



## Company Profile

**N**AIAD DYNAMICS® IS THE FUSION OF LEGENDARY Stabilizer and Ride Control System manufacturers Naiad Marine Systems®, Maritime Dynamics, Vosper Motion Control®, Vosper Stabilizers, VT Marine Products and KoopNautic Holland.

The full integration of these jointly-owned businesses occurred in early 2009 when NAIAD MARITIME GROUP, INC acquired all global operations and reorganized them as NAIAD DYNAMICS, now with interlinked facilities on three continents.

The global business draws on a wealth of experience and advanced technologies, operating as a completely unified entity, from research & development to worldwide service.

### *On the Shoulders of Giants*

The company traces its heritage from 1941 when NAIAD in the USA was first established as a precision manufacturer for the aerospace industry, a legacy continued to this day. The company's history is linked to Sperry Marine in the 1970's and includes Maritime Dynamics revolutionary work for the US Navy and the fast ferry industry in the 1980's. The company also traces its stabilization roots to 1891 when Sir John Thornycroft engineered and provided a stabilization system for the yacht *Cecile*. Vosper and Thornycroft joined in 1966 (later becoming VT Group plc) and the rich history of the Vosper Stabilizer business continues today, an integral part of NAIAD DYNAMICS.

### *Applications & Expertise*

Responsible for more than 14,000 stabilization systems in the luxury yacht, commercial ship and military ship markets—including over 55 of the world's Navies, numerous Coast Guards, most of the world's fast ferries, and more luxury yachts than any other company. The combined fielded experience and technical expertise of NAIAD DYNAMICS is unmatched in marine motion control.

Proven applications include displacement and planing monohulls, catamarans, trimarans, surface effect ships (SES), SWATH, SLICE, SWASH, RHIBS and other advanced hull forms from 10 to 150m, and monohulls to 250m (27,000 tonnes).

Recent military applications include the US Navy's sophisticated 115m *Freedom* Class Littoral Combat Ships.

### *In-House Capabilities*

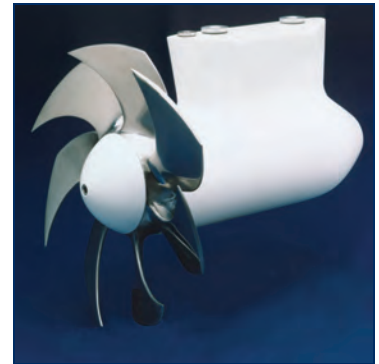
Extensive FEA engineering design, CFD hydrodynamic design, naval architecture and structural analysis, highly correlated proprietary ship modeling and simulation, full CNC manufacturing to US military aerospace standards, fabrication, full scale assembly and testing, tear down and repair facilities, dynamometer load testing, motion simulation hydraulic testing, electrical assembly and testing laboratory, extensive software engineering and programming. ISO 9001:2015 certified facilities in the U.S. and U.K.



## Technological Innovation

The company is credited with some of the most significant marine motion control innovations of the modern era, including:

- ✓ 1st ship Ride Control System "RCS" (simultaneous and continuous control of roll and pitch and often other ship motions)
- ✓ 1st commercial ferry and military ship RCS
- ✓ 1st Classification Society type-approved RCS
- ✓ 1st RCS with a fully integrated Auto Pilot
- ✓ 1st Active T-foil RCS and retractable T-foil RCS
- ✓ 1st use of Fins to provide zero forward speed stabilization (Stabilization AtRest®)
- ✓ 1st hydro-mechanical gyroscope controller for stabilization (US Patent)
- ✓ 1st fully digital Angle-Velocity-Acceleration controller utilizing CAN technology
- ✓ 1st application of rotary (Magnus effect) cylinders for low speed stabilization
- ✓ 1st Active Interceptor RCS, 1st strike tolerant active interceptor
- ✓ 1st monohull RCS, catamaran RCS, trimaran RCS, Surface Effect Ship RCS and SLICE RCS



## Motion Control Solutions

A full suite of standard, production-based systems

- ✓ AtSpeed® (Underway) and AtRest® (zero speed) Active Roll Stabilization Systems
- ✓ Advanced Ride Control Systems including TOTAL RIDE CONTROL® for luxury yachts
- ✓ Standard product configurations include Active Fins (roll fins, yaw fins, pitch canards), Retractable Fins, Active T-Foils, Retractable T-Foils, Active Trim Tabs, Active Interceptors, Active Lifting Foils, Active Spanning Foils and Rotary Cylinders.

Custom motion control product configurations designed to suit almost any application.

## Related Marine Systems

Hydraulic and Electric Bow Thrusters, Hydro-electric Power Packs, Integrated Hydraulic Systems, and VOSPOWER™ Waterjet Propulsion Systems.

## Technical Services

Ship modeling, simulation and motion control analysis. Custom engineering, testing, precision manufacturing, installation and refit services.

## Product Support

Customer service call centers in four time zones, fully equipped mobile service fleet, extensive spare parts inventory. No stabilizer manufacturer has more systems in service and supports more vessels worldwide. Continuous support of systems supplied decades ago. In-house design and manufacturing ensure long-term parts availability. Experienced staff of mobile field service engineers.

### NAIAD DYNAMICS US, INC.

Connecticut, USA  
+1 203 929 635

Maryland, USA  
+1 301 690 201

Florida, USA  
+1 954 797 756

### NAIAD DYNAMICS UK LIMITED

Southampton, England  
+44 (0) 2392 53 9750

### NAIAD DYNAMICS HOLLAND, BV

Maastricht, Netherlands  
+31 (0) 43 604 9200

### NAIAD DYNAMICS FRANCE SARL

La Ciotat, France  
+33 (0) 486 06 00 05

### ND ASIA PACIFIC PTY. LIMITED

Perth, Australia  
+61 (0) 451 699 676



[www.naiad.com](http://www.naiad.com)  
[sales@naiad.com](mailto:sales@naiad.com)

**NAIAD DYNAMICS: The Science of Ship Motion Control®**