

## **Boeing Space Unit Wraps Up Banner Year**

---

### **Boeing Space Unit Wraps Up Banner Year**

The achievement of several significant industry milestones in 2001 enabled Boeing Space and Communications, the world's largest space-related entity, to successfully execute on its strategic vision and business plans, further expanding its growth in global connectivity, information and communications and integrated battlespace.

Two successful intercepts for the Ground-Based Midcourse Defense (GMD) program; the 100th launch of a Delta II rocket; the first mechanical handshake in space; the launch of its 200th commercial satellite; and the certification of the RS-68 engine, which will power the new Delta IV rocket, are among the unit's achievements during the last 12 months. The \$10-billion, 40,000-person operating division also boasted a near-perfect record of 39 out of 40 missions successfully completed in 2001.

"We laid out a plan for ourselves and were able to execute on that plan," Jim Albaugh, president and CEO of Boeing Space and Communications, said this week from his office in Seal Beach. "We said that we were going to execute on our programs, deliver on our promises and improve profitability. . .and we did."

Boeing Space and Communications' businesses encompass five market areas, aligned to customer requirements: Launch and Orbital Systems; Human Space Flight & Exploration; Information and Communications; Missile Defense; and Integrated Battlespace. A brief list of highlights in each market follows.

## **Launch and Orbital Systems**

Launch and Orbital Systems completed eight successful Delta II launches and two successful Sea Launch missions in 2001. The Delta IV program achieved U.S. Air Force certification of its RS-68 engine and completed hot-fire testing of the vehicle's first stage and announced its first customer and launch. The RS-68 engine reflects the work of the first new generation of rocket engineers since the design of the space shuttle's main engines.

In 2001, Launch and Orbital Systems also achieved a 100 percent launch success rate on both Delta and Sea Launch missions, including the 100th Delta II launch.

## **Human Space Flight and Exploration**

Human Space Flight and Exploration had a year filled with historic moments and significant achievements, including six space shuttle missions to the International Space Station (ISS).

Two enormous robotic arms reached out towards one another and touched in one of the most historic "handshakes" of recent times after the U.S. Space Shuttle Endeavour delivered the Canadian arm, "Canadarm2," to the ISS during STS-100. The space shuttle's mechanical arm and the Canadarm2 exchanged payload during the mission.

In 2001, a new "gateway to space" was added when the Space Shuttle Atlantis delivered a new Airlock to the ISS during the STS-104 mission. The Airlock allows astronauts to enter and exit the 470-ton orbiting research facility, regardless of whether they wear an American or Russian space suit, critical because design differences between American and Russian spacesuits had impeded some access at the ISS.

The Space Shuttle Main Engine (SSME) also achieved a major milestone in 2001 with first flight of the Block II engine, a modification that is the culmination of twenty years of successful performance and evolution for the engine. With its new high-pressure fuel pump, the Block II engine provides a level of reliability and safety that surpasses the already remarkable record of safe and reliable flight for the SSME.

## **Information and Communications**

Boeing continued to break new ground in the field of global connectivity in 2001. Six Boeing satellites were launched, reaching an industry milestone of 200 satellites built and launched. In addition, Boeing had new orders for up to 18 satellites and payloads, a string of six successful satellite launches and the demonstration of a new satellite service. Boeing finished the year with a firm backlog of 35 satellites and payloads, along with 12 options. One of the major contracts signed by Boeing included a high-capacity military satellite communications system, Wideband Gapfiller Satellite System. The program has a \$1.3-billion potential value, if all options are exercised.

Looking toward next year, a Boeing-led team submitted a proposal for a new Joint Tactical Radio System (JTRS) program being procured by the U.S. Army. JTRS has the potential to unify communications across the battlefield, providing soldiers with an unprecedented amount of situational awareness by connecting military communications on the ground, in the air and in space.

## Missile Defense

Boeing continued its role as the prime contractor and lead systems integrator on the GMD program for the Ballistic Missile Defense Organization, as well as its significant role in other missile defense programs in 2001. Among the year's highlights were two successful GMD intercepts. Boeing's Patriot Advanced Capability (PAC-3) team also enjoyed unprecedented flight test success in 2001 with Boeing hardware performing successfully on three intercept tests. They moved from test into operations by equipping the first U.S. Army unit with the PAC-3 missile system. Boeing's Strategic System unit also was awarded a five-year contract for launch support services at Vandenberg Air Force Base in California.

## Integrated Battlespace

Much of Boeing Space and Communication's work this year focused on a new growth area called Integrated Battlespace, or using ground-, air-, and space-based systems to provide better situational awareness to the warfighter.

Boeing delivered four 767 Airborne Warning and Control System (AWACS) aircraft to Japan, upgraded three U.S. Air Force AWACS, and began upgrading the Royal Saudi Air Force fleet of five AWACS.

The next-generation command and control system, the 737 Airborne Early Warning and Control, a program for Australia known as Wedgetail, completed two major milestones in 2001.

Boeing completed the preliminary design phase of the Future Imagery Architecture program and successfully conducted the GPS II Preliminary Design Review with no deficiencies. Boeing Autometric received its initial ISO 9001 certification. Autometric also deployed resources overseas in support of Operation Enduring Freedom.

Boeing Space and Communications, headquartered in Seal Beach, Calif., is the world's largest space and communications company. A unit of The Boeing Company, S&C provides integrated solutions in launch services, human space flight and exploration, missile defense, and information and communications. It is NASA's largest contractor; a leading provider of space-based communications; the primary systems integrator for U.S. missile defense; and a leading provider of intelligence, surveillance and reconnaissance. The global enterprise has customers worldwide and manufacturing operations throughout the United States and Australia.

###

For further information:

Anne Eisele

(562) 797-1022

[anne.f.eisele@boeing.com](mailto:anne.f.eisele@boeing.com)

---