

# Home on the range



AL MOORE PHOTO

## Boeing Service Company helps keep U.S. ICBM system mission-ready

By RANDY JACKSON

As their pickup truck kicks up a cloud of dust along a remote Montana road, two military policemen scan the horizon as Boeing Field Supervisor Guy Halvorson and his Intercontinental Ballistic Missile (ICBM) field support team go to work.

They are en route to one of hundreds of Minuteman missile sites that stretch across the United States, from the coast of California across the open grazing lands of Montana and to the plains of North Dakota.

Halvorson and his team are part of the Boeing Service Company, a fully owned subsidiary of Integrated Defense Systems with approximately 1,500 people worldwide working to maintain and sustain customer communication and data systems. One of BSC's responsibilities is modification of the nearly 500 Minuteman missile sites that dot the United States.

Halvorson's team supports a \$78.2 million contract that Boeing C3 Networks received last year from ICBM prime contractor Northrop Grumman Mission Systems to deploy a replacement Environmental Control System (ECS) for the U.S. Air Force Missile Alert Facility, Launch Facility and Class 1 trainer facilities.

The team is removing older air-conditioning units and replacing them with modern environmental-control systems. The ECS contract is part of a larger contract managed by Northrop Grumman to modernize and sustain the U.S. Minuteman III deterrent force.

Regulating the environment inside the 25-foot-wide, 90-foot-deep (7.6-meter-by-27.4-meter) missile silos that house nuclear missiles is a critical task, Halvorson said: "Racks of electronic drawers in the silos are always 'live,' so environmental integrity is essential."

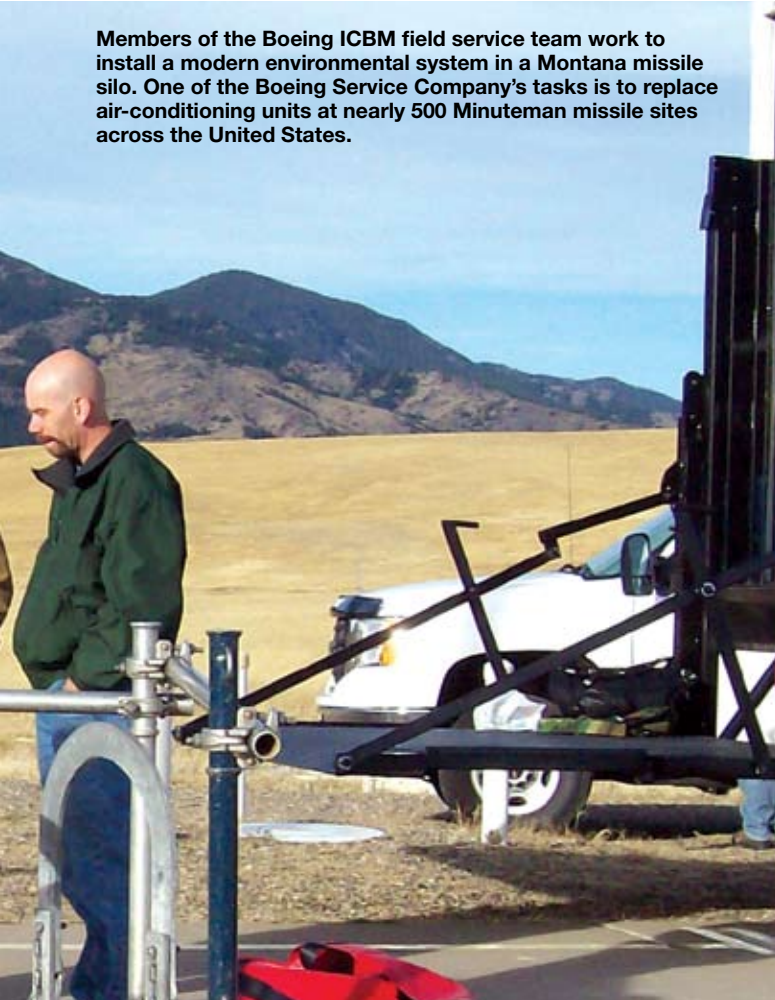
### CUSTOMER CONFIDENCE

Boeing has been involved in upgrades for the Minuteman for years, but this is the first time in 20 years that a defense contractor has been chosen to perform major modifications at Minuteman launch facilities unescorted.

"The fact that we are working around nuclear weapons facilities unescorted illustrates the trust the Air Force has in the Boeing team," said ICBM Field Support program manager John Kobbeman.

He also emphasized that "unescorted" does not mean "unsecured." At predetermined intervals, Halvorson contacts a security team at an undisclosed location. They validate the Boeing Field Service team and provide permission to be on site. Additional security measures are employed while the team is underground to

Members of the Boeing ICBM field service team work to install a modern environmental system in a Montana missile silo. One of the Boeing Service Company's tasks is to replace air-conditioning units at nearly 500 Minuteman missile sites across the United States.



ensure that no unauthorized personnel approach them or the restricted launch facility.

“To qualify for access to the closely guarded defense silos, all Boeing field team members must pass strict security clearances including psychological, physical and medical screenings,” Kobbeman said.

BSC field reps who travel among missile sites can boast their “office space” is thousands of miles of open country. Yet, said Greg Deiter, BSC director, “It’s a tough life on the range!”

“Weather conditions can be brutal,” added Kobbeman. “But this team is tough. A lot of the Boeing team members are retired ‘missileers’ from the U.S. Air Force, and missiles are in their blood.”

Deiter said teammates can be away from their families and homes for weeks at a time, sometimes forgoing planned vacations and often working in extreme weather. Why? “One hundred percent readiness can’t wait for summer,” Deiter said.

By “readiness,” he means the missiles—buried deep underground in hardened, blast-resistant silos and monitored around the clock by missile crews—are on alert continually.

“Out here on the range, we’re kind of like the cavalry,” Halvorson said. Where there’s a need, we’re there, and we’ll find a way to get the job done.” ■

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## ICBM: Looking ahead

Maintaining the United States’ safety and security is an important mission of the Boeing Intercontinental Ballistic Missile (ICBM) team.

Since the late 1950s, Boeing employees have played a major role in deterrent efforts by building, maintaining and upgrading the guidance and navigation system for the Minuteman weapon system. They’ve also provided overall integration, testing, assembly and deployment of Minuteman, the longest-serving U.S. operational ICBM system and a part of the U.S. security strategy for the future.



In this 2005 photo, an unarmed Minuteman III intercontinental ballistic missile launches from Vandenberg Air Force Base, Calif. Such launches ensure the weapon system remains operationally effective. Boeing is constantly evaluating new ideas and concepts to make the Minuteman system more affordable, flexible, accurate and secure.

Boeing is constantly evaluating new ideas and concepts to make the Minuteman system more affordable, flexible, accurate and secure. These new concepts can help ensure Minuteman remains the best-value deterrent meeting national security needs well into the future.

In another effort, a complex and changing global security environment has led the U.S. Air Force to investigate options for a prompt global strike system carrying conventional warheads.

In August 2007, Boeing C3 Networks, Advanced Systems and Phantom Works engineers began working on an \$8.9 million contract to study key elements of a conventional prompt global-strike missile demonstration. This contract is designed to mature conventional-strike missile concepts and technologies and reduce the risk associated with the technologies. It is scheduled to be completed by June 2009.

The study will help plan for a demonstration using a land-based Minotaur launch system and a payload delivery vehicle designed to carry and deliver various conventional payloads at global ranges in less than one hour of flight time. The contract is managed by the U.S. Air Force’s Space and Missile Systems Center at Los Angeles Air Force Base.

“With more than 50 years of experience designing, delivering and deploying Air Force missile programs, our team looks forward to helping refine requirements leading to a demonstration program and will provide system-level analysis of one of the key concepts considered viable for a prompt global strike system,” said Peggy Morse, director of Boeing ICBM Systems. “As a long-standing partner with the Department of Defense in defense of the United States, Boeing remains committed to providing solutions to the United States’ deterrence and global strike mission needs.”

—Cheryl Sampson

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