



**503 Specialist Team
Royal Engineers (STRE)
(Fuels Infrastructure)**

Major Keith James MBE JP VR
Officer Commanding 503 STRE (FI)

Shift Manager Stanlow Refinery



OC 503 STRE (Fuels Infra) Major Keith James MBE JP VR

- Refinery Shift Manager – 38 years in oil industry
- Upstream and Downstream Experience
- HNC Chemical Engineering
- NEBOSHH Diploma
- Senior PTW signatory
- TAR Focal Point

- Late Entry Major
- Graduated Sandhurst & Staff College
- Iraq Oil Planning Cell 2003-2008
- Former Team Warrant Officer
- 41 Years Reserve Service





Pipeline Experience: Operation of Shell & Essar Oil - Ethylene Pipelines

THE ROUTE
OF THE HP
NORTH WESTERN
ETHYLENE PIPELINE

LP C2 LINES TO:
CARRINGTON
SABIC
INEOS

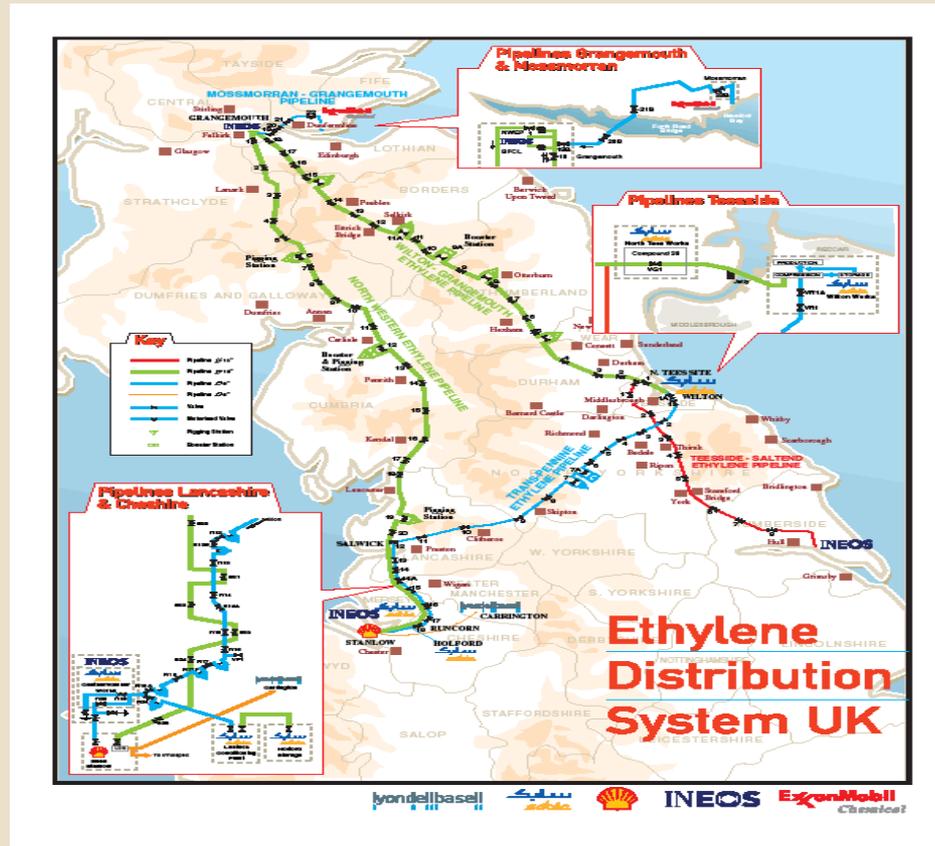




Distribution Network Background

UK
Ethylene
Distribution
System

North West
Ethylene
Pipeline
(NWEPE)



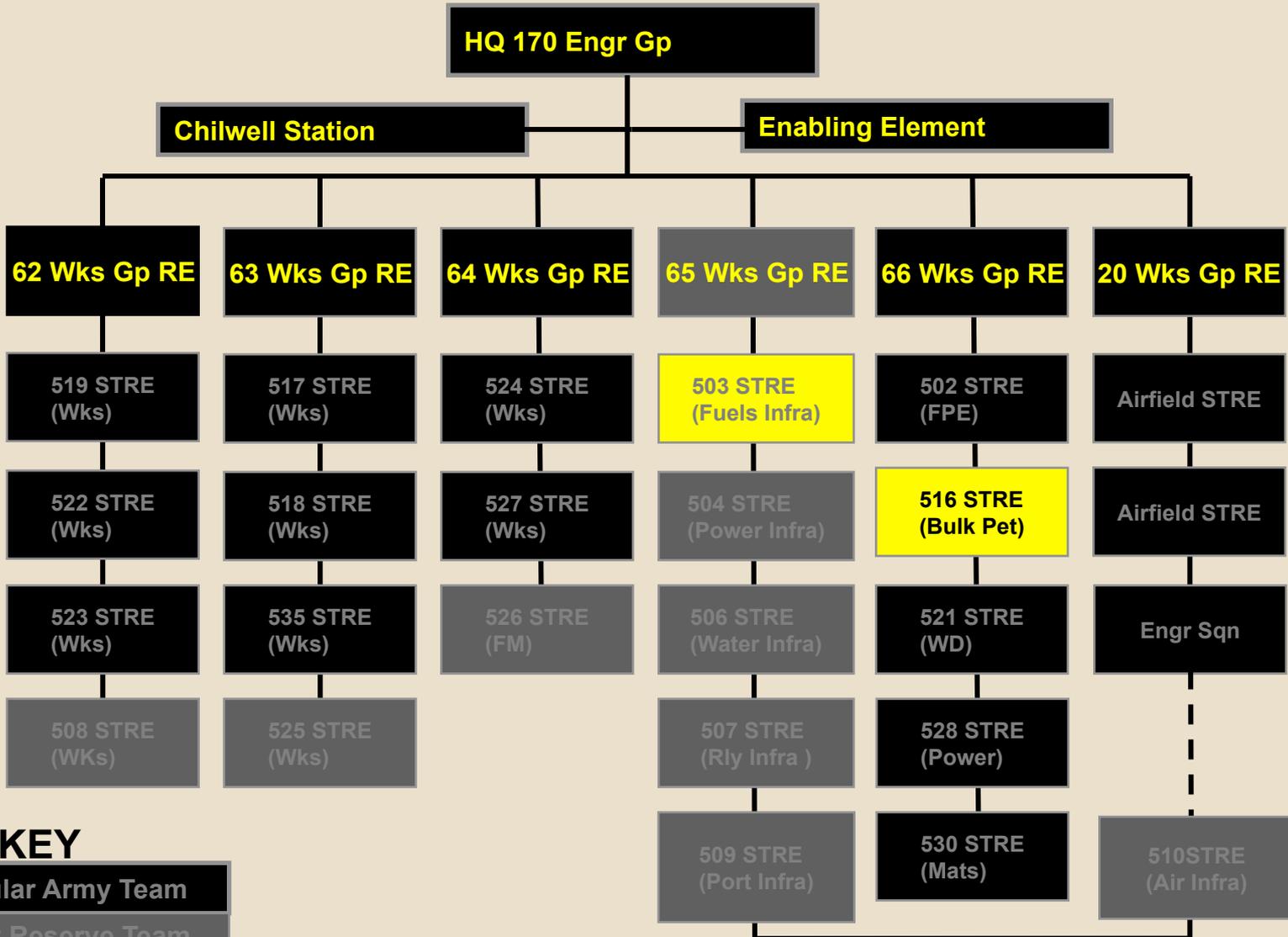


Agenda

- Who We Are
- What Our Organisation Looks Like
- Fuels Infrastructure Capabilities and Experience
- Crisis and Austere Conditions Experience
- Can We Add Value in Challenging Times
- Security: Self Sustainable
- CBRN - Functionality in (Chemical – Biological - Radioactive – Nuclear Environments)
- Mutual Benefit - Currency of Skills



170 (Infrastructure Support) Engineer Group Structure (Approx 750 Pers)





Fuels Teams Regular & Reserve Pairing Benefits

Eng&Log
Staff Corp

503 STRE

Perm Infra

RSME

516 STRE

Expeditionary / Tactical
Infra

Semi-perm
Infra



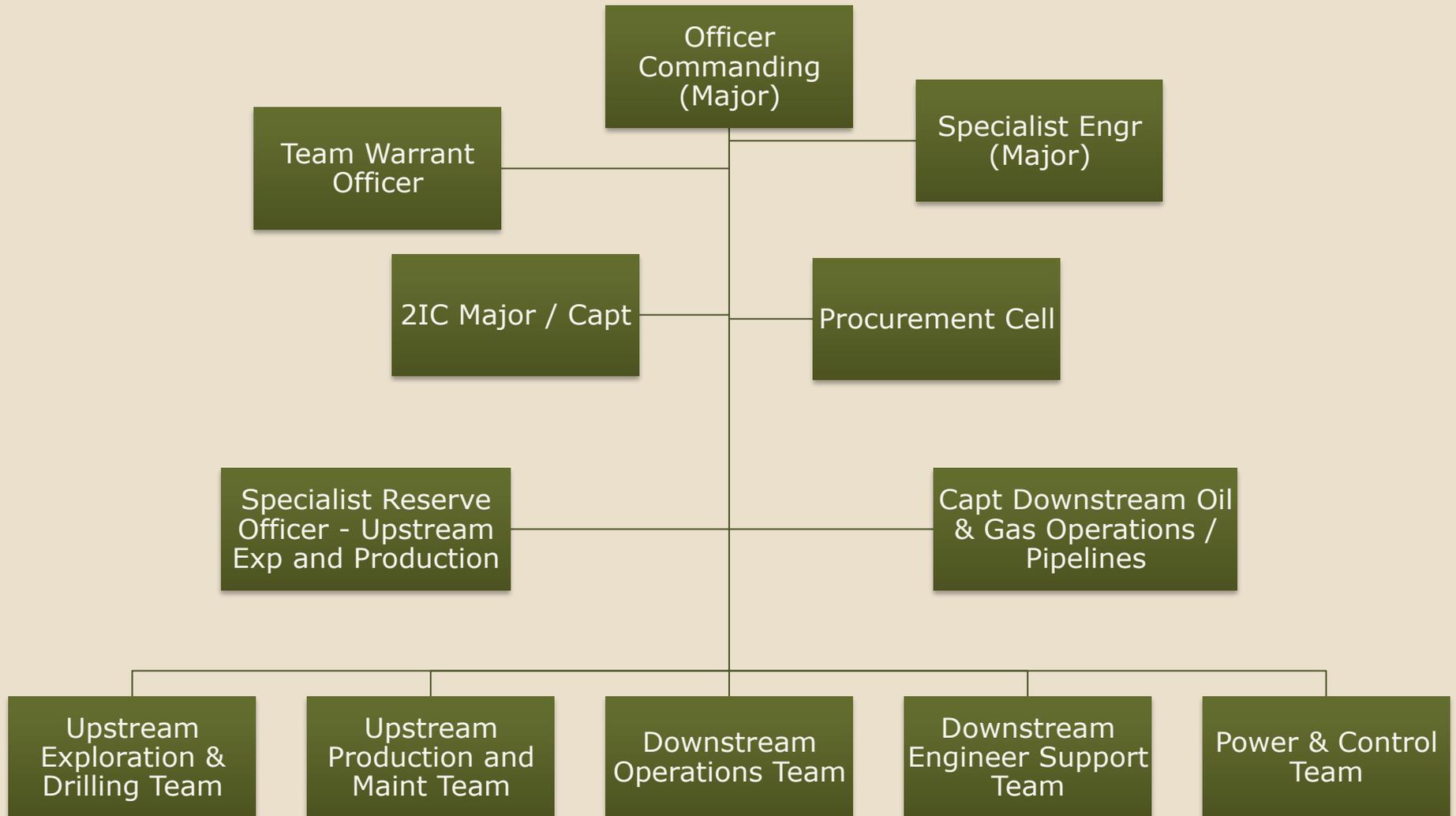
Depth &
Resilience



Breadth



503 STRE (Fuels Infrastructure) 35 Pers





Specific to Pipeline Operations

PIPELINE OPERATIONS

- Strategic Deployment and Advice (UK Military)
- Austere Conditions Operation / Defence
- Subsea and Onshore Pipeline Experience
- Upstream & Downstream Operations
- Maintenance Planning and Resourcing
- Consultancy and Project Delivery
- Emergency Response



PERSONALITIES: Captain Bob Wilkins

Current Position

- **National Grid High Pressure Gas Transmission**
 - Operational responsibility - site controller for 1 of 23 of the UKs Gas Compressor stations.
 - Equipment includes Aero Derivative Gas Turbines and Centrifugal Compressors.
 - UK Resilience.

Previous Positions

- **ESSO fuel distribution– Electrical Engineer**

5 Years Royal Engineers

25 Years REME





Capt Lee Thomas

Pipeline Project Engineer

- Designs and executes hydrocarbon transportation projects for major Oil and Gas companies.
- MSc Pipeline Engineering, CEng IMechE
- CSWIP Welding Inspector, CSWIP Coating Inspector



Lt Thomas



42" Cleaning Pig and Right of Way Azerbaijan



Port and Maritime Engineer

Major Lavin RE



- A Ports Specialist
- Interface between Sea and Land – Import and Export Facilities
- Most Oil Facilities have the waterfront in common
- Tranmere Handles up to 11 million tonnes of crude oil per year
- Further 15,000 miles of pipeline at Stanlow support the refining process – Multiply this by the number of facilities worldwide!!



Port and Maritime Engineers

- SPM system design for fuels input (Vietnam) and crude export (Iraq) including subsequent bid cycles.
- Studies and execution of fracture mechanic methods in bringing mothballed fuel pipelines back into service.
- Working with the Tri-Service Authorities in providing guidance on Marine Pollution (MARPOL) issues.



Crude Import and Fuel Export Systems Refinery Vietnam



Crisis and Austere Experience





Crisis and Austere Experience





Crisis and Austere Experience



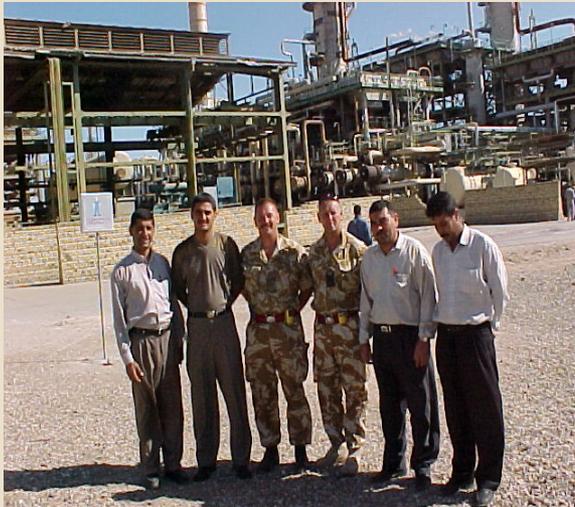


OP TELIC





Can We Add Value in Challenging Times





Can We Add Value in Challenging Times





Can We Add Value in Challenging Times





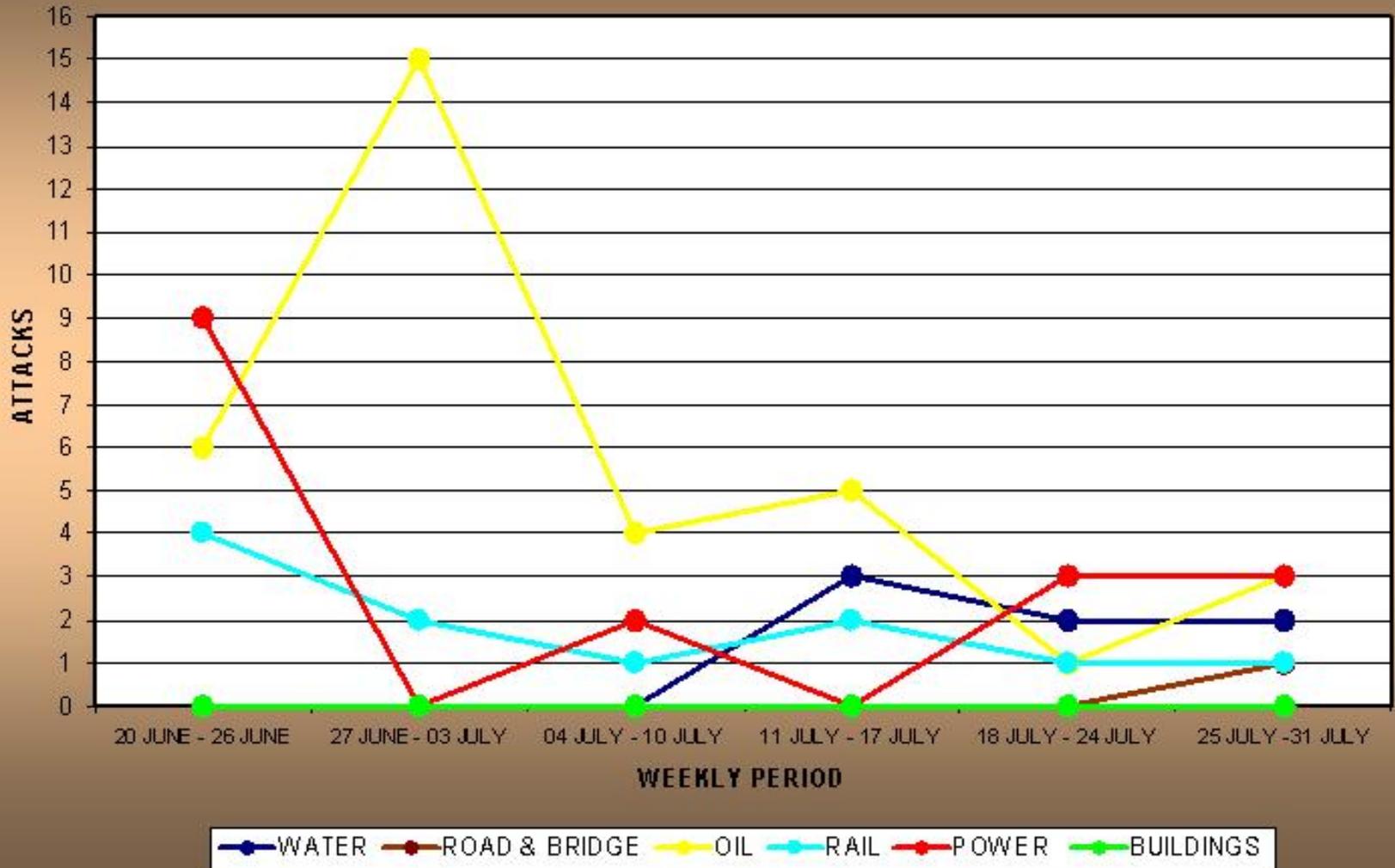
Security – Self Sustainable – Mission Analysis





Security – Self Sustainable – Mission Analysis

IRAQ INFRASTRUCTURE ATTACK SUMMARY





Security – Self Sustainable – Joint Ops





Security – Self Sustainable – Joint Ops





Security – Self Sustainable – Joint Ops





Ongoing Training 516 STRE (BP) Oil Infra Visit Sept 14 – Currency



Douglas Gas Field



Point of Ayr Gas Processing Terminal



Connah's Quay Power Gas Fired Station



Stanlow Oil Refinery



UKOPA Membership

WHAT MEMBERSHIP MAY OFFER

- Better Trained = Better Prepared
- Support Employees / Reservists
- Potential Joint Training / Share Best Practice
- Potential Joint Emergency Exercises
- Reachback Facility
- Understanding of Other Options



Any Questions

