



WSIRD

WEAPON SYSTEM INTERACTIVE REPORTING DASHBOARD

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CLEARED

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WSIRD

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Aviation OSS&E Analysis

Capability to visually integrate reporting dashboards for Aviation Maintenance Reliability and Supply Metrics as well as support for Weapon System Integrity Programs such as:

- Aircraft Structural Integrity Program (ASIP)
- Propulsion Systems Integrity Program (PSIP)
- Mechanical Equipment and Subsystems Integrity Program (MECSIP)
- Avionics and Electronic Systems Integrity Program (AVIP)

Genesis of WSIRD

KIHOMAC developed interactive dashboards to optimally support JSTARS AVIP Program Management actions in MIL-STD-1796A that can quickly be adapted to incorporate all Weapon System Integrity Programs

- Identify and drill through systems, sub-systems, components, and processes down to the actual data that impacts safety, reliability, aircraft availability, cost, maintainability, and supply chain effectiveness
- Dynamically visualize data to quickly determine maintenance high drivers, MICAPs, NMC/PMC status hours, Minimum Acceptable Performance, mission aborts, and cannibalizations

Data Visualization and Functionality

- Immersive visual design with an adaptable AI analyzer is included within the software
- AI capabilities allow for fast and accurate data review without human interaction (EWIS Keyword Search)

System Integration and Accessibility

- GovCloud integration
- Web page (properly secured and monitored) used as the delivery vehicle: no need for software or base IT on the customer side
- Development time is in day(s) to week(s) timeframe versus month(s) to year ranges for other equivalent systems

Data Integration and Management

- Can sync any type of data across multiple platforms, connect deeply into apps, and configure flexible workflows

Connection Capability to All Standard Data Collection Methods

- Flexible and intuitive data shaping and modeling (e.g., MySQL, MSSQL, Excel, Access)

Growth Potential

- Template creation allows for easy migration into future data information systems i.e., AFIRM/JRAMS/DoD ADVANA/Air Force BLADE, Army Vantage, and Navy Jupiter
- The goal is not all about the current tool, it is understanding the customer's need for answers, selecting the best tool set, and continually providing the right analytical applications

Data Processing
Week 1-2

Prototyping
Week 2-3

Development
Week 3-8

QA
Week 8-10

EST Launch
Week 10

Accredited Networks

Meets or exceed Department of Defense (DoD) security & control

- DoDI 8500.01 Cybersecurity
- Government Community Cloud-High (GCC-High) Microsoft 365 instance
- CMMI Dev Level III Certification

Secured Web Portal Option

- Government customer verifies users accounts
- KIHOMAC provides user access through web-browser
- Meets Information Assurance (IA) requirements
 - DoDI 8520.03 Identity Authentication for Information Systems
 - Leveraging Microsoft Identity Platform to support CAC/PKI authentication for Government users
- C-5 Customers exclusively access through DoD GovCloud

- **Current C-5 Dashboards to identify, track and trend**
 - Maintenance High Drivers
 - Aircraft Status Hours
 - MICAP High Drivers
 - Cannibalizations
 - Mission Aborts
 - **Electrical Wiring Interconnect System (EWIS) Keyword Search**
 - **Supply Maintenance MICAP Search Tool**
 - **Minimum Acceptable Performance**
 - Serially Controlled Items
 - Time Change Items
 - Mission Critical Items
 - Safety Critical Items
- Supply High Cost/High Demand
- **Supports MIL-STD-1798D**
- **Previously linked in JSTARS Aging Fleet Integrity and Reliability Management (AFIRM) System**
- **Maintaining historic JSTARS Dataset for Historical Analysis and AI/ML Development**



Core applications currently exist

- Supports MIL-HDBK-525
- Artificial Intelligence and Machine Learning to analyze free-form text allowing visualization and insight into previously obscured data

Easily developed & customized dashboards

- C-5 AWTs Data Analysis
- C-5 EWIS Physical Audit

Assist both USG & KIHOMAC with data analyses

- Currently gathering data for analysis can take days/weeks
- WSIRD reduces time to minutes/hours
- Most data is available with a few clicks of a mouse



Questions?

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