

HURRICANE SEASON

Isaac's threat to Florida still uncertain

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Tropical Storm Isaac, which formed Tuesday in the Atlantic Ocean, is expected to become a hurricane over the next few days and drench a string of Caribbean nations, including Puerto Rico, Haiti and possibly Cuba.

Though the National

Hurricane Center's official forecast path bent Isaac toward South Florida by week's end, the region remained just out of the cone — at least for now.

Robbie Berg, a hurricane specialist at the center, said computer models remained in conflict, with one suggesting the system could veer north and another

pushing it on a more westerly track that could keep it south of Cuba.

"It really is a little bit too soon to say whether it will affect Florida," Berg said.

At 8 p.m., Isaac was moving west at 17 mph with maximum winds of 40 mph. Forecasters expect the storm to reach hurricane strength by Thursday as it

approaches Puerto Rico and to continue west until Friday, when Isaac would be off the coast of Hispaniola. Puerto Rico, the Dominican Republic and Haiti could see heavy rains, flooding and mud slides.

Isaac's direction from there will be determined by the timing and strength of a high-pressure ridge to its

north and a trough digging down from the southeastern U.S. that could steer it more north, Berg said.

Conditions favor Isaac's development and a stronger storm would be more likely to push north, he said, but interaction with the mountains of Haiti or Cuba also could weaken the system or even rip it apart.

Tropical storm warnings were in effect for Martinique, Dominica, Guadeloupe, St. Martin, St. Kitts, Nevis, Antigua, Montserrat, Anguilla, Saba and St. Maarten.

And a tropical storm watch was in effect for Puerto Rico, the British Virgin Islands and the U.S. Virgin Islands.

20 YEARS AFTER HURRICANE ANDREW

FIU unveils 'Wall of Wind' simulator

• SIMULATOR, FROM 1A

codes. The other was put together with stronger standards enacted after Andrew that demand stronger nails, thicker plywood sheathing, heavier roofing felt, thicker shingles and other changes.

The results were a bit surprising as video cameras captured the spiraling damage while Walter Conklin, the Wall of Wind's project manager, cranked up the massive fans. The 8,400-horsepower system howled like a jet engine on takeoff as it wound to 160 mph, at peak flow pumping as much air as — by the calculations of FIU's College of Engineering — 7,650 leaf blowers.

As expected, the first things to go were roof shingles but pre-Andrew designs, rated for just 60 mph, held up nearly as well as heavier products rated for 130 mph. Half of the supposedly stronger shingles began peeling away as the digital wind gauge hit 109 mph, just Cat 2 strength. But as the wind increased, there was no comparison between old and new. At Cat 3, the older design lost half the tar paper intended to keep out rain. At Cat 4, a whole section of thinner plywood sheathing began buckling furiously, then flew off in a flash.

CODES' STRENGTH

Arindam Chowdhury, director of the wind engineering research at FIU's hurricane center, said the test confirmed the strength the new codes. Both roofs certainly looked torn up but the new one mainly lost shingles. Its heavier tar paper and thicker plywood remained in place, which would keep out the wind-driven water that accounts for most hurricane damage. But the test also raised questions about the accuracy of current shingle wind rating claims, which are based on small-scale tests.

"Clearly, a 130-mph rating



DESTROYED: After being hit with 160-mph winds, the test roof built to pre-Andrew codes failed at a demonstration of the destructive power of Category 5 hurricane-force winds at the Wall of Wind, a research project of FIU's International Hurricane Research Center.

CHUCK FADELY/MIAMI HERALD STAFF

is not really a 130-mph shingle," he said. "This is what the Wall of Wind is going to bring, really putting products to the test."

He said no amount of computer analysis can duplicate the full-scale, real world results of the simulator, which is capable of topping 157 mph, nearly matching Andrew's estimated peak winds of 170 mph.

The storm, which struck on Aug. 24, 1992, caused an estimated \$26.5 billion in damage, but only a small portion of South Miami-Dade County felt its strongest gusts. The storm exposed shoddy building practices that contributed to the losses but also showed

engineers, along with home buyers and builders, that there was a lot to learn about construction of homes and offices capable of standing up to major hurricanes.

FIU's hurricane research center, originally established after Andrew with private funding from the We Will Rebuild campaign in Miami-Dade, has expanded over the year with state, federal and private support from the insurance and roofing industries. In addition to construction and insurance, the center also studies social and environmental impacts of hurricanes.

The system FIU unveiled is the third version of its

wall of wind, improving on a two-fan system first constructed in 2005 and a six-fan system follow-up in 2007. Those designs, powered by gasoline engines and airboat props, could produce 120 mph Category 3 winds and helped researchers test new construction techniques such as the "ring-shank" roofing nail that dramatically increases holding power.

POWERFUL SYSTEM

The 12-fan system is far more powerful and sophisticated and the only university-based facility capable of generating Cat 5 wind speeds. An additional new feature, a large turntable

that will allow researchers to rotate structures and more closely mimic the shifting winds of a hurricane, wasn't used Tuesday.

Though researchers are still calibrating the system, Chowdhury said FIU has already used it to test some promising new construction designs. One using reinforced fiber and epoxy, much like fiberglass boat-building, to anchor trusses and beams proved stronger than metal hurricane clips, he said. The university is hoping to patent the technique and find a company to develop it.

Testing with the earlier versions of the wall of wind also helped develop metal

screens that can cut wind pressures on rooftop equipment like air conditioners by 58 percent, a change quickly incorporated into Florida's latest building code, he said — the first statewide upgrade generated by Wall of Wind research.

Chowdhury hopes the new, more powerful tool can help ensure that products billed as "hurricane-resistant" really perform that way under real world conditions.

"What we are doing here is more like holistic testing," he said. "You're not just testing individual components; you're testing the entire system. That's very important."

UNEMPLOYMENT COMPENSATION

Quest for benefits a challenge for Fla.'s jobless

• FLORIDA, FROM 1A

eligible and that I was going to be getting \$275 a week," said Togyer, of Fort Lauderdale. "That was seven weeks ago. To this day I have not received anything. I'm draining my savings to pay my bills."

Critics say Gov. Rick Scott and Florida's Legislature are behind a multipronged effort to restrict payments to eligible Floridians. A required 45-question "skills review" and an online-only application system have combined to restrict thousands of applicants from receiving aid. The U.S. Labor Department is investigating the complaints. A department spokesman told the Herald/Times that Florida is cooperating with the inquiry, but would not comment further.

Scott's office did not respond to a request for comment, but in the past, he has touted the required 45-question "skills review" as a common-sense reform intended to create a more skilled workforce.

Whatever the intention, the impact is clear: Hundreds of thousands of unemployed Floridians have been

cut off from a safety net system for those who find themselves suddenly without income.

Florida's "reciprocity rate" — the proportion of unemployed people who actually receive jobless benefits — is 16 percent, the country's lowest. Only one in three applicants for unemployment compensation in Florida receive any money, ranking the state dead last among the 50 states.

'MORE DIFFICULT'

"The cumulative impact of these changes is that the process of filing an initial claim for benefits is much more difficult for the average Floridian," the National Employment Law Project wrote in a recent complaint to U.S. Labor Secretary Hilda Solis.

The unemployment compensation system is designed as a form of insurance that businesses pay into to help fund temporary assistance for employees who lose their jobs through no fault of their own.

In Florida, the average weekly check is about \$230. Currently, about 800,000 are unemployed.

Scott and the Legislature

overhauled Florida's system in 2011, adding a long list of requirements and making all applicants apply online. The law required applicants to take a 45-question skills assessment, contact five employers every week and reduced the maximum number of weeks from 26 to 23.

Scott pushed more changes this year, rebranding the program as Reemployment Assistance and cutting the business taxes that fund the program by \$800 million over three years.

The program is mired in debt, and the transition has been anything but smooth.

Frustrated applicants complain of misinformation on the state's website and customer service phone lines that can be tied up for days on end.

A Herald/Times reporter tried several times over the course of a week to reach the state's customer service department for jobless claims. Several times an automated message said, "We are currently experiencing high call volumes. An agent is not available at this time," and then the line went dead.

On one occasion, the recorded voice said: "There

are currently 399 calls in front of you."

James Miller, a spokesman for the Department of Economic Opportunity, said tied-up phone lines are not a problem, and the average hold time is about seven or eight minutes.

"We have no record of any delays or problems with distributing Reemployment Assistance payments to claimants," he said. "We also are not aware of any issues with the 800 claim line."

Togyer said he has spent nearly two months trying to get someone to tell him what is going on with his application for assistance.

He applied online shortly after being laid off from his position with Shah, Drotos & Associates, a Pompano Beach engineering consultancy. He was told he was eligible for about \$275 per week, and waited patiently for his first check.

After three weeks, there was no check and he tried to call DEO to find out about the day. It took him several days to reach an agent, who then informed him that he was required to fill out a 45-question skills assessment to measure his skills.

Togyer said he saw nothing

about a skills test while he was applying, and received no warning that his application was incomplete. He has now completed the skills review but has yet to receive a single payment, he said. "I've been paying into it for 37 years. This is the first time I claim unemployment, and they're giving me a big runaround," said Togyer, who recently began collecting Social Security benefits. "They're treating me like I'm an illegal alien or something."

SCOTT'S FOCUS

Scott regularly touts the drop in the number of people receiving unemployment benefits as evidence that Florida's economy is improving. "The number of people on unemployment has gone from 568,000 to 320,000 people," he said this month at a gathering of conservatives in Jacksonville.

What he doesn't mention is federal data showing that more than 250,000 Floridians have been kicked out of the program during Scott's tenure because their benefits ran out. Hundreds of thousands of additional applicants have been denied access to benefits because

they did not meet strict new requirements that Scott signed into law.

Meanwhile, job creation in Florida continues to lag behind the national pace, countering Scott's argument that the Sunshine State is a beacon of economic growth and dependency on unemployment benefits is falling as a result.

With slowing job creation numbers, Scott has pivoted to highlighting the shrinking unemployment compensation rolls. Although the decline in the number of people receiving unemployment checks is clearly not an accurate barometer of job creation, Scott may point to such numbers during high profile appearances at the Republican National Convention next week.

"I'm pretty consistent in what I talk about every day," Scott said this month, indicating that he would not veer from his standard talking points during the convention. "I want to make sure people can get a job in Florida."

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