The Global Defense Marketplace

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A Changing Marketplace

• International acquisitions, mergers and partnerships are changing the landscape of the defense marketplace

• U.S. defense skilled workforce attrition is expected to reach crisis level in 2007

• Challenges and opportunities are greater than ever
The Industry Landscape

• U.S. defense budget is flat
• International armament market is large, but competition is very intense
• Aerospace/defense companies’ financial condition has improved, but high-growth commercial business continues to draw resources away
• Industry consolidation continues in U.S. and Europe, but with a distinct global character
U.S. Industry Consolidation

Martin Marietta

GE Aerospace 4/93

Lockheed 9/94

General Dynamics/ Ft. Worth 3/93

Martin Marietta 1/96

Lockheed Martin 8/00

COMSAT

Northrop Grumman

Logicon 5/97

Northrop Grumman 1/96

INRI* 9/98

Northrop Grumman 1/97

INRI* 9/98

Calif Microwave 4/99

E-Systems 4/95

Raytheon 1/97

Raytheon 4/99

Raytheon 7/99

Texas Instruments Defense/Electronics 1/97

Hughes Defense/Electronics 1/97

Hughes Defense/Electronics 1/97

Boeing 12/96

McDonnell Douglas 8/96

Boeing 10/99

Rockwell Aerospace/Defense 8/96

Boeing 10/99

Boeing 10/99

* INRI (International Research Institute)

** DPC (Data Procurement Corp.)
European Missile Consolidation

BGT
Matra Défense
Matra BAe Dynamics
BAe Dynamics
LFK
Aerospatiale Missiles
Oto Melara
Finmeccanica
Alenia Marconi Systems
GEC Dynamics
Saab Dynamics
Celsius/Bofors
NFT - Kongsberg
Thomson CSF
Shorts Missiles
Oerlikon

BGT
Matra BAE Dynamics
Saab
Kongsberg
Thales
Oerlikon
A Changing Marketplace

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- Challenges and opportunities are greater than ever
U.S. Government/Industry Common Challenges

**Government**
- Decreasing S&T $$$
- Workforce downsizing
- Workforce aging
- Over facilitization
- Decreasing competition

**Industry**
- Decreasing IR&D
- Consolidation
- Workforce aging
- Over facilitization
- Diminishing military suppliers
A Changing Marketplace

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Challenges in the Global Defense Market

- Protecting corporate technologies as alliances expand
- Tighter export control regulations
- Offset requirements/in-house work reduced
- Resistance within companies due to job security
- Keeping investors open-minded to global opportunities
- Repeated qualifications cost money and time
Repeated Qualifications

• To sell products internationally that are already in production for U.S. DoD:
  – Often must qualify components to buying country’s standards even if components/systems are:
    – A better design than contract requires
    – Already qualified to high standards through U.S. testing
• Repeated qualifications cost money and time
  – Qualification to U.S. standards could be a 2 1/2 year exercise
Opportunities in the Global Defense Market

• Market growth/business expansion
• Economic benefits to U.S. taxpayers, industry and defense
• Potential for long-term relationships with international industry partners
• Potential increased pool of skilled workers
• Potential for upgrades to flow back to U.S. customers
• Solutions/alternatives for DMS challenges
## Regional Market Penetration

**Year 2000**

<table>
<thead>
<tr>
<th>Company</th>
<th>Domestic</th>
<th>International</th>
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<tbody>
<tr>
<td>Boeing</td>
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<td>35</td>
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<td>Lockheed</td>
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<td>BAE SYSTEMS</td>
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<td>70</td>
</tr>
<tr>
<td>Thales</td>
<td>64</td>
<td>36</td>
</tr>
</tbody>
</table>
Fighter Aircraft Market Domination

Bahrain, Belgium, Denmark, Egypt, Greece, Indonesia, Israel, Jordan, Netherlands, Norway, Pakistan, Portugal, Singapore, South Korea, Taiwan, Thailand, Turkey, UAE, U.S., Venezuela

Fielded F-16s
Fighter Aircraft Market Domination

- Fielded F-16s
- Fielded Mirages
- Combined F-16s and Mirages
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- Solutions/alternatives for DMS challenges
International Sales

- Each billion $ of international sales equals 22,000 U.S. jobs
- Potential 10 - 20% savings in U.S. spare parts
- Larger production runs lead to lower weapons/equipment costs
- Promotes cross-servicing, mutual support and cooperation when conflicts arise
Opportunities in the Global Defense Market

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Conclusion

The global defense marketplace is here to stay and presents industry with a challenge for every opportunity.