

# A year like none other

Boeing faces profound challenges in 2009. What must employees do to make the year a success? The leaders of Commercial Airplanes and Integrated Defense Systems offer their views.

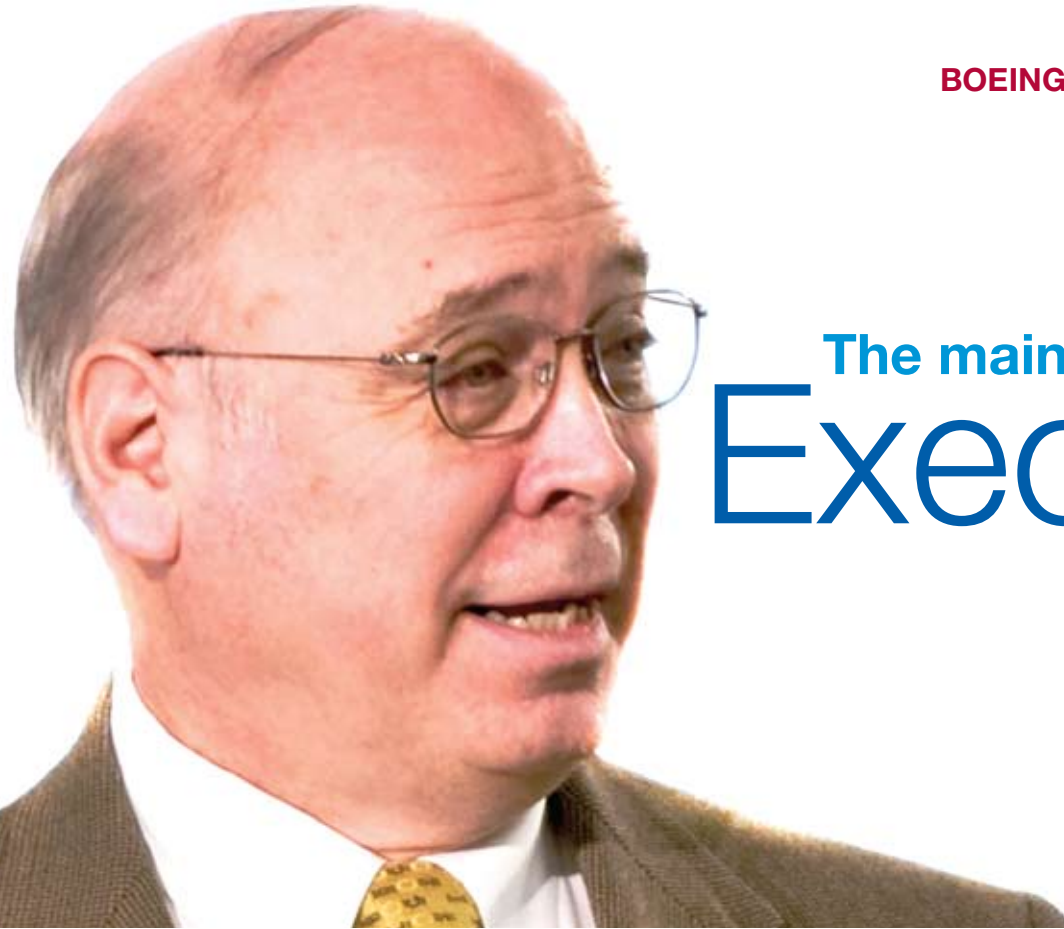
**F**or Boeing and its employees, 2009, perhaps more so than any recent year, brings with it a startling set of contradictory and challenging circumstances.

On the one hand, Boeing's major business units, Commercial Airplanes and Integrated Defense Systems, have compiled extensive backlogs worth a combined \$352 billion. In addition, international customers play a stronger role in each business unit's plans: Not only does Commercial Airplanes' backlog feature more orders from international customers than has traditionally been the case (see Page 35 of the July 2008 *Boeing Frontiers*), but IDS envisions international markets as a major source of business growth. These factors illustrate how important international markets are to both business units.

Yet on the other hand, the conditions in Boeing's major business markets arguably constitute the most difficult set of challenges the company has seen recently. The world is dealing with a recession and an ailing financial industry. Commercial and defense customers are having to adjust to these economic realities—and so is Boeing.

That backdrop raises the question: What's next for Boeing?

To provide insight on this question, *Boeing Frontiers* spoke with the leaders of the company's two major business units—Scott Carson, president and CEO of Commercial Airplanes, and Jim Albaugh, president and CEO of Integrated Defense Systems. In separate discussions, each leader offers his respective takes on the 2009 outlook for his business unit and its markets—and discusses the priorities each organization needs to focus on to make the year a success.



## The main focus: Execution

Scott Carson, Commercial Airplanes

**W**ith the first decade of the 21st century ending on an economic down note, Commercial Airplanes and its customers and suppliers face some tough challenges. Scott Carson, Commercial Airplanes president and CEO, recently put the current business environment in perspective for *Boeing Frontiers* and reviewed the top priorities for the year ahead. Following are highlights of the discussion.

### Q: What big issues does Commercial Airplanes face?

**A:** There are a number of challenges facing our business. There's no question that one of the biggest issues arises from the delays in the 787 and 747-8 programs. Our execution on those two development programs has not been satisfactory. This affects near-term opportunities for us to grow, and it affects how our customers think about us. It directly affects—today and tomorrow—our financial results.

Certainly we delivered fewer airplanes than we expected last year, and that had a big impact on us. And none of us suspected that the world around us would be threatened by the economic cycle we are now a part of. This has a lot of implications for us.

Thirdly is an issue that relates to the first two: Our recent announcement concerning a reduction in our work force. This was a very, very difficult decision. It is in response to the totality of the environment we are facing. It is an effort to help us to prepare for an uncertain future and to manage our cash flow, which is so important to our business for funding key development programs and ensuring our competitiveness through this difficult period.

Recently we restructured our organization to help put more focus and better execution in the airplane programs and our global supply chain. One of the key results of this effort is to integrate the 787 program with the rest of the production family to drive the improvements that are necessary to make that program a

long-term success, and a profit engine, for the company. Overall, the organization change will benefit our entire production system, put more emphasis on quality, boost our competitiveness and put us in a position to address the challenges of 2009.

### Q: How severe is the impact of the global recession?

**A:** The short-term market outlook is tied to the economic environment we're facing. We are indeed in a global recession. We have never been through a set of circumstances like we're going through today. Having said that, we're as well-positioned as any company in the world to get through this if we stay focused on execution.

Still, the economic situation is really dicey right now. We're seeing gross domestic product (GDP) deterioration in every part of the world. Just a year or 18 months ago, some major nations were enjoying double-digit GDP growth, but now those rates have dropped in a dramatic way.

Oil prices continue to be highly volatile. The good news is that where prices are today, airlines could be profitable, so there is an opportunity if the traffic is there for them to actually make money. The bad news is that we're seeing the impact of the recession on air travel.

Nonetheless, our 20-year forecast still suggests this is a very robust and very reliable market. But we are clearly going through a hiatus right now in terms of traffic, and the data can be hard to read. Our Sales team is watching this carefully to be sure that every airplane coming out of a fleet has a potential home so that we don't adversely affect the total business here at Boeing. All in all, most of the customers flying Boeing airplanes are holding on OK. So, based on where we are right now, we see relatively steady production over the next 18 months as we deliver on our backlog.

**Q: How solid is the Commercial Airplanes backlog?**

**A:** You may have seen some media reports indicating that our orders were off by a substantial amount last year. True, but we still took orders for 662 airplanes, and that was after coming from a couple of record years that had been well over 1,000. The fact is 662 orders still ranks as the eighth highest year in our history. So it isn't like we dropped through the floor. In other times it would have been considered outstanding business volume.

Also on the positive side, I like our model mix and the geographic dispersion of our backlog. All in all, this works well for us. I think we are as well-positioned in our backlog as we could hope to be. (See charts below.)

**Q: What about the services side of the business?**

**A:** The services market remains good. Of course, the airplanes that have come out of the fleet—mostly MD-80s and 737 Classics—are no longer consuming spares. So, the spares side of Commercial Aviation Services has been adversely impacted. But the technical services side of the business and the Jeppesen and Aviall subsidiaries are doing well. So even with pressure on revenues, the CAS organization has been able to meet its performance plan. Also, opportunities continue to open up for us around the globe in the services business.

**Q: Should Commercial Airplanes be working more closely with suppliers?**

**A:** Part of our restructuring effort deals specifically with supplier issues. Whether suppliers are outside the Boeing walls or inside the Boeing walls, we need a singular focus on that aspect separate from final assembly. Airplane programs and services

are how we make our money, but we need to focus on the quality, cost, productivity and schedule effectiveness of our supplier partners.

Our new Supply Chain Management and Operations organization will put a concentrated effort on driving first-time quality improvement from our supplier partners as a continuation of our productivity journey. We need to maintain the partnerships that we worked so hard to build while driving long-term productivity that benefits both of us.

**Q: How would you sum up the key focus areas for 2009?**

**A:** Clearly the first one is to finish our developmental programs. We must get them into the marketplace so they're generating revenue for our customers and for ourselves.

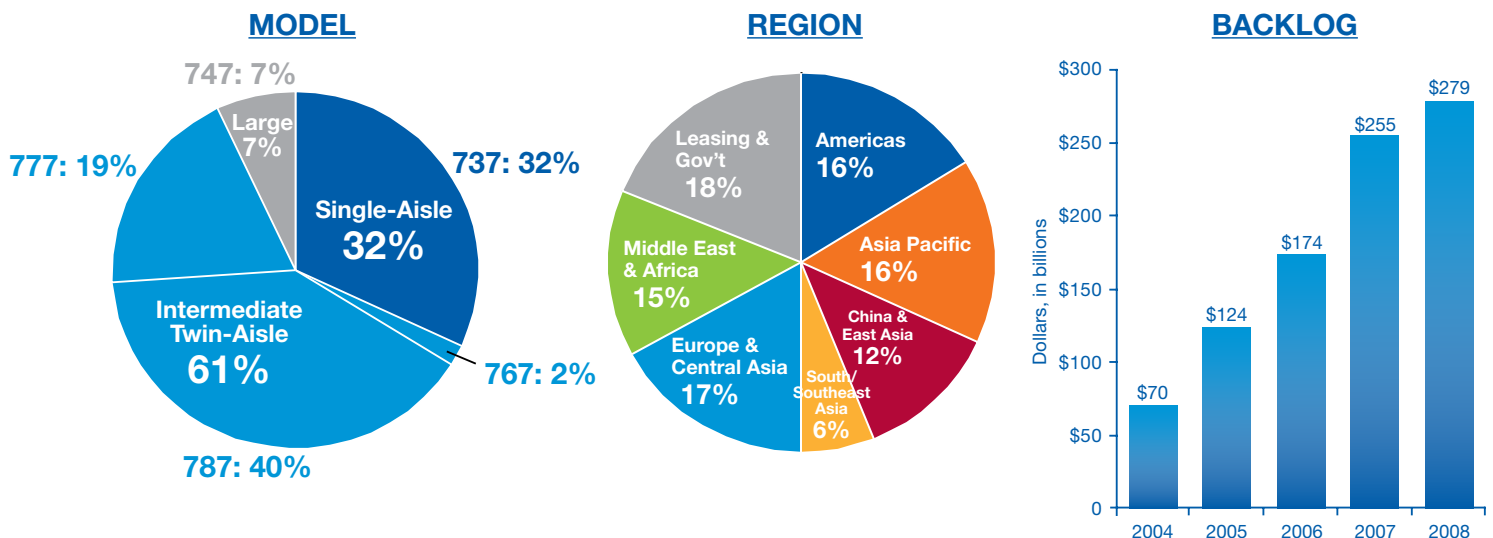
Second is keeping the backlog sold. That means being agile in terms of how we understand what's happening in the marketplace and being agile in terms of how we move our model mix around to keep production rates steady.

Third is quality. Our customers are not going to tolerate a production system—whether it's ours or our suppliers'—that is not delivering a high-quality product. We can differentiate ourselves in this market by making quality the most important thing we deliver to our customers.

And finally, the business plan. As I mentioned recently to my leadership team, the Commercial Airplanes plan approved by the company is, in my view, only the floor—the minimum goal. We have to work significantly throughout the year to exceed the plan. If we deliver a high-quality product to our customer with every delivery, if we delight the customer every time, we can beat the plan—and that will put us in a whole different place in the market. ■

**A SNAPSHOT OF A BACKLOG**

Commercial Airplanes' backlog reflects the market's interest in intermediate twin-aisle airplanes such as the 787 Dreamliner. It also shows how the great majority of airplanes are destined for customers outside the Americas—and that the value of this total backlog has mushroomed in the last few years.





# Know our customers' needs

*Jim Albaugh, Integrated Defense Systems*

**T**he New Year brings challenges and opportunities for Integrated Defense Systems. Clearly the financial meltdown and global recession weigh on everyone's mind and will affect business in 2009. At the same time, IDS has built a near-record backlog and enters the year with its fundamental financial strength and competitiveness intact. Equally encouraging, there are plenty of new business opportunities in the United States and internationally. Jim Albaugh, IDS president and CEO, sat down with *Boeing Frontiers* to discuss the way forward in 2009.

**Q: We began the New Year with a big positive—the first international sale of the P-8 anti-submarine and surveillance aircraft, to India. What does that say about our fundamental strategy amid the uncertainties of 2009?**

**A:** The P-8 sale represents something unique and powerful about Boeing: that we have certain strengths and capabilities that no other defense and aerospace company can match. It says further that if we continue to leverage this “One Boeing” strength, then we could see some more positive outcomes that set us apart from the rest of the industry. It also shows that we have the right strategies, people and technology to succeed over the long term—not only in platform businesses but for all of our IDS business units.

**Q: We're in a recession, the United States has a new president and U.S. defense spending is likely going to be cut. How does IDS manage through this?**

**A:** We need to keep our programs healthy, and here I'm talking about executing on our programs, making sure that they are relevant to the warfighter and their needs near-term, and keeping them politically viable. And that means working with the Washington, D.C., office on Capitol Hill.

At some point the budget will moderate. It will moderate as the U.S. gets out of Iraq, it will moderate because of the competition for government funding with the other social programs that exist, and I think that we need to be prepared for that time. And there are things that we can do to make sure we remain competitive.

**Q: Why do you feel IDS is well-positioned to remain competitive during leaner times?**

**A:** It's impossible to predict with perfect clarity which programs will survive and which ones won't. But we do understand the enduring needs of our customers. And if we focus on these needs—mobility, integrated command and control, global situational awareness, logistics support, force projection—and on developing technologies that support those enduring needs, as programs come and go we will be very well-positioned to win new opportunities.



At the same time I think price and cost will be much more of a determining factor, and we need to make sure our cost structure is one that offers us a competitive advantage now and in the future. Our strategy of enhancing existing platforms with new capabilities—including network-centric features—also helps our customers by providing lower-cost, low-risk and high-value solutions.

**Q: How do you think U.S. defense acquisition will change under an Obama administration?**

**A:** There certainly have been acquisition issues, there have been protests that have been sustained, there have been cost overruns, there have been programs that don't necessarily match the needs of the warfighter. I think it's time for both the Depart-

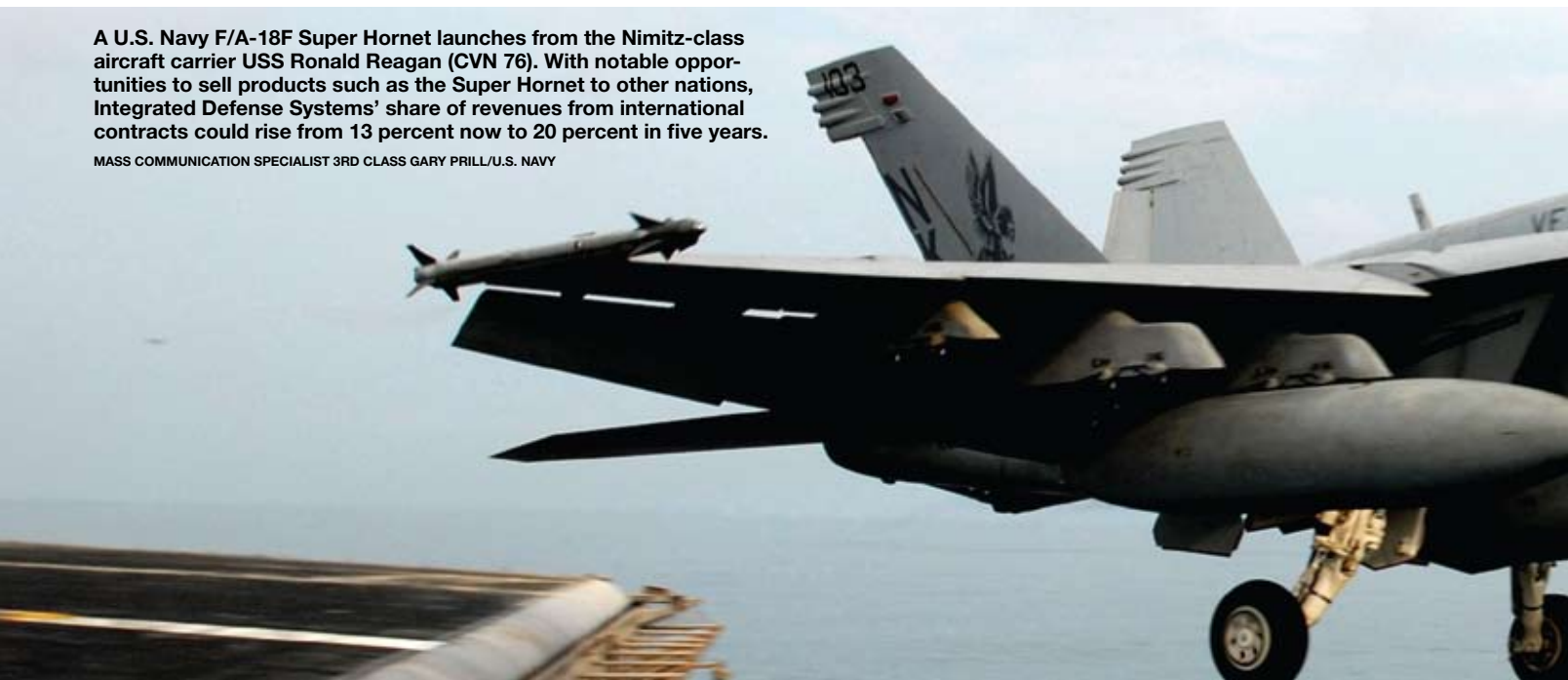
**Q: Where do you see business opportunities for IDS in the near term?**

**A:** Clearly an opportunity that we can all work on is our cost structure, making sure that the things that we are doing add value to our customer and that we're doing them as efficiently as we can. At the same time, there are many international opportunities we need to address aggressively. Some of the biggest sales potential will be in key international markets that are seeking a variety of aircraft. There are also adjacencies, such as Homeland Security, the intelligence market and other government services, that we need to address in a much more aggressive fashion than we have in the past.

The other opportunity has to do with the whole area of sup-

**A U.S. Navy F/A-18F Super Hornet launches from the Nimitz-class aircraft carrier USS Ronald Reagan (CVN 76). With notable opportunities to sell products such as the Super Hornet to other nations, Integrated Defense Systems' share of revenues from international contracts could rise from 13 percent now to 20 percent in five years.**

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ment of Defense and Congress and the defense companies to really sit down and address some of the issues that are driving these problems.

Relative to protests, having clear requirements, having good communications with all the competitors up front in the competition phase of the program and then carefully following the requirements of the Request For Proposals, all need to be done.

**Q: Do you anticipate a gradual or sharp decline in defense spending over the next five years?**

**A:** I don't anticipate a sharp decline. I think the environment we're in today is very different than in the '80s when there was a marked reduction in the defense budget. In those days, all the equipment was new and budget cutters could take cost out of the Defense Department by reducing personnel. The threats were well-understood. Today, there is a full spectrum of threats that need to be addressed. The equipment is old and needs to be reset, and we're adding 92,000 troops to the Army and the Marines.

port. As the airplanes that are out there continue to age and are not replaced, there will be more opportunities for our Global Services & Support business to provide the necessary upgrades, maintenance and training.

**Q: Tell us more about the international market.**

**A:** Right now I see more international opportunities than I have seen in my career with Boeing. These opportunities are driven by the fact that the threat environment has changed around the world, but it's also a result of globalization. Many countries that didn't have the ability to buy defense products now have the means to purchase them.

We see opportunities for fighter aircraft, rotorcraft, network systems, airborne early warning and control airplanes, and the C-17. Today, about 13 percent of our revenues are driven by international contracts. Within five years that number can reach 20 percent.

**Q: How critical is it to make cost a competitive advantage?**

**A:** In the present environment there are two overriding factors that will likely dominate our customer's decisions. One, do they get the capability that they need? And two, do they get it at a price that they can afford? We are a company that can always put together a great technical answer, but sometimes our solutions are so elegant that they become costly. And sometimes our solutions lack mature technologies that should be included—and that drives costs up. But our customer is going to have to make trades between cost and capability, where they have accepted a solution that provides them not the optimal capability, but the required capability. In fact, we've already seen them do that in

**Q: Another part of the IDS strategy calls for shaping new markets and agencies by leveraging the network. Can you describe some of the most promising of these opportunities?**

**A:** We've said for many years that using existing programs and capabilities and by linking those programs and systems together ensuring data and capabilities, you can provide a capability that didn't exist before. We've done that with Missile Defense, we are doing that with Future Combat Systems, and we are doing that with the Secure Border Initiative. There are more opportunities to make existing platforms more capable, more survivable through networks. There is potential internationally, too, where networking has not been done to the same extent as here.



places. And that means all of us need to understand the requirements of the customer, meet the requirements and make sure we put them into our programs.

**Q: How does IDS drive out cost from complicated and highly technical programs?**

**A:** The first thing we have to do is to make sure that we understand the requirements, and that means a lot of face-to-face communications with our customers. Second, we need to make sure our solutions use mature technologies. Third, we need to make sure that we've done good systems engineering and we've put together a very complete and integrated master plan. Then, we must be disciplined in how we do the work to make sure that as issues come up they are readily addressed by the program teams.

Another big part is making sure that, as we flow down requirements to our suppliers, we flow down the correct requirements. We have to spend time with them so they understand the requirements—just as we need to understand the requirements of our customers.

**Q: We face some challenging times in the short term, and Boeing has encountered tough times in the past. Why do you feel IDS is in such a solid position today and is well-prepared to grow in the future?**

**A:** I think it starts with the people that we have. This team has demonstrated time and time again they can handle adversity, they can solve difficult problems and they understand how important their work is to the customer. I'm sure that as we better understand the challenges we face in the coming years that once again this team is going to step up. And the leadership team is going to do everything we can to make sure that the team has all the information we have about issues, about budgets, about programs and about challenges. ■

*John Lockard, IDS chief operating officer, explains the link between productivity and cost containment—and leadership of the defense industry. Page 20*