

Test Field Divided Into Four Groups

To try to determine the most appropriate kit for certain types of voyages, we split first-aid kits into four categories and established basic standards for each. The categories are as follows:

Group I—For boats operating on lakes, rivers, or bays where professional medical help is readily available (within several hours at most). Cost is less than \$100.

Group II—For boats sailing the coasts or cruising within populated waters where medical help is available within 12 hours. Cost is less than \$300.

Group III—For coastal sailing or cruising where medical help may be up to 24 hours away. Cost is less than \$500.

Group IV—For vessels in isolated situations such as offshore passagemaking or remote cruising, where medical assistance could be several days or more away. Cost is less than \$1,000.

The leading tester on this project was Dr. Ed Mapes, a doctor of veterinary medicine and veteran of 30-plus years sailing inland and offshore. The kit stowed aboard his own boat has been formulated over years of sailing and continual upgrading of supplies and medications to reflect the most contemporary standards. Mapes has relied on several books as well, namely *National Ski Patrol's Outdoor Emergency Care* by Dr. Warren D. Bowman, *Advanced First Aid Afloat* by Dr. Peter Eastman, and *Where There is No Dentist* by Dr. Murray Dickson. *Preparations for Offshore Sailing and Cruising*, and the upcoming book, *Further Offshore*, by Mapes, contain chapters devoted to the care of patients with a wide array of injuries and illnesses aboard vessels at sea.

Mapes assessed each kit according to several criteria, including the quantity and quality of its medications and supplies, the suitability of the containers in which the items are stored, and price. Additionally, each kit was evaluated based on minimum standards adopted for that particular group.

Our assessment will naturally hold kits in succeeding categories to higher standards, since they must contain materials, supplies, and medications to provide treatment options for a wider and more severe variety of ailments, and for longer periods of time. Along with meeting each group's minimum standards for contents, the containers were also judged regarding water- and shock-resistance. Higher ratings were given to those kits whose contents were well organized and labeled according to categories of treatment, and to those with individual packets that are transparent for ready identification and have stout closures for security.

Each kit was expected to contain at least one medical manual that could assist lay persons in providing competent treatment to stricken crew members. These manuals were expected to reflect the intended purpose of the kit.