

put into operation almost instantaneously, as was done last year.

It is not yet possible to predict that a hurricane will start at such and such a time or in such and such an area, but once it starts, perhaps around the Cape Verde islands, it is soon spotted and tracked until it dies.

Navy or Air Force planes take off from Florida fields and fly to the storm. They penetrate the gale-like winds of the hurricane right through its most violent phases until they reach the usually calm "eye" or center of the storm. On the entire trip measurements of air pressure, wind velocity and the strength and direction of both the winds and the hurricane as a whole are taken and radioed back to the mainland. When the storm is within range, about 200 miles, radar can supplement the dangerous work of the planes.

With these observations, a clear picture of the path of the hurricane can be made and predictions as to which way it will go in the future are possible. Thus residents of threatened areas can be warned in time to take the necessary precautions.

Science News Letter, June 7, 1952

#### PHYSICS

### Wind: 1,100 Miles Per Hour At 65 to 100 Miles Up

► WINDS OF more than 1,100 miles an hour—a world's record—have been measured 65 to 100 miles high in the sky.

The announcement was made by Dr. G. J. Phillips, Cavendish Laboratory, Cambridge, England, and was the result of work done in England, Canada and here. Two National Bureau of Standards scientists, C. D. Salzberg and Reynold Greenstone, handled the American portion of the investigation.

Changes in the speed of wind that high up seem to be associated with magnetic storms, Mr. Greenstone told SCIENCE SERVICE. Dr. Phillips measured his record-breaking windstorm during a magnetic storm on Oct. 28, 1949. However, his finding was not announced until now.

The speed of winds up that far, in what scientists call the ionosphere, is measured by radar-like instruments that assess the electronic activity. Average winds at that altitude travel between 150 and 200 miles per hour.

Space ship navigators need worry very little about these speedy winds. A thousand-mile-an-hour wind at 65 miles altitude would only have the force of a one-mile-an-hour wind at sea level. This was figured out by Mr. Greenstone, taking into account the fact that there is about one-millionth the amount of air at that height for the wind to push around.

Dr. Phillips reported his findings in the JOURNAL OF ATMOSPHERIC AND TERRESTRIAL PHYSICS.

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#### MEDICINE

## Drug Hope Aids TB Patients

Even patients who do not get the new anti-tuberculosis drug, isoniazid, are helped by it since many who might leave hospital, stay in hope of getting it.

► THE NEW anti-tuberculosis drug, isoniazid or INAH for short, is helping many tuberculosis patients who so far have not gotten any of the drug.

This important benefit from the drug and newspaper publicity about it was brought out by Dr. R. J. Anderson of the U. S. Public Health Service at the meeting of the National Tuberculosis Association in Boston.

The patients being helped are those who would leave hospitals against medical advice. Because they have heard about the new drug, they are willing to remain in the hospitals in the hope of getting it later. Meanwhile, they may benefit from the rest and other treatment they have been getting, though the slow improvement under such treatment is often discouraging.

A second kind of by-product benefit Dr. Anderson foresees from the new drug is the increased stimulus it should give to finding and bringing under treatment the 150,000 persons in the United States who have active TB and do not know it.

"INAH has put tuberculosis on the front pages, dramatically bringing it to the attention of the people," Dr. Anderson said.

"Many members of the general public believed the disease vanquished years ago. Regardless of the efficacy of INAH, I think we would be wise to make capital of the renewed interest in tuberculosis which announcement of the drug has engendered."

The "lock and key" method of getting patients with tuberculosis under treatment and away from the community where their germs endanger others has proved successful in Seattle, Wash., Dr. Cedric Northrop, tuberculosis control officer of the Washington State Department of Health, declared.

Patients who refused treatment or tried to leave hospitals against medical advice are usually kept in locked wards for two weeks at Firland Sanatorium, Dr. Northrop said. Then they are transferred to the regular wards, subject to good behavior.

The patients thus forcibly isolated have not become bitter or antagonistic. On the contrary, Dr. Northrop reported, almost all of those isolated by legal measures proved tractable and capable of being managed when they learned they could be restrained if they failed to cooperate.

INAH is "not the quick and easy way to cure TB," Dr. Ross L. McLean of the Veterans Administration, Washington, D. C., declared in summing up VA hospital experience with it so far.

"But its failure to live up to the early ballyhoo and the emergence of resistance is no reason," he declared, "to turn about and chuck it in the waste basket."

"It is certainly at least next in line to streptomycin in effectiveness and there remains," he emphasized, "a vast potential field of usefulness to be explored."

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#### CHEMISTRY

### Battery Separator Stops Loss From Drying Wrinkles

► A NON-WRINKLE type of automobile storage battery separator is expected to result from research being done by Dr. Arthur B. Anderson of the University of California's forest products laboratory, Berkeley, Calif. It may help to lower prices of batteries.

At the present time, wood separators in car batteries must be kept wet from the time they are chemically treated by the manufacturer for removal of certain compounds until they are installed in batteries. If they dry out, they wrinkle so badly they are useless.

Based on previous experiments in drying lumber by solvent seasoning process, Dr. Anderson has satisfactorily dried a few of the separators so that they remain perfectly flat and smooth.

The drying process is a simple one of soaking the separators in a special liquid which replaces the water. When the liquid dries out, the wood does not warp or crack.

Dr. Anderson is now drying more of the wooden pieces for actual tests in batteries. Dry separators would be easier to handle.

Science News Letter, June 7, 1952

#### AERO-MEDICINE

### Pilots Warned Against Use of Reducing Drug

► PILOTS WORRYING about their waist lines had better do their reducing without use of drugs such as amphetamine, benzedrine and dexedrine, the Civil Aeronautics Administration has warned.

Two fatal accidents in England involving pilots who were dieting and taking dexedrine in an effort to lose weight led to the CAA warning and a similar one to Canadian pilots from the Director of Air Services of Canada.

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