

Star Wars on the high seas: Navy plans to deploy shipboard laser by 2014

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Some bad news for Sci-Fi fans: The Navy's new shipboard laser system, the [Laser Weapon System](#) [1] (LaWS), won't shoot spiffy beams of light of the sort used to kill stormtroopers, Cylons, and Klingons. But it will fire a focused infrared laser that can down drones, disable small boats, and — in the future — engage missiles and enemy jets.

The LaWS has been in development for six years at a total program cost of approximately \$40 million. Navy officials have pegged each individual unit at about \$38 million apiece, but according to Chief of Naval Research Admiral Matthew Klunder, each blast of "directed energy" will cost less than \$1.

[Read: Navy's laser weapon is thwarted by Mother Nature](#) [2]

Contrast this with standard shipboard munitions, which bleed the taxpayers dry for hundreds of thousands of dollars; the [AGM-84 Harpoon missile](#) [3] costs over \$700K per unit.

Naturally, the explosive power of these standard, costlier munitions dwarfs the LaWS — Peter Morrison, the Office of Naval Research program manager for this solid-state laser, equated the weapon's lethal effect with a "blowtorch." But the LaWS is presumably aimed at future threats, to include unmanned aerial systems and seaborne terrorist attacks.



Morrison [noted that](#) [4], "The solid-state laser is a big step forward to revolutionizing modern warfare with directed energy, just as gunpowder did in the era of knives and swords."

A March 14 report from the non-partisan Congressional Research Center suggested that the lasers "could lead to changes in naval tactics, ship design and procurement plans for ship-based weapons, bringing about a technological shift for the Navy — a game changer' — comparable to the advent of shipboard missiles in the 1950s."

The LaWS is electronically operated, so the number of volleys is limited only to the available juice. It piggybacks on the Phalanx Close in Weapons System's (CIWS) radar track to obtain a target and combines six high-energy lasers into one beam of light. The prototype has already gone 12/12 in live-fire tests, and the Navy has released a video of a LaWS — temporarily installed aboard the guided-missile destroyer USS Dewey (DDG 105) — shooting down a drone (seen below).

It's no Death Star laser — a small flash replaces a destructive beam of light — but it gets the job done. The Navy also released a [PR video](#) [5] describing the laser's history and operational capabilities. If you can get past the cheesy '80s veneer, it's very informative.

The Navy plans to deploy the LaWS aboard the USS Ponce, an amphibious transport

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ship retrofitted as a waterborne staging base, by 2014.

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[1] <http://www.navytimes.com/article/20130408/NEWS/304080020>

[2] <http://www.ecnmag.com/blogs/2014/02/navys-laser-weapon-thwarted-mother-nature>

[3] <http://usmilitary.about.com/od/weapons/l/aabombs2.htm>

[4] http://www.spacewar.com/reports/US_Navy_readies_laser_attack_weapon_in_2014_999.html

[5] <http://www.youtube.com/watch?v=vqLkpcHavZE>