THE ROLE OF AN “AIRPORT OPERATOR” IN TODAY’S
U.S. AVIATION SYSTEM

It sometimes seems that there are two unknowns in aviation. The first is how an aircraft can actually fly through the air. The second is how “airport operators” fit into the U.S. aviation system. While the first of these mysteries tends to diminish (but never entirely disappear) as one comes to understand the physics of lift, drag, and propulsion, the puzzlement about airport operators persists.

While airports and those who operate them have always been important, the economic deregulation of the airline industry that has unfolded over the last 30 years has had the effect of giving such entities far greater levels of influence at their airports, and thus in U.S. commercial aviation. This rising influence has been subtle, but it is both pronounced and positive.

What then is an airport operator, what do they do, why do they do it, and how do they go about it? Let’s start with the “what” and the “why”, for they can be stated much more succinctly than can the “how”.

An airport operator is an organization responsible for the direction and management of one or more airports. Such an organization sees aviation as a powerful and positive force in the modern world, and believes that linking its community to the world’s aviation system as tightly as possible will enable that community’s economy to grow and prosper. In a nutshell, this is both the “what” and the “why”. Everything the operator does is done in pursuit of the above goal.

That brings us to the “how” an airport operator works. Airports differ by size as well as by aviation mission, no two being just alike. Some accommodate the full range of activities, including scheduled airline passenger service, cargo activity, charter flights, general aviation, flight training, and military. Others handle only some of these functions. These differences notwithstanding, airport operators have much in common and can be thought of as having some or all the following roles, each of which will be further discussed below:

- Facility Developer
- Facility Maintainer
- Terminal Manager
- Utility Company
- Airfield Manager
- Law Enforcement
- Fire, Rescue, and Medical Service
- Ground Transportation Provider and Advocate
- Security Provider
- Aviation Marketer
- Community Aviation Leader
- Financial Manager

FACILITY DEVELOPER

Many airports have grown to become virtual cities. They are often vast physical reservations consisting of dozens of buildings, millions of square feet of enclosed spaces, extensive airfields, and complex utility systems to support all of that infrastructure. The larger ones range up to 40 square miles of land area and often represent billions of dollars of investment.

As aviation has grown over the years, and as it has become increasingly difficult to find locations for new airports, the physical expansion of existing airports has been the primary means of meeting the growing demands of the industry. It is imperative that the airport operator have, and from time to time update, a sound Master Plan for the continued physical development and redevelopment of the airport. As particular parts of that plan progress to actual development, a host of issues are raised relating to the quality of facilities, especially passenger terminals, which are to be added. The goal of building facilities that are appropriate front doors to communities is often in tension with the goal of minimizing the initial construction costs. Very delicate balances must be struck between these and other competing objectives.

To further complicate matters, the environmental laws and regulations which now apply have greatly extended the lead times to get new facilities in place. This, coupled with the very fragile financial condition of some sectors of the aviation industry, most notably the nation’s airlines, has presented airport operators with one of their most demanding challenges, that of making major facility investment decisions meant to provide adequate, affordable facilities for
a very uncertain future. If they are too cautious, customer service levels decline and air service opportunities are lost. If they are too aggressive, premature debt burdens are assumed, forcing user costs to rise, thereby discouraging the very pro-growth dynamic which the investment had been intended to create.

Finding and continuously adjusting the pace of facility investment and development is one of the most challenging tasks facing airport operators.

FACILITY MAINTAINER

As noted above, airports often have extensive physical facilities. While the maintenance of facilities is not an exciting subject, it is a very important one. It is likely that the overall impression that a traveler passing through an airport will have of that experience will be shaped as much by the level of maintenance as by any other factor. In addition, the overall financial performance of an airport will, over time, be influenced significantly by how well a preventive maintenance program for that facility was devised and executed.

An airport operator must organize and manage a substantial force of engineers, plumbers, carpenters, electricians, equipment operators, laborers, administrators, and others who will carry out these functions, and often must couple it with access to contracted third-parties who can add specialty skills that it is not practical to directly employ. To sustain an effective maintenance effort it is necessary to provide continuous training programs that deal with issues of currency on new technology and techniques.

Another dimension of this role for the airport operator is to inspire that maintenance workforce to see their role as a vital one. This is true both in day to day activities and in the emergencies, including weather-related emergencies, that so often arise (and which have an uncanny tendency to occur on nights and weekends). Having these “doers” regard the airport as their own is a vital dimension of this aspect of the business.

TERMINAL MANAGER

The passenger terminal is the most familiar part of an airport to the general public. The airport operator’s task is to bring about terminals that are pleasant, efficient, easily understood, inviting, and clean.

Such terminals consist of a number of airline-related elements such as ticket counters and hold rooms, as well as a broad variety of commercial ventures that
include food and beverage outlets and retail shops. In addition, a variety of public service facilities such as pre-board security screening locations, information counters, rest rooms, medical facilities, immigration and customs inspection areas, baggage claim areas and the like are to be found.

All of these terminal elements require a great deal of thought on the best configurations to accommodate passenger and baggage flows and to strike the right balances between the often-competing demands for the limited space. Such terminals must be fashioned to accommodate the very different needs of various passengers, international versus domestic, locally originating or terminating versus connecting, and other distinctions of that nature.

It has, in recent years, been a particular challenge for airport operators to devise and apply allocation and leasing mechanisms for airline space. The need is to both recognize the individual airlines’ need for stability while also leaving sufficient control in the airport operator’s hands to insure that airline space allocation is scaled to the activity levels of the individual airlines. This allocation must be adjusted from time to time as the activity levels of individual airlines ebb and flow in the competitive world of the airlines.

Yet another set of judgments must be made in fashioning a commercial program in a passenger terminal. Such a program is important both for customer service and for financial reasons, but airport terminal concession operations are a unique form of business in both the food and beverage and retail categories. The products that are made available as well as the hours of operation all must fit the peculiar demographics of the air traveler. These demographics are very attractive from the perspective of disposable income and similar benchmarks, but airport passenger flows occur in a pattern which is quite different from that found at a suburban shopping mall or similar location. Additionally, the commercial program serves a necessary public service need and must be packaged in contractual arrangements that compel that certain shops be open for business when customer demand alone would not usually warrant such opening.

Another dimension of terminal operation, one that has grown in recent years, is the provision of certain passenger services by the airport operator to replace those once commonly provided by airlines. As the airlines have become increasingly price competitive they have pared their costs and staffing levels wherever possible. One of the casualties of that trend has been guidance and information services and the once-generous airline provisions for delayed or stranded passengers. Increasingly, airport operators have moved to fill the gap left by the airlines in such areas as marshaling pre-board screening security lines, foreign language attendants in international arrivals areas, and emergency
provisions and supplies for passengers stranded by weather related delays and cancellations.

**UTILITY COMPANY**

Many airport operators have structured themselves to act as utility companies, providing certain utility services within their small cities. These services may include electric power, communication (both voice and data), natural gas, water, and sanitary sewer. This role brings with it not only the job of physically installing, maintaining, and periodically updating the utility infrastructure, but also of providing rapid response to service outages to avoid disruption of these vital services.

**AIRFIELD MANAGER**

In this role the airport operator takes on an array of responsibilities that directly interface with aircraft and with the FAA’s air traffic control functions. An airfield consists of the obvious features of runways, taxiways, and aprons, but also includes lighting, guidance, navigational aids, and fuel storage and distribution facilities and equipment. It is an area that requires a rigorous set of operational procedures, constant monitoring, a very high degree of operational discipline by those employees given access to it, and exacting maintenance standards to sustain its continued safe operation.

A key aspect of airfield operations is the preparation, continuous updating, and occasional exercising of emergency response plans designed to respond to any conceivable mishap on the airfield. These plans deal with mutual aid responses from neighboring jurisdictions and how that assistance can most rapidly be brought to bear in time of need.

Depending upon location and physical circumstances, airfields also may include ramp control towers managed by the airport operator. These relieve the FAA tower of the control function on airfield areas other than the immediate runways. Airfields also often have wildlife control programs to eliminate those threats to aircraft activity.

Most airports include Fixed Base Operators to service general aviation users, and many include aircraft hangars to accommodate aircraft maintenance and storage requirements. On occasion these hangar facilities are quite extensive, as would be the case at a major aircraft maintenance and overhaul base.
Many airports, recognizing the impact of aircraft noise on neighboring areas, have organized aircraft noise abatement programs. These seek to moderate such impacts by flight path adjustments and other abatement techniques while also educating surrounding communities on the noise related trends in modern aircraft.

**LAW ENFORCEMENT**

The airport operator is responsible for providing law enforcement services on the airport. This is often accomplished by organizing and maintaining a standing police department as a part of the airport operator’s organization, while at other locations it is accomplished by having such services provided by an airport-based detachment of a police force serving the community of which the airport is a part. In either instance, it requires the development of specialty skills unique to the airport environment.

While the need for these services at an airport has always been there, particularly in areas like automobile traffic control, crime prevention, crime investigation, crowd control, and emergency response, law enforcement activity has taken on a whole new importance in the age of security concerns that now confront airports. Armed law enforcement presence and support is a vital component of an airport-wide security program.

**FIREFIGHTING, RESCUE, AND MEDICAL SERVICES**

As noted previously, modern airports are increasingly becoming small cities. As such, they require services similar to normal municipal fire-fighting and prevention services. Being airports, however, there is a whole additional dimension to the need for firefighting and rescue services, that posed by the operation of aircraft with the attendant risk of high concentrations of gasoline and kerosene. Airports also attract large numbers of people, including travelers, visitors, and employees, who have emergency medical needs that must be met.

Airport operators routinely meet these needs by either directly operating, or by arranging for their parent government to provide, onsite fire departments that provide aircraft fire-fighting and rescue capability, structural fire-fighting and fire marshal functions, and emergency medical response. At larger airports, this sometimes involves multiple firehouse locations on a given airport.
While any modern fire department emphasizes training, this is particularly true of aircraft fire-fighting and rescue. Fortunately, aircraft incidents at airports are extremely rare, so experience on the part of fire-fighters must be gained and maintained in a training mode, often involving the building of unique training facilities capable of simulating aircraft rescue and fire-fighting scenarios.

Because of their specialized equipment and training in dealing with major fuel fires, airport fire departments are often relied upon by neighboring communities for support in those particular types of incidents occurring anywhere near the airport.

GROUND TRANSPORTATION PROVIDER AND ADVOCATE

Airports are, by nature, intermodal. Their purpose is to facilitate the movement of people and goods. Airport operators routinely concern themselves not only with the aviation segment of the journey, but with the ground transportation phase as well.

Airport operators provide on-airport roadways, automobile parking facilities, rental car availability, passenger pick-up and drop-off locations, and various truck facilities to accommodate cargo and mail movements. In addition, many airports arrange for public transportation services including taxicabs, door-to-door van services, and motor coach services to high volume destinations.

Several airports have teamed with regional transportation authorities to provide for regional rail service to their airports, while others have provided for, and in some cases actually operate, off-site highways to connect to regional freeway systems. Practically all airport operators participate actively in regional transportation planning processes to assure appropriate aviation focus in the planning of regional transportation networks.

SECURITY PROVIDER

The need for an airport to be concerned with security is, unfortunately, quite evident. If one used the term “security” in an airport setting in the 1950s and 1960s, it was likely to mean guarding against theft of baggage and cargo. By the 1970’s, with the initial incidents of aircraft hijacking (much of it involving flights diverted to Cuba), the term began to take on a different, more ominous meaning, which evolved to the terrorism focus which it has today.
While the federal government, in the wake of 9/11, became far more active in matters of airport security, taking on the direct functions of passenger and baggage screening at US airports, the airport operator remains heavily involved as well. The airport operator is responsible for identifying and securing those areas of the facility to which access is restricted, for deciding who will be afforded access to those areas and for checking the background of such persons and credentialing them appropriately. It also provides armed police support to the entire security operation, including that operated by the federal TSA.

AVIATION MARKETER

This is an area of airport operator activity which is largely unknown, but which has grown in both importance and influence since domestic airline service was economically deregulated in the late 1970’s and early 1980’s. A consequence of that domestic deregulation was that airlines began to introduce and withdraw service to communities at a very rapid pace. In the interest of paring their overhead costs in the face of new competitive pressures, airlines thinned their market analysis staffs that focused on existing and potential points of service. These two trends conspired to make airlines less familiar with the inner workings and trends of the markets they served and were considering serving.

A number of airport operators saw this as worrisome, but also saw an opportunity to step into the market-knowledge void which they saw developing, and undertook “air service development programs” of their own.

These programs, which are now quite common, involve airport operators developing and maintaining a high degree of insight into the air service needs of their communities. They make judgments about the practicality of filling those needs, targeting specific passenger or cargo carriers whose route systems and business plans seem compatible with identified air service needs. They then prepare well-researched analysis of the traffic potential of the desired service, and approach the targeted airline with that information.

While the decision to serve a market or to fly a route remains a decision for the particular airline to make, the airline is now presented with valuable information about the market opportunities. The airport operator, having only one community to analyze, can usually afford to analyze that market far more deeply than could any one of the many airlines who may be looking at it. In addition, the airport operator draws on organizational and business relationships with the very business, tourism, and travel community that can provide needed support for new air service.
When dealing with international services, which continue to exist under a regime of economic regulation, the airport operators have also become familiar with the particulars of specific bilateral aviation treaties that bear on their desired air services. They have participated with the US government in negotiating needed changes to those treaties, as well working with the US government to orient US international aviation policy towards the liberalization of access to new markets.

All in all, airport operators have, in recent years, had far more influence in shaping the air service in their communities than had previously been the case.

COMMUNITY AVIATION LEADER

There was a time in the now-distant past when communities had little influence over how well, or how poorly, their aviation needs were met. Today, given the relative loss of influence by the airline industry and the far more passive role now played by the FAA, they can exert far more influence. It is not, however, always clear to community leaders how that influence can be best focused.

While airport operators have traditionally been active in their communities, in recent years this activism has increasingly taken on the leadership role of organizing their community’s greater participation in shaping their aviation futures. It has also served to inform the community of the perils of overreacting to some of aviation’s less attractive byproducts, like aircraft noise, by unduly restricting aircraft operations. This is accomplished through strong Governmental, Community, and Media relations programs. It is the day-in, day-out interaction of those forces with their contacts in the community that shapes the airport operators’ leadership position.

In sum, a particular community’s aviation future will rest more and more on decisions made in that community and it is increasingly up to the airport operator to mobilize pro-aviation forces and to help them to navigate in a pro-aviation direction.
FINANCIAL MANAGER

In order to carry out all of the above roles, the airport operator must successfully manage the financial aspects of the enterprise. As the airports themselves have grown larger and more complex, so to have the operating entities’ financial affairs. It is now quite common for a large commercial service airport operator to be managing a balance sheet in the billions of dollars, and to have annual budgets in the hundreds of millions of dollars.

Airports for the most part are self-sustaining enterprises which do not rely on local taxes for support. They generate sufficient revenue from rates and charges collected from aviation users, including airlines, and from commercial services at the airport ranging from terminal shops to automobile parking operations to meet both their operating and debt service costs.

On the capital side, airports rely heavily on debt sold in the tax-exempt municipal bond market. This is augmented by federal grants funded by federal taxes imposed on aviation activity, and by passenger facility charges collected by airlines in the ticket sale transaction and remitted to the airport where the passenger enplanes.

Prior to airline deregulation, an airport credit was viewed by the financial markets in terms of the relative financial strengths of the airlines serving that airport. That is no longer the case. Today that same airport’s credit standing is judged on the strength of its market area, on the quality of its management, and on its track record of financial performance.

SUMMARY

Perhaps the above will shed light on the who, what, why, and how of airport operating enterprises, making it a bit more clear how they fit into the overall picture of aviation. While the many roles discussed above are quite diverse, they are bound together by the common motivation of seeking to tie an airport, and through it the airport’s surrounding community, as tightly as possible to the rest of the world through the global aviation system.

Jim Wilding

October, 2007