The State of Hanscom

Presented to
The Hanscom Field Advisory Commission

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THE STATE OF HANSCOM

MASSACHUSETTS PORT AUTHORITY

The Massachusetts Port Authority (Massport), which was created by the legislature in 1956, is the owner and operator of Hanscom Field. Massport is a world-class, independent, public authority that develops, promotes and manages airports, the seaport, and transportation infrastructure. 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 recognizes that its facilities may have an impact on its host communities. In order to responsibly address this, Massport is not only diligent in abiding by all environmental regulations, but voluntarily participates in many environmental programs. Additionally, Massport implements and participates in outreach programs that encourage an open and timely exchange of information and ideas that assist Massport in developing mitigation programs.

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, including the Massachusetts Aeronautics Commission, until 1956, when the legislature placed Hanscom Field under Massport's jurisdiction,

Hanscom Field is the region's premier full-service general aviation airport, and it plays a critical role as a corporate reliever for Logan International Airport. Aircraft operations at Hanscom have traditionally included commuter, business, charter, cargo, personal aircraft, air taxi 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 research and development facility abutting the airfield.

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 Historic 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 also discusses Massport's 2007 accomplishments at Hanscom, as well as its plans for the airport's future.

SECTION I - AIRCRAFT ACTIVITY

Table 1 shows total aircraft activity levels at Hanscom Field for 7 a.m. to 11 p.m. operations in 2006 and 2007 based on Federal Aviation Administration (FAA) tower counts, fleet mix data, and estimates. The 2007 data are preliminary and will be thoroughly reviewed before publication of the 2007 noise report.

TABLE 1
Hanscom Field Aircraft Activity
2006
FROM FAA TOWER REPORTS & ESTIMATES (7 A.M.-11 P.M)

	CIVILIAN						MILITARY	
	LOCAL	SINGLES	TWIN PISTON	TURBO	JET	HELI		TOTAL
January	3313	3108	304	508	2521	593	105	10,452
February	3548	3569	273	600	2516	538	65	11,109
March	5467	4879	349	658	2746	600	170	14,869
April	4889	5602	350	626	2871	575	133	15,046
May	5243	4537	342	737	2947	599	159	14,564
June	4661	4301	451	782	2936	576	117	13,824
July	7319	6781	369	770	2338	593	137	18,307
August	5837	6426	429	842	2530	593	136	16,793
September	5024	5400	376	854	2809	570	169	15,202
October	4769	4985	384	907	3152	606	139	14,942
November	4371	4314	379	815	3210	577	179	13,845
December	4781	4296	346	729	2675	594	83	13,504
TOTAL	59,222	58,198	4,352	8,828	33,251	7,014	1,592	172,457

2007
FROM FAA TOWER REPORTS & ESTIMATES (7 A.M.-11 P.M)

	CIVILIAN						MILITARY	
	LOCAL	SINGLES	TWIN PISTON	TURBO	JET	HELI		TOTAL
January	3688	3146	281	723	2734	594	95	11,261
February	2682	2853	303	634	2749	536	71	9,828
March	3266	3788	360	767	2992	571	83	11,827
April	3800	3334	368	952	3074	565	99	12,192
May	5217	5392	398	1047	3181	588	162	15,985
June	5698	5144	417	1065	2865	568	186	15,943
July	6471	5358	389	977	2518	613	82	16,408
August	7143	6161	368	1078	2546	578	155	18,029
September	5339	5270	313	897	2780	560	189	15,348
October	5583	4879	392	946	3299	585	105	15,789
November	4270	4164	320	805	3151	553	129	13,392
December	3574	2282	286	463	2637	581	82	9,905
TOTAL	56,731	51,771	4,195	10,354	34,526	6,892	1,438	165,907

Note: The 2007 figures are preliminary. All 2007 data will be reviewed before publication of the 2007 annual noise report.

The FAA tower counts are traditionally used to report the official number of operations for an airport, but at Hanscom they do not include 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 2,281 nighttime operations in 2007, a decrease from 2,324 in 2006.

The airport's activity levels have historically been closely aligned to the economic health of the high technology industry in Boston's Route 128/95 area and have generally mirrored national trends. For ten years starting in 1987, when Massport began estimating the fleet mix, the fleet mix remained relatively constant, with some increases in the percentage of jet operations and some decreases in the percentage of single engine piston operations.

More noticeable fleet mix changes began in 1999 when commuter service was reintroduced using turboprops, causing an increase in the percentage of turboprop operations. In addition, the percentage of single engine piston activity began to decline more steeply, while the percentage of jets increased more sharply. Business jet usage at Hanscom was particularly influenced by the September 11, 2001 events, which triggered a 50 percent increase in jet activity in the subsequent 12 months.

The data in Table 1 show 165,907 operations for 2007, a 3.8 percent decrease as compared to 2006. Although total operations have been below 200,000 twelve times in the past fourteen years, they were well above 200,000 for the 30 years prior to 1993, and they exceeded 300,000 in 1970.

Consistent with experience for more than 25 years, the civilian portion of the 2007 aircraft operations comprised approximately 99 percent of the total aviation activity. The 108,502 estimated single engine piston operations, ("Local" plus "Singles" in Table 1), indicate that their activity decreased 7.6 percent as compared to 2006. The single engine piston operations represented 65.4 percent of the total aircraft activity in 2007. Touch-and-go activity ("Local" in Table 1) comprised a little more than half of these 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 single engine piston aircraft.

The 4,195 estimated twin engine piston operations indicate a decrease of 3.6 percent as compared to 2006. They represented 2.5 percent of the 2007 operations. The 6,892 estimated helicopter operations indicate a decrease of 1.7 percent as compared to 2006, and they represented 4.2 percent of the total.

Turboprop aircraft activity, representing 6.2 percent of the 2007 total activity, increased 17.3 percent to 10,354 operations. This was due to the 19.2 percent increase in non-commuter turbo activity coupled with the 13.7 percent increase in commuter airline aircraft operations. In 2007, Boston-Maine, Hanscom's only commuter airline, conducted 3,477 operations and handled 17,398 passengers. Although there were more commuter aircraft operations in 2007 as compared to 2005, the number of passengers decreased 1.6 percent. In early 2008, Boston-Maine informed Massport that it was terminating commuter service at Hanscom, effective February 29. This will affect the turboprop activity level in the future.

The 34,526 civilian jet operations in 2007 represented 20.8 percent of the total activity and a 3.8 percent increase, as compared to 2006. Hanscom's business jet activity has exceeded 30,000 operations annually since the events of September 11, 2001; the 2007 level is the highest to-date.

The 2007 noise report will be prepared later in the year and will be presented to HFAC. It 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 2007

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.

Operating Hanscom Field with a balanced budget has been a challenge since 1974 when Massport assumed responsibility for maintaining the airfield. From FY93 through FY97, the airport's deficit exceeded $2 million annually. This resulted from the continued need to address aging facilities and equipment while aircraft activity decreased because of the slowed economy. Increased efforts to control Hanscom's expenses, combined with an improved economy, produced decreases in the deficit from FY97 through FY02. There was a small surplus in the operating budget from FY00 through FY02, and in FY02, the total deficit, including amortization, was below $1.0 million, the lowest in recent history.

Unfortunately, security and insurance related costs escalated after the events of September 11, 2001, and a soft economy weaken revenues. As a result, the total deficit increased, peaking at $2.5 million in FY06.

Table 2 demonstrates the recent fluctuations in Hanscom's budget. Comparing FY07 to FY06, revenues increased 24.4 percent, operating expenses increased 9.6 percent, and Hanscom experienced an operating surplus of over one million dollars. This, combined with a 0.8 percent decrease in amortization, reduced the total FY07 deficit to $1.4 million, a 44.5 percent decrease when comparing it to FY06. The total deficit was projected to be $2.3 million when the FY08 budget was prepared in the spring of 2007.

Massport recognizes that controlling Hanscom's deficit requires an aggressive multi-faceted approach. On the cost side, every expenditure and project is carefully 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 help increase revenue, and Massport will support companies that express interest in operating such services out of Hanscom, as long as they comply with Massport's regulations.

TABLE 2

Hanscom Field Five Year Financial Summary

Fiscal Years (FY) 04-08

REVENUES	FY04	FY05	FY06	FY07	*Budgeted* FY08
RENTALS					
Terminal	298,946	262,628	268,192	259,368	304,586
Non-Terminal	1,782,857	1,600,589	1,393,438	1,701,337	1,804,766
Ground	760,708	854,952	1,227,720	1,485,984	1,615,509
Tie Downs	164,171	165,935	150,161	158,375	155,196
Utilities	106,080	107,686	153,692	157,030	141,313
SUBTOTAL	3,112,762	2,991,790	3,193,203	3,762,094	4,021,370
FEES					
Landing Fees	686,059	522,678	825,070	1,075,753	845,911
Customs Fees (effective Oct. 2003)	283,676	290,080	556,647	877,562	690,052
Night Field Use Fees	326,106	532,497	436,049	584,352	429,722
Parking Fees	In "Other"	80,249	119,636	144,640	156,000
Other	320,787	247,816	578,752	650,257	475,089
SUBTOTAL	1,616,628	1,673,320	2,516,154	3,332,564	2,596,774
COMMISSIONS					
Rental Cars	146,192	133,627	139,383	146,250	127,544
Flight Schools	9,543	74,031	27,195	22,175	27,779
Ground Servicing	207,724	232,783	177,649	153,051	164,950
Fuel Flowage	815,207	799,537	792,895	1,090,997	1,013,785
Other	1,390	202,263	319,528	405,805	305,020
SUBTOTAL	1,180,056	1,442,241	1,456,650	1,818,278	1,639,078
TOTAL REVENUES	**5,909,446**	**6,107,351**	**7,166,007**	**8,912,936**	**8,257,222**
OPERATING EXPENSES					
Admin, Maintenance, Security Stat	2,295,862	3,069,967	3,162,629	3,709,615	3,509,793
Services	731,235	935,415	879,201	1,468,779	1,567,037
Utilities	321,465	271,747	414,686	354,281	616,384
Insurance	497,428	926,360	635,881	378,562	464,493
Professional Fees	137,314	83,392	784,602	367,021	425,500
Other (inc supplies, repairs, etc.)	766,212	484,395	600,658	816,392	708,169
General & Administration	465,910	584,528	609,886	671,399	846,003
TOTAL OPERATING EXPENSE	**5,215,426**	**6,355,804**	**7,087,543**	**7,766,049**	**8,137,379**
OPERATING SURPLUS/DEFICI	**694,020**	**(248,453)**	**78,464**	**1,146,887**	**119,843**
AMORTIZATION	1,868,670	1,952,484	2,526,530	2,506,616	2,398,836
TOTAL COSTS (oper.+amortiz.	**7,084,096**	**8,308,288**	**9,614,073**	**10,272,665**	**10,536,215**
SURPLUS/DEFICIT	**(1,174,650)**	**(2,200,937)**	**(2,448,066)**	**(1,359,729)**	**(2,278,993)**

SECTION III - ECONOMIC BENEFITS OF HANSCOM ACTIVITY

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

Located off Route 128/95, Hanscom Field has become 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 FY07, Massport invested over $1.3 million in airfield, terminal and other facility improvements at the airport. Cumulatively, approximately $53.7 million has been spent on completed capital projects at Hanscom since 1959. These 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, Massport completes an examination of the economic impacts of its facilities. This was last done for 2004 activity levels. It was determined that there were 462 jobs directly related to Hanscom, and it was estimated that Hanscom generated economic benefits of $180.6 million when all the direct, indirect and induced economic benefits of the airport were considered. It was also found that Hanscom generated $9.6 million in state and local taxes and that $65.4 million was spent on local purchases.

SECTION IV - 2007 ACCOMPLISHMENTS AND 2008 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.

Maintain and Improve Airfield

(a) Annual Airfield Improvement Program

Background: Many projects at Hanscom are part of maintaining a safe and efficient airfield, and these are generally eligible for federal funding under the FAA's Airfield Improvement Program (AIP). Each year, Massport submits projects for FAA funding approval. There were two AIP-eligible projects that were started but not completed prior to 2007.

- When Massport began its reconstruction project for Runway 5/23 in the late 1990s, the FAA informed Massport that the Runway Safety Area (RSA) for the runway needed to be

upgraded. After a full analysis of alternatives, an option that would bring the RSA more closely in alignment with current RSA standards was selected and approved by the FAA. The RSA project is not a runway expansion; it does not require any additional pavement; and it will not change how the runway is used. It involves re-grading of pervious areas at the two runway ends.

Design preparation began in 2005. Affected wetland areas at the Runway 23 end were identified, and it was determined that wetland replication would be required. The permitting process for the RSA wetland work began in July 2005 when Massport submitted an Environmental Notification Form for the project to the Massachusetts Environmental Policy Act (MEPA) staff. In the fall of 2005, MEPA held a public hearing and issued a scope for an Environmental Impact Report (EIR). A Draft Environmental Impact Report (DEIR) was submitted to MEPA in July 2006. After holding a public hearing on the DEIR, MEPA issued a certificate showing that the DEIR adequately and properly complied with the scope of work. Additionally, the certificate outlined the steps for preparing a Final Environmental Impact Report (FEIR) for the project.

- An update of the existing Airport Layout Plan (ALP) was pursued to meet the FAA's requirement that airports maintain current ALPs on file with them. In 2006, Massport began working with the FAA to finalize an updated ALP for Hanscom.

In 2007: The two AIP-eligible projects that started prior to 2007, but were not yet complete, were pursued:

- The FEIR for the RSA project was submitted to MEPA in January 2007. After notification in the Environmental Monitor and a public comment period, the Secretary of Environmental Affairs issued a certificate showing that the FEIR adequately and properly complied with the scope of work. Massport submitted a Notice of Intent (NOI) for the project to the Town of Bedford Conservation Commission (BCC) in May 2007 and attended three public meetings with the BCC in June and July. Because of the size of the project, the BCC was required to deny the permit per the Wetlands Protection Act. The BCC denial, with attached recommendations, was issued in August.

  In response to the BCC denial, Massport submitted a request for a Superseding Order to the Department of Environmental Protection (DEP) in August 2007. Additionally, Massport submitted an Application for Water Quality Certification to DEP in October and a water quality permit request to the Army Corp of Engineers in September. Again because of requirements in the Wetlands Protection Act, DEP denied the Superseding Order request in November. In response, Massport submitted a variance request to DEP. DEP held a public hearing on the variance request in December and accepted public comments until January 14, 2008.

- The FAA accepted the ALP in the spring of 2007, and Massport staff presented the ALP to HFAC in June.

Additionally, pavement repairs near the Pine Hill t-hangars and an upgrade to the existing main electrical vault for the airfield lighting systems were completed.

In 2008: It is anticipated that Massport will receive all the required permits for the RSA project by spring 2008. An RFP will be issued and construction is expected to begin in mid to late 2008.

Additionally, design work will begin for pavement reconstruction of taxiways Mike and Whisky.

(b) Safety and Security

Background: Safety and security are the two most critical components of operating an airport, and there is a continual 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.

Safety: 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 emergency is conducted on the airport. Although the primary purpose of this response and transport exercise is to test the effectiveness and efficiency of the airport's incident command and communication team, Massport encourages participation by mutual aid responders and area medical teams, which allows them to test their response times and to evaluate the capabilities of their medical facilities.

Security: There was an increased emphasis placed on security after the events of September 11, 2001. Before the end of 2002, installation of new security fencing was initiated and an ID badging program was developed. Badges must be displayed at all times when on the airfield. Anyone requiring unescorted access to the airfield must now undergo a background security check in order to obtain a badge.

In 2007: *Safety:* In June 2007, Massport conducted a tabletop exercise to review procedures for dealing with an airfield emergency. Participants interacted with their contemporaries from different organizations, putting names to faces while talking through a variety of potential scenarios and response actions.

Massport is required to maintain Aircraft Rescue and Fire Fighting (ARFF) services that comply with FAA standards. Traditionally, Massport contracted with Hanscom Air Force Base for ARFF services, as well as structural fire and first responder emergency medical services. However, this arrangement was interrupted in 2007. Due to federal accounting procedures, HAFB was unable to continue to provide ARFF services, effective July 1, 2007. Massport assigned Logan fire department personnel to provide ARFF services at Hanscom, and at the same time, staff pursued federal legislation that would allow Massport to revert to contracting with HAFB for the ARFF services. The legislation was approved in January 2008.

Wildlife on an airfield can be a serious safety hazard for aircraft. Massport contracted with the U.S. Department of Agriculture (USDA) to conduct a wildlife assessment, as recommended by

the FAA. The project involves twelve months of observation and data collection to identify types of wildlife and their patterns on the airfield.

Security: Massport continued its previously initiated security programs. Additionally, there was an on-going process of evaluating and implementing new programs.

In 2008: *Safety:* Safety initiatives and training programs will continue to be evaluated and potentially implemented. A simulated emergency exercise will be conducted on the airport in 2008. The results of the USDA wildlife assessment will be evaluated to determine whether additional steps can be taken to reduce or eliminate the hazards of wildlife on the airfield. It is also anticipated that Massport will again be contracting with HAFB for ARFF services.

Security: Massport will continue its security programs and will evaluate and implement new programs, as appropriate.

(c) Clear Zone Obstruction Removal

Background: A critical component of maintaining compliance with FAA certification and safety requirements is the elimination of obstructions within the runway approach surfaces. It is paramount that Massport remove vegetation that is penetrating, or close to penetrating, runway clear zones. Historically, a vegetation removal project has been required every five years. Based on a 1999 obstruction analysis using aerial photogrammetric mapping of the runway approach and departure surfaces, it was determined that vegetation removal from uplands and wetlands was necessary at all four runway ends in all four towns.

Following state guidelines in the *Generic Environmental Impact Report (GEIR) for Vegetation Removal at Public Use Airports* and the *1999 GEIR/Generic Environmental Notification Form Update*, Massport drafted a Vegetation Management Plan (VMP) for all four runway ends in 2001. Additionally, Massport delineated the wetlands that were identified in the first five year vegetation removal and maintenance program in the VMP, and the Conservation Commissions in the four towns approved the Abbreviated Notices of Resource Area Delineation to verify the wetland boundaries.

In 2002, Massport finalized the VMP and began pursuing the necessary permits for implementing the first five year vegetation removal and maintenance program. By 2003, Massport had received Orders of Conditions from all four towns, and vegetation removal took place in 2004. Subsequent maintenance was pursued in order to minimize the need for additional large-scale cutting in those areas.

The 1999 obstruction analysis identified penetrations in Bedford's Hartwell Town Forest and Jordan Conservation area when using a 34:1 slope from the runway end away from the airport. After extended communications with the FAA, it was agreed that Massport could pursue cutting at a 20:1 slope rather than a 34:1 slope. It was anticipated that this would eliminate the need to cut vegetation in the Bedford Town Forest, leaving only the Jordan Conservation land subject to this need. Massport initiated communications with the Town of Bedford to discuss the need for a mutually agreeable management plan for the necessary vegetation removal on town property.

In 2007: Massport updated its obstruction analysis for the airport with 2007 aerial photogrammetric mapping of the approach and departure surfaces for both runways. The analysis shows that efforts over the past five years have minimized the need for future vegetation removal in the areas that were cut in 2004; however, vegetation removal is required in areas that were not part of the first five year maintenance program. The results were used to begin developing a second five year vegetation removal and maintenance program, which will include a proposal for addressing the obstructions in the Jordan Conservation area.

In 2008: The new five year vegetation maintenance program will be completed and presented to the four town conservation commissions for approval. It will also be used to pursue discussions with the Town of Bedford regarding obstructions in the Jordan Conservation area. It is anticipated that implementation of the second five year vegetation maintenance program will begin in late 2008 or early 2009.

(d) Landside Maintenance

Background: In addition to maintaining the airfield, Massport must maintain the parking lot and entrance areas to the airfield. There were no landside projects in 2007, and none are anticipated for 2008.

Maintain and Improve Facilities

Background: Hanscom plays a critical role in the regional transportation system. This role demands appropriate maintenance programs and responsible development of airport facilities. At the same time, Massport must remain flexible, making adjustments to its projects based on changes in the aviation industry. Anticipating future needs and meeting the current needs of new and existing tenants create challenges that require careful analysis.

In its general aviation role, Hanscom is home for private pilots, flight schools, an aircraft maintenance training facility, small airport-related businesses, companies that provide air taxi services, and corporate flight departments of local companies. In addition, there are companies that provide services to aircraft operators; some of these companies specialize, while the fixed base operators offer a full range of services. Most of Hanscom's hangars, with associated office space, are owned or leased by tenants who are responsible for maintaining the facilities.

Third Party Development: Hanscom's customer base requires more hangar space than is currently available. In recent years, Massport has solicited third party development and management for new facilities.

Hangar 24 was vacated in 2001, and in subsequent years, Massport began pursuing third party development of the Hangar 24 site. Developers were interested in demolishing the old hangar and constructing a new facility. In 2006, Massport was informed by the Massachusetts Historical Commission (MHC) that, because of the significance of some of the events that took place in Hangar 24, the facility meets some of MHC's criteria for historical significance. Massport prepared a Project Notification Form regarding its plans for Hangar 24 and submitted

this to MHC in late 2006. Members of the residential communities support converting Hangar 24 into a public museum that commemorates the events that took place there during World War II and the cold war. Massport supports the concept of having an aviation museum, but maintains that the Hangar 24 site is on Hanscom's flight line and is an inappropriate location for a museum.

Massport Controlled Facilities: Massport owns and manages the Civil Air Terminal, a number of corporate hangars that are leased, and t-hangars and tie-down spots for owners of small aircraft. All of the Massport owned facilities must be maintained and sometimes upgraded. The civil terminal is home to a number of aviation businesses, including Hanscom's flight schools, and it has always been the base for any commuter airline service.

In 2007: *Third Party Development:* In response to Massport's filing the 2006 Project Notification Form regarding plans to redevelop Hangar 24, MHC asked Massport to participate in a public consultation process relating to the historical significance of events that took place in the hangar. Massport prepared a draft Memorandum of Agreement (MOA) and provided MHC with an engineering analysis of the structure. The latter found the hangar to be in poor condition and suggested it would be financial infeasible to renovate to meet today's building codes and safety standards. On June 15, MHC held a consultation meeting for all interested parties. In July, comments were submitted identifying suggestions for preserving, protecting, or mitigating the information related to historic events that took place in Hangar 24. Members of the residential communities continued to support converting Hangar 24 into a museum. Massport responded to the comments in August and, at MHC's suggestion, had the MOA noticed in the Environmental Monitor in September. Comments in response to this notification were submitted in September, and Massport responded to those comments in January 2008.

Massport pursued discussions with the two Hanscom flight schools regarding their potential use of a Pine Hill site that has been identified for development. One or both flight schools may be interested in building on the site. Also, Massport had discussions with the lessee of Hangar 10 regarding the lessee's plans to redevelop the facility.

Development opportunities were identified and analyzed in the 2005 Environmental Status and Planning Report (ESPR), which was finalized in 2007. The ESPR identifies development potential that would support the facility's role in the regional transportation system as a full service general aviation airport; it was noted in the document that the East Ramp is a large potential development area, the use of which does not involve increasing impervious surface.

Massport Controlled Facilities: Designs for renovating the Civil Air Terminal first floor to improve the efficiency of the area were pursued. Although Boston-Maine is leaving Hanscom, Massport is interested in having commuter service at the airport, and it is anticipated that design work will continue to incorporate plans that support a commuter airline operation. Because Massport is also looking at using a section of the terminal as an emergency location for Massport staff in the event of a disaster at Logan, it was determined that additional coordination of the divergent needs is required in the designs.

In 2008: *Third Party Development:* Because of Massport's interest in redevelopment of the Hangar 24 site, Massport will continue to consult with MHC in an effort to eliminate, mitigate,

or manage the redevelopment effects on the historical events that took place in the hangar. MHC has recommended that the FAA initiate a Section 106 review, which is a federal process under the National Historic Preservation Act of 1966. Massport will work with the FAA in that review process.

Massport will continue to pursue development of a site near the Pine Hill t-hangars. Either one or both flight schools currently at Hanscom may be interested. Massport will work with the lessee of Hangar 10 regarding the future of the facility. Additionally, the 2005 ESPR will serve as a planning tool as Massport pursues future development at Hanscom.

Massport Controlled Facilities: Massport plans to re-roof, paint the outside, and upgrade the first floor of the Civil Air Terminal. Also, Massport will continue to consider the role it might play in the future use of the U.S. Navy facilities that were vacated by Raytheon in 2000. The land is in Bedford, north of the airfield, and is contiguous with Massport property. The hangar abuts the airfield, and the office building is on a hill overlooking the airport.

Monitor and Respond to Environmental Issues

(a) Environmental Programs and Audits

Background: Massport has consistently maintained high environmental standards while complying with state and federal environmental regulations. There is a continual effort to extend and improve the use of environmentally friendly technologies and innovations to identify and minimize operational impacts.

In 2001, Massport brought its environmental commitment to a new level when Hanscom Field became the first U.S. airport to become ISO 14001 certified. To become certified, Massport developed and implemented an Environmental Management System (EMS) that meets international performance standards. The EMS provides a framework that fosters the use of environmentally sustainable practices for operating the field and creates an auditable system for tracking, managing, and improving environmental performance. The EMS facilitates environmental compliance, encourages strategic environmental thinking during business and planning processes, and promotes environmental awareness.

In 2007: Soon after it was issued in April 2007, Massport began voluntarily participating in the state's Leading by Example Program created by Executive Order No. 484. This program encourages state agencies to use environmentally sustainable practices that minimize the environmental effects of their operations and activities and that promote innovative solutions to critical environmental problems.

As part of Massport's environmental commitment, the Environmental Management Unit continued to monitor and audit activities at Hanscom to ensure the use of pollution prevention practices and to ensure compliance with environmental regulations. Programs that are on-going include:

- Tracking, managing and improving environmental compliance and performance through the EMS;
- Monthly inspections of all Massport fuel storage tanks and the Field Maintenance garage to ensure regulatory compliance;
- Inspecting Massport and tenant 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 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 stormwater discharges at Hanscom Field;
- Conducting periodic water quality inspections at Massport's stormwater outfall locations;
- Participating in the Massachusetts State Sustainability Program (Executive Order No. 438) to promote environmentally sustainable practices and in Massachusetts Leading By Example – Clean Energy and Efficient Buildings (Executive Order No. 484);
- Participating in an aggressive mixed paper and cardboard recycling program for tenant and Massport offices;
- Identifying opportunities during Massport capital program project design development to reduce stormwater runoff and peak flows;
- Identifying opportunities for development projects to control stormwater runoff. For example, if a project results in an increase in impervious surface, Massport requires compensatory storage for stormwater in order to avoid increasing peak stormwater run-off rates. This policy is incorporated into all Hanscom Field development.

In 2007, neither Massport nor any tenant had a reportable spill of hazardous waste materials at Hanscom Field.

In 2008: Massport's Environmental Management Unit and Hanscom staff will continue to use the EMS as the basis for tracking, managing and continually improving environmental performance. Targets will be updated as target dates are reached or when opportunities arise for improving the EMS framework. Staff will continue to monitor and audit Massport and tenant activities at the airport and will discuss issues with the responsible parties to ensure compliance with environmental regulations and permitting requirements. Massport will continue to meet all of its on-going environmental commitments.

(b) Management of Massachusetts Contingency Plan (MCP) Sites

DEP maintains a list of all MCP sites. In 2006, Massport brought its last DEP-listed site at Hanscom Field to regulatory closure.

(c) DEP Shawsheen Watershed Initiative

Background: Massport has been working cooperatively with the Massachusetts DEP, the U.S. Environmental Protection Agency, and the United States Air Force to improve the quantity and quality of stormwater discharges into the Shawsheen River. Massport has removed pavement to

decrease impermeable areas on the airfield and has incorporated water quality and water quantity improvements into ongoing projects using Low Impact Development technologies. Additionally, Massport has taken measures to directly affect stormwater discharges into the river. For example, overflow weirs for temporarily storing water were installed in three large drainage pipes leading to the Shawsheen River in 2006. The weirs were designed to reduce the peak discharge of stormwater and increase base flow by releasing the stored water over time.

In 2007: Massport prepared a computer model to evaluate potential stormwater improvement projects at Hanscom Field or on Hanscom Air Force Base. An important goal of the work was to develop a system for determining which stormwater improvements would be of the greatest benefit to the Shawsheen River.

In 2008: Massport will begin to design and construct stormwater controls based on the results of the 2007 computer modeling. Massport will continue to work cooperatively with the Air Force to gain the maximum benefit from a combination of controls implemented by both entities.

(d) Protection of Rare and Endangered Species

Background: Two grassland bird species subject to the Massachusetts Endangered Species Act have been observed at Hanscom Field: the Upland Sandpiper and the Grasshopper Sparrow. In cooperation with the Massachusetts Audubon Society, Massport has traditionally managed airfield vegetation in a manner that maintains aviation safety while protecting the grassland nesting areas of these species.

As part of its commitment to help protect the Upland Sandpiper and other listed grassland species, Massport completed a Grassland Management Program in 2004 that protects these birds while minimizing risks associated with hazardous wildlife species on the airfield. As part of this effort, Massport suspends mowing activities in some areas (excluding runway safety areas) during the critical nesting season of these birds. In addition, the U.S. Department of Agriculture regularly conducts field visits at Hanscom to monitor and evaluate wildlife on the airfield, with a focus on assisting Massport in minimizing bird strike hazards.

(e) Environmental Status and Planning Report (ESPR)

Background: Starting in 1985, Massport has prepared a series of environmental assessments for Hanscom Field. These studies identify the environmental effects of current conditions and activity at the airport, and they present and evaluate the potential cumulative environmental effects of several future scenarios.

Massport's first Generic Environmental Impact Report (GEIR) for Hanscom Field evaluated the environmental impacts for 1985 conditions and looked at the potential impacts for 1990. In 1997, a GEIR Update was completed, using 1995 as the base data year and evaluating potential impacts for 2000 and 2010. Subsequently, the name of the study was changed from a GEIR to an Environmental Status and Planning Report (ESPR) because it was determined that this title better characterized the study.

The 2000 ESPR analyzed the environmental effects for 2000 and compared the results to the data in the 1995 GEIR Update. In addition, potential environmental effects for 2005 and 2015 were analyzed based on a range of aviation growth scenarios, and on the development needed to support that activity.

Each year that the GEIR/ESPR documents were completed, they were submitted to the Massachusetts Environmental Policy Act (MEPA) offices, and the certificates issued by MEPA found them to be adequate. The certificate for the 2000 ESPR requested another environmental update using 2005 as the base year.

A draft Scope for the 2005 ESPR was submitted to MEPA in 2005, and MEPA issued a certificate, including a Scope of Work. Massport prepared the Draft 2005 ESPR and filed it with MEPA in November 2006. The document analyzed the environmental effects for 2005, compared them with the data in the 2000 ESPR, and projected potential environmental effects for 2010 and 2020 based on a range of general aviation, commercial, and cargo growth scenarios, and on the development needed to support that activity.

In 2007: During January, a series of meetings were held by Massport to present the material in the Draft 2005 ESPR. Additionally, MEPA held a January public hearing to receive public comments on the draft document. MEPA issued a certificate that found the Draft 2005 ESPR to adequately and properly comply with MEPA regulations and determined that the Draft ESPR could be submitted as the final document. After an additional informational meeting and MEPA hearing, MEPA issued a certificate for the Final ESPR.

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.

(a) Community Meetings

Massport is committed to the public's "right to know". Massport staff sponsor project specific informational meetings, tours, and public hearings for representatives and residents of the towns that abut the airfield, those who use the airport, the Minute Man National Historic Park, the FAA, Hanscom Air Force Base and other interested parties, as needed or requested. Additionally, Massport staff members regularly attend two monthly community meetings, as follows:

- *The Hanscom Field Advisory Commission (HFAC)*: The HFAC was established by the Massachusetts legislature in 1980. It includes representatives from the aviation and residential communities as well as advisory members who represent the National Park, Hanscom Air Force Base, the FAA, and Massport. Massport staff provide members of the HFAC with pertinent information regarding events and plans for the airport, as well as general information about Massport's goals, policies and plans. Additionally, staff prepare

and present monthly activity and noise statistics, *The State of Hanscom*, and the annual noise report, as well as a variety of other reports that are generated periodically.

- *The Hanscom Area Towns Committee (HATS):* The four towns that are contiguous to Hanscom Field and Hanscom Air Force Base created the Hanscom Area Towns Committee (HATS). One selectman from each town serves on HATS along with planning board and at-large members from the towns. Massport staff attend the HATS meetings to comment on discussion items and to respond to questions relating to Hanscom Field and Massport.

(b) Noise Metrics and Noise Abatement/Mitigation

Background: Aircraft noise is an airport-related concern for many Hanscom area residents and Minute Man National Historical Park, and Massport recognizes the importance of pro-actively addressing this issue. Massport is committed to implementing its current noise programs and to exploring appropriate new initiatives.

In 1980, Massport adopted regulations (Part F of the General Rules and Regulations for Laurence G. Hanscom Field) that include a nighttime field use fee that helps minimize activity between 11 p.m. and 7 a.m.; a restriction on commercial air carrier service to aircraft with no more than 60 seats; and restrictions on touch-and-go activity by type of aircraft and time of day. Touch-and-goes are aircraft operations conducted to repeatedly and consecutively practice landing and departing techniques. In addition, the regulations phased out the use of most Stage 1 aircraft at Hanscom. Stage 1 aircraft are some of the noisiest aircraft in the U.S. fleet. In the mid-1980s, Massport began supporting the use of the National Aircraft Business Association's noise abatement procedures for jet aircraft.

Following the 1995 GEIR Update, a Noise Working Group, with representation from both the residential and aviation communities, was established at MEPA's request. This group studied noise metrics and noise abatement and mitigation measures. It completed its mission in September 1999 by submitting a report with recommendations. Massport continues to review and report on the status of those recommendations in the ESPR, and those recommendations continue to guide Massport in its noise related initiatives.

Although Massport does not expect to adopt all of the metric-related recommendations included in the Noise Working Group's report, most of them were addressed and reported in the 2000 and/or 2005 ESPRs. Others will be addressed when the upgraded noise monitoring system (discussed below) is fully operational.

In an effort to minimize the impact of aircraft noise, all of the Noise Working Group's abatement and mitigation recommendations that required Massport's implementation were addressed. Most of them related to Massport's development of its fly friendly program. This program encourages pilots to use the quietest flying techniques that are safe and practical.

Massport created inserts for pilot manuals that outline the Aircraft Owners and Pilot Association's (AOPA) and the National Business Aircraft Association's quiet flying recommendations. These inserts continue to be made available for pilots of all aircraft using

Hanscom. Framed posters describing noise abatement procedures are hanging in the flight schools' offices and the fixed base operators' facilities. Videos that discuss the AOPA concepts were mailed to all based pilots of piston aircraft in 2000. More recently, videos describing the techniques for both jet and piston aircraft were incorporated into the training required to get a Hanscom security badge. As a result, pilots using Hanscom are consistently being exposed and re-exposed to the program, thus increasing awareness and an understanding of the quiet flying techniques.

On another front, Massport joined Sound Initiative in 2005. Sound Initiative is a recently created coalition that supports the federal phase out of non-Stage 3 aircraft weighing less than 75,000 pounds. Stage 1 and 2 aircraft were manufactured before today's stringent noise standards were adopted for new airplanes. The use of non-Stage 3 aircraft weighing over 75,000 pounds was phased out nationally by 2000, but most of Hanscom's jets weigh less than 75,000 pounds. Just a small number of operations by the lighter Stage 1 and 2 aircraft can contribute significantly to the noise exposure at Hanscom.

In 2007: AOPA contacted the FAA in the late spring and asked for an update on its 2000 claim that Hanscom's nighttime field use fee is weight-based and therefore is unreasonably and unjustly discriminatory. Massport staff met with the FAA and agreed to develop a noise-based fee structure to replace the existing weight-based one.

Massport continued to support the Fly Friendly program by distributing information that describes the program and by including the Fly Friendly video with the training for receiving a security badge. Additionally, Massport installed signs at strategic locations encouraging limited Auxiliary Power Unit (APU) use. APUs are used to provide power to a parked aircraft.

Massport also continued to support Sound Initiative in its effort to phase out the use of all non-Stage 3 aircraft in the U.S. The FAA Reauthorization bill HR 288 included a provision to phase-out non-Stage 3 aircraft over five years, but there were differences between the House and Senate versions of the phase-out. Additionally, lobbying groups were looking for a 10 year phase out.

In 2008: Massport will continue to support efforts that reinforce its commitment to minimize aircraft noise impacts on the communities. This will include working with the FAA in an effort to find an alternative noise-based nighttime field use fee structure, working with Sound Initiative in its effort to phase out of some of the noisiest aircraft in the U.S. fleet, and encouraging the use of community conscious programs such as Fly Friendly.

(c) Noise Monitoring System

Background: In an effort to facilitate the understanding of noise impacts in the communities, Massport installed a noise monitoring system at Logan and Hanscom in the early 1990s. The system includes six Hanscom microphones—one off each of the runway ends in each of the 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.

In 2005, Massport selected Rannoch Corporation to upgrade its noise monitoring system. Subsequently, Rannoch changed its name to Era Beyond Radar (Era). The upgraded noise system will have several interrelated, complex components for both Hanscom and Logan International Airport, including reports of noise levels, flight tracks, and aircraft identification, as well as a user-friendly website. Users of the internet will be able to research a noise event or flight, log a noise disturbance, and track correspondence related to a logged noise disturbance.

Because the new computer system had to be integrated with Massport's computer system, the project started with Massport and Era tackling a myriad of technical issues, many of which had to be resolved before moving into an installation phase. Although this took longer than originally anticipated, by the end of 2006, Hanscom had six new microphones installed and some preliminary data became available to Massport staff.

In the early stages of this project, the residential communities established an Ad Hoc Noise Group to work with Massport. Massport solicited input from this group for use in developing a new website for the system. Early in 2006, Massport met with the Ad Hoc Noise Group to answer questions and concerns about the project. Additionally, there was discussion with the chair of the community group regarding the communities' desire to have some of the noise monitors moved. Massport agreed to move two Hanscom monitors.

In 2007: As the year progressed, Massport staff had increasing access to data from the new system. Data from the old system was migrated to the new, and a series of reports to be generated by the new system were drafted. As the year came to a close, a new form was developed for responding to noise disturbance reports. It is anticipated that staff will be able to correlate many of these reports with aircraft events using the new system. Material for the new website was also drafted.

In 2008: The upgraded noise system is expected to become fully operational in 2008, and this will include a user-friendly, interactive website for residents. Massport will work with community representatives to determine new locations for two of the existing noise monitors. It is anticipated that some additional recommendations identified by the Noise Working Group in 1999 will be addressed when the new system is fully functional.

(d) Community Contributions

Massport's Charitable Contribution, Scholarship, 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 2007, Massport contributed $5,600 to educational, scholarship, and youth programs in the Hanscom area and provided over $14,000 to sponsor summer internship positions in the four Hanscom towns.

SECTION V – CAPITAL PROJECTS FOR FY08 THROUGH FY11

Each year, capital projects for Hanscom Field are evaluated for funding. Table 3 outlines the projects that have been identified for FY08 through FY12. Estimated project costs are included. The list does not include projects that have been completed in FY08.

The capital programs list is fluid and gets 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 actually implemented.

TABLE 3
Hanscom Field FY08 to FY12 Capital Projects

	PROJECTS	Current Funding Years	Cost FY08-FY12(in 000s)
	Runway Safety Area Improvements	FY08-FY09	$2,241
	Noise Monitoring System Upgrade	FY08-FY09	$335
	Security Access Control System	FY08-FY09	$405
	CAT 1st Floor Renovations	FY08-FY09	$2,920
	CAT Roof and Building Repairs	FY08-FY09	$690
Unfunded	Security Fence	FY08-FY10	$510
Unfunded	Airfield Improvement Program (Taxiway E & M Reconstruct)	FY08-FY11	$1,980
Unfunded	Stormwater Infrastructure	FY08-FY12	$421
Unfunded	CAT HVAC upgrade	FY09	$100
Unfunded	Virginia Road Fence	FY09	$100
Unfunded	UST Removal Program	FY09	$50
Unfunded	Airfield Improvement Program (RW5 overrun overlay)	FY10	$1,000
Unfunded	Airfield Improvement Program (Taxiway G Rehab)	FY10-FY11	$1,000
Unfunded	Airfield Improvement Program (Taxiway M Rehab)	FY10-FY11	$1,000
Unfunded	Rehab Landside Road Areas	FY11	$750
Unfunded	Pine Hill T-Hangar Roof Repair	FY11	$400
Unfunded	Rehab Old T-hangar pavement	FY11	$1,095
Unfunded	Perimeter Road Improvements	FY11-FY12	$350
Unfunded	Airfield Improvement Program (Taxiway S & W Hangar apron overlay)	FY12	$21
Unfunded	Salt Storage Enclosure	FY12	$250
Unfunded	Heavy Equipment Cold Storage	FY12	$675