

Personnel Transfer Chamber (PTC) descends to a Subsea Work Enclosure (SWE).

technology. Excursions to an undersea wellhead by the Personnel Transfer Chamber should be needed only about once every two years, however, since the swe is relatively self-maintaining.

About one-fifth of the free world's petroleum is now recovered from off-shore oil fields. SEAL officials expect that figure to rise to 50 percent of oil production by 1980. To help this endeavor, use of submerged equipment may save as much as 40 percent of the cost of building a platform and may advance oil production from a field by perhaps a year. The system is also designed to be safer for workers and the environment than present platforms.

For the time being, actual drilling of wells will continue to be done by surface craft, though the base of an SWE can act as a template to guide bits into some 18 slanted wells, fanning out from the center in all directions. Totally submerged drilling apparatus is currently in the experimental stage, including some initial tests of laser-beam drills. SEAL eventually hopes to install its submerged wellheads at depths as great as 6,000 feet.

The announcement of the new system comes just as the Council on Environmental Quality issued a report that is likely to speed its introduction. The council found offshore drilling to be environmentally acceptable, provided it does not take place close to such areas as Long Island, Cape Cod and the New Jersey beaches. By restricting drilling to at least 30 miles offshore from these areas, the council would force oil companies to drill in deeper water, where SEAL officials say their system is most competitive.

The council also disclosed a disturbing new piece of information. It revealed that the U.S. Geological Survey apparently overestimated potential Atlantic coast offshore oil reserves by several times, now expecting only 10 to 20 billion barrels of petroleum to be found, rather than a previously calculated 48 billion barrels. The full impact of this revision has not yet been assessed by long-range energy planners, but it is likely to have little effect on the present race to expand offshore drilling through increased leases and new, sophisticated equipment.

## Train fights to save ecology plans

Even as he announced the Nixon Administration's new proposals to ease environmental safeguards to meet energy shortages, Environmental Protection Agency Administrator Russell E. Train was digging in for what promises to be a public, interagency fight over two key areas of pollution control. By reportedly threatening to resign rather than be forced to advocate the proposals he thought would unnecessarily weaken environmental safeguards, Train won the right to debate

other Administration officials on the issues when Congress opens hearings on amendments to the Clean Air Act in a few weeks.

The two key issues involve preservation of already pristine air in remote parts of the country and the installation of "scrubbing" equipment in the smokestacks of power-generation plants. After a court order forbade "significant deterioration" of air quality in those areas of the country that have not already been polluted, EPA proposed for

them a set of maximum allowable increases of air pollutants far below standards set for urban areas (SN: 7/21/73, p. 36). The Administration view is that opening the large coal fields and oil shale deposits in the West will require use of pollution-causing equipment and refineries. Train says new energy sources can be found without further degradation of the atmosphere.

Train also opposes the Administration's proposal to substitute very tall chimneys, to widely disperse smoke from electrical power plants, in place of "scrubbing" equipment to remove pollutants. EPA maintains that the necessary technology is available; industry says it is not (SN: 7/7/73, p. 14). In a strongly worded letter to the President, Train called the tall smokestack proposal "highly inappropriate," though he says tall stacks could be used as an interim measure until scrubbers or alternative technologies are available.

Sources believe that Train's opposition will probably sound a death knell for the two proposals in question when Congress finally considers them, but other Administration proposals, which he will not oppose, may also find tough going. Under the new plan, 1975 auto emission standards, which would not require the nationwide use of catalysts in exhaust systems (SN: 4/21/73, p. 252), would be extended until 1977. EPA would be empowered to extend by five years the 1977 deadline under which major cities were supposed to clean up their air enough to meet ambient air-quality standards. In effect, this would negate the previously proposed traffic limitations (SN: 8/4/73, p. 71), which Train says would have led to gas rationing for their enforcement. EPA could also lift ambient airquality standards for states enough to eliminate fuel deficits through use of dirtier fuels. Finally, the President would be able to order certain power generating plants to switch from oil to coal until 1980.

The proposals, as submitted, already represent a limited victory for Train and EPA. In their original form, drawn up by the White House and the Office of Management and Budget, the amendments would have exempted certain energy related projects from EPA review altogether. Train is also opposing reputed Administration plans to scuttle the Land Use Bill (SN: 10/27/73, p. 267). "There is in my judgment no more important legislation before the Congress than the Land Use Bill," Train recently told a group of conservationists in Chicago.

How long such open opposition will be tolerated by an Administration never known for tolerating internal dissent remains to be seen.

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