



The Transatlantic Aegis Partnership: A Partnership Measured in Success

U.S.-Spain Defense Industry Day 2015

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Promoting National Security Since 1919





Lockheed Martin Corporation

Lockheed Martin is the Leading Global Security and Aerospace Company, Solving our Customers' Most Difficult Problems Through Our Employees' Innovation, Performance and Unmatched Integrity



Aeronautics



Information Systems & Global Solutions



Missiles & Fire Control



Mission Systems & Training



Space Systems



← Lockheed Martin International →



Integrated Platform Solutions



Training / Aviation Solutions



Cyber / IT / Logistics

Operational Locations:
UK, Australia, Canada, UAE, Saudi Arabia, Madrid, Singapore, Tokyo, Seoul, New Delhi, Tel Aviv
Local Delivery

Functional Focus:
Strategic Partnerships, Industrial Participation, Integrated Operations, Customer Engagement
Products with Purpose



International AEGIS Partnering



- Lockheed Martin understands the importance of local industrial participation
- AEGIS international programs have a long history of cooperation, including Local Content, Technology Transfer, and Strategic Partnerships
- The Open Architecture aspect of AEGIS allows flexible Combat System partnership opportunities
- Program models are customized to the needs and requirements of each country
- AEGIS partners have
 - Developed components of the AEGIS system
 - Integrated indigenous systems
 - Performed ship integration and life cycle maintenance
 - Applied technology and products to other program opportunities



The Spanish-US Partnership has been the most successful International AEGIS Industrial Partnership in history



The Transatlantic Aegis Partnership



- **Spain's decision to buy Aegis for the F-100 class created one of the most successful transatlantic maritime partnerships in history**
 - 5 ships delivered on schedule, on budget and fully operational
 - 8 ships sold abroad totaling more than \$2B of export sales for Spanish industry and enabling further exports
 - Over \$1B of Spanish content produced and technology transferred in support of Lockheed Martin products and programs via industrial participation projects



- **Continuing to leverage and enhance these partnerships enables demonstrated growth for Spanish industry and Lockheed Martin in an increasingly competitive global market**

Success Measured in Billions for a Partnership Spanning Decades



An Evolution of Industrial Cooperation

The Spanish Aegis Experience



Contract Awarded



**F-100 AEGIS FRIGATE
Construction Program
1997**



Spanish Industry Involved Up Front

- FABA, Indra, Sainsel, RYMSA
- Computer Hardware & Software
- RF Components, Water Coolers
- IFF, Networks, EW, etc.



**F-101
Commissioning
Sep 2002**

**First Missile Firings
Successful**




**F-101
CSSQT
Jul 2003**




**F-103
Commissioning
Dec 2004**

**F-103
CSSQT
SEP 2005**

Spanish Industry assumes additional CMS content




**F-102
CSSQT
Sep 2004**



**F-102
Commissioning
Dec 2003**

Navantia / Lockheed Team Provide F-310 AEGIS to Norway


**F-104
Commissioning
March 2006**

Contract Awarded



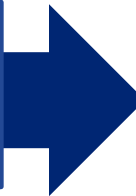
**F-105
Construction Program
Jun 2006**

Navantia Designs AEGIS Ships for Australia



**F-105
LAUNCH
Nov 2010**

Navantia / Lockheed Team offers AEGIS Frigates to Brazil

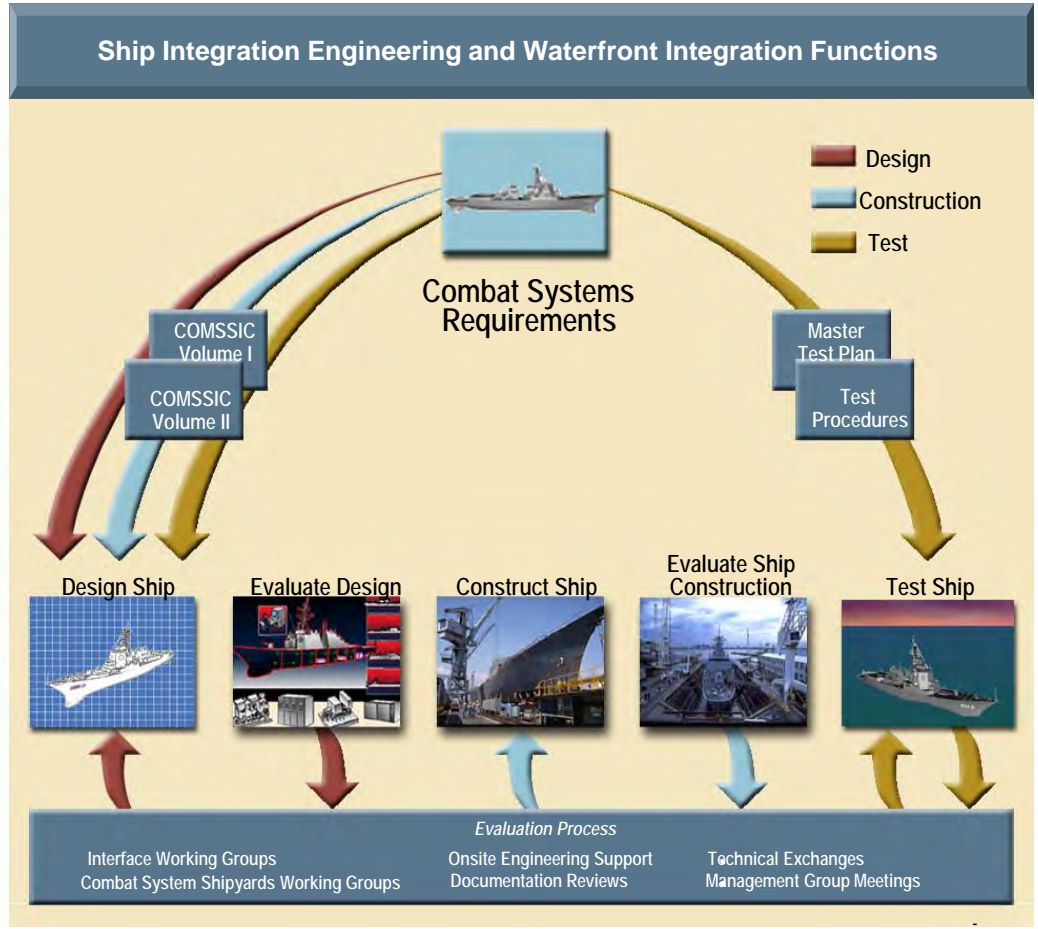




Spanish Shipyard Cooperation



Navantia



Lockheed Martin has Extensive Experience Working with Navantia Shipyards to Ensure a Low-risk, Successful Integration



LM-Navantia Aegis Cooperation

The Spanish Aegis Partnership



Capability Growth

Navantia Recognized by US Navy and LM for Aegis Excellence



Capability/Technology Transferred

- System Engineering Processes
- AEGIS Development Rigor
- Program Management Processes
- AEGIS Specs
- AEGIS C2 Code
- On-site Team

- NFR-90 Studies
- Non-Military C2 Systems

Before F-100

Capability/Technology Transferred

- AEGIS CP Development Standards
- Enhanced S/W CM
- On-site Team
- AEGIS Specs

- F-100 CDS
- F-100 SADS
- SATOE
- LBTS
- Integrated Test Team Member
- ADS & WCS Adjunct Cabinet Manufacturing
- VLS Hatch Mfg
- MK 45 Gun Refurb

F-100

- BAM Combat System
- SCOMBA

Capability/Technology Transferred

- IAFCL Toolkit /Simulator
- LBTS/CIST Integration Assist
- Production Test Assist
- On-site Team

- Prime C/S Integrator
- F-105 SC&D
- F-105 SADS
- SORTS
- LBTS Growth
- Integrated Test Team
- F-100 CDS, SADS CPM
- ARES Cabinet Prod.
- MK 45 Gun Refurb

F-105

Future Opportunities

- F-110 Prime CS Integrator
- SCOMBA-F adapted with AEGIS
- Additional F-110 CS Content
- CIST
- F-105 CPM
- F-100 CPM
- LHD CPM
- BAM CPM

- International Combat System Prime for Export
- Spanish CSEA
- LHD Combat System
- BAM CPM
- SCOMBA Growth
- International Combat System Offers

Navantia Capabilities Greatly Enhanced by Robust Industrial Cooperation and Technology Transfer during F-100 Program – Additional Growth Envisioned Thru Continued Cooperation



LM-Indra Aegis Industrial Cooperation

A Star Supplier for Aegis Components and Partner in Cooperative Systems Development and Production



Cooperation Growth ↑

Indra Recognized by US Navy and LM for Aegis Excellence



- Relationship started in 1996 during F-100
- Indra has produced components for every International Aegis program including over 25 USN systems
- Cabinets, Power Supplies, Cables, Modules, Sub-hybrids, miscellaneous fabricated components

Role as Aegis Worldwide Supplier

- In 2008 LM and Indra entered into a partnership to design, develop, produce a hull sonar system for F-105
- Indra and LM divided the program scope into 50/50 work-share
- Indra was the prime contractor with LM technical partnership

F-105 Hull Mounted Sonar Co-development

- Indra and LM now cooperatively marketing co-developed F-105 sonar solution worldwide
- Indra and LM are exploring other opportunities for cooperation and co-development on future opportunities including F-110

Future Cooperation Opportunities



Indra-LM Relationship based on Foundation of Success as Aegis Star Supplier and Grown through Cooperation on F-105 Sonar – Additional Growth Envisioned Thru Continued Cooperation



Summary and Conclusions



- **Spain's decision to buy Aegis for the F-100 class created one of the most successful transatlantic maritime partnerships in history**
- **Lockheed Martin is committed to continuing to grow our partnerships in Spain, with the MOD, Navy, and Industry**
- **F-100 is a model for program success, providing a low risk foundation for future programs, including robust growth of Spanish industrial capabilities**
- **Aegis offers Spain robust capability and flexibility, and a unique discriminator for Spanish shipbuilding in the global market**

We are Strongly Committed to Continued Success of our Partnerships in Spain

