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Featured Projects

## Patriot Counters Missiles During Operation Iraqi Freedom

Patriot is a long-range, all-altitude, all-weather air defense system designed to counter tactical ballistic missiles, cruise missiles, and advanced aircraft. Patriot uses advanced aerial interceptor missiles and high-performance radar systems.

"Patriot" refers to Phased Array Tracking Radar to Intercept Of Target. A more fanciful acronym often used by DoD personnel is Protection Against Threats, Real, Imagined, Or Theorized. The symbol for the Patriot system is a Revolutionary War-era Minuteman.

Patriot was deployed to Iraq a second time in 2003 to provide air and missile defense for the forces conducting Operation Iraqi Freedom. Post-war reports described Patriot's deployment as a "tremendous success," according to Army Aviation and Missile Command officials.

Patriot batteries had at least eight independently confirmed tactical ballistic missile (TBM) kills during the Iraq campaign, and Army battalions operating Patriot batteries reported successfully shooting down all 11 Iraqi TBMs that threatened coalition forces. These incidents included one Scud missile that would have struck the headquarters of the 101st Airborne Division and another that would have struck the Combined Land Forces Command Center, the highest echelon command location in Iraq at the time. The Scud missile was shot down by C Battery 2-1 Air Defense Artillery on April 1, 2003.

Echo Battery, operated by the 2nd Battalion of the 43rd Air Defense Artillery, fired and successfully engaged with the first PAC-3 missiles in combat. Patriot also provided radar surveillance for coalition forces that lacked a clear picture over much of Iraq.

Three types of missiles, including the Patriot Advanced Capability 3, Guided Enhanced Missile (GEM), and GEM + varieties, were highly successful in intercepting Al Samoud-2 and Ababil-100 tactical ballistic missiles, according to Army reports. However, no longer-range ballistic missiles were fired during Operation Iraqi Freedom in 2003.

Patriot model MIM-104 is produced by Raytheon and Lockheed Martin's Missiles and Fire Control division. The Patriot defense system was developed at the Redstone Arsenal in Huntsville, Alabama, which had previously developed the Safeguard anti-ballistic missile system and its component Spartan and Sprint missiles.

*Cynthia Greenwood edited this article, compiled from Army reports.*

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