NEXLOG Data-Driven Logistics (D2L)
M88 Predictive Maintenance Pilot

Installations & Logistics

Improving maintenance decisions by minimizing unscheduled repairs

Technology / Product / Objective:
- Prototype predictive maintenance software solution to improve operational readiness for a legacy platform (M88)
- Prototype smart sensors to increase system life and resiliency through predictive modeling, machine learning, big data analytics, and Condition-Based Maintenance (CBM)
- Combines structured data from sensors with unstructured historical GCSS-MC data to develop algorithms for predicting maintenance
- Pilot will leave-behind prototypes/data to be further assessed in the operational environment

The So What:
- Assess the impacts of a commercial predictive analytics solution on maintenance planning, costs, & operational readiness. Proof of concept will inform requirements for larger logistics predictive analytics and CBM+ capabilities.

Key Participants:
- Project Lead (PL) Agency: USMC I&L
- Gov't Contributors: RRTO, OSD (MPP)
- Transition Partners: MARCORSYSCOM, Army TACOM

Key Deliverables:
- Develop and deliver prototype data loggers for M88 platforms
- Deliver license to analytics software & data in AWS GovCloud
- Training / CONOPS manuals
- Develop a final report summarizing the work performed and the results and conclusions derived.

Project Milestones:
(DAC= Days After Contract Award)

- Project kickoff and POA&M development — 30 DAC
- Initial report with predictive insights gained — 120 DAC
- Field demonstration — 150 DAC
- Deliver final report & prototypes — 360 DAC