



CAE Atmos

US AIRWAYS

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Training Ground

By Tara Titcombe
Photograph by Brian Gomsak



What does it take to train pilots? A lot more than you might think. ➤

W

alk into US Airways' massive flight-simulator room and you may think you've landed on the set of a science-fiction movie. Huge white pods sit on black steel legs — and then they start to move. Despite all appearances, these pods are not other-worldly; they're used to train airline pilots.



★ Thanks to 180-degree visuals and state-of-the-art technology, simulators mirror the real-world flying environment. There's a simulator for nearly every type of aircraft, so pilots train in the same type that they fly. "US Airways has 16 simulators in two locations — Charlotte and Phoenix," explains Howard Garbee, director of flight department services. Inside, a simulator looks, feels, and sounds like an actual flight — from coat

hooks and cup holders to visuals of every runway and exact cockpit configurations.

There is one notable difference, however. Behind the captain and first officer seats is another chair for a check airman, who conducts training sessions. This seat is accompanied by computer monitors; one touch to these monitors and the sunshine on the windshield screen changes to rain, daytime to night, and the Phoenix runway to Heathrow.

Each simulator is programmed with the most up-to-date fleet information and technology. If a change is made in the fleet type, then that same change is made in the simulator. And the training in the simulators is programmed to address any challenging issues. "We train in the most proactive ways," Garbee says.

As intuitive and precise as these simulators are, the pilots don't just jump in and "fly." There's a

NOT IN KANSAS ANYMORE



MEET: Captain Mike Shinn
WHAT DOES HE DO?
757 Standards Check Airman
WITH US AIRWAYS SINCE: 1985

Captain Mike Shinn still remembers his first time flying a plane in Kansas in 1976. "I was so enthralled by it. I asked, 'Can you actually make a living doing this?'" That's exactly what he has done.

"As a check airman, I'm responsible for conducting the evaluation and training in the

aircraft and in the simulator. And I ensure that the flying pilots...operate under the standard operating procedures," Shinn explains. His job varies from day to day. Some days he'll be training pilots in the simulators, and other days he'll be flying a line to Hawaii. "To be honest, I still really enjoy flying the line," Shinn says. "But I do enjoy training and getting to pass along some of the great things that I've learned in my career. I'm very blessed that I get to do both."

And US Airways is grateful to have Shinn aboard. Recently he was awarded the prestigious "Partners in Safety" award by the Safety Programs division of the FAA for his work to improve pilot and air traffic controller communication. While the award is a huge honor for Shinn, he still mostly gets a kick out of flying. "It's so cool and so exciting."



PHOTOS BY BRIAN GONSAK; MIKE SHINN BY CHRISTOPHER BARR



Far left: Captain Al Garin pilots the A320 simulator. Opposite page, bottom: Captain Mike Green in the IPT room with trainer name t/k.

structured training process for every pilot. Three main types of training are conducted at the facilities: Continued Qualifying Training is a three-day session that all pilots must complete every year; Qualifying Training lasts about six weeks and trains pilots for a new aircraft; and Requalifying Training is conducted for pilots who have been away from the cockpit for some time. Each of these training types begins in “ground school,” which consists of time in the classroom and time in Integrated Procedure Training. An IPT room is the shell of a cockpit with touch screens displaying gauges, buttons, and other features. Ground school teaches the basics and preps the pilots before entering a simulator. More than 4,000 pilots must receive simulator training every year.

The sims, as they’re called, operate 20 hours a day in four-hour sessions. Each pilot typically flies for two hours straight in high-stress situations.

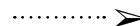


The flights, weather, and conditions are all pre-programmed in each simulator, so the pilots and check airmen can focus on

how to handle each situation.

While the simulators and the pilots may be the stars of the show, it’s the behind-the-scenes people who make it all possible. There’s the check airmen who conduct the training inside the simulators, the trainers who teach the pilots on the IPTs, and the planners and coordinators who analyze each training session to make it better. And then there

are the engineers. Along with keeping the sims up and running, the engineering group must also make sure the machines meet all standards and



My First Flight

When captains Al Garin and Mike Green ask if I want to go for a ride in one of the simulators, I jump at the chance.

When I take my spot in the captain’s chair, I’m told to put my feet on the pedals. Wait, there are pedals? I never realized how much

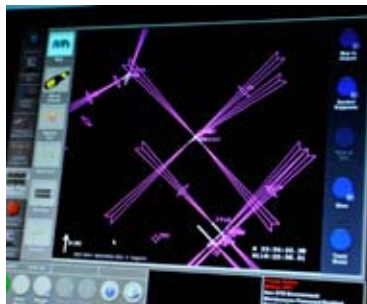
I don’t know about flying. (In case you’re wondering, the pedals help brake and steer the wheels.)

We decide to take a cruise around Zurich. As we head down the runway, I can feel the pedals move as Garin keeps the plane straight. Then we take off, and all I see is blue sky. As we ascend, I get a panoramic view of the mountains. Then we approach the mountains, coming closer and closer. An automated voice yells, “Pull up! Pull up! Pull up!” Garin instructs me to do just that, so I happily

yank the joystick all the way back. There’s that blue sky again. I’m assuming I cleared the mountains.

Next up: landing. Garin tells me to use the joystick to keep a tiny box centered on two intersecting lines. I hunch over and focus

hard on this new game. Then he reminds me: Look up. Oops! I’m almost on the runway, and that gray pavement is coming fast. As we touch down, Garin tells me to push the pedals to brake. I mash them all the way forward, but have forgotten to also use them to steer and to keep that yellow box centered. My plane is now nearly off the left side of the runway. Garin comes to my rescue and straightens things out — literally. When we finally come to a stop, I decide that I’ll leave the rest of my flights to the pros.



regulations. “Every year the FAA runs 253 tests on each simulator,” says Jamie Fowler, manager of simulator engineering. The tests ensure that the sims are safe, accurate, and up to date. It’s a challenging, 24/7 engineering operation, but, Fowler explains, “We have a 99 percent reliability rate.”

And it’s that reliability that relates

to all aspects of this facility — from the pilots to the check airmen to the engineers. “We have very dedicated people here doing behind-the-scenes work,” Garbee says. “We have a whole bunch of professionals who work with the pilots in order to deliver the best on-time performance for the airline. Everyone takes a lot of pride in what we do here.”

THE EXPERT EXPLAINER



MEET: Guy Mouton
WHAT DOES HE DO?
AQP Coordinator and
E190 Check Airman
WITH US AIRWAYS SINCE: 1988

Sure it’s part of his job, but Guy Mouton is *really* good at explaining things. As an AQP (Advanced Qualification Program) Coordinator, he’s in charge of planning the pilot-training curriculum. “Say you have a school, and each class is in charge of its own curriculum,” he explains. “But the school still has to have an overarching program that meets all the regulations the state requires — that’s what we do.” Mouton analyzes data collected from training sessions and incorporates his findings into programs that address any potential problem areas.

US Airways offers one of the most highly regarded training programs in the industry. And it’s not just pilots being trained under AQP, but also flight attendants and dispatchers. “US Airways is recognized among all the carriers as a leader in AQP,” Mouton says. “We constantly have people come ask us about how we do it.”

Working with all the different employee groups ensures that everyone is on the same page, and it’s Mouton’s favorite part of the job. “I get to work with all those different people. That’s the really interesting part for me.”

And by working with all those people, Mouton recognizes that everyone plays an important role. “We have an incredible group of pilots who work for US Airways,” he says. “They’re extremely experienced, extremely competent.”

My First Flight