



WORLDWIDE FLEET READINESS AND SUSTAINMENT_

DEFENSE SOLUTIONS_

Moog Inc. is a worldwide leader in the design, manufacture and integration of precision motion control systems and components. Moog is a renowned designer and manufacturer of a wide range of high performance mechanical and fluid control solutions, with facilities in the United States and twenty-four other countries.

For the naval market, Moog provides precision actuation systems and components for naval vessels. For military ground vehicles, Moog offers motion control solutions for radar systems, gun aiming, turret stabilization, and automatic ammunition loading. Our fluid and mechanical missile control solutions steer, stabilize and navigate both tactical and strategic missiles. Moog supplies integrated pan and tilt mechanisms, sensor nodes, cameras and threat deterrent solutions for border, port and secured facilities markets. For military aircraft, we provide integrated flight control systems solutions, which range from primary, secondary, high lift, engine controls and utility flight control systems.

AFTERMARKET EXPERTISE_

Provided with unparalleled manufacturing, logistics and certification expertise, Moog offers worldwide maintenance, repair and upgrade services for our products. A strong customer service record in support of numerous programs has ranked Moog among the highest rated companies in the business. It is evident through our recent recognition from the Defense Logistics Agency (DLA) for consistent performance and extraordinary customer support of critical weapons systems for the F/A18. Our partnership with the DLA, has proven our readiness to support military customers.

MOOG RECEIVES VENDOR EXCELLENCE AWARD FROM US DEFENSE LOGISTICS AGENCY

In January 2009, Moog was awarded the Vendor Excellence Award – Large Business from the US Defense Logistics Agency (DLA). The award recognized Moog for consistent superior performance and extraordinary customer support of critical weapons systems, particularly of the F/A-18 program requirements.

Moog was cited for its “cooperative, can-do attitude, innovative approaches and willingness to ‘lean forward’ in support of DLA’s mission requirements above and beyond any other strategic supplier.” Furthermore, DLA identified that its “partnership with Moog has resulted in outstanding readiness support to DLA, its military customers and the warfighter.”

SUPPORTING WORLDWIDE READINESS FOR THE F-18

Moog provides motion control systems to the F/A-18 Leading Edge Flap Actuation System and Wingfold Mechanical Drive Group

Challenge:

- Wingfold Transmission suffered from poor reliability and low MTBF
- Low reliability related to material and processes use to fabricate rotor

Solution:

- Reverse engineer all hydraulic motor components
- Redesign rotor to incorporate wrought bronze sleeves for improved service life
- Result is hydraulic motor with 250% increase in MTBF and a 25% lower acquisition cost

NAVAL SOLUTIONS_ SOLUTIONS_

Moog provides hydraulic and electromechanical rotary and linear actuation systems for US Navy vessels. We also provide slip rings, fiber optic rotary joints (FORJ), multiplexers, specialized motors and resolvers. These technologies are applied to steering, diving, stabilization, propulsion and shipboard weapons systems. Our naval products are built in our East Aurora NY, Orrville OH, and Blacksburg VA manufacturing facilities, where maintenance and overhaul support is also managed. We have supported the US Navy for its motion control requirements since the 1950's and are assisting the Navy in its endeavors to build and maintain an all electric fleet.

THE PLATFORMS WE PROVIDE HARDWARE TO ARE:

Submarines:

Virginia Class | Ohio Class | Los Angeles Class | Seawolf Class

Surface Ships:

Nimitz Class | San Antonio Class | Wasp Class | Harper's Ferry Class

Recognized for our cooperativeness and innovation in military aftermarket support, Moog is the right choice for the Navy's fleet sustainment. We have engineering staff available to solve any technical challenges that may arise. Our program management processes are geared for aerospace and defense projects. Contact us to learn more about how Moog can support your Navy support requirements.

PROVEN EXPERIENCE_ EXPERIENCE_

DESIGN ENHANCEMENTS

Challenge:

- Hydraulic linear actuator for weapons handler did not include an overturning moment
- Customer required product design and final test in less than 26 weeks

Solution:

- Co-engineered product and production method with shipbuilder
- First article unit and product unit manufactured at the same time



PRODUCT UPGRADES

Challenge:

- Minimal torque output led to decreased functionality
- Customer was concerned that turbulence at sea would cause rotary actuators to de-latch the arm that held payloads secure

Solution:

- Redesigned actuator to increase torque output by more than 50%
- Accomplished in less than 30 weeks, even within a restricted mounting surface location



SUPPLIER OBSOLESCENCE

Challenge:

- Original supplier of a condenser went out of business, leaving customer requirement unfulfilled

Solution:

- Reverse engineered product to meet customer specifications
- Manufacturing capabilities and technical expertise allowed for flexibility in design



LOCATIONS_

Argentina
Australia
Brazil
Canada
Finland
Germany
India
Ireland
Italy
Japan
Luxembourg
Netherlands
Norway
Philippines
Singapore
South Africa
South Korea
Spain
Sweden
Switzerland
United Arab Emirates
United Kingdom
United States

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