

physician or sent further on into the health system for hospitalization or secondary care. If tertiary care is needed, it would be provided by ambulatory-care facilities.

Exact definitions of facilities needed to make ambulatory care a part of the hospital system are still a subject for research. And most of the study so far is under the aegis of the Hill-Burton Program and the National Center of Health Services, Research and Development.

The Hill-Burton Program provides grants for construction and modernization of traditional health facilities, but under the new impetus it is channeling some support to the development of ambulatory care facilities, while seeking additional funds to do more.

The National Center started operating in May of 1968 to support research, development and related training in institutions involved in health services.

The center's budget under the just-signed appropriations bill for 1970 is approximately \$44.9 million, of which \$40 million is for grants and contracts. For fiscal year 1971, the Administration is seeking an increase to \$57.4 million.

Current grants are going to Peter Bent Brigham Hospital in Boston and the Johns Hopkins Medical School in Baltimore. At Peter Bent, researchers are exploring an automating system for ambulatory clinics in hospitals; Johns Hopkins is trying to design the building best suited to efficient out-patient care. The question is whether to use a regular clinic-style structure or something comparable to a doctor's office or suite.

A barrier to the broader implementation of ambulatory-care programs is that most health insurance plans fail to recognize and cover them.

But a trail is being marked by the Chicago Blue Cross, which has made special provision to cover such health care.

PANALBA LOSES AGAIN

A free hand for FDA

The U.S. Supreme Court this week freed the Food and Drug Administration to act summarily against Panalba and 85 other controversial combination antibiotics. The high court refused to restrain FDA, as requested, while the Upjohn Co. and the Pharmaceutical Manufacturers Association prepared their appeal of an Ohio circuit court decision (SN: 3/7, p. 242). The Ohio court had ruled that FDA was within its rights in applying drug control legislation enacted in 1962 to drugs that were marketed before that time. The Ohio court also said FDA did not have to grant the manufacturer a hearing before banning a drug from the market.

ECLIPSE RESULTS

An apparent research success

The total solar eclipse of March 7 (SN: 2/28, p. 227) may turn out to have been the most observed eclipse in history. The weather cooperated well over portions of the eclipse track where professional astronomers were gathered. "Not a cloud in the sky," is one astronomer's description of the scene near Miahuatlán, Mexico, where many expeditions were set up. By early this week the national eclipse coordinating center at the National Science Foundation had received many enthusiastic reports of success and very few notices of failure.

The weather was cloudy in Florida and Georgia and in Nova Scotia, disappointing many amateur astronomers and many tourists. But NSF says few professional astronomers had gone to those areas. Professionals who were not in Mexico were mainly clustered in southeast Virginia and adjacent North Carolina where the weather was clear.

Radio observations, less dependent on weather than optical ones, also went well according to all reports. Rocket-borne experiments sought information on solar radiation that does not come through the atmosphere and on changes in the upper atmosphere induced by the eclipse. Forty-five rockets were fired from the United States, 31 from Wallops Island, Va., and 14 from Elgin Air Force Base, Fla. Among these there were only three failures.

Two of the Wallops Island experiments didn't work, and one experiment package was lost at sea.

Two airplanes went up to follow the moon's shadow over the Pacific Ocean and afford observers a longer time under total eclipse than they could get standing on the ground. The aircraft belonging to the Air Force Cambridge Research Laboratories stayed in the shadow for 5 minutes 38 seconds, the one belonging to the Los Alamos Scientific Laboratory for 5 minutes 28 seconds.

It was an especially nice time to have such an available total eclipse, say astronomers, because the sun is now at the peak of its 11-year sunspot cycle. Though it will take time to analyze and calculate all the data obtained on March 7, some of the benefits are already apparent.

Radio astronomers at the National Radio Astronomy Observatory at Green Bank, W.Va., and at Tucson, Ariz., were watching as the edge of the moon crossed the sun's disk in the hope that it would help them locate the sources of different parts of the sun's radiation more precisely than with the one-minute



Applied Physics Lab

The earth: Moon's shadow at left.

resolution of telescopes alone.

"We did quite well," says Dr. David Buhl. "We looked at four active regions, and at least one showed some structure that I can see from the strip-chart recorder," before the data are reduced to a map. They hope the map will distinguish features 10 seconds apart. Dr. Buhl concedes the expectation may be a bit optimistic, but he says, "the data look good so far." Dr. Buhl's partner in the sunspot map making, Dr. Michal Simon, who observed from Tucson, reports that everything went well there too.

"A rather strong spot surprised me," says Dr. Buhl. The bright spot he refers to was between 1 and 1.5 times the brightness of the solar background.

The bright spot is a relatively small region three or four minutes across, about a tenth the diameter of the solar disk. The sun has two belts of active regions, one in the north and one in the south; this spot is in the southern belt quite near the eastern edge of the sun.

At the beginning of the week Dr. Buhl did not yet know whether his bright spot corresponded to any optical feature of the sun since he had not seen a photograph of the sun taken at that hour, but optical observers in the Los Alamos airplanes saw an exceptionally active area, which might or might not correspond, on the eastern part of the sun. The Los Alamos plane also got pictures showing 9 or 10 extra long spikes extending out from the sun. This pattern is unique, says Dr. Arthur Cox, leader of the expedition, but since it was obtained with a new filter technique, it may be that such spikes are present from time to time and the new filter simply enabled them to be seen for the first time. □