The Sustainment Enterprise Metrics Dashboard-Status, Value-Added, and Way Forward

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Systems Acquisition Group Executive
Naval Sustainment System (NSS)

Implementation of Naval Sustainment System

Surge
Near term step change in MC aircraft levels through focused influx of all support functions

FRC Reform
Best-in-class Organic facilities, with highest quality, lowest cost, and shortest cycle-time

O-level Reform
O-level empowered to maximize maintenance performance close to flight line, balanced with enterprise demand

Supply Chain Reform
Single, accountable supply chain owner that ensures all parts are available when needed – right part, right place, right time

Engineering & Maintenance Reform
Engineering-driven reliability system at base of sustainment activity

Governance, Accountability, & Organization
- Cascade readiness metrics across organizations
- Streamline Select Processes – i.e. OMN BTR in FY19
- First-steps towards enduring sustainment culture (applicable to all pillars)
- Coordinate currently ongoing, over-arching sustainment focus efforts (e.g. MRIPT, NSS, Task Order, R2R)
- Establish & pursue a sustainment data strategy
- Cement culture of sustainment (applicable to all pillars)

WILL TRANSFORM THE AVIATION LIFE-CYCLE SUSTAINMENT MODEL
Naval Aviation Data Analysis

People
Maintainers

Equipment
Aircraft
Systems
Components

OOR
Depot
Aircraft
Components

Supply

Training
Pilot & Aircrew
Maintenance

Cost

Ordnance

Engineering

Flight
Utilization

MC
FMC
Path to Improve Readiness
Move Analytics from Reactive to Proactive to Predictive

**REACTIVE**
Act on Known Issues
- Degrader List
- Supply Back Orders
- Historical Execution
- AOG/MOC Tactical Analysis
- Emergent requirements

**PROACTIVE**
Manage Known Risk
- Optimize Supply Deliveries
- Optimize Component Repairs
- Optimize Component Inductions by Site
- Optimize Maintainers by Site
- Optimize Aircraft Inventory
- Optimize Support Equipment
- Dynamic & Optimized Maintenance Scheduling

**PREDICTIVE**
Anticipate and Preclude Risks
- Predictive & Opportunistic Maintenance (Failures)
- Predict Supply Stock Outs
- Predict Squadrons ability to Execute
- ROIs on Component Improvement Initiatives
- CBM+ (Anomaly Detection)

**NAVAIR Areas of Responsibilities**
- Acquisition of Systems
- Sustainment of Systems

**READINESS**
# Analytical Tools to Improve Readiness

## Near Term/ Tactical Improvement

**Aircraft Down NOW... get it back up**

*Self Service Business Intelligence*

- People (maintainer readiness)
  - Total Force Databases
  - MACCRAT
  - Enterprise Dashboards Air Boss’s Report Card
- Equipment
  - Enterprise Dashboards (Tableau & QLIK)
  - AOG/MOC Dashboards & Tools
  - In-Flight Vehicle Health Monitoring IVHM
- Supply
  - NAVSUP Logistics Cell (**LOGCELL**)
  - Supply End-to-End (**E2E**)
- Training
  - Training Analysis Project (TAP)
  - SHARP/MSHARP
  - Current Readiness Databases

## Long Term/ Strategic Improvement

**Posture FUTURE aircraft readiness**

*Analytical IT Systems*

- Vector – Enterprise Analytical Tool (SQL .net environment)
- DECKPLATE- Authoritative data warehouse capable of hi end analytics (Teradata_Cognos environment)
- Sensor Ground Stations - IMDS, FAME, HMS, CAMEO, MEGA
- Aircraft Utilization – RAMP, AIRRs, Navy Synchronization Tool NST
- Depot- NMDS, Business Objects
- Several OEM Tools (ALIS, HMS, eRIC)

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### Exercised Within a Digital Environment
### Degrader Repairs Last 30 days

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<tr>
<th>Degrader</th>
<th>Active EXREPs /AWP</th>
<th>ER%</th>
<th>Overall Status</th>
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<tr>
<td>TE Regulating Valve</td>
<td>128</td>
<td>19</td>
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#### Performance

- **Average TAT**
  - Target <60 days
  - **35.9 days**

- **Average sale to FCF**
  - Target <7 days
  - **4.3 days**

### I-level (FRC-W and FRC-MA)

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<th>RFI</th>
<th>TAT</th>
<th>Target</th>
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</tbody>
</table>

### Actions Against Issues

All listed actions directly affect T04,5

**Data as of 19 November**

- **GCU**
  - FY20 Sched.: 252
  - FY20 Comp.: 21
  - Nov Prod.: 9
  - Actual: 10

- **Single Canopies**
  - FY20 Sched.: 24
  - FY20 Comp.: 7
  - Nov Prod.: 2
  - Actual: 2

- **Double Canopies**
  - FY20 Sched.: 30
  - FY20 Comp.: 27
  - Nov Prod.: 19
  - Actual: 20

- **Holdback Fitting**
  - FY20 Sched.: 24
  - FY20 Comp.: 6
  - Nov Prod.: 2
  - Actual: 2

- **Windscreens**
  - FY20 Sched.: 96
  - FY20 Comp.: 8
  - Nov Prod.: 1
  - Actual: 1

- **Rudder ServiceCylinder**
  - FY20 Sched.: 2
  - FY20 Comp.: 1
  - Nov Prod.: 0
  - Actual: 0

- **Flow Control Valve**
  - FY20 Sched.: 60
  - FY20 Comp.: 13
  - Nov Prod.: 0
  - Actual: 0

- **TE Regulating Valve**
  - FY20 Sched.: 128
  - FY20 Comp.: 11
  - Nov Prod.: 4
  - Actual: 4

### Production Dashboard Example
Reliability Control Board

O-level Maintenance

I-level Maintenance

Commercial Repair & Overhaul

D-Level Repair & Overhaul

Aircraft, OEM, & Engineering Data

Reliability Analysis & Resources

Reliability Control Board

Fleet Manager

Stakeholders

Reliability Program

The Fleet

Data Management

Process

People & Capabilities

Readiness Outcomes
The engineering support team must provide tactical and strategic services that enable fleet readiness.

**Tactical**

- **Operations Control**
  - AOG Desk (FST)
  - Better customer presence and engagement; 24/7 response team, transparent customer products, commitment to service
  - Clear process improvements; capacity management, mx review, systems review

**Strategic**

- **Reliability Control Board**
- **PMA Eng.**
- **FST Eng.**
- **Action Cells**
  - Strategic priorities set and managed by reliability control board; priorities aligned against top degraders
  - Integrated degrader action cells directly address top degraders; all other projects in PMA and FST aligned for maximum readiness impact

**Fleet Performance and Readiness**

- Immediate flight-line need
- Initiatives and repairs

**Discussion today**

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