



By Tara Titcombe | Photos by David Aschkenas

HEAVY DUTY

The heavy-maintenance facility at Pittsburgh International Airport knows planes — from top to bottom, inside and out.



Fixing in Figures

★
18,000 man hours
 to complete a major
 heavy maintenance visit
 on an Airbus 320

★
170
 average number of
 planes serviced at
 PIT hangar yearly

★
2,300
 roughly the number
 of items listed on an
 inspection checklist

★
24/7
 hours a day and
 days a week that
 the hangar works

★
380
 mechanics and inspec-
 tors at PIT

★
27 years
 average seniority
 of the mechanics
 at PIT

Hangar 5 is a hub of activity. In this massive building at Pittsburgh International Airport, three planes sit with three-story scaffolds around their tails. Cabin interiors are stripped out. Wings are disassembled. Landing gear is detached. Engines are removed. There's a constant hum from the fluorescent lights above and an occasional whine of an air sander and pounding of a rivet gun.

From above, the hangar may seem like a maze of wires, tools, sheet metal, parts, and pieces. Workbenches are scattered among cities of toolboxes, which surround the three massive jets. To any outsider, it may seem a bit chaotic, but a closer look shows that it's all very organized.

The heavy-maintenance department (with two locations in Charlotte and Pittsburgh) is like a doctor's office for planes. Aircraft come here for anything from long-term inspections to new galley mats — anything from major surgery to a minor checkup.

"We have more than 400 mechanics and aviation professionals who work here," says Frank Milillo, director of base maintenance at PIT. "The average seniority is around 27 years." Clearly, the mechanics have plenty of experience, but on top of that they have their FAA A&P (Airframe and Powerplant) license, 80 hours of training per specific aircraft, and yearly recurrent training.

While the mechanics are trained on all aspects of an aircraft, most find a specialty. Some prefer to work on flight controls, others on avionics, while others enjoy sheet metal or composite repairs. Each plane has a checklist, which can easily contain thousands of items, showing every single part that must be inspected or worked on. Once a mechanic has completed an item, he or she signs off on the checklist.



Hefty Achievement

We're not the only ones taking note of US Airways' maintenance team. Recently the airline was awarded the prestigious **2012 MRO of the Year Award for Airline Maintenance Excellence** by Aviation Week and *Overhaul & Maintenance* magazine. The award is given to the world's top maintenance-related companies. US Airways is recognized for reducing the number of aircraft out of service due to maintenance, significantly lowering deferred maintenance items, and for becoming the first airline to have its FAA-approved Safety Management System program validated by the International Air Transport Association's Operational Safety Audit.

Certain tasks completed on an aircraft may have a requirement to be inspected again. "We have quality-control inspectors who double check the work of a mechanic whenever a flight critical system is worked on," Milillo says. "We use ultrasonic inspection to look for deep structural cracks. We use thermographic inspection to check for internal moisture that could cause damage to flight controls. And we also use eddy-current inspection to look for surface cracks in aluminum structure."

The hangar pays strict attention to detail. Whenever a mechanic takes a part off an aircraft, the part is tagged, and a corresponding tag is placed in the spot



from which it was taken. Some planes are draped with little yellow tags. Then there's the wall of small parts that looks like a library's card catalog. Above the wall is a chart of every screw, nut, bolt and miscellaneous piece, along with the drawer and compartment number where each item is located.

In a place as detail-oriented as Hangar 5, every job, whether large or small, has a common focus: safety. "Our satisfaction is knowing that aircraft leave the hangar in pristine condition and that they are safe and reliable," Milillo says. "The safety of our passengers and crew is our absolute number-one priority." ✈



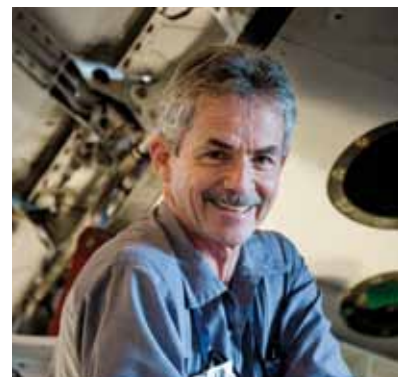
LEARNING TO FLY

MEET: Joe Fleet
TITLE: A&P Mechanic
TIME WITH US AIRWAYS: 28 years

Probably one of the nicest guys you'll ever meet, Joe Fleet knew instantly that he was going to work in the hangar. "I first started delivering mail here," he says. "I had never seen a place this big, and I thought, 'I'm going to work here someday.'" He has now been at the hangar for 24 years.

Although Fleet typically works on the wings, he keeps updated on all aspects. "You're always learning, and you need to continue so you don't become complacent," he says. "You have to keep learning to become proficient."

His favorite part of the job? "At the end of the day, I like the satisfaction of getting a job done well and to completion."



LEADER OF THE PACK

MEET: Bob Black
TITLE: Lead Mechanic
TIME WITH US AIRWAYS: 32 years

As a lead mechanic, Bob Black oversees a crew of 12 and coordinates work assignments to make sure planes meet their ETR (estimated time of readiness). That's one of the biggest challenges for Black. "There's a little anxiety because we all want to succeed," he says. "We're all driven to succeed." But with a strong team, the job becomes easier. "There is an absolute dedication of the guys that maintain these airliners," Black says.

His favorite part of the job happens once a job is complete. "After we get the plane all back together, I love watching it fly," Black says. "People that I'll probably never see in my entire life depend on the work that we do, and that is really cool."