To help sailors defeat small boat threats and aerial targets without using bullets, the Office of Naval Research wants to develop a solid-state laser weapon prototype that will demonstrate multi-mission capabilities aboard a Navy ship. The Solid-State Laser Technology Maturation program builds upon ONR’s directed-energy developments and knowledge gained from other laser research initiatives, including the MK 38 Tactical Laser Demonstration tested at Eglin Air Force Base, Fla. Credit: US Navy illustration

ONR will host an industry day May 16 to provide the research and development community with information about the program. A Broad Agency Announcement is expected to be released thereafter to solicit proposals and bids.

The Navy's long history of advancing directed-energy technology has yielded kilowatt-scale lasers capable of being employed as weapons. Among the programs, the Maritime Laser Demonstration developed a proof-of-concept technology that was tested at sea aboard a decommissioned Navy ship. The demonstrator was able to disable a small boat target. (Click here to watch a video.) Another program, the Laser Weapon System, demonstrated a similar ability to shoot down four small unmanned test aircraft.

The SSL-TM program builds upon ONR's directed-energy developments and knowledge gained from other laser research initiatives, including the MK 38 Tactical Laser Demonstration tested at Eglin Air
Force Base, Fla. All of these efforts could help the
Department of the Navy become the first of the
armed forces to deploy high-energy laser weapons.

Provided by Office of Naval Research