Airport squeeze

STAR TREK AS FUTURE MODEL FOR AVIATION?

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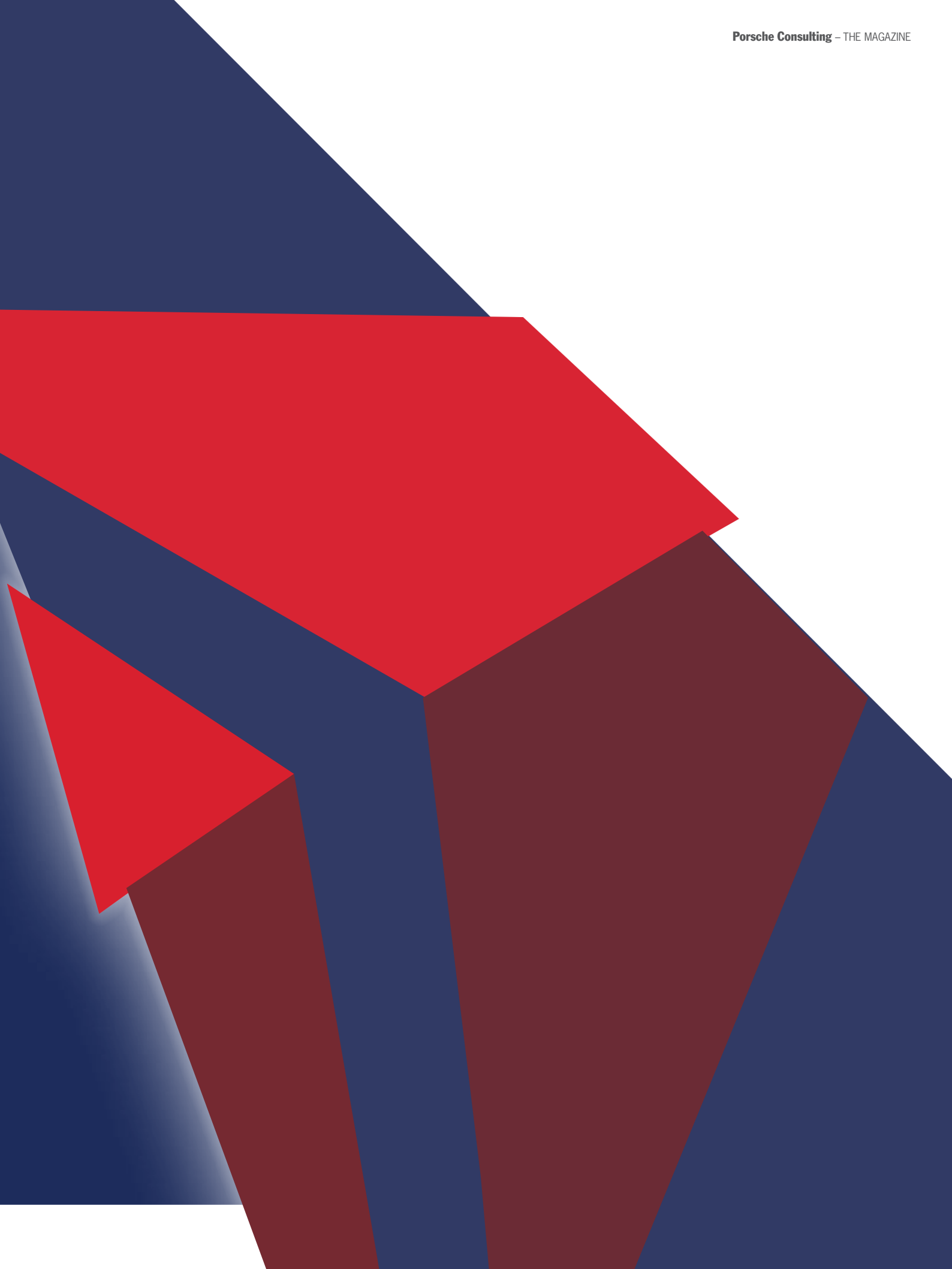
Getting to know the neighbors—that's an important thing to do for anyone who moves to a new location. And because Porsche Consulting has just opened a new subsidiary in the USA, the president and CEO of this new company, Dr. Norman Firchau, paid a visit to Atlanta International Airport, which is very near the consulting office. Firchau's first visit was organized by Dr. Ulrich Guddat, a partner and aviation expert at the Porsche Consulting parent company in Germany. On the airfield, right in the middle of "operations," the duo met up with Delta representative Gil West. A true specialist, West knows not only his own carrier's home airport like the back of his hand. The new neighbors immediately hit it off. And by the end of the visit, they shared a vision of flying in the future.



In charge of 202 airports around the world: Gil West. 2 billion dollars will be invested in airport facilities, services, and technologies by 2013.

DELTA AIR LINES IN FIGURES

31,800,000,000 DOLLARS' WORTH OF SALES IN THE 2010 BUSINESS YEAR
160,000,000 PASSENGERS PER YEAR
80,000 EMPLOYEES WORLDWIDE
13,000 FLIGHTS PER DAY, INCLUDING ALLIANCE PARTNERS WORLDWIDE
803 AIRPLANES IN THE FLEET
350 DESTINATIONS IN 70 COUNTRIES

Weather conditions at Hartsfield-Jackson International Airport in Atlanta, Georgia, the busiest airport in the world, are blustery. The last gusts of a tropical storm, which has swept the southern part of the USA over the past few days with wind speeds of up to 95 kilometers an hour, are blowing over the enormous airfield. For Gil West it's no big deal. If he were a sailor, even the Bermuda Triangle wouldn't faze him. But he has a different profession, with a key role to play. For Delta Air Lines, West is in charge of 202 airports in 105 countries. His business card reads "Senior Vice President, Airport Customer Service." This position often requires nerves of steel. Because, as everyone knows, if airports aren't functioning properly, there is virtually no way forward.

West has accumulated his share of experience in turbulent economic times as well. One need only look back a few years at the tough period for Delta, when ever more low-priced carriers were crowding onto an airline market that was already highly competitive and on the brink of bankruptcy, while at the same time fuel prices were rocketing skywards. Delta was about to merge with its competitor Northwest Airlines. "That was a considerable risk at the time," says West, an engineer who even as a child loved to tinker with car and airplane parts at his father's workshop. Delta got a second wind, became the largest airline in the world, and is now back in the black. West played a significant role in this process. His responsibilities can be described in astonishingly succinct form: It's his job to make sure that all Delta passengers arrive safely and on time with their luggage at their destinations. The actual scope of his job becomes evident, however, when one considers how many people Delta flies from A to B each year, namely 160 million. As West notes, "That's half the population of the USA."

And that's just the beginning, as Dr. Ulrich Guddat —an expert for aviation and aerospace at Porsche Consulting—observes. "Crises, such as those triggered by the SARS virus, are an unavoidable part of the airline business," he says. "Nevertheless, passenger levels have risen and will continue to rise over the →

coming years." While worldwide flights carried 5.3 billion passengers in 2010, the International Civil Aviation Organization estimates that there will be 16 billion flights every year by 2050. What looks like a good business prospect for the sector at first glance threatens to backfire. Both airways and airports are simply running out of space, with expansion proposals blocked by strict environmental regulations. And the two aircraft manufacturers Airbus and Boeing cannot keep up with production. "Airbus and Boeing are each building around 500 planes a year right now—but 30,000 new planes will be needed by the year 2030 to meet rising demand," reports Dr. Norman Firchau. The aviation industry will also continue to change, as Guddat explains: "I'm assuming that the large European providers will continue to expand by means of acquisitions in order to remain globally competitive. Yet the future plans of many providers are not clear, nor are those of aircraft manufacturers. But one thing is certain—they all have to become more efficient." The fact that Porsche Consulting can help accelerate aircraft production has just been demonstrated by its experts at a European aircraft manufacturer. In the first year of this joint project, throughput times for individual component production including final aircraft assembly were shortened by 15 percent, while error rates dropped dramatically at the same time.

But back to the airfield at Hartsfield-Jackson, where numerous Delta planes are lined up and waiting. An Airbus A330-200 stands peacefully next to a Boeing 767-300 ER, for example. Specialists immediately note that around 300 million U.S. dollars are parked at these two gates alone. "These aircraft really should not be standing around for so long," says Guddat. "As far as I'm concerned, that's waste. When their expensive planes are not in the air, airlines are losing money." The problem is that it takes so much time to process these aircraft. Unloading and cleaning, technical inspections, refueling and reloading take much too much time—about 25 minutes for a plane with 100 seats. Or as West describes the situation the other way around, there's not enough speed. "Passengers have to get to the planes faster," he says. "My dream is to transport people as fast as they do in *Star Trek*." The reality for passengers, however, usually consists of standing in

The new premises of Porsche Cars North America, which will also be home to Porsche Consulting Inc., takes shape close to Hartsfield-Jackson Atlanta International Airport. The building is planned to be completed in 2013 and will have space for 400 employees.

NEW PORSCHE CONSULTING SUBSIDIARY IN ATLANTA, USA

The demand for Porsche Consulting's services has long since extended beyond Europe. Over the past five years, the Porsche subsidiary has posted sales of around 20 million U.S. dollars with American clients. In October 2011, it launched Porsche Consulting Inc., with headquarters in Atlanta. Following Milan in Italy and São Paulo in Brazil, this is the company's third international subsidiary. The U.S. company will focus on lean management, supply chain management, and optimizing research and development processes. Management consulting in the USA has thus far concentrated primarily on clients in the automotive, aviation, electrical engineering, and tourism sectors.

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT

Atlanta's airport is considered the world's most crucial hub. Planes can reach 80 percent of the U.S. population within two hours. Every day 2,700 airplanes taxi down its runways and 240,000 passengers—or 10,000 an hour—go through its gates. Hartsfield-Jackson has 199 gates, none of which are outside. At 121 meters, its tower is the highest in the USA and the fourth highest in the world. The world's largest control tower (132 meters) is located at Suvarnabhumi Airport in Bangkok.

DR. ULRICH GUDDAT (36),
PARTNER
PORSCHE CONSULTING.

DR. NORMAN LEE FIRCHAU (41),
PRESIDENT AND CEO
PORSCHE CONSULTING INC.

GIL WEST (50) **"SENIOR VICE PRESIDENT, AIRPORT CUSTOMER SERVICE" AT DELTA AIR LINES, ATLANTA; MBA AND BS IN MECHANICAL ENGINEERING DEGREE FROM NATIONAL UNIVERSITY SAN DIEGO AND NORTH CAROLINA STATE UNIVERSITY; HOBBIES: RESTORING CARS, GOLF, TRAVEL.**

line, going through security, and then waiting again at the gate before boarding. In numerical terms, waiting accounts for 55 percent of the total time that they spend at airports, according to a study by Porsche Consulting.

The consultants are already working on solutions for both of these challenges. "The goal has to consist of decoupling passenger boarding and disembarking from the aircraft itself. In other words, passengers would enter the cabin while the plane is still approaching. The inspiration for this can be found in the many pre-assembly processes along production lines at Porsche," explains Guddat. His vision for the future consists of having cabins "released" from the aircraft, with passengers then leaving them separately. In the meantime the next cabins are already "pre-assembled," i.e. occupied. This would result in shorter idling times for planes and shorter waiting times for passengers. And higher comfort levels at the same time, as Guddat illustrates with the following image: "An airplane seat these days is a bed, an office, a dining space, and a cinema at the same time—which means that it's not the optimal solution for any one of these functions. A modular approach would make it possible to use different cabins on night flights and on business trips. And to change them rapidly from flight to flight."

West immediately saw the virtues of this idea—"Actually, it should be put into practice right away." Even though it would mean the end of that impressive vista of Delta planes lined up on the airfield in Atlanta. ←