

A Simple Solution to One of Flying's Biggest Annoyances

First airport trials of the 'Flying Carpet' show a full plane can board in just 10 minutes

By Cindy Druker | Epoch Times Staff

Nine years ago, Rob Wallace, a 74-year-old design engineer from Australia and a frustrated flyer, was sure he'd hit upon the ultimate solution to speeding up the slow, tedious process of airplane boarding.

The only problem was, he couldn't find any airline willing to give it a try.

"Innate conservatism," was the only explanation he could summon to explain why not a single carrier wanted to even test an idea that could save them millions of dollars per year.

"It's kind of a chick and egg argument—nobody wants to be first," Wallace said.

But Wallace finally got a chance with the help of Vlad Kolesnik, a researcher at St. Petersburg State University of Civil Aviation in Russia.

Kolesnik helped organize three tests of Wallace's "Flying Carpet" boarding system at the Pulkovo Airport in St. Petersburg with Siberian carrier S7 Airlines. The trials weren't conducted with official approval from the airline's head office and were tacked on at the end of an already planned series of 62 trials comparing boarding systems over four weeks. But the results, which were just released, show promise.

The Flying Carpet proved to be the fastest system; one trial broke the elusive 10-minute barrier while boarding 151 passengers onto an Airbus A320.

Kolesnik believes the carpet has the potential to do even better than that.

"Of course, if the carpet was famous and everyone knew what to do and why we use it, the carpet would show 10 minutes or even less for the 180 passengers," he was quoted as saying.

To compare, in 2013 Spirit Airlines boasted being able to board an A320 in just 20 minutes, which was roughly 10 minutes faster than other major airlines like American or US Airways, according to an article at the time in Forbes.

Boarding Time Matters

Airlines care enormously about boarding times because every second an aircraft spends at the gate costs dollars.

Wallace calculates that saving one minute is worth about \$40. While that may not seem like a lot, if an airline can save 5 minutes per flight, and it operates 100 planes, each making six short-haul flights per day, that's a savings of \$36 million over

THE FLYING CARPET AND HOW IT WORKS

The "carpet" is actually a scaled-down version of a plane's seating plan printed on the departure lounge floor.

1. When boarding starts, an attendant opens the ropes to allow random groups of 25 to 40 passengers at a time to enter the carpet area and walk to their assigned seats, which takes about 35 seconds.

As soon as that group heads to the plane, the next group of 25 to 40 passengers can assemble on the carpet.

2. The spaces on the carpet representing each seat are purposefully small so that passengers in adjacent rows can't take their places at the same time, thus forcing them to step back and briefly wait to join the next group.

3. When a group proceeds to the plane, they are already lined up in row order, so they can efficiently take their seats without having to push past each other or wait for fellow travelers to stuff their bags into overhead compartments.



ALL PHOTOS BY VLAD KOLESNIK

a year. Across the entire industry, that's about \$4 billion annually.

The savings matter even more when you consider that boarding times have only been increasing.

Research by Boeing shows that it takes twice as long to board a plane today as it did in 1970, going from 18 to 20 passengers per minute back then, to as low as nine passengers per minute now.

A variety of factors have contributed to the trend, including two big ones.

Checked-baggage fees, which are now commonplace, mean more carry-on luggage—luggage that blocks aisles and takes longer to cram into overhead compartments.

Flights are also fuller now. In the 1990s, planes were generally 65 to 70 percent full; today, airlines aim for a load factor of 80 percent or more.

Next Steps

With those trends not looking to change on their own, the magic carpet offers a promising solution.

Wallace says he's hoping word of the positive results will attract attention from other airports and airlines.

Ideally, he'd like to test the carpet in different countries with different types of passengers to see if the results are the same. He'd like to see whether, with more exposure, proper explanation, and signage, his method can indeed board 180 passengers in under 10 minutes as Kolesnik predicts.

Given how frustrating boarding can be, which is what prompted Wallace to dream up his invention in the first place, Wallace sees airlines as the biggest block, not passengers. "I think most of the traveling public would be happy to go along with the system," he said.

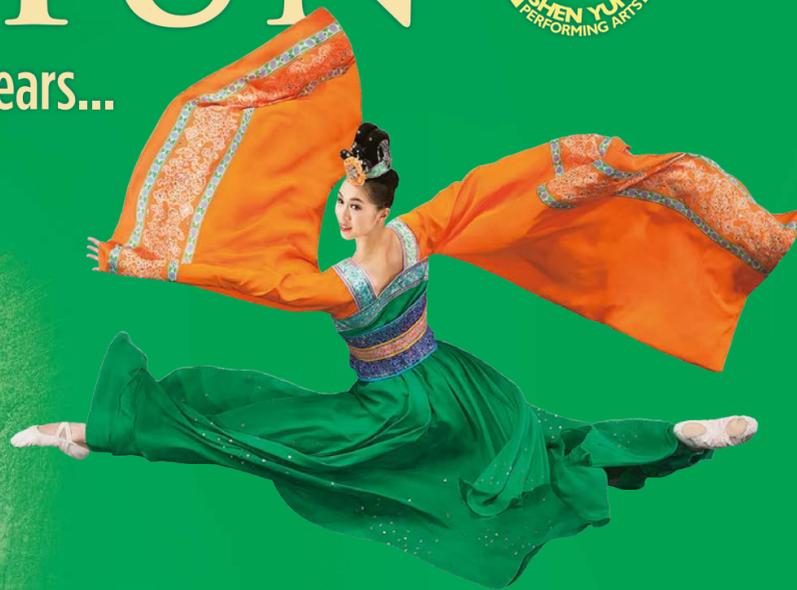
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