Modeling Equipment Health for Strategic Procurement and Sustainment

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• Approach
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• Acknowledgments
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Motivation

- Aircraft Fleet Age Expected to Increase Before Declining
- Support Equipment Age Linked to Fleet Age
- Mission Capable Rates Are Dependent on Effective Support Equipment
- Fragmented Life Cycle Management of Maintenance Functions
• DoDAF Framework
  – Relate System and Maintenance Functions
• BBP 3.0, Emphasize
  – Control LCC
  – Productivity
  – Innovation
  – Competition

Map Selected Functions to SE
• Strategic Procurement of Support Equipment
• Maintenance Functions Across Service
• System Health Modeled for Life Cycle Management
Approach

Identify Service-Wide Common Maintenance Functions from System Architecture
• Compile Historical Support Equipment Supply System Data
  – Track for Obsolescence
  – Track for Usage
  – Classify by Dominant Function
<table>
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<th>2019</th>
<th>2020</th>
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*Assume draw down in 2020s. High remaining life suggests minimal ROI.
**Assume FRP begins.

Align Legacy Aircraft with Emerging Support Equipment for Maximum Life
• Modeling Support Equipment Life
  – Design Life
  – Individual Asset Life
• Identifying Common Maintenance Functions
• Enable Strategic Procurement
• Setup for Optimizing Life Cycle Management
• Thank you to the Avionics & Support Systems Department of the Defense & Intelligence Solutions Division

