RAFAEL MARKS 10 YEARS SINCE IRON DOME'S FIRST COMBAT INTERCEPTION

With over 2,500 combat interceptions, at a success rate of 90%, and numerous lives saved, Rafael recently marked the 10th anniversary of the first combat interception of Rafael's Iron Dome Air Defense System.

Iron Dome's development began in December 2007, and was completed in less than 3 years. Within less than a month after being deployed in Israel, on the evening of April 7, 2011, the system was challenged in combat for the first time. A rocket that was launched from the Gaza Strip was detected by Iron Dome's radar. Within seconds, the data transmitted to the BMC (Battle Management Center) was processed, and the battery operators needed to decide whether to activate an interceptor against the threat. With precise impact location provided by the BMC, pointing to the southern Israeli city of Ashkelon, with a population of more than 130,000 civilians, the crew decided to launch an interceptor, and made combat history by intercepting the threat, preventing civilian injuries and significant damage to property.

Iron Dome's first massive and dramatic performance took place during operation Pillar of Defense in 2012, when it intercepted over 500 different threats fired from the Gaza Strip onto different parts of Israel, including heavy rocket barrages. Iron Dome had become a game-changer, earning it the Israel Security Award in 2012. Iron Dome has played an instrumental role in every conflict since then, by stopping thousands



of rockets from hitting Israel, spanning small to large mortars and rockets with varying ranges and warheads.

Iron Dome serves as highly mobile, dual mission systems, designed to defeat UAVs and cruise missiles, as well as Very Short Range (VSHORAD) targets, rockets, artillery and mortar (C-RAM) threats, aircraft, helicopters, and PGMs. Iron Dome provides robust, yet selective defense. Its ability to discriminate between threats headed

towards a populated area and those that will fall into the sea or open fields, reduces costs, and limits unnecessary interceptor launches. A single battery can protect a medium-sized city, using its highly cost-effective interceptor fired only at desired targets to protect defended areas.

Iron Dome's development has continued throughout the years, and its capabilities today include wider coverage, providing protection against a broader spectrum of threats, the ability to handle simultaneous threats, very high-volume salvos, and much more.

In August 2019, Israel's Ministry of Defense and the US Defense Department signed an agreement for the purchase of two Iron Dome batteries for the US Army.

Both batteries have now been delivered to the US. In May 2020, Rafael and Raytheon Technologies Corporation signed a joint venture agreement to produce Iron Dome interceptors and launchers in an all-upround facility in the US. The partnership is called Raytheon Rafael Area Protection Systems (R2S).

Due to Iron Dome's open architecture design, it can be integrated with IBCS and other components in use as part of IFPC,



including its radars. This means that the system can essentially be taken apart and re-assembled based on the customer's legacy systems or on its future choice of other battery components, such as ones used by NATO forces. Rafael has developed additional variants of the Iron Dome system, to form a family that consists of the naval variant C-Dome, providing protection of strategic naval and land assets against advanced ballistic, aerial and surface-to surface threats, including saturated attacks. C-Dome is operational with the Israeli Navy.

Iron Dome can protect under scenarios for which the system was designed. It is being continuously updated to handle new and emerging threats. Due to its high mobility, it can be moved around, and deployed according to threat levels and operational assessments, with the decision of where and how to deploy lying solely in the hands of the user.

Iron Dome is also offered as an integrated, all-in-one air defense (I-Dome) system for

maneuvering tactical forces in the field on a single vehicle. I-DOME is an all-in-one mobile version of the Iron Dome system. The system is integrated with all components on one single truck.

I-DOME consists of a wheeled chassis launcher with 10 Iron Dome interceptors, a radar and the battle management and control center (BMC). This gives it maximum mobility, supporting the mobile forces / maneuvering tactical forces in the field.

The interceptors are placed in sealed, ready to launch canisters. They are inserted into two five tube groups on the turret. I-DOME effectively protects against short to medium range rockets, mortars and artillery shells, cruise missiles and UAVs. The system defends motorized or mechanized troops, and provides point air defense of military, industrial, administrative installations.

Iron Dome is a 'household name' in Israel, and has become synonymous with excellence. Teams of scientists and engineers who developed the system and are continuing to do so on a daily basis.

Thanks to them, Iron Dome's capabilities are light years beyond its original design. It has evolved from a blueprint into a true game-changer, saving lives and preventing escalation, enabling military and political decision-makers to make calm and collected decisions. It has allowed Israel to carry on its daily routine, even while being targeted by an indiscriminate enemy.

To read all about Iron Dome and get access to the latest information, videos and images, follow this QR-code:



For a special 10th anniversary video follow this QR-code:



