



Ministry
of Defence

de&s

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**DIRECTOR ROTARY WING &
UNCREWED AIR SYSTEMS**

**DEFENCE EQUIPMENT &
SUPPORT**

**Increasing the Availability of the UK's Rotary Wing fleets.
A Case Study**



Strategic Context

- International Order under rapidly increasing threat.
 - Russia – Illegal invasion of Ukraine bringing war to Europe – most immediate threat today
 - Middle East – widespread conflict and tension between multiple actors
 - China – increasing economic, military and technological power with implications for the free and open international system
- DE&S – alongside defence and security partners – has critical role to play in deterring the UK's potential adversaries – success in our mission is not optional
- The DE&S mission:



Increasing Defence Outputs

Defence Support Strategy 2022

- Chief of Defence Staff challenge to Increase Defence Outputs ('50% more availability from existing capabilities')
- Link to Defence Support Strategy 2022 target Strategic Outcomes
- Rotary Wing Strategy – cohere Defence Rotary Wing Sector to meet availability challenge

Diagnosis

Support Challenges:

Strategic Base effectiveness and resilience

Poor availability, productivity and efficiency

Demand signals

Finance and cost of ownership

Poor data and analytics

Strategic Direction, Concepts and Force Development

Whole Force vulnerabilities

Vision (themes)



People Centric



Information-led



Technology-enabled



Resilient, effective and efficient



Integrated and interoperable

Strategic Outcomes (by 2025)



A capable and resilient Defence Support Enterprise



Enhanced decision making across the Defence Support Enterprise



Effective delivery of Defence Support, integrated across the Military-Industrial complex



A step change in Support Force Development and experimentation



Defence Support People enable future performance

The strategy will be reviewed periodically in line with major Government and Defence strategic reviews.

Ways & Means

Strategy Delivery

Integrated Defence and Security Review *
Command Plan Capability Demand



Defence and Security Industrial Strategy
(Rotary Wing Sector)



Defence Rotary Wing Strategy *



Rotary Wing
Acquisition Programme

Rotary Wing Enterprise
Support Solution

* The Strategic Defence Review (SDR) is underway

** As part of the SDR, the Rotary Wing Strategy is being refreshed



Director Rotary Wing & UAS Portfolio

Head Helicopters 1
(Principal Engineer)



Wildcat AH



Wildcat HMA



Merlin Mk2



Merlin Mk4/4A



Merlin Mk2
Crowsnest



S92



AW189



A109SP



Dauphin N2

Head Helicopters 2
(Principal Engineer)



Chinook



Chinook CSP



Dauphin N3



Airbus H145 Jupiter Mk2



Apache 64E



Puma Mk2



New Medium Helicopter

Head
Air Enablers



Phenom, Prefect & Texan

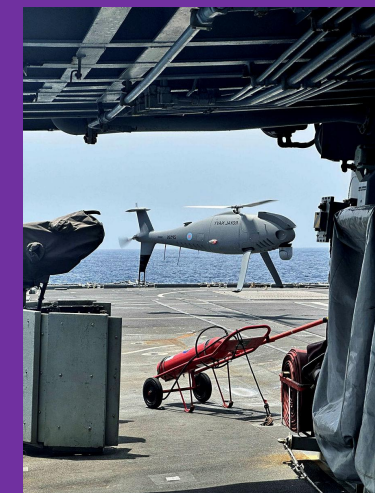


H135 Juno/H145 Jupiter



Aeromedical

Head
Remotely Piloted Air Systems



Rotary Wing Enterprise Executive Summary

Why RWE?

The drivers for change

- Failure to achieve the desired levels of rotary wing aircraft reliability and availability, impacting value for money and necessary reliability investment
- Cost plus relationships, reward under-performance and mis-aligns customer demand and resourcing
- Incoherent fleet and operational planning, disconnecting operations and maintenance
- Incoherent approach to address aging fleets and support systems in face of global cost growth challenge

RWE assumptions

*No new money
Efficiencies recycled
Performance-based payment*

- RWE seeks no new money - Necessary support investment will be self-funding or through gained efficiencies
- Exploiting technology
- Simplified output focused KPI and resilient measures – adopt best practice
- 10 year contract to enable return on investment and financial stability
- Recycling to create 'win-win-win' culture

RWE redesign win-win-win for the Front Line, DE&S, and Industry

The RWE will be a win-win-win for

Front Line Commands

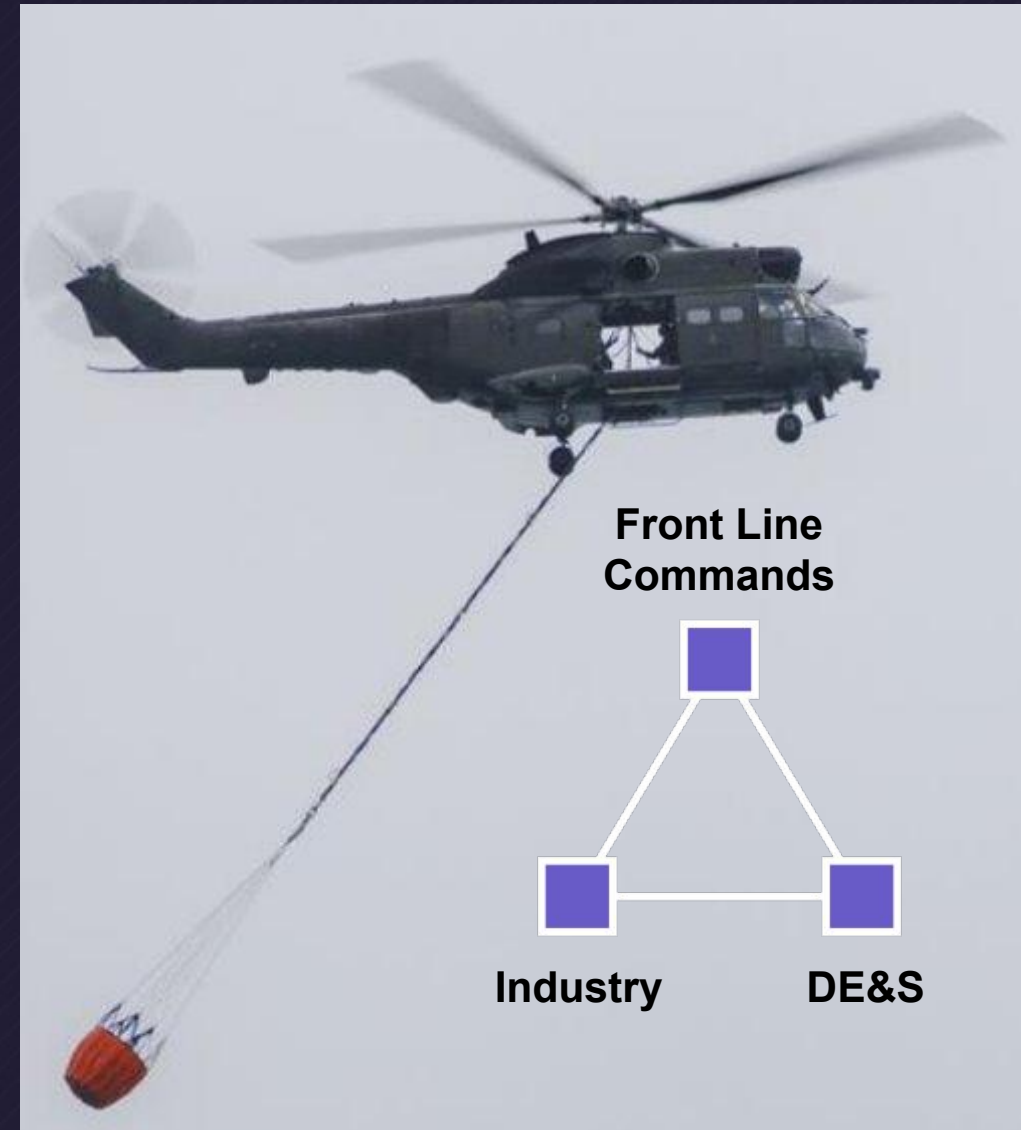
- Reliable delivery of the required output with enhancement funded from existing budget.

DE&S

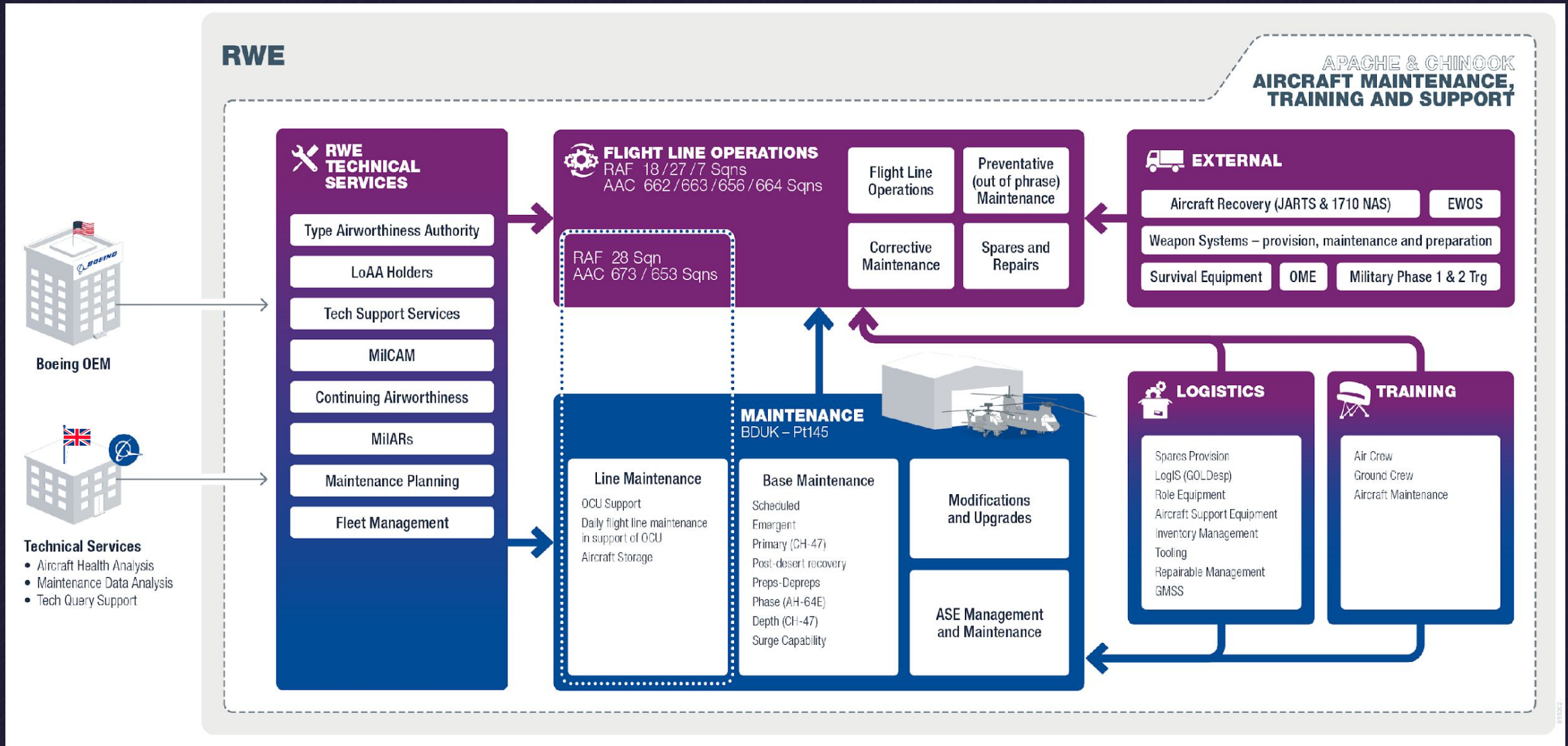
- An effective, efficient and affordable support solution bound by a commercial framework that is simple with minimal effort to administer

Industry

- Ability to increase revenue, improve percentage margin, and invest in UK infrastructure with increased potential for future work

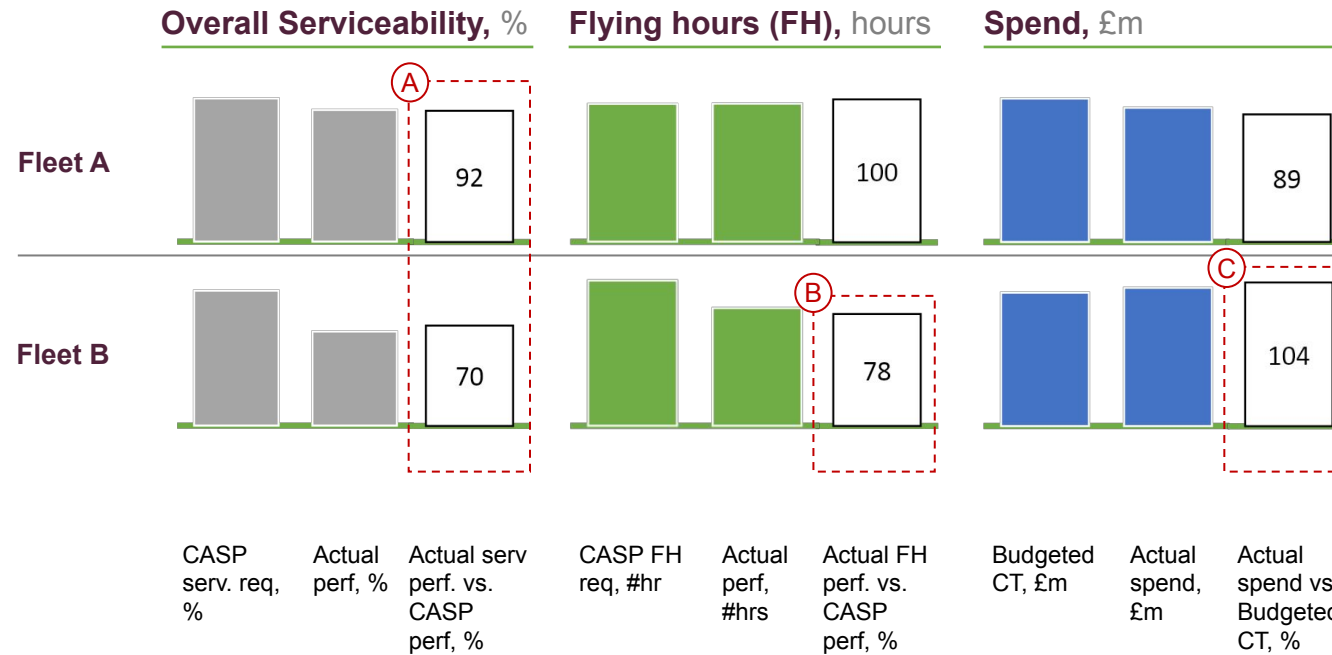


Aiming Point: Indicative End State Design



Indicative Example

2020/21 Aircraft performance



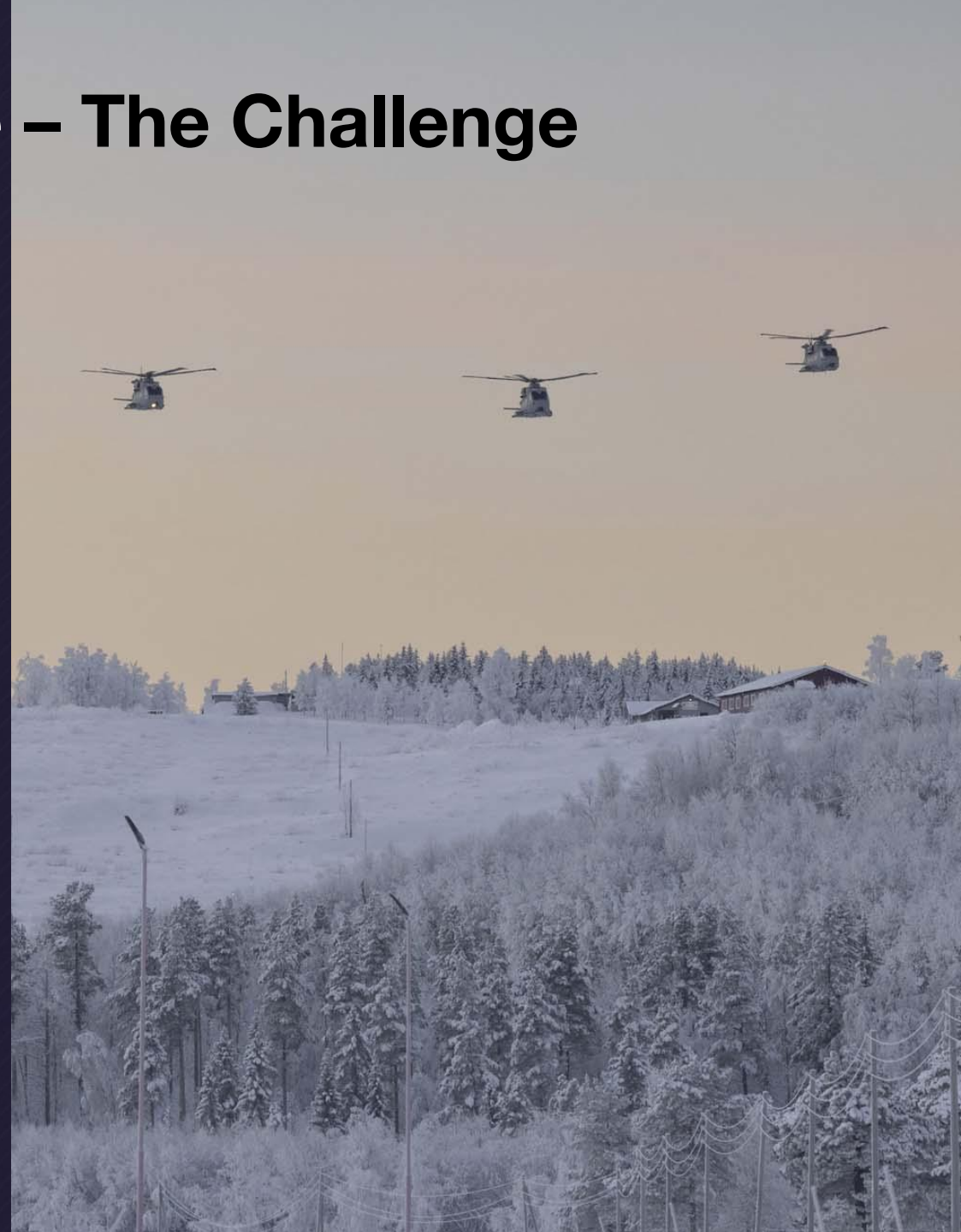
Insights

- (A) All platforms are falling short of serviceability requirements
- (B) Despite serviceability falling below requirements, the actual flying hour performance exceeds serviceability
- (C) For Fleet B, the proportion of spend exceeds the performance across both serviceability and flying hours

Transformation Cultural Change – The Challenge



Delivering the right aircraft, with the right capability, at the right time.



Key Themes & Enterprise Levers

Reliable delivery of the required output

Investment needed funded within the Control Total

Affordable solution

Effective and efficient support solution, with framework simple to administer

Increase revenue and improve percentage margin



Technical Services



Training



Digital



Material & Logistics



Service Management



Aircraft Maintenance



Infrastructure



Moving the boundaries with Industry.

EH101 Merlin Mk2 Recovery – An Enterprise Endeavour

DE&S, Leonardo Helicopters UK & Navy Command embraced a truly collegiate approach to recover Merlin Mk2 availability.

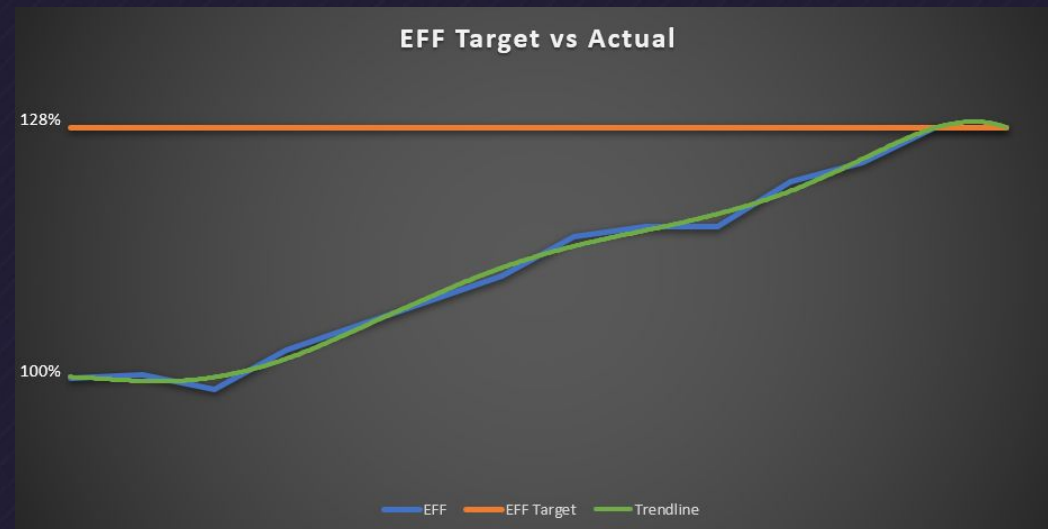
Driven by shared goals, commitment to candid dialogue and the confidence to step outside process, this approach has delivered a significant increase in the availability of Merlin aircraft.

Effective Forward Fleet (EFF) = # of aircraft provided to squadrons

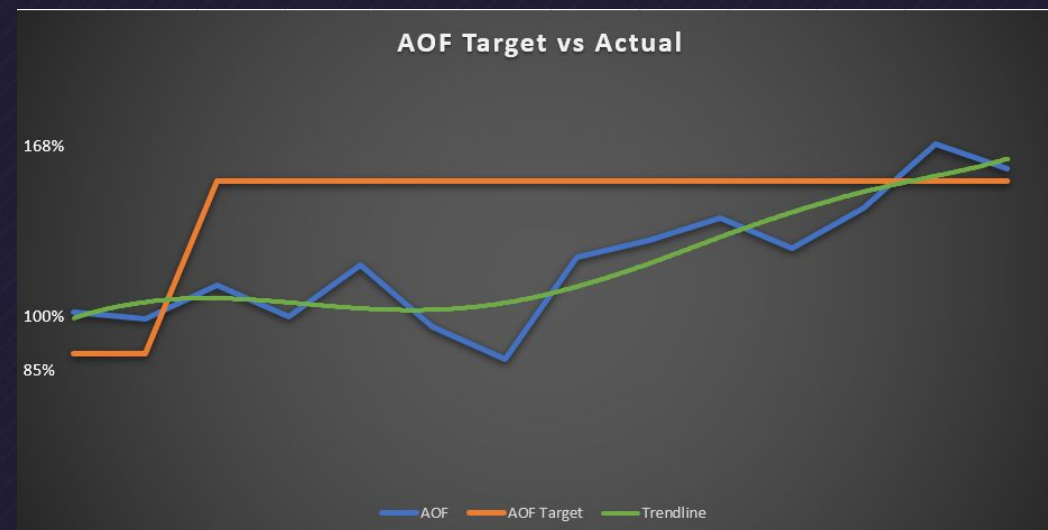
Available to Operate & Fight (AOF) = # of aircraft AOF per day.

This collaboration has seen a convergence of stakeholder expertise, resources and innovation, enabling the rapid resolution of impediments and joint exploitation of opportunities.

Continuing to embrace this 'Enterprise' ethos, these gains have been sustained over the last 6-months.



EFF numbers increased by 28% in 18 months.



AOF numbers increased by 68% in 18 months.



Questions?

