

Timely reprieve for ocean drilling

After years of considering numerous options for replacing or updating the aging drilling ship the *Glomar Challenger*, the National Science Foundation has been presented with an enticing option from an unexpected source. The slump in demand for oil has idled several of the exploration drilling ships owned by U.S. oil companies. Industry representatives suggest that one of the ships could be converted for scientific drilling for about \$10 million and leased for a reasonable price. It also would cost about \$10 million to convert the smaller and less-powerful *Challenger*, while the initial cost estimated for converting the *Glomar Explorer* (SN: 10/16/82, p. 247) is a hefty \$90 million. In a more auspicious time for the oil industry, leasing costs would have been prohibitive for NSF.

The option appeared at an opportune moment. NSF director Edward Knapp had asked a panel of scientists, headed by Charles Drake of Dartmouth College in Hanover, N.H., to review and rank NSF-sponsored programs in crustal studies. The committee agreed that plans to convert the *Explorer* were unrealistic given the present economy. Early in February, just as the panel was about to recommend modernizing the *Challenger* (an option rejected previously), Sedco, a Houston-based oil firm, approached NSF suggesting that it would be feasible to convert one of

the industry ships for scientific use.

The idea was an instant hit. Not only can NSF afford to convert one of the industry ships, but the vessels already are equipped with the risers necessary for drilling on the continental margins. A riser for the *Explorer* was part of a long-term plan, with expenses estimated at \$50 million to \$100 million above the initial conversion cost. The commercial ships also have an added plus — the blowout-preventers that are needed if a ship is to drill in areas where oil and gas deposits might be found.

Most of the industry ships potentially available to NSF are capable of drilling to depths that encompass much but not all of the margins. Extra equipment for extending the riser could be carried on a supply ship, though such an arrangement is costly and complicated, especially where transfer of parts would be undertaken in rough seas.

Allen Shinn, director of NSF's Office of Scientific Ocean Drilling, says that bids will be considered and that, pending congressional approval, a decision might be made by this fall. There would be a 10-month hiatus in drilling between November, when the *Challenger* retires, and the time the newer ship would be ready. An initial two-year contract would be signed, with one-year options for renewal subject to a pre-agreed inflator. "It was pretty clear that in the present economic climate, the *Explorer* didn't make sense," Shinn says. "If you could get a commercial ship, it was obvious that was the way to go."

—C. Simon



Courtesy of Exxon Corp.

An oil-industry ship such as the Sedco 472 could be converted for use in scientific ocean drilling. The ship, one of several that NSF may consider, is smaller than the Glomar Explorer but is already capable of riser drilling.

Censors darken optical communications

Military censorship has struck yet another scientific meeting. This time, at the topical meeting on optical fiber communication, OFC'83, in New Orleans this week only three papers were withdrawn, not the hundred or so that caused havoc at an optical engineering meeting last August in San Diego (SN: 9/4/82, p. 148). The three papers were all of a scheduled symposium on military applications of fiber optics. The authors were Larry U. Dworkin of the U.S. Army communications command at Fort Monmouth, N.J., Brian Hendrickson of Griffis A.F. Base in Rome, N.Y., and Thomas G. Giallorenzi of

the Naval Research Laboratory in Washington, D.C.

Donald B. Keck of Corning Glass Works in Corning, N.Y., one of the two general chairmen of the meeting, told SCIENCE NEWS that meeting organizers had worked closely with authors to assure that the proper permissions were received. But when these three papers were submitted to the censors before the meeting, the authors were told they couldn't present them. From the printed abstracts, the papers were to have been general surveys of military uses of fiber optics.

—D. E. Thomsen

NAS opposes central risk-deciding panel

Several years ago, the chemical formaldehyde was shown to cause cancer in animals. So the Consumer Product Safety Commission banned further sales of urea-formaldehyde foam insulation (SN: 2/27/82, p. 131). At the same time, the Environmental Protection Agency decided neither to ban nor to limit the chemical's use in a wide variety of other products ranging from plywood to medicines. And the Occupational Safety and Health Administration decided not to lower its three part per million maximum workplace formaldehyde level. One chemical. Three different regulatory tacks.

The formaldehyde story is often cited by those who accuse the government of inconsistently evaluating chemical health hazards and who therefore favor the establishment of a central panel — separate from existing regulatory agencies — to assess the risk of chemical exposure before existing agencies decide whether to regulate that exposure. This week, however, a National Academy of Sciences committee — chaired by Reuel A. Stallones of the University of Texas at Houston — recommended *against* the creation of such a panel. In its report, the NAS committee noted that different regulatory approaches for the same chemical may reflect not inconsistency in the interpretation of data, but rather the necessary consideration of different variables, such as different routes and amounts of exposure to that same chemical. While it acknowledged that the art of defining risks needs to be improved, the committee concluded that creating a separate agency to do these risk determinations could cause "considerable" confusion and delay.

However, the committee did recommend that a panel be created to develop uniform guidelines for use by regulatory agencies during their own individual risk assessments. Also, the NAS committee — whose report was requested by Congress — recommended that the agencies release their risk assessments of chemicals for peer and public review before any regulatory action on those chemicals is taken.

The NAS report has met with mixed reviews from the American Industrial Health Council, a broad-based coalition of firms and trade associations that long has been a proponent of the creation of a central risk-assessment panel. The council is encouraged that NAS recognized the need for improved risk assessments but disappointed that the committee "didn't think that a risk assessment panel is a workable concept," AIHC's Ronald Lang told SCIENCE NEWS. Lang said AIHC members still are reviewing the NAS report and deciding whether to continue to push for a risk assessment panel, "recognizing that it will now be an uphill fight." —L. Garmon