

Sea Law Treaty: Amid U.S. Gains, the Prospects for Science Are Sinking

Negotiations for a new sea law treaty closed what will probably be their penultimate round in New York on 7 May, and the outcome for civilian and military research appears bleak indeed. The part of the draft treaty dealing with science places so many restrictions, conditions, and encumbrances on the conduct of research that some oceanographers are saying that their ships may be becalmed, like that of the ancient mariner, by what they are coming to regard as an albatross of a treaty.

American negotiators at the 156-nation meeting, which has been trying to draw up a single new code for ocean transit, fishing rights, pollution, and deep-sea mining, had hoped to come up with something better for science. The United States, along with other technologically advanced nations, has been fighting for maximum freedom for oceangoing research vessels. But many countries of Asia, Africa, and Latin America have argued that the major powers can use scientific research as a screen for resource exploration or military intelligence, and hence have lobbied for tight controls on research. If the new draft treaty becomes law, coastal countries will have won the right to refuse to allow ocean research ships to work within 200 nautical miles of their shores. At present, research ships may, in most cases, carry out their work almost anywhere, and need permission only to work within 3 miles of most other countries' shores.

The new draft of the treaty is different from the one which emerged from the previous sea law meeting in 1975 in Geneva, Switzerland. The previous text was backed by many U.S. oceanographers because it gave coastal countries very little control over their research activities. The U.S. delegation's plan had been to refine this compromise text still further at the New York meeting.

But sources close to the New York meeting say that, in the closing days, delegates from the Soviet Union, who previously backed freedom for researchers, made an abrupt about-face and began talking about giving coastal countries more control. As a result, the head of the science negotiations, Alexander Yankov,

a Bulgarian who often reflects Soviet views, drew up a new draft text that has been called by some a "disaster" for science.

Under the new draft text, any research group seeking to work within 200 miles of another country's shores—that is, within that country's "economic zone" of limited jurisdiction—can do so only at the pleasure of that country. Article 60 of the draft text says bluntly:

Marine scientific research activities in the economic zone or on the continental shelf shall be conducted with the consent of the coastal state in accordance with the provisions of this Convention.

The text states that "the coastal state shall not withhold its consent" for a proposed project; but then it adds a series of "unless" clauses which leave ample room for refusal by any country so inclined. The coastal country can refuse permission, for example, by claiming that the project is resource related. It can claim that the application to do the research is factually inaccurate, or it can request more information. This latter provision has researchers particularly worried because, by using it, a coastal country could endlessly delay applications and greatly increase the uncertainties of planning oceanographic voyages.

Even if researchers get permission and perform their studies, the coastal country can later veto publication of the results on the grounds that they bear "substantially on the exploration or exploitation of living or nonliving resources."

Distinguishing between resource-related and non-resource-related research would obviously be difficult in many cases. One reason oceanographers preferred the Geneva draft text was that it let researchers make the initial determination of whether research was resource related. Under the new draft text this determination is to be made by the coastal country.

It should also be noted that the New York meeting did produce two apparent gains for U.S. oceanography. One is a provision in the draft text that refers disputes over the conduct of marine re-

search to international arbitration procedures. The other gain was the dropping of provisions in the Geneva text which would have given a new, international authority, dominated by developing nations, control over deep-ocean research beyond the 200-mile zone.

One estimate by a leading oceanographic school, which could be representative of most civilian oceanographic institutions, is that its ship spends 45 percent of its time at sea within the 200 miles of other countries' shores. These are the areas which will become "economic zones" of limited jurisdiction under the proposed draft treaty; they comprise some 35 percent of the ocean area of the world.

If allowed to stand, the draft treaty could "make life very difficult for oceanography in the future," says John A. Knauss, provost for marine affairs at the University of Rhode Island. "I am extremely disappointed," Knauss says of the draft text. "If allowed to stand completely as is, the governments of coastal nations will have almost complete control over scientific research in the economic zone. If the coastal state should exercise all its options under the draft text, it could be extremely damaging to ocean research."

Ironically, the overall result of the New York meeting has been portrayed by State Department spokesmen as a net gain for the United States. This is because Secretary of State Henry Kissinger, last April, tabled a series of compromise proposals which broke a conference deadlock on the issue of deep-ocean mining. Marine research is, after all, only a minor part of the entire negotiation, and it is the only one on which the United States failed to achieve its major objectives. State Department spokesmen have not yet addressed the question of the failure of the science negotiation: the official in charge of it, Terry L. Leitzell, could not be reached for comment despite repeated inquiries.

There is some chance that the new draft text could be changed at the next sea law meeting in August, which is expected to be the last session of the conference; however, scientists close to the negotiations doubt that this will happen. Thus, the odds are that, in the future, oceanographers will have to live with what, in conference parlance, is known as a "consent regime"—and it is worthwhile to examine what this would do to science.

For one thing, many government-sponsored research projects are already arranged, on a voluntary basis, with rep-

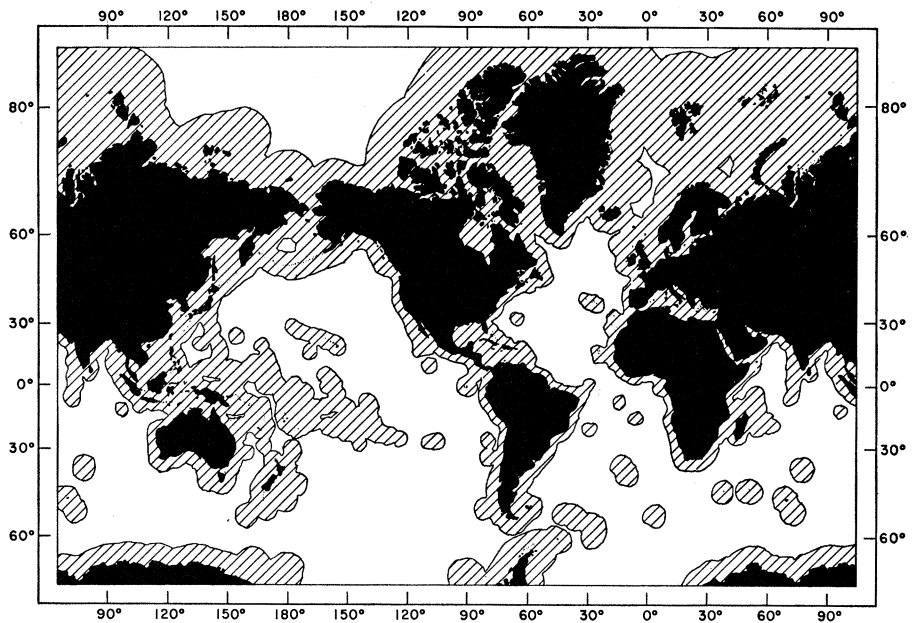
representatives of the governments of coastal countries. In these cases the only change would be the formal requirement that this be done for any work within 200 miles of shore. However, private U.S. institutions, such as Scripps Institution of Oceanography and Woods Hole Oceanographic Institution, which now often make their own arrangements, would have to use government-to-government channels. Finally, whereas now researchers can approach a coastal country in many ways, through private contacts, through the Paris-based International Oceanographic Commission, or through the country's governments, under the new treaty, all contacts would have to be "official."

Moreover, even when a host country is eager to have the research performed off its shores, the conditions and obligations imposed by the treaty would mean increased cost and time. The net effect of these requirements, says one research administrator, would mean "cancellations and postponements and uncertainties right down to the day you had planned to start." The effect would be "insidious," causing scientists gradually to shift their interests to the deep ocean or to work off their own country's shores.

Impact on Current Projects

Several projects now under way could be in jeopardy if the proposed text comes into effect. For example, the International Decade of Ocean Exploration is sponsoring a study in which U.S. scientists, aided by some from Chile and Argentina, are studying the Circum-Antarctic Current by examining a strait south of Latin America known as the Great Passage. All of the passage falls within 200 miles of Chile's and Argentina's shores, however, and under the treaty these nations would have effective control over the project.

Other projects include SEATAR, the South East Asia Tectonics And Research project, aimed at identifying the complex tectonic features of the sea floor and land masses in the region of Indonesia. Such regional efforts would be more difficult because they are clearly resource related (plate tectonics can offer clues to the location of minerals and petroleum) and hence would become subject to coastal state control. Also, it will probably take years for countries to resolve disputes about overlapping 200-mile economic zones—especially in regions such as Southeast Asia, where the sea floor is well known to be rich in minerals and petroleum.



Mercator global projection showing the 200-mile "economic zone," where a consent regime will govern research under the draft treaty. [Based on data from Department of State, 1974]

Much recent research attention has focused on sea floor spreading now occurring in the middle of the deep oceans. But research on the history and causes of sea floor spreading will become more difficult, because it will be harder to study the places where the process started—that is, the margins of the continents which were once joined and have since been pushed apart.

Ultimately, U.S. scientists may find themselves with water everywhere, but not much of it available for research. A recent U.S.-sponsored expedition explored the Cayman Trench, located in the sea floor south of the island of Cuba. Under the proposed new treaty, however, much of the trench would become off limits because the U.S. government does not recognize that of Cuba. The "official channels" requirement, then, would prohibit our government from making the necessary arrangements for such expeditions.

It is possible that U.S. scientists would be unwilling to participate in research projects whose publication the coastal country seemed likely to censor. Moreover, the restraints on publication in the treaty could conflict with the Freedom of Information Act, and thus could pose problems in congressional ratification of the treaty.

The proposed draft text could also have a major impact on the Navy. Currently, the Navy sends up to a dozen ships sailing within 200 miles of other countries' coasts, surveying the ocean floor, studying the acoustical reflectivity of the bottom, and recording the currents, water temperatures, and even the pres-

ence of living organisms. The survey data is fed into an operational command of the Navy, known as NAVOCEANO, but, since it is also made available to scientists, it could arguably be labeled research.

"That's increasing man's knowledge of the marine environment and that's what the treaty defines as research," says William T. Burke of the University of Washington Law School, an expert on the science negotiations. "You can read this text to mean that these military vessels must also obtain consent."

Coastal countries could argue also that this research is resource related and on these grounds deny the Navy permission for these activities, although the Navy would be likely to dispute this argument very strongly. "The DOD [Department of Defense] was as surprised by this as everyone else was," comments one official. And Stuart French, the chief DOD representative at the meeting, says, "We're still evaluating the consequences of the single negotiating text." Under other parts of the draft text, military vessels which are "navigating" from one point to another have free access to all parts of the ocean, including the 200-mile economic zone.

Civilian oceanographers have only just seen the new draft text and have not yet developed a plan for trying to get it changed to something more acceptable. But between now and August, it seems likely that, like the old mariner, they will be grabbing the arm and bending the ear of anyone who will listen—politicians, diplomats, military brass—to tell them their particular, sad tale.

—DEBORAH SHAPLEY