars	FY21-FY24	\$10,859
Taxiway Romeo Maintenance	FY22-FY23	\$2,000
Replace Airfield Snow Equipment	FY22-FY26	\$3,585
Capital Equipment Contingency	FY22-FY26	\$625
Civil Air Terminal Restroom Renovations	FY23	\$1,500
Communications Upgrades	FY23	\$750
Electrical Infrastructure Study & Improvements	FY23	\$1,500
Rehabilitate Runway 5-23	FY23-FY26	\$12,000
Hydrant Replacements	FY23-FY26	\$200
Renovate IT Data Center Room	FY24	\$1,300
Relocate Salt Storage, Civil Air Terminal Parking	FY24	\$1,243
Rehabilitate Maintenance Garage	FY24	\$2,500
East and North Ramp Utility Studies	FY24	\$250
Civil Air Terminal Security Upgrades	FY24-FY25	\$2,000
Taxiway Echo Rehabilitation & Geometry	FY24-FY26	\$5,000
Paint Civil Air Terminal	FY25	\$750
<i>Capital Funding contingent upon Massport Board approval and subject to change.</i>	TOTAL	\$46,062