

O'Hare

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caught in tubes."

So Pittman brainstormed with others at the FAA and came up with a way to revolutionize the arcane, 50-year-old methods at O'Hare. (The FAA doesn't use the same type of computer system nationwide for air traffic control operations.) The new O'Hare system, which includes new computers and software, too, uses 4-inch deep, flat-panel monitors with enhanced graphics displays and special sunlight-readable screens that make it easy for controllers to read information on the monitors under bright sunlight conditions.

Working with a company called PixelVision, Pittman was instrumental in the development of the flat-panel screens, which are used at O'Hare and also at a new radar tower 30 miles from the airport in Elgin. The touch-screen computers, similar to a kiosk at a shopping mall, allow the controllers to monitor the activities of an array of planes simultaneously at one of the world's busiest airports.

(The Elgin tower, which handles air traffic control for planes outside of the immediate sphere of O'Hare, hands off flights to O'Hare and receives flight data for outgoing flights from O'Hare. Another system in Aurora handles air traffic for the upper Midwest. The Elgin facility has been dogged by technical difficulties of late. But these are not related to the Automated Flight Data Processing System, Pittman says.)

"The air traffic controllers wanted air traffic operations to stay the same," Pittman says. "They wanted the information delivered right to their desks, the way the strips of paper used to be."

Ed Sasena, director of sales and marketing at PixelVision, worked with Pittman to develop the new display monitors at O'Hare. He says that Pittman's primary goal in developing the monitors was "keeping visual obstructions or distractions to a minimum. The sleek nature of flat-panel technology lends itself well to addressing this type of requirement."

"Another interesting design feature that Pittman called for was keeping the monitor just a few inches thick so it could be positioned such that the controller, who performs time-critical heading assignments, could maintain

maximum eye contact with the runways and still have peripheral visual access to the display. The unit is also equipped with a touch screen, eliminating any need to look down at a keyboard and, therefore, away from the runways."

Glenn Zimmerman, a spokesman for PixelVision, says that "Clyde is someone I would like to work with in a pressure situation. He keeps his cool at all times. He's still friendly and easygoing, even when the heat is on."

During a recent tour, six of the 14-inch flat-panel monitors were being used to control air traffic, and one was in the air traffic simulator room, where Pittman and colleagues perform research and development.

In addition to the computer technology, Pittman had to manage negotiations between the air traffic controllers union, air traffic management, airway facilities engineers and outside contractors.

For his work, Pittman received a commendation from the government, and a special coin was minted in honor of the opening of the new tower. Pittman, President Clinton and Mayor Daley's office each have a copy of the limited issue coin.

Those who know him say that Pittman remained unflappable during the whole process and was still fun to be around, even though he had such a heavy goal on his mind.

"I've known Clyde for about 20 years, and you couldn't find a better person," says Valerie Granahan, a staffing leader at the FAA. "He's humorous and dedicated to the job. You couldn't find anyone better to work with."

Syed Rizvi, an engineer at the FAA who works with Pittman, comments that he is "incredibly creative. We couldn't have pulled all of this off without him. He's one of the most innovative guys I've met."

Pittman, 49, became interested in aviation early in life. He was born in Japan where his parents, both in the Navy, were stationed, and he came of age in the late 1950s and early 1960s near Cape Canaveral, Fla. As a youth, he would watch the test rockets being launched by Werner von Braun, the German-born missile expert, and dream of a career in space.

"I was so close to the launches that the skin on my cheeks shook and my hair stood on its ends," he says.

After graduating from the University of Florida with a degree in electrical engineering, his dream came true. He landed a position as an engineer at NASA and worked with von Braun's colleagues. As part of his development, he underwent much of the same training as an astronaut, even going so far as to use the emergency exit from the rocket gantry at the Kennedy Space Center, plunging hundreds of feet down a Teflon tube into a fireproof "rubber room" inside a concrete bunker.

"They made all of the engineers do that," Pittman says. "They thought we would design equipment better if we knew what it felt like to use it. But that trip down the tube was certainly a once-in-a-lifetime experience."

At the tail-end of the Apollo program, he reworked electronic devices originally made for space into hearing aids.

But the dream came to an end when President Richard Nixon cut the budget for the space agency. Pittman had to leave NASA and take a position in Washington, D.C., at the FAA headquarters. It was a far cry from the heady days of the space race.

"I think I was the lowest paid engineer at FAA at the time," he recalls. "And you need a lot of money to live in Washington."

A position opened in the Chicago office of the FAA, and Pittman applied for the job and landed it. In Chicago, his engineering skills flourished again, and he worked on an array of projects, such as allocation of the portions of the radio frequency spectrum controlled by the FAA. He moved up the ranks to his current position, supervisor of the electronics section for airways facilities, which means he basically runs the computer operations at the airport.

The O'Hare project still requires two more development phases, but the system has already reduced the amount of paper-passing by controllers, bringing O'Hare a step closer to its goal of achieving a totally paperless system.

Pittman enjoys boating with his wife Linda, and three children during his off-hours, and he dreams of someday, when he retires from the government later this year, of starting his own space flight company.

"Wouldn't that be a blast?" Pittman says.