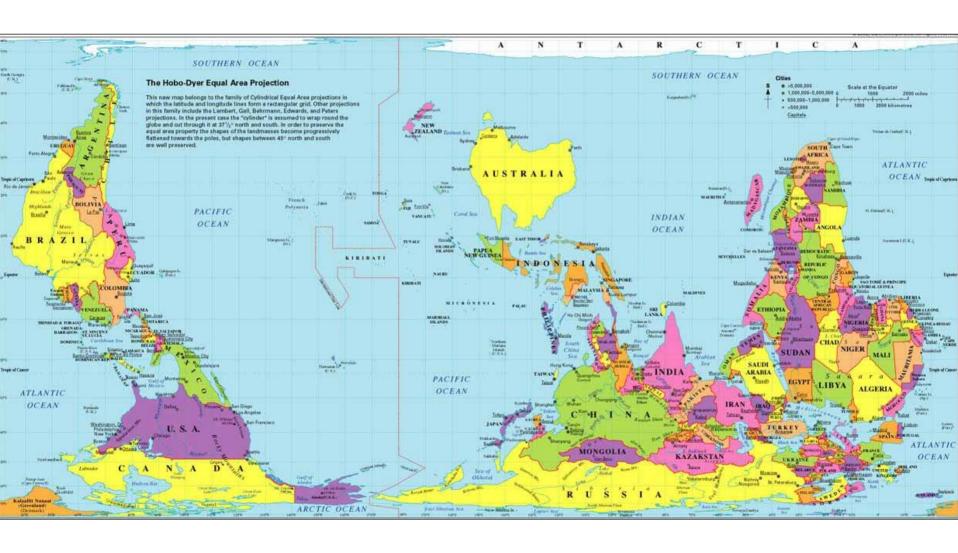


### Current Theatre Environment An Australian Perspective

Dr Roger Lough
Chief Defence Scientist

Pacific Theatre Operational Science and Technology Conference
Hawaii
April 2007



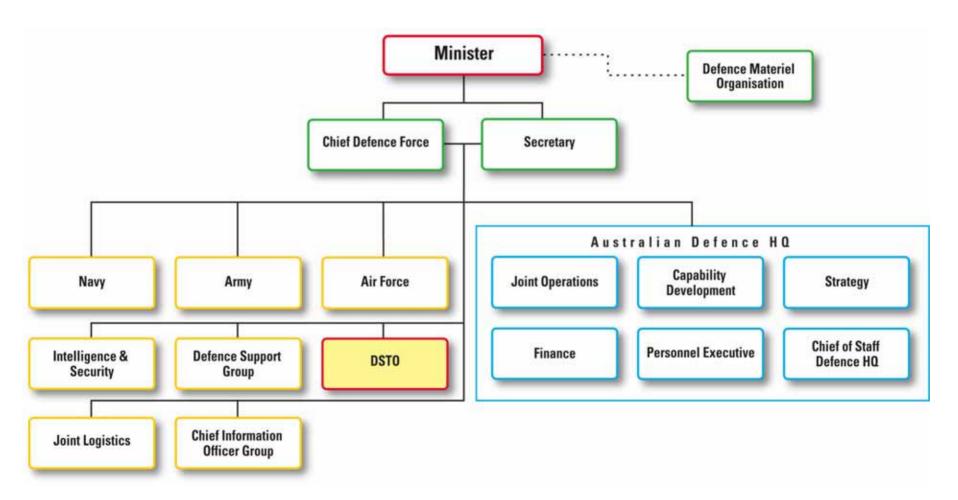




#### **DSTO Mission and Vision**



#### **Defence Structure**





#### **DSTO** at a Glance





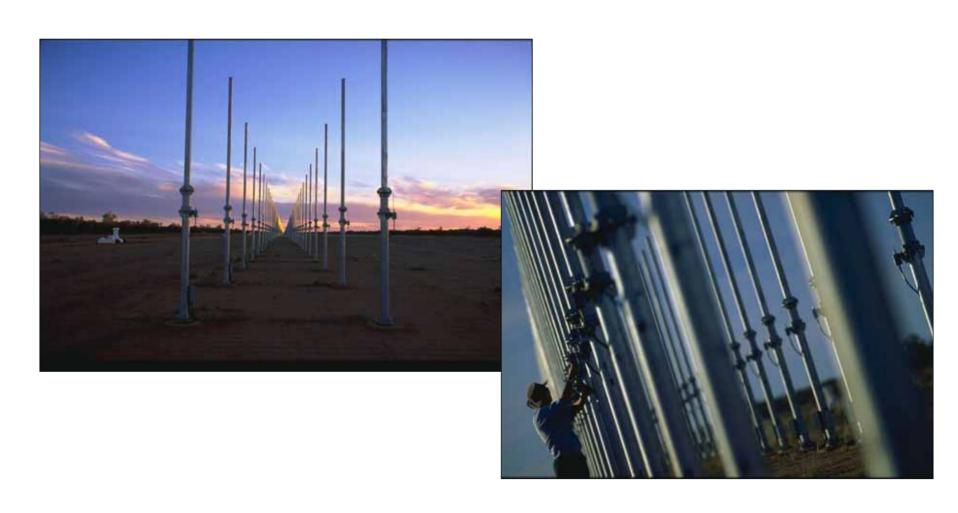
#### **DSTO Functions**





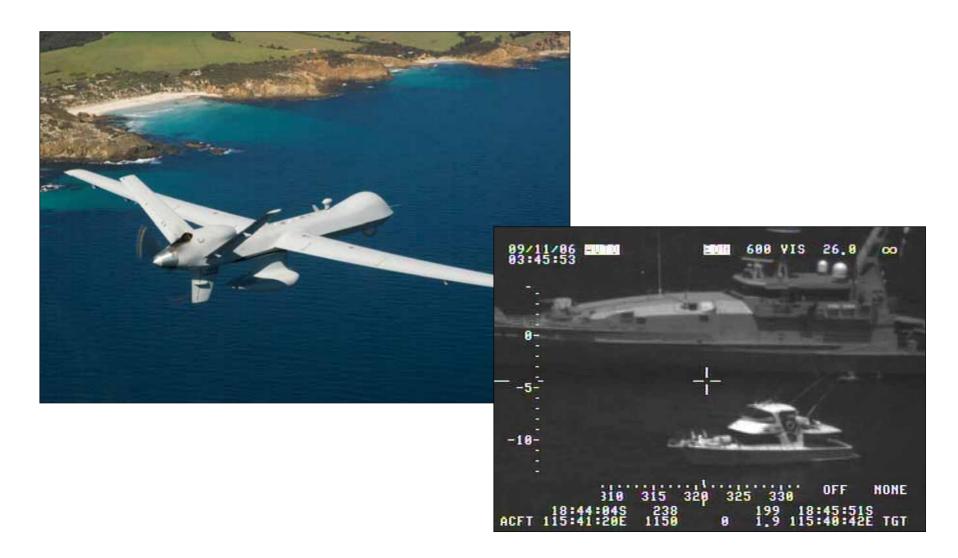
## **Program Thrusts**

#### **Wide Area Surveillance**





## **Program Thrusts Network Centric Warfare**





# Program Thrusts Interoperability



Joint Australian United States Exercise – Talisman Sabre 07



Coalition Readiness Management System Project Arrangement -CReaMS



## Program Thrusts Experimentation

Automation of the Battle Space Initiative

Headmark



Headline – Concept Exploration and Analysis Laboratory (CEAL)



## Program Thrusts Chemical, Biological & Radiological Defence



PC3 Laboratory



Breathable Chemical and Biological suit



# Program Thrusts Aging Aircraft



Structural test on F/A-18

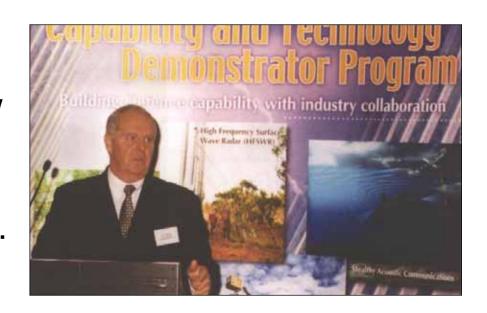


**Smart Structures** 



### Capability & Technology Demonstrators

- Allows Australian Defence Industry to demonstrate how advanced technology can enhance Defence capability.
- \$160 M invested since 1998.
- Average CTD \$3m; 3 years.





### Capability & Technology Demonstrators



**Underwater Personal Computer** 



Fibre Laser Sonar (Hydrophone)



# Capability & Technology Demonstrators







Cuttlefish – protection of ships from radar surveillance

Rassputin Sonobuoy



#### **Emerging Issues**



Operational Tempo



**IEDs** 



Space (Hypersonics)



Intelligence, Surveillance and Reconnaissance



## Thank you

