



JOINT AVIATION COMMAND

LT COL MAX GARRETY MBE
SOI ADAPTIVE TRAINING



UK JOINT AVIATION COMMAND

- Army owned
 - Army Air Corps
 - Commando Helicopter Force
 - RAF SH Force
 - Army UAS Gp
 - Sp Elements
- Generate / Operate HQ



PROJECT MERIDIUS – JAC SYNTHETIC COLLECTIVE TRG PRINCIPLES



Fight not Flight



Simulation is not there to replace live flying; it is there to augment it



Fail fast



Focus on the MDO



COLLECTIVE TRAINING IN THE LAND ENVIRONMENT

Scale	Training Level
	ALPHA
	BRAVO
	CHARLIE
REGT	DELTA



ECHO
+



LAND WARFARE CENTRE - COMBINED
ARMS MANOEUVRE



CHALLENGES AND OPTIMISATION OF COLLECTIVE TRAINING

How we achieve CT

- Flight simulators (ALPHA)
- Unit training (ALPHA + BRAVO)
- Live Ex (FOXTROT)

Requires structured and protected programming

The aim of true Collective Training:

- Integration
- Scale
- Complexity

The solution?....or at least progress



JAC COLLECTIVE TRG – PRINCIPLES

- Operationally focussed – ARRC, I Avn BCT and ATFs
- MDO
- Front and Rear crew focus
- Full Plan/Brief/Fly/AAR
- FORM Cycle
- Crew interaction
- Course delivery
- Msn Rehearsal
- Experimental (DSTL (TCDO))
- SaaS
- Independent White Force

			Synthetic Training Capability					
		Collective Training Level	Definition	Wc	AH	CH	Me	Pu
Same aircraft type	Alpha	Crew/Single aircraft	✓	✓	✓	✓	✓	
	Bravo	Pair/Unit of Action	✓	✓	✓	✓	✗	
	Charlie	Flight or 2 x sub-units training alongside each other (e.g. single SH platform with live troops)	✓♦	✓♦	✗	✗	✗	
	Delta	Sqn/Regt operating independently	✗	✗	✗	✗	✗	
2+ aircraft types	Echo	2+ aircraft types in an ATF/BG and basic Combined Arms context	✗	✗	✗	✗	✗	
	Foxtrot	Multi platform task organised ATF/BG under a 1* formation	✗	✗	✗	✗	✗	
	Golf	Brigade sized training	✗	✗	✗	✗	✗	



JAC COLLECTIVE TRG OBJECTIVES

JHC Force CT Requirements – As Is			
	CHF	AAC	RAF
CAST (Mini BCT/ATF)	x	x	x
Avn Warfare Cse	x	x	x
Msn Comd Foundation Cse	x	x	x
Jt Fires AOP & SCAR	x	x	
Patrol Comd Cse	x	x	
FARP/FOB Comd Cse	x	x	
Judgemental Trg	x	x	x
Multi A/C Execution SOPs & TTPs	x	x	x
FMQ/CR	x	x	x
BMQ/LCR	x	x	x

JHC Force CT Requirements – With the Proposed Solution	
CAST (Mini BCT/ATF)/Pre Deployment Trg	✓
QWI/QHTI Trg	✓
DSTL/22 Sqn Tactics Development	✓
Avn Warfare Cse	✓
Msn Comd Foundation Cse	✓
Jt Fires AOP & SCAR	✓
Patrol Comd Cse	✓
FARP/FOB Comd Cse	✓
Judgemental Trg	✓
Multi A/C Execution SOPs & TTPs/COMAO	✓
FMQ/CR (including full Rear Crew capability)	✓
BMQ/LCR (including full Rear Crew capability)	✓



MANAGING EXPECTATION



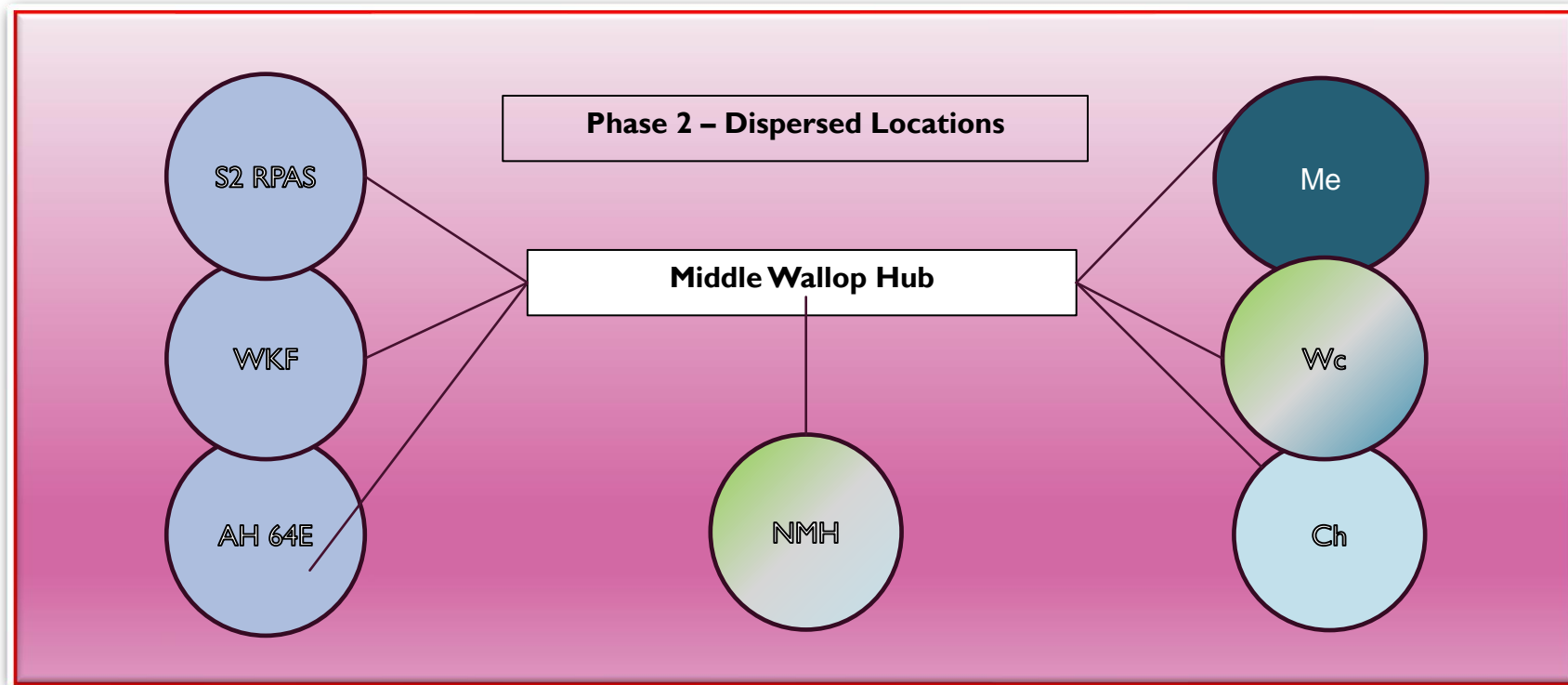
- Targeted Fidelity
- Capability
- MVP
- Believable/Immersive
- Cost
- Scalable
- Usable



JAC COLLECTIVE TRG – DEFINING THE STRATEGIC NEED

Phase I - Central Location

- AH64E
- Wildcat
- Merlin 4
- Chinook
- NMH
- Watchkeeper
- S2 RPAS



INTERIM SOLUTION – ACTT LITE

The Apache Command Tactics Trainer (ACTT) desktop lite system is designed as a low-cost simple training system comprised of COTS components integrated with the MoD's DVS2 software to facilitate tactics training in the aerial environment.

The ACTT system is a multi-user low-cost training platform utilising Commercial Off-the-Shelf software and hardware. This provides a training capability for:

- Up to 4 Apache crews (pilot and mission commander) using Virtual Reality.
- Two desktop role-players.
- An out-of-the-window visual display (projected).
- An instructor (IOS station).
- A server system to serve world data to all systems.

These are all networked together by isolated internal network.

This is designed as a tactics trainer, and not a flight simulator. This means that the accuracy of flight dynamics or aircraft likeness will not be critical, it is designed to integrate the aviation users into large battlefield scenarios.



inzipire

Apache Command Tactics Trainer
Desktop Lite System



INTERIM SOLUTION – ACTT LITE



JHC J7 Simulation Synthetic Collective Training Project MERIDIUS

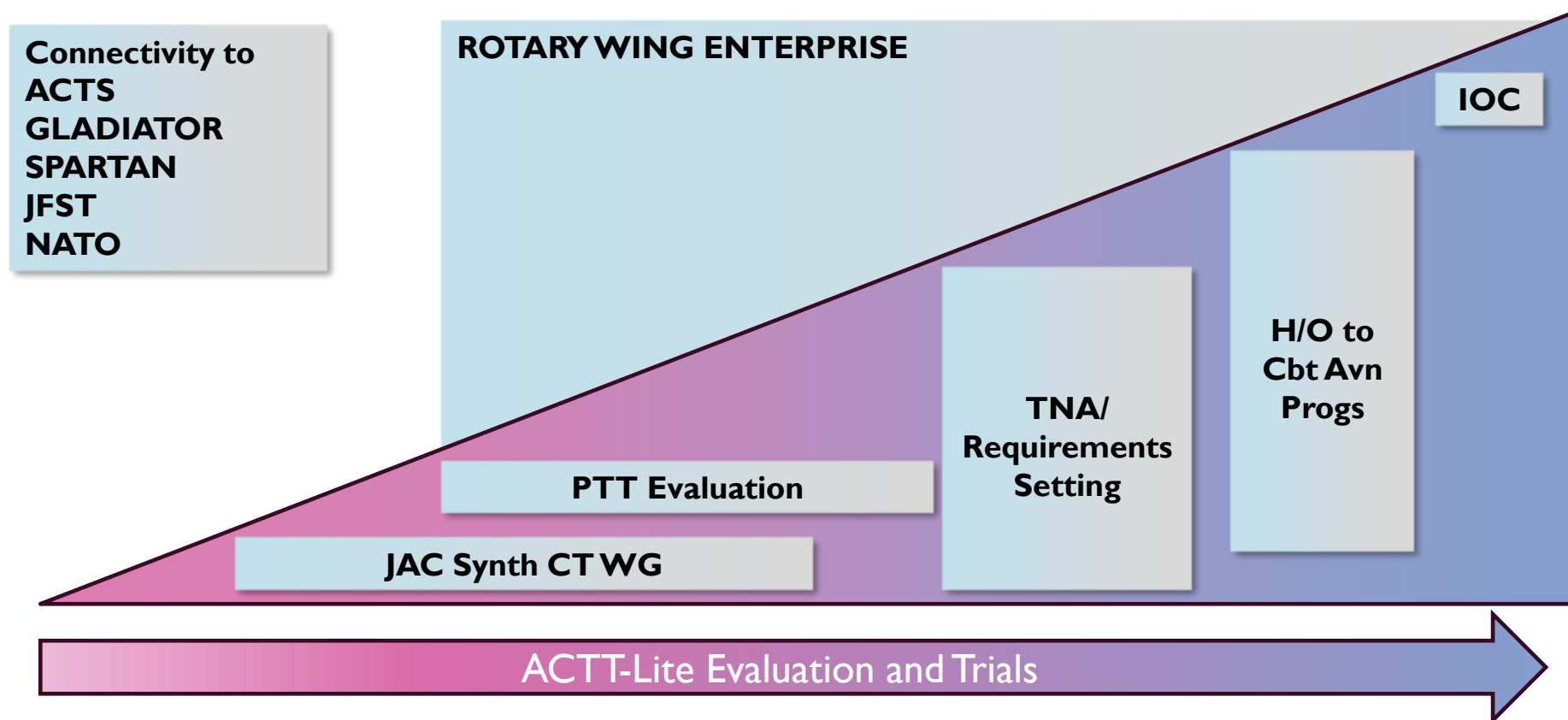


Apache Command Tactics Trainer
Desktop Lite System

Joint Helicopter Command

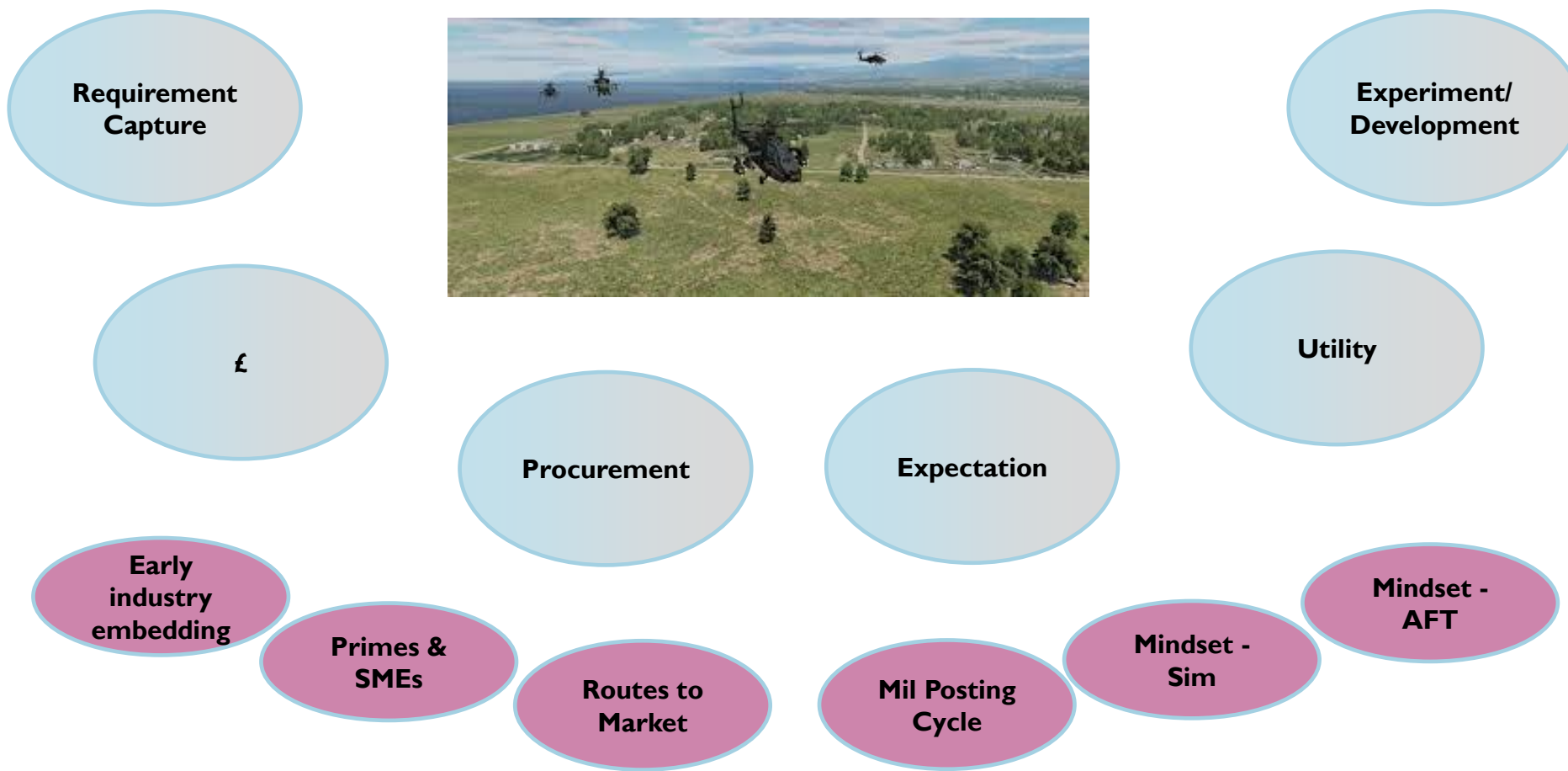


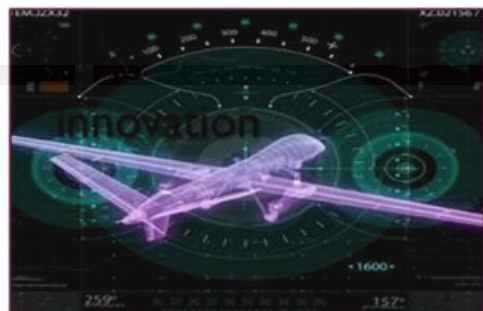
JAC COLLECTIVE TRG – ROUTE TO MARKET



JAC COLLECTIVE TRG – CHALLENGES/FRICTIONS

UK MOD Strategic Operational Demand





QUESTIONS?
MAX.GARRETY992@MOD.GOV.UK

