

→ don't finish supper - people in India will starve -

beacon II II  
monks II II  
zealots II II

## **Boeing Supplemental Information -- Great Innovators**

*"Innovation is the central issue in economic prosperity" – Dr. Michael Porter*

### **William Boeing**

In 1910, Boeing went to Los Angeles for the first American air meet. Boeing tried to get a ride in one of the airplanes, but not one of the dozen aviators participating in the event would oblige. Boeing came back to Seattle disappointed, but determined to learn more about this new science of aviation. He spent a lot of time talking about aviation theory with George Conrad Westervelt, a Navy engineer who had taken several aeronautics courses from the Massachusetts Institute of Technology. In the autumn of 1915, Boeing returned to California to take flying lessons from another aviation pioneer, Glenn Martin. Before leaving, he asked Westervelt to start designing a new, more practical airplane. Construction of the twin-float seaplane began in Boeing's boathouse, and they named it the B & W, after their initials. On July 15, 1916, Boeing incorporated his airplane manufacturing business as Pacific Aero Products Company; a year later, he changed the name to the Boeing Airplane Company. In 1917, the 28-person payroll also included pilots, carpenters, boat builders and seamstresses. When the B & W did not sell, Boeing used his own financial resources to guarantee a loan to cover all wages — a total of about \$700 a week. By the end of 1918, 337 people were on the Boeing payroll.

→ today →

### **Bill Gates**

Bills love for computers and math led him to a new place around his neighborhood that was renting computer time. He got an arrangement with the owners that he would get free computer time if he found things that would make the computer crash. During this time Bill met Paul Allen his business partner for the rest of his life. Together they started a small company called Traf-O-Data, they sold a small computer outfitted with their program that could count traffic for the city. He told his teachers that he would be a millionaire by the time he was 30 -- this was one of the few times he underestimated himself, Bill was a billionaire when he was 31.

### **Soichiro Honda**

Honda left school at age 15 to seek work as an auto mechanic in Tokyo. His first job was hardly auspicious: For a year he cared for the infant baby of his boss's family. With the child in tow, he often wandered the garage, watching the mechanics and making suggestions. As Honda tinkered with engines in between diaper changes and bottle feedings, it became obvious that his strength wasn't in child care but rebuilding engines. He soon attempted a full-time stint as a professional race-car driver, but a crash suffered in a race nearly killed him and sent him back to work as a mechanic. He formed his own company in 1937. Japanese militancy was at its height, and in 1938, Honda's company was forced to switch to building engines for the Imperial Navy's boats and planes. After Allied bombing leveled his factory near the end of the war, Honda showed that his mechanical genius extended to pursuits other than cars. For more than a year, he made a living brewing alcohol with a homemade still. In 1948, he returned to his true love by starting a new company: Honda Motor Co. Honda Motor introduced its first car in 1957, the N360. The Japanese government tried to strong-arm Honda into merging his company with one of the country's stronger automakers. He refused and set out to make stylish vehicles with high quality handling and engineering.

### **Akio Morita**

Morita came from a family that had been brewing sake for 400 years. He began tinkering with electronics at a young age, and at 25 started a company with Maseru Ibuka in the basement of a war-devastated, bombed-out department store — with \$500 in borrowed cash — and hawking tape recorders from the back of a pickup truck to a generation of Japanese consumers who had no idea what they could possibly be used for. From there it was on to his seminal visit to Bell Labs in the early 1950s, when he looked at the best of American research—the transistor (for which its American inventors saw only a small niche market in hearing aids). He foresaw the future of the transistor-based microelectronics that was at the heart of Sony's success in transistor radios. Having once been stung in Europe to learn that Westerners in the 1950s equated "Made in Japan" with "toys" and cheap, poor-quality items like the little umbrellas floated in cocktails, he would go on to oversee breakthrough developments in color television, camcorders, video recorders, and the Walkman, among thousands of other Sony products that helped redefine "Made in Japan" as a phrase embodying leading-edge technology, quality, and high customer satisfaction.

①

### Talking Points:

**Very Important Note:** After MS takes podium, he immediately should call the company officials to front, shake their hands, and welcome them to SC before making the announcement.

① This will be the planned photo op of the event. Company officials are Tom Risely of Vought and Giuseppe Giordo [jis-EP-ee jee-OR-doh] of Alenia

→ officially introduce them to SC

**Another Note:** Wherever possible, MS should emphasize his and Bob's personal involvement and hands-on approach to this project (trips to Rome, Dallas, etc.)

### The Future of Flight Begins Today

➤ I think it's very appropriate to be making this announcement today – 101 years ago this month, the Wright Brothers made their historic first flight

While NC may have been first in flight, SC will be home to the future of flight with this announcement today.

### What we're announcing

SC is going to be home to manufacturing and assembling roughly 60% of the fuselage for Boeing's 7E7, the Dreamliner – a plane that will literally revolutionize commercial flight.

Vought Aircraft Industries will be producing fuselage sections here in North Charleston. Then, a joint venture between Vought and Alenia Aerospace will assemble and finish a larger portion of the fuselage before shipping it to Washington State to be finished by Boeing

Overall: 645 jobs, \$560million in capital investment

**Key Point:** But this announcement is a lot bigger than those numbers for a couple of reasons:

### I. Clustering and the Monitor Report

Michael Porter →

The Wright brothers could never have envisioned the manner in which the airplane revolutionized the world in which we live.

Likewise, it's difficult to envision the scope of what this announcement will mean for South Carolina's future

This, aerospace composites, is exactly the kind of high-tech, high-growth industry we're talking about when we talk about clustering.

BMW - 1<sup>st</sup> manufacturing facility outside Germany

- 1<sup>st</sup> Italian Aerospace Investment in USA.

Closest comparison we can make in terms of significance is BMW

Because of BMW's decision to build their facility in South Carolina, we now have a thriving auto cluster in this state.

We have a cluster that includes ICAR, we have 232 auto suppliers in the state, and there are auto-related companies in 41 of our 46 counties.

That's after only a decade. It's exciting to think about what we'll be saying about the aviation and composite industries in this state ten years from today.

## II. Composites and a History of Innovation

Why did the Wright Brothers flight succeed? Lots of folks were working on flying, but the Wrights were doing things no one else was doing

Propeller - Until the Wrights, no one really understood how a propeller was supposed to work when it came to flight. They turned to ship-building literature and discovered the principles used, eventually allowing them to test propeller shapes in their wind tunnel, discovering an efficient shape.

Power plant - up until this point, all "flights" had been in un-powered gliders. The Wrights needed a lightweight gasoline engine that would drive the propeller, but no one could build one to their specs. So they built it themselves with the help of a friend Charles Taylor.

On, Thursday, December 17, 1903, their plane achieved man's first powered flight -- 12 seconds, 120 feet. The brothers flew 3 more times that day. The final flight of the day carried Wilbur 852 feet in 59 seconds.

These are two companies with a history of innovation that have been around almost as long as the Wright Brothers -

Vought started in 1917 as the Lewis & Vought Corporation, today has a workforce of more than 6,000 serving commercial and military customers.

Alenia has its roots all the way back in 1912, today has a workforce of 8,800 serving commercial and military customers.

South Carolina is joining these companies on the cutting edge of aeronautics by helping make the first plane comprised almost completely of composite materials. That's what's so significant here is the kind of materials these airliners will be built with

The future of the aviation industry is in the use of composite materials -- Airplane components that are today made with aluminum and other metals will tomorrow be made with composites, which are highly durable and lightweight.

NEW HORIZONS

(cutting edge of)  
new technologies.

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With the presence of the Vought and Alenia facilities in South Carolina, our state will be well positioned to become a leader in this extremely promising, high-growth sector. We will develop a skilled labor pool of workers experienced in the industry, and a network of suppliers will likely grow, as companies relocate to be near our hub of composite expertise and as start-ups and spin-off companies develop to support the industry.

Besides aeronautics, other examples of composite applications include the automotive, maritime, biomedical, infrastructure, and sports industries.

### ③ About Competing in a Global Economy → outward not inward

This project is about more than the jobs that are being created and the investment that's being made right now. It's about the birth of a modern, high-tech, high-skill cluster in South Carolina - this launches SC into the global economy

It's about creating not just a regional, not just a national, but a GLOBAL base of knowledge in the composites and aerospace industries, right here in South Carolina. It's about the world-class companies and the world-class minds that will now call South Carolina home.

→ Vought  
→ Alenia

All this adds up to competitiveness - this announcement means a significant competitive edge for South Carolina

It's also about SC being able to compete for this type of investment -- The competition for this project was as strong as it gets. This was a high-profile contest that involved states across the country, and South Carolina emerged victorious because of our strengths:

→ 1.2 b. choice, 1 billion Indians

pro-business environment, terrific workforce, infrastructure (especially the port), top-notch training programs, committed leadership at all levels, and our quality of life.

South Carolina is a U.S. leader in international investment because South Carolina's strengths are universal in their appeal -- SC ranks 2nd in terms of the percentage of our private workforce employed by foreign companies (8.1 %).

### Close -- People to thank:

Bob Faith, Jack Ellenberg, Daniel Young, and Sam Moses (in the European office) at Commerce.

→ Steve Dykes, Charleston County Economic Development Office.

→ Heyward Horton, Charleston Regional Development Alliance.

Legislators: Wilkens, Harrell and McConnell will be present and should be thanked

environmental community

### ④ → QUALITY OF LIFE

① Tom Spatt - London?  
② Bob Harrell / Hugh - leg changes  
③ Penn

⑤ PERSISTENCE & PARTNERSHIP - best see  
remember - low field MOBILE, (JES EP EE) // Dallas (3 AM thunderstorms)  
(Rome dca) → Bob