

**DHINS Technology Demonstration
U.S. Coast Guard Group Key West
May 20, 2004**

System: Dual-Frequency Identification Sonar (DIDSON)
Vendor: Sound Metrics Corp.
Contact: Ed Belcher 206-364-1441

DIDSON was used by EOD divers to image the hull of a Coast Guard Ship and surrounding area. DIDSON images include:

The improvised explosive device attached near the stabilizer

The stabilizer

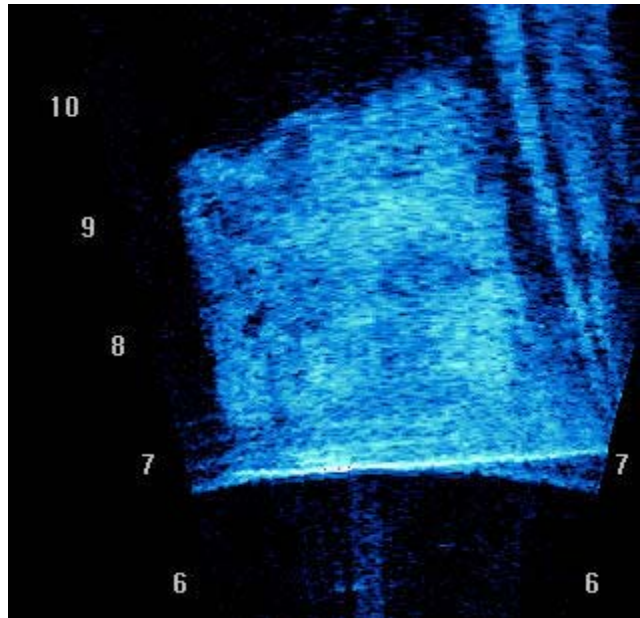
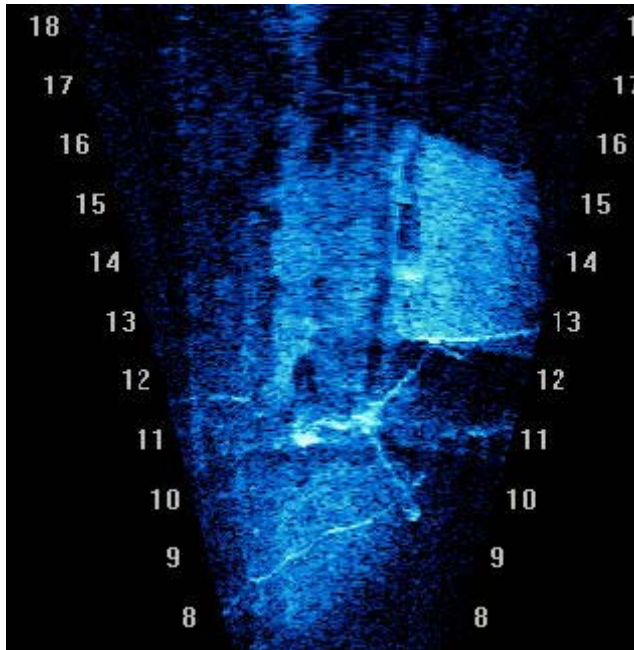
A transducer mounted on the hull

A section of hull with weld beads

The weld bead perimeter of the draft numbers on the hull. The number "2" is legible.

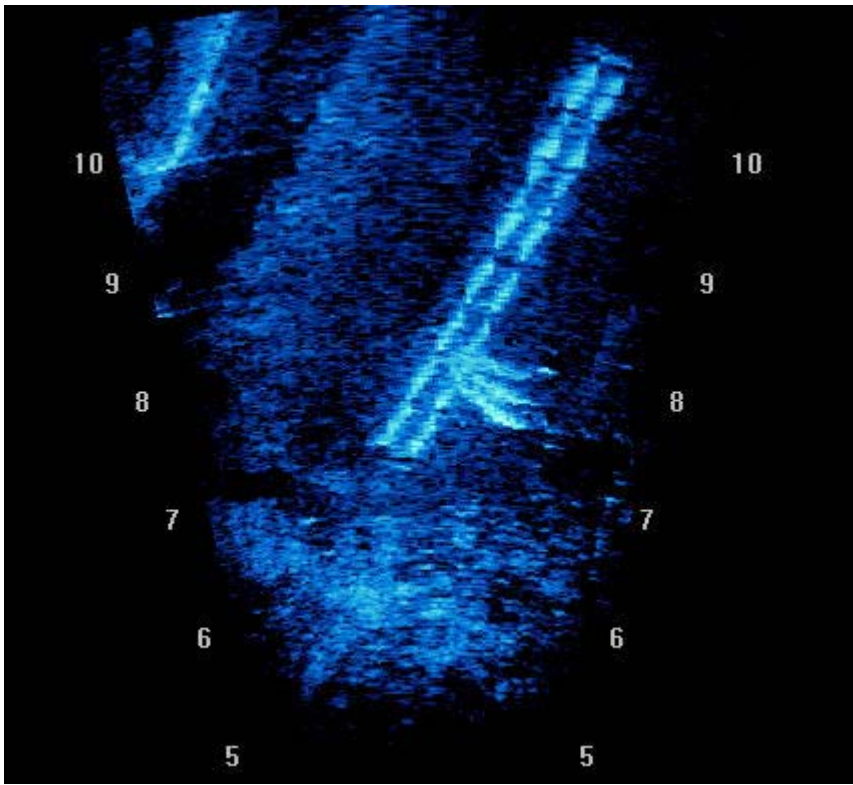
A ladder

Several fish



Left: Improvised Explosive Device at 11-12 feet from DIDSON and attached to hull and stabilizer with bungee cord.

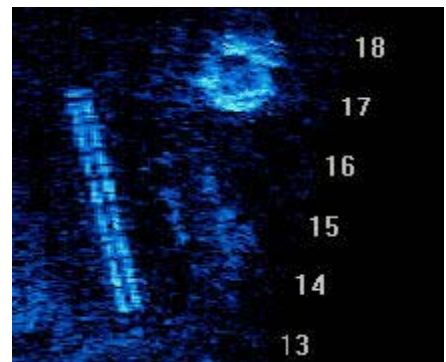
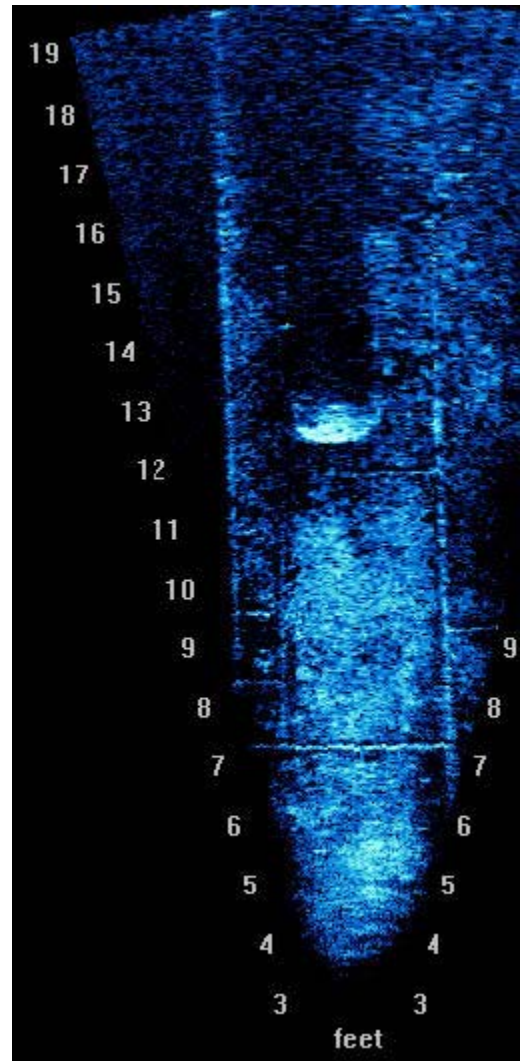
Right: Stabilizer

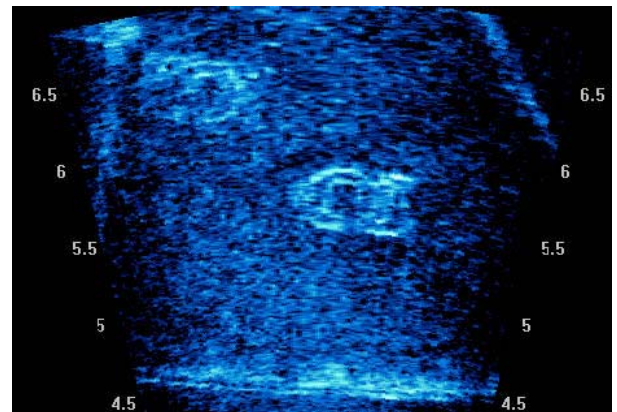
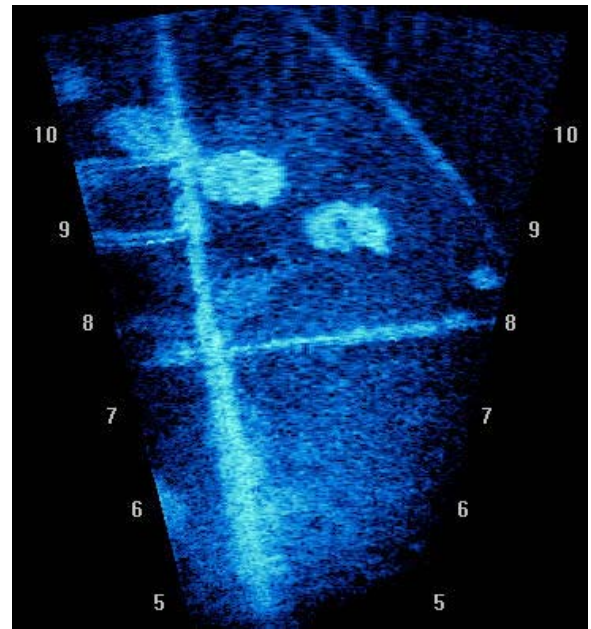
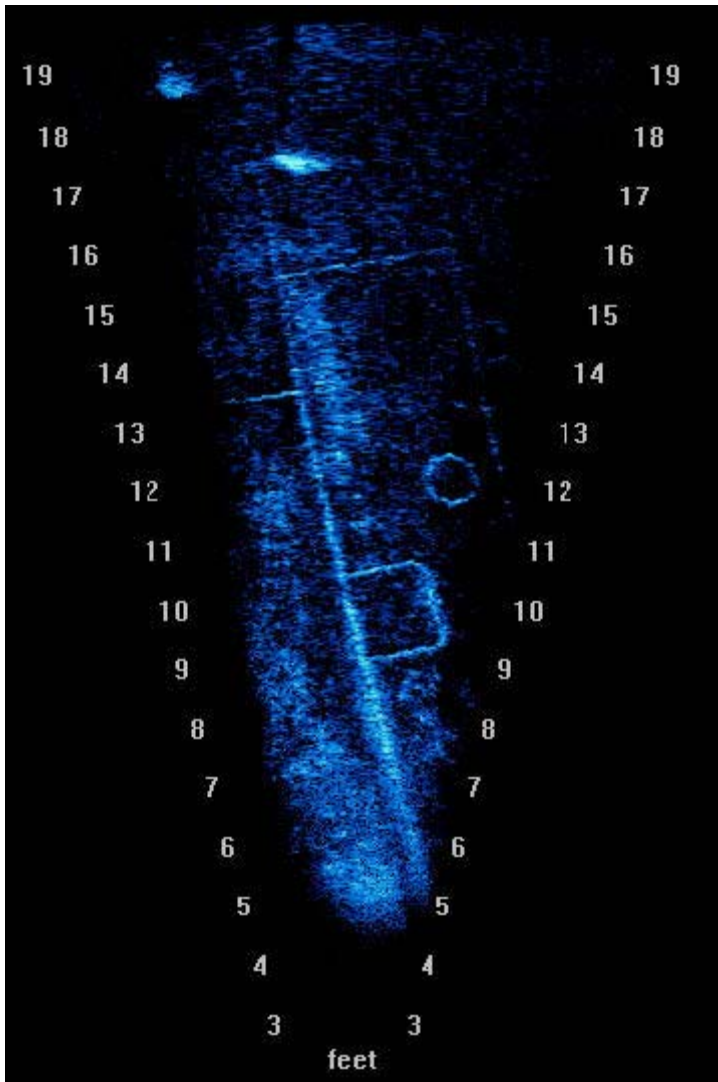


Top Left: Anode with fish 8 feet from DIDSON.

Top Right: Transducer dome 13 feet from DIDSON.

Bottom Right: Anode 13-17 feet from DIDSON.

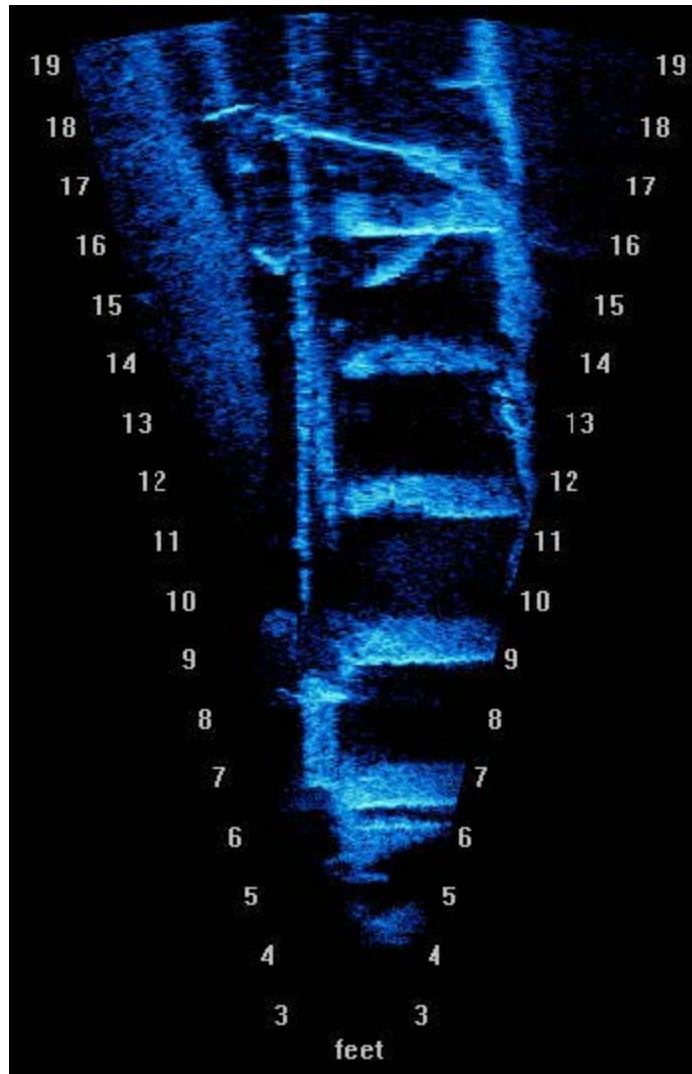
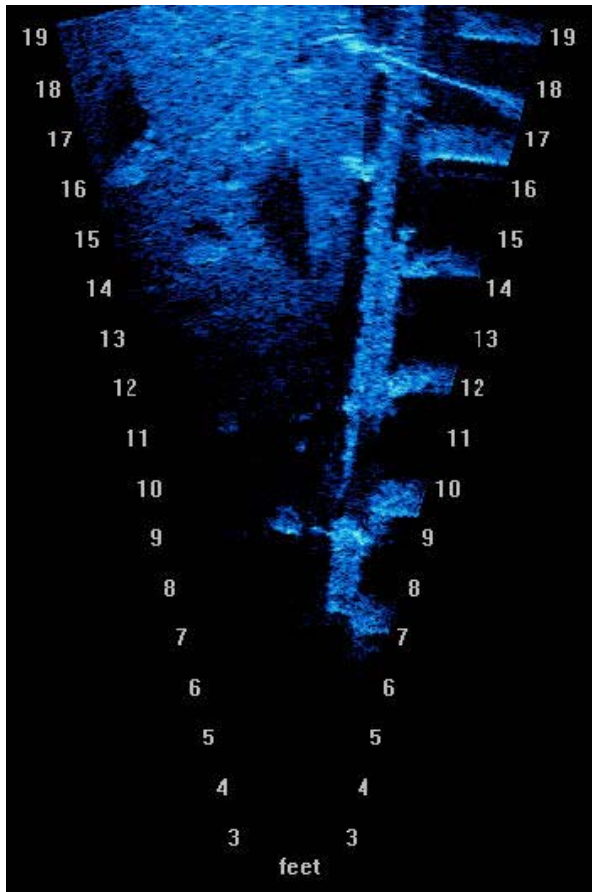




Top Left: Section of hull with weld beads visible. Note Fish at 17 feet.

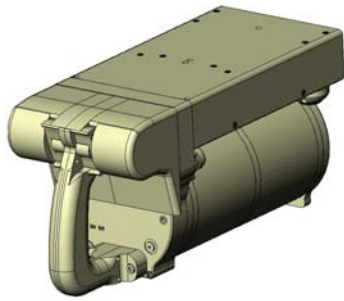
Top Right: Draft numbers at bow of ship. These numbers have weld bead perimeters.

Bottom Right: Draft numbers after a diver wiped off the fouling. The number "2" is legible. "3" is partially legible in this shot.



A ladder-like structure in the berthing area is in both of these images. The image on the right also has a fish 15-16 feet from DIDSON.

A section of bottom at the berthing area.



Diver-held version of DIDSON

