

## METEOROLOGY

## New Wind Chart Aids Jet Weather Forecasts

➤ SPEEDING JET planes to their destinations will be aided by a new kind of wind chart described at the American Meteorological Society meeting in Kansas City, Mo., by Dr. Karl R. Johannessen of the Air Force's Air Weather Service, Washington.

Known as a "shear" chart, it is a graphic aid to forecasting more accurately the wind distribution between 25,000 and 45,000 feet. Present upper air charts, Dr. Johannessen said, do not give the forecaster information needed for swift air navigation by jet planes, which climb gradually during flight from about 30,000 feet to 40,000 feet or higher.

The forecaster now solves the problem of wind forecasts for jets by consulting wind readings at various points along the route, then doing mental tricks to get a wind prediction.

Use of the new graphic aid is justified, Dr. Johannessen said, because present wind reports are inaccurate and because meteorologists do not yet know how to predict small-scale variations in wind patterns at such high levels.

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## ENTOMOLOGY

## Repel Insect Pests

➤ THREE HIGHLY destructive insect pests have been turned back as they attempted to invade United States orchards and gardens, the U. S. Department of Agriculture has revealed.

The Mexican fruit fly and the citrus blackfly, both injurious to citrus fruits, were detected near the Mexican border. Living adults of the Chinese rose beetle were intercepted as stowaways on airplanes flying from Hawaii to the United States.

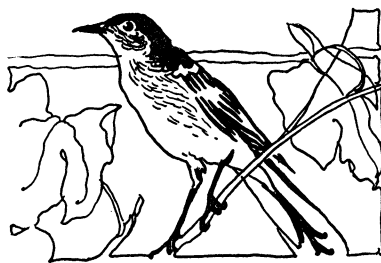
The Mexican fruit fly was discovered infesting orchards near Tijuana, Baja California, Mexico. To halt the pest's entry across the border, all host trees in a belt five miles wide in the area on the United States side of the border are being sprayed with insecticide.

Over 282,000 trees have already been sprayed, using 61,825 gallons of bait material. Protective measures will be continued through the summer of 1956.

The citrus blackfly had already crossed the border when it was detected. The infestation was found on a single lime tree in a tourist court near Brownsville, Texas. Egg spirals and unemerged pupae were found on leaves of the tree. A thorough survey failed to uncover more infested trees in the area.

The Chinese rose beetle, which attacks a wide variety of plants, was discovered in airplane baggage and aboard airplanes heading for the mainland at Hickam Field and Honolulu airport during preflight inspection.

This beetle occurs throughout southern



Mockingbird

➤ THE SOUTH is favored in many ways. There are magnolias in the spring, for example, and heavy-odored jasmine flowers. In summer the indolent Spanish moss moves languidly on its live-oak branches, encouraging one in the praiseworthy art of waiting

until tomorrow. It is better today to listen to the mockingbird.

The mockingbird is most especially something to be thankful for. Many other birds, most of them in fact, sing industriously during the mating and nesting seasons, and then shut off the supply. They give us plenty of a good thing—sometimes rather too much—during a utilitarian period, and then stop, almost abruptly.

Not so the mockingbird. He is an artist, and his song is not merely a means to a living but an end in itself. He will tinkle and coruscate and whistle his own scintillating music, and for variety ring in bits from the repertoires of other birds, with catcalls and rusty-hinge squeaks by way of scherzo interludes. And he is apt to give us a recital at most any time and for any reason or no reason at all.

Although the North is not blessed with the mockingbird, it has an almost equally talented cousin of his in the catbird. The mockingbird and the catbird look a good deal alike, being slim, long-tailed birds of a general gray color scheme, and they have the same habit of ducking in and out among the branches when you try to get a good look at them; not flying away, but keeping inconvenient bunches of leaves between themselves and the would-be observer.

The cousinship is most clearly traced through the catbird's song. This mockingbird of the North has an assortment of notes of his own, and of imitations of other sounds, that fairly rivals the stock of his more widely reputed cousin in Dixie. There are even some loyal Yankees who prefer the catbird. And, indeed, if it were not for the mewing call he sounds when excited or alarmed, the catbird might well have been formally named the Northern Mocker.

That catcall is the most realistic imitation in nature, though it is not a deliberate imitation. Catbirds were using it long before white men came to America and brought their pets with them. But it is so much like the voice of a somewhat distressed kitten that it will fool even a cat.

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Asia. It was introduced into Hawaii sometime before 1896, probably with soil around the roots of imported plants. It is not known to occur in the continental United States.

While still a long way from this country, the Mediterranean fruit fly has established itself in the highlands of Costa Rica, the report said, and the USDA is keeping track of it. The situation there is expected to become serious as the rainy season approaches and coffee berries develop over 80,000 acres.

The Mediterranean fruit fly got into Florida in 1929, but was successfully eradicated. It is not known to be present now in the United States.

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## ENGINEERING

## New Knowledge to Fight Losses From Corrosion

➤ TO REDUCE the \$5,000,000,000 toll taken annually by corrosion of metals, a corrosion research council is being organized by the Engineering Foundation, New York.

A \$200,000 fund is being raised by a group headed by H. H. Uhlig, chief of the Massachusetts Institute of Technology's corrosion laboratory, to investigate basic problems in metallic corrosion.

Science News Letter, June 25, 1955

Human cancer has been transplanted into the cheek pouch of hamsters.

## MATH IS FUN

By Joseph Degrazia, Ph.D.

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