

# **UK Reaper Update and Influences on UAS Strategy**

Unmanned Aerial Systems  
26 June 2012

# Scope

- Reaper Update
- ‘Unmanned’ Strategy
- Equipment Future
- Utilisation – Operations vs Training
- Airspace Integration
- Crew Training and Personnel Organisation
- Questions

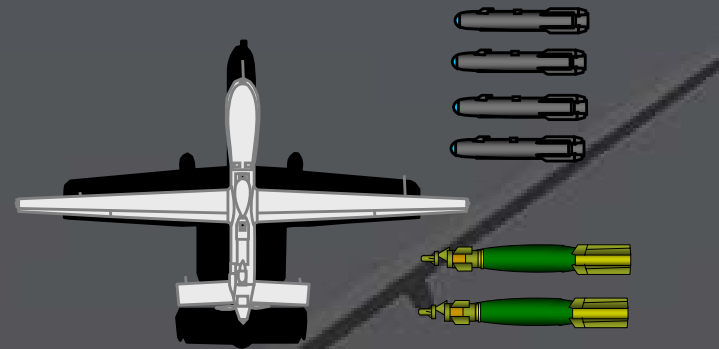
# Reaper Update

## Current

- 5 / 3
- 34,753 Operational hours
- 281 Weapons

## Future

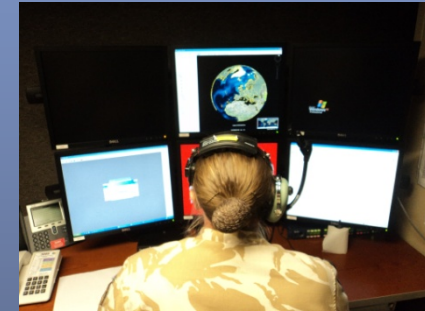
- Additional Reaper Capability (ARC)
- 5 / 4
- RAF Waddington, XIII Sqn
- 72 HPD



- Dimensions
  - Wingspan 66'
  - Length 36'
  - Max gross weight 10,500 lbs
- Max speed 250 KTAS
- Endurance
  - 20 hrs clean
  - 10+ hrs fully combat loaded
- Operating altitude
  - 30K+ with weapons
  - 50K+ clean

# 'Unmanned' Strategy

- It is not 'Unmanned'



- Breadth of Unmanned



- Why Unmanned
  - Dull, Dirty, Dangerous

# Equipment Future

- Not an Equipment Roadmap
- MALE moving towards UCAS
- Technology Growth
  - ‘Plug and Play’



# COLLECT

DIRECT

PROCESS DISSEMINATE

# Utilisation Operations vs Training

- Level of Output
  - 72 HPD = 26,000+ HPY
  - Validity of this metric?
  - Personnel levels to support 72/7/365
- Training Live Synthetic Balance
  - Cost savings & complexity potential
  - Lack of 'Real World' support
- Efficient manning
  - Crews
  - Support (Eng etc)
  - PED
  - Reserves and Contractors
  - Ability to 'Surge' when required



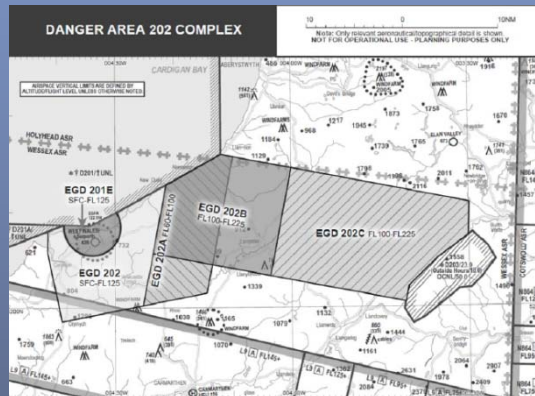
“Some of the capacity will return to The States and we’ll use that to train organically and with our teammates ... the rest will be used in operational missions by previously underserved combatant commands, particularly U.S. Southern Command and Pacific Command”

USAF COS Gen Schwartz

Source: [nationaldefencemagazine.org](http://nationaldefencemagazine.org)

# Airspace Integration

- Currently utilised in Segregated Airspace



- Flight In Non-Segregated Airspace (FINAS)
  - Six specific briefs on topic
    - Airworthiness, Regulation, Technology (Detect & Avoid)
  - MOD vs Civil Sector requirement

# Crew Training and Organisation

- Historical Manning
  - Previous Type Experienced



- Formed unit. Persistent ISR. Incomparable operational continuity for enduring operations



# Crew Training and Organisation

- DAEDALUS Trial
  - 90 / 15 / 4
  - Serving officers
    - Air Battle Management, Air Traffic Control, Provost
- RPA Elementary Flying Training
- RPA Instrument Qualification
- Other Courses
  - RPA Fundamentals
  - Air Land Integration
  - Joint Air Weapons Employment Course
  - Joint Firepower Course
  - Human Factors
- Predator Formal Training Unit



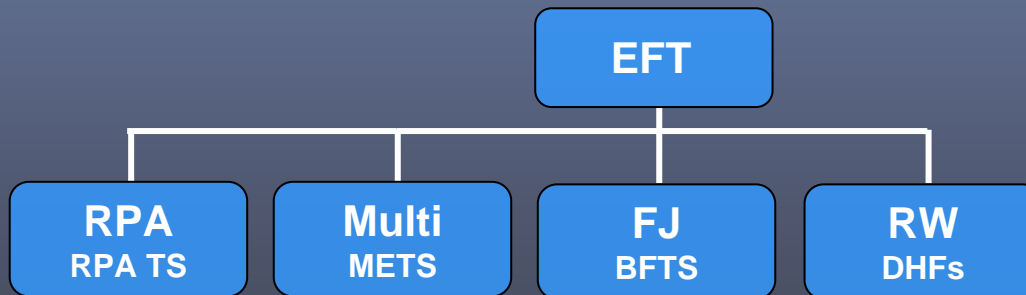
# Crew Training and Organisation

- DAEDALUS Trial
  - 2 Pilots from RAF Valley
- Other Courses
  - RPA Fundamentals
  - Air Land Integration
  - Joint Air Weapons Employment Course
  - Joint Firepower Course
  - Human Factors
- Reaper OCU



# Crew Training and Organisation

- All types of Training
  - Highly Trained Crews, In the Loop aided by Automation
  - Real World, Real Aircraft, Real Lives vs 'PSM'
- Effective and Efficient Training
  - Applicable level of training as per manned
- Potential Future Streaming Options



- 'Future Branch'

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# QUESTIONS