



*Credit: U.S. Army/Maj. Robert Fellingham*



*Credit: U.S. Air Force/  
Senior Airman Trevor Gordner*



*Credit: U.S. Army National Guard/  
Staff Sgt. Gabriel Rivera*



## MOOG TOTAL SUPPORT

DEFENSE SUSTAINMENT SERVICES

Moog Inc. is a worldwide designer, manufacturer, and integrator of precision motion control products and systems. Over the past 70 years, we have developed a reputation for delivering innovative solutions for the most challenging motion control applications. As a result, we have become a key supplier to the world's leading multi-domain vehicle manufacturers and are positioned on countless military platforms, providing reliable systems and support for our customers. Moog Total Support also provides sustainment and aftermarket services across thousands of commercial applications.



# MOOG TOTAL SUPPORT – DEFENSE

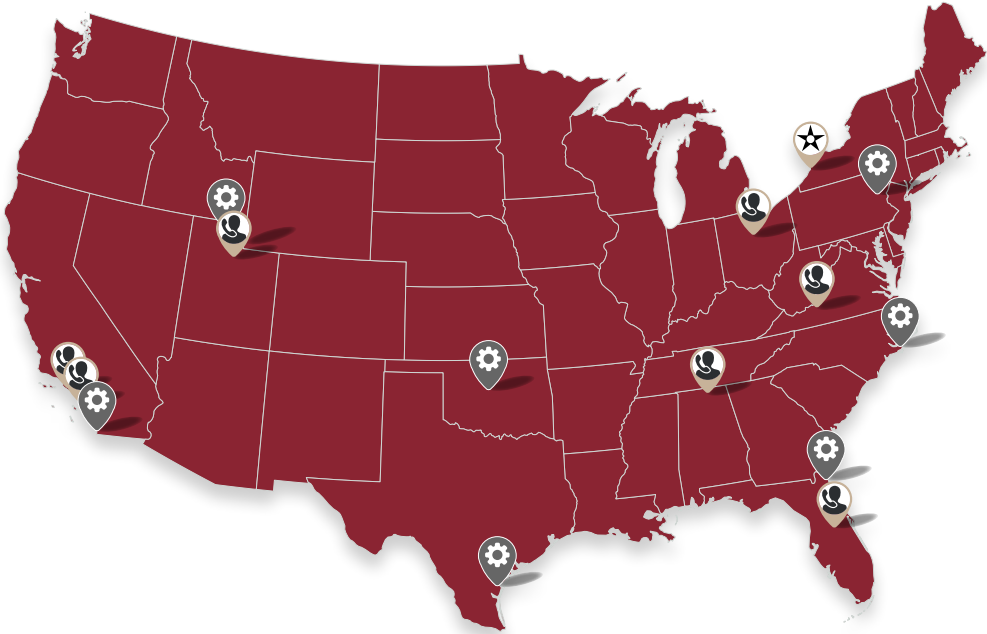
Our comprehensive global sustainment program broadly includes OEM product support, modernization and upgrades, service and support, training and engineered solutions supporting industry's wide range of defense products across multi-domain operations. As an OEM supplier, Moog is the logical choice for follow-on product support.

## ADVANTAGES

- Dedicated teams with the backing of a large Original Equipment Manufacturer (OEM)
- Direct OEM support with comprehensive engineering resources
- Technical, logistics, integration, maintenance, and training support
- Depot support / regional offices for faster global response
- Public-Private Partnerships (P3s) – Industry leader in direct partnering
- Cost-share – willing to invest and create Intellectual Property (IP)
- Field Service Reps (FSRs) are Moog employees with a deep level of knowledge and dedication

# GLOBAL SUSTAINMENT SUPPORT

Contact: [totalsupport@moog.com](mailto:totalsupport@moog.com)



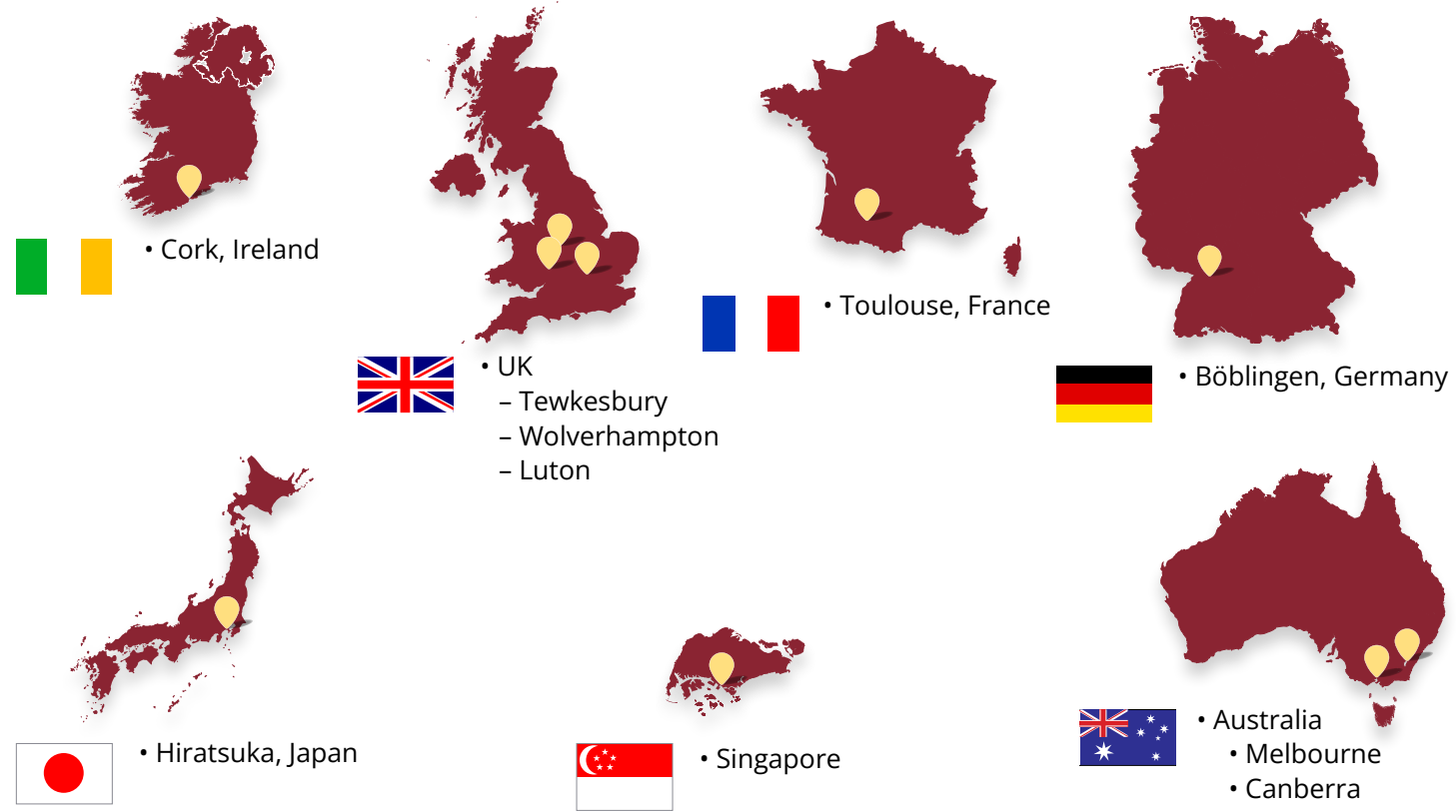
## MOOG U.S. DEFENSE LOCATIONS

- East Aurora, NY ★ (Headquarters)
- Blacksburg, VA
- Huntsville, AL
- Orlando, FL
- Orrville, OH
- Salt Lake City, UT
- Santa Barbara, CA
- Torrance, CA

## DEPOT SUPPORT

- Corpus Christi, TX
- Hill AFB, UT
- Jacksonville, FL
- Letterkenny, PA
- MCAS Cherry Point, NC
- North Island NAS, CA
- Tinker AFB, OK
- Tobyhanna, PA

# INTERNATIONAL DEFENSE LOCATIONS





# MOOG TOTAL SUPPORT OFFERINGS

## OEM PRODUCT SUPPORT

- Spares
- Repair and overhaul
- Software support – revision changes, etc.
- Parts and kits
- Initial provisioning
- Logistics

## MODERNIZATION AND UPGRADES

- Upgrades
  - Software
  - Mechanical
  - Hydraulics
  - Electronics
- Obsolescence management
- Additive manufacturing
  - 3-D printing

## SERVICE AND SUPPORT

- Public-Private Partnerships (P3s)
  - On-site depot start-up and support
  - Test equipment services
  - Engineering Services
- Moog Field Service Reps (FSRs)
- Joint venture experience
- Licensing
- Data – technical information, drawings
- Documentation
  - Repair manuals
  - Operation manuals
  - Test equipment manuals

## TRAINING

- Maintenance
  - Preventive Maintenance Checks and Services (PMCS)
  - Tools and test equipment
- Operators / operations
- Simulation
  - Computer-based training
  - Embedded system training
- Subsystem integration
- Theory of operation
- Test equipment
- Training support
  - Virtual or on-site

## ENGINEERED SOLUTIONS

- Reverse engineering
  - Mechanical
  - Hydraulics
  - Electronics
- Repair and overhaul of non-Moog hardware
- Tech insertion





MOOG DEFENSE  
EQUIPPING THOSE WHO DEFEND FREEDOM  
ACROSS MULTI-DOMAIN OPERATIONS



LAUNCH VEHICLES

- Power & Control Electronics
- Thrust Vector Control Systems
- Chemical & Cold Gas Engine Systems
- Main Engine Fluid Controls
- Secondary Payload Adaptors & Delivery Systems
- Vehicle SoftRide® Isolation

SPACECRAFT &  
PAYLOAD DELIVERY SYSTEMS



- Payload-Ready Satellite Buses
- Propulsion Systems
- Integrated Flight Avionics
- Structures & Isolation Solutions
- Mechanisms & Control Electronics



ROTARY WING

- Weapon Stores Management Systems (SMS)
- Missile Launchers & Simulators
- Flight Control Systems
- Vibration Control
- Slip Rings
- Cockpit Avionics Solutions



FIXED WING

- Weapon SMS
- Flight Control Systems
- Motion Control for ISR Search Radar
- Stabilized Motion Control for Turrets
- Engine Control Systems
- Media Converters/Ethernet Switches
- Missile Launchers & Simulators
- Cockpit Avionics Solutions



MISSILES &  
KILL VEHICLES

- Thrust Vector Control
- Fin Control
- Wing Deploy
- Integrated Propulsion Systems & Fluid Control
- Seeker Motors
- Avionics & Sensor Integration
- Structures & Isolation Solutions
- Control Electronics



UAS

- Flight Control Systems
- Weapon SMS
- Missile Launchers & Simulators
- Actuators
- Vehicle Management Systems



RADAR

- Radar Multi-Axis Positioning Systems
- Cooling Equipment Units
- Slip Rings
- Digital Airfield Solutions
- Runway FOD Detection



COMBAT &  
TACTICAL VEHICLES

- Reconfigurable Integrated-weapons Platform
- Turret Weapon Systems & Integration
- Stabilized Motion Control
- Fire Control
- Ammunition Handling
- Large Caliber Weapon Control Systems
- Modular Countermeasure Directors
- Multi-Mission Payload Systems
- Short Range Air Defense
- C-UAS Solutions



LAUNCHERS

- EH to EM Conversions & Upgrades
- High Voltage Elevation & Azimuth Control
- Directed Energy
- Weapon SMS
- Slip Rings



SUSTAINMENT SERVICES

- OEM Product Support
- Modernization & Upgrades
- Service & Support
- Training
- Engineered Solutions

SUBMARINES

- Valve Actuation
- Hull Mechanical Actuation
- Servovalves
- Periscope Actuation
- Optronics Rotary Joints



TORPEDOES

- Steering Assembly
- Servovalves
- Electromechanical Controls

SURFACE  
VESSELS

- EM Actuation
- Weapon SMS
- Stabilized Motion Control for Turrets
- Gun Control Units
- Active Stabilization
- Ammunition Handling



AUV / UUV

- Propulsion Systems
- Steering & Dive Control Systems
- Subsea Utility Motors

SPACE

LEO/MEO/GEO & Beyond  
DOD  
Commercial  
Civil

ROTARY  
WING

Black Hawk  
V-22  
Seahawk  
S-92 | S-76  
AW129 | AW159  
FLRAA  
MD 530F  
Bell 407  
AH-64E Apache  
AH-530  
T129  
CH-53

FIXED  
WING

F-15 | F-16 | F-18 | F-35  
AT-802 OA-1K Skyraider II  
T-50 Golden Eagle  
AC-130J Ghost Rider  
KF-21 Boramae  
Eurofighter  
MC-145B  
Scorpion  
Bronco II  
Caravan  
PreciSR  
Hurjet  
Hawk  
AJT  
IDF

MISSILES &  
KILL VEHICLES

Tactical & Strike Systems  
Hypersonic Missile Systems  
Long Range Ballistic Missiles  
Air & Missile Defense

UAS

Predator  
Gray Eagle  
MQ-25

RADAR

G/ATOR  
AN/TPY2  
Sentinel  
AN/TPQ-53  
MEADS  
Aegis  
TRML-4D

COMBAT &  
TACTICAL VEHICLES

M-SHORAD  
LAV-AT/25  
Stryker  
CV90  
PZH 2000  
Bradley  
MLIDS  
Abrams  
M113AS4  
RCH 155  
CWS-Heavy  
Ariete C2  
Centauro II  
Jaguar  
Piranha V  
CASEAR 155  
K9 Thunder SPH  
K9 Vajra Howitzer  
K21 IFV  
K2 Black Panther

LAUNCHERS

MML  
HIMARS  
MLRS

SUBMARINES

Seawolf Class  
Virginia Class  
Ohio Class  
Columbia Class  
Collins Class  
Scorpene Class  
Dreadnought Class  
Barracuda Class

TORPEDOES

Mk 48  
Mk 54

SURFACE  
VESSELS

Ford-class Aircraft Carrier  
Littoral Combat Ship  
Frigate Types 45/23/122-125  
K30  
Nimitz Class Carriers  
Chevallier CT40 c-UAS  
Evolved Cape Class Patrol Boat  
Hobart Class Destroyer

AUV / UUV

XLUV  
UUV-FoS  
Echo Ranger  
Echo Voyager  
CLASSIFIED  
RMMV

# EQUIPPING THOSE WHO DEFEND FREEDOM

**MOOG** | Shaping the way our world moves™

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www.moog.com/defense-sustainment



Moog Space and Defense



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