When it comes to US West Coast airports, Portland International (PDX) is often overlooked, compared to Seattle (SEA), San Francisco (SFO), and Los Angeles (LAX). However, for 75 years, PDX has been at the heart of the community, both economically and culturally.
The city's first commercial airport was built on Swan Island, in the Willamette River, about five miles from the site of the current airport. Construction began in 1926 and became operational in 1928, though Charles Lindbergh was able to pilot his plane, The Spirit of St. Louis, into the airport in September, 1927. The Swan Island facility quickly grew to the point that, by the mid-1930s, the Port of Portland announced the building of a ‘super airport’ on 700 acres of land near the Columbia River.

PDX Begins

The new Portland-Columbia airport, as it was then known, had five runways (which, by today’s standards, would barely pass as taxiways), took four years to construct, and was one of the largest Great Depression-era Works Progress Administration (WPA) projects. Much thought went into the planning of the airport to accommodate future expansion. While the passenger terminal building has since moved from its original location, and the number of runways has been reduced to three, the airport is still in the same place 75 years on.

The 1950s were a time of great change for the airport, beginning with the completion of a new 8,800-foot (2,700m) runway in 1951 (extended to 11,000 feet in 1974) and ending with it being renamed Portland International Airport. At the end of the decade, a new terminal was constructed on the east side of the field—the foundation of the airport’s current passenger terminal. And jet service from Portland began with Pan American Airways flights to Hawaii.

In 1990, anticipating growth in traffic, the airport commenced a massive expansion. The $800 million project included the construction of a new parking garage, and roadway and terminal improvements. The airport’s current configuration sees the terminal, which is in the shape of a letter H, situated midfield, with two parallel runways and a 6,000-foot (1,830m) cross-wind one (21/3). The southern runway (28R/10L) is the longest at 11,000 feet (3,350m); the northern one (28R/10L) is 9,825 feet (3,000m) long. In the winter months, aircraft typically depart to the east, while, in the summer, aircraft approach and depart to the west.

Fifty-eight gates, along with 19 remote stands, serve the passenger terminal, which has five concourses. A connector with moving walkways provides convenient access between the north (A, B, C) and south (D, E) concourses. Excellent views of the airside operations can be enjoyed from the center of the connector.

Outside, bridging the terminal with the parking garage is a 12,000 sq ft glass canopy covering the entire vehicle arrivals area. This stunning architectural feature protects visitors from the weather while letting in lots of natural light. When I first visited the airport, I was pleasantly surprised by the overhead heaters in the shuttle pick-up area, which took care of cool days or evenings.

The airport is currently in the planning stages of a 200-foot extension of concourse E, designed to create greater efficiencies by balancing traffic in the terminal. Alaska Airlines (AS), along with its subsidiary, Horizon (QX), is the largest operator at the airport, accounting for about 43% of the traffic. Combined with Southwest (WN), the second largest operator at PDX, two-thirds of the airport’s operations are currently on the south side of the terminal. This places an enormous strain on the security checkpoints and baggage system. When the extension is completed, AS will move its operations to the north side, and United Airlines (UA) will move to the south concourses.

"Not only will this project meet the current operational needs of the airport, but it will provide more opportunity for growth," says Vince Granato, Chief Operating Officer for the Port of Portland, which operates the airport. "We are working with the airlines that will be impacted, and expect to break ground in early 2016, with completion scheduled for 2017."

This is the first major terminal renovation in the public spaces since 2001, although, in 2010, there was a complete reconstruction of the baggage system, to improve accuracy and capacity. Significant runway upgrades were completed in 2011. To increase operational efficiency, the north runway was extended to 9,825 feet (2,995m), allowing aircraft departing for Asia or Europe to utilize either the north or south runway. The smaller crosswind runway is used, less than 5% of the time, by some cargo operators.

PDX is also home to the Oregon Air National Guard’s 142nd Fighter Wing, which has F-15C Eagle aircraft stationed there. The military operations occupy about 246 acres (100ha) of
space on the southeast portion of the airport complex. According to Granato, they don’t have much impact on civilian operations, with only about 2% or 3% of total aircraft movements. The military has had a presence at PDX for almost as long as the airport itself has been in operation. Two years ago, a new 50-year lease was signed; this will reduce the military’s footprint to 200 acres over the next 15 years, with a further reduction for airport expansion options in 2043.

Environmental stewardship is important to the airport, and one recent project was a new de-icing treatment facility. PDX doesn’t receive a lot of snow; however, many aircraft are parked overnight and require de-icing in the winter months before morning departures. To the north of the airport is the Columbia River, on its final stretch before emptying into the Pacific Ocean, and to the south is the Columbia Slough, which feeds into the river. While the de-icing agent could be contained around the terminal, some of the solution from the taxiways and runways was draining into the slough. The airport built a new collection and treatment system to allow the clean discharge to feed directly into the Columbia River.

Other measures to mitigate the airport’s impact on the surrounding environment include the use of non-lethal methods to relocate birds and animals to stop them from coming into contact with the aircraft. The Port of Portland also relocated its airport administrative offices to a building next to the terminal. This is designed to minimize the impact on the environment, with a green roof and systems to treat and reuse waste water.

The TriMet MAX Light rail system links the city to the airport, and about 6% of passengers reach it by train. Granato expects this number to rise, as it is a good option not only for passengers, but also for airport employees. Many services are provided to cyclists to encourage more bicycling to and from the airport; these include secure bicycle storage; a bike assembly and repair station, which makes it easier for passengers to disassemble and assemble their bicycles before and after their flights; and a tool check-out counter, where cyclists can borrow tools and air pumps.

**PASSENGER NUMBERS ON THE RISE**

Passenger volumes have slowly been rising at PDX, with more 16 million passengers expected to pass through the airport this year, 20% more...
than five years ago. The airport serves a catchment area that includes eastern Oregon and part of eastern Washington, and stretches south to Eugene and 115 miles north to Olympia, Washington—where people there make the decision to fly from Portland or Seattle. There is limited air service from two smaller Oregon cities—Eugene and Medford—but PDX is the only international airport in the state.

To its credit, PDX seems to be content with its place in the aviation world, and doesn't aspire to be something it is not. That's not to say that the airport is complacent about taking on new business and new routes, but rather that it understands that the market determines demand. “We don't drive growth, we respond to it,” says Granato. “It's the passengers that drive growth. Our job is to accommodate where people want to go.”

In the early 2000s, when Vancouver, Canada, was Portland's only international destination, PDX aggressively marketed itself to international carriers and landed Lufthansa (LH) and Mexicana (MX). The German carrier connected Portland with Frankfurt (FRA). Mexicana offered service to Guadalajara (GDL) and Mexico City (MEX). Around the same time, Northwest (NW) initiated flights to Tokyo (NRT) and Amsterdam (AMS). Delta (DL) still operates these former NW routes, but service to Mexico ended in 2008, and, a year later, LH pulled its Portland service, with both carriers citing financial losses on the routes.

Sometimes, timing is everything. Last year, Mexican LCC Volaris (Y4) reconnected PDX with Guadalajara, one of Mexico's largest cities, and, this year, international service is expanding, even if initially on a seasonal basis. Icelandair (FI) began service to its Keflavik (KEF) hub, with convenient onward connections to its European network, and German leisure carrier Condor (DE) put FRA back on the map with twice weekly service.

“We are thrilled to have new service to Europe,” says Granato. “This is a reflection of what the community wants. We are the smallest US airport with nonstop service to Asia and Europe.”

Granato credits Portland-based businesses, such as Columbia Sports Wear and Nike, with producing a lot of the business and leisure traffic to Asia and Europe. He expects international markets to grow faster than domestic routes. “There are very few of the top 40 cities in the US that we don't serve,” he notes. “We anticipate that some of these seasonal international offerings will develop into year-round services.” According to the airport, passenger volumes to Europe double in the summer months, reaching 1,200 passengers a day.

PDX is primarily an origin and destination airport, with 83% of passengers flying point to point, while 17% are connecting through it. The top five domestic destinations are Las Vegas (LAS), Los Angeles (LAX), San Francisco (SFO), Phoenix (PHX) and Denver (DEN). Four Mexican cities and Tokyo are the top five
international destinations favored by the area passengers. There is also service to five destinations within Oregon: Pendleton, Redmond, Eugene, North Bend, and Medford.

CONNECTING THE COMMUNITY

While some airports have mass concession agreements, by which they contract with one company to provide food and beverage and shopping services, since 1988, PDX has instead supported the Oregon Market concept, in which the airport has individual leases with vendors.

“We have some national brands, but what you will primarily see are local companies, and this is a reflection of our community,” says Granato proudly. “Outdoor food carts are popular in Portland, and we’ve brought that part of the local culture to the airport by adding a few food carts to the terminal. This introduces small businesses to the airport environment, some of which may grow into full outlets.”

With the Port’s mandate to move passengers and cargo, it’s not surprising that the latter plays an important role for the airport and for the local and regional economy. Approximately, 220,000 tons of cargo are shipped through PDX annually. During the summer months, large quantities of perishable goods, including fresh fruit—apples, cherries, blueberries, and pears—are shipped to Asia. Interestingly, the air soles of Nike footwear are produced in a factory south of Portland and then air-freighted to Asia, where they are assembled onto the rest of the shoe. While there is a small cargo facility on the north side of the airport, the bulk of cargo operations is located on the south side.

CULT OF THE CARPET?

All airports have unique features. For some, it’s the architecture, or the amenities—swimming pools, art galleries, or, in the case of LAS, slot machines. In Portland, it’s the carpet. Surely, at no other airport in the world has the carpet become such a cultural phenomenon as it has in PDX.

The near 30-year old teal-hued carpet has developed such a cult following that it even has its own social media accounts. When most airports replace their carpet or flooring, it ends up in a landfill or at a commercial recycler, but in Portland it’s given away to the community.

“The carpet took on a life of its own over the years, when people in Portland would take a photo of their feet when they arrived home,” says Granato.

Given the carpet’s place in the public’s affections, the airport wanted to do something with it instead of sending it to the landfill or recyclers. But, with 13 acres of carpet to replace, PDX wasn’t equipped to supply the carpet to the public.
The airport’s symbolic 30-year-old carpet has developed such a cult following that passengers take photos of their feet when they arrive home or depart on a trip. PDX has supported an Oregon Market concept within its terminals, where individual leases have been established with vendors. Pictured the market with numerous stores and restaurants.

So they advertised the opportunity for interested parties to obtain carpet and make it available to the community. It was the biggest response the Port has ever had to a Request for Proposal; 32 companies responded. Four were selected.

“It’s been a very unique experience and has connected the airport to the community. It’s generated a lot of excitement,” says Granato. “Some people were sad about the old carpet going away, but it needed updating and we put a lot of thought into the new design and pattern.”

Even Damian Lillard, of the NBA’s Portland Trail Blazers basketball team, is feeling the carpet love. His latest shoe design collaboration with Adidas features the pattern and color of the old PDX carpet, which will also live on as designer furniture, pet beds, rugs, door mats, luggage tags, and an assortment of other specialty products. One cautionary message from a company distributing the carpet said, amusingly: “20 year old carpet is not perfect. There may be stains or missing tufts.” Even so, many people seem to be excited to own a piece of PDX history.

And, while it may seem a little over-the-top to some, the airport has long had an endearing relationship with the community. “For people in Portland and Oregon, this is their airport,” says Granato. “It’s not like Southern California, where there are a number of different airports. PDX is the front door to our city and we are very welcoming.”

Granato adds that everyone at the airport—the concessionaries, the TSA (Transportation Security Administration), and the airlines—is striving to make the customer experience a positive one. There’s free Wi-Fi, and a street-price policy for merchants—customers pay as much as they would in the city, so they don’t feel gouged. People actually come to the airport simply for a meal.

With service to new international destinations and having received, in recent years, traveler accolades as America’s best airport, PDX has a lot going for it. —KD

EVERGREEN AVIATION AND SPACE MUSEUM

If you’re visiting Portland, don’t miss the Evergreen Aviation and Space Museum, located in McMinnville, 45 miles (less than 90 minutes by car) southwest of Portland International Airport. The museum features the legendary Hughes Flying Boat, also known as the Spruce Goose, which, made entirely of wood, is the largest airplane ever constructed.

The museum, with a collection of 150 other aircraft, spacecraft, and exhibits, was co-founded by Captain Michael King Smith, an Air Force veteran, and the son of Evergreen International Aviation founder, Delford M. Smith.

Next to the museum is the Evergreen Wings and Waves indoor waterpark. You can’t miss it. It’s the building with an Evergreen Boeing 747 perched atop the roof. The waterpark features 10 slides and you can even start your water adventure from inside the aircraft’s fuselage. The waterpark aims at offering fun and education through interactive exhibits and learning tools.

Location:
500 NE Captain Michael King Smith Way
McMinville, Oregon

Web:
www.evergreenmuseum.org