

# earth and environment notes

## SEISMOLOGY

### Sicilian quake source sought

An airborne infrared survey of Sicily is being made by scientists from Italy and the U.S. Geological Survey to see if any active hot spots remain from a series of earthquakes that rocked the area in mid-January (SN: 2/3, p. 127).

Besides infrared equipment, the survey aircraft will carry cameras for making conventional low-angle color photographs of fractures and damage patterns. If a pattern or alignment of hot spots can be found, the investigators believe, it would strongly suggest a fracture plane or fracture system as the cause of the quakes.

If that is the case, monitoring of the fracture areas over a period of time may enable future tremors to be predicted well in advance, according to Dr. William T. Pecora, director of the U.S. Geological Survey.

## ZOOLOGY

### Mouse turns off for long life

A tiny species of desert pocket mouse may live longer for his weight than most other animals because of his ability to "turn off," according to three scientists at the University of California, Los Angeles, Laboratory of Nuclear Medicine and Radiation Biology.

The researchers have found 25 pocket mice in the Nevada desert that have survived from three to five years, a remarkably long time for so small a mammal. The creature weighs only one-fourth of an ounce.

The studies indicate that his longevity may be due in part to his ability to go into a state of torpor in his burrow during lean times, thus conserving as much as 80 percent of his energy.

Also because of this inactivity, the mouse may be less exposed to hazards and predators.

## WEATHER

### 67 third worst tornado year

The third worst tornado year in the Environmental Science Services Administration's records was 1967, when 837 tornadoes hit 44 states. Only 1965, with 898 of the deadly storms, and 1957, with 864, were worse.

By far the biggest victim last year was the state of Texas, which suffered 158 tornadoes, almost one-fifth of the total. The storms took only seven lives in that state; Illinois, with only 41 tornadoes, was less fortunate with 59 fatalities.

The only states spared by tornadoes in 1967 were Alaska, Connecticut, Montana, Rhode Island, Vermont and Washington.

## AIR SAFETY

### Weather Bureau goes birdwatching

The U.S. Weather Bureau is going birdwatching. Using its weatherwatching radar stations at Washington, Pittsburgh, Akron, Detroit and Minneapolis, the bureau is helping to track the spring migration of the whistling swan from the Chesapeake Bay to its nesting grounds in northwest Canada. Radar photos are being taken through

the second week in April.

The project is being conducted at the request of the U.S. Air Force, since the swans, which can weigh up to 20 pounds, constitute a serious hazard to aviation. USAF scientists want to know how fast and how high the swan flies, its route, and how its progress is affected by weather conditions.

## DISASTERS

### Earthquake deaths down in 1967

The National Earthquake Information Center reports that quake fatalities in 1967 decreased by 74 percent from the previous year.

Last year 796 deaths occurred from 16 shocks in 11 countries in Africa, Asia, Europe and South America, compared to 2,968 deaths in 1966.

## HYDROLOGY

### Making rain over Tasmania

What is believed to be the largest rainmaking job ever attempted in the Southern Hemisphere has begun in Tasmania, off the southern tip of Australia.

The island's desperate water shortage is threatening to force most of its heavy industry to close down because of lack of hydroelectric power.

A de Havilland Twin Otter has been modified at a cost of more than \$300,000 into a cloud-seeding aircraft capable of dropping silver iodide crystals into the clouds from above. Special plumbing, tanks and pumps have been installed to enable dispersal of the crystals from the plane's wingtips.

The Tasmanian Hydroelectric Commission and the Australian Commonwealth Scientific and Industrial Research Organization have jointly chartered the special craft for two years, in hopes of building up water reserves in the island's highland areas.

## WATER POLLUTION

### Cleaning up after tanker wrecks

As Puerto Rico's beaches blackened from 5.7 million gallons of oil from the wrecked tanker *Ocean Eagle*, British Government officials faced a new report recommending wide-ranging research in the wake of the even greater disaster of the *Torrey Canyon* (SN: 4/8/67, p. 328).

The report, produced by a committee of scientists under the government's chief science adviser, Sir Solly Zuckerman, says that before the *Torrey Canyon* wreck last year most oil pollution came from illegal tank washings at sea. However, "the trend toward larger tankers may have increased the risk of serious pollution from accidents around our coasts."

The committee argues for research that would cover: means for speedy transfer of the cargo from a stranded tanker, methods of firing oil in stranded tankers and on the sea surface, effects of natural factors on the movement, dispersion and destruction of oil at sea, oil sinking, scavenging and gelling agents, more effective, but less toxic, detergents, detergent spraying and other cleansing equipment, mechanical removal methods, both for the sea surface and for beaches, and cheap and effective booms to block oil from entering harbors and inlets.