

## Obsolete Component Replacement. Improved Life.

Our proprietary design offers sustainment alternatives.



### Overview

Kellstrom Defense (formerly Kellstrom Defense Aerospace, Inc.) has engineered a solution for the accelerometers that is incorporated into the targeting system of the TOW Missile System. The original equipment manufacturer (OEM) discontinued production of these items. Our customers approached us for a solution.

### Background

As platforms age, OEM support for sustainment diminishes and end-users tasked with maintaining operational readiness are faced with critical supply chain deficits. Kellstrom Defense (KD) offers its military customer base legacy aircraft solutions that address these shortfalls. We are a global provider of comprehensive support for U.S. manufactured legacy defense platforms including fighters, transports, patrol aircraft and helicopters. Our "Total Support" approach encompasses strategic distribution, repair & overhaul, engineering & manufacturing, modernization solutions and overall program management. KD's Engineering & Manufacturing Division continues to grow its capabilities in order to keep up with the legacy aftermarket demand for engineering solutions, including the re-design and modernization of aircraft systems.

### Business Need

The TOW Missile System is still widely used on the AH-1 Bell Cobra Helicopter. This system incorporates a range finder and target tracking system that uses highly sophisticated components. One of those components is the accelerometers that control the right to left; up and down position of the optical range finder.

These devices are sensitive instruments that are subject to failure due to the harsh environments they operate in. Due to the sensitivity and known poor reliability of these accelerometers, replacement is required after only a few hundred hours of operation in the field.

### Solution

The Kellstrom Defense Engineering & Manufacturing Division has re-engineered these obsolete, out of production components and now provides accelerometers with the same form, fit and function as the original component, but incorporates modern MEMS accelerometer devices with much higher reliability and accuracy. Our engineering team fully qualified this new design in the harsh AH-1 environment and saw a significant increase in the devices ability to withstand the shock and vibration without damage as compared to the original device. Now our customers have a reliable spare part that they can install into their legacy systems and continue to operate their equipment.

### Benefits

The Kellstrom Defense accelerometers provide a direct replacement to the OEM product with the same function with a superior level of reliability. Our prototype testing procedures ensure that our production parts operate with full capability, bringing longer operating life to these aging systems.



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