

Iron Dome Air Defense System: The US Army Intends to Purchase Some from Israel

In a de facto admission that existing US missile defenses just don't work the U.S. Army announced its intent to procure a limited number of Iron Dome weapon systems to fill its short-term need for an interim Indirect Fire Protection Capability (IFPC)," a US Army statement sent to Business Insider on 6 FEB. Israel's Iron Dome missile-defense system, indigenously designed with a \$429 million US investment backing it, represents the world's only example of working 61 missile defense. The Iron Dome Weapon System was developed by the Israeli firm Rafael Advanced Defense Systems to detect, assess and intercept incoming rockets, artillery and mortars. Rafael has teamed with Raytheon to produce Iron Dome's Tamir interceptor missiles to engage incoming threats launched from up to 40 miles away.

While the US, Russia, and China work on high-end missile systems meant to shoot down stealth aircraft in ultrahigh-tech wars with electronic and cyber warfare raging along the sidelines, none of these countries' systems actually block many missiles, rockets, or mortars. On the other hand, Israel's Iron Dome has shot down more than 1,200 projectiles since going operational in 2011. Constant and sporadic attacks from Hezbollah in Lebanon and Iranian aligned forces in Syria have turned Israel into a hotbed of rocket and mortar activity, and the system just plain works. Not only do the sensors and shooters track and hit targets reliably, the Iron Dome, unlike other systems, can tell if a projectile is going to miss a target and thereby save a \$100,000 interceptor fire. While the system does not run entirely without error, U.S. and Israeli officials consistently rate the dome as having a 90% success rate on the Gaza border, one of the most active places in the world for ballistic projectiles.

The US already has missile defenses for its forces. The 2019 Missile Defense Review said the U.S.'s Patriot Advanced Capability-3 missile-defense system has a "proven combat record," though US officials inflated its success rate during Operation Desert Storm. The U.S., unlike Israel, which is surrounded by enemies bent on its ultimate destruction, doesn't get many enemies firing ballistic missiles at its forces. Still, to protect its soldiers, the Army typically deploys Patriot defenses to its bases to protect against short-range missile attacks. In Iraq, the US Army also experimented with a Phalanx gun system that would rapid fire 20mm rounds at incoming rockets and mortars. But Saudi Arabia, a weaker U.S. ally, has put its Patriot defenses to the test and found them severely wanting either through user error or failings of the system itself. In repeated missile strikes from Houthi rebels using relatively unsophisticated Iranian ballistic missiles, the Patriot missile defenses have failed, sometimes spectacularly.