

MINUTES OF THE HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT.

The joint meeting of the Senate Commerce and House Economic Development Committees was called to order by Chairman Kenny Wilk at 12:45 p.m. on March 27, 2003, in Room 313-S of the Capitol.

All members were present except: Representative Krehbiel, Excused
Representative Kuether, Excused
Representative Boyer, Excused

Committee staff present: April Holman, Legislative Research
Debra Hollon, Legislative Research
Fulva Seufert, Secretary

Conferees appearing before the committee: Lt. Gov. John Moore
Jeffrey L. Turner, Vice Pres., General Manager, Boeing
Commercial Airplanes, Wichita Division

Others attending: No List

Chairman Wilk opened the joint meeting of the Senate Commerce and House Economic Development Committees by welcoming Lt. Governor John Moore to the Committee. The Lt. Governor said he was a former aviation executive and is very concerned about the future of the industry.

The Lt. Governor then introduced Mr. Jeffrey L. Turner, Vice President, General Manager, Boeing Commercial Airplanes, Wichita Division, who opened by saying he appreciated the invitation to talk about Boeing's 7E7 Program. He outlined the environment of Boeing in today's economy. Boeing is about 12,000 strong in workforce with nearly \$1 billion in payroll, which, of course, is down significantly in numbers since 9-11. Mr. Turner said that last year Boeing was studying concepts for both the Sonic Cruiser and a new super-efficient jetliner. But now they have focused their product development efforts on the jetliner 7E7 which will allow them to apply advanced technologies to bring dramatic improvements in air travel for both the airlines and passengers in 2008. He stressed Boeing's good reputation as a designer and builder of airplanes. He said they had gained in market share with the new airplanes they have built and that about 80% of those jobs were not in place 10 years ago. He further stated that what Kansas workers will be doing at Boeing ten or twenty years from now will depend largely on the state's and Boeing's roles in the 7E7 program. He said that it was important for Kansas that Boeing be selected to be part of the 7E7 team. Before 9-11 and the downturn in commercial airplane orders, Boeing's economic impact on the state approached nearly \$3 billion annually. Mr. Turner said, "The 7E7 program has the potential to sustain thousands of manufacturing and ancillary jobs for those selected to join the supplier team." (Attachment 1)

The discussion included many questions concerning what the legislature can do and what is expected along with the level of financing that other cities have and how much money it would take for Boeing to know that Kansas is serious. Mr. Turner's answer to how much money it would take was 500 million to do the type of program they are considering. He said at full production, 4,000 employees would be needed to incorporate all the basic technology for this airplane and all future airplanes. When asked about who the biggest competitor is, he responded that it is a global partnership for this airplane. The Committee members asked for details on what the state can do. The conclusion was that legislators need to know the issues and study to work out a creative plan for Boeing and the state to work together to figure it out. Mr. Turner said as far as time frame is concerned, 2003 is a pivotal year for this program. What the configuration will be and who the key partners will be are decisions that will be made in 2003. The big question will be whether Boeing Wichita will be funded from internally generated funds or externally generated funds. Mr. Turner told the Committees that in terms of creating an environment for a partnership that the state and Boeing have cleared the first hurdle by having this meeting. He thanked the Committees for extending them this opportunity, and that hopefully by working together Kansas can be as competitive as anyone in the world.

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT at 3:30 p.m. on March 27, 2003 in Room 522-S of the Capitol.

Chairman Wilk told the Committees that it would be necessary to develop a plan or a proposal from Kansas during the next six weeks and that the House Economic Development Committee will be reconvening and meeting to work on a plan of action. He also said the Committee would be working closely with Lt. Gov. Moore.

Chairperson Brownlee thanked Mr. Turner and said she was pleased to hear about this exciting opportunity. Chairman Wilk also thanked the Lt. Governor and Mr. Turner for appearing before the Committees.

The meeting adjourned at 1:20 p.m.

**Briefing to the Kansas Legislature
7E7 Airplane Program**

Jeffrey L. Turner
Vice President, General Manager
Boeing Commercial Airplanes - Wichita Division

March 27, 2003

Thank you for the opportunity to address this joint meeting of the Senate Commerce Committee, House Economic Development Committee, and other members of the State Legislature who are here today. My name is Jeff Turner. I am the Vice President and General Manager for the Wichita Division of Boeing Commercial Airplanes.

As most of you know, Boeing Wichita is a primary engineering, fabrication, assembly, and modification center for The Boeing Company. Our Kansas operations encompass both commercial and military work. We build the complete fuselage of the 737 and 757 airplanes in our Wichita factory. Within the 13,000,000 square feet we occupy on our 1,200-acre site in Wichita, we employ over 12,000 Kansas workers and have a payroll of nearly \$1 billion.

Let me begin by expressing my appreciation for the interest the state of Kansas is showing in the new 7E7 airplane program. For almost 75 years, Boeing Wichita and the state of Kansas have exemplified Boeing's motto of "working together," and the 7E7 is one of the most significant opportunities we have ever had to cooperate on a mutually beneficial initiative.

I do not plan to give you a detailed description of the 7E7 at this time but have attached a recent article ("*Boeing's new jetliner takes shape*") for you to review at your convenience. Last year, Boeing was studying concepts for both the Sonic Cruiser and a new super-efficient jetliner. Responding to the overwhelming preference of airlines around the world, we have now focused our product development efforts on the new jetliner. This will allow us to apply a suite of advanced technologies that will bring dramatic improvements in air travel for airlines and passengers in 2008. We will continue to study and develop faster airplanes like the Sonic Cruiser for later market applications.

This year, Boeing will announce an international team of suppliers (both internal and external to the company) to design and build the 7E7. Boeing Wichita is well positioned to participate as a result of solid business decisions and our exemplary technical competence, but we are outmatched financially by others vying for the work. Our modern facilities, our trained and capable workforce, and our reputation to deliver superior products give us an important edge. However, without the capability to secure independent financing, we cannot effectively compete with today's global manufacturers.

House Economic Development
3-27-03
Attachment 1

Testimony by Jeff Turner (7E7 Airplane Program) - continued

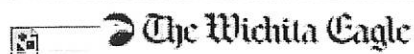
Clearly, it is important for Kansas that Boeing Wichita be selected to the 7E7 team. Before the downturn in commercial airplane orders, and the resulting reduction in employment, our economic impact on the state approached nearly \$3 billion annually. Now, for the first time in recent history, that number may begin to decline. Continued investment in our facility, made possible by your strong support over the years, has helped Boeing Wichita be repeatedly assigned major responsibilities on new airplane programs, most recently the 737 Next Generation and the 777. Nearly eighty percent of the work performed in our Wichita factory today did not exist ten years ago. What Kansas workers will be doing at Boeing Wichita ten or twenty years from now will depend in large part on our role in the 7E7 program.

Boeing Wichita is proud to have been a close partner with Kansas and Kansas citizens for a very long time. Our continued success can be attributed in large measure to the willingness of our communities, our Kansas suppliers, and our state and local governments to stay the course with us through both good times and times of difficulty and challenge. The 7E7 program has the potential to sustain thousands of manufacturing and ancillary jobs for those selected to join the supplier team. Working together, we can demonstrate that Kansas can be as competitive as anyone in the world.

Thank you again for your kind invitation to address your committees and members of the State Legislature. I will be pleased to answer your questions.



Posted on Sun, Mar. 09, 2003



Boeing's new jetliner takes shape

BY JAMES WALLACE
Seattle Post-Intelligencer

EVERETT, Wash. - Talks with airlines about Boeing Co.'s super-efficient jetliner are going well, with new details emerging about the size, range and shape of the company's first all-new jetliner since the 777, according to the head of the 7E7 development program.

Two 7E7 family members are planned initially, with one seating from 200 to about 225 passengers in three classes, and a stretch version that would carry about 250 passengers in three classes, Walt Gillette said in an interview last week.

More discussions with potential airline customers will further refine the final configurations before the end of the year and determine which version Boeing builds first.

The 7E7 program is on schedule, and the company expects to be ready to seek board approval by the end of 2003 to offer the plane to customers, Gillette said. A formal program launch would follow in early 2004, with the first flight in the third quarter of 2007 and the 7E7 entering service with airlines in mid-2008.

Boeing Wichita's eventual role in the program, if any, is still unclear. The local plant was part of the advanced materials team for the Sonic Cruiser program, which was cancelled in favor of the 7E7 in December.

Dead aim at Airbus A330

Even though Gillette called the new plane a "child" of the 777, he revealed that it will have a different fuselage shape.

It is a design that takes dead aim at Airbus and its A330-200, the main competitor to Boeing's 767 in what's known as the middle of the airplane market.

The 7E7 is seen as a replacement for the 767. It would be significantly more efficient than the 767 and the A330, according to Boeing.

Rather than the standard circular fuselage cross-section of the 777, the new plane will have what's known as a "double-bubble" fuselage. This will allow it to carry bigger cargo containers like the A330, while also providing more room than the A330 in the main cabin for passengers.

Airlines are saying they want the 7E7 designed for eight-abreast economy-class seating, Gillette said.

The seats and aisles would be at least as wide as those on the 777, he said.

Composites or aluminum

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Gillette said there is a "horse race" among composite and aluminum makers as Boeing begins to zero in on what kind of advanced materials will be used for the new plane. He said Boeing does not yet know if major structures such as the wing and fuselage will be made of composites or new aluminum alloys that are considerably stronger than what has been used on airplanes before.

He said Boeing will begin to make selections by next month about which materials to use on certain parts.

The 7E7 will be a combination of carbon-fiber composites, new aluminum alloys, some fiberglass and more titanium than has been used on jetliners before, Gillette said.

"We are having a great competition between the aluminum companies and the composite companies," he said. "It's an absolute horse race of the finest kind."

Because weight was such a critical factor, the Sonic Cruiser would have been built mostly of composites.

New engines, new plane

Boeing shelved plans late last year to develop the Sonic Cruiser, which would have carried passengers at nearly the speed of sound. Airlines told Boeing they wanted the Sonic Cruiser's advanced technology in a plane that would be much more efficient to operate than today's planes.

The 7E7 will have about 17 percent less fuel-burn per passenger seat than the 767-300 and about 20 percent less than the A330-200, Gillette said.

In recent interviews, Airbus executives have said that once the new engines for the 7E7 are ready in a few years, they could be used on the A330 to make it as efficient as the new Boeing plane.

But Gillette said the engines, while much more advanced than those available today, would only provide about 8 percent more fuel efficiency if put on an existing plane such as the A330-200.

A further 2 percent or 3 percent improvement in efficiency comes from correctly sizing the plane during its development to match better engine performance, he said. Another 3 percent comes from advanced aerodynamics, while another 3 percent comes from weight reduction using advanced materials.

"When you design a plane from scratch with more efficient engines, you get more benefits than just the engines," he said. "It's a full meal deal to get this kind of efficiency."

Another factor for an airline is the trip costs, Gillette said. Fuel is only a small part of that equation. And the 7E7 will provide about an 8 percent lower cash operating cost per mile than the A330-200 or the 767-300, he said. This cost includes fuel, crew pay, maintenance and ground handling fees.

Long-range from get-go

The 7E7 is being designed as a mid-size jet, but with the extended range found on the new 777-300ER and the new 747-400ER. These planes can fly upwards of 7,200 nautical miles.

The 7E7 would fly from 1,000 to 1,500 nautical miles further than the A330 or 767-300.

"With the 7E7, we are bringing big airplane economics and big-airplane range to a medium-size plane," Gillette said.

The time Boeing spent over the past two years talking with customers about the Sonic Cruiser helped focus airlines on their needs for an all-new mid-size plane, Gillette said.

"The Sonic Cruiser got the dialogue going about the business case and the way the industry wants to be in 2008 and beyond," he said.

He described the 7E7 talks with airlines as "intense."

"We have a lot of dialogue going on in many areas," he said.

"We are doing well on our schedule. It's like we have been spending the last year and a half getting ready for this intensity."

A double-bubble

The most critical decision for any new plane is the fuselage cross-section. Once set, it cannot be changed.

The 7E7 is being sized so that cross-section below the cabin floor will be nearly identical to that of the A330-200, Gillette said.

That means it can carry the larger LD-3 cargo containers. The 777, 747 and A330 carry these size cargo containers. The 767 has to carry smaller, specially designed LD-2 cargo containers and this has hurt sales in competitions against the A330.

Above the floor, the 7E7 double-bubble cross-section will be wider than the A330, Gillette said. The cabin of the 7E7 would be about 226.5 inches at its widest, or at about shoulder height for sitting passengers, Gillette said.

Airbus jetliners, including the A330, all have circular cross-sections like the 777.

Most Boeing jetliners have used the double-bubble cross-section.

For the 7E7, this will mean that future freighter versions will be able to carry cargo pallets crossways on the main deck rather than lengthwise, as with the A330, Gillette said. This will allow more pallets to be carried.

Pallets are different from cargo containers. Cargo is essentially strapped on pallets that are then loaded onto a plane.

Long or short

After the cross-section is determined, the second most important decision for a new airplane is the length of the fuselage for the base plane.

In the past, most jetliner families have been designed so that longer versions come later. Shrinking an existing plane was not considered very economical.

But Gillette said modern airplane design, using advanced modeling techniques and digital definition, means the bigger 7E7 could come first.

But that does not mean it will be first.

The decision on whether to build the bigger or smaller 7E7 first will depend in part on the requirements of airlines that want the first planes.

"We are ready to go either way," Gillette said.

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