



Australian Government

Department of Defence
Capability Acquisition and
Sustainment Group

KC-30A Asset Information Management System

SQNLDR Tanya Evans

Systems Engineering Airworthiness Manager, HALSPO



Scope

- Intro to HALSPO
- KC-30A Capability
- KC-30A Enterprise
- Levels of Service
- Critical Assets
- Types of data
- Data Mapping
- Decision Making Framework
- Asset Information Management
- Where to from here



Heavy Airlift Systems Program Office

Mission

We deliver heavy airlift capability for defence in partnership with industry and global partners

Vision

HALSPO works as a team to deliver:

Heavy airlift capability to meet global operational requirements

Ongoing agile and responsive support to Air Mobility Group

Cost-effective through-life support leveraging a strong industry base

Objectives

- 1. Deliver the required sustainment outcomes and manage the introduction of new capability*
- 2. Continue to improve our business*
- 3. Build on external and internal relationships and be trusted to deliver*
- 4. Provide heavy Airlift sustainment services using a diverse, motivated and skilled workforce of optimal size and structure*

KC-30A Capability

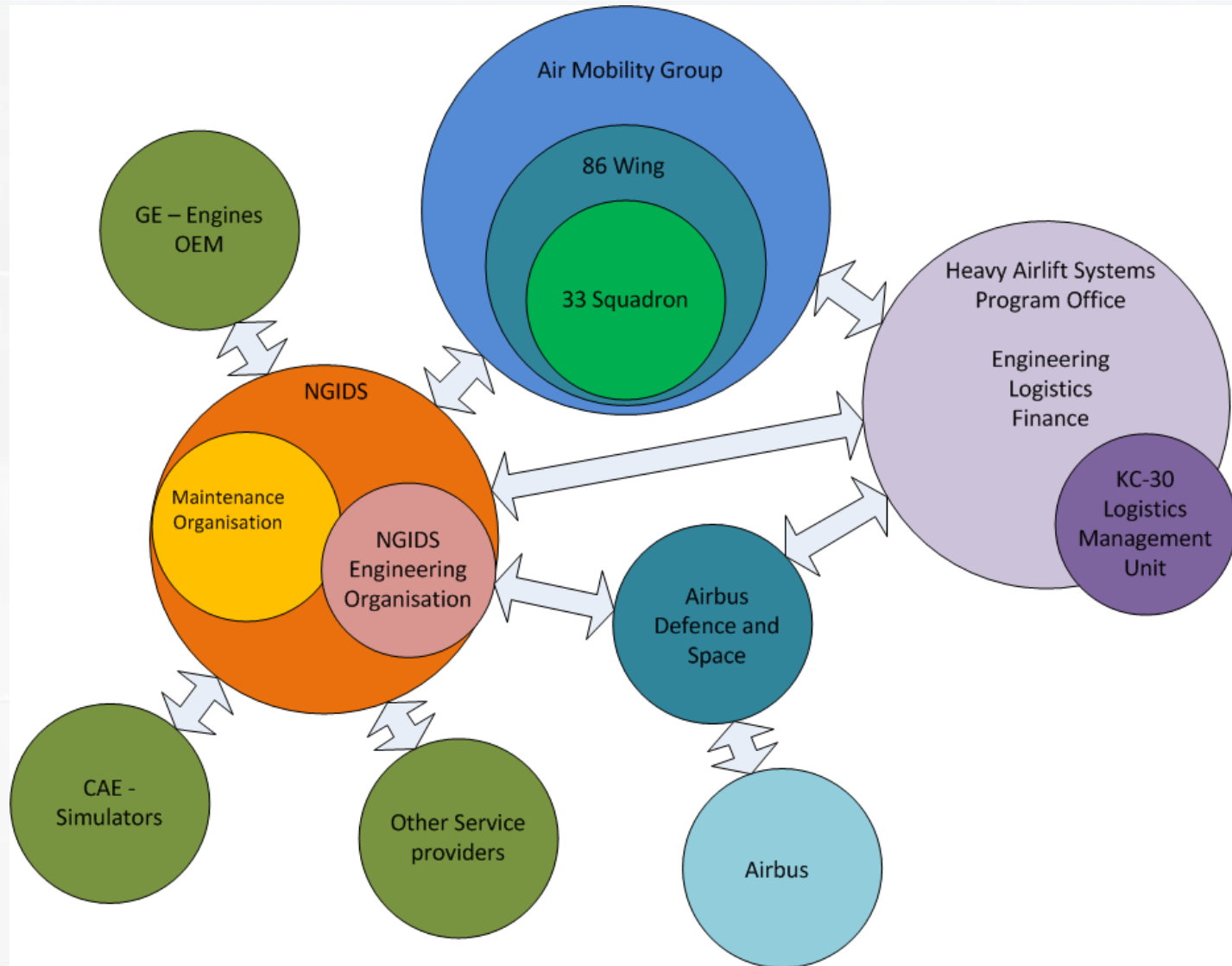
- 5 x KC-30A
- A/C 006 due Sep 2017
- A/C 007 due mid 2019

Missions:

- AAR
 - Aerial refuelling Boom System
 - Hose and Drogue
- ALS
 - Personnel
 - Stores
 - VIP Transport



KC-30A Enterprise




Current Levels of Service

- Life of type
- Available Aircraft
- Mission Capability
- Rate of Effort
- Aircraft Serviceability
- Mission System serviceability
 - Pods
 - Boom
 - UARRSI

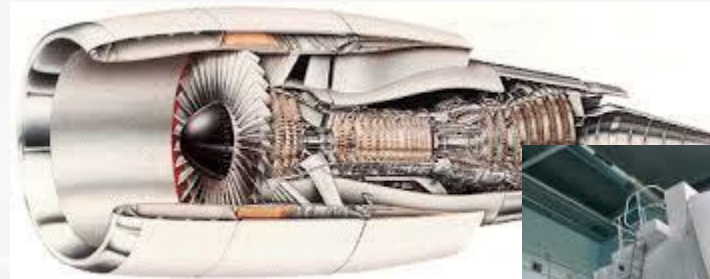


How do we know?

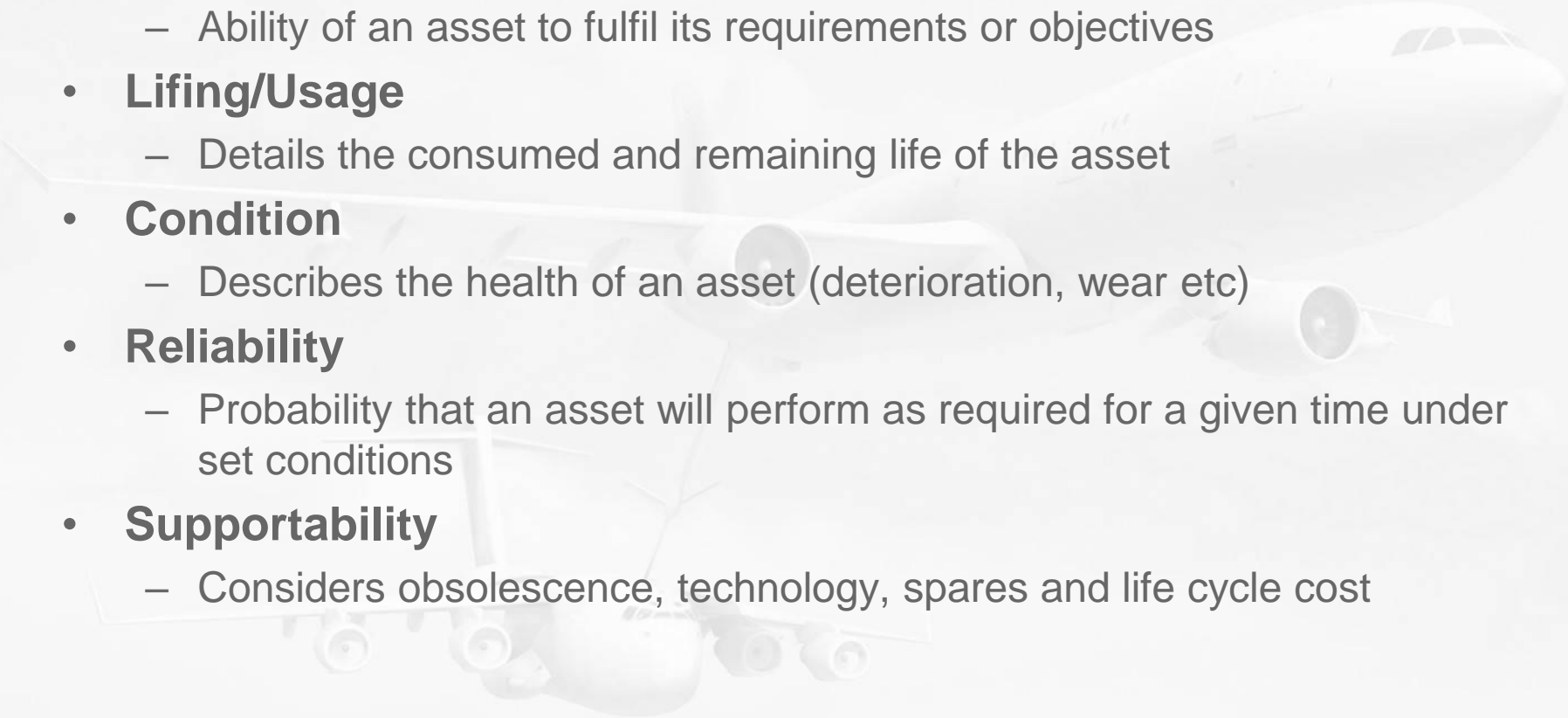
- 
- Aircraft availability
 - Serviceability rates
 - Maintenance hours
 - Mean time between failure
 - Number of serviceable engines
 - Pod hours
 - Boom hours
 - Boom cycles
 - Engine Hours
 - Engine Cycles
 - Airframe Hours
 - Landing Cycles
 - Qualified aircrew
 - Number of maintainers
 - Engineering vacancies
 - Mean time to repair
 - Number of serviceable spares
 - Cost to repair
 - Number of Publication Amendment Requests
 - Tech Information registration time
 - Number of tasks engineering tasks open
 - Days in maintenance
 - Maintenance Interval Extension Requests
 - Carried Forward Unserviceability
 - Publication Interim Amendments
 - Aviation Safety Occurrence reports
 - Corrective Action Requests
 - Mission Completion rates
 - Facilities maintenance requests
 - Number of Special Technical Instructions
 - Rate of effort achievement
 - Flying Hours
 - Flight Cycles
 - Courses completed
 - Course length
 - Fuel consumption
 - Oil consumption
 - EGT Margins
 - Downtime due to spares
 - Downtime due to facilities
 - UARRSI serviceability
 - Downtime due labour
 - Structural condition data
 - Number of defects
 - Tyre wear
 - Missions cancelled
 -and many more.....

Critical Assets

- Engines
- ARBS
- Pods
- Maintenance manuals
- Simulators
- Maintainers
- Facilities



Types of Data

- **Performance**
 - Ability of an asset to fulfil its requirements or objectives
 - **Lifing/Usage**
 - Details the consumed and remaining life of the asset
 - **Condition**
 - Describes the health of an asset (deterioration, wear etc)
 - **Reliability**
 - Probability that an asset will perform as required for a given time under set conditions
 - **Supportability**
 - Considers obsolescence, technology, spares and life cycle cost
- 

Data Mapping

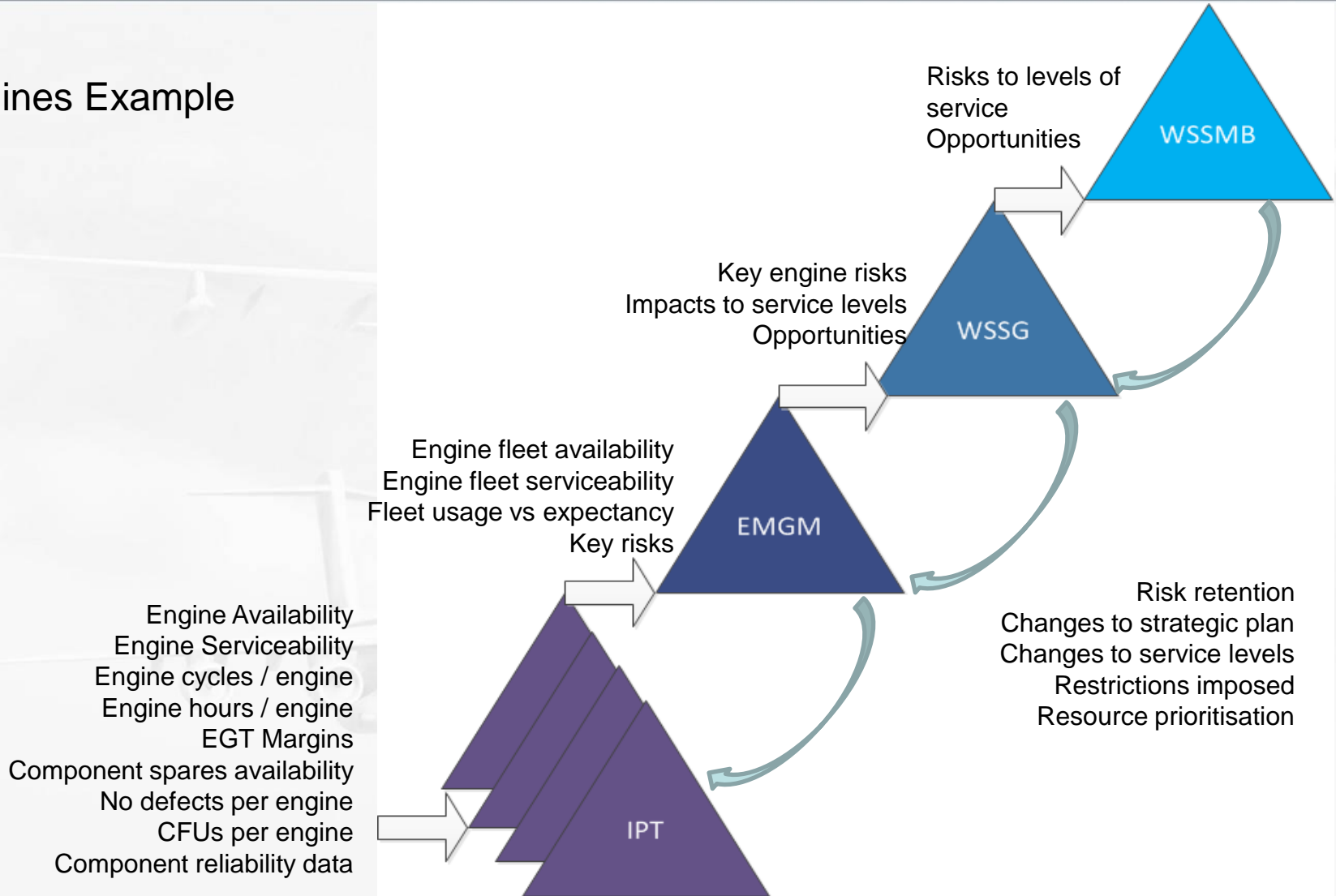
Data Type	Airframe	Engine	Boom	Hangar	Simulators	Maint Manuals
Performance	-Availability -Serviceability -ROE achievement	-Availability -Serviceability	-Mission Capable	-Downtime due facilities	-Qualified aircrew	?
Lifing	-Airframe Hours -Airframe cycles	-Engine hours -Engine Cycles	-Boom hours -Boom cycles	-Time since construction	-Operating hours	?
Condition	-Condition assessments	-EGT Margins -Oil consumption	-Inspection results	?	?	-No. PIRRs
Reliability	-Defects -Materiel ASORs	-Defects	-MIERs -Defects	-Maintenance Requests	?	-No. interim amendments
Supportability	-MTTR -Downtime due spares	-Cost to replace	-No. spares available	?	?	-PIRR turnaround time

Decision Making Framework



Turning Data into Information

Engines Example



Where to from here?

- Finalise and Approve HALSPO Asset Information Management Plan
- Establish and review against existing reporting framework
 - Levels of Service
 - Critical Assets
- Develop detailed data map
- Identify shortfalls and remove unnecessary monitoring activity



Questions?

