

United States Navy's *USS Makin Island*: Unique Hybrid Propulsion System Uses GE LM2500+ Gas Turbines



The United States Navy commissioned its LHD 8 ship *USS Makin Island* on October 24, 2009, in San Diego, California. *USS Makin Island* is the first U.S. Navy amphibious assault ship to feature a unique hybrid propulsion system that relies on two GE LM2500+ gas turbines or two diesel electric motors. The ability to select the best mix of power plants to match the immediate mission requirements provides the opportunity for significant fuel savings and reduction in operating costs for the ship.

According to the U.S. Navy, “by using this unique propulsion system, the Navy expects over the course of the ship's lifecycle to see fuel savings of more than \$250 million, a testament to the Navy's commitment to energy awareness and conservation.”

LM2500+ Gas Turbine

The LM2500+ marine gas turbine is based on the design and precedent-setting reliability of GE's popular LM2500. The 40,500-shaft horsepower LM2500+ delivers up to 20% more power at a simple-cycle thermal efficiency greater than 39%.

Its high efficiency, reliability, and installation flexibility make the LM2500+ ideal for a wide variety of marine, power generation and mechanical drive applications.



GE LM2500+ gas turbine

Shown is the *USS Makin Island* (photo courtesy of the United States Navy).