Growing in and from the UK: Partnering with our customers for future prosperity

September 2017
A top 10 Global Defence & Aerospace Company

Leonardo is a global high-tech company and one of the key players in Aerospace, Defence and Security worldwide.

Divisions

Helicopters | Aircraft | Aerostructures | Airborne & Space Systems | Land & Naval Defence Electronics | Defence Systems | Security & Information Systems

Subsidiaries/Joint Ventures

**DRS Technologies**
100% Leonardo

**Telespazio**
67% Leonardo
33% Thales

**Thales Alenia Space**
67% Thales
33% Leonardo

**MBDA**
37.5% BAE Systems
37.5% Airbus Group
25% Leonardo

**ATR**
50% Leonardo
50% Airbus Group
Significant international presence

150+ COUNTRIES USE OUR PRODUCTS, SYSTEMS AND SERVICES

4 Domestic Markets

ITALY
UK
USA
POLAND
Building the UK’s future

7000 Employees
50% UK
50% Export

400+ people on apprenticeship and graduate schemes

UK supply chain sustains 25,000 jobs over 1700 companies (1300 SMEs)

© 2017 Leonardo MW Ltd – All rights reserved
Major UK presence

**Edinburgh**
Radar, Lasers, Infra-Red Counter Measures, Electro-Optic Targeting

**Luton**
Defensive Aid Suites, Radar Warning Receivers, Jammers, EW Cyber, Mission Systems Integration, Satellite services, Geo-information and ground systems

**Bristol**
Cyber and Information Assurance, Critical Infrastructure, Training & Simulation

**Yeovil**
End-to-end helicopter capability

**Basildon**
Optronics, Defence Communications Systems, Critical National Infrastructure (CNI), Land Systems, Acoustics

**Southampton**
Infra-Red Detection, Defence Communications Systems, Traffic Control Systems
Helicopters
End-to-End Capability

**Product & Capability**
- Military Product Range
- Highly integrated helicopter systems
- Helicopters bespoke to customer specific requirements
- Blades and transmissions

**Looking to the future...**
- British Experimental Rotorcraft Programme (BERP) IV
- Active blades
- Rotary Wing Unmanned Air Systems (RWUAS)

**Service & Support**
- Delivery of integrated Customer Support and Training programmes
- 24 hour Fleet Operations Centre
- 350 MoD personnel based on site
- Delivering customer training at their operational bases

**MANAGING**
the whole value chain
Over 100 years of expertise

- **Westland**
  - Founded 1935
  - First aircraft Maiden Flight (1907)

- **Agusta**
  - Established 1951

- **Leonardo Helicopters**
  - Signs Strategic Partnership Agreement

- **Leonardo**
  - 2018

**Key Events**

- **1975**
  - British Experimental Rotorcraft Programme (BERP)
  - Lynx First Flight 1975

- **1986**
  - Lynx claims World Speed Record, 249.1mph

- **1999**
  - AW101 enters VVIP market

- **2006**
  - Order for 62 Lynx Wildcats

- **2008**
  - AW609 blade and yoke development

- **2011**
  - AW159 enters service
  - Leonardo Helicopters signs Strategic Partnership Agreement
  - AgustaWestland 100% acquired by Finmeccanica

- **2014**
  - RLUAS CCD Phase I

- **2018**
  - RLUAS CCD Phase II
  - Move to commercial Helicopter design (2011)
Extensive International Support network

UK MoD
Merlin Mk2 • Merlin Mk4 • Wildcat AW159 • Sea King Mk7 • Lynx Mk9

Canada
AW101

Portugal
AW101 • Lynx Mk95

Algeria
AW101 SAR • SL300 Mk130 • SL300 Mk440 • AW101 VVIP

Turkmenistan
AW101 VVIP

Brazil
Lynx Mk21

Nigeria
AW101 VVIP

South Africa
SL300

Egypt
Sea King Mk70 • Sea King Mk72

Saudi Arabia
AW101 VVIP

Qatar
Sea King Mk74 • Sea King Mk92

Denmark
AW101 • Lynx Mk86

Norway
AW101 SAR • Sea King Mk43A

Belgium
Sea King Mk43B

Italy
AW101 MMI • AW101 AMI CSAR

France
Lynx Mk4

Korea
Lynx Mk99 • AW159

Germany
Lynx Mk988 • Sea King Mk41

Japan
AW101CHF • AW101MCM • AW101 TMP

Philippines
AW159

Malaysia
Lynx Mk100

Indonesia
AW101 VVIP

Pakistan
Sea King Mk45
Strategic Partnering with the UK MoD

**Fighting Fit**
Transformation Programme underway focused on delivering increased value to both the UK MoD and Export customers.

**Innovation & Exploitation**
Leonardo works closely with the UK MoD on the development of new capabilities for current platforms, Wildcat & Merlin and new platforms, with VTOL unmanned the principle focus through RWUAS Phase II.

**Innovation & Exploitation - RWUAS Phase II**
RWUAS Phase II is a jointly funded programme between Leonardo and the UK MoD to establish the requirement for a Rotary Wing UAS in both land and maritime environments and the optimum solution for a concept design.

**Innovation & Exploitation - Phase III**
Subject to a successful Phase II, Phase III is anticipated to see the concept design developed as a programme.

**Prosperity**
Strengthened approach to the export market place between Leonardo and UK Government.
Developing the UK’s Prosperity Agenda

The UK Government focus is on National Prosperity, led by increasing exports with a particular emphasis on world leading technologies.

- Spends over £450M with 815 UK supply chain of which 35% are SMEs
- £850M GVA = £66,900 per employee
- Over 17,000 jobs supported in UK
- 60 Apprenticeships and 20 Graduate training programs/year
- Delivers £600M of export revenues annually to the UK – approx. 10% of UK Defence Exports
- Competitive globally
- 20-25% of cost taken out of Merlin and Apache Integrated Operational Support contracts
- Export orders being won against US FMS offerings, which have very strong U.S. Government support globally

Source: PWC report 2013
Defence Electronics, Cyber and Security
Sensing, Engaging and Protecting...

- **Airborne & Space Systems**
  - Radars, Infrared Counter Measures and Lasers, Defensive Aid Suites, Electronic Support/Counter Measures and Electronic Warfare Operational Support

- **Land & Naval Defence Electronics**

- **Security & Information Systems**
  - Homeland Security, Cyber Security and ICT Solutions, Traffic Control Solutions, Automation Systems

**EXPERTISE ACROSS THE FULL SYSTEM SPECTRUM**

- COMPONENTS
- SUB-SYSTEMS
- SYSTEM
- COMMUNICATIONS
- TRAINING & SIMULATION
- PRODUCTS
- AVIONICS ELECTRONICS
- SUPPORT AND SERVICE
- CYBER AND SECURITY
Recognising the past, protecting the future...

**Sense**
- Various AI Radar
- AirPass
- AWG11
- Lightning
- Foxhunter
- Phantom
- Tornado F3
- Blue Vixen
- Sea Harrier
- JSF EOTS
- CaptoTyphoon
- Tornado F3
- Typhoon AESA

**Engage**
- Jaguar and Harrier Targeting subsystem
- Tornado EO Targeting Subsystem
- RHWR and Skyshadow for Tornado GR1/GR4
- RF TRD for Tornado F3
- Zeus for Harrier GR5
- Praetorian for Typhoon
- Apache
- Litening
- Multi Function Array (MFA)

**Protect**
- Gyro Gunsights
- Early RWR
- V-Force RWR
- ARI 18223/8
- Barrage Jammers
- Jammers
- RHWR and Skyshadow for Tornado GR1/GR4
- RF TRD for Tornado F3
- Zeus for Harrier GR5
- Praetorian for Typhoon
- Barrage Jammers
- Jammers

**Timeline**
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000
- 2010
**Combat Air - Current & potential presence**

<table>
<thead>
<tr>
<th>Sense</th>
<th>Typhoon</th>
<th>Gripen</th>
<th>JSF</th>
<th>FCAS</th>
<th>TF-X / J-FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radars, EW, EO</td>
<td>Captor M-Scan</td>
<td>E-scan radar</td>
<td>Praetorian ESM</td>
<td></td>
<td>Radar ESM</td>
</tr>
<tr>
<td>Engage</td>
<td></td>
<td>Raven Radar</td>
<td></td>
<td></td>
<td>Radar IRST</td>
</tr>
<tr>
<td>Targeting &amp; Weapon subsystems</td>
<td>Captor IRST</td>
<td>Targeting Laser</td>
<td></td>
<td></td>
<td>‘EW’ Seeker</td>
</tr>
<tr>
<td>Protect</td>
<td>Praetorian ECM</td>
<td>BriteCloud</td>
<td>BriteCloud</td>
<td>Integrated multi-function system (Radar, EW, Comms., IFF, Datalink)</td>
<td></td>
</tr>
<tr>
<td>EW, Weapons</td>
<td>BriteCloud</td>
<td>BriteCloud</td>
<td></td>
<td></td>
<td>‘EW’ Payloads</td>
</tr>
<tr>
<td>Command &amp; Control</td>
<td>Computers Cockpit</td>
<td></td>
<td></td>
<td></td>
<td>C2 sub-system</td>
</tr>
<tr>
<td>Communicate</td>
<td>Radios IFF</td>
<td>IFF</td>
<td></td>
<td></td>
<td>Datalink</td>
</tr>
</tbody>
</table>
Partnerships to deliver excellence

BriteCloud  Dragonfire  Guardian  CIRCM  Missile Seekers

Gripen  Typhoon  TyTAN  Osprey Firescout  Team Skytale
AESA Surveillance Radar
Trusted Partner for NATO’s Global Cyber Defence

Leonardo leads a Consortium to deliver NCIRC’s Full Operating Capability

- 2011: Full Operating Capability
- 2012: NCIRC Expansion Phase
  - 20+ New Sites, Systems and Platforms Globally
- 2015: Contract Renewal & Technology Refresh

- 2011: >75 Sites
- 2012: 28 Nations
- 2013: 70,000 Users
- 2014: 350M Events/day
Conclusion
Growing in and from the UK. Partnering with our customers for future prosperity.

Intelligent Partnerships

Innovation

Targeted investment in the right skills and capabilities

Optimum solutions for UK and export customers
THANK YOU FOR YOUR ATTENTION