

APRIL 2005

PROPOSED SCOPE

HANSCOM



2005 L.G. HANSCOM FIELD

ENVIRONMENTAL STATUS & PLANNING REPORT

Bedford, Massachusetts

EOEA NUMBER: 5484/8696



Submitted to:
Submitted by:

Executive Office of Environmental Affairs
Massachusetts Port Authority



Massachusetts Port Authority
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Telephone (617) 428-2800
www.massport.com

March 31, 2005

Secretary Ellen Roy Herzfelder
Executive Office of Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Proposed Scope
2005 L. G. Hanscom Field Environmental Status & Planning Report
Bedford, MA
EOEA Number: 5484/8696

Dear Secretary Herzfelder:

The Massachusetts Port Authority (Massport) is pleased to submit for your review this Proposed Scope for the 2005 L. G. Hanscom Field Environmental Status & Planning Report (ESPR) in Bedford, MA (EOEA #5484/8696). The Proposed Scope is being submitted in accordance with the provisions of the Massachusetts Environmental Policy Act (MEPA), G.L. Chapter 30, Sections 62-62H and its regulations, 301 Code of Massachusetts Regulations (CMR) 11.00. The Proposed Scope responds to your Certificate on the 2000 ESPR. A copy of the most recent Hanscom Field Status Report and a reviewers list is also attached.

Massport is requesting a 45-day comment period to accommodate community review, with the close of comments on May 23, 2005. Massport will also hold a public meeting during the month of April in addition to the MEPA Scoping Session.

Members of Massport's staff are available to discuss the attached documents with you or your staff if needed. Please contact me at 617.568.3546 with any questions or comments.

Sincerely,

Thomas W. Ennis
Senior Project Manager
Economic Planning & Development Department

Proposed Scope
for the 2005 L. G. Hanscom Field
Environmental Status and Planning Report

Massachusetts Port Authority
Aviation Planning and Development Department

April 2005

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Environmental Status & Planning Report
April 2005**

PROJECT NAME: 2005 Hanscom Field Environmental Status & Planning Report
PROJECT LOCATION: Bedford, Massachusetts
EOEA NUMBER: 5484/8696
PROJECT PROPONENT: Massachusetts Port Authority (The Authority)

The Authority is committed to a multi-modal, multi-airport, multi-state regional transportation program that will satisfy future regional aviation demand. A key component of that transportation program is the use of regional airports to complement Logan International Airport (Logan). L.G. Hanscom Field, which is located in the four towns of Bedford, Concord, Lincoln, and Lexington, is New England's premier general aviation (GA) airport. Minute Man national Historical park is located just south and west of the airport in Lincoln and Concord. As a reliever to Logan, Hanscom Field provides airside relief by annually serving approximately 200,000 GA operations. Hanscom Field handles over six times more GA operations than occur at Logan. The airport also supports niche commercial service. This role for Hanscom Field was established in the Master Plan for the airport in 1978, clarified in the 1980 Noise Rules, restated in the most recent 1995 Generic Environmental Impact Report (GEIR) and the 2000 L. G. Hanscom Field Environmental Status & Planning Report (ESPR) and continues to be the program for the future.

Hanscom Field's Master Plan and Noise Rules

The Authority assumed ownership of Hanscom Field in 1974. The airport is located approximately 20 miles northwest of Boston just outside Route 128/I-95 and is convenient to most of metropolitan Boston. The Federal Aviation Administration (FAA) identifies Hanscom Field as a reliever airport. As such, its primary role in the regional aviation system is to accommodate regional GA needs, which includes some commercial and cargo service. This allows larger nearby airports to concentrate on large-scale commercial activity.

In 1978, the Authority prepared a Master Plan for the airport. The preparation of the Master Plan included a lengthy and comprehensive public process. In 1980, after additional public process, Massport adopted the Hanscom Field Noise Rules, which were an outgrowth of the Master Plan. The Master Plan and the 1980 Noise Rules remain the framework for airport planning and operations today.

The variety of aviation activities at Hanscom Field include private corporate aviation, recreational flying, pilot training, air charter, cargo, commuter service and limited military flights. The Master Plan and the 1980 Noise Rules contemplate and provide for commercial airline service. In fact, the 1980 Noise Rules specifically allow for passenger aircraft with up to 60 seats. Commercial airlines have operated periodically at Hanscom Field since the mid-1970s. Since September 1999 there has been continuous commercial service at Hanscom Field; Pan Am is the most recent airline to provide commercial passenger services. In early 2005, several other commercial carriers expressed interest in serving Hanscom Field.

History and Purpose of Environmental Status and Planning Report

The Massachusetts Secretary of the Executive Office of Environmental Affairs (Secretary) has, since 1985, requested that the Authority prepare an Environmental Status and Planning Report (ESPR) every five years to evaluate the cumulative effect of growth and change at Hanscom

Field and provide data and analyses on noise, ground transportation, air quality, and water quality. The original GEIR, the 1995 GEIR Update, the 2000 ESPR, and now the 2005 ESPR provide a retrospective analysis of the environmental effects of Hanscom Field while including analyses for future conditions. As a result, these documents remain an effective planning tool from which the Authority's policy and program developments are derived. The 2005 ESPR will present an overview of the operational environment and planning status of Hanscom Field and will provide long-range projections of environmental conditions against which the effects of future individual projects can be compared. The ESPR will allow the reader to see historical environmental information, current information, and a forecast of future environmental effects at Hanscom Field. The ESPR does not replace the requirement for filing an Environmental Notification Form (ENF) for a specific project if that project meets or exceeds a MEPA regulation threshold.

The Authority filed its 2000 Draft ESPR with the Executive Office of Environmental Affairs (EOEA) in July 2002, followed by the Final ESPR (FESPR) in May 2003, and received the MEPA Certificate on the FESPR on August 14, 2003. Together, the Draft and Final ESPRs contain, among other things, an extensive discussion on air and ground transportation and detailed information on such technical issues as noise abatement, air quality, ground access, and water quality management. The MEPA Certificate issued by the Secretary on August 14, 2003 determined that the 2000 ESPR "adequately and properly complies with the Massachusetts Environmental Policy Act." The Secretary's Certificate requires that the major areas of analyses for the 2005 ESPR include, but are not limited to, aviation planning, landside planning, ground access, noise, air quality, water quality, sustainability and airport mitigation.

Public Review and Participation

In developing this proposed Scope, the Authority reviewed the Final MEPA Certificate for the 2000 ESPR (dated 8.14, 2003) and distributed a draft of the Proposed Scope and Schedule to representatives of the four towns, HATS Environmental Subcommittee and the National Park Service regarding the ESPR public review and participation process. Per the proposed schedule the Authority will convene the following:

- Hold a public meeting to discuss the proposed MEPA scope which will be in addition to the MEPA scoping session
- Convene up to four technical workshops during the public review process for the Draft ESPR which will be in addition to the MEPA hearing for the Draft ESPR.
- Convene one public meeting during the review of the Final ESPR which will be in addition to the MEPA hearing for the Final ESPR.

Format of the 2005 ESPR

The Draft and Final ESPRs will follow the general format of the 2000 ESPR. Detailed technical studies will be summarized in a readable format to illustrate clearly the implications of recent trends, existing conditions and potential future scenarios. The ESPR will build on the base information developed for the 2000 ESPR, presenting policy considerations and an overview of the airport's current and potential future role within the regional planning context, including a status report on the Authority's proposed planning initiatives and projects. The 2005 ESPR technical studies will include analysis of airport activity levels, noise, ground access, air quality, water quality, natural resources and sustainability. The chapters on ground transportation management, noise, air quality, and water quality will include the following sections:

- Discussion of analysis methodologies and assumptions
- Report of 2005 conditions in comparison to previous years
- Prediction of 2010 and 2020 conditions

Forecasted activity levels for the future years may occur earlier or later than the forecast, but the analysis years of 2010 and 2020 will provide useful parameters for the analytical framework.

CD-ROM versions and limited printed copies of the ESPR will be available for public review. The Draft and Final ESPR will be posted on the Authority's web page. Supporting technical appendices will be provided as necessary. The following describes the proposed ESPR sections.

I. Introduction

This section will generally introduce the ESPR and place it in its environmental and regulatory context. This section will:

- Summarize the evolution of the Hanscom Field environmental review process.
- Describe the analysis framework for the environmental reporting and technical studies to be conducted.
- Describe the organization of the 2005 Hanscom Field ESPR.
- Summarize the major sections of the ESPR, with supporting graphics and data tables.

II. Facilities and Infrastructure

This section will update information presented in the 2000 ESPR regarding the airfield and its supporting infrastructure and utility system, including:

- The use and storage of hazardous materials at Hanscom Field, including jet fuel use and spill prevention efforts
- The status of the Authority's tenant audit program
- The current status of the 21E sites at Hanscom Field

III. Airport Activity Levels

This chapter will report on airport activity levels for 2000 to 2005 and describe the new forecasts of aviation activity for 2010 and 2020. This proposed scope is being developed concurrent with the ongoing New England Regional System Plan (NERASP). One product of the NERASP study is development of new aviation commercial passenger forecasts for the principal airports in New England, including Hanscom Field. At this time, it is assumed that the NERASP forecasts will serve as the new 2010 and 2020 Hanscom passenger forecasts. The ESPR will use NERASP forecasts to assist in developing fleet projections for each future analysis year. In the event those forecasts are not available for the 2005 Hanscom ESPR, the ESPR will develop the requisite forecasts and describe the relationships between the Hanscom ESPR and NERASP forecasts. Additional details on the Regional Aviation System Plan study are available on-line at www.nerasp.com.

The 2005 ESPR will describe historic airport activity levels. The ESPR uses specific analysis years to integrate airport activity levels with other areas of analysis, such as traffic projections. The ESPR will provide an update of activity levels at Hanscom Field according to the following:

- Report on aircraft fleet mix and on activity levels of GA, commuter and military operations from 2000 to 2005.
- Compare 2000-2005 activity levels to historic trends.
- Compare actual 2005 activity levels to forecasted 2005 activity levels from the 2000 ESPR.
- Report on current and future trends within the airline industry.

The ESPR will develop forecasts of aviation activity for 2010 and 2020 based on recent trends at Hanscom Field and with consideration of the role that the airport plays in the regional airport system. The ESPR will report actual changes in fleet mix and aircraft operations at Hanscom Field – both increases and decreases – and compare these data to the range of future activity levels and fleet mix defined by the moderate and high growth scenarios of the 2000 ESPR. Differences between actual and previously forecast activity levels will be explained and will be reflected in the underlying assumptions for the 2010 and 2020 forecasts. The forecasts will also include coordination with forecasting for the Logan ESPR and the development of forecasts for the New England Regional Aviation System Plan Update.

- Prepare 2010 moderate growth activity levels and passenger forecasts.
- Prepare high growth activity levels that will vary the fleet mix and passenger forecasts for the year 2020, which is consistent with the Logan ESPR and other regional planning efforts.

The fleet mix of the moderate growth scenario will include GA, military, commuter service and some cargo activity. This scenario will be based on recent trends at the airport as well as regional and national aviation trends. The 2020 scenario will look at a higher growth rate in GA, commuter and cargo operations. The purpose of the high growth scenario is to address the uncertainty of the commuter and cargo markets and to provide a sensitivity analysis for the evaluation of potential environmental impacts. The ESPR will provide future aviation forecasts according to the following:

IV. Airport Planning

The Authority continues to assess planning strategies for operating an efficient airport in an environmentally sensitive manner. As owner and operator of Hanscom Field, the Authority also must accommodate and guide airport tenant development. This section will describe the status of planning initiatives and projects for the:

- Terminal Area
- Airside Area
- Landside Area

This chapter will also report planning and development initiatives by the Minute Man National Historical Park, the Hanscom Air Force Base and the four contiguous towns that affect Hanscom Field and are affected by Hanscom Field.

V. Regional Transportation Context

Hanscom Field is the premier GA facility serving Massachusetts and the New England region. The ESPR will describe the role of Hanscom Field in the region's transportation system, and will report on the Authority's efforts to strengthen the regional transportation system and on its cooperative efforts with other transportation agencies to promote an efficient regional aviation system with improved public/private transportation access. This chapter will update the information provided in the 2000 ESPR with the most current information provided in the Logan EDRs and ESPR in relation to Hanscom Field and will include the following:

- For 2005, a report on regional airport operations, passenger activity levels, and the status of plans and new improvements as provided by regional airport authorities and a report on recent rail service initiatives by others that could affect air passenger travel including the North-South Station Rail Link and Acela Service.

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- A discussion of the role that Logan International Airport plays in intercity travel choices.

As noted earlier, the initial phase of the New England Regional System Plan is scheduled to be completed prior to submission of the Draft 2005 Hanscom ESPR. Accordingly, the ESPRs discussions of the status of the regional aviation system and Hanscom's role in the system will be largely drawn from the NERASP study. It is anticipated that the ESPR will use this study for the basis of its report on the following regional aviation issues:

- Diversion opportunities to alternative modes and to New England airports.
- A report on the integration of New England regional airport facilities as a regional system
- A report on Hanscom Field's role in the GA airport network.
- A report on the current status of the ground access improvements at the four New England regional airports (Logan International Airport, T. F. Green Airport, Manchester Airport and Worcester Regional Airport) by state transportation agencies, including projected dates for completion of studies and/or construction and an analysis to quantify the effects of these measures upon projected passenger levels at each of the airports.

In addition, the ESPR will report on the Authority's efforts to promote service at Worcester and other airports, as well as other Authority involvement to promote the regional transportation system.

A report on relevant regional and local highway studies and transit projects such as the Urban Ring will be included.

VI. Ground Transportation

The ESPR will report on Ground Transportation conditions using the following indicators:

- Traffic, roadway and access analysis results
- Mode share data
- High occupancy vehicle (HOV) ridership alternatives
- Parking demand and management information

Background growth in traffic within the Study Area attributed to Hanscom Field as compared to other area sources will be evaluated. The Study Area for the traffic analysis in the 2000 ESPR was bounded by Route 2A, Old Bedford Road, Route 62, Routes 4/225 and Route 128/I-95. The 2005 ESPR will include the fourteen intersections that were counted for the 2000 ESPR within this Study Area. The 2005 ESPR will identify and evaluate those Study Area intersections that Hanscom Field traffic contributes 10-percent or more to the existing traffic volumes on each intersection approach. The 2005 ESPR will also use this approach to evaluate the Study Area intersections for the forecast activity levels and years.

Analyses conducted in support of the 2000 ESPR and other available information indicate that Hanscom Field currently does not have a sufficient commuting population to support a Transportation Management Association (TMA). The potential for developing partnerships with abutters and area businesses to facilitate a regional Transportation Demand Management (TDM) approach will be discussed in the ESPR. Other special topics will address recent studies, and issues raised in previous ESPR Certificates, reviewers' comments, and will:

- Report available information from the Authority's survey of Hanscom Field employees.
- Describe TDM strategies including potential for participation in a TMA.

-
- Review, summarize and analyze, as necessary, existing metropolitan transportation documents and report as to how they relate to Hanscom Field access.

VII. Noise

The Noise chapter of the ESPR will report current conditions for the year 2005 and projections for the forecast activity levels and years using the following indicators:

- EXP as calculated in accordance with FAA prescribed standards for the Integrated Noise Model (INM) and past practice at Hanscom Field
- Day-Night Average Sound Level (DNL) contours.
- Time-Above (TA) contours for a Given Threshold

All noise contour levels will be computed using the INM. The DNL levels depicted will be based on accepted EPA and FAA guidelines. Impacts assessment for both DNL and TA will be based on data from the 2000 U.S. Census. The ESPR will present the noise data from the six permanent monitoring stations at Hanscom Field including minimum, maximum and average daily DNL values. Special topics will address recent studies, and issues raised in previous ESPR Certificates, reviewers' comments, and will include, in consultation with the Authority:

- A report on the Fly Friendly program at Hanscom Field.
- An analysis and review for areas that are affected by noise from aircraft upon start-up and take-off roll.
- Update on the incorporated recommendations from the 1999 Report of the Hanscom Field Noise Workgroup.
- Update on new noise monitoring system.

VIII. Air Quality

The Air Quality chapter of the 2005 ESPR will report current conditions for the year 2005, industry update on airport-related greenhouse gasses (GHG's), and projections for the forecast activity levels and years using the following indicators:

- Emissions Inventory for:
 - Carbon Monoxide (CO)
 - Oxides of Nitrogen (NOx)
 - Volatile Organic Compounds (VOCs)
 - Particulate matter (PM10)
- Available monitoring results for:
 - Ozone Precursors
 - Nitrogen Dioxide (NO2)

IX. Wetlands/Wildlife/Water Resources

The ESPR will include the most recent, including the 1998 and 2001 wetlands delineation, and the identified vernal pools. The ESPR will report wildlife habitat mapping using available information from Massachusetts Natural Heritage and Endangered Species Program (MANHESP). The ESPR will provide an update of the Authority's vegetation management program at Hanscom Field.

The ESPR will report on any incremental changes to the Hanscom Field storm water management system and to the Storm Water Pollution Prevention Plan (SWPPP). The ESPR will report on the water quality monitoring program at the Shawsheen River. The ESPR will provide any available public information on the National Pollutant Discharge Elimination

System (NPDES) permit, and the SWPPP. Reporting indicators for water quality improvement will include NPDES Permit monitoring results. The ESPR will also report on the deicing monitoring program. The 2005 ESPR will also report on the Vegetation Management Plan, the new Hanscom Field Grassland Management Program and all associated monitoring and maintenance.

X. Cultural and Historical Resources

The 2005 ESPR will review the existing data on historic and archeological resources at Hanscom Field. The most current version of the State Register of Historic Places and the files of the Massachusetts Historical Commission will be reviewed, as will previous available planning studies conducted within or adjacent to Hanscom Field. This information will be compared to the 2000 ESPR and updated where appropriate in the 2005 ESPR.

XI. Sustainable Development and Environmental Management System

The Sustainable Development and Environmental Management System (EMS) chapter of the ESPR will report on the development of the Authority's Sustainable Development Program and the Pilot EMS Program at Hanscom. The Authority received an ISO 14001 Certification for Hanscom Field in 2001, making it the first airport in the nation to qualify. The Certification establishes objectives and targets, monitoring procedures and roles and responsibilities to track and manage the environmental performance of Hanscom Field. This chapter will include a discussion of the following:

- Summary of existing sustainable practices currently being undertaken by the Authority at Hanscom Field
- Report on recycling policy and efforts
- Report on toxic reduction at the airport
- Report on the Pilot EMS Program at Hanscom Field, including the ISO 14001 Certification
- Opportunities for sustainable development practices

XII. MEPA Documentation

This section will include a copy of the Secretary's 2003 Certificate on the 2000 Hanscom Field ESPR, a copy of the Secretary's Certificate on the scope for the 2005 ESPR, a reviewers list and a glossary of terms. Supporting Technical appendices will be included in the report as necessary. The Draft ESPR will respond to comments on the Proposed Scope in a topical format. The Final ESPR will include a copy of the Secretary's Certificate on the Draft 2005 ESPR and respond to comments on the Draft ESPR in a topical format.

MEPA Reviewer's List

2005 L. G. Hanscom Field ESPR Reviewer's List

Federal

Senator Edward M. Kennedy
2400 JFK Building,
Boston, MA 02203

Senator John F. Kerry
1 Bowdoin Square
10th Floor
Boston, MA 02114

Representative Edward J. Markey
5 High Street, Suite 101
Medford, MA 02155

Representative Martin T. Meehan
305 Essex Street – 4th Floor
Lawrence, MA 01840

Representative John Tierney
17 Peabody Square
Peabody, MA 01960

John Silva, Manager Environmental Program
FAA New England Region
ANE 600
12 New England Executive Park
Burlington, MA 01803

Dimitros Merageas
FAA Control Tower
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Bedford, MA 01730

EPA/Council on Environmental Quality
722 Jackson Place, N.W.
Washington, DC 20503

Nancy Nelson, Superintendent
National Park Service
Minute Man National Historical Park
174 Liberty Street
Concord, MA 01742-1705

Craig Cavedi, Community Planner
Hanscom Air Force Base
120 Grenier Street
Hanscom Air Force Base, MA 01730

State

The Honorable Susan Fargo
MA State Senate
State House, Room 504
Boston, MA 02133

The Honorable Robert A. Havern
MA State Senate
State House, Room 109
Boston, MA 02133

The Honorable Cory Atkins
MA House of Representatives
State House, Room 26
Boston, MA 02133

The Honorable Jay Kaufman
MA House of Representatives
State House, Room 489
Boston, MA 02133

The Honorable Charles Murphy
MA House of Representatives
State House, Room 156
Boston, MA 02133

The Honorable Susan W. Pope
MA House of Representatives
State House, Room 237
Boston, MA 02133

The Honorable Tom Stanley
MA House of Representatives
State House, Room 146
Boston, MA 02133

RL-1

Mr. James Stergois
 Executive Office of Environmental Affairs
 Undersecretary for Policy
 c/o Nancy Gabriel-Sackie
 100 Cambridge Street, Suite 900
 Boston, MA 02114

Executive Office of Transportation (EOT)
 Attn: Environmental Reviewer
 10 Park Plaza, Room 3170
 Boston, MA 02116

Massachusetts Aeronautics Commission
 Attn: MEPA Coordinator
 10 Park Plaza, Room 3510
 Boston, MA 02116

Massachusetts Historical Commission
 The Massachusetts Archives Building
 220 Morrissey Boulevard
 Boston, MA 02125

Massachusetts Bay Transportation Authority
 Attn: MEPA Coordinator
 10 Park Plaza, 6th Floor
 Boston, MA 02216-3966

Massachusetts Water Resource Authority
 Attn: MEPA Coordinator
 Charlestown Navy Yard
 100 First Avenue
 Boston, MA 02129

Commissioner's Office
 Massachusetts Department of Environmental
 Protection
 One Winter Street
 Boston, MA 02108

Massachusetts Department of Environmental
 Protection/Northeast Regional Office
 Attn: MEPA Coordinator
 One Winter Street
 Boston, MA 02108

DCR Division of Water Supply Protection
 Attn: MEPA Coordinator
 251 Causeway Street, Suite 600
 Boston, MA 02114

Department of Agricultural Resources
 Attn: MEPA Coordinator
 16 West Experiment Station
 University of Massachusetts
 Amherst, MA 01003

Massachusetts Highway Department
 Public/Private Development Unit
 10 Park Plaza
 Boston, MA 02116

Massachusetts Highway Department
 MHD – District #4
 Attn: MEPA Coordinator
 519 Appleton Street
 Arlington, MA 02174

Massachusetts Department of Public Health
 Director of Environmental Health
 250 Washington Street
 Boston, MA 02115

Massachusetts Division of Fish & Wildlife
 Natural Heritage and Endangered Species Program
 Commonwealth of Massachusetts
 Route 135
 Westborough, MA 01581

Regional

Metropolitan Area Planning Council
 60 Temple Place/6th Floor
 Boston, MA 02111

Local

Bedford Public Library
 7 Mudge Way
 Bedford, MA 01730-2168

Richard Reed
 Town Administrator
 10 Mudge Way
 Bedford, MA 0173

Bedford Board of Health
 10 Mudge Way
 Bedford, MA 0173

Town Clerk
Town Hall
10 Mudge Way
Bedford, MA 01730

Conservation Commission
Town Hall
10 Mudge Way
Bedford, MA 01730

Planning Director
Town of Bedford
10 Mudge Way
Bedford, MA 01730

Sheldon Moll
Board of Selectmen
10 Mudge Way
Bedford, MA 01730

Bryan Glascock, Acting Director
Boston Environment Department
One City Hall Plaza, Room 803
Boston, MA 02201

Concord Public Library
129 Main Street
Concord, MA 01742

Chris Whalen, Town Manager
22 Monument Sq.
P.O. Box 535
Concord, MA 01742

Concord Board of Health
141 Keyes Road
Concord, MA 01742

Town Clerk
Town Offices
22 Monument Square
P.O. Box 535
Concord, MA 01742

Conservation Commission
Town Offices
22 Monument Square
P.O. Box 535
Concord, MA 01742

Historical Commission
Town Offices
22 Monument Square
P.O. Box 535
Concord, MA 01742

Concord Planning Board
141 Keyes Road
PO Box 535
Concord, MA 01742

Planning Director
Town of Concord
22 Monument Sq.
PO Box 535
Concord, MA 01742

Anne Shapiro
Board of Selectmen
22 Monument Sq.
P.O. Box 535
Concord, MA 01742

Carey Memorial Library
1605 Mass Ave. at Carey Hall
Lexington, MA 02420-5385

Town Manager
1625 Mass. Avenue
Lexington, MA 02420

Town Clerk
Town Offices
1625 Mass Avenue
Lexington, MA 02420

Conservation Commission
Town Offices
1625 Mass Avenue
Lexington, MA 02420

Health Division
Town Offices
1625 Mass Avenue
Lexington, MA 02420

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Historical Commission
Town Offices
1625 Mass Avenue
Lexington, MA 02420

Planning Director
Town of Lexington
1625 Mass Avenue
Lexington, MA 02420

Board of Selectmen
1625 Massachusetts Ave
Lexington, MA 02420

Jeanne Krieger
Board of Selectmen
1625 Massachusetts Ave
Lexington, MA 02420

Lincoln Public Library
Reference Department
3 Bedford Road
Lincoln, MA 01773

Town Clerk
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Board of Health
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Conservation Commission
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Planning Board Administrator
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Timothy Higgins
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Sara Mattes
Board of Selectman
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Lincoln Board of Water Commissioners
Lincoln Town Hall
P.O. Box 6353
Lincoln, MA 01773

Organizations

Hanscom Area Towns Committee (HATS)
Members will receive an electronic copy of the document via e-mail

Hanscom Field Advisory Commission (HFAC)
Members will receive an electronic copy of the document via e-mail

Individuals

The 2005 L. G. Hanscom Field ESPR Proposed Scope is available on the Massport web site at; www.Massport.com



The State of Hanscom
March 15, 2005

The State of Hanscom

**Presented to
The Hanscom Field Advisory Commission**

March 15, 2005

**By
Barbara A. Patzner, Director
L. G. Hanscom Field**



STATE OF HANSCOM

March 2005

INTRODUCTION

In 1941, after the state purchased land northwest of Boston, primarily in Bedford, for the purpose of building an airport, 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" (BED). There are accounts that indicate the formal dedication took place in 1943.

During its early years, state control of the airport passed to a number of different agencies, including the Massachusetts Aeronautics Commission. It wasn't until the Massachusetts Port Authority (Massport) was created by the legislature in 1956 that Hanscom Field fell under its jurisdiction. Massport is an independent, financially self-sustaining, public authority that provides for the growing transportation needs of Massachusetts and New England by developing, promoting, and managing airports (Logan, Hanscom, and Worcester), the seaport, and the Tobin Bridge as customer-oriented gateways to New England. Massport must anticipate and accommodate changes in the region's economy to ensure that businesses have the transportation facilities they need to compete successfully in the global marketplace in the 21st century. This is done while maximizing safety, security, and environmental sustainability.

Hanscom Field is a first class, full-service airport, accommodating general aviation and limited commercial service. It plays an important role in the regional transportation system by providing an excellent alternative for general aviation activity that might otherwise go to Logan, including private, business, charter, cargo, and air taxi operations. The airport also handles commuter service, and is an important resource for Hanscom Air Force Base, a research and development military facility abutting the airfield.

At the beginning of each year, Massport prepares the *State of Hanscom*, which is presented to the Hanscom Field Advisory Commission (HFAC), a legislatively created body comprised of representatives from the aviation community, the surrounding residential areas, and area-wide organizations. Ad Hoc members include representatives from Hanscom Air Force Base, the Federal Aviation Administration, and Minute Man National Historic Park, as well as Massport. The presentation of the *State of Hanscom* to HFAC provides a wide range of interested parties with an opportunity to openly discuss the airport's role in the regional transportation system and Massport's objectives for the facility. The *State of Hanscom* reviews the airport's operational activity, financial performance, and economic benefits, and it discusses Massport's 2004 accomplishments at Hanscom, as well as plans for the airport's future.

SECTION I - 2004 AIRCRAFT ACTIVITY

Table 1 shows total aircraft activity levels at Hanscom Field for 7 a.m. to 11 p.m. operations in 2003 and 2004 based on FAA tower counts, fleet mix data, and estimates. The 2004 information is preliminary and will be thoroughly reviewed before publication of the 2004 noise report.

TABLE 1
Hanscom Field Aircraft Activity

2003

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

	CIVILIAN						MILITARY	TOTAL
	LOCAL	SINGLES	TWIN PISTON	TURBO	JET	HELI		
January	4766	4069	289	739	2263	581	115	12,822
February	4106	3709	286	660	2242	527	63	11,593
March	6418	5684	296	705	2484	593	75	16,255
April	5877	5902	338	752	2821	578	88	16,356
May	6072	6355	473	863	2673	588	88	17,112
June	6682	6569	477	821	2583	571	117	17,820
July	7701	7957	472	888	2422	594	101	20,135
August	7432	6990	486	844	2247	617	124	18,740
September	6998	6902	459	810	2545	575	90	18,379
October	5528	6625	435	731	2909	590	148	16,966
November	5534	5382	382	642	2608	576	83	15,207
December	4582	4768	357	602	2555	588	50	13,502
TOTAL	71,696	70,912	4,750	9,057	30,352	6,978	1,142	194,887

2004

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

	CIVILIAN						MILITARY	TOTAL
	LOCAL	SINGLES	TWIN PISTON	TURBO	JET	HELI		
January	2806	3100	306	523	2415	593	43	9,786
February	5270	5275	327	549	2698	553	41	14,713
March	5488	4675	360	754	2709	589	104	14,679
April	4488	5713	395	984	3021	577	92	15,270
May	5037	5885	462	1092	3000	597	92	16,165
June	6316	7164	481	994	2959	597	104	18,615
July	5426	5775	531	1045	2868	608	242	16,495
August	6381	6020	480	976	2326	602	109	16,894
September	6043	6389	365	868	2588	582	96	16,931
October	4675	5164	405	872	3141	602	131	14,990
November	4886	5101	353	848	2929	577	84	14,778
December	3978	3452	353	652	2407	589	57	11,488
TOTAL	60,794	63,713	4,818	10,157	33,061	7,066	1,195	180,804

Note: The 2004 figures are preliminary. All 2004 data will be reviewed before publication of the 2004 annual noise report.

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. Between 1987, when Massport began estimating the fleet mix, and the late 1990s, 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 (including touch and go activity).

More noticeable fleet mix changes began in 2000 when commuter service was reintroduced using turboprops, causing an increase in the percentage of turboprops. In addition, the percentage of single engine piston activity began to decline more steeply than in the 1990s, and the percentage of jets increased more sharply after September 11, 2001.

The data in Table 1 show 180,804 operations for 2004, a 7.2 percent decrease as compared to 2003. Although total operations have been below 200,000 eight times in the past eleven years, they were well above 200,000 for the 30 years prior to 1993, and they exceeded 300,000 in 1970.

The civilian portion of the 2004 aircraft operations continued to comprise over 99 percent of the total aviation activity. The estimates for single engine piston aircraft, including touch-and-goes ("Local" in Table 1), indicate that their activity decreased 12.7 percent as compared to 2003. They represented 68.9 percent of the total aircraft activity in 2004. Touch-and-go activity comprised a little less than half of the single engine piston 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, and they are most commonly conducted by flight schools using single engine piston aircraft.

The estimated twin engine piston aircraft activity remained stable, with a 1.4 percent increase as compared to 2003. They represented 2.7 percent of the 2004 operations. Estimated helicopter operations increased 1.3 percent as compared to 2003, and they represented 3.9 percent of the total.

Turboprop aircraft activity, representing 5.6 percent of the 2004 total activity, increased 12.1 percent, due to the 45 percent increase in total operations conducted by the commuter airlines. Shuttle America, the airline that brought commuter service back to Hanscom in September 1999, left Hanscom Field in 2004. Meanwhile, Boston-Maine Airways, which had provided some limited commuter service in 2002 and 2003, returned to the airport, overlapping with Shuttle America for two months. Boston-Maine used smaller planes and averaged more daily flights than Shuttle America had in 2003. During the year, the two airlines conducted 4,308 operations. They handled 22,078 passengers, or 11,152 enplanements, a 39 percent decrease from 2003.

The 2004 civilian jet aircraft activity increased 8.9 percent as compared to 2003, and represented 18.3 percent of the total activity. Hanscom's fixed base operators (FBOs), who service and manage many of the jet aircraft that use the airport, note that many businesses today appear to prefer jets to turboprops. The increase in jet traffic and the four percent decrease in non-commercial turboprop activity would be consistent with this observation.

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 2005 nighttime operations in 2004, an increase from the 1744 in 2003.

The 2004 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 2004

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 airport. 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 deficit, combined with an improved economy, produced annual decreases in the deficit from FY97 through FY00. There was a balanced operating budget from FY00 through FY02, and in FY02, Hanscom experienced its lowest deficit in recent history, dropping to \$880,000.

Unfortunately, security and insurance related costs escalated after the events of September 11, 2001, and a soft economy weakened revenue. The FY03 operating budget closed with a \$546,000 deficit; including amortization, the deficit once again exceeded \$2 million.

Massport recognizes that reducing the deficit requires a multi-faceted approach. There is an on-going effort to control costs at Hanscom; every expenditure and project is carefully scrutinized for its financial implications, and cost saving measures are explored. Expanding sources of revenue through development, which this is discussed later in this report, is another avenue. Massport also recognizes that limited commercial and/or air taxi services help increase revenue, and in the past year, Massport has been supportive of companies that have expressed interest in operating out of Hanscom.

Other approaches for reducing the deficit include increasing the rates and charges, and/or implementing new fees. In FY04, Massport increased most of the rates and charges and implemented a Landing Fee for transient aircraft as well as a Customs cost recovery program. These steps left Hanscom with a FY04 operating surplus of \$692,000, while the deficit, including amortization, dropped 49.5 percent to \$1.2m.

Table 2 outlines Hanscom's financial performance from FY01 through FY04 and includes financial projections for FY05, using standard accounting principles. FY04 revenues

TABLE 2
Massachusetts Port Authority
Hanscom Field Historical Financial Summary
FY01-FY05
(000s omitted)

REVENUES	FY01	FY02	FY03	FY04	<i>Projected</i> FY05
RENTALS					
Hangar / Cargo	\$1,152	\$1,265	\$1,396	\$1,755	\$1,550
Ground/Land	761	752	574	761	776
Terminal	375	446	351	299	258
Other Exclusive Space	27	27	27	27	10
Utilities	101	109	102	106	111
SUBTOTAL	2,416	2,599	2,450	2,948	2,705
FEES					
Customs Fees (effective Oct., 2003)				284	350
Fuel Flowage	695	767	756	815	809
Tie Downs	152	139	133	164	150
Landing & Parking Fees	52	57	64	686	777
Night Field Surcharge	313	262	443	325	335
SUBTOTAL	1,212	1,225	1,396	2,274	2,421
COMMISSIONS					
Rental Cars	299	180	179	146	146
Flight Schools	1	0	16	10	20
Ground Servicing	131	423	(74)	208	194
Other	14	212	126	321	178
SUBTOTAL	445	815	247	685	538
TOTAL REVENUES	4,073	4,639	4,093	5,907	5,664
				45%	
OPERATING EXPENSES					
Maintenance	1,197	1,241	1,355	1,446	1,596
Administration	947	906	1,013	1,390	1,265
Utilities	191	259	271	322	364
Insurance	109	129	440	497	935
Professional Fees	360	82	132	136	65
Security	426	484	563	442	940
Other**	370	382	476	516	661
General & Administration	437	428	389	466	643
TOTAL OPERATING EXPENSES	4,037	3,911	4,639	5,215	6,469
			2,368	2,836	2,861
OPERATING SURPLUS/DEFICIT	36	728	(546)	692	(805)
AMORTIZATION					
	1,380	1,608	1,783	1,869	1,953
TOTAL COSTS (oper.+amortiz.)	5,417	5,519	6,422	7,084	8,422
SURPLUS/DEFICIT	(\$1,344)	(\$880)	(\$2,329)	(\$1,177)	(\$2,758)

Figures may not add exactly due to rounding.

**Other includes expenses such as electrical maintenance, engineering and environmental costs

FY=fiscal year (FY04: July 1, 2003 - June 30, 2004)

totaled over \$5.9 million, a 44.3 percent increase, as compared to FY03. Meanwhile, operating expenses increased 12.4 percent as compared to FY02. Insurance costs alone increased 13.0 percent in FY04; this was on top of the 241 percent increase between FY02 and FY03. Security costs show a 21.5 percent decrease; a reflection of the savings that ensued when tenant escorts on the field were eliminated after implementation of the badging system. The FY04 amortization costs increased 4.8 percent as compared to FY03.

In the FY05 scenario, the operating budget moves back into the red, and the total deficit begins to approach three million. In an effort to improve the bottom line, Massport implemented some additional increases in its rates and charges, effective February 1, 2005. The rates and charges will be reviewed annually, and periodic increases can be anticipated.

SECTION III - ECONOMIC BENEFITS OF HANSCOM ACTIVITY

Hanscom Field operates as a full service airport, serving the diverse flying needs of individual pilots and local employers including high technology corporations, research and development firms, educational institutions and commuter airlines. Access to general aviation facilities has been identified as a major consideration in the location decisions of businesses that rely on these services.

Last year, Massport invested almost \$2.5 million in airfield, terminal and other facility improvements at the airport. Cumulatively, approximately \$44.4 million has been spent on completed capital projects at Hanscom since 1959.

Periodically, Massport has conducted an economic analysis of Hanscom to estimate the economic benefits of the airport. This was last done for FY00 when the airport had over 500 employees. It was estimated that FY00 activity at Hanscom generated economic benefits of almost \$110.6 million when all the direct, indirect and induced economic benefits of the airport were considered. Massport has recently contracted with a consultant to prepare an updated economic analysis for all of its facilities. The results will be shared with HFAC when it becomes available.

SECTION IV - 2004 ACCOMPLISHMENTS AND 2005 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. Massport continually seeks the appropriate balance in supporting business needs by ensuring the airport is a first class full service airport while operating it in an environmentally responsible manner. This is done by coupling maintenance and improvements at the airport with a variety of environmental initiatives, programs, and policies.

Maintain and Improve Airfield

(a) Annual Airfield Improvement Program

Background: Certain projects that are part of maintaining a safe and efficient airfield are eligible for federal funding as part of the Federal Aviation Administration's (FAA's) Airfield Improvement Program (AIP). Each year Massport submits projects for FAA funding approval.

2004: Reconstruction of Taxiway Tango, including airfield in-pavement lighting replacement was nearly completed before the end of 2004. The project included the removal of some impervious surface. Design work for an overlay of a portion of the East Ramp was also nearing completion by the end of the year. Preliminary designs for upgrading the Runway Safety Area (RSA) for Runway 5/23 were completed and a consultant was hired to begin the additional design work required for environmental permitting. The RSA project will involve regrading turf on both sides of the northern portion of the runway. Once the permits are issued, there will be a public bid process. This project is required to meet FAA safety criteria. It is not a runway expansion; it does not require any additional pavement; and it will not change how the runway is used.

2005: The restoration of Taxiway Tango and Phase 1 of an East Ramp overlay project will be completed. The overlay project for a portion of the East Ramp will commence. Permitting for the RSA project will be pursued in 2005.

(b) Safety and Security

Background: Safety and security are critical components of operating an airport, and there is a continual emphasis on both at Hanscom.

Safety: The most recent safety initiative focused on the potential hazards of winter weather. After a particularly icy winter in 2002-03, tenants requested that deicing agents be used on the airfield to enhance safety. In response, Massport's Environmental Management Unit analyzed the potential use of FAA-approved anti-icing and deicing products.

In 2003, a report was presented to HFAC that reviewed the options for airfield anti-icing and deicing agents, evaluated their environmental effects, and included a discussion of the effects of the aircraft deicing that has historically been conducted by tenants on the field. It was determined that sodium formate, a relatively new product, would be an environmentally safe agent for airfield use. Massport initiated a pilot program during the winter of 2003-04.

Security: There was an increased emphasis placed on security after the events of September 11, 2001. Before the end of 2002, equipment for an ID badging system that can incorporate access control mechanisms was purchased, policies for an ID badging system were developed, and installation of new security fencing began. The ID badging program requires everyone on the airfield to wear a badge or be escorted onto the field, and those who work at the airport are encouraged to wear their badges when in the buildings as well.

2004: Safety: During the winter of 2003-04, sodium formate was used on the runways and taxiways during icy conditions, and stormwater testing and analyses were conducted to determine the environmental effects. There were seven sampling events, the first of which was conducted in the fall of 2003 as a baseline, before any de-icing/anti-icing agents were used; the other six were conducted after storm events when propylene glycol and sodium formate had been applied. A report was submitted to HFAC in the spring showing that there were no adverse environmental impacts.

Security: Approximately 1500 ID badges had been issued by the end of 2004. Installation of upgraded airfield security fencing from the terminal area to the Pine Hill t-hangars was nearly complete by the end of the year. The fencing project included new trap gates for automobiles accessing the t-hangars.

2005: With the badging program and new fencing in place, steps will be taken in 2005 to add an access control system. Pedestrian gates will be added near the trap gates and bollards will replace the Jersey barriers in front of the civil terminal. All security measures will continue to be reviewed, with appropriate adjustments being made, as warranted.

(c) Clear Zone Obstruction Removal

Background: A critical component of maintaining compliance with FAA certification and safety requirements is the elimination of clear zone obstructions, and it is paramount that Massport removes vegetation that is penetrating, or close to penetrating, runway approach surfaces. Historically, a vegetation removal project has been required every five years. Based on a 1999 obstruction analysis using aerial photogrammetric mapping of the runway ends, 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) in 2001 that included the identification of two phases of required project-specific vegetation removal. Massport also delineated the wetlands to be affected by the Phase 1 vegetation removal. Subsequently, 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 using the 2001 approved wetland boundaries, Massport submitted Notices of Intent (NOIs) to the Conservation Commissions in the four contiguous towns for the VMP's Phase 1 vegetation removal in wetlands. In 2003, Massport received the Orders of Conditions from all four towns for Phase 1.

2004: The construction phase of the Phase 1 vegetation removal began in late January of 2004. In accordance with the environmental permits, most of the work was completed while the ground was frozen; work in remaining areas was completed in the spring and fall. Maintenance of the areas that were cut was initiated to minimize the need for future large scale cutting.

2005: Regular maintenance of the Phase 1 vegetation removal areas will continue in 2005.

Phase 2 of the vegetation removal project identified in the VMP includes sections of Bedford's Hartwell Town Forest and Jordan Conservation area because some trees in these areas penetrate or are close to penetrating the Runway 23 approach surfaces. The VMP indicates that a management plan for this area will be developed with the Town of Bedford. In 2005, Massport will work with the FAA to further clarify the requirements for this area and begin discussions with the Town of Bedford to begin determining the best approach for addressing the issue. Additional NOI filings are anticipated for Phase 2 vegetation removal, although no schedule has been set at this time.

Burning continues to be viewed as a potentially positive mechanism for controlling vegetative growth. If conditions warrant, Massport will work with the Concord Natural Resources Commission to develop prescribed burns that reduce the extent of future vegetation penetrations. The Concord Natural Resources Commission has been particularly supportive of this approach to vegetation control.

(d) Airside Maintenance

Background: In 2001, a three bay extension with direct access to the airfield was designed for the existing field maintenance garage. Additional space is needed in the field maintenance garage because 1) FAA-approved sand used during snow removal operations is stored in an undersized landside facility, and 2) large snow removal and maintenance equipment is currently stored outside, exposed to the elements. The design addressed both of these needs; the addition would also increase efficiency by having the sand more readily available to the equipment and to the airfield. Construction of the maintenance garage extension was postponed after the September 11, 2001 events.

2004: In 2004, Massport staff began a review of the financial implications of alternative construction options for the garage. In the meantime, replacement doors for the current facility were ordered for installation in early 2005

2005: The need for the garage extension continues. It is anticipated that this project will move forward in 2005 with some cost saving adjustments to the construction requirements.

An upgrade to a portion of the airfield perimeter road that connects the end of Runway 29 to Taxiway H would allow service vehicles to access an area in the northeast portion of the airfield that Massport has identified for potential development. This will be pursued when Massport issues a Request for Proposals for that development parcel.

Maintain and Improve Facilities

Background: Maintenance and responsible development of airport facilities, while constantly adjusting to changes in the aviation industry, are critical to the continued ability of Hanscom to play its role in the regional transportation system. Meeting the current needs of new and existing

tenants and their customers while anticipating future needs, creates a challenge that receives careful consideration.

In its general aviation role, Hanscom accommodates private pilots, flight schools, small airport-related businesses and flight departments for local businesses. In addition, there are companies that provide services to aircraft operators, such as the Fixed Base Operators and aircraft maintenance facilities. This customer base requires more hangar space than is currently available at Hanscom. In the 2000 Environmental Status and Planning Report, Massport identified three potential development sites: the Hangar 1 site, the Hangar 24 site, and an undeveloped parcel located north of Runway 11/29. In 2003, Liberty Mutual presented Massport with a Hangar 1 site proposal, and it was accepted by the Massport Board.

In addition to accommodating general aviation, Hanscom supports commuter service. After a number of years without commuter activity, Shuttle America restored commuter service in the fall of 1999. From the summer of 2002 until April 2003, Boston-Maine Airways joined Shuttle America by providing some limited airline alternatives. Accommodating commuter service requires Massport to continually assess the airlines' needs, particularly as they relate to the Civil Air Terminal.

2004: Liberty Mutual removed the old structures on the Hangar 1 site and began construction of a new hangar (Hangar 16). Massport also issued a Request For Proposals (RFP) for third party development of the Hangar 24 site. After a review of the submissions it was determined that a new RFP should be issued, eliminating flight school requirements, and allowing a more open process for determining the best use of the site.

Also in 2004, t-hangar roofs were either replaced or repaired; some of the HVAC units on the second and third floors of the Civil Air Terminal (CAT) were replaced; and plans for upgrading the terminal lavatories were pursued.

2005: Liberty Mutual expects to move from Hangar 10 to its new Hangar 16 facility in May 2005. Massport is issuing a Request for Interest to solicit a new tenant for Hangar 10, and a developer will be selected for the Hangar 24 site. It is also anticipated that an RFP will be issued for the development of a site near the Pine Hill t-hangars. Another RFP will be issued for development of a site on the northeast side of the airfield, although this may not take place in 2005.

Shifts in tenancy on the second floor of the terminal building may require some renovations to ensure that all tenants on that floor continue to have two means of egress, and second and third floor CAT lavatory upgrades are anticipated. Staff will review potential upgrades on the first floor of the CAT that could increase efficient use of the area and bring the space to a par with the upgrades made in recent years on the second and third floors. Massport staff will also explore a low-cost revenue control system for the parking lot in 2005.

Finally, Massport will continue to consider the role it might play in the future use of the Raytheon facilities that were vacated in 2000. The land, owned by the U.S. Navy, is in Bedford

and is contiguous with Massport's 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. 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 2002, Massport began participating in the new State Sustainability Program (Executive Order 438) developed by the Executive Office of Environmental Affairs. This program was an expansion of the Clean State Program, which Massport actively participated in for many years. The State Sustainability Program was designed to promote environmentally sustainable practices by agencies including green building, reduced environmental impact from operations, and reduced costs to taxpayer.

2004: As part of Massport's environmental commitment, the Environmental Management Unit continued to monitor and audit activities at Hanscom in 2004 to ensure the use of pollution prevention practices and compliance with environmental regulations. Programs that are ongoing include:

- Tracking, managing and improving environmental performance through the EMS;
- Monthly inspection of all Massport fuel storage tanks to ensure proper functioning and regulatory compliance;
- Inspecting Massport and tenant facilities to ensure environmental compliance;
- Reviewing 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 regular water quality inspections at Massport's stormwater outfall locations;
- Participating in the Massachusetts State Sustainability Program (Executive Order No. 438) to ensure compliance with all environmental laws and regulations by adopting a formal EMS;
- Following the Clean State Initiative (Executive Order No. 350), which was established in

1993 to direct state agencies to achieve environmental compliance and develop pollution prevention measures for their facilities.

- Participating in an aggressive mixed paper and cardboard recycling program for tenant and Massport offices.
- 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 runoff rates. This policy is incorporated into all Hanscom Field development.
- Identifying opportunities during Massport capital program project design development to reduce and/or retain stormwater runoff.

In 2004, Massport had no reportable spills at Hanscom Field. One Hanscom tenant had a spill of approximately 20 gallons of jet fuel.

Also in the spring of 2004, Massport's environmental unit completed an analysis of the storm water after sodium formate was used on the airport's pavement following winter storms, as discussed in the Security and Safety section of this report.

2005: In 2005, 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 facilitate compliance with environmental regulations and permitting requirements. Massport will continue to support all of its on-going environmental commitments, including active participation in the state's environmental programs.

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

Background: There is one active Department of Environmental Protection (DEP)-listed disposal site located at Hanscom Field, which is being brought to regulatory closure under the MCP. Massport is listed as the potentially responsible party (PRP) for the site, located adjacent to the Massport Field Maintenance Garage. This site was originally assigned Release Tracking Numbers (RTNs) 3-13953 and 3-17349 by DEP; however, they have been combined, and Massport is following the interim deadlines of the earlier RTN 3-13953. Several rounds of subsurface investigation were conducted on this site in order to define the nature and extent of contamination.

2004: Massport began remediation of this site in 2004. Remediation included excavation and offsite disposal of polychlorinated biphenyl contaminated soils. The offsite disposal was regulated by the U.S. Environmental Protection Agency (EPA) under the Toxic Substance Control Act.

2005: Remediation activities were completed in February 2005. Site restoration is scheduled for the spring of 2005. DEP and EPA documents will then be prepared to bring this site to regulatory closure.

(c) **DEP Shawsheen Watershed Initiative**

Massport continues to work cooperatively with the Executive Office of Environmental Affairs (EOEA) and the Shawsheen Watershed partners to assess and improve water quality of the Shawsheen River. When possible, Massport has been incorporating potential water quality improvements into ongoing projects, such as reducing impermeable areas and investigating engineering solutions to reduce/delay peak runoff flows into the river.

(d) **Protection of Rare and Endangered Species**

Background: Two grassland bird species subject to the Massachusetts Endangered Species Act have been observed at Hanscom: the Upland Sandpiper and the Grasshopper Sparrow. In cooperation with the Massachusetts Audubon Society, Massport has traditionally managed airfield vegetation in a manner to protect the grassland nesting areas of these species, while maintaining aviation safety. As part of this effort, Massport suspends mowing activity during their critical nesting season. 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.

2004: In early 2004, Massport completed a Grassland Management Program as part of its commitment to protecting the Upland Sandpiper and other listed grassland species, while minimizing risks associated with hazardous wildlife species. Copies were provided to the Hanscom area towns' Conservation Commissions. In addition, an Environmental Monitor was hired to monitor implementation of the vegetation management project—Phase 1, in order to ensure protection of rare and endangered species.

2005: Massport will continue to follow the guidelines of the Grassland Management Program.

(e) **Environmental Status and Planning Report (ESPR)**

Background: Massport's first Generic Environmental Impact Report (GEIR) for Hanscom Field used 1985 as the base year. In addition to evaluating the environmental impacts for 1985 conditions, it looked at the potential impacts for 1990. In 1997, a GEIR Update was completed, using 1995 as the data year, and it looked at potential impacts for 2000 and 2010. In 2001, the name of the study was changed from a GEIR Update to an Environmental Status and Planning Report (ESPR).

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 developed based on a range of general aviation, commercial and cargo growth scenarios, the development needed to support that activity, and planning options. Upon their completion, the GEIR and ESPR documents 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.

2004: In late 2004, Massport staff began drafting an RFP and Scope for the 2005 ESPR.

2005: The Scope will be submitted to MEPA in 2005, and Massport will issue an RFP and select a consultant for the project. Data collection will begin.

**Communicate with the Residential and Aviation Communities Regarding Airport Issues
and Support Local Aviation Related Programs**

Background: Massport is interested in maintaining an open dialogue with those who use the airport and the airport's neighbors, particularly the towns that abut the airfield, the Minute Man National Historic Park, the FAA, and Hanscom Air Force Base. There are two regular monthly meetings that are attended by Massport staff. The Hanscom Field Advisory Commission (HFAC), which was established by the legislature, includes representatives from the aviation and residential communities and ad hoc members from the National Park, the Base and the FAA. HFAC usually meets on the third Tuesday of each month, September through June. During July and August, it meets as needed.

The four towns that are contiguous to both 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. HATS generally meets on the fourth Thursday of each month.

Massport staff provide members of the HFAC with pertinent information regarding events and plans for the airport. This includes the annual presentation of the *State of Hanscom*, monthly activity and noise statistics, and the annual noise report. Data from the permanent noise monitoring system are included in the monthly and annual noise reports. At HATS meetings, Massport staff are available to report on events and respond to questions relating to Hanscom Field.

Massport continues to support many of the recommendations developed by the Noise Working Group, a committee created after the 1995 GEIR with representation from both the residential and aviation communities. This group studied noise metrics and noise abatement and mitigation and submitted its final report with recommendations in September 1999. A number of the metric recommendations were included in the ESPR.

Most of the abatement and mitigation recommendations were addressed when Massport developed a fly friendly program in 2001. This program encourages pilots to use the quietest flying techniques that are safe and practical. Inserts for pilot manuals continue to be made available for pilots of all aircraft, outlining the Aircraft Owners and Pilot Association's and National Business Aircraft Association's quiet flying recommendations. Framed posters describing noise abatement procedures are hanging in the flight school offices and FBOs.

In the early 1990s, Massport installed a noise monitoring system at Logan and Hanscom. The system includes six Hanscom monitors—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.

2004: Massport continued to meet with HFAC and HATS and encourage Fly Friendly techniques. Massport began a process to replace the original noise monitoring system, selecting Rannoch Corp. to implement this project. As part of the upgrade, Massport is reaching out to local community representatives to provide information and solicit feedback. Initial meetings were held at Logan and Hanscom in December 2004

Massport also worked with the surrounding communities to address the current federal Base Realignment and Closure (BRAC) process. BRAC is used to determine which bases in the United States should be closed. The towns and Massport recognize the value of Hanscom Air Force Base (HAFB) and joined with other state entities in an effort to keep the Base open.

2005: Massport will continue to meet with HFAC and HATS, encourage Fly Friendly techniques, and support efforts to keep HAFB open. A contract will be signed with Rannoch Corp. to upgrade Massport's noise monitoring system, and follow up meetings with community representatives are planned at critical milestones during the installation process.

SECTION V – CAPITAL PROJECTS FOR FY05 THROUGH FY09

Each year capital projects for Hanscom Field are evaluated for funding. The following page outlines the projects that have been approved for funding during the next five years. Although it shows the currently funded projects that are expected to move forward in the near future, it is a fluid list, which gets adjusted periodically. Circumstances may change the year in which a project is completed, the amount that is expended, or whether a project is actually implemented.

HANSCOM FIELD FY05 to FY09 APPROVED PROJECTS

	PROJECTS	Estimated Cost (in 000s)
Fiscal Year 2005 (July 1, 2004-June 30, 2005)		
1	Airfield Improvement Program (Apron/Taxiway Restoration-Phase 3)	\$1,381
2	Airfield Improvement Program--Design (East Ramp Overlay-Phase 1)	\$217
3	Airfield Improvement Program--Design (East Ramp Overlay-Phase 2)	\$47
4	Runway Safety Area Improvements	\$64
5	Security Enhancements	\$777
6	Vegetation Management	\$181
7	Field Maintenance Garage Addition for Sand & Vehicle Storage	\$114
8	Field Maintenance Garage Doors	\$200
9	Noise Monitoring Upgrade	\$34
10	Airport Auditing Cameras	\$27
Fiscal Year 2006 (July 1, 2005-June 30, 2006)		
1	Airfield Improvement Program (East Ramp Overlay-Phase 1)	\$1,098
2	Airfield Improvement Program (East Ramp Overlay-Phase 2)	\$1,243
3	Runway Safety Area Improvements	\$107
4	Security Enhancements	\$347
5	Field Maintenance Garage Addition for Sand & Vehicle Storage	\$2,123
6	CAT Bathroom Renovations	\$34
7	CAT Roof and Building Repairs	\$18
8	CAT 1st Floor Renovations	\$119
9	2nd Floor Renovation in CAT	\$100
10	Noise Monitoring Upgrade	\$82
11	Stormwater Management	\$40
Fiscal Year 2007 (July 1, 2006-June 30, 2007)		
1	Airfield Improvement Program Design (T-Hangar Apron Rehab)	\$12
2	Runway Safety Area Improvements	\$134
3	Security Enhancements	\$201
4	Field Maintenance Garage Addition for Sand & Vehicle Storage	\$58
5	CAT Bathroom Renovations	\$266
6	CAT Roof and Building Repairs	\$182
7	CAT 1st Floor Renovations	\$341
8	Noise Monitoring Upgrade	\$84
Fiscal Year 2008 (July 1, 2007-June 30, 2008)		
1	Airfield Improvement Program Design (T-Hangar Apron Rehab)	\$269
2	Runway Safety Area Improvements	\$1,695
3	CAT Roof and Building Repairs	\$75
4	CAT 1st Floor Renovations	\$1,061
Fiscal Year 2009 (July 1, 2008-June 30, 2009)		
1	Airfield Improvement Program (T-Hangar Apron Rehab)	\$1,639