

CPO 31 Bio Medical

Project Summary

This project's primary objective was to develop a prototype and test a model for longitudinal blast exposure monitoring in a training environment. The model was designed to demonstrate a functional plug-in software component that pairs a set of gauges with the Operator's TAK configuration. The blast gauges were designed to capture overpressure data, acceleration, and waveforms to wirelessly transmit data to the Operator's TAK device. The device simultaneously integrates with a TAK server and the Smartabase athlete data management system.

Project Timeline

Project Kickoff: 12 February 2020
Final Acceptance Testing: 21 – 22 September 2020
Final Report Submission Date: 08 October 2020



Resources Consumed

Total Cost: \$430,782.28



Project Results

During final acceptance testing at Ft. Benning, a group of 30 Operators equipped with a blast gauge system and a TAK device (Samsung S9+), executed breaching and mortar training. The blast gauge system successfully captured overpressure data for each Operator during each event. The blast gauge system transmitted the overpressure data to the TAK device and to a TAK server which, ultimately, was transmitted to Smartabase over WiFi. Upon completion of each event, the vendor and TPOC provided feedback to each Operator.