



## Are You Wired?

**C**an you trust your life and that of your ship to your portable submersible pumps, or will they electrocute the operator when used in an emergency? Photos on this page show some submersible pumps with dangerous, electrical-safety deficiencies. Unfortunately, these conditions have become the rule, rather than the exception.

Three out of four submersible pumps—75 percent!—that we survey are unsafe because of cable issues like exposed wiring, where the cable pulls past the rubber compression fitting and slices in the cable, which exposes the wire conductors. Remember, submersible pump cables always must be in excellent repair, and you must keep them watertight.

When doing required electrical-safety checks on these cables, follow maintenance requirement card (MRC) S1-R on MIP EL-002/029:

- ✓ Extend power cable and inspect the sheath for cuts, tears and abrasions. Make sure the cable has no splices or exposed conductors.
- ✓ Inspect the cable's reinforcement sleeve for cut and cracked surfaces; the sleeve construction also should be of non-conducting material.
- ✓ Inspect the pump's power-cable stuffing-tube for a watertight seal to the pump casing.
- ✓ Inspect the attachment plug for loose, broken and missing parts.
- ✓ Inspect the plug insulation for cracks, chips and overheating.

Although these steps are not all-inclusive to the MRC, they are the ones that seem to be overlooked.

Submersible pumps are designed to enable a ship to survive a flooding casualty. If your submersible pumps have

electrical cables that look like those in the accompanying photos, or if they do not comply 100 percent with the MRC, the safety and lives of your ship and shipmates could be in peril. Check your pumps regularly! ⚠

The poor condition of these wires show a mishap-in-waiting. Follow the MRC when performing submersible pump PMS to prevent this from happening to your gear!

