

The miners' plight

Miners' black lung disease—pneumoconiosis—is a chronic lung inflammation caused by inhaling coal dust. In many cases it causes a slight disability; in more complicated cases it causes severe pulmonary disability and, because there is no cure, often death.

A report to Congress this week by the Department of Health, Education and Welfare says 40 percent of the first 4,200 coal miners examined in Pennsylvania and West Virginia have black lung disease. Of 3,000 miners examined in Virginia, Kentucky, Indiana, Ohio, Alabama, Illinois, Colorado and Utah, 28 percent showed signs of the disabling ailment. Rates were as high as 58 percent in two Pennsylvania mines.

Dr. Raymond T. Moore, associate director of the Washington office of HEW's National Institute for Occupational Safety and Health, says the tests are part of a yearly report required by the Coal Mine Health and Safety Act of 1969 (SN: 12/27/69, p. 592). The intention is to test every miner in the country. "The results," he says, "are somewhat in line with past experience." He feels that in general there has been some improvement in mine safety since the 1969 act. "We are not happy," he says, "but we are optimistic. We have not had enough experience with the provisions of the act but we do feel that there will be improvement in the future."

The Bureau of Mines, however, is not so optimistic, and no one is ready to brag about safety accomplishments. The latest sampling shows that only 80 percent of the miners are working in mines that comply with the limit of 3.0 milligrams of coal dust per cubic meter of air. And by December of 1972 the mines are required to be down to 2.0.

The mine fatality rate has decreased, but it may not stay down. For the first seven months of this year the rate was 0.73 fatalities per million man-hours of mine exposure (the lowest in recorded history). In June the rate was 0.48 (11 deaths). In July it went up to 0.97 (17 deaths). In the first three weeks of August 15 fatalities were reported.

A Bureau of Mines spokesman says conditions for miners have improved to some extent but the fatality rates and black lung incidence show that the problem is not under control.

Henry P. Wheeler, deputy director for health and safety at the Bureau of Mines, expresses hope that industry is coming to the same conclusions as the bureau. "Physical improvement and compliance with the law are not enough," says Wheeler. "And unfortunately, safety and health standards

have deteriorated while management concentrated on physical improvement." He says conditions are getting better every year but that the mines are "not anywhere near" total compliance with the law. "Unless fatalities go down, penalties will have to go up." □

SPACE CHEMISTRY

Interstellar acetaldehyde

The discovery of yet another organic molecule in interstellar space was announced last week by a team of scientists using the 140-foot radio telescope of the National Radio Astronomy Observatory at Green Bank, W.Va. The molecule, acetaldehyde (CH₃CO), was detected in the direction of the galactic center in Sagittarius A and Sagittarius B2. The report (International Astronomical Union circular 2350) was made by J. A. Ball, C. A. Gottlieb, A. E. Lilley and H. E. Radford of the Harvard College Observatory. The latter two are also with the Smithsonian Astrophysical Observatory. □

ADVISED AGAINST SST

Secret OST report released

The final report of the ad hoc supersonic transport review committee of the Office of Science and Technology, dated March 30, 1969, submitted to the President six months before his September 1969 pro-SST announcement, was released to the public last week. The Garwin Report (prepared at a Presidential request by a committee of scientists headed by industrial physicist Richard L. Garwin) recommended "the termination of the development contracts and the withdrawal of Government support from the SST prototype program." Reasons cited: technical risks, poor production timing, uncertain market demand, sonic boom, air-traffic-control delays, price escalation, availability of capital, status of the French/English Concorde and Soviet TU-144, Government-manufacturer-client relationships and environmental problems.

OST director Edward E. David Jr., the President's chief science adviser, said the report was being released "to dispel any further misconceptions that might result from further litigation."

Capitol Hill foes of the SST and members of the Sierra Club and Friends of the Earth tried in vain to have the report released while Congressional debate over the fate of the SST raged. But their legal attempts were thwarted until last week when the Administration evidently decided that its ends would no longer be served by keeping the report secret.

Under normal circumstances, findings of OST committees are made public as soon as they have gone through clearance procedures. An OST spokesman said this week that there is an open policy with regard to all reports. He said about 80 such OST reports have been written in the past 13 years and all of them (except for classified material) have been released through normal, but complicated, channels. With the SST report it appears that the channels were a little more complicated than normal. □

ALDABRA'S LEASE ON LIFE

An island for science

Four years ago an isolated atoll in the Indian Ocean called Aldabra became a scientific *cause célèbre* when the British Defense Ministry disclosed its desire to build a military airfield there. The small group of coral islands, in an oval ring 20 miles across, comprise a unique island ecosystem, and the Royal Society led a battle, quickly joined by the U.S. National Academy of Sciences and the Smithsonian Institution, to save Aldabra for ecological studies (SN: 10/21/67, p. 391). In the end, science won a reprieve when Britain abandoned plans for the airfield, primarily because of defense budget cuts caused by Britain's devaluation of the pound (SN: 12/16/67, p. 584).

Since then the Royal Society has continued with its long-term research program on Aldabra. A research station, with facilities for four permanent staff members, their wives, and six visiting scientists, was completed this summer. A committee headed by Dr. T. S. Westoll of the University of Newcastle upon Tyne directs the research effort.

A new step seems now to ensure the protection of Aldabra for scientific research and wildlife conservation through the end of the century. The Royal Society has purchased a 14-year lease on Aldabra, with option for a renewal of an additional 20 years. It will pay a nominal rent to the Commissioner of the British Indian Ocean Territory. When its research program is finished it plans to turn the lease over to a conservation group.

The research is aimed at gaining a thorough understanding of the structure and function of an elevated limestone island ecosystem. Aldabra is the last remaining home of the giant land tortoise *Testudo gigantea* and is probably the last breeding place of the frigate bird in the Indian Ocean area. It has 12 endemic species of subspecies of birds, including the flightless rail, and at least 18 unique species of higher plants. □