For the first time in several years the unabashed exuberance that has prevailed at the annual NBAA Convention was replaced by concerns—if not outright fear—that business aviation’s rapid rate of climb is now nosing over into a descent that will likely be felt beginning in 2010 or 2011 and last for at least two years. Yet business jet manufacturers by and large shrugged off the sharp declines that rocked Wall Street during last month’s convention in Orlando, pointing instead to their own healthy sales backlogs as a chief reason why the next industry downturn will be easier to weather than those of the past.

As evidence that the business jet buying boom could indeed be on temporary hiatus there were no blockbuster deals announced at the show, reversing a phenomenon in high gear at every NBAA Convention for the last eight years. Hawker Beechcraft said its Brazilian dealer, Lider Systems, placed an order for 23 airplanes worth around $200 million, but conspicuously absent from this year’s convention were the bulk orders from fractional providers and large charter firms that have plumped the show news in recent years.

But unlike the last market downturn in 2001, business jet manufacturers this time can indeed count on billions of dollars worth of orders already on the books to keep factories and completion centers busy even if new orders slow to a trickle, which is precisely what appears to be happening. All of the major OEMs still point to the international market as a source for new sales, albeit at a pace hobbled by the current economic crisis—which in the face of a steady flow of mostly negative news on Wall Street and around the globe now appears more like an economic “condition” that we’ll be living with for some time.

Just days before Honeywell Aerospace released its annual forecast of the turbine business airplane market, senior executives were still massaging the document to soften language that perhaps overstated the industry’s prospects. Still, the finished product released to journalists at a media dinner before the show predicts that the bizjet sales dip expected to start in 2010 will be relatively shallow and brief. After 2012 the industry will begin growing again almost as quickly as it has in the last five years.

Honeywell predicts that as many as 1,400 business jets will be delivered next year, far outpacing last year’s record 1,020 and the 1,200 expected to roll out of factories this year. This stellar performance will fade in the ensuing two years before climbing again in 2011 or 2012. Even accounting for the expected two-year decline in deliveries, more airplanes will roll out of OEMs’ factories in the worst year of the next downturn than at the peak of the last up cycle.

At least that’s the prediction. If economic conditions worsen further, manufacturers could see a sizable portion of their current backlogs evaporate fairly quickly, analysts warn. Still, senior executives at the major OEMs say the fundamentals of business aviation remain intact and the appetite for business airplanes is as strong as ever—even if the credit needed to buy them is harder to secure.

**OEMs Count on Backlogs**

Dassault Falcon president John Rosanvallon said he sees less than 5 percent of the company’s backlog as being in jeopardy, adding that the next downturn will be quite unlike those of the past. “We and most other OEMs say the fundamentals of business aviation remain intact and the appetite for business airplanes is as strong as ever—even if the credit needed to buy them is harder to secure.”
the beginning of business aviation.” Pointing out that sales in Russia, Eastern Europe and Brazil have picked up the slack in the U.S. market, Rosanvallon said the industry risk is much more spread out than at any time in the past. “These two characteristics make this crisis unique, and a little bit different in terms of analysis.”

Cessna chairman, president and CEO Jack Pelton said that, even with the current economic turmoil, Cessna is buoyed by the fact that it will deliver 470 new jets this year and has a backlog worth more than $16 billion. And don’t think for a second that Cessna is taking its foot off the gas pedal, he emphasized. “We are not backing off on any of our investments or development,” Pelton said at the show. He cited lessons Cessna learned during the economic downturn of 2001 to 2003, and said more new models are in the development pipeline.

During the last downturn Cessna built two new factory service centers—in Orlando and Wichita—while continuing to develop four new airplanes: the Citation Mustang, CJ3, Sovereign and XLS. “When we came out of that period, more than 80 percent of our order backlog was for those [four] new products,” Pelton recalled. “We’re going to continue with our existing development programs and be well positioned to get through this unknown period of time.”

Hawker Beechcraft commercial aircraft president Brad Hatt said orders in the U.S. have slowed in the last couple of years and that some buyers have postponed their delivery slots, but he echoed the optimistic outlook on international markets, saying they have remained comparatively strong. He added that the portion of the company’s $7.4 billion backlog that might be in jeopardy is small. “People aren’t going to walk away willingly from million-dollar deposits” they’ve placed on new airplanes, he said. Also signaling a commitment to forge ahead with new projects, Hawker Beechcraft introduced two derivative models at the show: the Hawker 450XP with more efficient engines and more capable avionics than the Hawker 400XP it replaces; and the King Air 350i, featuring a more modern and quieter interior than the current Model 350.

But despite the global economic downturn, those who travel the globe aboard lavish bizliners don’t appear to be cutting back on transportation. Airbus, for one, reports “no downturn” in orders for its bizliners this year. “Our market is not affected,” said François Chazelle, vice president for executive and private aviation. “We could sell more aircraft if it weren’t for the limited capacity at the completion centers.” So far this year Airbus has sold nine widebody bizliners and 14 single-aisle bizliners.

Meanwhile, Boeing Business Jets president Steven Hill said at the show that the company has added orders to its backlog in the past year for 21 aircraft worth approximately $3 billion. Overall, the company claims a total backlog of 59 aircraft, consisting of 33 of its 737-based BBJ series and 26 widebodies worth a total of $8.2 billion. But according to J.P. Morgan industrial analysts who spoke at the show, the business jet market is headed for a 15-percent downturn following the expected peak in deliveries in 2010. However, they also predicted the downturn will be shallower than the 31-percent decline in 2001 and 2002, seeing massive declines in air travel in China,” Nadol said. “It’s like nothing we’ve ever seen before. Things are shrinking, and it’s happening in India, too.” Nadol added that the analysts are puzzled because the countries’ economies are growing, a fact that should point to a corresponding increase in aviation. “There’s obviously some sort of disconnect somewhere,” he said.

Business will increase in the Middle East, Eastern Europe (including Russia) and Latin America. “There’s a lot of cash out there,” said Stephen Tuska, executive director of J.P. Morgan Securities. “There’s been a pickup in demand, which will make the downturn less brutal than the one in 2001 and 2002.”

Cessna is seeking volunteers to transport some 2,000 athletes to the next Special Olympics, which will be held July 17 to 24, 2010, in Lincoln, Neb. The company would like to secure at least 325 Citations to support the effort. Cessna began transporting Special Olympics athletes and coaches in 1985 with two company aircraft. Since then, the airlift has grown to a volunteer effort that includes hundreds of Citation owners who make their aircraft and crews available to Special Olympians and their coaches.

CONVENTION CLIPS

Embraer, CAE Launch Phenom 100 Training
Embraer CAE Training Services, a joint venture of Brazilian OEM Embraer and Canadian simulator training services provider CAE, launched its first pilot and technical training programs for the Phenom 100 entry-level jet, to be based at the CAE training facility in Dallas. While the announcement at NBAA’08 marked the official launch, technical training actually began in August and pilot training in September. The effort is supported by a Phenom 100 full-flight simulator. A second full-flight simulator for both the Phenom 100 and Phenom 300 is scheduled to open at CAE’s Burgess Hill training center in the UK in next year’s first quarter.

GE Honda nearing HF120 certification
GE Honda Aero Engines said it is releasing hardware designs and receiving manufactured hardware for its first HF120 development engine, in preparation for formal certification testing. To date, the company has built and tested 10 HF120 engine cores and 10 full engine demonstrators. During demonstration testing at Honda’s WAKO-Nishi R&D Center in Japan, the HF120 produced more than 2,100 pounds of thrust and exceeded its fuel-efficiency target. The tests also verified the engine design’s operability and thermal, mechanical and component efficiencies, according to GE Honda.

Harrison Ford To Chair 2010 Special Olympics
Actor/pilot Harrison Ford accepted the position of honorary chairman of Cessna’s 2010 Special Olympics Airlift at NBAA’08. “It is an opportunity for the athletes, an opportunity for Cessna to demonstrate its community-minded approach, and an opportunity for all of us in aviation to do something positive and high-profile to promote aviation at a time when aviation faces some difficulties,” Ford said.

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Some Records Fall at NBAA’08
NBAA concluded its 61st Annual Meeting & Convention with 30,811 in attendance, close to a record and representing what association president and CEO Ed Bolen deemed “a solid turnout.” “This year’s show comes amidst spikes in the cost of fuel, tightening credit markets and a challenging economy,” he said. “Business aviation has been impacted by adverse economic trends like every other industry, so we’re pleased that our convention continues to offer a valuable marketing and networking opportunity for our member companies.” As evidence of the value that NBAA members place in the opportunities available at the show, Bolen noted that the total number of exhibit booth spaces sold inside the Orange County Convention Center numbered 5,302, beating last year’s high of 5,257. The 1,183 exhibitors (nearly a record) joined a record-setting 139 piston, turboprop and jet aircraft on display at nearby Orlando Executive Airport, the association noted.

Once again this year volunteers built a playground for local kids near the static park host airport. More than 250 NBAA members and local residents pitched in on the Saturday before the show to construct the play-ground at a local apartment complex. Last year, in recognition of NBAA’s 60th anniversary, the association partnered for the first time with Ka-boom—an organization whose mission is to put a playground within walking distance of every child in America—to erect an aviation-themed playground at an elementary school near Atlanta’s Fulton County Airport, the site of last year’s static display. ~S.P.
Despite the strengths of the industry, however, a number of signs point to a definite downturn. Tusa said corporate lending standards have tightened, a move that usually precedes an economic downturn by three or four quarters. Corporate spending and profits have a direct effect on business aviation. “Next year is going to be a tough year,” he said. “We’re already hearing reports of small business owners using credit cards and home equity loans to meet their payrolls.”

**News of the Show**

Gulfstream led the news on the opening day of NBAA’08 by taking the lid off one of the most porous secrets in recent years: the Gulfstream G250, a successor to the G200 that gets more cabin length out of the same fuselage and the new, wider-chord wing the G200 sorely needed, along with a T tail and new engines and avionics (see page one). No other new business jets debuted at the show, perhaps unsurprisingly after the parade of new models—from the Citation Columbus to the Gulfstream G650 to the Learjet 85 to the Embraer Legacy 450 and 500—unveiled in the last year. But there was plenty of news at NBAA’08 nonetheless.

Noting that the company has invested $1.5 billion to develop and support its growing line of business jets, Embraer executive v-p Louis Carlos Affonso pointed to a service center in Florida and the value of its airplanes as reasons why the Brazilian company is ready to take on the more established OEMs, and in particular Cessna. Embraer also offered further details about the interiors of its Phenom 100 and 300 and said certification of the Phenom 100 was imminent.

Cessna and Bombardier both showed new interior mockups for their latest jets, with Cessna unveiling a flashy cabin for the Citation Columbus that the company...
said was intended to be reminiscent of a hip New York City hotel. The interior made liberal use of tonal grays and blacks with “lipstick red” accents throughout. Bombardier, likewise, revealed an ultramodern interior in the Learjet 85 mockup that made use of dark accents against cream-colored seating.

Bombardier Learjet vice president and general manager David Coleal at the show strongly hinted that little of the structural design work done by Grob on the Model 85 was salvageable and that Bombardier’s facility in Queretaro, Mexico, would play a critical role in providing most of the aircraft’s structural components.

Coleal also announced that Learjet is tapping the expertise of an internal Bombardier composites advisory board to navigate the way forward on the aircraft and that the company remains committed to delivering the first certified Learjet 85 by 2012.

Bombardier terminated its contract with Grob on September 17, a month after the German company filed for insolvency. “We learned a lot [from Grob] but a lot was still left to do, so we are going to re-evaluate everything,” Coleal said, adding that Grob had not developed any tooling or parts for the Learjet 85 and that most of the engineering work done by Grob probably would not be used in the project. Coleal said Bombardier has no plans to hire any of the Grob engineers involved on the Learjet 85 and that the composites technology on the aircraft could change substantially.

The first of what could be as many as 80 Bombardier Challenger 300 super-midsize jets, meanwhile, has entered service with block charter operator XOJet. The two companies unveiled the airplane, outfitted with a distinctive interior, at the NBAA’08 static display at Orlando Executive Airport. XOJet placed firm orders for 20 Challenger 300s at last year’s show, along with options for an additional 60.

Options on four of those aircraft have been converted to firm orders so far. The San
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Carlos, Calif. company currently operates a fleet of 23 Cessna Citation Xs and plans to build that fleet to 48 aircraft by 2012. XOJet sells block time to members and provides traditional charter services. XOJet differentiates its service from traditional jet card programs in that the average member buys a comparatively larger block of hours.

Epic Aircraft plans to certify the Victory and Escape prototypes in the U.S., according to chairman and CEO Rick Schrameck. The company is still pursuing certification of the Dynasty turboprop single in Canada, but has not released a timeline for the certification. Epic has completed 300 hours of testing on the Dynasty to date. “We love Canada, but we’re Americans,” Schrameck remarked, adding that Epic will pursue certification of the Victory jet single and Escape turboprop single under Part 23 rules for aircraft with an mtow of less than 6,000 pounds.

He also said the Victory and Escape certification will “probably jump ahead” of the Elite twinjet, the prototype of which is still a hostage in Tbilisi, Georgia, following the Russian invasion. In addition, the company is splitting into two individual, wholly owned businesses.

The experimental product group will consist of Epic Air and aircraft completions services (ACS), and the technology group will consist of aerostucture composites, design R&D and certifications. Schrameck said the company is separating so the FAA can “better define what we do.”

Germany’s Dornier Aircraft, meanwhile, announced plans to manufacture and sell the Seastar flying boat in the U.S. Former Adam Aircraft president Joe Walker will head the program as CEO of the recently formed Dornier Seaplane Company.

Dornier Seaplane is independent of other Dornier Aircraft businesses and is wholly funded by the Dornier family. To date the family has invested $150 million for the design and development of the $6 million all-composite twin-engine amphibian but is seeking additional U.S. investors to fund the program. Calling it one of the “hard realities” of the industry, Walker said the company will require another $150 million to bring the airplane to full production status.

All manufacturing and product support will be conducted in the U.S. and only a small core group of engineers will remain at the company’s headquarters in Germany. The company expects to create up to 500 jobs at the as-yet-undetermined manufacturing facility, which will most likely be located in the Southeast U.S. Dornier Seaplane expects demand for 30 and 50 Seastars per year, for total sales of up to 500 over the next 10 years. At its full production rate, the company would generate $300 million in revenue annually.

Viking Air of Sidney, British Columbia, meanwhile, announced at the show that it flew its DHC-6 Twin Otter Series 400 prototype for the first time on October 1 from Victoria International Airport. Said Steve Stackhouse, pilot-in-command and Viking’s manager of flight operations, “The aircraft performed beautifully.” Michael Moore, co-captain and engineering test pilot, echoed, “The first flight went smoothly and the aircraft handled exactly as expected.” The airplane was on display in the NBAA static park at Orlando Executive Airport.

On the fractional front, acknowledging that Flight Options had strayed from its original vision, company founder Kenn Ricci and CEO Michael Silvestro, both of whom returned to the operation in recent months, announced initiatives designed to “recapture the energy we had” at the beginning.

“I don’t blame the [previous] management [for the loss of energy],” Silvestro said at an NBAA’08 press conference. “The owner at the time thought it was better to be smaller.” He added, however, that the current management and owner–HIG Capital, which bought the company from Raytheon in 2007—are dedicated to growth. Silvestro said the company has a new logo, will repaint and refurbish all airplanes in its fleet within 15 months and has put six new salespeople in charge of its Midwest, South Central, Southeast, Great Lakes, New England and New York territories.

Thales demonstrated for the first time at NBAA’08 its new iDeck “avionics prototyping, advanced system simulation tool.” The simulation platform lets airframers and their customers design, validate and test their future avionics suite configurations and functionality before entering full-scale development.

The iDeck concept is based on a generic hardware platform, connected to a simulated aircraft environment, including complete phases of flight and integrating complete sets of subsystems and functions such as an interactive flight management system, terrain awareness and warning, head-up display, digital map and cockpit controls.

Not surprisingly, politics and the economy dominated the agenda at NBAA’08. Pete Bunce, president and CEO of the General Aviation Manufacturers Association, said his members are concerned about the credit crunch but are taking a wait-and-see attitude. “Nobody knows quite yet what is happening and companies are now looking for solutions to protect themselves in the future,” he said.

NBAA president and CEO Ed Bolen outlined the association’s efforts in opposing aviation user fees, and reminded the audience that the fight is not over yet. Unable to come to an agreement on FAA reauthorization, Congress approved an extension of the current authorization to the end of March.

“When the new Congress convenes,” Bolen said, “we’ll be starting from scratch. But in some ways we’re ahead of last time. Over the last two years our community has learned how to come together to fight user fees and we’ve found friends outside the industry who help us. We’ve also shifted to a more positive focus. Instead of responding only to the airlines’ strategy of vilifying business aviation, we’re working to make the Next Generation air transportation system a reality based on fuel taxes, not user fees.”