

# **MARSHFIELD MUNICIPAL AIRPORT → GEORGE HARLOW FIELD**

## **→ FREQUENTLY ASKED QUESTIONS →**



### **What is the history of the airport and why were the recent safety improvements needed?**

The Town of Marshfield acquired the airport in 1965 through a Town Meeting vote. Before the town acquired the airport, it was a privately owned airport that dated back at least to the 1940s. The runway was paved in 1968 and many other improvements were completed in subsequent years. The airport Administration building, a barn that was acquired as part of the airport purchase

in 1965, was renovated in 2001 through a state grant. Prior to the recent safety improvements, the taxiways were last paved in 1972 and the runway in 1983. Both were well past the normal useful life of airport pavement and had to be brought up to current FAA safety and design standards during the reconstruction process. Compliance with FAA airport design standards is mandatory and not discretionary for the airport and determines an airport's eligibility for reimbursement from the FAA and MassDOT/Aeronautics (they fund the majority of the project). Essentially, it was like bringing a house up to current code during a renovation project.



Recently completed safety improvements at Marshfield Airport included the following, and brought the airport up to current FAA safety and design standards for the runway and taxiway system: widening the taxiways from 30 to 35 feet, widening the runway from 75 to 100 feet (to help compensate for lack of crosswind runway eliminated in a previous update to the Master Plan), lengthening the runway for landing



by 300' to 3300', adding 300' paved safety/overrun areas on both ends, applying the use of declared distances which provides 3600' for takeoff, all new taxiway and runway pavement, new lighting systems including a Precision Approach Path Indicator Light System (PAPI) on the Runway 24 approach end, improved instrument approaches and clearing of obstacles (trees) in approach zones. Adding Precision Approach Path Indicator Lights (PAPI lights) on the Runway 24 Approach (over Fieldston Beach) provides pilots with glide path guidance to proper touchdown

zone, advising pilots if they are too high or too low on the approach (previously, pilots had to rely only on their best judgment and experience). PAPI lights also provide better guidance for pilots during night landings, keeping them well clear of any obstructions. PAPI lights were installed for Runway 6 during a past project. Gusty cross winds, sudden wind shifts and contaminated pavement surfaces are just a few of the factors pilots face in the Northeast. Winter conditions provide even tougher challenges as pilots contend with high snow banks, narrow taxi lanes, reduced runway widths and poor braking action. Having a wider runway and taxiways and slightly longer runway will result in improved safety margins. The airport has always been, and continues to be, a small general aviation airport.

### **Do members of the Airport Commission live in Marshfield?**

**Yes, all members are residents.** The Airport Commission is a five member board and includes a direct abutter (surrounded on three sides by airport property) as well as a representative from the surrounding neighborhood. All members of the board supported the project. Only one member of the board is an active pilot. The Commission has been working to address neighbor concerns about the airport, which are often a result of false rumors and misinformation. Dave Dinneen, the Airport Manager, and the Airport Commission have met with neighbors on several occasions at the airport and at their homes. Members of the Commission will continue to be accessible to any neighbors that have concerns about the airport and we encourage all concerned to obtain factual information from members of the Commission, the FAA, the State DOT Aeronautics Division or airport management.

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### **How does the airport benefit the public?**

#### **Reasons Why Residents Voted To Purchase the Airport:**

**(This Text is Quoted From Original 1965 Town Meeting Presentation)**

- To provide another active income-producing business in town
- To provide an additional employment opportunity in town
- To provide another educational field in town leading toward several kinds of lucrative career opportunities
- To provide aviation transport facilities of a “general aviation” nature (i.e., other than airlines)
- To provide a feature of attraction to any industry which might become interested in locating in Marshfield
- To acquire town-owned land, which under the terms of purchase constitutes a very attractive investment on a long-term basis

The very reasons that Town Residents voted to acquire the Airport in 1965 have stood the test of time. If anything, the airport has contributed far more to the community, particularly in the area of emergency management and economic impacts, than was ever anticipated. Like all transportation facilities (marine, rail, auto), Harlow Field serves residents and businesses from around the region, not just Marshfield.



The U.S. Coast Guard, State Police, National Guard, and other federal, state and local agencies fly out of GHG to facilitate search and rescue operations, fire patrol, federal and local law enforcement activities, wildlife and environmental monitoring flights. Harlow Field is a base for emergency medical flights, transporting serious emergencies to hospitals in Boston and elsewhere, 24/7/365. Many area pilots donate their aircraft, time and skills to compassion flights

organizations like Angel Flight ([www.angelflightne.org](http://www.angelflightne.org)) and Patient Airlift Services ([www.pals.org](http://www.pals.org)). The airport is actively engaged with Marshfield’s Emergency Management Agency to support disaster and emergency response operations and staging of emergency supplies as needed.



Every year, multiple young students complete their first solo flights, an incredible achievement that often leads to a career path in aviation. Any parent watching their child solo for the first time feels better knowing that the runway is a little longer and wider and the margin of safety is significantly improved. Most commercial pilots learn to fly at small airports like Marshfield and hundreds of kids from Marshfield and surrounding towns have started their careers at Harlow Field. Even Neil Armstrong learned to fly at a small airport in Ohio, seeding a passion that would eventually lead him all the way to the moon. Like all transportation facilities (marine, rail, auto), Harlow Field serves residents and businesses from around the region, not just Marshfield. It contributes to the economy in countless ways and is a valuable public safety resource.

Over the years, many of Marshfield’s high school students have held part time jobs, trained and received their pilot’s license or mechanic’s license at the Marshfield Airport. Marshfield can be proud that many of these young people have gone on to have successful careers as Airline Executives, Military Pilots, Aerospace Engineers, Airline Pilots, Flight Instructors, Corporate Pilots, Airport Managers, Aviation Technicians. The airport, through Shoreline Aviation, continues to provide highly-skilled job opportunities and a number of Marshfield and South Shore residents are employed as pilots, managers, dispatchers, aviation technicians, ground crews and more. Because airport management is contracted through Shoreline Aviation, the town does not employ or pay for any airport staff.

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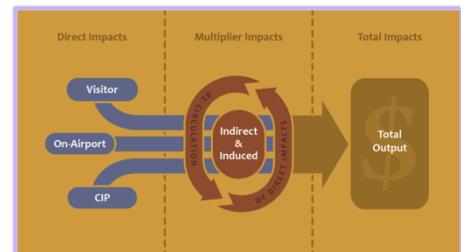
The airport's Automated Weather Observation System (AWOS), installed through FAA/ MaDOT grants (Project Cost \$304,507), provides Marshfield's weather data to the National Weather Service and other local forecasting agencies. The data from this system benefits the public and community by improving the forecasting accuracy for our town and provides critical weather data to aid in public safety and emergency preparedness activities. When you see Marshfield temperatures or weather on TV, the data is coming from the weather system at Harlow Field.



Marshfield Airport is part of our interstate/ intermodal transportation system and links our Town to the nation and the world. We are proud of our record for leveraging significant grant monies to improve this valuable town resource, and proud of the contributions we make to the economy, educational resources, and recreation and emergency resources of our community.

### **How does the airport contribute to the local economy?**

Business travelers utilize the airport to base their aircraft or utilize charter or rental aircraft to fly direct to thousands of airports throughout the country and conversely, visitors fly into Marshfield from all over the country to access business and recreational interests on the South Shore. Recreational users enjoy taking scenic or photo flights of the beautiful coastline. Shoreline Aviation provides courtesy shuttles to local inns, restaurants and area attractions. Rental cars and taxi services are also available for visitors.



According to results from a 2011 Economic Impact Study conducted by the MADOT, activities at Marshfield Airport support 58 jobs, 2.6 Million in wages and 8.1 Million in total economic activity (on and off airport impacts). According to the MADOT's economic impact study consultant, grant funds from the safety improvement project itself created about 140 jobs, 6.4 Million in payrolls and 19.4 Million in total impacts. Results of an updated economic impact study are anticipated in early 2015.

### **What was the overriding public benefit that justified the airport safety improvement project?**

The project fulfilled an overriding public interest for the flying public as well as for the community living and working within close proximity to the Airport property boundaries. The overriding public interest served is safety. Enhancing safety at public use airports is a very high priority for the Airport Commission, FAA and MassDOT Aeronautics Division. The safety



improvements associated with the recently completed project were most closely related to the areas where aircraft operate (runways and taxiways) and the airspace around the airport and were a very high priority for the funding agencies because they were safety related. Improvements to these facilities will reduce the potential for harm to passengers, airport employees, airport users, and surrounding community members. Analysis of past accidents and incidents



indicates that many could have been prevented or would have been far less serious under the current runway configuration. **The goal of all safety improvements is to reduce the potential for accidents and incidents, thereby improving public safety for pilots, passengers and the surrounding community.**

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### **Were there public hearings about the recently completed safety improvement project?**

During the planning and design of the safety improvement project, multiple alternatives were investigated by the Airport Commission and the final project design resulted in a level of compliance that was satisfactory to the FAA and MassDOT balanced with a well thought out mitigation plan to address unavoidable environmental impacts. The project began in 2002 and received a DEP Variance and many other associated permits after multiple studies, environmental impact reports and many public hearings, eleven years later, in 2013. In addition to DEP, the project was reviewed and/or permitted by Army Corp of Engineers, the FAA, the State DOT Aeronautics Division, MA Natural Heritage, Marshfield Conservation Commission, Marshfield Zoning Board of Appeals, Massachusetts Audubon Society, Coastal Zone Management and others. All appeals of permit approvals were overturned and the permit approvals were upheld.

### **How was the environment protected?**

The airport is situated in a complex wetland environment and a comprehensive plan was developed to protect environmental resources and mitigate for all disturbances. Environmental mitigation for the project has already been completed, including the creation and on-site restoration of freshwater wetlands, permanent preservation of over 100 acres of upland/wetland forest (transferred to Mass. Audubon for permanent protection), creation of 70 acres of shrub-shrub wetland/upland habitat (preferred habitat for Eastern Box turtles), and creation of additional turtle nesting habitat resulting in a net gain of 3.1 acres of nesting habitat. As part of the mitigation for the project, the airport was able to secure \$400,000 in funding towards the dredging of Bass Creek, a project supported by DPW and Marshfield Conservation Commission. The DPW awarded the contract for this project and the restoration of tidal influence and fisheries habitat to the upper reaches of Bass Creek as well as invasive species management has been completed. Improvements to Bass Creek are expected to help alleviate some flooding in the Fieldston area, decrease stagnant water mosquito breeding grounds and benefit a wetland that was clogged with invasive phragmites and silt. All buildings were removed from the Woodbine Farm, which was acquired by the airport, and this property was returned to open space habitat. The farm pond remains and provides fresh water and habitat for wildlife. Construction of airport safety improvements were overseen by an Independent Environmental Observer, who was approved by and reported directly to the MA Department of Environmental Protection, an Environmental Monitor (who is a certified Ecologist, Wildlife/Rare Species Biologist, Professional Wetland Scientist and Professional Soil Scientist) and the Project Manager, Gale Associates of Weymouth, MA, to ensure compliance with permits and plans. DEP attended numerous pre-construction meetings as well as ongoing construction meetings during the project. DEP also conducted site inspections during the project, including during placement of timber piles.

### **What about the CCA pilings that were used during the project?**

The timber piles used during the recent project are coated with a substance known as CCA (Chromium, Copper, Arsenate) to reduce the potential for rot or insect damage. According to EPA and DEP, it is an allowed product for use in many applications however it is not allowed for use in some residential applications such as children's play sets or decks where direct contact with human skin is likely. CCA coated timber piles are and have been used throughout the town of Marshfield for seawalls, foundations, and other similar application. Many homes and businesses in the area around the airport and along the ocean are constructed on a timber pile foundation. With the new FEMA flood elevations, we will see timber piles used even more commonly. The timber piles are surrounded by sand and other materials. They are commonly used on docks and piers around the area, including Green Harbor, the South River and the North River.

# **MARSHFIELD MUNICIPAL AIRPORT → GEORGE HARLOW FIELD**

## **→ FREQUENTLY ASKED QUESTIONS →**

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### **Why did trees have to be cleared around the airport?**

For obvious safety reasons, airplanes and trees are a bad mix. As required by FAA and MassDOT Aeronautics, clearing obstructions from runway approaches and protected airspace around the runway environment is a major priority for all airports. Engineers were required to survey FAA approach zones and protected airspace surfaces before the tree clearing and after the tree clearing to certify to the Federal Aviation Administration (FAA) that obstructions in protected airspace have been cleared. All tree clearing work was overseen by an Independent Environmental Observer, who was approved by and reports directly to DEP, and an Environmental Monitor (a certified Ecologist, Wildlife/Rare Species Biologist, Professional Wetland Scientist and Professional Soil Scientist), to ensure compliance with permits and plans. Significant regrowth has already occurred in all cleared areas and growth will continue as the approach areas are converted to lower growing scrub shrub wetland habitats. The Airport Commission did not like clearing trees but for Harlow Field and thousands of airports around the country, maintaining clear approaches is a necessary and essential duty that protects public safety. When trees grow up in approaches, they must be cut because trees and airplanes in the runway environment simply aren't a good mix. If you look out the window as you touch down at any airport in the country, you will see trees in varying stages of regrowth, depending on when the last clearing project took place. If you visit the airport today, you will see that all areas cleared of obstructions this winter have significant regrowth that will continue for years to come.

### **Why does the airport need fencing?**

Fencing is installed at airports for security and wildlife control. The airport does not seek to fence the entire perimeter of the property, just aircraft operating areas, subject to environmental restrictions. The Airport Commission recently received approval from DEP and the ZBA to erect 500' of black vinyl coated wildlife / security fence, without barbed wire, set back 50' from Plymouth Ave. Use of the black vinyl coated posts and fabric (as opposed to galvanized posts) and elimination of the barbed wire will improve the look of the fence. Additional buffer plantings are planned in conjunction with the wildlife/ security fencing, pending the outcome of a citizen appeal of the approval for the fencing and plantings. Fencing discourages deer and other large wildlife from entering the runway environment, protecting both the wildlife and the public from what could be a disastrous encounter. See recent article in the Boston Globe relating to deer problems at airports:

<http://www.bostonglobe.com/news/nation/2014/09/24/deer-are-pests-for-airports-threats-pilots/2wUBFGokZ9AcgLA5VwwDnK/story.html?event=event25#comments>

### **Will larger planes start using the airport now that the improvements have been completed?**

There has been a lot of misinformation suggesting that the safety improvements, which increase the available landing distance from 3,000 feet to 3,300 feet, will result in large jet aircraft and frequent jet operations. At one point there was even a rumor that there was a hangar being constructed at the airport which would house a Boeing airliner wing factory. None of the proposed safety improvements were completed to make the airport suitable for aircraft that were not already able to operate out of the airport, nor do we anticipate any appreciable change in numbers of operations as a result of the project. As was stated numerous times at public hearings, the economy will continue to be the driving factor on the number of aircraft operations. It has been suggested by a small group that large aircraft, including commuter airliners, would start to use the airport once the safety improvements were completed. This is simply not the case. There are very few jet models that can operate out of small airports like Marshfield. Bordered by rivers on both ends of its runway, Harlow Field will remain a small general aviation airport. Following completion of safety improvements, the airport is now in compliance with current FAA safety and design standards, making the airport safer for the flying public and the entire community. The recently completed project is likely the most complicated and significant project that will ever take place at the airport.

# **MARSHFIELD MUNICIPAL AIRPORT → GEORGE HARLOW FIELD**

## **→ FREQUENTLY ASKED QUESTIONS →**

**Are there plans to expand the airport in the future and will they purchase entire neighborhoods to do so?**

**No.** The current configuration of the runway and taxiways at Marshfield Airport are expected to remain the same in the future. The Town of Marshfield, Marshfield Airport Commission, FAA and MaDOT Aeronautics have no plans to expand runway or taxiway system at the Marshfield Airport. The rumor that the recently completed project is Phase I of an extensive plan to lengthen the runway and expand the airport for large jets and commercial traffic is patently false, similar to the rumor that a Boeing airliner wing plant was being built at the airport several years ago.

**What happens if there is an accident?**

The Airport works closely with the Marshfield Fire and Police Departments in Marshfield. The Fire Department has conducted training specifically for aircraft accident response, as well as other types of incidents. Aircraft operating out of Marshfield carry a fraction of the fuel that the Fire Department must be prepared to deal with in any sort of accident, including on our roads and waterways. Tractor trailer trucks making fuel deliveries and home heating oil delivery trucks carry far more fuel on our roads and some boats in our rivers and harbors carry far more fuel than the aircraft flying out of Marshfield Airport. **Safety improvements at the airport were completed with the goal of reducing the likelihood of an accident or incident occurring, particularly off airport property. The overriding justification for the project was improving safety for the public. The addition of 300 feet of landing distance to the runway, 300 foot paved runway safety areas and clearing obstructions from approaches significantly reduced the potential for an aircraft accident or incident outside of the runway environment.**

**How is the lease with Shoreline Aviation structured?**

There are two ways an Airport Commission can operate a small airport: (a) Town run by Town employees with Town funds or (b) contract management to a professional company, familiar with Airport Operations. For small airports, the best method is to contract management services with a professional and experienced FBO (Fixed Base Operator). By doing so, the Town is relieved of most of the logistical and financial demands of operating the airport. The Town does not fund or employ any personnel to manage, maintain or operate the Marshfield Municipal Airport, nor does the town provide plowing or mowing services.

There has been a lot of discussion over the years regarding the lease, including whether the Taxpayers/Town should be receiving more from Shoreline Aviation, our contracted management company. State and Federal laws and grant assurances require that all revenues generated by the airport are paid into the airport's revolving account and reinvested back into the airport. The exception to this is the taxes generated by aircraft hangars at the airport, which are paid directly into the Town's general fund.

Shoreline does not lease the entire airport. Their leasehold land covers only about 11 acres of the airport property and does not include the runway, taxiways, east parking apron or approach zones. Shoreline Aviation does not have an exclusive right to provide aviation services at the airport.

**The lease requires that Shoreline Aviation provide compensation to the Town. This compensation is provided as a combination of money, manpower, and services, which include the following:**

- Monthly rent with escalation clause (all funds are deposited in Airport Revolving Account per Federal and State law), a current value of \$2426 per month
- Provide a state-licensed Airport Manager and other airport staff
- Act as liaison with state, federal and local authorities on day to day airport operations
- Supervision and oversight of airport operations in accordance with FAA and MAC guidelines
- Routine maintenance of all equipment including plow truck, snow blowers, tractors, and mowers

# **MARSHFIELD MUNICIPAL AIRPORT → GEORGE HARLOW FIELD**

## **→ FREQUENTLY ASKED QUESTIONS →**

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- Snow plowing service
- Routine maintenance of all buildings

Additional work and improvements routinely performed by Shoreline Aviation include:

- Landscaping, brush clearing and all mowing, routine maintenance of airport infrastructure such as runway lights, airport beacon, taxiway lights, etc.
- Payment of electric bills associated with much of the infrastructure at the airport, including the terminal building, electric gates and automated weather observation system
- Provide visiting pilots and passengers a courtesy shuttle to local restaurants, inns and businesses
- Janitorial services for airport administration building
- Contributions to local law enforcement, medical evacuation, firefighting and emergency management efforts
- Contribution of a second snow plow, snow blowers, additional landscaping and mowing equipment (purchased by Shoreline)

### **When is the airport open?**

The airport is open 24 hours per day, 7 days a week. The airport administration building is open seven days per week from 8 AM until dusk and visitors are welcome to come and enjoy the fenced in viewing area overlooking the ramp and runways. It's a great place to bring kids! The airport management staff and Airport Commission welcome residents to visit so they can learn more about the airport. With so much misinformation circulating, residents are encouraged to meet with airport staff if they have concerns.



### **What should I do if I have a noise complaint or concern?**

Residents with complaints or concerns should call the airport at **781-834-4928** and ask for the airport manager. You will be asked to provide your name, address, telephone number and a description of your complaint or concern. Residents can also leave a message for the Airport Commission. The Airport Commission generally meets on a monthly basis at the Airport Administration Building (93 Old Colony Lane in Marshfield). The Airport Administration Building is ADA Accessible. Meeting Agendas are posted on the Town's website and calendar. Due to Public Meeting Laws, only items on the Agenda may be discussed at the meeting. However, there is a public comment period at the end of the meeting and the Commission will take any input under advisement and will be considered for a future agenda item if the Commission determines it is necessary. A member of the Commission will often meet with residents who have questions or concerns at a time that is convenient for both parties.

### **What's been happening since the airport reopened in June?**

Since reopening, we have had people fly in from all over the United States and Canada. We love to learn what brings them to our community. A few of the reasons we regularly hear include visiting family and friends, conducting business on the South Shore, enjoying sport fishing out of our harbor, eating in our fantastic restaurants and staying in our Inns. Visitors from Marshfield and the surrounding community have enjoyed touring the airport and facilities and watching planes from the fenced viewing area. The airport was even a stop on a local family's scavenger hunt and the site of a birthday party for a young Marshfield resident. Approximately fifty members of an International Women Pilots organization, the Ninety-nines, flew into the airport on Saturday, September 27<sup>th</sup>. One of the most frequent comments we hear from visiting pilots is "this is one of the nicest small airports I've visited in throughout the United States".

Shoreline Aviation recently installed an aviation radio on the harbormasters boat to assist with aircraft to boat communications. This allows pilots to communicate with the harbormaster staff during search and

# **MARSHFIELD MUNICIPAL AIRPORT → GEORGE HARLOW FIELD**

## **→ FREQUENTLY ASKED QUESTIONS →**

rescue operations and more recently, to assist with shark patrols. As recently as 9/27/14, the airport was the stage of an emergency med flight evacuation and earlier in the week it was a maintenance stopover point for a Coast Guard helicopter.

We will continue to work with members of the community who have continuing concerns about the airport and ask that residents and board members interact in a productive, professional manner. The Airport Commission is made up of Marshfield residents, including one member that is a direct abutter to the airport and another that lives in the approach zone near Fieldston. The two members in the airport neighborhood are not users of the airport. Only one member of the Airport Commission is an active pilot. All members of the Airport Commission supported the airport safety improvement because the safety of the community and the flying public is, and always will be, the highest priority we have.

### **Recent Events at Marshfield Airport:**

The Airport Commission invited the community to the Public Safety Day at the airport which was held on Saturday, October 4<sup>th</sup>, from 10 AM to 2 PM. This was our 3rd year conducting this important event and this year, we have renamed the event Public Safety Day to reflect the transformation into a full blown interagency, multi-modal Public Safety Day. Safety plays a role in our everyday lives whether on land, in the air or at sea. This event is intended to help educate the public on emergency preparedness and will showcase the equipment, agencies and personnel that work 24/7 to keep us safe and assist us when needed. We had close to thirty different agencies, companies, and specialized units participate including federal, state and local governments, utilities, local organizations and multiple communities along the Massachusetts coast. There was an extensive array of equipment on display, including fire apparatus, marine assets, aircraft and helicopters, public utility equipment, emergency management equipment and more. Stay tuned for future event dates!

