

The CH-53E prototype of the mine countermeasures version flies during testing by Sikorsky.

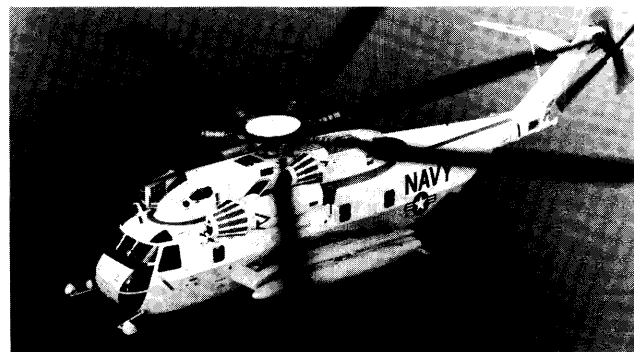


Photo by Sikorsky

Illustration Courtesy Sikorsky



In an artist's concept, the MH-53E Super Stallion is seen in flight during minesweeping operations. Note enlarged fuel sponsons adding to on-station time.

# The MH-53E Minesweeping Super Stallion

Now in the development stage by Sikorsky, the MH-53E will be a reconfigured version of the CH-53E *Super Stallion* presently being introduced into the Marine Corps. The prototype, seen in cutaway at right without enlarged fuel sponsons, made its first flight on December 23 last year. It is now undergoing evaluation and testing at the Naval Coastal Systems Center in Panama City, Fla.

The MH-53E's triple turbine engines will provide greater lift for mine countermeasures operations while enlarged sponsons will carry additional fuel to allow up to six hours of time on station. The new configuration will also feature the airborne mine countermeasures coupled, dual digital automatic flight control system. The system consists of two digital computers, a cockpit control box, six accelerometers, and five position sensors. It is 42 percent lighter, occupies 54 percent less volume and consumes 41 percent less power than the older analog system. There is no organizational level maintenance required. The computers continually cross-check one another and disable any potential false inputs to the automatic flight control system servos. If one computer fails, the other will automatically double its output, eliminating any degradation in automatic flight control performance.

Also part of the new mine countermeasures capability is a dedicated AMCM hydraulic system, improved AMCM navigation, 30,000-pound tension tow boom, better mirrors and better crew environment.

The MH-53E *Super Stallion* is capable of inflight refueling and can be refueled at hover. It is also shipboard compatible with amphibious ships serving as airborne mine countermeasures platforms. The aircraft will sweep waters for mines by flying above the surface, towing electronic or magnetic sweeping gear as well as gear for neutralizing moored mines.

The Navy anticipates a requirement for 55 of these helicopters.

Cutaway illustration courtesy of Air International, March 1981.

