# Marketplace Realities & Risk Management Solutions 2007

## Special Report on Property Marketplace

Spring 2007 Edition

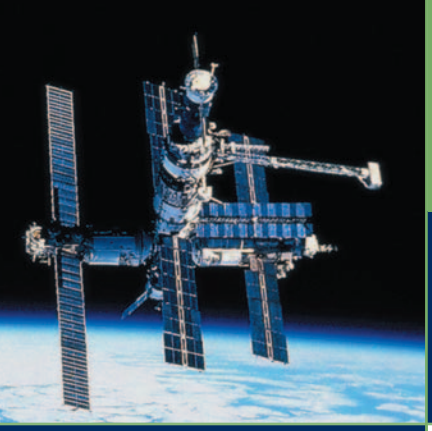









Willis



# Marketplace Realities 2007
& Risk Management Solutions

## Property Update

Willis

Spring 2007

## Foreword

In "A Tale of Two Markets" we describe Property insurance marketplace conditions as they apply to two types of risk, *cat* and *non-cat* – those risks that are subject to the natural catastrophe perils of wind, flood and earthquake, and those risks that are not.

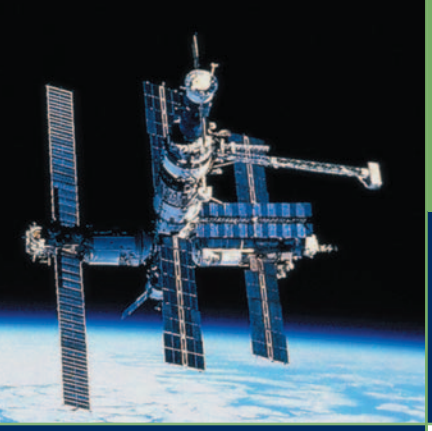
While US coastal property values have continued to grow, the availability and affordability of insurance have moved in the opposite direction. The strong financial performance of the US Property/Casualty insurance industry in 2006, along with recent signs of further Property marketplace softening, may neither add up to nor indicate a prospective return to long-term equilibrium in the cat risk segment.

### Crystal Balls

On May 9, three weeks before the official June 1 start of the Atlantic Hurricane Season, the press was abuzz with the news of subtropical storm Andrea. It was only the second time in the past ten years that a named storm developed prior to the start of the season. Was it a harbinger of an active, above-average season to come, as had been forecast by Colorado State University's Philip Klotzbach and William Gray? Their highly regarded work, *The Tropical Meteorology Project* (http://tropical.atmos.colostate.edu), has been a feature of the hurricane prognostication landscape for years. Last month, citing "the rapid dissipation of El Niño conditions", they increased their 2007 season forecast from seven to nine hurricanes, five of which would be intense (category 3, 4 or 5 on the Saffir-Simpson scale).

Their forecast at this time last year called for the same frequency of named storms for 2006, but it didn't happen. The US was visited by tropical storms Alberto, Beryl and Ernesto – hardly household names in the manner of Katrina-Rita-Wilma. The variance of actual-to-expected does not impugn the validity or integrity of the Colorado model; rather, it is indicative of the intricate nature of the science of climate-related forecasting. While some might like to think that the tempestuous 2004 and 2005 seasons were aberrations, succeeded as they were by a relatively mild 2006, the sequence could also be interpreted as a sign that climatic volatility is increasing.

How do these matters impact underwriting practices? Uncertainty regarding the timing and quantum of cat losses drives capacity rationing and precautionary pricing behavior by insurance carriers. The recent return to profitability and growing capacity in the general marketplace, with concomitant softening in many market segments, does not dispel or dilute uncertainty regarding the incidence or extent of nat cat losses. Equilibrium is not yet at hand.



# Marketplace Realities 2007
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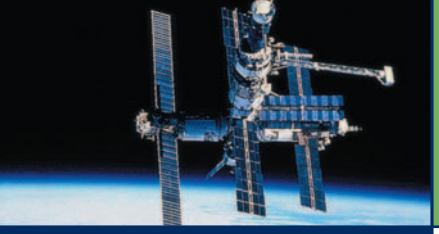
### Willis Hurricane Tracking Advisory Service

On May 1, we published our *Atlantic Basin Hurricane Forecast* bulletin, providing in-depth treatments of the Colorado model and the Saffir-Simpson Hurricane Scale. On the same day, we issued a bulletin describing the Willis Hurricane Tracking Advisory Service, which provides our clients with real-time direct notification of the status, forecast track and description of developing tropical depressions, storms and hurricanes. Both bulletins are attached and are also available as individual downloads from the Publications page of www.willis.com.



# Marketplace Realities 2007
## & Risk Management Solutions

**Property Alert**
**Spring 2007**

## A Tale of Two Markets

It's still a tale of two markets. Outside catastrophe-prone areas, it's soft, with traditional markets and new ones chasing premium down while broadening coverage. In catastrophe-prone areas, it's not – yet – particularly where the total catastrophe risk capacity required by a given insured dampens competitive market forces.

In our last edition of *Marketplace Realities*, we said that the year 2006 "quickly degenerated into a total meltdown in terms and capacity for many coastal wind exposures."

As we look at the realities of today's marketplace, we remind ourselves of the factors that drove that meltdown:

- **Natural catastrophe losses in 2004-2005**
  According to Swiss Re, in 2004-2005 there were $131 billion in insured natural catastrophe losses, approximately $100 billion of which occurred in the US. As the marketplace for property insurance and reinsurance is truly global, we focus on the $131 billion. Prior to 2004, insured catastrophe losses averaged about $23 billion per year. Said another way, insured catastrophe losses in 2004-2005 shot up 184 percent. Several industry leaders, including Warren Buffett, have said we must deal with the very real possibility that because of global warming, natural cycles in hurricane frequency and severity, and economic development in coastal areas, average nat cat losses in a year may be much higher than they were in the period from 1970 to 1992. Thus, the reasoning goes, insurance pricing and underwriting in today's market must reflect that possibility.

- **Catastrophe loss models**
  In May 2006, RMS released version 6.0 of its *RiskLink* catastrophe model. At the time of the release, RMS announced that windstorm loss projections on individual properties in coastal areas would increase on average 40 percent in the Gulf Coast and Southeast Atlantic, and 30 percent in the Middle Atlantic and Northeast US. This corresponds to what we witnessed as the revised model was applied to our clients' portfolios, and it was a key ingredient of the major dislocation of cat capacity in the second half of 2006.

  In October 2006, RMS convened its annual Expert Elicitation meeting of hurricane climatologists, whose findings would "provide the foundation for the RMS medium term view of frequency in version 7.0 to be released in spring 2007." We cite several key conclusions noted by RMS in their published report[1]:

  – The results of the 2006 elicitation of activity rates at U.S. landfall were very similar to those implemented in version 6.0. In fact, for measures of category 1-5 and category 3-5 activities across the basin and at U.S. landfall, changes in rates compared to last year's analysis were 2% or less.

[1] *The 2006 RMS Expert Elicitation and Atlantic Hurricane Activity Rates Update* – Risk Management Solutions, Inc., November, 2006

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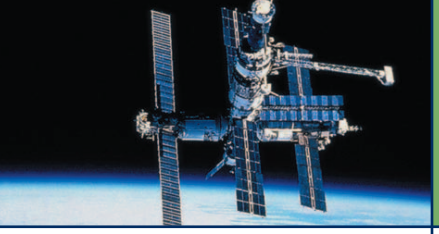




- Despite the low activity observed at U.S. landfall and throughout the western half of the Atlantic hurricane basin in 2006, the level of expected medium-term risk for the U.S. remains significantly above the long-term average.

- RMS will release an update to the U.S. Hurricane Model in version 7.0 in spring 2007, reflecting any changes in knowledge relevant to expected hurricane losses. However, the medium-term, five-year view of activity rates implemented in version 7.0 will remain unchanged from RiskLink 6.0 as a result of the 2006 expert elicitation.

- **Ratings agencies**
  In the aftermath of the losses of 2004-2005, ratings agencies such as A.M. Best, Standard & Poor's, Moody's and Fitch increased the capital requirements imposed on insurers who underwrite nat cat risk, thereby reducing capacity in that segment.

## The Year 2006

What a difference a year can make – especially one in which insured losses drop below historic averages. The year 2006 was probably the most profitable one in history for insurance underwriters. Globally, property and casualty insurance and reinsurance capital at the end of 2006 was approximately $1.35 trillion, an increase of approximately $150 billion. That translates into $150 billion of hypothetical additional capacity. Further, investors formed eight new insurers in Bermuda and four new syndicates at Lloyds of London; approximately $4.7 billion of cat bonds were issued; and sidecars proliferated.

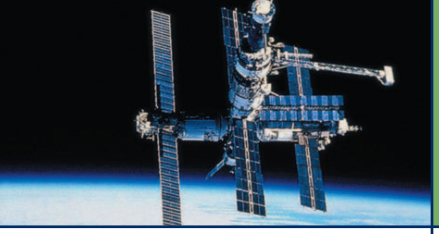
## The Year 2007

So, has the hard market of 2006 ended? Yes. But is the market "soft" now? No – certainly not when viewed against pre-2006 conditions.

There are still shortages of capacity for coverage against hurricanes, floods and earthquakes. In some places, it remains impossible to purchase enough insurance to qualify for a commercial mortgage-backed securities loan unless the lenders agree to modify the insurance requirements. A beach resort may not be able to buy more than $200 million of hurricane insurance no matter how much money they are willing to spend (within reason).

On the other hand, except for insurance against natural catastrophes, the marketplace in May 2007 is softening and the rate at which it is softening seems to be accelerating every day. There is vigorous competition, rates are falling and there is more capacity.

Even insurance buyers who suffered hurricane and storm surge losses in 2004 and 2005 are beginning to get relief, with capacity rapidly reappearing, pricing decreasing and terms and conditions being offered with greater flexibility – the exception being cat deductibles. The speed with which pricing has changed for these buyers since the beginning of the year is inconsistent: some renewals are flat; some have decreased 5 to 25 percent; but only a very few have experienced increases. Again, the largest reductions occur where the most vigorous competition can be generated – but even then, the pricing is well above pre-2006 levels.





It seems that the insurance marketplace is willing to use its new-found capital to support writing cat at reduced, but still robust, rates when viewed against historical norms.

## Beware of Flood Zone Changes

Hurricane Katrina shed a spotlight on how outdated FEMA's flood maps were in identifying areas most at risk for flood damage. Changes in topography, significant commercial and residential development, and the vulnerability of aging dams, dikes and levees in certain areas had not been adequately reflected in the old maps.

In response to sharp criticism by Congress and others, FEMA is systematically updating these maps, and the updates could translate into significant new risks for insurance buyers. For commercial buyers, the biggest danger is in beginning a policy year with properties designated in certain zones and ending it with these zones having been updated mid-year. It is the norm for underwriters to put exclusions and/or limitations and higher deductibles on the most vulnerable flood zones, sometimes referred to as Special Flood Hazard Areas (SFHA – within the 100-year flood plain) and at other times as zones with prefixes A and V. It is not the norm for underwriters to identify in their policies which locations on a schedule are subject to such special conditions; rather they will say these apply based on the flood zone designation in effect *at the time of the loss.*

Insurance buyers would do well to request that the communities in which they have operations notify them directly as soon as flood zone changes are being proposed. FEMA does not normally make changes without giving these communities advanced notice and a chance for a public hearing.

## Proactive Strategies

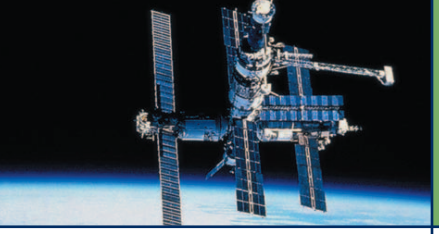
This has been said before but it bears repeating: even insurance buyers with assets in catastrophe-prone areas can improve their property insurance programs by adopting strategies and implementing plans to enhance risk profiles and create positive differentiation.

1. Use the time between now and the next renewal to develop an outstanding submission. Underwriters respond to a good story well told. Diagrams and pictures are helpful.

2. Make sure your statement of values accurately reflects the actual insurable replacement value of your buildings and structures, including code upgrades if applicable.

3. Use revenue and materials flow charts to describe your business interruption exposures. BI worksheets completed and signed by forensic accountants are always well received by the underwriters.

4. Invest in risk abatement. Buildings built (or upgraded) according to the current windstorm and earthquake building codes have suffered less damage in the recent catastrophes.





5. Develop disaster recovery and business continuity plans, put them in writing and show them to your underwriters.

6. Have a face-to-face visit with your key underwriters several months before your renewal date.

7. Have well formed, realistic, optimistic expectations for your property insurance renewal and let everybody know what they are.

## TRIA

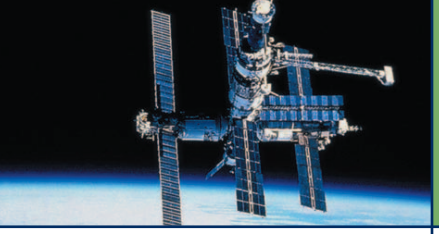
Almost five years after the passage of TRIA, we are still without a political or industry consensus on its need or scope. The House and the Senate committees overseeing TRIA's fate differ on the length of any extension and the inclusion of domestic acts of terrorism and life insurance. The American Insurance Association and National Association of Mutual Insurance Companies differ on the trigger for a certified act of terrorism (now $100 million in combined insured losses) and on insurer retentions for nuclear, biological, chemical or radiological events (NBCR), the latter organization wanting no liability for such events. And with the exception of NBCR, the administration continues to maintain that TRIA is discouraging the development of private sector capacity to handle terrorism and should not be extended.

We have been at the forefront of those industry voices calling for a public-and-private partnership – a permanent facility – to address catastrophic loss arising out of an act of terrorism. Our statement to the Senate Banking Committee on February 28 was emphatic. Failure to implement a long-term or, ideally, a permanent fix before TRIA expires will not only vastly decrease risk transfer options, it will effectively expose the U.S. economy to potentially devastating uninsured economic losses. The issue before Congress must not simply be whether the government will be the insurer of last resort, but whether the government is prepared to work with insurers (and, by extension, reinsurers) to thoughtfully and deliberately develop a plan to maximize private sector coverage and avoid reacting in crisis mode after an attack occurs.

A single terrorism event could produce hundreds of billions in losses. One scenario estimates that a large nuclear, biological, chemical or radiological (NBCR) attack in New York City could reach $778 billion. The capacity of the insurance marketplace pales in comparison with the quantum of such losses. Reinsurance industry estimates indicate that only about $6 to $8 billion in global terrorism reinsurance capacity is available, with a fractional capacity of $1 to $2 billion for a NBCR attack.

There is a growing chorus of voices calling for a long-term solution. At a hearing convened on March 5 by the House Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, New York Senator Charles Schumer said that "the cycle of pending expiration and renewal of TRIA has created a damaging fear pattern among insurers,"[2] and he called for the program to be "made permanent or at least cover the next 15 years." New York Mayor Michael Bloomberg "said it was crucial to the New York City's overall economic health."

[2] *The New York Times,* March 6, 2007.





While continuing to hope for a permanent solution, we believe that TRIA will indeed be extended – perhaps for the 15-year term envisioned by Senator Schumer, and albeit with amendments that may be more onerous to insurers than those provided by the current structure. All of this a half decade of missed opportunities after the enactment of TRIA.

## Contacts

Suzanne Douglass
212 915 7739
suzanne.douglass@willis.com

James Costner
615 872 3421
james.costner@willis.com

Earl Owen
617 351 7532
earl.owen@willis.com

# Willis Technical Advisory Bulletin

Willis

## May 2007 – Atlantic Basin Hurricane Forecast

### This Year They Might Be Right

Predictions for the 2007 season are comparable to those of a year ago. If these prove more accurate than last year's, the insurance climate will be very different in 2007 than it was in 2006.

Forecasters predict that the 2007 Atlantic hurricane season will be much more active than the average season since 1950. The Colorado State University (CSU) Tropical Meteorology Project team led by Dr. William Gray offers the following estimates.

| Event | Prediction for 2007 | Average |
|---|---|---|
| Hurricane | 9 | 5.9 |
| Named storms | 17 | 9.6 |
| Named storm days | 85 | 49.1 |
| Intense hurricanes (Category 3, 4 or 5) | 5 | 2.3 |
| Intense hurricane days | 11 | 5.0 |

The probability of a major hurricane landfall in the US is estimated to be about 140 percent above the long-period average. Forecasters expect Atlantic basin net tropical cyclone (NTC) activity in 2007 to be about 185 percent of the long-term average.

Incorporating data through March 2007, this forecast is based on a newly devised extended range statistical forecast procedure which utilizes 40 years of past global reanalysis data. Analog predictors are also utilized. The CSU team has altered their more benign forecast of early December largely due to the rapid dissipation of El Niño conditions over the past couple of months. Currently, neutral ENSO (El Niño-Southern Oscillation) conditions are present. CSU expects either neutral or weak-to-moderate La Niña conditions to be present during the upcoming hurricane season. Tropical and North Atlantic sea surface temperatures remain well above their long-period averages.

### Landfall Predictions

Here are the probabilities for at least one major (category 3-4-5) hurricane landfall on each of the following coastal areas.

- Entire US coastline – 74 percent (average for last century is 52 percent)
- US East Coast including Florida Peninsula – 50 percent (average for last century is 31 percent)
- Gulf Coast from the Florida Panhandle westward to Brownsville – 49 percent (average for last century is 30 percent)
- Caribbean – above-average major hurricane landfall risk

CSU will be issuing seasonal updates of their 2007 Atlantic basin hurricane forecasts on Thursday, May 31 (to coincide with the official start of the 2007 hurricane season on June 1); Friday, August 3; Tuesday, September 4; and Tuesday, October 2. The August, September and October forecasts will include separate forecasts of August-only, September-only and October-only Atlantic basin tropical cyclone activity. A

For more information on loss control guidelines for specific natural perils, or any property risk control issue, contact your local Willis representative; or Joe Stavish, PE, North America Property Risk Control Practice Leader, at 800 862 1441, stavish_jc@willis.com

verification and discussion of all 2007 forecasts will be issued in late November 2007. The first seasonal hurricane forecast for the 2008 hurricane season will be issued in early December 2007. All of these forecasts will be available on the web at: http://hurricane.atmos.colostate.edu/Forecasts

## The Saffir-Simpson Hurricane Scale

### Category One Hurricane

Winds 74-95 mph. Storm surge generally four to five feet above normal. No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery and trees. Some damage to poorly constructed signs. Also, some coastal road flooding and minor pier damage. Hurricanes Allison of 1995, Danny of 1997 and Claudette of 2003 were Category One hurricanes at peak intensity.

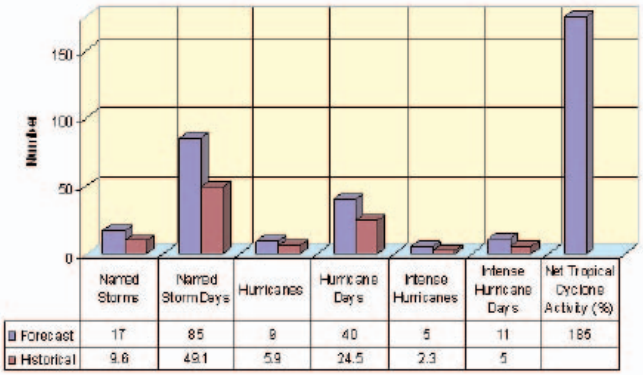
### Category Two Hurricane

Winds 96-110 mph. Storm surge generally six to eight feet above normal. Some roofing material, door and window damage to buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs and piers. Coastal and low-lying escape routes flood two to four hours before arrival of the hurricane center. Small craft in unprotected anchorages break moorings. Hurricane Bertha of 1996 was a Category Two hurricane when it hit the North Carolina coast, while Hurricane Isabel of 2003 was a Category Two hurricane when it passed through North Carolina.

### Category Three Hurricane

Winds 111-130 mph. Storm surge generally nine to 12 feet above normal. Some structural damage to small residences and utility buildings with a minor amount of curtain wall[1] failures. Damage to shrubbery and trees with foliage blown off trees and large trees blown down. Mobile homes and poorly constructed signs are destroyed. Low-lying escape routes are cut by rising water three to five hours before arrival of the hurricane center. Flooding near the coast destroys smaller structures with larger structures damaged by battering of floating debris. Terrain continuously lower than five feet above mean sea level may be flooded inland eight miles or more. Evacuation of low-lying residences within several blocks of the shoreline may be required. Hurricanes Fran of 1996 and Fabian of 2003 were Category Three hurricanes at landfall in North Carolina and Bermuda, respectively.

**Year 2007 Hurricane Forecast (Historical vs. Forecast)**




| | Named Storms | Named Storm Days | Hurricanes | Hurricane Days | Intense Hurricanes | Intense Hurricane Days | Net Tropical Cyclone Activity (%) |
|---|---|---|---|---|---|---|---|
| Forecast | 17 | 85 | 9 | 40 | 5 | 11 | 185 |
| Historical | 9.6 | 49.1 | 5.9 | 24.5 | 2.3 | 5 | |

### Category Four Hurricane

Winds 131-155 mph. Storm surge generally 13 to 18 feet above normal. More extensive curtain wall failures with some complete roof structure failures on small residences. Shrubs, trees and signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Low-lying escape routes may be cut by rising water three to five hours before arrival of the hurricane center. Major damage to lower floors of structures near the shore. Terrain lower than 10 feet above sea level may be flooded, requiring massive evacuation of residential areas as far inland as six miles. Hurricane Luis of 1995 was a Category Four hurricane while moving over the Leeward Islands. Hurricanes Felix and Opal of 1995 also reached Category Four status at peak intensity.

### Category Five Hurricane

Winds greater than 155 mph. Storm surge generally greater than 18 feet above normal. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. All shrubs, trees and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage. Low-lying escape routes are cut by rising water three to five hours before arrival of the hurricane center. Major damage to lower floors of all structures located less than 15 feet above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within five to 10 miles of the shoreline may be required. Hurricane Gilbert of 1988 was a Category Five hurricane at peak intensity and is the strongest Atlantic tropical cyclone of record. Hurricane Andrew was a Category Five hurricane when it struck South Florida in August of 1992.[2]

[1]An exterior non-bearing wall between columns, sometimes containing windows or all glass.

[2]Hurricane Andrew was re-classified as a Category Five hurricane on August 21, 2002 by the National Oceanic and Atmospheric Administration (NOAA).

# Willis Hurricane Tracking Advisory Service

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**Vital Information on Developing Storms** **May 2007**

The Willis Hurricane Tracking and Advisory Service offers real-time direct notification of the status, forecast track and description of developing tropical depressions, tropical storms and hurricanes in the Atlantic basin. Actual public advisories are sent to clients, at least a twice a day, during tropical cyclone development stages. This service is available at no charge to provide our clients with advanced warning so they can commence preparations to protect their property in the event of an approaching storm. If you are interested in this service, please contact your local Willis representative or Joe Stavish, North American Property Risk Control Practice Leader, at 800 862 1441 ext. 4638, stavish_jc@willis.com; or Dave Gluckman, Senior Vice President, Property Risk Control, at 800 862 1441 ext. 4635, david.gluckman@willis.com.

## SAMPLE BULLETIN

HURRICANE ISABEL ADVISORY NUMBER 22
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL
11 AM AST THU SEP 11 2003

...EXTREMELY DANGEROUS HURRICANE ISABEL CONTINUES MOVING WESTWARD...

AT 11 AM AST...1500Z...THE CENTER OF HURRICANE ISABEL WAS LOCATED NEAR LATITUDE 21.4 NORTH... LONGITUDE 54.5 WEST OR ABOUT 535 MILES...865 KM...EAST-NORTHEAST OF THE NORTHERN LEEWARD ISLANDS.

ISABEL IS MOVING TOWARD THE WEST NEAR 9 MPH...15 KM/HR...AND THIS MOTION IS EXPECTED TO CONTINUE FOR THE NEXT 24 HOURS.

MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 150 MPH...240 KM/HR...WITH HIGHER GUSTS. FLUCTUATIONS IN STRENGTH ARE COMMON IN MAJOR HURRICANES AND THESE COULD OCCUR DURING THE NEXT 24 HOURS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 60 MILES... 95 KM... FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 185 MILES...295 KM.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 930 MB...27.46 INCHES.

LARGE OCEAN SWELLS AND DANGEROUS SURF CONDITIONS ARE LIKELY OVER PORTIONS OF THE LEEWARD ISLANDS...THE VIRGIN ISLANDS...AND PUERTO RICO OVER THE NEXT SEVERAL DAYS.

REPEATING THE 11 AM AST POSITION...21.4 N... 54.5 W. MOVEMENT TOWARD...WEST NEAR 9 MPH. MAXIMUM SUSTAINED WINDS...150 MPH. MINIMUM CENTRAL PRESSURE... 930 MB.

THE NEXT ADVISORY WILL BE ISSUED BY THE NATIONAL HURRICANE CENTER AT 5 PM AST.