

Will the US make its own laws of the sea?

by Colin Norman, Washington

Two bills which are now being pushed independently in the United States Congress are likely to have a significant impact on the second session of the Law of the Sea Conference, which opens in Geneva next month. One measure is designed to protect the financial interests of American companies involved in mining operations on the deep sea bed, and the other would extend the jurisdiction of the United States over fishing rights from 12 to 200 miles. Both those issues were at the centre of intense debate during the first session of the Law of the Sea Conference held in Caracas last year, and the prospect of unilateral American action on either of them is certain to colour debate in Geneva.

As for the issue of mining on the sea bed, there was virtual deadlock in Caracas between developing nations, which generally supported the idea of establishing an international authority to regulate commercial operations and research on the sea bed, and industrialised nations, which were reluctant to give an international body so much authority over commercial enterprises. The importance of the bill which was introduced into Congress last week by Senator Lee Metcalf, a Democrat from Montana, is that it signifies that if the conference deadlocks again, the United States may well go ahead with regulation of deep sea mining on a unilateral basis.

Although Metcalf's bill was introduced last year and Congress failed to pass it, it should be regarded more seriously this time because Metcalf has made a deal with some powerful committee chairmen which will ease the bill's progress through the Congressional mill. The clear inference being given by Metcalf's staff is that if the Law of the Sea Conference deadlocks, the bill will be out of committee and on the floor of the Senate very quickly.

The impact of the bill on the Geneva conference should also be seen in the light of the recent claim on an area of the sea bed filed by Deepsea Ventures Inc., one of the leading companies involved in exploratory work on the mining of manganese nodules. Although the claim, which was filed in the United States in November last year, has not been recognised by the State Department, it signifies that Deepsea Ventures is prepared to press ahead with its mining operations no matter what happens at the Law of the Sea Conference.

Metcalf's bill, in short, would estab-

lish a licensing scheme, operated by the Department of Interior, which would issue exclusive licenses to American companies for prospecting rights on large blocks of the sea bed. Later, the companies would be able to apply for licences to begin commercial exploitation of minerals on the sea bed. Although the bill states that the licensing operation would be replaced by any mechanism that may be established by international treaty, the Administration has consistently opposed the measure on the grounds that it would pre-empt discussions at the Law of the Sea Conference.

Last year, the bill was passed by the Senate Interior Committee soon after the Law of the Sea Conference ended in Caracas, but the Senate Foreign Relations Committee claimed jurisdiction over the measure and kept it bottled up until Congress adjourned. This year, however, Metcalf has concluded a deal with the chairmen of both the Armed Services and the Foreign Relations committees which would give them only 30 days to consider the bill once it is passed by the Interior committee. At the end of that period, the bill would automatically go on the Senate calendar and be brought to a vote.

One other factor could influence the situation later this year. The Interior Department, which has consistently opposed Metcalf's bill, is now developing legislation of its own which will be introduced as an alternative measure if the Law of the Sea Conference is inconclusive. The bill, which was first brought to light by *Ocean Science News*, a newsletter well versed in the affairs of the marine science industry, would provide for prospecting licences to be issued to American corporations but would impose a moratorium on commercial exploitation.

As for the fisheries bill, a measure supported chiefly by Senator Warren Magnuson, a powerful Democrat from Washington State, was passed by the Senate late last year, but it was not considered by the House. Magnuson intends to re-introduce the measure this week and the House Committee on Merchant Marine and Fisheries will be holding public hearings during the second week of March on a similar measure.

The opposition of the Department of Defence was considered an important factor in preventing the bill from being passed by the full Congress last year, but there have recently been rumours—which the Department of Defense will neither confirm or deny—that the department no longer opposes the measure. If that is the case, Congress could well pass a fisheries protection bill while the Law of the Sea Conference is still in session. □

Fighting disease on the Volta River

from Peter Collins

THE development of new techniques for applying pesticides is being intensively studied by the Centre for Overseas Pest Research (COPR) as part of Britain's contribution to the vast onchocerciasis ('river blindness') control project now getting under way in the Volta River Basin. This project, sponsored by the World Bank, the UN Development Programme, and the World Health Organisation (WHO), is expected to cost some \$200 million over the next 20 years, with financial and technical cooperation from Canada, France, West Germany, the Netherlands and the USA, in addition to about £500,000 from this country as an initial contribution.

The opening phase of the project, managed by the WHO, aims to eliminate the black fly, *Simulium damnosum*, which is the vector of the parasite directly responsible for the disease, and which can only be effectively attacked during its larval stages. These are aquatic; the project thus involves a massive use of pesticides in the Volta rivers and their many tributaries in which the flies breed. It is here that the WHO has sought the help of the COPR, whose experience of tropical pest control was built up during the many years of its predecessor, the Anti-Locust Research Centre. In the present project, the problem is one of applying larvicides to many hundreds of miles of rivers running largely through dense forest, and of ensuring that they reach the larvae, which live in the fast-running stretches attached to sub-aqueous vegetation or to the river bottom, where they feed by filtering material brought down by the current.

Early trials, carried out by the COPR under contract to the WHO and in cooperation with a French onchocerciasis team, showed that the normal system of spraying from fixed-wing aircraft or helicopters was unsuitable or ineffective, partly because a large proportion of the pesticide is inevitably wasted on riverside vegetation. To avoid this, Cliff Lee, of the COPR, devised a method for dropping quantities of pesticides *en bloc* at a suitable distance upstream of the fast-flowing stretches favoured by the *Simulium* larvae. The prototype 'rapid release' device now being used in field trials is designed to apply accurately measured quantities of from 0 to 50 litres in a single drop, and has so far given extremely good results. The formulation devised for Abate (the pesticide chosen by the WHO as least likely to damage other aquatic species) is such