



**Tropical Outlook - Western Caribbean to Florida for
Late June Through Early July**

Prepared for: Captain Lee Cumberland – S/Y Satori

Date: June 15th, 2016

Good day. Please find below an outlook discussing the tropical potential along your planned itinerary over the next 3 weeks.

Outlook:

The 2016 Atlantic Tropical Season has gotten off to a fast start, with Tropical Storm Bonnie forming north of the Bahamas at the end of May and Tropical Storm Colin forming north of Yucatan earlier this month (a rare hurricane, Alex, formed over the Eastern Atlantic back in January). Colin was the earliest that a “C” storm has formed since records began in 1851. What atmospheric conditions can be attributed to these formations, and can we expect this trend to continue over the next 3 weeks?

There are 2 main factors that contribute to early season tropical development for the Atlantic basin. The first is warming sea surface temperatures, with waters across the Gulf of Mexico and around the Bahamas tending to warm faster than the open Atlantic. The second factor is the frequency of cold fronts tracking across the Gulf of Mexico and Northern Bahamas, with secondary low development occurring along the southern ends of these fronts as they move E-ESE’ward from the Central United States. These secondary lows are most likely to develop when these fronts slow in forward motion, often stalling in the vicinity of the Eastern Gulf of Mexico to the Northern Bahamas. These lows can then take on tropical characteristics, assuming that the winds in the upper levels of the atmosphere are favorable. The cold fronts will then often aid in the steering of the tropical system toward the north and east.

During July, the favorable areas for tropical cyclone formation gradually shift from the Gulf of Mexico and Florida/Bahamas to the open Atlantic waters east of the Leeward Islands, especially later in the month. This is due to cold fronts becoming less frequent offshore of the Southern U.S. and tropical waves offshore of Western Africa (i.e. the Cape Verde season) becoming the dominant contributor to formation. Historically, the probability of development slowly increases throughout July.

So, what is the outlook for the next 3 weeks? There are no immediate concerns for the Atlantic Tropical Basin over the next 5 days. However, sea surface temperatures are running above normal at this time across much of the Atlantic (i.e. Caribbean, Gulf of Mexico and W’rn Atlantic). We will need to monitor an area of low pressure developing north of the Bahamas along a cold front during the 18th-19th time frame. However, this is expected to move NE’ward away from Florida and will have a low potential for development due to strong winds aloft. Farther west, a tropical wave is forecast to move W’ward over the Yucatan on the 17th/18th and emerge over the Bay of Campeche on the 19th. Environmental conditions are not forecast to be particularly favorable, with any development being slow to occur.

From the 20th onward, we expect there to be areas of squalls persisting from the Southwestern Caribbean northwest across the Yucatan Peninsula and into the Bay of Campeche. However, we do





not forecast any cold fronts of significance to pass through the Gulf of Mexico or Florida through the end of June, so tropical development is not expected at this time. Any tropical waves that do move W'ward across the Caribbean this time of year will typically be too weak to develop, though noteworthy in this is that Tropical Storm Colin did form from such a system in the NW'rn Caribbean and Yucatan Peninsula/Southern Gulf of Mexico earlier this month. The very long range does suggest that the last week of June (i.e. 27th-29th) will be a bit more favorable for development over the W'rn Caribbean/Yucatan Channel vicinity with weaker upper level winds in place

Recommendations:

If a system were to form in the Atlantic basin, we would be sure to provide an advanced heads-up on this concern in our daily tropical summaries. With the proper planning and guidance from WRI, the chances of encountering a tropical system while enroute are nil. However, if there was a concern for development to occur ahead of your route, Cancun or Isla Mujeres both provide good ports of refuge from strong hurricanes. If unable to find dockage, we have had vessels anchor in the lee of Isla Mujeres and safely ride out hurricanes.

Farther north, Key West would only be a good option in a tropical storm, as the vicinity is well exposed to the north and south. Once the vessel reaches the Florida Straits, there will be multiple safe havens to pull into along Eastern Florida (i.e. Miami, Fort Lauderdale, West Palm Beach for example). The port of choice would be highly dependent on a system's track, which we would monitor closely.

Given the lower potential for tropical development over the next 10 days, we would recommend the vessel depart for Florida sooner rather than later.

Please contact us if you have any questions, thank you.

Weather Routing Incorporated



Web: www.wriwx.com

Phone: 1.518.798.1110

Email: wri@wriwx.com