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MAY - 2020

Marine Acoustics, Inc.

TOP  
**Maritime**  
Consulting/Service  
Companies 2020



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*The annual listing of 10 companies that are at the forefront of providing  
Maritime consulting / services and transforming businesses*

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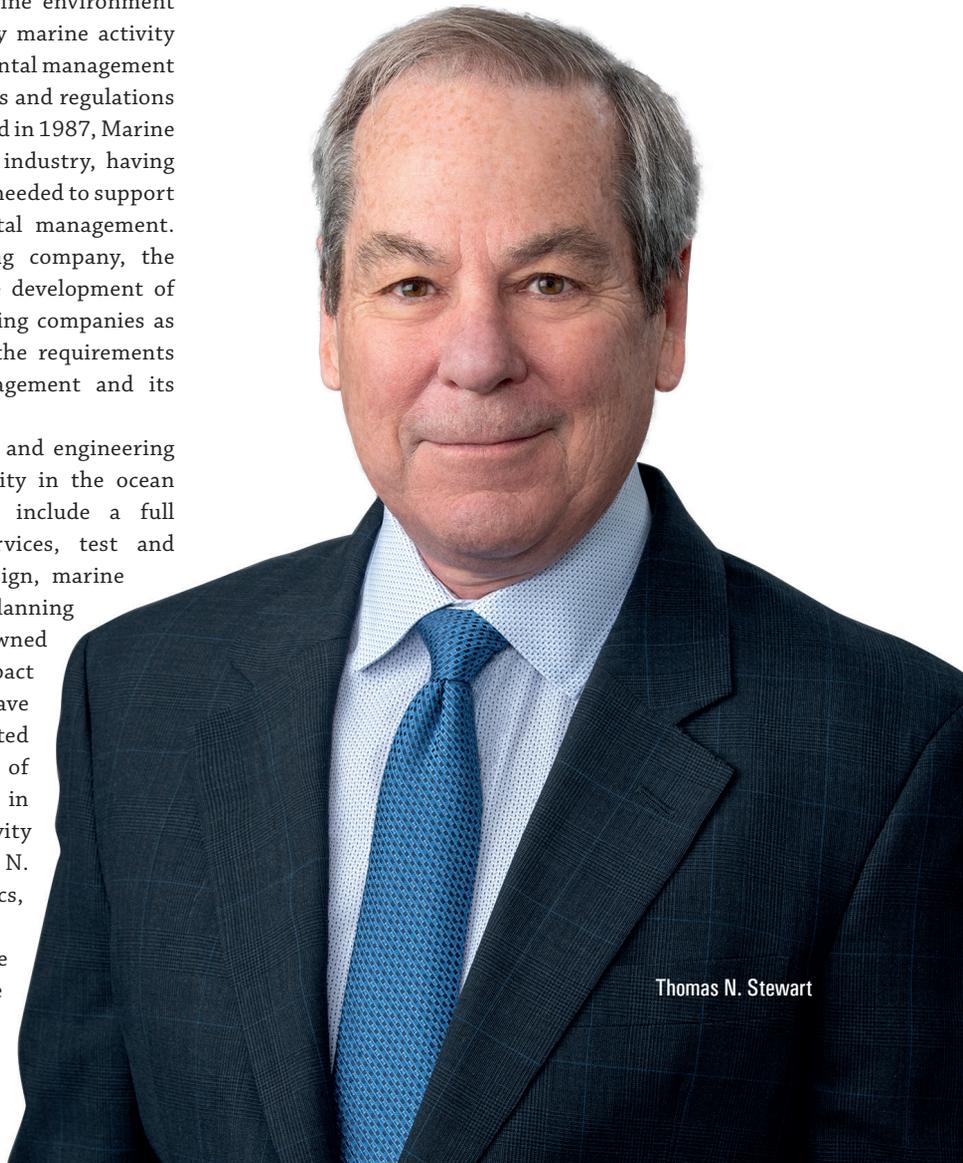
## The Experts of Ocean Environment

**A**ccording to a recent report by UNDP (United Nations Development Programme), more than 3 billion people depend on marine and coastal biodiversity for their livelihoods. The total market value of marine and coastal resources and industries is estimated at \$3 trillion per year, about 5 percent of the global GDP. Alternatively, according to the UN Environment Programme, it is estimated that the cumulative economic impact of poor ocean management practices leads to a cost close to \$200 billion per year. Considering the facts, it is not an over-exaggeration to say that if left unchecked, the impact of human activity on the marine environment is disastrous. Undoubtedly, conducting any marine activity without the assistance of marine environmental management or adhering to the strict environmental laws and regulations stays a daunting task for companies. Founded in 1987, Marine Acoustics (MAI) has been a leader in the industry, having played a pivotal role in developing the tools needed to support the growing field of marine environmental management. Being a global scientific and engineering company, the company has been at the forefront of the development of technology and support services for assisting companies as well as government agencies in meeting the requirements surrounding marine environmental management and its regulations.

With its broad spectrum of consulting and engineering services, MAI provides technical superiority in the ocean environment. MAI's areas of expertise include a full range of environmental compliance services, test and evaluation services, undersea warfare design, marine environmental compliance, and sea test planning and support. "Our internationally renowned recognized researchers have studied the impact of human activity on marine wildlife. We have published research papers and conducted significant research in that area as a result of which MAI has developed strong expertise in understanding the effects of human activity in the ocean environment," asserts Thomas N. Stewart, President & CEO at Marine Acoustics, Inc.

It cannot be stressed enough that the impact of human intervention on the

marine life and ocean environment should be kept to the bare minimum. For the same, MAI offers technical, environmental services, including the virtual modeling tools for impact assessment, database development, and programmatic support for a full range of environmental assessment issues—to both corporate customers and governmental customers. This involves conducting environmental research to look at the impact of human activity on the marine



Thomas N. Stewart

environment, identifying the kind of activities that have a significant impact, and the ones that don't, while also taking into consideration their threshold. "We pioneered the first global environmental impact statement on the impact of low-frequency sound on the marine environment," explains Stewart.

When it comes to undersea warfare, MAI focuses principally on evaluating the performance of technologies that the U.S. Navy brings into the ocean environment. The company designs experiments and tests of complex systems and their interactions with other systems operating in the ocean environment. Whether it's naval systems design, development, test and evaluation, and training services, the company's Naval Technology & Training Support staff provides a high level of expertise and experience in all those aspects. Moreover, MAI provides support to a wide range of system development programs such as airborne, surface and submarine applications. Given their experience in both operations and training, MAI's expert team has been a major part of the planning and execution of many large multi-platform sea tests for the U.S. Navy, including theatre-level anti-submarine warfare exercises, Office of Naval Research large scale exercises, and the Low-Frequency Active (LFA) and Critical Sea Test (CST) programs.

MAI assisted the Naval Undersea Warfare Center in developing a more holistic test program for Sonar effectiveness, to include the identifying testable performance metrics, preparing Capability Development Documents, and preparing measurement analysis plans. "We conduct measurements, evaluate the performance, and we do that in a way that pays attention to the design of experiments that gives us

statistical confidence in the assessment of the system's performance" states Stewart.

Today, MAI is renowned as a global leader in the development of a wide range of engineering and scientific models to support both naval systems development as well as environmental engineering and science issues. The company provides program support, including system engineering and technical assistance services for the U.S. Navy. "We have a small but important research and development line of work that underpins our services. It provides our employees with the opportunity to maintain and hone their knowledge level and skills at a cutting edge level,"

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## **We pioneered the first global environmental impact statement on the impact of low-frequency sound on the marine environment**

explains Stewart. MAI's differentiator in the market is its ability to work with different organizations, bring them together as a team, and best use the strengths of each team member. The company has an experienced and technically capable staff who hold advanced degrees, and have operational

expertise with the systems and the environments important to the customer. The technical staff members also serve on numerous national and international advisory committees. "Our intent is to continue our successful approach of hiring talented people and maintain a strong base of skilled personnel while also encouraging them to engage in continuing education," says Stewart. He explains that the company's expert team not only has an understanding of this process but also has the overall expertise to understand how to develop those teams and organize and conduct those tests for meeting the test objective. "Our expertise with the subject matter gives us a competitive edge over others. We have an understanding of the operations involved, and our focus is always on understanding what the client needs to gain out of the endeavor," states Stewart.

For the future, the company aims at expanding its role within the U.S. Navy as well as its business to include testing a broader range of undersea warfare systems, increasing the company's scope of research and development, and adding more environmental services to assist a broader range of industry. MAI is already conducting developmental work to provide the Navy with decision support tools that will help the Navy operators maximize the overall effectiveness of their systems and assist them in using systems across operating platforms in a collaborative way for better efficacy. The company is extending its environmental business into renewable energy sources such as offshore wind energy systems. Additionally, "We plan to expand our working capability into not just the marine-based systems but also land-based environmental impacts," concludes Stewart. 