A Way to Extend the Mission of the FA-18

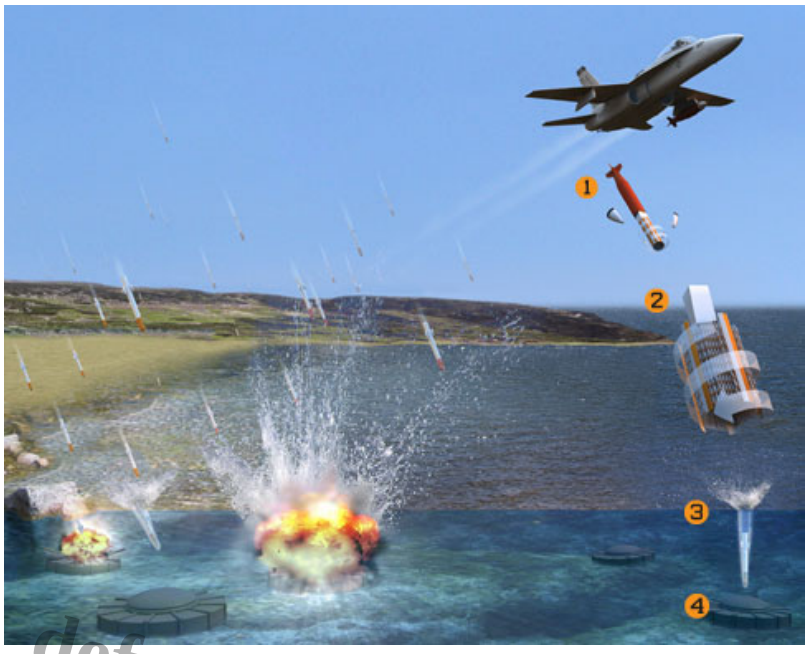
Description



Photo credit: Popular Science

The scientists are coming up with new and better (and safer for the people involved) methods for mine clearance. In this case, it adds one more use of the FA-18 airframe to find itself almost completely â€œunkillableâ€• from a programmatic standpoint, while making mines laid at the beach, and in the surf zone in an effort to stop our Marines, much more killable.

> Beach Cleanup
> A naval strategy to detonate 70 million mines calls for high-tech showers of darts
>
> By Bjorn Carey | April 2007
>
> Since 2001, more than 13,000 American soldiers have been killed or maimed by landmines or improvised explosive devices. Civilians included, landmines kill or injure an estimated 20,000 people around the world every year. To blaze safer trails, the U.S. Office of Naval Research is developing a system that uses thousands of chemical- and explosive-packed darts to snuff out landmines. â€œItâ€™s one of the most successful systems weâ€™ve tested so far,â€• says project leader Brian Almquist.
> [â€¦]



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HOW IT WORKS

1. A plane drops a bomb packed with darts. Once it reaches 1,000 feet above its target, the bomb ejects a seven-foot-long tubular canister.
2. A corkscrew pattern carved into the bombâ€™s interior spins the canister as it slides out, like a bullet leaving a gun. The rotation and small explosives jettison the canisterâ€™s panels and expose 6,500 darts stacked several rows deep. The mass of darts is also spinning, which uniformly disperses them.
3. Each seven-inch dart slams into the ground at 1,200 feet per second. Its blunt nose helps it carve a channel in water or sand, a process called cavitation. This reduces friction on the body of the dart and allows it to pass through two feet of sand and more than seven feet of water.
4. Darts inject the mines with one of three substances: a chemical that safely burns the TNT, a reactive powder that breaks apart the mine by increasing internal pressure, or a small explosive that detonates the mine on impact.

After the indignant post by Neptunus Lex about â€œpimping his rideâ€• to make â€œElectricâ€• FA-18s, I wonder how heâ€™ll react to his community becoming MCM typesâ€¦.

Category

1. Marines
2. Military
3. Navy
4. Technology

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