

Destructive Hurricane Donna Gave Research Project Valuable Data

By JOSEPH L. MYLER
Washington—(AP)—Donna was the most vicious hurricane in U.S. history but it was not altogether an ill wind.
It gave the weather bureau's national hurricane re-

search project (NHRP) more information about tropical storms than all the other hurricanes studied since the project started in 1956.
On the basis of this and previously gleaned information,

project officials say they are encouraged to believe man eventually will learn how to control these whirling monsters of destruction spawned annually by nature.
The NHRP was established

as a result of hurricane disasters in 1954 and 1955. For its first year of operation, 1956, Congress gave the project \$750,000. Current spending is at the rate of about \$2.5 million a year.

Hurricane research already has paid off in improved forecast and warning methods. Donna was never out of sight by radar from the moment it was spotted in the Atlantic Sept. 2 to the time it blew itself out over New England 11 days later.

Two four-engined DC8 flying laboratories of the hurricane project and cooperating research aircraft of the Air Force and Navy flew dozens of fact-finding missions into Donna's heart.

Automatic instruments photographed the storm, took temperature, pressure and humidity readings, recorded wind speed and direction, measured water droplet size and distribution, and noted icing rates.

According to Robert Johnson, coordinator of the weather bureau's hurricane and severe local storm research projects, "this was the best documented storm we ever had."

Simultaneous Flights

For the first time the NHRP's airplanes were able to conduct "three-dimensional" investigation of a giant hurricane by making simultaneous flights through it at different altitudes.

On Wednesday, Sept. 7, one of the four-engined craft drove into Donna at 8,000 feet while another rocked through at 12,000 feet. They encountered winds of 172.5 miles an hour near the eye of the storm. Winds of more than 115 miles an hour whirled over an area extending 25 miles outward from the storm center.

The big planes flew prearranged x-shaped and box patterns through and around the storm taking readings and pictures for future analysis. Both were buffeted violently and one was struck by lightning and pounded by hail.

Neither was seriously damaged, but hail so eroded the surface of one radar dome that it had to be repainted. In one of the past hurricane seasons, lightning stitched a row of holes in the leading edge of a wing as neatly as a machine drill could have done it. The wing had to be patched.

Robert C. Gentry, head of the hurricane project at Miami, reported after a trip through Donna that it was the most intense storm he had ever been in.

The flying labs normally carry 10 men—weather scientists, electronic technicians to keep the instruments working, and the flight crew. Each has its own electrical generator to supply power for the radar and other equipment.

The big payoff from NHRP research will come in future years when information gathered over several seasons finally adds up to broad understanding of the forces which create and drive hurricanes. What NHRP is shooting for ultimately is knowledge that will make hurricane control possible.

But there have been immediate benefits, too. Using hurricane information collected at Miami, the Travelers Insurance Co. devised a statistical forecast system which was put to the test with Donna.

It came up with 36-hour forecasts which Coordinator Johnson described as "spectacular." The system predicted the curve northward through Florida which Donna made after sweeping through the Keys. It also forecast the speedup in forward movement as the hurricane left Florida on its way up the coast to New England. Its momentum jumped from 10 to 45 miles an hour.

Whether this system will prove similarly successful with future hurricanes remains to be seen.

Too Early To Discuss Control
Johnson said it is too early to discuss ideas the weather bureau is developing on how to control hurricanes. But he said research results to date have produced "some encouraging results."

A giant hurricane is a 500-billion horsepower engine capable in a single day of lifting two billion tons of water from the ocean and dumping it back in the form of torrential rains. Every second it discharges power equal to several atomic bombs. In less than an hour it spends energy greater than all the electricity this country could produce in five decades.

So, smashing a hurricane or even pushing it around would take some doing. Scientists believe that the best approach would be to kill hurricanes in the womb by destroying the weather patterns which produce them.

Cloud seeding at the right moment, it has been suggested, might be one way of doing that.



ELECTROVECTOR BASEBOARD HEAT

Dealers Line Up To Serve You
Look For the ELECTROVECTOR Truck in Medford

Electrovector Baseboard Heat Is—

- Clean
- Comfortable
- Economical



Electronic Service

MEDFORD'S EXCLUSIVE ELECTROVECTOR DEALER

18 North Grape

SP 3-1971



"Baseboard electric heat is so safe that furniture can be placed directly against the heater without damage..."

GEORGE and RICHARD SILVA - Builders - Yreka

FOR FULL INFORMATION ON SAFE, CLEAN, ECONOMICAL ELECTRIC HEAT, VISIT A CAL/ORE ELECTRICAL LEAGUE DEALER OR ELECTRICAL CONTRACTOR.

BAUMER'S SHEET METAL & HEATING
840 N Riverside - Medford - SP 3-4346

BROOKS ELECTRIC
1116 N Riverside - Medford - SP 2-5209

COURT STREET ELECTRIC
1127 Court Street - Medford - SP 2-2463

ELECTRONIC SERVICE
18 N Grape - Medford - SP 3-1971

ENLOE ELECTRIC
Rt. 1, Box 415 - Talent - KE 5-1269

FELDMAN & OLSON - Medford - SP 3-2811
237 East Main - Medford - SP 3-2811

HARRISON ELECTRIC
Rt. 2, Gibbon Road - Central Point - NO 4-2091

MODERN PLUMBING & SHEET METAL
613 East Jackson - Medford - SP 3-5368

ROGUE ELECTRIC SERVICE
961 Shafer Lane - Medford - SP 2-6603

RUSH ELECTRIC COMPANY
1023 S Riverside - Medford - SP 2-4960

TROWBRIDGE & FLYNN
214 West Main - Medford - SP 3-6241

YOW'S HEATING, AIR CONDITIONING & SHEET METAL
1729 N Riverside - Medford - SP 2-664

WIRE YOUR HOME FOR MODERN, LOW-COST ELECTRIC HEAT ON COPCO'S WIRE-ON-TIME PLAN... MAKE BUDGET PAYMENTS AT LOW INTEREST RATES... ASK YOUR LEAGUE DEALER OR COPCO SERVICE OFFICE.

Heat-by-Wire
(NOT FIRE)



MEDFORD'S

Compact

SHOPPING CENTER



WE GIVE

We Redeem

SILVER DOLLAR STAMPS



SPECIAL PRICES EFFECTIVE THRU WED., OCT. 5th

LIMIT RIGHTS RESERVED NO SALES TO DEALERS



OAKDALE BIG Y 11th and Oakdale

BIG Y SUPER Hiway 99 North

Some Folks just look at the Prices



But the Smart Shopper looks for Quality, First

SHOP AT THIS SIGN OF QUALITY...THIS SIGN OF SAFE SAVINGS

Smart Shoppers know that QUALITY is the first requisite of a good food buy. To this... add the right price... the lowest price consistent with fine quality, and you have the low, everyday price found on each item at your Big Y Mkts. Price comparison isn't necessary. Each of our days is dedicated to serving you better... as we save you more.

INSTANT COFFEE

Nescafe 6-oz. Jar **69¢**

WHITE STAR

TUNA FISH

No. 1/2 Can Reg. 29c

2 for **39¢**

BETTY CROCKER

BISQUICK

Large 40-oz. Box Reg. 47c

27¢

A TASTY DISH!

fryers

WHOLE or CUT UP

Oregon Grown Really Fresh

39¢ lb.



U.S.D.A. CHOICE—PLATE

BOILING BEEF

lb. 19¢

U.S.D.A. CHOICE

SHORT RIBS

Lean Meaty

lb. 39¢

TOMATOES

Market—No. 2 1/2 Can

5 for **\$1.00**

CHILI BEANS

Riveria—24-oz. Can

5 for **\$1.00**

SALAD DRESSING

Malley's Tang Quart Jar

29¢

DELRICH

MARGARINE

SUPPLY LIMITED

2 lbs. **25¢**

ZEE

PAPER TOWELS

REG. 33c ROLL

2 rolls **49¢**

GRAPES

Tokay or Seedless

Mature Plump Vine-Ripened Full Natural Sweet Flavor



10¢ lb.