



## Piedmont Triad AmRRON ExSum Hurricane Florence (Update)

### Key Judgments:

- All residents should continue to closely monitor weather services for updated forecasts regarding hurricane Florence. Storm path projections are changing (depending on which model is used) continuously.
- All residents should be prepared with a minimum of 5-7 days of supplies. (2 days leading up to storm and 3-5 days after the impact of the storm).
- All residents should review the most current U.S. Rainfall Potential and Flash Flooding Potential maps for Florence on NOAA's website (see link in References below). Anyone living in a flood prone area should make decisions on whether or not to evacuate in advance of the storm based on the these rainfall and flooding projections.

AmRRON members began conducting nets according to the AmRRON SOI on Wednesday morning. See the AmRRON website for the most current information regarding nets. See References below for relevant links.



The Cajun Navy Relief has began staging boat teams ahead of hurricane Florence. They are coordinating with emergency management organizations in North Carolina and South Carolina.

### Introduction:

Tropical Storm Florence has strengthened to a category 4 hurricane as of September 10<sup>th</sup>. At 11 AM, the storm was centered 485 miles southeast of Wilmington, moving at 15 mph. It's a potentially catastrophic Category 4 storm with 130 mph maximum sustained winds.

Mandatory evacuations are occurring in North Carolina and South Carolina.

### Substantiation:

**2018-09-10-1630Z – wxii12.com: Evacuations, university closings begin in parts of North Carolina**

<https://www.wxii12.com/article/evacuations-begin-parts-of-north-carolina/23064487>

Officials along in North Carolina's coast are issuing a mandatory evacuation order for all visitors and residents on Hatteras Island as Hurricane Florence moves closer to the East Coast.

Dare County officials have announced that a mandatory evacuation order goes into effect on Hatteras Island at noon Monday. A mandatory evacuation for residents and visitors in other areas of the county goes into effect at 7 a.m. Tuesday.

**2018-09-12-1550Z – foxnews: Hurricane Florence's path: Track the storm here**

<http://www.foxnews.com/us/2018/09/12/hurricane-florences-path-track-storm-here.html>

Hurricane Florence, a powerful Category 4 storm, could stall upon reaching the Carolina coast and make a slight shift south toward South Carolina once it makes landfall, becoming "a major flooding event," according to Fox News Senior Meteorologist Janice Dean.

The storm, which is poised to affect millions this week in the southeastern U.S., is "expected to bring life-threatening storm surge and rainfall" to North Carolina, South Carolina and Virginia, and parts of the Mid-Atlantic states, the National Hurricane Center (NHC) said.

**2018-09-12-0600Z – nhc.noaa.gov: Key Messages for Hurricane Florence**

[https://www.nhc.noaa.gov/refresh/graphics\\_at1+shtml/092830.shtml?key\\_messages#contents](https://www.nhc.noaa.gov/refresh/graphics_at1+shtml/092830.shtml?key_messages#contents)

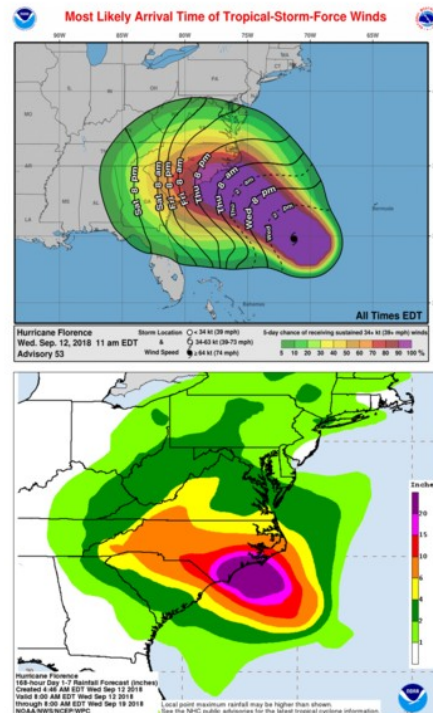


## Key Messages for Hurricane Florence

### Advisory 53: 11:00 AM EDT Wed Sep 12, 2018



1. A life-threatening storm surge is now highly likely along portions of the coastlines of South Carolina and North Carolina, and a Storm Surge Warning is in effect for a portion of this area. All interests in these areas should complete preparations and follow any advice given by local officials.
2. Life-threatening, catastrophic flash flooding and significant river flooding is likely over portions of the Carolinas late this week into early next week, as Florence is expected to slow down as it approaches the coast and moves inland.
3. Damaging hurricane-force winds are likely along portions of the coasts of South Carolina and North Carolina, and a Hurricane Warning is in effect. Strong winds could also spread inland into portions of the Carolinas.
4. Large swells affecting Bermuda and portions of the U.S. East Coast will continue this week, resulting in life-threatening surf and rip currents.



For more information go to [hurricanes.gov](http://hurricanes.gov)

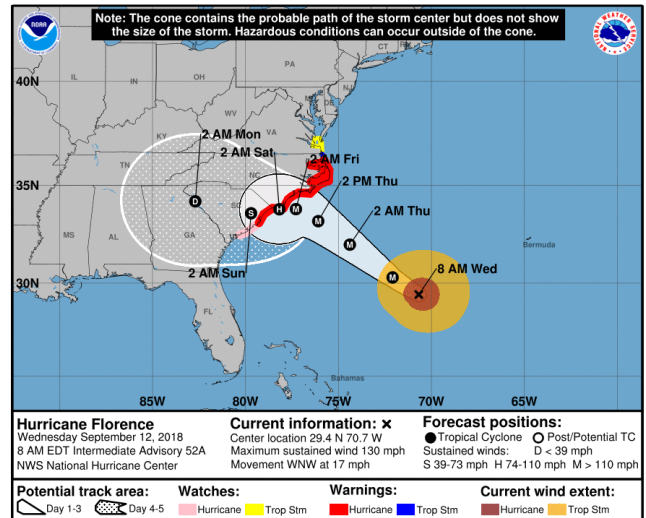
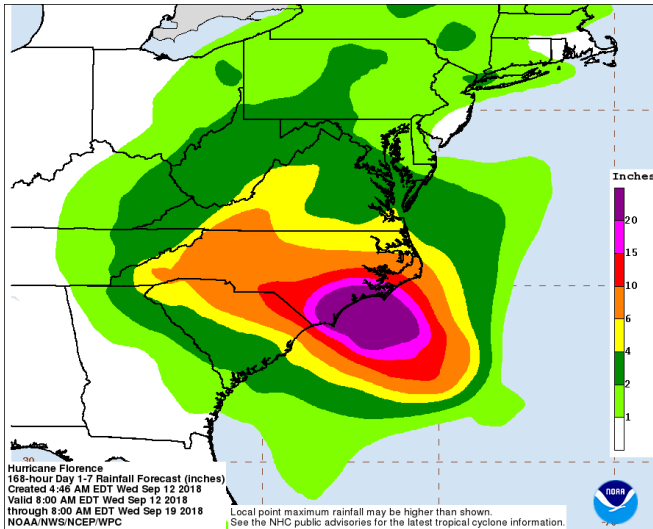
## 2018-09-12-1436Z – weather.com: Hurricane Florence Will Slow Down, Hammer Carolinas and Appalachia for Days with Catastrophic Flooding, Destructive Winds

<https://weather.com/safety/hurricane/news/2018-09-12-hurricane-florence-forecast-southeast-us>

- Florence remains a dangerous Category 4 hurricane.
- Florence is expected to crawl near or along the coast of the Carolinas at least through Saturday.
- This will produce catastrophic flash flooding and major river flooding.
- Life-threatening storm surge will occur near landfall and for some time after.
- Hurricane and storm surge warnings have been issued.
- Tropical-storm-force winds may arrive as soon as Thursday.
- Florence's remnant may linger in parts of the East into early next week.

Hurricane Florence will slow down, performing an agonizing crawl through the Carolinas and Southeast into early next week, producing catastrophic inland rainfall flooding, life-threatening storm surge and destructive winds.

As of Wednesday morning, Florence was centered less than 500 miles southeast of Wilmington, North Carolina, moving northwestward.



**2018-09-11-0640Z – Forward Observer Email: Intelligence Support for Hurricane Florence & Disaster Response**

Email body from Samuel Culper from Forward Observer:

I had a great meeting with Shawn from Cajun Navy Relief a couple nights ago. He's the president of the non-profit 501(C)3.

You may have heard of the Cajun Navy or seen them on the news rescuing people from their rooftops and flooded homes. They're the volunteer group that specializes in search and rescue during extreme weather events like hurricanes and flooding. And they were a critical part of rescue efforts last year during Hurricane Harvey along the Texas and Louisiana coast.

I remember seeing trucks with boat trailers not just from Texas and Louisiana, but coming down from Illinois and Iowa and other states. There was even a guy who drove all the way from New York to help with search and rescue. Despite the catastrophic damage, this was the best of Americans being Americans.

Hurricane Florence is scheduled to make landfall on Thursday night and into early Friday morning. And the folks at Cajun Navy Relief are sending Cajuns and their boats to the East Coast for another round of search and rescue operations and aid deliveries.

A large part of our mission here at Forward Observer is to teach intelligence and security skills for emergency preparedness and disaster response. Our classroom and online training prepares students to face challenges like hurricanes, earthquake, riots, or worse, through instruction on local intelligence gathering and analysis skills that build better situational awareness. We teach students how to reduce uncertainty about what's going on now and in the future.

But most people learn best by doing, and that's why I'm very proud to announce that Forward Observer's Fox Company (our team of intelligence volunteers) will be providing intelligence support to the search and rescue teams from Cajun Navy Relief.

We'll be pushing them real-time intelligence information on what's going on in their area of operations. We'll keep them aware of area threats and developments, and be available for reach back support to answer their questions so they can focus on their mission.



Intelligence is a force multiplier. There is no other tool in the emergency preparedness and disaster response arsenal better able to inform us of what's happening beyond our line of sight. Without the ability to gather intelligence, we're left virtually deaf and blind on the area around us. We need timely and relevant information to build intelligence, and we need intelligence to help us make better decisions. Your blind spots pose significant risks to any operation.

Through intelligence, we can remain aware. We can identify threats and potential risks to the mission. We can better understand the dynamics affecting our operating environment, and from that, we can build a much better picture of what our security situation looks like and what's likely to happen in the future.

**2018-09-11-1648Z – Senator Thom Tillis: Hurricane Florence - Important Info and Phone Numbers**

Email body from Thom Tillis:

Friends and Neighbors,

This week, North Carolina will be experiencing severe weather, including strong winds and a large amount of rainfall as Hurricane Florence makes landfall. There is potential for power outages and major flooding in low-lying areas, and the most important thing you can be doing is to start preparing for a direct hit. This includes:

Having emergency supplies in place at home, at work and in the car, including bottled water, nonperishable food items for three to seven days for each family member, prescription medications, first aid kits, flashlights, and extra batteries.

Creating an emergency communication plan with your family before the hurricane. Know where family members will be during the storm and how to get in touch with them.

Checking your insurance coverage and gather important documents.

Knowing your local evacuation plan and how to receive alerts.

Instructions on how to plan and prepare for severe weather as well as access to real-time weather, flooding, traffic and shelter information can be found at [www.ReadyNC.org](http://www.ReadyNC.org). I also want to make sure you have important contact information available if you need to deal with power outages or any emergencies.

- For life-threatening emergencies, call 911.
- For a toll-free hotline to speak with a trained specialist, call 211. They can provide you information on shelters, evacuation routes, storm clean-up, volunteer needs, and locating food and water. The service is available 24/7.
- For road closures, call 511.
- For Coast Guard search and rescue, call 1-757-398-6700.
- For help finding fuel/gas, visit [www.gasbuddy.com](http://www.gasbuddy.com) or download the app.
- For shelter locations, visit [www.redcross.org](http://www.redcross.org) or call 888-892-1162.
- For volunteer opportunities, visit [www.nvoad.org](http://www.nvoad.org).
- If you have trouble contacting emergency officials, my staff can be reached at (704) 589-7493.



**Outlook:**

Conditions are developing very quickly. Different models are projecting some very different paths after hurricane Florence gets to the coastline. Most models seem to agree that hurricane Florence will approach the coast near Wilmington as a strong category 4 hurricane then move in an east to southeast direction. The models vary widely on how far to the south Florence will travel while moving inland. Supplies such as batteries, gas, lanterns, candles, water, and basic foods are being depleted quickly as residents prepare for the effects of the storm. These items will become increasingly difficult to obtain. Power outages and flooding, especially near the coastline are expected. Some localized flooding has already been reported.

**References:**

- 1) ExSum – PT AmRRON 2018-09-08-A Tropical Storm/Hurricane Conditions for NC in the Coming Week
- 2) ExSum – PT AmRRON 2018-09-10-A Hurricane Florence
- 3) ExSum – PT AmRRON 2018-09-11-A Hurricane Florence (Update)
- 4) AmRRON Communications Condition Level: <https://amrron.com/net-resourcestools/amcon-amrron-communications-condition-level/>
- 5) AmRRON Tropical Storm/Hurricane for Coming Week: <https://amrron.com/2018/09/09/tropical-storm-hurricane-conditions-for-nc-in-the-coming-week/>
- 6) NWS: National Hurricane Preparedness: <https://www.weather.gov/wrn/hurricane-preparedness>
- 7) NOAA: National Hurricane Center: [https://www.nhc.noaa.gov/refresh/graphics\\_at1+shtml/092830.shtml?cone#contents](https://www.nhc.noaa.gov/refresh/graphics_at1+shtml/092830.shtml?cone#contents)