

DOCKWALK

ESSENTIAL READING FOR CAPTAINS AND CREW

SEPTEMBER 2008 | www.dockwalk.com

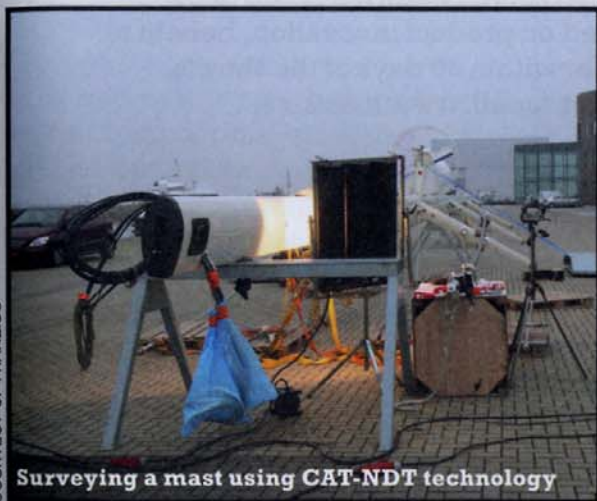
Lifestyles of the **Fun and fabulous**

When crew develop a taste for the high-life

WOMEN
in the Wheelhouse
AND WHY THEY LOVE WHAT THEY DO



Thermal X-Ray Vision for Surveyors



FOR DECADES, MARINE surveyors have proven invaluable to yacht buyers and owners by discovering flaws that most experienced boaters would miss. But even these “super men” of the marine industry don’t have one power possessed by the man of steel – X-ray vision.

Now they do, thanks to some new technology called

Computer-Analyzed-Thermography – Non-Destructive-Testing (CAT-NDT). The X-ray-like equipment is used to test laminates without any of the more intrusive techniques used in the past.

Using CAT-NDT, technicians apply light and thermal energy to a hull, deck or even composite part and look at it using an infrared camera connected to a high-capacity computer that’s equipped with the appropriate software. This approach is much less invasive than sanding down through the gelcoat or drilling out core samples from the hull and it recently proved itself when a crack was found on a carbon-fiber mast aboard a 65-foot sailing yacht. CAT-NDT also found a slight delamination in the keel flange on the boat, which easily could have been missed with conventional inspection techniques.

CAT-NDT requires up to two people to operate the system. An energy pulse is sent at material being tested. If the pulse travels through cleanly, without obstruction, the material is free of defects. If there is a flaw or fracture, the energy pulse would be held up or slowed. The differences in the energy flow are recognized

by the highly sensitive camera, evaluated by special software and are then seen on the computer screen.

In addition to delamination, CAT-NDT can detect early stages of osmosis and defects in carbon-fiber parts, reveal stressed hull sections on pre-owned boats and show signs of water intrusion into the laminate. Because there’s no sanding or drilling involved, the process has no negative environmental impact and presents no inhalation risk to users.

Currently, the only company using CAT-NDT is German-based Franzius Company. Company president Oliver Franzius said that his group is the only one licensed to sell, distribute and use the system. Some companies take other types of non-destructive measurements using thermography, but the results are not reproducible and don’t penetrate as deeply as CAT-NDT. Franzius said he will train other people to use the system in the future and that he has received requests from around the world to examine pleasure, commercial and even military vessels. For surveyors and customers alike, CAT-NDT sounds pretty super. www.franzius.de – ERIC COLBY