

Running in Fog: An Expert's Advice

MOTOR BOATING & SAILING

OCTOBER 1990

\$3.00

**We test the
New Bertram 60 & 72
Plus the Blackfin 33**

**Boatkeeper:
Getting Ready
For Winter**



**Beautiful
(And Sexy)
Braginton 45**

**Tempest's
Talking Helm Station**

**Venice to Monte Carlo
Race in a Cigarette 38**



Talking Tempest

"Welcome aboard your Tempest advanced-concept offshore motor yacht. I am your computerized mate ready to assist you on your great nautical adventure. Please state your personal identification," says a clear, yet invisible female voice.

"David," responds the helmsman.

"Hello David."

"Hi."

"Please wait while I perform start-up procedures. . . O.K."

"I will monitor the engines and stand by to activate various systems upon your voice command."

"Helm down," says David.

"Helm is up," comes the clipped response.

"Navigation down."

"Navigation module is up."

"It's obvious David is having the time of his life."

Observing the Tempest 60's assent to human captain and his equally assent to electronic first mate get ready to leave the dock makes me feel sort of sorry, however. Despite its unmistakable New York accent, something about a talking helm evokes memories of BAL . . . and Max Headroom. But I'm soon reassured that this computer-mate harbors accents of mischief, in case it will.

"I've purposely restricted the Tempest Voice Computer to passive interface functions," says Adam Erdberg, president of Tempest Yachts in N. Miami Beach, Fla. and the man who first thought to employ advanced voice recognition and response systems in the marine market. "I could have made the computer steer on command, start and stop the engine, but I'm not doing that because of the liability—even at 99-percent accuracy." he explains. "And everything has a manual override."

What Erdberg has decided to include in the program makes perfect practical sense for today's yachtman. As a complement to the yacht's standard panel warning bells and flashing lights, the computer voice will loudly announce specific problem situations. Early warnings such as "port engine, low oil pressure," "starboard engine overheating," "high-water forward bilge" and "fire in engine room" not only ensure passenger safety, but also can save you many times the \$10,000 you've paid for the computerized system (including hardware). As Erdberg points out, "If contaminated fuel goes undetected, it can blow \$150,000 worth of engines."

This voice-activated helm may change forever boat operations as we know them today.

In addition to maintaining 24-hour watch-duty in the engine room, the computer-mate serves as an extra pair of hands when they are needed the most. Particularly during high-speed maneuvers, it's comforting to know you can verbally command the vessel to turn lights on—as in "navigation lights activate"—without removing your hands or attention from the helm in search of the proper button.

The Tempest Voice Computer will respond to a series of such commands (including on/off light switches for all sec-

tions of the vessel), but only when activated and spoken to by a voice it has been programmed to recognize—generally that of the boat's captain, owner and a few family members. This is known as a "speaker-dependent" system and requires several hours of menu-driven training to achieve voice recognition. During this time, the computer creates templates of particular voice patterns which are then stored in the machine as memory . . . and recognized for as long as the owner wishes.

Monny Gordon of Fairview, N.J.-based T-Leg Technologies Corp. is the voice-activation specialist who engineered the Tempest system.

Gordon, whose past experience includes work on both U.S. and Israeli military aircraft, was well aware of the problems of many cockpits when he set about designing a computerized voice system for marine application. Gordon is justly proud of VoiceMate, as he's named his marine voice-command-and-response system, which he says will recognize commands up to 98 percent of the time, while boasting 100-percent accuracy in response.

To run his custom software, Gordon chose a rugged, IBM-compatible portable computer featuring a hard disc and two floppy drives. The computer, which is sold as a package with the software, should be specifically shock-mounted in a spray-free area. Tempest's second installation, on a yacht headed for Palm Beach, was stored neatly out of sight, built into a chest in the master stateroom. Another VoiceMate was also recently put aboard a Wilcox. Gordon observes that the computer's general-purpose hardware is also ideally suited for ship's management and everyday home and office PC applications. □

By MINDY LEAF