A BOEING COMPANY

**Spectrolab, Inc.** 12500 Gladstone Avenue, Sylmar, CA 91342 USA FAA Repair Stations No. L9SR877X EASA Repair Station No. EASA.145.6207

## **SX-16 Nightsun<sup>®</sup> Enhanced Gimbal Assemblies**

Spectrolab Inc. is pleased to announce the introduction of the new Enhanced Gimbal Assembly for the SX-16 Nightsun<sup>®</sup> Product Line.

This new Gimbal Assembly adds enhanced functionality with improved reliability. These enhancements do not change the form, fit and function in system applications, however we have released the Enhanced Gimbal Assembly as a new configuration with new part numbers.

Part number 019059-210 is compatible with Gimbal part numbers (019059-10, 019059-110, 019059-11, 019059-111, 022955-21, 022955-121, 022955-22 and 022955-122). Part Number 019059-230 is the SpectroLink configuration of the Enhanced Gimbal Assy.

To start, we've introduced a newly designed Gimbal Arm that has undergone and exceeded rigorous DO-160 testing profiles and requirements. This has allowed us to give it an on condition service life removing the seven (7) or ten (10) year life limit. The new aluminum Arm is a one-piece, ribbed and flared design that is machined, bent and treated to offer increased lateral stability and structural integrity to improve vibration levels to Searchlight.

A new Gearbox design has been implemented on the Enhanced Gimbal Assembly. The design was required to be retro-compatible so that older gearbox components can still be used. The Gearbox is unchanged externally, thus not affecting form and fit. Internally, we've tightened the gear tolerances, yielding less than ¼ ° (quarter of a degree) of gear play. Gaskets have been replaced by O-rings to seal the housing and better protect the dry-lube gears from the environment. These enhancements on both azimuth and elevation gearboxes, coupled with the enhanced Gimbal Arm result in a steadier searchlight beam that is easier to keep on target.

Additionally, the Enhanced Gimbal offers adjustable hard stops in both azimuth and elevation axis to obtain proper range of motion for your specific application. The adjustable hard stop design is compatible with any stock Searchlight stop configuration.

The new Enhanced Gimbal improves performance and reliability of the SX-16 Nightsun<sup>®</sup> Searchlight that you are familiar with and overall offers an enhanced user experience.

Available as new assemblies, we also offer component upgrades under our FAA repair station, authorized service centers and upgrade kits for field installation.

Spectrolab recommends that all valued customers wishing to upgrade their existing SX-16 Nightsun<sup>®</sup> systems, allow our FAA/EASA Authorized Repair Station to handle these upgrades.

Please do not hesitate to contact Spectrolab's Illumination Products Customer Service Department by phone at (800) 936-4888 or email at <u>DL-SYLCustomerservice@west.boeing.com</u> with any questions that you may have.