# **Guided Training Round (GTR)**



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## **Contact:**

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## Topic Number: J201-CSO1

**SYSCOM:** Naval Air Systems Command (NAVAIR)

#### Program Sponsor: PMA-201

#### **Other Potential Programs:**

PMA-242 (Dual Mode Air Launched and Net Enabled Weapons Training Round), US Air Force AFLCMC/EB, and international customers

# **Current TRL:** 4

Projected TRL: 5 / Q3 2023

#### **Keywords:**

LGB, JDAM, LJDAM, Training, LGTR, ELGTR, Net Enabled Weapons, Readiness, SDB, PGM, Affordability, GTR, JTAC





# THE CHALLENGE

The Department of Defense (DoD) and international pilots, maintainers, weapon handlers, and Joint Terminal Attack Controllers (JTAC) are unable to train as frequently as desired with Joint Direct Attack Munitions (JDAM), Laser JDAMs (LJDAM), Small Diameter Bombs (SDB) and Net Enabled Weapons (NEW) due to their high cost and range restrictions. Most air-launched weapons fly too far to be able to be dropped on most training ranges. LJDAMs cost \$50,000 per round. If CoAspire can take an in-production Department of the Navy (DoN) Laser Guided Training Round (LGTR) and convert it into a MIL-STD 1553/1760-compatible round, GPS/GNSS and Semi-Active Laser-guided dual mode training rounds will cost a fraction of the cost of full-up training rounds, allowing for more frequent training, increased readiness, and use on more ranges.

## **THE INNOVATION**

CoAspire has designed, built, coded, and fully integrated in a Hardware in the Loop (HWIL) and Software in the Loop (SIL) small form factor dual mode GPS/GNSS to be added to LGTR's pre-existing Semi Active Laser missile guidance hardware package. By integrating Commercial Off the Shelf (COTS) and CoAspire-designed components with over 6,000 lines of code, the team has proven GTR functionality in laboratory and test vehicle environments.

## **THE NAVY BENEFIT**

The Navy will have a Precision Guided Munition (PGM) for training or warhead integration at a fraction of the cost of other weapons. With an objective price of under \$10,000 per round at rate, the GTR will provide a potential precision strike weapon at a fraction of the cost of using other PGMs.

# **THE FUTURE**

Continued SBIR Phase II Enhancement or Program Office funding will support test article development and engineering activities resulting in multiple test flights on the critical path to EOC. Funds would support NAVAIR-prioritized activities like autopilot integration and GTR full up round integration and validation to include ground and air testing. Over 200,000 LGTRs have been manufactured for the U.S. Navy and many international partners. The GTR has huge commercialization potential on a path to sell over 200,000 rounds, which could result in a DoD and FMS revenue stream of over \$2B.