

Floyd W. Jones
Memorial Airport:
Action Plan

Airport Advisory Board

September 2009

Introduction

The Airport Advisory Board was established to give direction for the future of Floyd W. Jones Memorial Airport by addressing safety issues, managing the Airport Manager and the fiscal budget, and developing a market strategy to insure the longevity of the airport.

The airport is part of the transportation infrastructure, the same as the railway system, the road network, and waterways. Each plays a crucial role on how materials are shipped and how individuals travel so industries or companies can operate effectively and efficiently in today's economy. An airport affects the community in many different ways. Two ways are keeping industries/businesses in an area or attracting new industries/businesses to an area. This retains jobs or adds additional jobs. With these jobs, the wages paid get circulated back into the community multiple times. Please keep in mind an airport is not the only reason an industry or company stays or moves to this area, but an airport is part of the greater whole.

The traffic witnessed at Floyd W. Jones Memorial Airport has increased drastically over a period of ten years. From 1995 to 2005 itinerant operations (outside business operations) had increased by 268% and "business jets" based at the airport had increased 600%. The airport is witnessing heavier traffic volumes along with heavier aircraft that utilize the airport facilities. The current runway isn't designed for the length, width, and the load bearing capacity that these larger aircrafts demand. With this in mind, the probability of unwanted interactions of aircraft and the public is increased.

History

A brief history will be given about the Floyd W. Jones Memorial Airport and what has transpired until now. In the 1950s the City of Lebanon purchased land and paved a runway 24 feet wide by 2,400 feet long. This runway is still there today, but is used as one of the taxiways. In 1966, with a City bond issue, the City purchased land and built a 75 foot wide by 4,000 foot long concrete runway. 1970 a non-directional instrument approach system was installed and in 1984 FAA grant monies were used to extend the runway to 5,000 feet and to install a localizer. A localizer helps pilots position themselves for a landing. The 1990s a new area was built for outside aircraft parking (an apron) and a new terminal building was built. Around 2000 the taxiway was rebuilt, extended and moved.

During the timeframe of the early 2000s an engineering consultant was hired to update the Airport Master Plan (AMP) along with the Airport Layout Plan (ALP). An Airport Master Plan is a study of past, present, and future activities of the airport and deduces a plan to meet the

activity “demand” forecasts. Demand is defined by the activity and what types of aircraft use the airport. The ALP is a drawing of the current airport layout and possible alternatives to meet the demand forecasts. This study and drawing was needed to gain additional funding from the FAA.

After the completion of the update to the Airport Master Plan and Airport Layout Plan one of the recommended alternatives, which will be covered in Options, was chosen. To accomplish this, a Wildlife Hazard Assessment had to be conducted and it was completed. The next step in the process was to perform an Environmental Assessment (EA). An EA considers all impacts a specific project could have on people and the environment. The EA is currently being finalized.

Problem Statement

The Floyd W. Jones Memorial Airport is currently inadequate for jet take-offs and landings causing major safety issues. These safety issues affect the public, passengers of aircraft, and pilots. One of the major goals of the Airport Advisory Board is to make the airport the safest possible for everyone involved.

The Floyd W. Jones Memorial Airport also needs to be marketed to where the airport could become a self sustained department of the City of Lebanon. Within this process, hopefully the citizens will learn the crucial role the airport plays in this community. The Board will also give structure and guidance to the Airport Manager to accomplish the tasks set forth.

Safety

There are several safety issues surrounding the airport at this time. Most of the items below can be addressed to make a safer environment for the public and airport patrons. The runway, which is 5,000 feet long by 75 feet wide, is too short and narrow to meet the requirements of the larger aircraft that is based at the airport and others who utilize the airport through business operations or transient operations. This is intensified when it is hot outside or when the runway is wet. With the forecast of increased usage and larger aircraft that will utilize the airport this safety issue is a grave concern.

Along with being too short, a runway safety area can be considered nonexistent at this time. This area helps protect aircraft in an event of an undershoot, overshoot or excursions from the runway (*Figure 1-3*). This area also helps protect public or private property from being damaged by giving an area where aircraft can navigate if there are issues. One way to rectify this situation is to give room at the ends of the runway the possibility of forming a more gradual slope from the runway to the existing ground. Something else that plays into this is the steep

banks that run alongside the runway at different points the aircraft run a possibility of running off the side. This is more of an issue with the larger aircraft and in conjunction with the narrow width of the runway.



Figure 1 (North End: Berm)



Figure 2 (North End: Manors Drive)



Figure 3 (South End: Fremont Road)



Figure 4 (North End; Trees)

There are a few obstructions at the airport at this time. There are trees located at the North end of the runway that are taller than the allowable height (**Figure 2**). A few saplings are located along side the runway in a drainage ditch that need to be removed and the temporary electrical poles installed for the God and Country Show need to be taken down. These obstructions do not meet the requirements of the FAA.

The lighting of the runway and taxiways could be vastly improved along with the repair or improvement to the visual guidance indicators. These systems have been put off due to the anticipation of them being paid for through the grant associated with the expansion project, but these improvements are needed regardless.

Options

The main project related to the airport is the Airport Expansion Project. There are other smaller projects that can be included other than just the Expansion Project to give a means of operating the safest airport possible. Below, the options are discussed, described, and the time frames associated with each.

Expansion

Looking at the Expansion Project, the options considered were expanding to the North, to the South, moving the airport to another location, or to do nothing at all. Previously mentioned in the History Section, an engineering consultant was hired to produce an Airport Master Plan Update and an Airport Layout Plan. All these options below were considered, but only one was approved for federal/state funding.

Extending the runway to the North will increase the safety issues of aircraft landing from the North or taking off to the North. Presently there are a few obstacles, such as signs and a cell tower, that are close to aircraft when they are approaching the airport to land (*Figure 5*). If the runway was extended to the North those obstacles would be closer or in the way when an aircraft was coming in for a landing. This option would only decrease public and aircraft safety. One thing to know is the cell tower mentioned had FAA approval for the construction at its current location and designed height. To have it moved may be a difficult task. Currently there are no federal funds available for this option and if it is chosen the time frame for finishing this project would be fifteen to twenty years for completion and that is “if” there would be funding available at that time.



Figure 5 (North End: Approach)

A Southward extension to the runway would increase public and aircraft safety. This would be accomplished by shifting the current runway to the South, increasing the runway width to 100 feet, increasing the load bearing capacity to 60,000 psi, and then increase the runway length. How this would increase public safety is what was covered in the Safety section, the improved Runway Safety area along with the whole Expansion Project would greatly decrease the probability of an aircraft coming into contact with the public. There would be less chance of overshooting or undershooting.

A breakdown in chronological order for this option would be finishing the EA (6-12 months), land purchasing (1-2 years), the re-route of Fremont (1 year), and then the actual expansion of the runway and attributed details (1 year). Fremont Road would be divided by the extension. The East side would be made into a cul-de-sac and the West side would be re-routed into Emerald Road (**Figure 6**). The runway extension alternative of 5,500 feet was chosen in the early 2000s due to the City's financial responsibility to the proposed project. The funding for the project would be a combination of a 90/10 and 95/5 grants. This means the City would pick up 5-10% of the total project cost. The City is allowed to use "in-kind" labor. This means the work the City performs on the project counts towards the City's financial responsibilities for the project. Also approved for funding within this project are funds for land purchasing, relocation

of utilities, upgrades to the landing instruments, and even the re-routing of Fremont Road. Currently, the consultant is in the middle of having an EA, Environmental Assessment, finalized by MODOT Aviation Division. An EA is tied directly to a project. Any drastic changes to a project would result in a new EA and if the changes are outside of what is in the AMP an update to the Master Plan would be needed. A typical EA completion is 1-2 years and an update to an AMP is 1-3 years. Attached are letters addressing this project option from Regal-Beloit Flight Services and the local EMS. Estimated completion for this option would be approximately five years.

One variation of the southward expansion was to include a tunnel for one lane vehicular traffic. At this time there are no funds available.

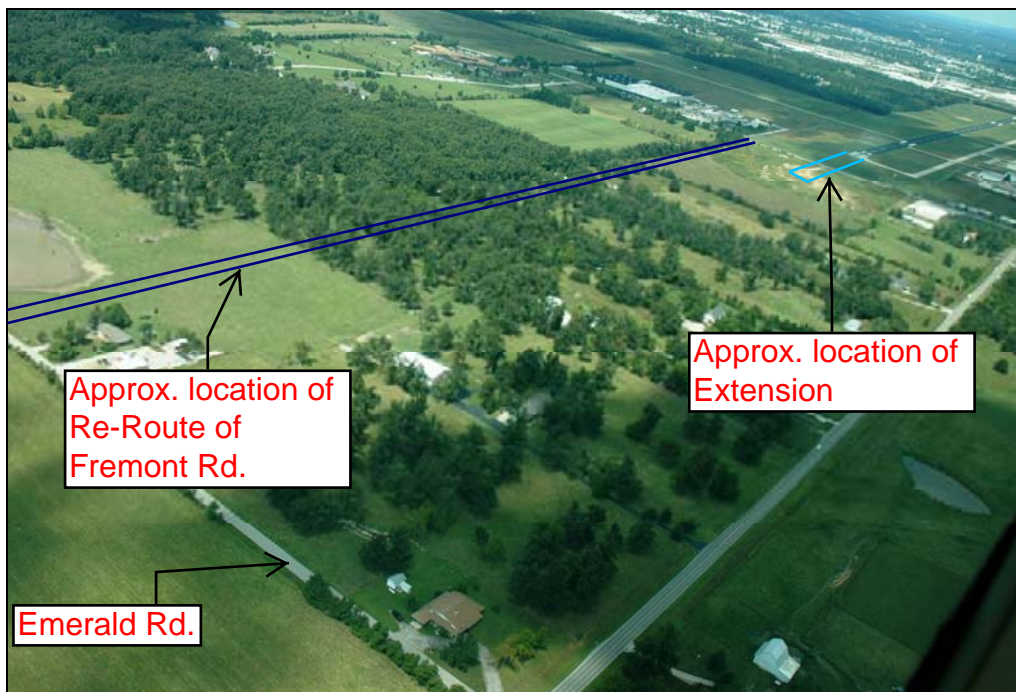


Figure 6 (South End: Expansion Area)

Another option is to move the airport. The City would face the same types of issues that are present with the considered extension to the South, but at a higher project cost. Two big questions would have to be answered first. Where would a good location be and how would it be funded? At this time grant funds are not available and if they would become available an estimated project completion date would be 20-25 years from now.

There is always the option of doing nothing, keeping the airport “as is”, but keep in mind the airport is a critical part of the City’s transportation infrastructure. The same safety issues would

exist and with the passing of time only increases the chance of an accident occurring. A good analogy would be if Interstate 44 was never built and Route 66 was still being used. Imagine the traffic volume and the types of traffic that presently use I-44 now. Route 66 would not be sufficient to handle the volume or types of vehicles that travel now on I-44. It would cause serious safety issues and the roadway would fail because it originally wasn't designed for the heavy traffic flows. This relates to the increased volume of traffic the airport witnesses along with the types of aircraft that utilize the airport now.

Aviation Obstructions

There are a few other smaller projects that are currently on the list for completion. Currently trees located in the Runway Protection Zone at the north end of the airport are causing serious safety concerns. The trees are being cleared instead of trimmed due to the cost associated with the maintenance of the area. There are also saplings growing in a drainage ditch that runs underneath the runway. These saplings need to be removed and a work order has been filed for the removal of them. There were four electric poles installed for the God and Country show for temporary electric service. These poles are planned for removal this Fall.

Revenue Generation

Ideas and suggestions have been discussed on how to increase the revenue for the airport. The ultimate goal is to have the airport be self supporting. One idea was for the FBO (Fixed Based Operator) to obtain an Over the Wing Federal Contract. This relates to the ability to sell fuel to the military. Another suggestion is to look at the hanger and land leases and see if the City is charging fair market value. The next few ideas deal with publicity, tourism, and marketing of the airport. Information about the airport needs to be put on the City's website and maybe into an informational tourism packet that is handed out in the area. Activities that the public can participate in, such as an air show, needs further study.

Recommendations

The recommendations of the Airport Advisory Board are as follows. The actions that need to take place currently are following the Airport Master Plan as set out for extending the runway to the South, finish the EA (6-12 months), purchase the land associated with the project (1-2 years), construct the re-route of Fremont Road (1 year), relocate utilities (in conjunction with re-route), and then proceed to the construction of the extension to the runway along with the other project details (1 year). When this project is finished go back, re-evaluate the Master Plan, and make updates trying to regain the length of the runway that was shifted to the South on the North end

of the airport. This sequencing of details is recommended due to the time it would take to update the Master Plan and perform another EA or EA amendment. This would add another few years to the process with the gamble of not being able to secure funding.

Studies need to be completed in the future on a marketing strategy and fair market value rental/lease rates. Also the FBO needs to look into the Over the Wing Contract to see if the airport could boost revenue generation this way.

These are the recommendations the Airport Advisory Board is making at this time. Please consider these recommendations and see fit of the proper actions that need to take place so the interest and safety of the public and aviation patrons are looked after.