Connexion by Boeing Flying Test Lab Pioneers New Frontiers in Airborne Communication Services

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The Boeing Company (NYSE: BA) is successfully using a sophisticated flying laboratory to test, validate and pioneer new solutions in broadband airborne communications. Connexion One, a specially equipped Boeing 737, is being used to demonstrate overall system capability and to certify portions of the on-board hardware, systems and procedures that will enable commercial airliners and other aircraft such as executive jets, to begin offering passengers real-time high-speed Internet and intranet access, television and e-mail.

"Connexion One provides a dedicated environment for demonstrating the robustness and inflight operability of the Connexion by BoeingSM service," said Connexion by Boeing President Scott Carson. "That's a capability that helps to reduce future risk by thoroughly testing all aspects of the service before it's installed on commercial airliners. It also has proven to be a powerful sales and marketing tool, because global airlines have the opportunity to experience first-hand the tremendous benefits of airborne broadband communication," Carson added.

Connexion One is operated by the Connexion by Boeing flight test team. The cabin is equipped with onboard server, router and service-analysis equipment and also is outfitted to demonstrate security enhancement capabilities the venture is pursuing for commercial airline customers. Seats are configured for demonstrating connectivity to the Connexion by Boeing service. On the exterior, the top of the aircraft fuselage is outfitted with low-profile phased array antennas to enable real-time, Ku satellite-based data transmission and reception.

The aircraft permits airline evaluators assessing the enhanced consumer and operational benefits of real-time broadband services to personally test the service by having it perform multiple, simultaneous high-bandwidth tasks ranging from data transfer and full-featured e-mail to streaming video and global web site access. Airline technical teams have found the service to be as robust or superior to the high-speed connections they enjoy at home or in the office.

"Lufthansa strongly believes in broadband as the only technology that can provide a home-like experience to the passenger," said Bernhardt Seiter, Lufthansa's director of business model and partnership in Lufthansa's Internet on board project team. "Having personally tested, from 39,000 feet, a system that our passengers will be able to use in the near future was an overwhelming experience."

Peter Lewalter, director of technology and infrastructure in Lufthansa's project team, said, "There are a lot of people out there promising broadband, but only Connexion by Boeing is able to demonstrate a live broadband experience in flight."

The robustness of the Connexion by Boeing service was initially demonstrated during a 2.5-hour test flight earlier this year, when an e-mail with digital photo attachment was transmitted from 33,000 feet. The e-mail was received moments later on the ground, where a return reply was composed, sent and promptly received by the airborne team.

System validation testing continues under experimental licenses granted by the Federal Communications Commission (FCC) that allow the Connexion by Boeing service to operate above U.S. territory and waters. Recently, the Connexion One Team demonstrated the long-range capability of the phased array antennas during a test flight from Seattle to Hawaii when continuous transmission capability was maintained up to 1,150 miles offshore.

Boeing has been granted a commercial receive-only license from the FCC that allows the transmission of satellite-based data onto mobile aeronautical platforms using the12 GHz Ku bandwidth. Boeing also has applied for a two-way service license, which is hoped for in the near-term. Data gathered during Connexion One flight tests also is being used to demonstrate that the Connexion by Boeing service can operate without causing harmful interference to other spectrum users, in support of domestic and international two-way license applications and other ongoing international regulatory activities and study groups.

Connexion by Boeing is the market-leading initiative to bring commercial broadband data services to in-flight aircraft. The innovative venture combines the core strengths of the world's largest aircraft manufacturer with the company's move into space-based communication technologies. In-flight airline passengers will soon be able to choose from a multitude of personalized real-time services, including Internet and corporate intranet access, e-commerce, television and entertainment, transmission and receipt of data, shopping and travel and destination information. Airline operators also will benefit from in-flight access to aircraft and crew data.

A prototype of the Connexion by Boeing service is currently available to the executive services market in the U.S., which includes operators of private and government aircraft. Connexion by Boeing also remains on track with leading European carrier Lufthansa to equip its long-haul fleet beginning with a prototype installation in

late 2002/early 2003. For additional information, visit the Connexion by Boeing web site.

Certain statements in this presentation contain "forward-looking" information that involves risk and uncertainty, including projections for new business and business opportunities; technology development; domestic, foreign and international regulatory and coordination success; total shareholder returns; market potential and revenue opportunities; wireless communication market behavior; revenue model, growth strategy, and other trend projections.

This forward-looking information is based upon a number of assumptions including technological feasibility; government policies and actions, including domestic, foreign and international regulatory authorizations; access to spectrum and successful coordination with other users of spectrum; reliability of professional service providers and software; global economic, passenger and freight growth; current and future markets and demand; performance of internal plans; product performance; customer financing; customer, supplier and subcontractor performance; favorable outcomes of certain pending sales campaigns; government policies and actions; and successful negotiation of contracts with labor unions.

Actual future results and trends may differ materially depending on a variety of factors, including successful execution of the plans to develop and implement the proposed services, technical difficulties and uncertainties associated with the Internet and with mobile communications platforms, timing of delivery to market of the proposed services, changes in the market for the proposed services, successful execution of internal performance plans, including continued research and development; the actual outcomes of certain pending sales campaigns; acceptance of new products and services; product performance risks; the cyclical nature of the aerospace, internet and communications businesses; volatility of the market for certain products and services; domestic and international competition in communication; uncertainties associated with regulatory certifications by the U.S. Government and foreign governments; other domestic and foreign regulatory uncertainties, including access to spectrum and successful coordination with other users of spectrum; collective bargaining labor disputes; performance issues with key suppliers, subcontractors and customers; governmental export and import policies; factors that result in significant and prolonged disruption to air travel worldwide; global trade policies; worldwide political stability; domestic and international economic conditions; the outcome of political and legal processes; legal, financial and governmental risks related to international transactions; legal proceedings; and other economic, political and technological risks and uncertainties. Additional information regarding these factors is contained in Boeing's SEC filings, including, without limitation, Boeing's Annual Report on Form 10-K for the year ended 2000 and its Form 10-Q for the guarter ended September 30, 2001.

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