

An Iron Dome of Defense

Little more than a flimsy plan at the Israeli Defense Ministry just seven years ago, the Iron Dome missile defense system is now hailed as a groundbreaking innovation, an example of the technological prowess of Israel, and an embodiment of the unique relationship between the Jewish state and the United States.

The system passed its first major test during Operation Pillar of Defense in November, successfully intercepting over 400 rockets fired from the Gaza Strip toward Israeli population centers. The system not only saved countless lives, but also allowed Israel's decision makers to display restraint, thus averting an all-out war.

The idea for Iron Dome arose after Israel's 2006 war with Hizballah, in which more than 4,000 rockets were launched into the country's north. As rocket fire from Gaza targeting southern Israeli communities also intensified, it became clear that a system was needed to defend against short-range rockets and missiles.

Engineers from Israel's Rafael Advanced Defense Systems set out to build such a system as quickly as possible. As *The Wall Street Journal* explained, "An all-star team of engineers assembled from across Israeli defense companies worked around the clock. Pensioners were called out of retirement... And in 2009, during the first field test, an Iron Dome prototype successfully intercepted an incoming rocket." By April 2011 an Iron Dome battery was fielded outside the southern city of Beersheba and shot down its first rocket fired from Gaza. Since then the system has achieved an 85 percent interception rate and is constantly improving, as its developers enhance its accuracy and expand its range.

Iron Dome uses missiles to destroy warheads in midair. Each battery covers an area roughly the size of a small city, protecting it against rockets and mortar shells with ranges of up to 45 miles. The system's computerized radar and tracking system calculates where an incoming rocket or mortar shell is likely to land, and fires a guided missile to blow up the projectile only if it is headed for a populated area. Thus, interceptor missiles are not wasted on rockets that pose no threat to life or property.

Of course, a complex system like Iron Dome does not come free. In fact, each interceptor missile fired costs approximately \$45,000. But thanks to the hard work of pro-Israel activists, the Obama administration and lawmakers learned early on that it would be a wise and important investment on the part of the United States. Congress thus approved a request from President Obama to include \$205 million for Iron Dome funding in the 2011 budget, and has pending authorization for hundreds of millions of dollars more to aid in the production and deployment of the system. Now that the Iron Dome has proven itself, Washington will have the ability to use it in its own defense efforts against short-range rocket threats in the Persian Gulf and South Korea.