Interview With CEO

Mr. Randy H. Brinkley
President

Boeing Satellite Systems
Boeing Space & Communications

Interviewer ： Takao Ueda
AIAA JFSC

Mr. Randy H. Brinkley

Biography

As president of Boeing Satellite Systems (BSS), Randy Brinkley is responsible for general management of the world's largest manufacturer of commercial communications satellites.

Prior to his current position, Brinkley was senior vice president of Programs for BSS. He was responsible for execution of all the company's programs.

Before joining BSS in May 1999, Brinkley was the program manager for the International Space Station (ISS) at NASA for five years. Earlier, he was mission director for the Hubble Space Telescope repair mission.

Brinkley joined NASA in 1992 after two years with McDonnell Douglas Corporation.

After 25 years in the U.S. Marine Corps, Brinkley retired as a Colonel. He has flown more than 4,000 hours in 42 types of aircraft.

He received his BS degree from the University of North Carolina in 1965 and a MS from Boston University in 1980. Subsequently, he undertook several graduate works in national defense related Colleges and Schools.

For his efforts on the Hubble Repair Mission and other excellent jobs, Brinkley received the NASA Outstanding Leadership Medal, and many other honorable Medals and Awards from various organizations.

Brinkley was born Sept. 29, 1944, in Asheville, N.C., and now lives in Manhattan Beach, Calif., with his wife, Lisa. They have four children.

--- What has been the biggest challenge after you took your position as the President of BSS?

Brinkley: **In its purchase of Hughes Space and Communications Company, The Boeing Company's goal was to acquire our tremendous intellectual capabilities – our people, and our technology. The greatest challenge I have faced as leader of BSS is to accelerate the integration of BSS into the larger entity that is Boeing.**

For example, Boeing has a strategic thrust called Global Connectivity, which means weaving terrestrial and space-based networks to create new communications solutions for our customers. As chairman of Boeing's Strategic Sub-council for Global Connectivity, it is my job to lead Boeing's efforts to take early leadership in this arena. We see a lucrative window of opportunity opening now, and our greatest challenge is to move quickly in joining BSS' satellite technology with Boeing's integration expertise so that the company can focus on new applications and services markets.

That said, I never forget that we face an equally important challenge every day. I am referring to our need to perform on the satellite contracts we have and to ensure that the satellites we deliver have the highest quality and reliability.

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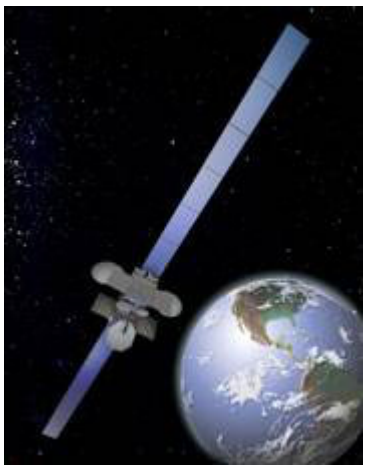

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--- How is your projection for the commercial satellite market for the next few years?

Brinkley: **In spite of the recent economic downturn, I believe the future offers enormous potential for dramatic growth. By the end of the decade we see an**

addressable infrastructure and services market of nearly $40 billion out of a space-based communications market of $180 billion.

Boeing believes that broadband, greater demand for video, and mobile services are still prime areas of growth. We also see opportunity in Digital Audio Radio Services (DARS). These areas will pace the evolution of the communications industry, in all its forms.

For example, according to the Yankee Group, the number of broadband subscribers for Internet access in Asia will increase nearly 850 percent by the year 2003. By any measurement, that is healthy growth – and it will open new markets for communications carriers and technologies.

The economic challenges of the past year have also made it very clear that unlocking profit in these opportunities will take a much greater understanding of the critical success factors involved. It will also take an emphasis on networks and applications rather than infrastructure.

--- What is your view for the unique role of satellite communications in the rapid growth of terrestrial broadband networks?

Mr. Brinkley during interview

Brinkley: **I'll give you two examples of the most significant developments in this area. Digital signal processors, or DSPs, change a satellite from what we call a "bent pipe," which passively reflects relatively simple information streams, into a "switchboard in space," which intelligently directs complicated,**

changing communications traffic of all kinds.

Since the first generation of our DSPs in 1995, we've improved the throughput they can handle 20 times. These fourth-generation DSPs are capable of 50 trillion operations per second.

Another key capability comes from active antenna technology. Instead of continuously sending a signal to a continent-sized satellite broadcast footprint, active beams provide the capability to custom-tailor delivery to much smaller geographic areas, such as cities or provinces.

These technological advances are on-orbit today. We are confident that these innovations will make money for our customers as they redefine how satellite communications can fit in the global web of communications and commerce.

---You have been emphasizing the importance of program success at the customer, which should be assured by the utmost reliability/quality of the satellite built by BSS. How do you actually plan to enhance the assurance of the products at BSS?

Mr. Brinkley & Mr. Ueda talking about the satellite business

Brinkley: **We take full responsibility for how our products perform on-orbit. In retrospect, in trying to meet the legitimate business needs of our customers BSS has been less disciplined than we should have been in introducing new product**

lines and new technologies. To address this, we have implemented a more measured, rigorous approach to introducing new technology while improving our system tools to understand risk and predict performance on-orbit. We are also implementing a more thorough documentation of our manufacturing procedures.

Thuraya at integration area

Thuraya

-- The purchasers of the commercial satellites outside U.S. have had significant problems in both program schedule and technical information availability because of the restrictive export license application. How is your view for the improvement of these situations at least for the allied countries of U.S.?

Brinkley: **It has been a difficult challenge to balance the U.S. government's responsibility to make sure that satellite technologies with a military application are properly protected, just as it is our responsibility to protect intellectual property for Boeing. At the same time we also recognize the requirement and responsibility of our customers to understand the product they are purchasing and operating for years to come. I believe we have made significant progress in balancing these requirements, and in a time when world events would suggest a more restrictive interpretation by governments. So, on the contrary, we have seen a more balanced and responsive attitude and action by government regulatory agencies. We will keep working to improve and streamline the process.**

--- Lastly, may I ask how do you enjoy your personal life away from work?

Brinkley: **When I do get away from work I like to exercise and garden. My favorite sports are water skiing and snow skiing with my family.**

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Mr. Brinkley and Mr. Ueda after interview