DESCRIPTION

The Seakeeper 3 was designed with the ability to be run off of a vessel’s 12 VDC house battery bank. Because of this, software provisions have been made to prevent excessive battery discharge during operation. Technical Bulletin 90454 explains this automatic procedure.

AUTOMATIC LOW-VOLTAGE SHUTDOWN

In situations where there is a net discharge on the house battery bank (i.e. engines off), the Seakeeper 3 – which continually monitors battery voltage – will run at full power until it detects 11.1 VDC at the Seakeeper. At this level, which reflects approximately 11.3-11.5 VDC at the battery bank, the SK3 will begin incrementally decreasing its power consumption to ensure that its measured voltage does not decrease below 11.0 VDC.

During this decrease in power consumption, if the measured voltage at the SK3 does not increase above 11.1 VDC, then the Seakeeper will continue to de-rate power consumption until it reaches 67% of its flywheel target speed. At this point, an alarm will trigger and the Seakeeper will shut itself down.

If, before the 67% flywheel speed automatic shutdown is triggered, a net charge is fed back into the battery bank (i.e. engines have been started) and the voltage at the Seakeeper is raised above 11.1 VDC, the Seakeeper will detect this and begin incrementally increasing its power consumption once again, until it resumes full-speed stabilization.

If the system voltage is raised after the 67% flywheel speed automatic shutdown is triggered, the user will need to manually restart the Seakeeper to resume stabilization.