A resurgent economy is propelling demand for business aircraft.

Text and photography by Kirby J. Harrison

There is an old joke in Brazil that this largest of Latin American nations “is a country of the future, and always will be.” But things have a way of changing.

Today, Brazil and the rest of Latin America represent a rapidly maturing business aviation market. Indeed, Brazil is now counted among the “BRIC” nations, referring to Brazil, Russia, India and China—all rapidly maturing markets with a growing demand for business aircraft and all that goes with them.

Rui Tomaz de Aquino, president of the Associação Brasileira de Aviação Geral (ABAG, Brazilian General Aviation Association) recently recalled the words of poet Walt Whitman, who said that if we can dream, we can also realize those dreams. “Now,” said Aquino of the resurgence of business aviation in Latin America, “those dreams are becoming a reality.”

Aquino was speaking at the Latin American Business Aviation Conference & Exhibition (LABACE), sponsored by ABAG and held in August in São Paulo, Brazil. If that show is a barometer of the growth of business aviation in Latin America, then there is room for optimism, at the very least. The total of 108 exhibitors comfortably surpassed the total of 71 at the 2007 event and, perhaps more important, an estimated $400 million in new business was generated, double the tally at LABACE 2007.

Aquino noted that 308 executive jets were delivered in Latin America last year. Among other factors fueling the growth is the aging of the business aircraft fleet in Latin America: 52 percent of executive jets and 66 percent of helicopters in the region are at least 15 years old, he noted.

That market potential is not lost on the world’s aircraft manufacturers. Virtually all had aircraft on display at LABACE 2008, a space set aside for helicopters was filled, and more than a few makers of light piston singles and turboprop aircraft were present, including Cirrus, EADS Socata, Pilatus and Piper.

John Rosanvallon, CEO of Dassault Falcon Jet, said the Falcon fleet in Brazil alone now totals 20 aircraft and the company has firm orders for another 25 to be delivered over the next four years. That fleet, he added, will total more than 50 Falcons within the next five years. Perhaps more surprising is the fact that of the 25 aircraft on order for delivery over the next four years, 12 are for the new $40-plus million Falcon 7X.

Fabio Rebello, Bombardier’s v-p of sales for Latin America, said the region accounts for six to eight percent of the Canadian OEM’s sales worldwide, and that Mexico and Brazil are its largest customers. In Brazil, 92 Bombardier airplanes are in service, of which 86 are Learjets.

Like Rosanvallon, Rebello noted the growth in demand for large-cabin business jets, particularly in Brazil. That demand, added Rebello, is expected to continue to grow for the next 10 to 20 years, driven in great part by...
expanding oil and gas industry and mining and commodity producers seeking to boost their share of world markets.

Cessna expects to deliver 48 new business jets to Latin American customers this year, and the Citation order backlog for the region now totals more than 175 airplanes. But the Wichita-based OEM counts Brazil as its largest Latin American customer. “Cessna will deliver more Citation business jets to Brazil this year than to any other international market,” said v-p of international sales Trevor Esling. And he noted that “Brazil is our largest single international market for the Mustang, outside the European Union.”

Cessna anticipates its fleet in Brazil alone will reach 175 Citations by the end of this year, about 55 percent of the total of 317 business jets in service in the country.

While Latin American operators as a whole continue to exhibit more interest in mid-range jets, Cessna is well aware of the growing popularity of large-cabin jets, and starting in about late 2013 or early 2014, it will put an airplane into service that will fit that market segment. The large-cabin Citation Mustang, with 4,000-nm range, will be capable of non-stop flight between São Paulo and Miami at speeds of up to Mach 0.92.

Gulfstream Aerospace is known for its large-cabin, long-range business jets and has seen its Latin American fleet go from 35 to 92 airplanes in the past six years. In 2012, Gulfstream’s largest airplane to date, the G650, is expected to enter service. According to Gulfstream Aerospace president Joe Lombardo, the company is already talking with Brazilian customers. The clean-sheet twinjet is expected to have 7,000-nm range at Mach 0.85 and a max speed of Mach 0.925, carry price tags ranging from $20 million to slightly more than $50 million, with backlogs out beyond 2014.

Brazilian aircraft manufacturer Embraer is also keenly aware of Latin America’s status as a fast-growing market, and is not taking for granted its inside track as the region’s only resident OEM. Of the 800-plus combined orders for its new Phenom 100 and Phenom 300, more than 100 are from Brazilian customers, and by the end of this year 15 Legacy 600s will be in service in Brazil. Embraer is also converting letters of intent received at EBACE for its Legacy 450 and 500 to firm orders, and according to Luis Carlos Affonso, executive v-p of Embraer Executive Jets, those orders “fully justify” the decision earlier this year to launch the program.

Finally, Embraer has received an order from the Brazilian government for two head-of-state variants of its E190 airliner. The first is to be delivered by the end of this year and the second next year.

Growth in Individual Wealth

Perhaps the interest in large-cabin aircraft, particularly in Brazil, should not be so surprising. A Cappellini/Merrill Lynch study released in June placed Brazil as the Latin American country with the greatest number of millionaires. In fact, since 2006 the number of people in Brazil categorized as ultra-high net worth, with assets of $30 million or more, has increased 19 percent. The Merrill Lynch report also notes that Latin America as a whole has seen the greatest increase of any region of the world Latin American country with the greatest number of millionaires since 2007. According to the World Wealth Report issued in 2007, there were approximately 9,400 ultra-high-net-worth individuals in Brazil, São Paulo, the World’s Helicopter Capital

High above the miles-long ribbons of daily traffic jams in Brazil’s largest city, São Paulo, there is luxurious freedom in the more than 420 helicopters that flit from rooftop to rooftop. According to Cleber Mansur, president of the Brazilian Helicopter Pilots Association, that number will approach 460 helicopters by 2010. And, he added, there are currently 280 helicopters in this sprawling metropolis of more than 3,000 square miles.

It all began in the early 1990s, when main highways into the city became jammed, not merely at rush hour but virtually any hour. Today, São Paulo is home to some 20 million people and about 6 million automobiles, and a one-hour drive from Guarulhos International Airport to the city center became two and even three hours. Growing crime rates darkened the outlook. It was not unheard of for criminals to walk up to limous stuck in traffic and demand money from passengers. Worse still, passengers were sometimes forced from their vehicle, taken to the nearest automatic teller machine and ordered to empty their accounts.

Faced with this, those with the means discovered that helicopters offer the perfect solution: speed and security. As the ranks of wealthy individuals and companies in and around São Paulo swelled, so did the number of helicopters.

In 2008, looking up at the sky from between the towering skyscrapers during rush hour, it seems almost as if there is as much traffic above the city as there is below. Even in a city of some 3,000 square miles, maneuvering a fleet of 420 helicopters offers operational challenges, and the city and operators are attempting to deal with them.

Working with local authorities, São Paulo helicopter operators have established a series of main flight corridors, most of which follow the two main rivers and the major highways that pass through the city. There are also connecting corridors, and each corridor has an assigned altitude, typically between 2,000 and 3,500 feet. By common consent, pilots remain in contact with one another on the agreed-to 127.35 MHz radio frequency. Above 3,500 feet, helicopter traffic is regulated by São Paulo ATC

Most of the helicopters were built at a time (in the not-so-distant past) when there were no regulations governing helicopter traffic patterns. As a result, there remain many interesting approaches to helipads.

According to Mansur, a new law will require that in such cases, one of the landing sites must be closed. Another law will require a minimum of 400 meters separation between helipads.

As industry in Latin America expands beyond regional boundaries to a more global stage, demand for large-cabin business jets is rapidly growing.

400,000 high-net-worth individuals with assets of $1 million or more in 2006, and about 9,400 ultra-high-net-worth individuals. In the most recent 2008 report, the number of high-net-worth individuals remained the same, but members of the ultra-high-net-worth club jumped to 10,200.
**NEWS BRIEFS** Compiled by Kirby J. Harrison

I **Brazilian Airspace Control Picks Jeppesen**

Brazil’s Departamento de Controle do Escaço Aéreo (DECEA, Department of Airspace Control) has decided to deploy Jeppesen’s total airspace and airport modeler (TAAM) software at its newly created simulator laboratory in São Jose dos Campos, Brazil. Jeppesen will provide advice and user support to ensure DECEA receives the full benefit from its investment. This includes installation, commission, system testing and training. Jeppesen will also aid with the development of the TAAM model of Brazilian airspace, as well as a detailed ground model of the Rio de Janeiro and Brasilia International Airports. TAAM is scheduled to be operational in early 2009.

II **Premier Aéreo Finds a Way Down**

If your FBO has a runway on one side and a major highway on the other, and you can’t buy or lease the space on either side, what do you do to expand your hangar accommodations? Aroldo Cardoso, president of Premier Aéreo, adjacent to Runway 17 at São Paulo’s Congonhas Airport, picked the only other direction-down. By early next year, Premier Aéreo will have completed work on a new 161,400-sq-ft hangar under the existing FBO facility. An elevator, not unlike those on an aircraft carrier, will transport aircraft as large as the Grob SPN between ground level and the underground hangar. Completion is expected in the third quarter next year, along with a second helipad. Another FBO is scheduled to open later this year at Vracapos International Airport in Campinas, and plans are being made for a third facility to open “somewhere in the northeast in the third quarter 2009.”

III **Texas Aviation Expands In Latin America**

Helicopter modification and interior completion specialist Texas Aviation Services has been providing services to the Latin American helicopter community for more than three decades and continues to broaden its customer base there.

The Fort Worth, Texas-based company recently delivered the second in a batch of three Bell 412EP helicopters to Helicol. The Bogotá, Colombia-based operator uses its rotocraft fleet to transport British Petroleum personnel to remote and otherwise inaccessible locations throughout the country.

Texas Aviation has also received repair station certification from Brazil’s ANAC (Agência Nacional de Aviação Civil). Texas Aviation is one of only a few independently owned helicopter modification and completion centers in the U.S. with Brazilian repair station certification.

IV **Mauricio Botelho Recognized at LABACE**

Former Embraer president and CEO Mauricio Botelho was honored at the opening general session of the Latin American Business Aviation Conference & Exhibition (LABACE) in August as the Brazilian Emeritus Aviation Personality. Botelho accepted the award on behalf of the company for which he assumed responsibility in 1995. The year before, Embraer had recorded losses of $330 million on revenues of just $250 million. By 1998, under Botelho’s leadership, Embraer was showing a profit. He turned the company over to his successor, Frederico Corado, in April 2007. That year, Embraer revenues came in at $5.245 billion, and net income was reported at $489.3 million.

V **Lider Aviation Puts Up New Hangar in Rio**

Lider Aviação, celebrating its 50th anniversary this year, is investing $7 million in a new hangar at the Jacarepaguá Airport in Rio de Janeiro. The 45,000-square-foot facility is slated to be completed later this year and will house a factory-approved Bell and Helibrás/Eurocopter service center.
**BUSINESS AVIATION IN Latin America**

Continued from page 44

**Brazil Midair Marks Second Anniversary with Open Questions**

Two years after the collision between an Embraer Legacy 600 and a Gol Boeing 737 sent the Brazilian airliner crashing into the Amazon forest with the loss of 154 lives, key questions remain unanswered, but the safety cost of efforts to place blame are clear.

The principal puzzles in the crash are why both aircraft were at the same altitude, why the Legacy’s transponder was not operating, and why the Legacy and ground control remained out of radio contact for close to an hour.

The day before the anniversary, Brazil’s Center for the Investigation and Prevention of Aeronautical Accidents (CENIPA) announced that the final report is under review by American and Canadian members of the investigative commission, and should be released by year-end. The statement recaposed some conclusions already reached.

The Honeywell transponder, CENIPA says, was operational although not in use, and “no errors were found in design or integration” of the Embraer’s avionics. The American pilots, Joseph Lepore and Jan Paladino of Long Island-based Excel-Aire, did not turn off the transponder, or notice or remember doing anything that might have turned it off accidentally. CENIPA also declared that ATC radio and radar equipment did not contribute to the accident.

**Radio Silence**

When the Legacy was over Brasilia, the crew was told to change to the frequency of a sector behind the airplane, rather than that of the sector they were entering. ATC did not attempt to contact them until they had passed out of range of that frequency. The pilots continued to hear transmissions throughout their flight, but only from other aircraft, never from the ground, which was not apparent as the transmissions were in Portuguese. When the pilots attempted to contact Brasilia before entering the airspace of the Manaus control center, minutes before the collision, three out of the five frequencies listed on the aeronautical chart were disabled on the controller’s console.

Still unexplained, however, is why the last transmission picked up by the Legacy from Brasilia was captured more clearly on the recorder of the more distant Gol Boeing, and why after the collision the Legacy was unable to communicate with either Brasilia or Manaus, finally relaying through a nearby cargo airplane a request for clearance to make its emergency landing at an Air Force base.

TGAS equipment on the two brand-new aircraft did not warn of the impending collision because it depends on both aircraft having operating transponders. With the Legacy’s transponder off, the business jet’s exact height also disappeared from ATC displays.

Controllers point to one specific feature of the X-4000 ATC software as having compounded the problem. A review of the software by the Federal Court of Audit (TCU) in August described the issue: “The X-4000 system possesses a functionality that automatically alters the flight level at the point on the route foreseen on the plan, without the controller’s acquiescence, and independent of the true level at which the aircraft is flying.”

When the system loses an aircraft’s exact height, either through failure of the secondary radar or loss of the transponder signal, the automatic height substitution can be misleading, controllers claim, and contributed to the Gol tragedy.

The TCU report highlights the dynamics of Brazil’s military-run ATC system, in which nearly all controllers are military personnel with their careers capped at the rank of sergeant, reporting to Air Force officers for whom ATC is normally a brief detour from flying.

On the issues of automatic altitude change, the TCU sided with the controllers, with the understated conclusion that “the incorrect presentation of the level in the data block increases the risk of traffic conflict.”

The 83-page report candidly gave the Air Force’s position. “In a meeting realized in the editor’s office, the managers alleged that they have not made this change because they fear that doing so could be used in the courts, since the controllers involved in the Gol 1907 accident used, as a line of defense in the trial on the case, the thesis that this functionality had been one of the causes of the accident.” The report says that the Air Force asked that the issue be suppressed from the text altogether.

**Criminal and Civil Trials**

The two American pilots of the Legacy were detained in Brazil for more than two months. They have been criminally charged with “endangering an aircraft” in Brazil’s federal courts, along with four air traffic controllers. The controllers, along with a fifth, are simultaneously being tried on charges including manslaughter in the independent military court system.

In May the Brazilian court sent questions to the U.S. to be answered by the pilots. However, Brazilian trial procedures changed in August, causing the judge to cancel the questioning until further notice.

After a U.S. judge ruled in July that civil suits in the case should be brought in Brazil, many families rushed to meet the two-year statute of limitations in the Brazilian Code of the Air. Leading indemnity lawyer Luiz Roberto de Arruda Sampaio explained, “Under Brazilian law the airline that carried the victims, Gol, has ‘objective responsibility.’ Objective responsibility means, roughly, ‘I don’t want to know who’s responsible; I want you to pay me.’”

Only one family has sued ExcelAire and Honeywell in Brazil. Gol says it has reached settlements with the families of 76 victims.

While Sampaio’s statement failed to answer some of the mysteries, it did make clear the safety costs of criminalization. The American pilots refused to speak to the Brazilian investigators until January of this year, delaying completion of the report. On their lawyers’ advice, none of the air traffic controllers has yet testified in the safety investigation, CENIPA says.

The newspaper O Estado de S. Paulo in September reported a steep drop-off in the number of Confidential Reports for Flight Safety received by CENIPA. The voluntary reports have fallen from 159 in 2005 to only nine so far this year. Brigadier Jorge Kersul Filho, head of CENIPA, said, “When a crewmember fills out a report and later sees that being used in court, he feels inhibited and stops collaborating.” The reports have been one of CENIPA’s principal safety tools.

—Richard Pedicini

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**U.S. Pre-clearance Coming To Universal Aruba**

Starting early next year, private aircraft traveling to the U.S. from or via Latin America will be allowed to pre-clear all U.S. Customs and Immigration at Aruba’s general aviation terminal, operated by Universal Weather & Aviation subsidiary Universal Aviation Aruba. The U.S. and Aruba reached the agreement in May this year, making Aruba the first country in the world to sign such a pre-clearance agreement with the U.S. When private aircraft operators land at Queen Beatrix Airport in Oranjestad, they will enter the customs and immigration wing of the terminal, and once cleared they will be officially considered within the U.S. and able to bypass the normally required U.S. airports of entry and proceed direct to any destination within the United States.

**Brazilian Government Picks E190 for Transport**

Brazilian OEM Embraer has signed a contract with the Brazilian government to supply two E190 airliners for government transport. The two twinjets will be configured with a secure communication system, head-of-state executive chambers and a total seating capacity for 40. Auxiliary fuel tanks will give the aircraft non-stop range from the Brazilian capital, Brasilia, to any destination in South America. The first is scheduled for delivery in December this year and the second next year. The aircraft will be operated by the Special Transportation Group of the Brazilian Air Force. The contract has a total value in the S$80 million range.

**Ricardo Nogueira Takes Over at ABAG**

Ricardo Nogueira has replaced Adalberto Feipeliano as executive vice president of the Associação Brasileira de Aviação Geral (ABAG, Brazilian General Aviation Association). Nogueira is a veteran of the Brazilian Air Force and served as a flight instructor at the Air Force Academy in Pirassununga, São Paulo. He spent 29 years at the Department of Airspace Control (DECEA), 19 of them in air traffic management. He also flew for Rio Sul Airlines for five years. He has a law degree and specializes in aeronautical law.

**Synergy and Hangar Uno Announce Partnership**

Synergy Aerospace, of which OceanAir Taxi Aéro is a subsidiary, has formed a partnership with Hangar Uno of Buenos Aires to develop and increase its share of the business jet market in Argentina.

“This partnership will allow us to deliver any kind of customer support, including AOG, maintenance and hangar storage,” said José Eduardo Brandão, director of São Paulo-based OceanAir Taxi. “We will also rent and sell business jets and helicopters in Argentina.”

Hangar Uno has a 20-year history in the business aviation services industry, from sales and rental of helicopters and fixed-wing aircraft to flight training.

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**Celebrating the partnership of Synergy Group and its subsidiary OceanAir Taxi Aéro with Argentina’s Hangar Uno at LABACE 2008 are (l-r): OceanAir director of commercial sales and marketing José Eduardo Brandão; José Enomovich, president of Synergy Aerospace; Guillermo Tuhó, president of Hangar Uno; and Hangar Uno director Miguel Candia.”**

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**Growing fastest is the helicopter segment serving the rapidly expanding offshore oil and gas industry. It was revealed last year that the discovery could raise Brazil’s oil reserves by a whopping 40 percent and usher the country into the exclusive international club of exporters. Some of these fields are more than 180 miles offshore, creating a need to modernize and expand the existing helicopter fleet.**

**This offers a particularly ripe opportunity for OEMs such as Sikorsky, whose S-76 is the most widely used**
helicopter in support of the offshore oil and gas industry in Brazil. Sikorsky expects its S-76++, with a ferry range of nearly 400 miles and cabin capacity for 12 passengers, will be much in demand. In fact, Sikorsky’s Brazilian representative, Powerpack Representações e Comércio of Rio de Janeiro, has seven S-76++s on order, of which six are destined to support offshore oil and gas operations.

Schweizer Aircraft, wholly owned by Sikorsky, was at LABACE riding the successful sale of eleven 300CBi helicopters in 2007. A two-seat light piston machine, the 300CBi gained some exposure when eight were used in support of the 2007 Pan American Games.

Helibras (Helicópteros do Brazil) is more than just the Eurocopter presence in Brazil for marketing and support; its factory in Itajuba is responsible for assembly of AS 355s, AS 355s and EC 130s for the Latin American market. The Eurocopter fleet in Brazil includes more than 300 executive helicopters and another 80 engaged in offshore oil and gas support. At LABACE, Helibras announced the sale of the first two EC 145s for the Brazilian market, as well as two AS 350B2s and two EC 130B4s to helicopter services and charter operator Helisul of Foz do Iguaçu near the Argentine border.

If there is any complaint with regard to the growing demand for helicopters in Latin America, it is not that the demand exists, but that the OEM backlog is slowing sales to impatient customers.

Clear-air Turbulence

Much positive can be said about the business aviation market in Latin America. But despite apparently clear skies, there are areas of turbulence.

Most of Latin America appears to be experiencing a period of political stability that bodes well for continued economic growth, particularly in Brazil and Mexico. On the other hand, under the heavy spending of president Hugo Chavez, Venezuela is experiencing the fastest rise in consumer prices in four years, and the central bank reported 22-percent inflation in 2007. Chavez has also stepped up his efforts to export his brand of socialism throughout Latin America, using oil income as a vehicle.

Observers speculate that his influence might find a more welcome reception were it not for the economic growth in those neighboring countries. On the other hand, some observers claim that what Chavez is doing is no different from what the U.S. has been doing for years to gain influence in Latin America.

It should be noted, as well, that Latin America is neither shocked by nor so fearful of heads-of-state such as Chavez, who describes himself as a populist. “A populist is nothing strange to Latin America,” said Adalberto Febiliano, former executive v-p of the Brazilian General Aviation Association (ABAG, Associação Brasileira de Aviação Geral), with a shrug.

On a more practical note, Latin America represents an aviation infrastructure badly in need...
of improvement and expansion, and nowhere is this more evident than in Brazil, where it threatens to stifle the growth of business aviation.

Even as the business aircraft is gaining credit as a tool for economic growth, the lack of airports and growing congestion at major destinations such as São Paulo threatens to limit its use.

In few places is this more evident than at Congonhas Airport, near downtown São Paulo. Growing congestion and recent accidents there have prompted a reduction in landing slots, with the allotment for general aviation set at four per hour. That ration is being reconsidered. But in the meantime, ANAC’s (Agência Nacional de Aviação Civil) solution is centered on the reliever airports, such as Jundiaí, where a new control tower has been opened, and at Santos, where the military air base is an alternative.

Rethinking the Infrastructure

Brandão, along with others, points out that some 150 business aircraft were expected to be delivered in Brazil this year and next. “We need more airports urgently, and another international airport,” he said. “And although authorities are discussing it, so far it is more hot air than substance.”

Embraer executive v-p of Executive Jets Luis Carlos Affonso agrees. While the future of business aviation in Brazil is promising, he said, environmental issues, airport infrastructure shortcomings and a strained ATC system are bottlenecks, just as they are in other parts of the world.

The failing aviation infrastructure in Brazil is a problem addressed by Minister of Defense Nelson Jobim, who spoke at the opening general session at LABACE this year. A jurist and politician, Jobim took over from Waldir Pires following public outcry over multiple airplane crashes in 2006 and 2007.

“We need to rethink our aviation infrastructure,” he told attendees at the conference. Jobim went on to outline some of that rethinking, including an upgrade of ground capacity for not only more landings but also for sufficient ramp space, and the continued training and hiring of young professionals who can efficiently manage a growing aviation infrastructure.

Citing the need to manage supply and demand, he noted that “A lack of capacity can strangle demand. We need a sense of urgency,” he concluded.