

Introducing CRG's **Biodynamic Acceleration Sensor System**

Aircraft ejections place a high degree of strain on the body, especially the head and neck. The Biodynamic Acceleration Sensor System monitors actual ejection events to accurately capture pilot head motion before, during, and after an ejection. This provides more accurate data models to evaluate seat technology and safety equipment in ejection environments, as well as to aid in mishap investigations. The system can operate across a variety of fast jet platforms, ejection systems, and test scenarios.

Biodynamic Acceleration Sensor increases warfighter safety with the following features/benefits:



Comfortable Wearables

Fits comfortably and safely on or inside the helmet (i.e. underneath ear cup)



Easy Consumables

Disposable and easily replaceable (peel-and-stick attachments)



Low Maintenance

Operates for up to one year without device replacement or additional upkeep



Data Collection/Storage

Accurately collects biodynamic data before, during, and after ejection



Automatic Response

No on/off action required by pilots with automatic sensing and data collection

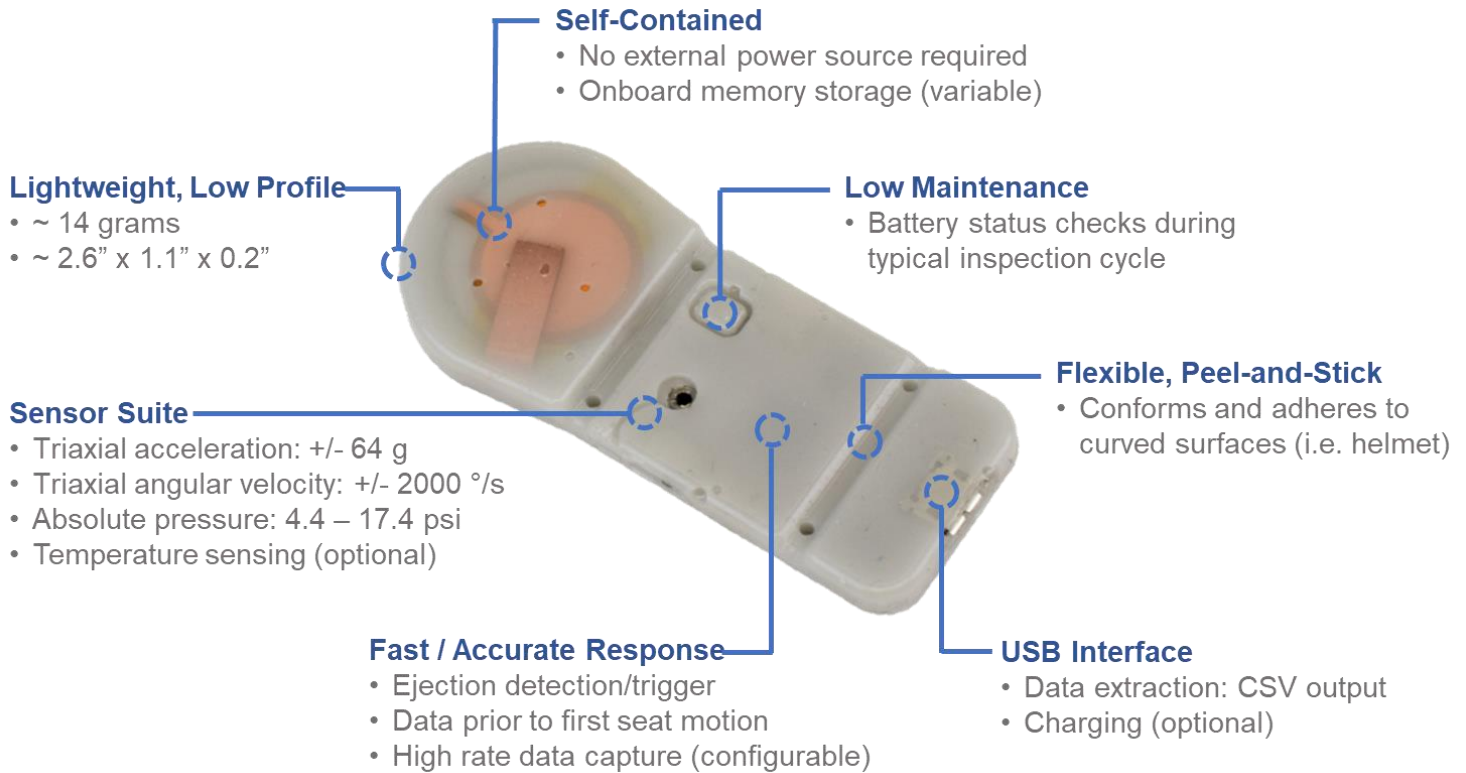


Sensor Modularity

Can be programmed based on use case (i.e. flight vs. sled test vs. lab test)

Help Decrease the Risk of Warfighter Injury

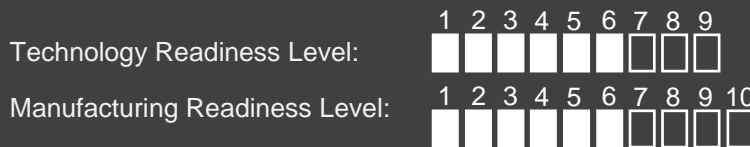
via a wearable biodynamic acceleration sensor system



Biodynamic Acceleration Sensor System Status:



Source: wpafb.af.mil



Designed and fabricated fully functional prototypes

Demonstrated high-rate and high-impulse data capture in-house

Captured helmet impact test data at WPAFB and demonstrated survivability

Captured HIA (Horizontal Impulse Accelerator) and VDT (Vertical Deceleration Tower) data at WPAFB

Captured high speed rocket sled data at Hurricane Mesa Test Facility (May 2021)

For more information:
Contact us at sales@crgrp.com



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