

**Marion Blakey  
President and CEO  
Aerospace Industries Association**

**Hexcel Corporation – Worldwide meeting  
Chantilly, Virginia**

**Jan. 30, 2008**

Good afternoon to you all. I'd like to thank Hexcel Chairman and CEO David Berges (BUR-JIS) for inviting me here to address you today. I understand that many of you have come from far-flung locales to be here, so I welcome you.

Hexcel is one of those companies that gets more and more impressive the more you get to know about it. I saw a chart that showed dots on a diagram of a commercial jet airliner for every part provided by Hexcel. Now, you could barely see the plane with the dozens of dots splashed around the page, covering the diagram from the nose to the tail cone. The list of platforms that incorporate Hexcel materials as integral parts reads like an all-star team of the aerospace and defense industry – F-18 ... F-22 ... F-35 ... C-17 ... V-22 ... 747 ... 777 ... 787 ... the GE90 engine series ... oh, and that little-used craft called the Space Shuttle.

But it's one of the non-aerospace business units that made the biggest impression on me. You see, I love to ski, and have for many years. Like most skiers, years ago I heard about a legendary ski that came out in the early 70s that was made out of a crazy material no one had ever seen before. The status symbol of the Hexcel ski certainly put your name on the map, even though you don't manufacture them under your brand anymore. I understand that more than half the skis and snowboards made today contain Hexcel materials. From what I've seen of skiers recently, the time they spend in the air after launching off jumps might qualify them as part of aerospace after all!

Hexcel and the Aerospace Industries Association are similar in that our interests span the industry and its subsectors of space, defense and civil aviation. It's extremely exciting and rewarding to be involved in so many of these intriguing arenas. As you can imagine, I have been working to take in volumes of information in my few months on the job at AIA. But today I'm

going to concentrate on a topic that has been in my portfolio for a while. Civil aviation is very important to both our industry as a whole, and your company in particular.

As we just saw from George Hamlin's presentation, civil aviation is extremely complicated, with many factors affecting the industry's bottom line. In December I delivered AIA's annual Year-End Review and Forecast, which showed civil aviation driving an extremely strong aerospace industry. We are set to reach record levels in many categories for 2007, including overall sales, commercial aviation orders and foreign trade balance.

I'm sure many of us read the reports from both Boeing and Airbus that they had remarkable years, shattering order records. Those orders will translate to a very strong base for our industry for the next several years, at least. Now, I know we are all worried about the softening in the U.S. economy and the potential for recession. But analysis we have done at AIA shows the U.S. aerospace industry is less likely to be affected than many sectors, and we expect our strong forecast to hold up at this time.

But we've all been in at this long enough to know our industry is not immune to outside influences. There are two things in particular that have the potential artificially to trip-up the civil aviation industry as we move forward – infrastructure constraints and environmental concerns.

We all saw George's chart a moment ago that showed projected traffic and seat capacity growth looking into the future. I don't know about you, but I thought it was in danger of spiking clear off the screen! Obviously, the pressures on civil aviation as we go forward are remarkable.

The U.S. Department of Transportation forecasts that the number of domestic air passengers will hit one billion by 2015, which is not that far away when you think about it. That represents an increase of 31 percent more than today's volume. Our current air transportation system simply cannot handle that many passengers. Many of you here are frequent travelers, and I'm sure you have noticed we are near capacity in our system today. We all know it only takes a bank of thunderstorms to wreak havoc on air travel on any given day.

The problem is that we are forced to rely on an air transportation system built on an outdated architecture. While the system is very safe, as statistics prove, it is based largely on radar technology that dates back to just after World War II. In fact, the system today does not allow us to fully use the capabilities that are in most of the current fleet of aircraft.

While we have made piece-meal improvements to our air traffic control system, now is the time to take a bold step forward.

Fortunately, we have a way to improve infrastructure to the point we are not only keeping up with demand, but handling it with confidence. When implemented, the Next Generation Air Transportation System – known as NextGen – will transform the way we handle air travel in the United States. Similar technology can be applied virtually anywhere in the world. Our colleagues in Europe, as many of you know, are developing the SESAR system that will see comparable technological advances.

NextGen incorporates advanced satellite-based technology to allow more efficient point-to-point travel and will revolutionize the way we deal with challenges like weather delays. Here's a short list of the benefits NextGen will provide – precision navigation ... secure digital communication ... highly tuned surveillance systems ... advanced flight deck avionics ... more accurate weather information ... and the environmental benefits are formidable. For example, in 2005 airport congestion and air traffic delay forced airlines to consume 2 billion gallons of fuel unnecessarily at a cost of 3.3 billion dollars.

One challenge is securing the political will to get NextGen to where it needs to be. On average, approximately a billion dollars additional will be needed annually to keep NextGen infrastructure on track. Everyone agrees that we need to upgrade the air transportation system, but the devil is in the details. At AIA we have made it a top priority to advocate for NextGen on both the policy and financial levels and will continue to do so going forward. The issue is one of our top election priorities for this year, and we have been reaching out to all the candidates within both parties stressing the importance of modernizing the air transportation system. Too much is at stake, and we expect all our elected officials to address it.

Many of you have traveled internationally to be here today – hopefully you have shaken off the jet lag by now! The global nature of business travel underscores an important point about air transportation modernization – it can't be done in a vacuum. Continued growth in aviation

around the globe, particularly in rapidly developing regions and countries, depends on modernization. So an important part of aviation infrastructure modernization involves international cooperation and outreach.

Our industry and the U.S. government have relationships with many countries and regions around the world that are working to make sure advanced technology is in place.

Every country or region has its own set of challenges that must be overcome to make sure we have the best global air transportation system possible. Statistics show a huge increase in air travel demand today in both India and China, and projections show it will keep climbing into the future. Both nations are lacking in the infrastructure to keep up with these increases. So working with these nations to improve air travel safety and capacity is extremely important.

India and China are both moving aggressively to address their infrastructure constraints and install state-of-the-art systems. An excellent recent example of cooperation is the U.S-India Aviation Cooperation Program. This partnership involves both governments as well as major aviation companies in both nations. The goal is to identify and support India's air transportation modernization priorities, especially concentrating on the lack of existing infrastructure in a nation that ranks among the fastest-growing in the world for air travel.

In China, a key challenge is to increase access and flexibility within their air transportation system. Last fall the Chinese system introduced reduced vertical separation minimum to increase their capacity. Once again, U.S. industry and government is helping these efforts. The Wright Brothers Partnership U.S.-China Aviation Cooperation Program is designed to foster training and technical cooperation as China's aviation industry moves forward.

Last month I had the privilege of addressing the Montreal Chapter of the Royal Aeronautical Society. As you can imagine, this was a cosmopolitan audience with many attendees linked to ICAO, the United Nations' international civil aviation organization, and other multi-national groups.

I stressed the need for a global air transportation system that is coordinated and interoperable no matter where you are operating in the

world. The reaction I received was overwhelmingly positive, and it makes me optimistic that at the end of the day we will make it to this important common goal.

The other major challenge we all share is the environment. Let's face it – like any other industry that uses hydrocarbon fuels, aviation has an adverse impact on the environment. It is a much smaller effect than many other sectors and industries, contributing only between 2 and 3 percent of all greenhouse gasses worldwide. But unless we take aggressive action, that number is likely to grow. It's the goal of the U.S. aviation industry to push that number lower.

We all know that global warming is front-page news, and noise issues are always important at the local level. So it's clear to me and many others in the industry that environmental challenges are far and away the biggest barriers to growth in aviation, both in the United States and around the world. We in the American industry know full well how important this issue is to the global community.

I think we've all seen the news reports on protests in Europe specifically targeting the aviation industry regarding greenhouse gasses. Some of the rhetoric has been alarming in its tone.

One European climate center said flying is the worst thing an ordinary person could do to damage the planet, and a column in the Guardian newspaper in London suggested aviation was to blame for catastrophes like flooding in Bangladesh. An official from the European air transportation management group CANSO said aviation is in danger of becoming the next tobacco industry.

But let's put this in perspective. As an industry, we have an excellent record of environmental stewardship. But we need to do a better job of telling that story. We have achieved significant improvements in aircraft fuel efficiency since the dawn of the jet age. Between 1960 and 1997, the industry reduced fuel consumption per available seat mile 70 percent, an average of 1-2 percent per year. Since 1997, we have reduced aircraft fuel use a further 3-5 percent, and we anticipate significant reductions in the future. This is due in large part to the strength of market forces.

However, market forces alone are not strong enough to meet local air quality and noise challenges. Yet, manufacturers have been aggressive in addressing these concerns.

Oxides of nitrogen (NO<sub>x</sub>) certification standards have been reduced to 40 percent below the original 1986 ICAO standard, and aircraft noise has been reduced 90 percent since 1975.

While the tone of the debate in the U.S. has been more level-headed than in Europe, it is no less important of an issue here. One of the first things I learned upon coming to AIA a few short months ago was how important this issue is to the manufacturing community. We are committed to pioneering new aircraft and engine technologies that are more efficient. The industry understands the most immediate means of reducing aviation emissions of all types can be achieved by improving the efficiency of air traffic management systems. In addition to the significant environmental benefit, there are gains in safety.

So, our industry is not resting on its laurels. While we are committed to providing technologies to improve the performance of the current fleet, we are working today on the technologies for aircraft and engines that will be built five or 10 years from now.

This means at least a 15 percent improvement in CO<sub>2</sub> and fuel efficiency in each new generation of aircraft while continuing to significantly reduce engine NO<sub>x</sub> and the noise footprint. This goal is definitive and measurable.

This is where Hexcel is on the front line. Now, I don't have to tell a room full of people who work in the composites field how much this technology means to reducing aircraft weight and increasing performance. The increased use of composites in aircraft, including the new models -- like the Boeing 787 -- made up mostly of the advanced materials, will result in remarkable gains in fuel efficiency and go a long way toward making aviation as clean an industry as possible. The excitement I've heard expressed throughout the aviation community industry on the future of composites is remarkable, and I'm proud to count an innovator like Hexcel among AIA members.

There are other exciting new technologies that will make environmental gains even greater. The engines that will power the new air frames will be markedly more efficient than those in use today.

Engine companies are making such strides that we are seeing new classes of engines, like the Pratt & Whitney geared turbo fan, emerge. This engine will soon become a reality as it has been chosen to power the Mitsubishi Regional Jet.

Biofuels are another area where we are making progress. For example, Boeing and GE Aviation are working with Virgin Atlantic to test the use of biofuels to power airliners. A demonstration flight is planned for next month to test this promising clean-fuel technology.

Officials have said they do not expect the biofuel to negatively affect the test engine's performance or range, and no modifications are necessary to use the alternative fuel. This is yet another very promising development when it comes to aviation's environmental impact.

I talked about NextGen earlier. I can't stress enough the significant benefit that the system will have on aviation's environmental impact. Since aircraft will fly more efficiently in point-to-point routes using less fuel, emissions will be reduced.

There will also be fewer aircraft idling on runways and burning fuel in holding patterns. Studies show that modernizing the air transportation systems in the U.S. and Europe will reduce greenhouse gas emissions by 10 to 15 percent in each region. So NextGen technology is the best of several worlds when it comes to making leaps forward.

We are living and working during a remarkable time in the aviation industry. Like the skiers perched on a mountain with trusty Hexcel technology on their feet, we are ready to plunge into an exciting ride that will undoubtedly have some twists and turns.

But the one thing we are sure of is that millions and millions more people will be traveling by air in the coming years and decades, and we must be ready for them. Artificial constraints like insufficient infrastructure and environmental impacts cannot be allowed to drag down an industry that is ready to climb to even greater altitude.

Thank you, and I'd be happy to answer any questions.

**--AIA--**