F-35 Lightning II

Tom Fillingham
Managing Director
F-35 Lightning II

Key partner on the US defence programme to develop the three-variant F-35 Lightning II aircraft

Conventional Take Off & Landing

Short Take Off & Vertical Landing

Carrier Variant
### International Participation – Aircraft Quantities

<table>
<thead>
<tr>
<th>Country</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>2443</td>
</tr>
<tr>
<td><strong>Level 1</strong></td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>138</td>
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<tr>
<td><strong>Level 2</strong></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>31</td>
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<tr>
<td>Netherlands</td>
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<tr>
<td><strong>Level 3</strong></td>
<td></td>
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<tr>
<td>Turkey</td>
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<tr>
<td>Denmark</td>
<td>48</td>
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<tr>
<td>Canada</td>
<td>80</td>
</tr>
<tr>
<td>Norway</td>
<td>48</td>
</tr>
<tr>
<td>Australia</td>
<td>100</td>
</tr>
</tbody>
</table>

Total current customer requirements: 3173 aircraft
F-35 Industry Team

- Center Fuselage
- Weapons Bay Door Drives
- Arresting Gear
- Carrier Version (CV) Control and Test
- Radar
- Software
- Low Observable Support System
- Training Courseware and Management Systems

- Aft Fuselage
- Horizontal & Vertical Tails
- Fuel System
- Crew Escape & Life Support
- Prognostics Health Management Integration
- CVF Integration Support
- Autonomic Logistics and Global Sustainment
- Mission Systems
- EW System
- Vehicle Management Computer

- Air System Verification
- System Integration
- Mate Through Delivery
- Edges & Control Systems
- Autonomic Logistics
- Mission Systems
- Vehicle Systems
- Training System
- Forward Fuselage
- Wing
Expertise and technology

BAE Systems Military Air Solutions (MAS) brings military aircraft expertise that is critical to the design and development of the F-35 Lightning II airframe and mission systems

– Digital thread technology from design to manufacturing

– Precision airframe engineering

– Systems modelling and simulation

– STOVL expertise

– Lean manufacturing

– In-service support
"The first STOVL variant of F-35 demonstrates the capabilities that BAE Systems brings to the F-35 programme”

Bobby Williams, vice president and F-35 program manager, Lockheed Martin Aeronautics Company
System Development & Demonstration (SDD) Contract

- 10 year SDD phase began in October 2001 - $18bn contract awarded to prime contractor Lockheed Martin to develop F-35; $7bn supplementary funding received with a contract extension to 2013

- SDD phase for development and testing of entire aircraft system and manufacturing techniques

- 21 test aircraft
  - 14 flight test
  - 6 non-airborne test
  - 1 radar signature test

- SDD is worth approx $2.5bn to BAE Systems (MAS)
SDD Programme Status

- First flight of first CTOL variant 15 December 2006
- First STOVL variant in assembly – BAE Systems formally handed-over aft fuselage to the Lockheed Martin on 3 April 2007
- STOVL first flight expected in 2008
- ‘Optimised’ CTOL variant (production standard) in assembly, BAE Systems (MAS) will start assembly of aft fuselage on schedule in April 2007
- ‘Optimised’ CTOL variant first flight expected in 2009
- First CV variant on target to commence assembly of aft fuselage in October 2007. Empennage on target to commence assembly in January 2008
- CV first flight expected in 2009
Low Rate Initial Production and Full Rate Production

- Biggest defence production programme of its type, valued at over $250 billion, spanning 30+ years, and potentially delivering over 3000 F-35 Lightning II aircraft worldwide

- BAE Systems (MAS) business share valued at over $25 billion

- Initial US government commitment to LRIP through two key events:
  - Authority To Proceed for Long Lead items – secured Q2 2006
  - Full Funding for first 2 aircraft – due summer 2007

- Over 300 F-35 LRIP aircraft (US/UK) anticipated to be delivered over 7 years

- Seven LRIP contracts (lots) each spanning 3 years, awarded by the US DoD on an annual basis. LRIP is expected to continue through to 2015

- Follow on Multi Year Buys will potentially supply a further 2700+ aircraft to air forces across the world excluding any Foreign Military Sales (FMS)
Global Sustainment

– BAE Systems playing a vital role in developing the F-35 Global Sustainment business model

– Revised Teaming Agreement signed at Farnborough International 2006 which sets out BAE Systems (MAS) role in the Sustainment phase of the programme

– BAE Systems will lead sustainment activities for the UK fleet on behalf of the F-35 Team

– Global Sustainment is a potential business stream of $300 billion to F-35 Team and industry partners over 50 year operational horizon
Clarifications and Questions?