



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

U.S. Army Research, Development and Engineering Command

U.S. Army Research Laboratory

Mobility & Logistics Technology Areas of Interest

Objective: To provide advance planning information regarding ARL technology areas of interest. Note: The information provided is not a solicitation, a request for proposal or quotation, an invitation for bids or a broad agency announcement.

Requested Innovation: To develop prognostics and diagnostic systems for critical air and ground vehicle components.

Description: Create solutions to allow vehicle systems to diagnose critical components and communicate that information to operators and maintenance technicians. Develop prognostic algorithms to assist in the prediction of most types of failure and project remaining useful life for monitored critical components.

Technology Areas of Interest:

- Several prototype monitoring and prognostics systems incur high cost and large weight penalty. Requested diagnostic hardware should be integrate- able into existing critical components and have low weight and power requirements for sensors, wiring, and electronics package.
- Prognostic/Diagnostic algorithms should characterize the damage to critical components and incorporate physics of failure modeling.
- Low cost solutions need to allow for mass production across the vehicle fleet

EDGE Call for Innovation (CFI)

“CFI ARL-Prognostics/Diagnostics-001”