



COAST NOTES

A Virgin Islands Marine Advisory Services Publication

VIMAS is a branch of

the University of Puerto Rico Sea Grant College Program & the University of the Virgin Islands Eastern Caribbean Center.



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Marine Careers Series

Technical Careers

There are numerous marine-related technical careers available. Many of these provide support for marine biologists, engineers, medical workers, oceanographers and resource managers. Marine technicians include those responsible for overseas shipping and transportation, including the captains, crews, pilots and navigators of marine vessels. Others include those who maintain, repair and build boats, engines, and industrial machinery for work and exploration at sea. Careers related to customs, cargo and vessel inspection, as well as maritime and coastal zone law enforcement require legal knowledge. Other technical careers are related to our recreational use of the oceans in fields such as marina management, SCUBA instruction and sailing crew positions.

What do technicians do?

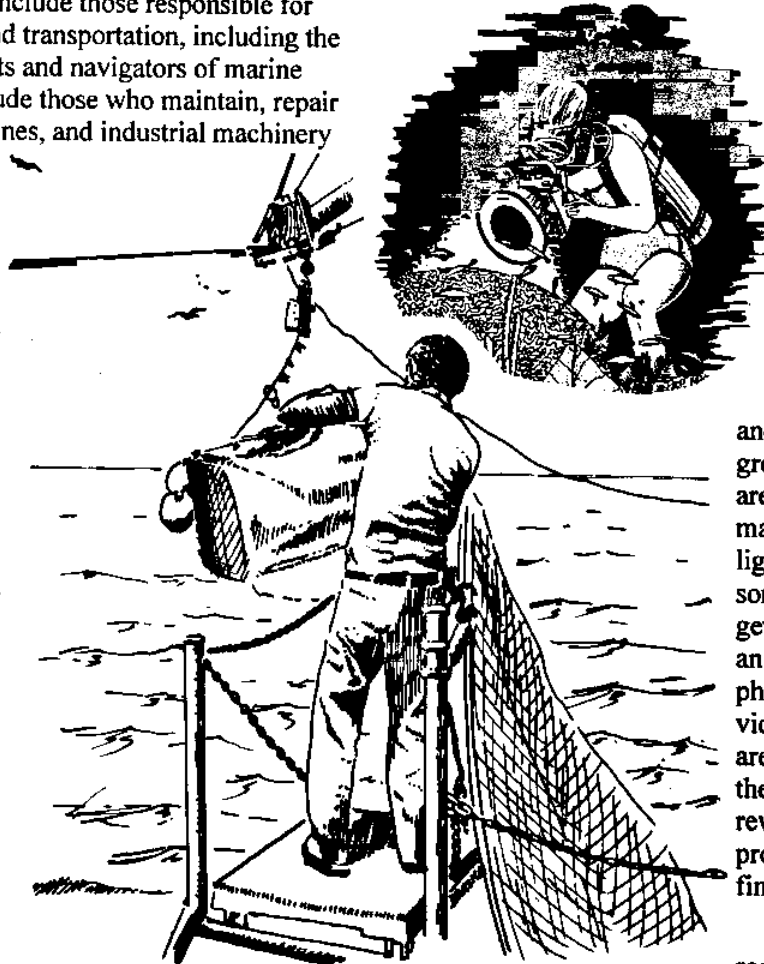
Technicians operate, maintain and repair equipment ranging from simple sailboats to submersibles used to explore the deepest areas of the oceans. All scientific activities at sea require the support of skilled technical teams to keep equipment operating properly.

Commercial SCUBA divers are often needed to work on underwater construction and repair on oil rigs, or for salvage and rescue. Recreational SCUBA is the fastest growing sport in the world

and so the demand for certified dive instructors, dive masters to lead tours and guide tourists to popular dive sites, and equipment repair specialists to maintain gear, is at an all time high.

Underwater photography is another area of rapid growth, and technicians are needed to operate and maintain cameras and lights. Although it is sometimes difficult to get started in a career as an underwater photographer or videographer, those who are able to establish themselves find it rewarding both professionally and financially.

In the field of recreation, marina management - including office, secretarial and support staff - offers many opportunities. Dock and shoreside workers include those involved in the construction, maintenance and repair of both vessels and related on-land facilities. On board, there are



numerous opportunities available as crew on charter vessels or personal yachts. Crew positions range from galley cook to captain and require experience ranging from none to (for captains) highly specialized training and certification.

Education

Technical careers typically require the smallest investment in formal education beyond high school. Often special training or certification will satisfy the general requirements of the position; in other cases, on-the-job training may be extensive. Apprenticeships may provide education and experience at the same time.

For high school students, the best preparation for a career in the technical fields is part-time employment in the area of interest. Positions in dive shops and marinas usually require no experience or certification. Although these will not

pay much, such jobs offer work experience and exposure to the field. This is just the competitive edge you will need when you look for a full time job. Vocational training in high school is another excellent way to prepare. Boat repair work, for instance, includes fiberglass and woodwork, sail making, metal work and engine repair, so most vocational training can be put to use in the technical marine field.

Business courses and office training are also good foundations for technical careers. Often, businesses in the field of marine recreation are small and employees wear many hats. The more you can do, the more attractive you are to prospective employers.

Some technical careers may require a two- or four-year degree in a related field such as one of the sciences, math, computers or electronics. Ask your guidance counselor for specifics on the field(s) you're interested in.

Some Technical Marine Careers

Biological technician - conducts experimental laboratory work with scientists; collects specimens and data with biological oceanographers or marine biologists.

Boat builder/repair/maintenance person - builds, repairs and maintains boats. This can include any or all aspects of vessels such as sails, motors, rigging, fiberglass, woodwork and upholstery.

Chemical technician - assists chemical oceanographers in measuring the chemical components of samples; collects and analyzes data; assembles, uses and maintains scientific equipment.

Commercial diver - uses SCUBA or other diving technology to work underwater. Petroleum industry, insurance companies (for salvage), and other industries use commercial divers for underwater construction, welding, maintenance and salvage of equipment, facilities and gear.

Crew member - works aboard a sea-going vessel (chartered, privately owned or corporate), in any of a variety of positions such as cook, line-handler, navigator or captain.

Fisheries technician - assists fisheries scientists in surveys, tagging, collecting samples, dissections and analyses of specimens; helps with the design and

construction of fishing gear, farm fishing equipment and hatcheries.

Marina manager - manages the business and technical operations of a marina or port facility; assists with marina management and design; supervises marketing of marina and facilities.

Statistician - collects, analyzes and interprets marine data for other professionals in marine fields.

Technical writer - produces manuals and technical publications dealing with marine work; assists in the preparation and layout of publications used for recording research and technical work.

SCUBA related technicians - include instructors, dive masters, equipment repair specialists, salespeople and marketing specialists.

by Lynne Hinkey
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This is one of a series of *Cast Notes on marine careers*. The series includes *Careers in Marine Biology; Physical and Chemical Oceanography; Ocean Engineering; Medicine and Health Planning Management and Legal Professions; and Technical Careers*.

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