

tive process," says one veteran staff member. [Policy] is not handed down on tablets. It's very fuzzy. We're told, for instance, that the President wants to hold down civilian employment. You rarely get signals clearly."

What is implied in these divergent views are differing general conceptions of how OMB should operate. Those imbued with the old "bureau" tradition seem to feel there is nothing wrong with OMB that a return to closer communications downward with client agencies and upward with the President and his chief aides would not remedy.

On the other hand, the new breed of managers clearly believes that OMB should continue to move in the direction of improving formal policy structures and increasing the active management of programs.

There is a third view based on the belief that OMB has acquired too much power by default. From this perspective, reform of the whole budget process is needed to restore authority to Congress. OMB is not a popular agency with Congress, and the budget which is about to appear is unlikely to make it more popular. What is different this

year, however, is that Congress has taken the first faltering steps toward disciplining its appropriations process to keep spending within budgeted limits. Congress, however, has shown an almost feudal inflexibility toward the kinds of internal transfers of authority that such a major reform would require. So unless and until such radical reform occurs, OMB, under whatever name and organization chart, is likely to persevere, because the budget remains the most effective combination of carrot and stick available to a president.—JOHN WALSH

## Law of the Sea: Energy, Economy Spur Secret Review of U.S. Stance

At the urging of the Treasury Department, U.S. officials preparing for the United Nations Law of the Sea conference are conducting a drastic reassessment of previously stated United States positions on issues ranging from offshore oil and gas development to international environmental policy.

The classified studies, begun last April, can best be described as an eleventh-hour reexamination of what this country stands to gain or lose economically in the conference. Officials close to the review acknowledge that it has been spurred in part by concern over the energy situation and

the economic instability that has accompanied it.

This June, substantive negotiations toward an international treaty will get under way in Caracas; in fact, the Law of the Sea conference officially opened with an organizing session in New York last December. The reviews are looking at the stances put forth by the United States in preliminary negotiating sessions in New York and Geneva during the past 3 years.

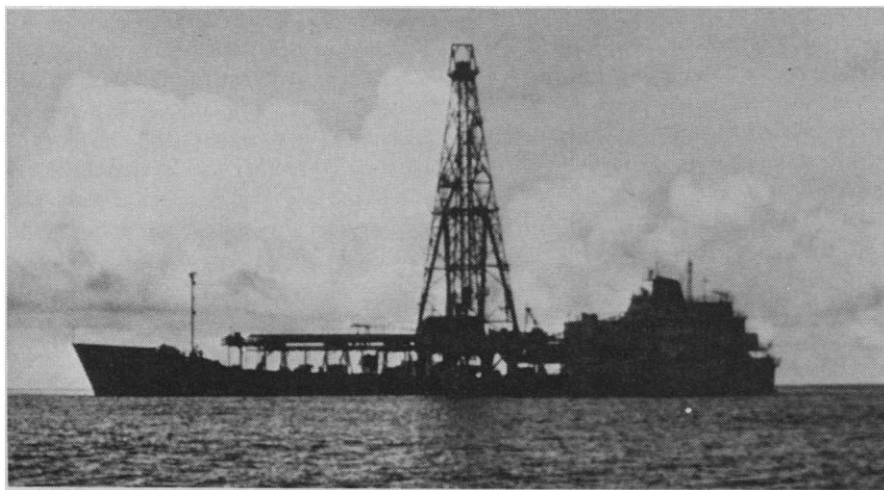
The intense new examination of the economic and energy aspects of the Law of the Sea is said by several sources to have been urged principally

by Treasury Secretary George Shultz and William E. Simon, Shultz's deputy secretary and the Administration's new energy czar. Officials stress that the reviews are not intended to scrap present U.S. negotiating positions and could merely turn into an exercise in "filling in the blanks" in these positions. But they do not rule out the possibility that, after close analysis, some tenets in the U.S. position could be discarded.

The Law of the Sea conference, if successful, will resolve fundamental questions of national and international jurisdiction in the oceans. The conferees are expected to extend the territorial sea, which is that narrow band of ocean along the shoreline over which the adjacent country has complete control, from 3 to 12 miles. Doing this, however, would place under purely national control approximately 100 straits which the United States deems vital to its military and commercial interests.

The U.S. position has favored the 12-mile territorial sea only on the condition that those straits remain open.

In addition, the conference will attempt to reach a balance of national versus international rights in a wider offshore area that would be called the "coastal economic zone." This zone would start at the outer edge of the territorial sea, and extend to some still undefined limit—perhaps 200 miles offshore, perhaps to the edge of the continental shelf. The extent of coastal nation control over oil and gas resource exploitation, fishing, and scientific research is a major issue, since these zones are believed to contain most of the wealth of the world's oceans. Finally, the Law of the Sea conference will have to decide how to regulate



*An Exxon drilling rig probes the continental shelf.*

pollution, fishing, and seabed mining in the fully international waters beyond the coastal economic zone.

The United States has tried to assume a role of world leadership in the conference since 1970, when it proposed a draft treaty for discussion. The draft, in the words of one expert, represented what was thought then to be "the best possible deal" for the developing countries, which constitute a majority of nations. Some of the provisions that were regarded as benefiting these nations, and thus came to be characterized as "internationalist," included two U.S. proposals: one, for a strong organization to control the international seas; and so-called revenue-sharing proposals that would spread the income from ocean activities among all nations. The draft treaty also tried to minimize coastal state control over the offshore economic areas—thus giving other nations more access to them—through a complicated "trusteeship" arrangement that has since been dropped.

Since 1970, these so-called internationalist proposals have been gradually eroded by the twin forces of militant nationalism among the developing countries—many of which are coastal states—and bickering among affected U.S. industries and government agencies.

The current Treasury-inspired economic reviews are part of this ongoing evolution, and ultimately they could help kill some of the remaining "internationalist" U.S. positions. For one thing, the reviews are reconsidering the feasibility of international revenue sharing. For another, they include the question of whether a strong international organization supervising development of seabed minerals is in the U.S. economic interest. Questions like these, coming only a matter of months before the Caracas meeting, have clearly angered veteran officials who are dealing with the U.S. role in the conference. "I think they're grossly incompetent and ill-informed," one official said of some Treasury reviewers. "They really didn't understand the kinds of things that went on in the last 3 years. When they jumped in, it turned into an education program for Treasury."

But other sources say that, in all the years of preparation, the government has never taken a hard look at the economic impact of the proposals of the United States and of other countries. Such a review, they say, is needed, especially in view of the energy

situation. "We're looking at questions which just haven't been asked," said one official. "Let's face it. The world is not the same as it was in 1970."

According to sources both in and out of the Treasury, Shultz, Simon, and deputy assistant secretary Howard Worthington became aware in March of the possible economic problems that could arise from the Law of the Sea conference. They then succeeded in obtaining a place on the key steering group for the U.S. delegation, the executive committee of the 100-man

Interagency Task Force on the Law of the Sea. The one Treasury lawyer who had been working with the big task force was reassigned to other, unrelated duties. Treasury then appointed four economists to work full time on Law of the Sea, and three administrators to work part time.

The reviews themselves were ordered as a result of an early summer meeting of the committee that arbitrates interagency disputes on Law of the Sea matters, the Undersecretaries' Committee of the National Security Coun-

## OTA Staffs Up

The Office of Technology Assessment (OTA), formed as an advisory agency for Congress, is getting itself organized. Former Congressman Emilio Q. Daddario, who chaired a House subcommittee on science, research, and development for 7 years, was appointed director of the OTA in November (*Science*, 30 November 1973). The appointment of Daniel V. De Simone as OTA deputy director was announced a month later. De Simone, an electrical engineer and lawyer, was assistant to the director of the now-defunct Office of Science and Technology. Ellis R. Mottur, a principal staffer on science and environment for Senator Edward M. Kennedy (D-Mass.), has been appointed assistant director.

Kennedy is now chairman of the Technology Assessment Board, which oversees OTA activities. The board consists of six senators, six representatives, and Daddario as an ex officio member. Representative Charles A. Mosher (R-Ohio) has now been chosen vice-chairman of the board. According to the law that established OTA, chairmanship of the board changes from one House to the other at the end of each Congress. Therefore, when Kennedy's term as chairman expires in January 1975, Mosher would become the new chairman.

The 12 members of the Technology Assessment Advisory Council have been approved by the board. The first meeting of the council is scheduled for 24 January, at which time a chairman will be elected. The council will perform much the same function with respect to OTA as the President's Science Advisory Committee did with the old Office of Science and Technology. Council members are as follows:

Harold Brown, president, California Institute of Technology; former Secretary of the Air Force

J. Fred Bucy, physicist and electronics engineer, executive vice-president, Texas Instruments, Inc.

Hazel Henderson, author, lecturer, and environmentalist, Princeton, N.J.

J. M. Leathers, executive vice-president, Dow Chemical Corp.

John McAlister, Jr., political scientist, associate professor, engineering-economic systems department, Stanford University

Eugene P. Odum, director, Institute of Ecology, University of Georgia; member, National Academy of Sciences

Frederick C. Robbins, dean, Case Western Reserve University School of Medicine; Nobel laureate in medicine, 1954

Jerome B. Wiesner, president, Massachusetts Institute of Technology; science adviser to President Kennedy

Edward Wenk, Jr., professor of engineering and public affairs, University of Washington; chairman, Committee on Science and Public Policy, National Academy of Engineering

Gilbert F. White, director, Institute of Behavioral Sciences, University of Colorado; former president, Haverford College

Ex officio members are Lester S. Jayson, director, Congressional Research Service, Library of Congress, and Elmer B. Staats, Comptroller General.

—SCHERRAINE B. MACK

cil. In addition to Treasury participation, the Council of Economic Advisers, Peter Flanigan's Council on International Economic Policy in the White House, and the Office of Management and Budget are said to be involved. Also, some outside academic economists have contributed along with specialists in other federal agencies.

At first the studies were conducted publicly, like many other projects generated in connection with the conference. But sometime during the summer the chairman of the interagency task force, John N. Moore of the State Department, decided they should be classified.

One of the major issues being studied is the question of how the Law of the Sea conference could affect future U.S. energy supplies. A central dispute concerns the amount of control a nation will have over development of the oil and gas resources within the proposed coastal economic zone on the continental shelf. Although only a handful of nations have continental shelves extending beyond 200 miles, most nations, as a matter of self-interest, favor a coastal economic zone boundary of 200 miles offshore. The United States, whose continental shelf is even wider in some places, has remained ambivalent as to whether it favors a 200-mile limit or one including the entire continental shelf. Meanwhile, the Soviet Union favors an economic zone limit at a water depth of 500 meters or to a distance of 100 miles—a proposal that would favor the Soviet Union but few other countries. Some nations favor a much narrower economic zone limit—for example, one extending to only 40 miles, which would leave as much as 60 percent of the estimated offshore oil and gas reserves in international waters.

According to a recent United Nations study, the U.S. continental shelf is estimated to have approximately 400 billion barrels of potentially recoverable oil, or as much as ten times the proven reserves of the United States and three times those of Saudi Arabia. Under many of the proposals before the conference, some of those U.S. reserves could go to other nations—either through direct exploitation or through international sharing mechanisms. These are the kinds of questions under review.

A further complication is the issue of what would become of the income from offshore oil and gas development. In 1970, U.S. officials mentioned—but did not formally propose—that as much as 50 to 66 percent of the revenues

from ocean resource development be directed to developing countries, in accord with the principle that the ocean's resources are the "common heritage" of mankind. Since then, U.S. officials have avoided naming percentages, but have continued to back the revenue-sharing proposal in principle.

Revenue sharing also enters into the negotiations because the United States and several other countries have said that they favor some revenue sharing from deep seabed mining activities. Although the preliminary negotiations have focused on what kind of international organization should license deep-sea development and divide up the spoils, the current economic reviews are said to be looking at revenue sharing. Treasury officials are said to be skeptical of the concept's feasibility, and to be trying to figure out how much revenue might be involved.

Should it conclude that the notion is unsound, the United States may have to jettison an important element of its position in the conference. Hitherto the revenue-sharing proposals have helped the U.S. in its role as purported world leader; moreover, they are a bargaining chip in dealing with some developing countries who, under revenue sharing, would stand to benefit.

The list of other issues involved in the Law of the Sea is long, and the present economic review is said to cover many parts of it. Fisheries and environmental questions are said to be included. Military considerations are said not to be. Officials would neither confirm nor deny that scientific research—or some aspect of the U.S. position on that issue—is included in the reviews.

Even if the current interest of Shultz and Simon in the Law of the Sea ends with the economists altering existing U.S. positions, the reviews will have achieved one other thing. The architects\* of the new Federal Energy Office, set up in response to the fuel shortage, were sufficiently aware of the conference to include a Law of the Sea office among those reporting to the FEO's Assistant Administrator for International Policy and Programs. This is a contrast to the other agencies concerned with sea law: even in the State Department, those working on the meeting operate out of a temporary branch of the legal affairs office. By and large, in other agencies, those involved are on a temporary assignment,

\* Among whom were Shultz and Simon.

on loan from some other, permanent office.

A less concrete but perhaps more important result of the recent burst of activity spurred by Shultz and Simon is that, in the course of it all, both these officials got their feet wet on oceans issues and became interested in the conference outcome. Even those bureaucrats who grumble about the new entrants concede that the review exercise has also drawn attention to the conference in their own agencies. "They [Treasury] took it to the top, and in the long run that will bring Law of the Sea to the attention of the other Secretaries." Among them is Henry Kissinger, who, so far, is said to have paid little attention to Law of the Sea matters.—DEBORAH SHAPLEY

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## RECENT DEATHS

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**Edna W. Bailey**, 90; professor emeritus of education, University of California, Berkeley; 10 October.

**Arthur J. Bendick**, 85; clinical professor emeritus of radiology, Medical School, Mt. Sinai Hospital; 26 October.

**Charles A. Brown**, 45; chairman, zoology department, Howard University; 31 October.

**Joseph J. Burns**, 65; professor of education; Villanova University; 9 November.

**Robert D. Dripps**, 62; vice president for health affairs, University of Pennsylvania; 30 October.

**George R. Eastwood**, 89; professor emeritus of agriculture, Ohio State University; 8 October.

**Warren J. Kaufman**, 51; professor of sanitary and radiological engineering, University of California, Berkeley; 10 November.

**Bruce Konigsmark**, 45; chief of neuropathology, School of Medicine, Temple University; 31 October.

**Lawrence S. Kubie**, 77; lecturer emeritus in psychiatry, Johns Hopkins University; 26 October.

**Ernest Little**, 85; dean emeritus, College of Pharmacy, Rutgers University; 30 October.

**Ernest Sondheimer**, 50; professor of biochemistry, College of Environmental Science and Forestry, State University of New York, Syracuse; 11 October.

**Leon J. Taubenhaus**, 61; former clinical professor of preventive medicine, School of Medicine, Boston University; 4 November.