IMPROVING THE ROTARY WING VALUE
PROPOSITION FOR MILITARY REQUIREMENTS

The AgustaWestland Roadmap

Riga, 15th – 16th October 2012
SUMMARY OF PRESENTATION

- European Market Presence
- Military Rotary Wing Market Dynamics
- Platform Evolution
- Improving the Value Proposition
- Specialised and Modified COTS Solutions
- Scalable Solutions
- Technology Development & Exploitation
- Advanced Platform Capability
- Training for Effectiveness
- Support for Availability
- Concluding Remarks
EUROPEAN MARKET PRESENCE

- Largest turnover in military rotorcraft
- Largest export value of military helicopters from EU
- Largest share in value of current EU mil/gov fleet
- Widest range of military helicopters
  - 2.8T to 24 Tonnes
- Pioneer of Joint Rotorcraft development in EU.
  - AW101 and NH-90
- First dedicated combat helicopter developed in EU
  - AW129
- Largest military helicopter developed in EU
  - AW101
- Leading Naval Helicopters
  - Super Lynx, AW159 Wildcat, NFH-90, AW101
- Pioneer of Tilt-Rotor in EU
- Largest access to US military rotorcraft technology through collaboration
  - AH-64 Apache, CH-47F, AW609 Tilt Rotor
AgustaWestland maintains a leading share of the EDA fleet by value.
RECENT AGUSTAWESTLAND MILITARY HELICOPTER COMBAT / LAW ENFORCEMENT OPERATIONS UNDERTAKEN BY NATO COUNTRIES

1. Afghanistan
- Lynx Mk9, Mk9a, Mk7
- AH1 Apache
- Sea King Mk4, Mk7
- AW101 (UK Merlin Mk1, Mk3 and Italian MMI)
- AW129 Mangusta
- NH90 TTH
- AB412
- CH-47

2. Iraq
- Sea King Mk4
- AW101 Merlin Mk3

3. Somalia (Anti-Piracy)
- AW101 (UK Merlin Mk1, Italian MMI)
- Lynx (Multiple Countries)
- AW109LUH

4. Caribbean (Anti-Drugs)
- Lynx (Multiple Countries)
- AW101 Merlin

5. Libya
- AH1 Apache (Ship-borne)
- Lynx (Multiple Countries)
- Sea King Mk7

Plus support to Humanitarian Assistance / Disaster Relief Operations Worldwide
TRENDS – MISSIONS & MARKETS

SHIFT TO HOMELAND SECURITY

- From a World War scenario to border patrol/civil protection
- Sophisticated sensors and mission systems required
- Missions shifting from military to civilian operations (e.g. SAR, Law Enforcement)

EXPORT MARKETS

- From “bloc logic” to hard competition among OEMs
- Value for money solutions delivering operational effect when needed
  - Lesser quantities but more efficient utilization of aircraft
  - Competitive, effective training and support solutions
- Industrial co-operation and offset opportunities

SHIFT TO EXPEDITIONARY WARFARE

- Multiple hybrid warfare scenarios
- Helicopters are major contributors in low intensity and high intensity conflicts
- Harsh (hot/high, sandy) and hostile (MANPADS, RPG) environments
- Critical logistic requirements

Rotorcraft unique capabilities central to modern military operations
PLATFORM EVOLUTION

1950s to 1980s
- Military Basis
- Commercial Variant

2000s and beyond
- Commercial Basis
- Military Variant

2005 and beyond
- Common Baseline
- Commercial Variant
- Military Variant
IMPROVING THE VALUE PROPOSITION

To deliver operational effect when required in the most cost effective way

A combination of:
- Platform operational capability and cost effectiveness
- Training for operational effectiveness
- Support for operational availability

Operator / Industry Partnership focused on cost effective delivery across all areas
SPECIALISED & MODIFIED COTS MILITARY PLATFORMS

Modified COTS provides ~90% effectiveness at ~60% the cost of specialised helos

Dual (commercial / military) approach endorsed by FAS4Europe Study
SCALEABLE SOLUTIONS – THE FAMILY CONSTRUCT

Configuration
Basics & Equipment Standards

Configuration
Internal and External Equipment / Weapons

Certification / Qualification - Safety

Operations
Mission Equipment & Weapons

Operations
Procedures & Training

Operations
Mission Scenarios

Support & Maintenance

Simulation & Training
Commercial R&T Increasing
• Technology driven by ever increasing demands of commercial market
• Examples include Synthetic Vision, Terrain Avoidance, Collision Avoidance and Touch Screen Controls
• Highly relevant to military market place
• Size of business encourages industry investment and reduce time to market
• Technology insertion / refresh increasing

Military Specific R & T Decreasing
• Technology driven by military req’ts; e.g. survivability, weapons etc.
• No read across to commercial markets
• Industry investment dependant on potential returns; slows time to market
• Some technology areas can be applied to commercial platforms operating in military environments (e.g. ASE)
PLATFORM CAPABILITY – AW149 / AW189

“...there needs to be a shift to more commercial models of civil design which must be more adaptable”
Baroness Neville-Jones
RUSI Conference
14th Jan 2010

“The challenge ... is how to leverage the commercial marketplace, utilise civil airworthiness and logistics...reduce maintenance costs and provide equipment suitable and effective for operational deployment”
Lt Col P Mason US Army & Mr J Tang FAA
“Implications of Using Commercial Rotorcraft for Military Missions”
1st May 2008

AW149 / AW189

- Same vehicle and avionics baseline; different markets
- Superior Payload / Range Capability (16 Troops)
- Hot & High Performance
- Day / Night / All Environment Operations (VFR/IFR)
- Fully integrated low workload “glass” cockpit and Aircraft and Mission Management System
- Wide range of communications, navigation, mission equipment and armament options
- Provides Battlefield Support, SAR/CSAR and Command & Control in the military environment
TRAINING - DELIVERING OPERATIONAL EFFECT

AIRCREW

Classroom & Multimedia Instruction → Flight Training Device → Full Flight Simulator → Helicopter Operational & Mission Equipment Training

TRAINING MANAGEMENT SYSTEM

GROUNDCREW

Classroom & Multimedia Instruction → Maintenance Training Simulator
TRAINEING – DELIVERING OPERATIONAL EFFECT

EDA Helicopter Tactics Training

• EDA acting on behalf of Czech Republic, Hungary, Luxembourg, Slovenia and Sweden
• AW contracted to deliver tactics and gunnery training through to 2013
• Portable facility comprising 2 cockpits w/ domes & 2 cabin mock-ups; one with dome
• COTS technology scaleable and adaptable
• Being developed to encompass SAR and CSAR
SUPPORT – REDUCING COST / INCREASING AVAILABILITY
SUPPORT - AW FLEET OPERATIONS CENTRE

AgustaWestland Limited

AWL CS&S Core Functions
- Technical Services
- Material Services
- Fleet Operations Centre
- Aircraft Services
- Customer Management
- Support Solutions

AWL Supporting Functions
- Procurement
- Engineering
- Manufacture Centre of Excellence
- Information Communication Technology
- Human Resources
- Training

Supply Chain & Service Providers
- OEM’s/Sub Contract
- Warehousing Logistics
- Import/Export Licencing
- Transportation

Customer Operation ‘In-Country’ or Deployed

Data & Materials Operational Feedback

Customer Operations
- Flight Crews
- Operations Management

Data & Materials

Materials & Services

Fleet Operations Centre

Support Solutions

Secondary Functions
- Procurement
- Engineering
- Manufacture Centre of Excellence
- Information Communication Technology
- Human Resources
- Training

Primary Functions
- OEM’s/Sub Contract
- Warehousing Logistics
- Import/Export Licencing
- Transportation

Forward/Customer Domain

Depth/Industry Domain
INTEGRATED SUPPORT & TRAINING SCHEME BENEFITS

- IOS Schemes save in practice 25% when compared against a traditional support service
- Integration re-defines the boundary between industry and the military manpower
- Enables uniformed personnel to be focussed on higher priorities
- Optimises infrastructure and costs
- Aircraft and training system configurations remain aligned
- Facilitates fluctuations between live flying and simulation to ensure the optimum balance
CONCLUDING REMARKS

- Better Value Propositions

- Dual (commercial / military) development of new platforms

- Incorporation of military technologies into military qualified / civil certified platforms

- Training solutions delivering effectiveness

- Support solutions delivering availability

- Common “family” approach