

Army Report Details Patriot Record in Iraq War

- [Arms Control Today](#)

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A new Army report reaffirms earlier Pentagon claims that the Patriot missile defense system destroyed all Iraqi missiles that it engaged during the invasion of Iraq, but does not fully account for why the system failed to target several other Iraqi missiles fired at U.S. forces and Kuwait. The report also describes several operational challenges to the system's performance that emerged in the buildup to and unfolding of the conflict.

The 32nd Army Air and Missile Defense Command, which is charged with protecting U.S. ground forces from air and missile attacks, recently released its account of "Operation Iraqi Freedom." As part of that history, the command reports that the Patriot missile defense system, which is designed to destroy short- and medium-range ballistic missiles, scored a perfect nine for nine in intercepting Iraqi missiles. Colonel Charles Anderson, chief of staff of the command, wrote, "The critics concerns over Patriot lethality should be forever silenced."

Yet Iraq fired at least 23 ballistic and cruise missiles, according to the report, during the three-week span it took U.S. forces to fight their way to Baghdad and topple Saddam Hussein's regime. Of the 14 Iraqi missiles not engaged by Patriots, four were reported as outside the range of any Patriot system and one exploded shortly after launch. No official explanation is given for why the other nine Iraqi missiles were not fired upon, though the report implied that at least three might have been because their trajectories were judged to be non-threatening.

Patriots also did not down any Iraqi cruise missiles, which are powered for their whole flight, can maneuver, and fly at low altitudes. Due to these flight characteristics, a cruise missile can be difficult for radars to track or confused with aircraft.

Although dismissing several Iraqi cruise missile attacks that caused no casualties as ineffective, the report acknowledged, "continued [cruise missile] attacks may have forced us to change our tactics." The report later added that "the ability of these older cruise missiles to penetrate friendly airspace and reach their targets should serve as a warning...that the emerging cruise missile threat must be addressed."

The other Iraqi missile that presented a special challenge was the short-range FROG-7 missile. Because of their brief flight times, the missiles must be detected and engaged within roughly 90 seconds, forcing Patriot commanders to make rapid firing decisions. The report recommended that the Army consider putting more senior officers in charge of Patriot batteries in the future to ensure effective decision-making.

Iraq did not launch any Scud missiles, which an earlier version of the Patriot had little success against in the 1991 Persian Gulf War. Originally built by the Soviet Union and sold prolifically, Scuds are aging, short-range ballistic missiles capable of carrying a several hundred kilogram payload.

The report also pointed out difficulties in getting the Patriot systems up and running. The Iraqis, who waited to fire any missiles at U.S. forces until after the invasion started, might have caught U.S. forces unprepared to use Patriots if they had attacked earlier.

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Up until just two days before the U.S. invasion began, Patriot radar systems were regularly malfunctioning due to the harsh environmental conditions. Raytheon, the Patriot manufacturer, sent engineers out to the field to get the systems working properly.

Once hostilities commenced, another problem arose. Due to the enormous amount of electronic equipment involved in the fast-moving battle, there was, in the report's term, "cluttered cyberspace." Electronic signals interfered with each other, creating confusion for radars and communication systems. The report said this could have contributed to one Patriot's mistaken intercept of a U.S. fighter aircraft. Another Patriot destroyed a British jet.

An analysis should be done on battlefield electromagnetic interference and new tactics and techniques should be created to deal with the problem, the report recommended. It further stated that these should be "applicable to the environment in the Korean Theater of Operations." The United States is currently in a standoff with North Korea over its pursuit of nuclear weapons, and roughly 37,000 U.S. troops are stationed in South Korea. These forces are equipped with Patriots.

Although Patriots are mobile and some moved forward with U.S. troops into Iraq, the report stressed that the system should be better designed to operate "cross-country" or off-road. "Since the armed forces of the United States are now an offensive force (as opposed to the Cold War, defense of Europe orientation) it is imperative that Patriot become more mobile and able to sustain maneuver over time," the report concluded.

U.S. forces possess three versions of Patriot missiles. The newest is the Patriot Advanced Capability-3, which accounted for two of the nine Iraqi missile kills.

The Army Inspector General is also conducting a study on the Patriot's performance and U.S. Central Command is investigating the two friendly-fire incidents.

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