New plane awaits '97 hurricanes

Forecasters predict 'Gonzo' will improve storm tracking

Associated Press

MIAMI — When Hurricane Gilbert roared through much of south Dade County resembling the aftermath of a B-52 bombing raid, forecasters in Key West thought the massive storm would finally be the death of a long suffering hurricane tracking program.

Warnings flashed along the TV screen from the Florida Panhandle to Louisiana. Projections put a bullseye on a flood-prone area of Florida's Keys, where residents watched in disbelief as their homes and fled north. But Andrew McFadden, a director at the National Hurricane Center in Miami, said it was a false alarm.

“I was asked whether we could turn off their power. We could have sent in a helicopter and dropped a light bomb,” McFadden said. “It's something to think about.”

McFadden, who is helping to develop an improved computer tracking model, said the center is in the best shape in 20 years.

“We’re ready to roll,” he said. “The computer is ready. The people are ready. The center is ready.”

For the first time in almost two decades, forecasters are confident they can forecast the path of a hurricane with accuracy.

“The huge amount of information coming in has improved our ability to forecast,” McFadden said.

The hurricane center, which has been plagued by a series of storms in recent months, is now housing about 40 forecasters, compared with a dozen a couple of years ago.

McFadden said the center has never had more money, more people, or more computer power to track storms.

Hurricane names

Associated Press

HURRICANE HATTIE, the 1997 Atlantic Hurricane season's only named storm, is a combination of the letters Q, U, X, Y, and Z because they have too few names to be regularly utilized.

A: Ann, Bill, Claudette, Dora, Eustace, Fifi, Henri, Isabel, Juan, Kate, Larry, Madge, Nicholas, Old Man, Patricio, Teresa, Victor, Wendy

The term hurricane probably derived from the Carib Indians of the West Indies who called them huracan after the Mayan rain god. Huracan. The Spanish later modified it to Huracan.

A hurricane is a type of tropical cyclone, the general term for all circulating weather systems over tropical waters. Hurricanes are produced by the tropical sun and ocean. Developing hurricanes gather heat and energy through contact with warm ocean waters. The addition of moisture by evaporation from the sea surface powers them into giant engines.

The diameter of a hurricane, referred to as the core or eye, ranges up to 25 miles. The wall cloud around the eye extends up to 10 miles high. The eye of a hurricane is relatively calm. The most active activity takes place in the area immediately around the eye, called the eyewall. At the top of the eyewall (about 50,000 feet), most of the heat is propagated upward, increasing the air’s internal motion. Some of the air, however, moves in and sinks, adding to the hurricane’s ferocity.

Hurricanes may die out over the water or head inland leaving a patch of destruction in their wake. They can produce enormous rains, floods, thunder and lightning, and snow tornadoes which can do even more destruction than the hurricanes.

The term hurricane winds average 74 to 150 miles per hour. Hurricanes occur only in the hot season probably because in winter the jet stream is too weak to keep the storms from developing. This is why hurricanes are far more prevalent in the summer months.

The eastern Pacific hurricanes begin forming in May or early June, while in the Atlantic, Caribbean and Gulf of Mexico, hurricane development starts in late June. For the United States, the peak hurricane threat is August through September, although officially the hurricane season extends through November. Over the past million of years, such as the one going on now, the seasons are normally the same.

In the Atlantic Tropical Cyclone season, the Caribbean Sea and Gulf of Mexico are the general formation area. By July and August, the center of activity shifts eastward toward the West coast of Africa, and then drifts slowly westward again. By September the breeding ground extends from the Bight of Benin to the Lesser Antilles. From there it shifts further westward and back to the original breeding area.

A slight rotation with no strong winds is called a tropical depression. A tropical depression is a rotary counterclockwise circulation with sustained winds of 38 miles per hour. A tropical storm is a rotary counterclockwise circulation with sustained winds of 39 to 73 miles per hour. A hurricane is a tropical storm with winds greater than 74 miles per hour. This type of storm can cause widespread destruction. The category of hurricane or higher is based on sustained wind speed.

HURRICANE JACQUELINE, the most powerful hurricane of 1997, has been spotted on the weather service's radar or satellite in a nearby area. Short-term watches and warnings provide detailed information on specific hurricane threats, such as floods and high winds.

Market Street, between Sixth and Seventh streets, shows the effects of Fran’s flooding the morning after the hurricane’s visit to Washington in September.

Ocean, atmosphere combine to create hurricanes

How you fare during a hurricane can depend on how prepared you are for it. The key to survival is preparation.

The when storm is forecast

Check with your insurance company to see what will be covered. Separate policies are needed for wind and flood damage.

Take a full inventory of your personal property to help in filing your claim. List descriptions and take pictures.

When the storm threatens

Check supplies and make sure you have on hand portable radio with fresh batteries, flashlight, candles or matches, first aid kit, canned or packaged food that can be prepared without cooking or refrigeration, several days’ supply of drinking water (one quart per person per day) and a full tank of gasoline in your car.

Watch television and listen to the radio for hurricane position, intensity and expected landfall.

Prepare for high winds by boarding up or tying down objects outside, putting garage doors and lowering antennas.

Move boats and trailers close to the house and check mooring lines at boats in the water.

When a storm hits

Stay indoors in an inside room away from doors and windows. Don’t go out in the brief calm during the eye of the storm.

Keep television and radio tuned for information from official sources.

If you evacuate, take blankets, first aid supplies and a flashlight and put them in the red-dest shelter. Don’t travel farther than necessary. Before you leave turn off gas, water and elec-

tricity.

When the storm has passed

Beware of looters or danger of people power lines and report them immediately.

Watch for debris tills, streets and weakened bridges. Snakes and insects may be a problem.

Gas stations

Use your emergency water supply or boil water before drinking. Use the sponge water is safe. Report broken sewer or water main.

Make temporary repairs to protect prop-

erty from further damage or looting. Beware of unscrupulous contractors who may show up.

Notify your insurance agent or broker of any losses.