Kaney Receives Navy SBIR Award to Develop Sonobuoy Power Amplifier

ROCKFORD, Ill. – The U.S. Navy has selected Kaney Inc. for the Small Business Innovative Research (SBIR) program to apply advanced power amplifier technologies to the next block upgrade of AN-SSQ/125 sonobuoys, the company said in a Dec. 1 release.

Under this effort, Kaney teams in Rockford, Ill and Dayton, Ohio, will develop a low-distortion Class D power amplifier using high-efficiency, high-power density, widebandgap semiconductors. Microprocessor-based distortion reduction algorithms and specialized output filtering will be used to meet distortion requirements. Amplifier design upgrades are required to support a wide range of input voltages, high-bandwidth, high-power, low-distortion and lower volume than the legacy power amplifier. The SSQ-125 sonobuoys are used by the U.S. Navy for anti-submarine warfare operations. The SSQ-125 is air launchable from fixed or rotary-wing aircraft. It is also easily deployable from the deck of a surface vessel.

"Our team has unparalleled experience in advanced technology and manufacturing critical military and aerospace products that will be leveraged for this new product development," said Jeffrey J. Kaney Sr., chief executive officer of Kaney Inc.