## Mercury's Turbine Outboard



Mercury Racing is famous for breaking the rules. The company won't cheat on the racecourse at Rouen, but it will ignore conventional design wisdom. The most recent proof of this is Mercury's new experimental outboard motor. Pistons,

connecting rods and crankshaft haveall been replaced by a Rolls Royce Allison 250- series gas turbine. It's bolted onto a Mercury Racing 2.5 EFI Offshore center section and laid on top of a Torque Master gearcase. The experimental engine was built in an alliance wuth Marine Turbine Technologies (MTT). For those who unfamiliar with the company, MTT is renowned for its turbine expertise.



SPOGLIN UP: Merc bolts on a turbine for the U.S. Navy.

We recently tested the prototype turbine outboard (320hp) on a 26-foot aluminum landing craft built by Munson Boat Works. Start-up is exactly like a helicopter. Spin the turbine with an aircraft starter motor, add fuel and fire, and then wait while it spools up. True to the nature of turbine power, sound levels are high, registering 105 decibels (dB) at idle and 114 dB at wide open trottle. Under way, and at 95 percent power, fuel flow measured a modest 24 gph, which is considerably better than a conventional gasoline outboard. According to MTT's founder, Ted McIntyre, top speed on this particular turbine-powered craft is 40 mph: that's with four crew members and an old-style M151A1 Jeep (not a Hummer) as payload.

This experimental outboard motor was developed in resource to a pending requirement of the U. S. Navy that will forbid gasoline onboard its ships. While the Navy is considering diesel direct- injected outboard motors in a variety of makes and models, the MTT/Mercury turbine should be tantalizing. It weighs only 200 pounds- about as much as a 50 hp outboard-and it's narrow enough to pass through the hatch in a submarine's sail. Finally, the turbine outboard has multi-fuel capability (diesel, kerosene and JP4 jet fuel). If The engine does go into production, the cost is estimated at \$40,000. Contact:Mercury Racing, Dept. MB, P. O. Box 1939, Fond du lac, WI 54935. (920) 929-5000. <a href="www.mercurymarine.com">www.mercurymarine.com</a> -T.B.

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