

# Appendix

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**FEMA— G-363 HURRICANE READINESS**
**ACRONYMS, TERMS AND DEFINITIONS**

ACRONYMS, TERMS	DEFINITION
<b>ALTM</b>	Airborne Laser Terrain Mapping
<b>AMSI</b>	American National Standards Institute
<b>ASCE</b>	American Society of Civil Engineers
<b>BPAT</b>	Building Performance Assessment Team
<b>DAE</b>	Disaster Assistance Employee
<b>DAMN</b>	Decision Arc Maps
<b>DHS</b>	Department of Homeland Security
<b>DOT</b>	Department of Transportation
<b>ECT</b>	Evacuation Clearance Time
<b>EENET</b>	Emergency Education Network
<b>EMI</b>	Emergency Management Institute
<b>EMS</b>	Emergency Management System
<b>EOP</b>	Emergency Operations Plan
<b>ESF</b>	Emergency Support Function
<b>ETIS</b>	Evacuation Traffic Information System
<b>FEMA</b>	Federal Emergency Management Agency
<b>FIRMETTES</b>	Flood Insurance Rate Maps
<b>FRP</b>	Federal Response Plan
<b>GIS</b>	Geographic Information System
<b>HAP</b>	Hurricane Action Plan
<b>HAZUS</b>	“Hazards US” GIS program used by FEMA for damage loss estimation
<b>HAZUS-MH</b>	“Hazards US” for multi-hazards
<b>HES/HS</b>	Hurricane Evacuation Study
<b>HLY</b>	Hurricane Local Statements
<b>HMGP</b>	Hurricane Mitigation Grant Program

ACRONYMS, TERMS	DEFINITION
<b>HURREVAC</b>	Hurricane Evacuation
<b>LEPC</b>	Local Emergency Planning Committee
<b>LIDAR</b>	Light Detection Ranging
<b>MWFHR</b>	Main Wind Force Resisting System
<b>NHC</b>	National Hurricane Center
<b>NOAA</b>	National Oceanic & Atmospheric Administration
<b>NOW</b>	Short-Term Forecasts
<b>NWS</b>	National Weather Service
<b>OREMS</b>	Oak Ridge Evacuation Modeling System
<b>PPA</b>	Performance Partnership Agreement
<b>RFC</b>	River Forecast Centers
<b>SBCCI</b>	Southern Building Code Congress International
<b>SLOSH</b>	Sea, Lake, and Overland Surges from Hurricanes
<b>SOP</b>	Standard Operating Procedure
<b>STAPLEE</b>	Social, Technical, Administrative, Policy, Legal, Economic, Environmental
<b>STM</b>	Storm Tide Maps
<b>TDR</b>	Technical Data Report
<b>TDS</b>	Time Delineating Schedule
<b>TPC</b>	Tropical Prediction Center
<b>USACE</b>	United States Army Corps of Engineers
<b>USGS</b>	United States Geological Survey
<b>UTC</b>	Coordinated Universal Time
<b>WAWTAP</b>	Wind and Water Technical Assistance Program
<b>WFO</b>	Weather Forecast Office

## HURRICANE READINESS CHECKLIST

The Hurricane Readiness Checklist (HRC) was produced by the Federal Emergency Management Agency as tool to aid local government decision makers in implementing a time-structured emergency response to the threat of a hurricane. This checklist provides a step – by – step list of considerations, which enables local government officials to follow a structured guide to prepare for a potential hurricane strike. The considerations listed are based on standard preparedness and response guidelines. These considerations, presented in a Microsoft Excel spreadsheet format, identify a logical sequence for decision makers to follow for implementing response actions according to prescribed priorities and needs. The checklist consists various operational condition phases that can be tailored to meet specific local needs. Each phase provides a different set of considerations that should be reviewed by decision-making officials. The HRC was placed in Excel format so that each local government entity can design a checklist that is unique and workable for their specific jurisdiction. The checklist can also be utilized as a historical response/accountability tool after the threat or strike is over.

In sum, the Hurricane Readiness Checklist is a support tool for defining, guiding and documenting local government preparedness and response actions through timed phases during a hurricane strike. Its goal is to ensure that citizens are protected in a timely fashion and that the necessary human and physical resources are in place to support protective measures designed to prepare communities for hurricanes.

# HURRICANE READINESS CHECKLIST

Hurricane preparedness - prior to June 1	PRIORITY	PERSONNEL	STATUS OF	DATE/TIME
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>Hurricane Planning</b>				
*Update local hurricane operation and evacuation plans and resource lists				
*Revise Standard Operating Procedures (SOPs)				
*Review local emergency management ordinances and update				
*Test Hurrevac and other hurricane technology				
*Review Stafford Act Policies with State Emergency Management				
*Mitigate Vulnerable Critical Facilities				
*Solidify and review mutual aid agreements				
*Review Evacuation Zones and Clearance Times				
<b>Emergency Operations Center (EOC)</b>				
*Replenish supplies and check equipment				
*Test communication lines				
<b>Evacuation Routes</b>				
*Review/update evacuation maps and add/change routes				
*Check status of county/city evacuation routes and post signage				
<b>Emergency Alert Systems</b>				
*Test National Oceanic Atmospheric Administration (NOAA) weather radios				
*Exercise county/local Emergency Alert System (EAS)				
*Participate in National Weather Service (NWS) conference calls/meetings				

Hurricane preparedness - prior to June 1	PRIORITY	PERSONNEL	STATUS OF	DATE/TIME
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>Shelter Status</b>				
<b>Congregate Shelters</b>				
*Review shelter list and update				
*Meet with Sheltering and shelter regulatory agencies				
*Work with DFACS/American Red Cross (ARC) to submit shelter updates				
*Prepare for temporary/permanent shelter signage				
<b>Special Needs Shelters</b>				
*Update special needs shelter database				
*Meet with Public Health on shelter sites/staffing				
*Work with public health to submit correct shelter information to State Officials				
*Prepare for temporary/permanent shelter signage				
<b>Pet Friendly Shelters</b>				
*Review shelter list				
*Meet with local Humane Associations				
*Prepare for temporary/permanent shelter signage				
<b>Medical Emergency Plans (voluntary)</b>				
*Review hospital evacuation and preparedness plans				
*Review nursing home, personnel care homes and other community group evacuation plans				

Hurricane preparedness - prior to June 1	PRIORITY	PERSONNEL	STATUS OF	DATE/TIME
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>Emergency Support Functions (ESF) - primary and support agencies</b>				
*Meet with primary and support agencies and update ESFs:				
ESF 1 - Transportation				
ESF 2 - Communications				
ESF 5 - Information and Planning				
ESF 6 - Mass Care				
ESF 8 - Health and Medical				
ESF 16 - Evacuation				
ESF 17 - Public Information				
<b>Public Information/Education</b>				
*Develop and update educational materials (e.g., brochures and pamphlets)				
*Review and update press releases				
*Disseminate educational materials to community groups and media				
*Conduct interviews with media				
*Issue press release on or near June 1				
<b>Reentry</b>				
*Update reentry procedures and protocols				
*Establish recovery phases				
<b>Hurricane Season (June 1 - November 30)</b>				
*Monitor tropical disturbances				
<b>Other Functions</b>				



Tropical System Threat Within 72 - 48 hours	PRIORITY LEVEL	PERSONNEL RESPONSIBLE	STATUS OF TASK	DATE/TIME COMPLETED
<b>Storm Watch</b>				
*Track and plot storm on Hurrevac and/or other technology				
*Contact State Emergency Mgt Officials and local weather service(s) for updates				
<b>Communications</b>				
*Notify local government officials				
*Notify ESF agencies for possible plan/EOC activation				
*Alert critical workforce team members of the potential threat				
*Prepare critical workforce families and activate family hurricane plans				
*Conduct a preliminary mobilization briefing for ESF agencies				
ESF 1 - Transportation				
ESF 2 - Communications				
ESF 5 - Information and Planning				
ESF 6 - Mass Care				
ESF 8 - Health and Medical				
ESF 12 - Energy				
ESF 14 - Animal and Animal Industry				
ESF 15 - Law Enforcement				
ESF 16 - Evacuation				
ESF 17 - Public Information				
ESF 18 - Volunteers				
*Activate HAM Radio operating teams as needed				

Tropical System Threat Within 72 - 48 hours	PRIORITY	PERSONNEL	STATUS OF	DATE/TIME
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>EOC</b>				
*Review plans and SOPs with personnel				
*Test EOC equipment and prepare for possible activation				
*Activate telephone lines				
*Monitor EAS and NWS Weather Wire				
*Participate in conference calls with emergency management agencies				
*Prepare equipment and staging areas				
<b>Evacuation Decision Making</b>				
*Conduct a preliminary evacuation meeting				
*Determine evacuation status for special needs and other vulnerable populations				
<b>Shelter Status</b>				
*Alert ARC, Public Health and Public Works				
*Determine availability of inland hurricane evacuation shelters				
*Begin contacting individuals listed in the special needs database				
*Analyze potential impact from neighboring state evacuations				
<b>Medical Facilities (voluntary)</b>				
*Notify hospitals of potential threats, as needed				
*Initiate contact with nursing homes, personnel care homes, if planned				
*Initiate contact with Home Health Care, as applicable				
<b>Other Facilities</b>				
*Contact county/municipal school boards				
*Initiate contact with transportation providers				

Tropical System Threat Within 72 - 48 hours	PRIORITY LEVEL	PERSONNEL RESPONSIBLE	STATUS OF TASK	DATE/TIME COMPLETED
*Notify animal control shelters				
<b>Logistics</b>				
*Brief designated Public Information Officer(s)				
*Complete logistics for briefings and interviews with media				
*Notify media of designated telephone and fax numbers				
*Schedule preliminary media briefing, as appropriate				
<b>Other Functions</b>				

Watch/Warning for possible landfall within 36 - 48 hours	PRIORITY	PERSONNEL	STATUS OF	DATE/TIME
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>Storm Watch</b>				
*Participate in state and National Hurricane Center (NHC) conference calls				
*Continue to monitor EAS, Hurrevac and other systems				
*Contact all applicable primary and support agencies				
*Activate EOC (partial or full based on clearance times and threat)				
*Monitor storm track and provide local government officials updates, as appropriate				
<b>Activation</b>				
*Hold decision making evacuation meeting(s) with local government officials				
*Announce EOC activation to ESF agencies, as applicable				
*Conduct mobilization and staging area briefing(s)				
*Inform media of EOC activation, as appropriate				
*Initiate situation reports and distribute to designated groups				
*Conduct EOC briefings				
<b>Shelters</b>				
*Confirm availability of out-of-county sheltering, as needed				
*Confirm evacuation decisions from other states and counties				
*Check with hotels/motels on space availability				
*Announce congregate, special needs and pet friendly shelter openings, if applicable				
*Announce critical workforce family shelters, if applicable				

<b>Watch/Warning for possible landfall within 36 - 48 hours</b>	<b>PRIORITY LEVEL</b>	<b>PERSONNEL RESPONSIBLE</b>	<b>STATUS OF TASK</b>	<b>DATE/TIME COMPLETED</b>
<b>Information and Planning</b>				
*Confer with Public Information Officers concerning press releases				
*Conduct media briefings (e.g., 3 - 4 hours)				
<b>Law Enforcement and Transportation</b>				
*Activate traffic control at high traffic intersection points, as necessary				
*Change programmed control of local traffic signals, as necessary				
*Consider limiting incoming traffic to emergency personnel				
*Request NWS broadcast over NOAA radios county road information				
*Announce pick-up points of people needing transportation, as available				
*Provide traffic flow information to EOC and neighboring counties, as needed				
*Provide Evacuation Transportation Information reports to state				
<b>Evacuation</b>				
*Post transportation and law enforcement personnel along county evacuation routes				
*Broadcast evacuation routes				
*Contact vulnerable populations (e.g., special needs, manufactured homes residents)				
*Request local government officials announce voluntary or mandatory evacuations				
Utilize Hurricane Evacuation Study Zones to issue Phased evacuations				
Issue Phase 1 (e.g., manufactured homes, flood and surge areas, special needs)				
Issue Phase 2 (e.g., tourists and other vulnerable populations)				
Issue Phase 3 (e.g., all evacuation zones)				
*Continue to provide status reports to media, as appropriate				
<b>Other Functions</b>				

Warning for potential landfall within 36 - 24 hours	PRIORITY	PERSONNEL	STATUS OF	TIME/DATE
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>Storm Watch</b>				
*Request local officials participation in protective action calls with adjacent counties				
*Hold local government evacuation decision meetings (e.g., 3 - 6 hours)				
<b>Emergency Operations Center (EOC)</b>				
*Request ESF 5 primary support agencies provide EOC briefings (e.g., 2 - 3 hours)				
*Complete and distribute EOC situation reports, as applicable				
*Prepare EOC facility- Mitigate Winds, Doors, etc.				
<b>Shelters</b>				
*Continue to monitor status of all types of emergency shelters				
*Prepare to open refuges of last resort, if applicable				
<b>Communications</b>				
*Continue to monitor all broadcasts for warnings and advisories				
*Issue protective actions via EAS, NOAA, The Weather Channel and media				
*Continue to work with HAM Radio operators				
*Maintain contact with other local EMA				
*Continue to monitor status of critical workforce family shelter(s)				
<b>Transportation</b>				
*Keep abreast of Port Authority/USCG updates and shut downs, as applicable				

Warning for potential landfall within 36 - 24 hours	PRIORITY	PERSONNEL	STATUS OF	TIME/DATE
	LEVEL	RESPONSIBLE	TASK	COMPLETED
*Coordinate with local airport authorities, as needed				
<b>Evacuation</b>				
*Identify at risk areas not evacuated				
*Initiate warning for evacuation of at risk areas via public safety (e.g., police, fire)				
*Keep in close contact with hospitals and other urgent care facilities, as needed				
*Request local government official(s) announce additional evacuations instructions				
*Evacuate all designated personnel, as necessary				
<b>Public Works</b>				
*Obtain information on power, gas, telephone, water and sewer status				
*Coordinate possible shut off of any utilities, if applicable				
<b>Other Functions</b>				

Warning of imminent storm within 24 - Evacuation Shutdown/Shelter In Place	PRIORITY	PERSONNEL	STATUS OF	TIME/DATE
	LEVEL	RESPONSIBLE	TASK	COMPLETED
<b>Evacuation</b>				
*Decide when evacuation movements should cease due to conditions				
*Issue media releases on ceasing evacuations, as necessary				
*Relocate emergency workforce to designated safe locations, as applicable				
<b>Law Enforcement</b>				
*Request Sheriffs' Office and Police Departments stop evacuation				
*Divert evacuees to nearest safe haven or refuge shelter, if available				
<b>Other Functions</b>				



## Assessments (TBD)

## National Hurricane Survival Initiative Poll

This summary presents the results of two separate polls, using the same questionnaire, conducted in April and May 2000 by Penn, Schoen and Berland Associates of Washington, DC to assess the knowledge and level of preparedness of homeowners in hurricane vulnerable states.

- May 2000: 1,037 telephone interviews among homeowners in coastal and adjacent counties in eight southern states (Alabama, Georgia, Florida, Louisiana, Mississippi, North Carolina, South Carolina, and Texas). The margin of error for the study is  $\pm 3.1\%$  at the 95% confidence level. A total of 150 interviews was conducted in all states except Alabama and Mississippi, where only 50 interviews each were conducted.
- April 2000: 250 telephone interviews among homeowners in coastal counties in six northern states (Connecticut, Delaware, Massachusetts, New Jersey, New York and Rhode Island). The margin of error for the study is  $\pm 6.2\%$  at the 95% confidence level. The study was stratified by household population (by county).

The major conclusions of the study are as follows:

1. Homeowners in the South are much more concerned about hurricanes than homeowners in the North, but the level of perceived risk of hurricanes in both areas is low given the actual threat: homeowners in the North perceive the risk to be minor and homeowners in the South perceive the risk to be moderate.
2. There is a disconnect between perceived level of preparedness and actual level of preparedness: Homeowners in Northern and Southern coastal communities think they are well-prepared for a hurricane but are not well-prepared.
3. There is a disconnect between perceived level of knowledge and actual level of knowledge: Homeowners in Northern and Southern coastal communities think they are well-informed about hurricanes but lack a thorough knowledge of hurricanes.
4. There is a perception among a significant percentage of homeowners in both the South and the North that it is too expensive take preventive actions to reduce the impact of a hurricane on their homes, but this belief is due in large part to a lack of awareness of how much these preventive measures cost. When informed of the cost, half or more of homeowners in the South and North say they are likely to spend the money.
5. Homeowners in the South are more likely to get personally involved in hurricane prevention than homeowners in the North.

1. Homeowners in the South are much more concerned about hurricanes than homeowners in the North, but the level of perceived risk of hurricanes in both areas is low given the actual threat: homeowners in the North perceive the risk to be minor and homeowners in the South perceive the risk to be moderate.

- Although the level of concern about a hurricane striking their community is twice as high in the South (78%) compared to the North (35%), only one-third (35%) of homeowners in the South and 9% of homeowners in the North are VERY concerned.
- Although 81% of homeowners in the South and 50% of homeowners in the North say that it is likely their community will be impacted by a hurricane in the next 5 years, only one-third (35%) of homeowners in the South and 16% of homeowners in the North say that it is VERY likely.
- Although 79% of homeowners in the South and 46% of homeowners in the North say their community is at risk for a hurricane, only 29% of homeowners in the South and 5% of homeowners in the North say that their community is at GREAT risk, as compared to SOME risk (50% in the South, 41% in the North).

Polling results suggest that residents underestimate the very real danger a SEVERE hurricane would pose to their communities, especially in Northern coastal communities and certain Southern states. In the South, for example, the level of concern about hurricanes, views on how likely their communities will be impacted and perceived risk differ by state: homeowners in Louisiana, North Carolina and South Carolina express a higher level of concern and a higher perceived risk that homeowners in Florida, Georgia and Texas.

Differences by State	FL	GA	LA	NC	SC	TX
Very Concerned	24%	34%	35%	49%	41%	24%
Very Likely Impacted	20%	28%	41%	54%	43%	28%
Great Risk	17%	20%	35%	45%	29%	21%

Polling results also suggest that it is particularly critical to educate homeowners who have not experienced a hurricane or had a hurricane damage their home about how important it is to prepare for a hurricane. It is not by coincidence that homeowners in the three Southern states who expressed the most concern and highest perceived risk have had the most direct experience with hurricanes.

Differences by State	FL	GA	LA	NC	SC	TX
Experienced hurricane	68%	59%	81%	90%	75%	73%
Hurricane damaged home	22%	17%	41%	66%	55%	32%

The challenge is particularly acute in Northern coastal communities, where only 19% of homeowners say that a hurricane has ever damaged their home. In the North, 27% of homeowners said that the thing that would motivate them the most to take preventive actions was if "a hurricane hit." It is important to communicate the need for actions based on actual risk, not on perceived risk or actual previous experience.

2. There is a disconnect between perceived level of preparedness and actual level of preparedness: Homeowners in Northern and Southern coastal communities think they are well-prepared for a hurricane but are not well-prepared

81% of homeowners in the South and 66% of homeowners in the North say they are well-prepared to deal with a hurricane but the results indicate a lack of preparedness:

- 58% of homeowners in the South and 76% of homeowners in the North have taken NO actions to protect their homes from the impact of a hurricane.
- 64% of homeowners in the South and 77% of homeowners in the North have not purchased flood insurance.
- 57% of homeowners in the South and 77% of homeowners in the North have not prepared a disaster supplies kit to use in the event of a hurricane.

Although homeowners in both the South and North are cognizant of the need to seriously consider evacuating during a Hurricane Warning and are prepared to heed the advice of officials, homeowners are not prepared for a hurricane evacuation:

- 36% of homeowners in the South and 77% of homeowners in the North have not prepared a hurricane evacuation plan.
- 34% of homeowners in the South and 60% of homeowners in the North have no predetermined location to evacuate to.
- 35% of homeowners in the South and 61% of homeowners in the North do not have an alternative location to evacuate to in the event their first choice is not available.
- 63% of homeowners in the South and 87% of homeowners in the North do not keep a map with directions about the location they plan to evacuate to in a handy and secure place.
- 49% of homeowners in the South and 67% of homeowners in the North do not keep telephone numbers for the location they plan to evacuate to in handy and secure place

3. There is a disconnect between perceived level of knowledge and actual level of knowledge: Homeowners in Northern and Southern coastal communities think they are well-informed about hurricanes but lack a thorough knowledge of hurricanes.

95% of homeowners in the South and 79% of homeowners in the North say they are well-informed about hurricanes but the results indicate a lack of knowledge:

- Only 14% of homeowners in the South and 12% of homeowners in the North say that flooding is the greatest

danger posed by hurricanes, even though flooding poses great dangers and causes the most problems in certain markets. Homeowners in the South (65%) and North (72%) overwhelmingly say that High Winds is the greatest danger.

- Although large majorities of homeowners in the South (87%) and North (83%) know that a Hurricane Watch means a hurricane is possible and a Hurricane Warning means a hurricane is expected, less than 5% of homeowners in the South and North could identify the differences in timeframe (36 hours for a Watch and 24 hours for a Warning).
- 47% of homeowners in the South and 51% of homeowners in the North are unaware that homeowner's insurance does not cover flood damage.
- 74% of homeowners in the South and 85% of homeowners in the North are unaware of the 1993 rules change affecting coverage of flood insurance claims (must purchase insurance 5 days prior to a claim as opposed to 30 days).
- Less than 30% of homeowners in both the South and North can identify more than one specific action people can take to protect their homes against hurricane damage (36% of homeowners in the South cited the purchase of pre-cut outdoor plywood boards for windows).
- 60% of homeowners in the South and 72% of homeowners in North the do not know their home's elevation above sea level.
- 51% of homeowners in the South and 60% of homeowners in the North are not familiar with what a storm surge is.

4. There is a perception among a significant percentage of homeowners in both the South and the North that it is too expensive take preventive actions to reduce the impact of a hurricane on their homes, but this belief is due in large part to a lack of awareness of how much these preventive measures cost. When informed of the cost, half or more of homeowners in the South and North say they are likely to spend the money.

- 43% of homeowners in the South and 44% of homeowners in the North say that taking preventative actions to reduce the impact of a hurricane on their home is too expensive.
- When asked how much they would be willing to spend to reduce the impact of a hurricane on their homes, 49% of homeowners in the South and 34% of homeowners in the North said they did not know, revealing a lack of awareness of the costs of preventive action.
- When informed that spending between \$2,000 and \$3,000 on improvements to their home would significantly reduce the risk of hurricane damage, 56% of homeowners in the South and 50% of homeowners in the North said they would be likely to make those improvements.

5. Homeowners in the South are more likely to get personally involved in hurricane prevention than homeowners in the North.

Approximately one-half of homeowners in the South and approximately one-third of homeowners in the North express an interest in getting personally involved in hurricane prevention.

- 49% of homeowners in the South and 30% of homeowners in the North said they would be likely to support a group or an organization if they tried to get them involved in activities to reduce the impact of hurricanes in their community.
- 45% of homeowners in the South and 34% of homeowners in the North said they would be likely to volunteer their time or organize co-workers to make sure their place of work was safer from hurricanes.

*Last Updated: Friday, 22-Oct-2004 17:28:00 EDT*

## Hurricane Action Plan— Blank (TBD)

## Hurricane Action Plan— Sample (TBD)

**TBD**

**Hurricane Frances Advisory Number 12**

TNT31 KNHC 272041

BULLETIN

HURRICANE FRANCES ADVISORY NUMBER 12

NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL

5 PM AST FRI AUG 27 2004

...FRANCES STRENGTHENS INTO THE THIRD CATEGORY THREE HURRICANE OF THE SEASON...

INTERESTS IN THE NORTHERN LESSER ANTILLES AND THE NORTHEASTERN CARIBBEAN SEA SHOULD CLOSELY MONITOR THE PROGRESS OF FRANCES OVER THE NEXT SEVERAL DAYS.

AT 5 PM AST...2100Z...THE CENTER OF HURRICANE FRANCES WAS LOCATED NEAR LATITUDE 15.7 NORTH...LONGITUDE 49.8 WEST OR ABOUT 800 MILES...1290 KM...EAST OF THE LEEWARD ISLANDS.

FRANCES IS MOVING TOWARD THE NORTHWEST NEAR 12 MPH...19 KM/HR. A MOTION BETWEEN NORTHWEST AND WEST-NORTHWEST IS EXPECTED FOR THE NEXT 24 HOURS OR SO.

MAXIMUM SUSTAINED WINDS ARE NEAR 115 MPH...185 KM/HR...WITH HIGHER GUSTS. THIS MAKES FRANCES A CATEGORY THREE MAJOR HURRICANE ON THE SAFFIR-SIMPSON HURRICANE SCALE. ADDITIONAL STRENGTHENING IS FORECAST DURING THE NEXT 24 HOURS...AND FRANCES COULD BECOME A CATEGORY FOUR HURRICANE OVER THE WEEKEND.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 25 MILES... 35 KM... FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 105 MILES...165 KM.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 962 MB...28.41 INCHES.

REPEATING THE 5 PM AST POSITION...15.7 N... 49.8 W. MOVEMENT TOWARD...NORTHWEST NEAR 12 MPH. MAXIMUM SUSTAINED WINDS...115 MPH. MINIMUM CENTRAL PRESSURE... 962 MB.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

THE NEXT ADVISORY WILL BE ISSUED BY THE NATIONAL HURRICANE CENTER AT 11 PM AST.



FORECASTER STEWART

WTNT41 KNHC 272100  
HURRICANE FRANCES DISCUSSION NUMBER 12  
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL  
5 PM EDT FRI AUG 27 2004

FRANCES HAS CONTINUED TO RAPIDLY INTENSIFY AS INDICATED BY A DVORAK SATELLITE INTENSITY ESTIMATE OF T5.5...OR 102 KT...FROM BOTH TAFB AND SAB. THE INNER-CORE CONVECTION HAS INCREASED IN VERTICAL DEPTH AND AREAL COVERAGE...AND THE OUTFLOW IS EXCELLENT AND CONTINUES TO IMPROVE AND EXPAND OUTWARD.

THE MOTION IS 305/09. FRANCES HAS MADE A SLIGHT NORTHWESTWARD JOG AS ALLUDED TO IN THE PREVIOUS ADVISORY...BUT THIS IS EXPECTED TO BE SHORT-LIVED AS THE SHORTWAVE TROUGH LOCATED DUE NORTH OF FRANCES MOVES EASTWARD AND THE RIDGE BUILDS BACK IN BEHIND THE TROUGH. THIS SHOULD TURN FRANCES BACK TO THE WEST-NORTHWEST ON SATURDAY. THERE IS NOW MUCH LESS DIVERGENCE IN THE NHC MODEL SUITE AFTER 48 HOURS

...AND IN THE LONGER TIME PERIODS. ALL OF THE MODELS NOW AGREE THAT THE HIGH ZONAL FLOW FORECAST TO DEVELOP ACROSS THE NORTHERN U.S. AND THE NORTH ATLANTIC AFTER 48HR WILL ALLOW FOR A STRONG SUBTROPICAL RIDGE TO THE SOUTH TO EXTEND EAST-WEST FROM THE AZORES TO BERMUDA AND INTO THE SOUTHEASTERN U.S. THE LATEST GFS AND CANADIAN MODELS HAVE SHIFTED FARTHER NORTH...WHILE THE UKMET AND GFDL MODELS HAVE SHIFTED A LITTLE MORE TO THE SOUTH AND WEST. ALL OF THESE MODELS ARE CONVERGING NICELY ABOUT THE PREVIOUS SEVERAL NHC FORECAST TRACKS...SO I SEE NO REASON AT THIS TIME TO MAKE ANY SIGNIFICANT CHANGES TO THE PREVIOUS TRACK FORECASTS. THE OFFICIAL TRACK IS JUST AN EXTENSION OF THE PREVIOUS TRACK AND IS CLOSE TO THE GUNA MODEL CONSENSUS.

FRANCES IS FORECAST TO REMAIN IN A LOW SHEAR ENVIRONMENT AND OVER INCREASING SSTs THROUGHOUT THE PERIOD. THE SHIPS INTENSITY MODEL NOW MAKES FRANCES A 113 KT MAJOR HURRICANE IN 48 HOURS...SINCE THE 'SELF-INDUCED' VERTICAL SHEAR HAS DECREASED OWING TO THE GFS FORECAST POSITIONS BEING CLOSER TO THE OFFICIAL TRACK FORECAST. THERE WILL LIKELY BE SEVERAL FLUCTUATIONS IN THE INTENSITY OVER THE NEXT 5 DAYS...BUT CATEGORY FOUR INTENSITY SEEMS LIKELY SOME TIME DURING THAT PERIOD...AND CATEGORY 5 STRENGTH IS EVEN POSSIBLE.

FORECASTER STEWART

FORECAST POSITIONS AND MAX WINDS

INITIAL	27/2100Z	15.7N	49.8W	100 KT
12HR VT	28/0600Z	16.9N	51.2W	105 KT
24HR VT	28/1800Z	17.9N	52.8W	110 KT
36HR VT	29/0600Z	18.9N	54.5W	115 KT
48HR VT	29/1800Z	19.7N	56.4W	115 KT
72HR VT	30/1800Z	20.6N	60.0W	115 KT
96HR VT	31/1800Z	21.5N	64.5W	115 KT
120HR VT	01/1800Z	22.5N	69.0W	115 KT

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WWW

**Hurricane \_\_\_\_\_ Advisory Number \_\_\_\_\_**

**(Insert Sample Advisory Products here)**

## Hurricane Action Plans (TBD)

## Impact Assessments (TBD)