



an EnPro Industries company

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Fairbanks Morse and the U.S. Navy

(a brief history)

Navy development of submarine diesels in the 1920's & '30's

- Responded to need for a U.S. diesel engine manufacturer

Fairbanks Morse patents the Opposed Piston engine - 1936

- Ideal for submarine applications
- Navy's first procurements in 1937 and continued through the '50's
- Upgrade of engine continues today

Fairbanks Morse upgrades large marine engine technology

- Began manufacturing the Colt-Pielstick marine diesel engine in the '70's
- First USN large marine diesel LSD41 class in 1980
- Began manufacturing the FM/MAN engines in 1995
- Product upgrades continue today



USN Programs 1970's - Today

LSD-41 & LPD-17



LCS-1 & 3



SSBN-726, SSN-688 & SSN-21



**T-AO-187, T-AKR-300
& T-AKE-1**



CVN21 Program



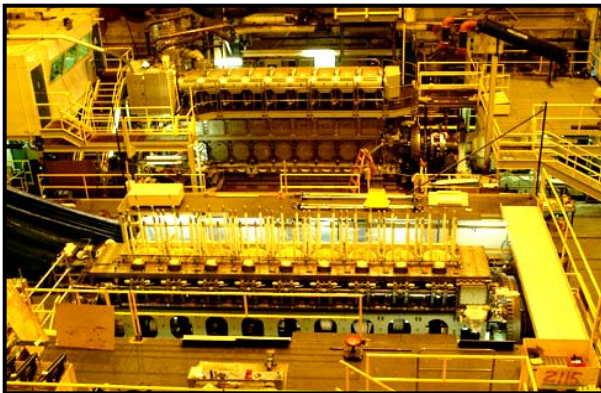
LHD-1-7, LHD-8, LHA-6





FME Investment for Navy Programs

Nearly \$30M invested in capital improvements since 2002



**Manufacturing, training facilities, engineering and ILS staff to support
LPD-17, T-AKE 1, LHD-8/LHA(R), LCS-1, and CVN 21 Programs**

Fairbanks Morse Acquisition Support

FME meets/exceeds specifications (no exceptions/waivers)

- Only domestic engine manufacturer in the size/power range required
- Product and systems engineering tailored to the end application
- On-site qualification testing
- Strong aftermarket and provisioning support



Fairbanks Morse In-Service Support

Aftermarket parts & service organization

- Only U.S. engine manufacturer with factory-direct service organization
- Repair technicians and engineers available 24/7 world-wide
- On-site technical support and life-cycle engineering staff

Navy Diesel Engine Technical Support contract in place

- Five-year contract awarded in 2007
- Supports acquisition programs
- R&D support for alternative fuels and energy efficiency improvements
- Similar efforts in place for the U.S. Coast Guard

FME partnership with NGSB Planning Yard for LPD-17

- Sustainment utilizing “performance based logistics” approach
- Focused on maintenance and provisioning
- Multi-phase development plan favorably concluded in July
- Supports ships being delivered w/o provisioning & maintenance plans



Preparing for tomorrow's USN Programs



LHA(R) = LHA-6 Class



LCS (LMCO Design)



CVN 78 Class

For small businesses:

- It is critical that we have a clear vision of future programs
- Important to establish long-term requirements
- Multi-year programs are required to justify high investments
- Supplier cost reductions are based on volumes
- Must retain our highly-trained workforce

MPFF

T-AOE(X)

LCC(X)

L(X)

Others

Impact of Changes & Uncertainty

Navy shipbuilding plans have not been reliable or consistent

- High cost of meeting Navy requirements difficult to absorb
- Production volume unpredictable
- Difficult to justify fixed investments
- Without long-term contracts, supplier prices remain high

Aftermarket is not predictable – good area for joint improvements

- Inventory to support new-construction deliveries not established
 - No supply system inventory orders before ships are delivered
 - No demand history or forecast to justify FME inventory investment
- Working with prime contractors on sustainment efforts
 - Strong potential to improve logistic support issues

Navy business decline prompts change in strategy

- Focus on re-emergence of the commercial nuclear power industry
 - FME is the only remaining NQA-1 qualified manufacturer of EDG sets



Fairbanks Morse Engine is the original U.S. manufacturer and today's premier provider of customized medium-speed engine systems, parts, and direct service solutions.