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Our Nation and the Sea

The world has entered an era in which the oceans are commanding increasing attention. One expanding activity is the exploitation of undersea resources. During the past four years, production of petroleum from the U.S. continental shelves has doubled, and the output is now valued at more than \$1 billion annually. To date, all production of offshore petroleum in commercial quantities has been from wells in waters 340 feet deep or less, but exploratory wells have been drilled at water depths of 1300 feet, and leases have been taken to 1800 feet. Already U.S. industry has spent \$13 billion in exploiting domestic offshore petroleum resources, including \$4 billion in lease bonus and rental payments to the government.

Alert to the growing importance of marine affairs, Congress has shown concern that national policies be adequate. Of special significance was the enactment of Public Law 89-454—the Marine Resources and Engineering Development Act of 1966. This law established a national policy to advance marine sciences and created a Cabinet-level council and advisory commission. The council, consisting of high-level government officials, has worked under a diligent chairman, Hubert H. Humphrey. It has dealt with substantive policy problems, involving marine science, that touched the jurisdiction of two or more government departments. The work of the council has resulted in 20 presidential policy statements. The council's staff, under its director, Edward Wenk, Jr., produced three excellent annual reports on marine science affairs, including one recently released.*

The Commission on Marine Science, Engineering and Resources has also reported recently on its activities.† The commission, consisting principally of nongovernmental members, served for 2 years, under the chairmanship of Julius A. Stratton. Its report contains much thoughtful comment and many recommendations. Naturally, it devotes considerable space to organizational and budgetary matters. About a score of federal agencies are involved in marine affairs, and no one agency has primary overall responsibility. The report recommends consolidation of many of the activities into one organization. Important matters considered in the report are questions of international rights to the sea and sea bottom, management of the coastal zone, the food resources of the seas, and means for increasing the national capability in marine affairs. The recommendations include establishment of national laboratories for marine science in universities, federal support of fundamental marine technology, and national projects for meeting challenging goals. The proposed fundamental technology includes development of special materials and of reliable power supplies capable of operating at great depths. The national projects are designed to force rapid advancement of knowledge and technology. Among the projects recommended are laboratories on the continental shelf and deep-exploration submersible systems capable of carrying men to a depth of 20,000 feet.

One project is of special significance to landlubbers. It is a proposed multifaceted effort to restore water quality in a lake of "manageable proportions." Lessons learned from such a study might be applicable to the Great Lakes.

The two new reports are of interest to many scientists. By reason of their sponsorship they will probably affect national policy. They could well serve as models for other aspects of science relating to public policy.

—PHILIP H. ABELSON

* *Marine Science Affairs—A Year of Broadened Participation* (Government Printing Office, Washington, D.C., 1969). † *Our Nation and the Sea* (Government Printing Office, Washington, D.C.; publication date, 5 February).