

METEOROLOGY

Report on Audrey

► THE WEATHER BUREAU does not evacuate people from areas threatened by a hurricane, the agency made clear in a preliminary report on Hurricane Audrey, the disastrous tropical storm that smashed into the Texas and Louisiana coast on June 27.

The Weather Bureau is responsible for issuing warnings of hurricanes approaching the U. S. mainland, and local offices work closely with Government and Civil Defense officials, police, Red Cross and others in advising as to precautionary measures necessary to protect life and property.

Because of the more than 450 lives lost and the extremely heavy property loss, private citizens and some law-makers have claimed the Weather Bureau did not give sufficient warning on Audrey.

A re-reading of the hurricane forecasts for the week shows this claim is not true. If the advisories and bulletins had been heeded, it is probable that many persons, particularly in the Cameron, La., area that was hit with a 10.6-foot wall of water, would not have died.

The Weather Bureau's preliminary report does not say this, of course, but lets the record speak for itself.

At 10 a.m., CST, Wednesday, June 26, some 22 hours before Audrey's center crossed the coast, the New Orleans Weather Bureau issued hurricane warnings for the entire Louisiana coast and for the Texas coast as far south as Galveston. A hurricane warning means the area will feel the storm's full effects and all precautions should be taken immediately. This advisory also warned of gales and rising tides, advising all persons in low, exposed places to move to higher ground.

Although no official reports of the highest winds were received from the areas exposed to the storm's full fury, the damage near Cameron indicated winds in excess of 100 miles an hour near Audrey's center as it passed inland.

The center, or "eye," of a hurricane rarely kills anyone. Destructive winds begin at the edge of this relatively calm eye and extend outward far in advance of the storm center. Although the high winds blow over trees and houses and tear down power lines, the greatest loss of life occurs from drowning.

As a hurricane moves forward, it often piles up huge waves that cut off or completely cover low-lying coastal areas.

This is why Weather Bureau hurricane warnings always emphasize the danger of high tides.

The preliminary report clearly shows the warnings on Audrey pointed to the high-tide danger and urged evacuation of low-lying areas.

Science News Letter, July 27, 1957

Do You Know?

A high acid level in the stomach promotes *secretin* output, which in turn inhibits gastrin and hence the gastric juices.

A quarter-inch thick layer of plastic and boron absorbs *neutrons* as effectively as eight feet of concrete in atomic reactor shields.

The world's first transportable cesium *atomic clock* uses the vibrations of cesium atoms as a source of time-keeping.

GENIACS® for a song!

This means that you can now compose music with your GENIAC® kit; we aren't giving them away yet. Far from it, we have just sold our ten thousandth kit and are working overtime to keep up with the orders. People like our Geniac® computer kits because we have put everything we could think of into them. Besides the manuals we have special wiring diagrams, dozens of extra experiments, a pamphlet on the applications of symbolic logic to circuit design by Claude Shannon, and a two hundred page book on the relationship of computing machinery and cybernetics to the processes of human thought.

In short we have made our GENIACS® the best available to demonstrate the basic ideas of computer construction and design . . . and here is the proof of the pudding . . .

Every year we have a contest (with cash prizes) for the best designs made by purchasers of our kits. Last year a sixteen year old boy used our GENIAC® to design a machine that makes musical tunes. Other people may need million dollar computers but our customers only need their GENIAC and the special instructions we provide to create automatically any number of musical melodies.

Each GENIAC® kit contains over four hundred parts, a rack for holding the panels, a parts tray, two books and five pamphlets to bring you a basic introduction to digital computer operation and design. Included among many other experiments are designs for the machine to compose music, logic machines, syllogism solvers, coders and decoders, game playing machines (tit-tat-toe and nim).

These easy-to-put-together machines are already in use in hundreds of schools, colleges and research firms. They require no soldering, operate off a flashlight battery and while simple enough to be constructed by a nine year old they are fascinating to adult scientists.

All this with a TWO WEEK return guarantee, for only \$19.95 post paid. (add 80¢ west of the Miss., \$2.00 abroad.)

C₁O₃H₁₇N₁-Mescaline

but you can't understand its biological significance unless you know the structural formula (see BRAIN MECHANISMS AND DRUG ACTION, Fields et al., \$4.50 pp). If you follow research on the brain a three dimensional model is essential. Our cut-out model of the human brain (only \$5.98 pp.) is used in schools and colleges and purchased by hundreds of physicians to help interpret recent research. The models are easily understood, show functional pathways as well as location of major areas. Shipped pre-cut for your assembly.

Gibberellin costs \$4536 lb.

yet its effect on plants is so strong that only 50 parts per million will make roses grow twice as tall. Gibberellin acid is produced by a fungi and was discovered in Japan by its effect on rice plant stems. It stimulates the production of carbohydrate material in plants: fresh and dry weights are increased 30-50%, it increases flowering and budding, decreases flowering time and causes changes in shape and color of the leaves. Try it yourself!

A twelve ounce, pressurized spray can (50 ppm.) \$4.98 pp
Experimenters kit, with Gibberellin concentrate, measuring unit, handy sprayer and wetting agent . . . \$4.98
order from:

Oliver Garfield Co. Inc.
Dept. SL 77-D, 126 Lexington Ave., N. Y. 16, N. Y.

FREE



THE NEXT ISSUE of
SCIENCE NEWS LETTER
to one of your friends

SCIENCE NEWS LETTER
1719 N Street, N.W.
Washington 6, D. C.

Please send the next issue
of SCIENCE NEWS LETTER, FREE,
as a sample, to:

Name _____

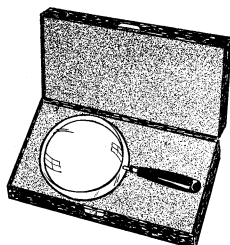
Address _____

City _____ Zone _____

State _____

7-27

POWERFUL MAGNIFYING GLASS



U. S.
ARMY
SURPLUS

only
\$3.80
POSTPAID

Polished frame in fitted plush-lined green velvet carrying case with lock. Finest American made. Precision-ground and polished lens. 3" diameter. Cost the government \$12.00. Our price \$3.80 postpaid.

A. S. TRADING CO.

Dept. 12-T, 69 Lexington Ave., N. Y. 10, N. Y.

RAPID CALCULATIONS

by A. H. Russell

CAN YOU—

- Name the day of the week on which May 1st, 1485, fell . . .
- Give the cube root of 42508549 . . .
- Tell how long it takes for money to double itself at 5% compounded annually . . .

IN 5 SECONDS?

- or, Multiply 56837 by 2467
- Divide 385623874169 by 89 . . .

in 20 Seconds?

YOU CAN—

perform these and many other feats *MENTALLY* after studying this book!

Now you can learn how easily and quickly work with figures can be speeded up through use of simple short cuts and elimination of needless number juggling. Saves time, drudgery.

Covering a wide range, from simple arithmetic on up, the instructions given can be applied to an endless variety of activities. The book will be found especially valuable to executives and administrators, engineers and scientists generally, doctors, druggists, stock market traders, bookkeepers and accountants, and to workers in numerous other occupations involving number calculations. Not least, the average person will find he is enabled to check his everyday accounts more quickly, more accurately, and with infinitely less bother.

287 Pages • Self-teaching Exercises with Answers \$2.95 • 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 109-L
251 West 19th Street, New York 11

