Boeing Satellite Systems Celebrates the Launch of its 200th Commercial Communications Satellite

Syncom. Anik A. SBS 3. DBS-1. DIRECTV-4S. Though they may read like alphabet soup, these are the names of satellites that have changed the world of communications. All were designed and built by the Boeing Satellite Systems (BSS) subsidiary of Boeing Space and Communications, a unit of The Boeing Company (NYSE: BA). And with the November 26 launch of DIRECTV-4S, BSS has built and delivered 200 commercial spacecraft for a roster of customers that spans the globe.

"Boeing Satellite Systems takes great pride in its unmatched heritage of innovation that began nearly 40 years ago and continues with Monday's launch of our 200th commercial satellite, DIRECTV-4S," said Randy Brinkley, president of Boeing Satellite Systems. "Starting with the 1963 launch of Syncom, Boeing has continuously provided spacecraft that have defined the state-of-the-art in satellite communications. And as we celebrate our accomplishments, we also offer our thanks to DIRECTV and all our other customers all over the world, many of whom have returned again and again to purchase Boeing-built satellites."

More than 40 customers in 18 countries have purchased satellites built by the heritage Hughes Space and Communications, now Boeing Satellite Systems, and the Boeing 601 holds the distinction of being the most purchased model in the world. More than 80 have been ordered to date.

Some of the "firsts" achieved by Boeing Satellite Systems include the following:

- July 1963: Syncom, the world's first geosynchronous communications satellite
- November 1972: Anik A, the world's first national domestic satellite
- November 1982: SBS 3, the first commercial satellite orbited by the Space Shuttle
- June 1994: DBS-1, the first U.S. digital direct broadcast satellite (DBS) system
- November 2001: DIRECTV-4S, the first DBS spacecraft using spot beams to deliver unique programming to individual U.S. television markets.

Syncom: The launch of Syncom began a communications revolution. Scientists working for Hughes Aircraft Company - later known as Hughes Space and Communications Company and now Boeing Satellite Systems - proved the concept that a satellite in Earth-synchronous orbit could communicate directly and continuously with any ground station in its line of sight, using fixed antennas. This opened the door to instant global communications.

Anik A: November 1972 brought the first of a series of geosynchronous communications satellites the company developed for individual nations to use within their territorial boundaries. Three Anik A satellites were built for Telesat Canada. Anik A became the world's first national domestic satellite and also showcased a new antenna technology - the shaped beam. Earlier communications satellites broadcast their signals to the entire globe, including oceans and landmasses incapable of using the signal. But the signal beam on Anik A was shaped only to cover Canada, the second largest country in the world.

SBS 3: An early version of the Boeing 376 design, SBS 3 entered the history books on November 11, 1982, when it became the first commercial satellite to be placed in space by NASA's Space Shuttle during its premier commercial flight. The satellite was one of a series the company built for Satellite Business Systems that were jointly owned by subsidiaries of IBM, Comsat General Corporation, and Aetna Life and Casualty. The satellites were designed to provide private business communication services to large U.S. companies.

DBS-1: The June 1994 launch of DIRECTV® service began the digital television revolution in the United States. A trio of Boeing 601 spacecraft originally known as DBS 1, 2, and 3 (now called DIRECTV-1, DIRECTV-2 and DIRECTV-3) made up the initial space segment of DIRECTV, the country's first digital direct-broadcast satellite television service using high-power satellites to transmit hundreds of channels of programming to subscribers via small (18-inch) receiving dishes.

DIRECTV-4S: More than seven years and nearly 10 million subscribers after its service launch, the DIRECTV satellite fleet will soon include its first spot beam spacecraft, DIRECTV-4S. The Boeing 601HP satellite will dramatically expand the DIRECTV channel capacity through the use of spot beams that reuse frequencies in highly focused beams aimed directly at the major television markets where DIRECTV delivers the signals of local network affiliates.

Boeing Satellite Systems' 200 satellites include numerous other firsts in a string of technology achievements. These included being first to market with such breakthroughs as multi-junction gallium arsenide solar cells and ion propulsion as well as microprocessors that give spacecraft large-scale digital signal processors more power than thousands of earth-bound computers.

In all, spacecraft built by Boeing Satellite Systems have provided more than 1,400 years of cumulative on-orbit service to customers worldwide. Today Boeing Satellite Systems continues to hold the largest share of the satellite market, with a backlog of 39 satellites valued at more than $4.2 billion.

Boeing Space and Communications is the world's leading manufacturer of commercial communications satellites, and is also a major provider of space systems, satellites, and payloads for national defense, science and environmental applications.

The Boeing Company is the largest aerospace company in the world and the United States' leading exporter. It is NASA's largest contractor and the largest manufacturer of commercial jetliners and military aircraft. The company's capabilities in aerospace also include rotorcraft, electronic and defense systems, missiles, rocket engines, launch vehicles, satellites, and advanced information and communication systems. The company has an extensive global reach with customers in 145 countries.

###

For further information:
Diana Ball
310-662-7473
diana.ball@boeing.com
Anne Eisele
562-797-1022
anne.f.eisele@boeing.com