





## **WEAPON SYSTEM INTERACTIVE** REPORTING DASHBOARD

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# Background

### **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



# Development Requirements

WSIRD

### **Data Visualization and Functionality**

- Immersive visual design with an adaptable Al analyzer is included within the software
- Al 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



# Cybersecurity

#### **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 webbrowser
- 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



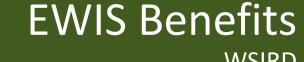
# Current Applications

WSIRD

- 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

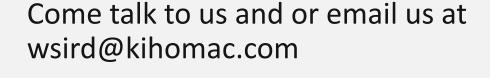
- Currently gathering data for analysis can take days/weeks
- WSIRD reduces time to minutes/hours
- Most data is available with a few clicks of a mouse







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