

To: Yacht XXXXX, Captain XXX XXXXXXXX

From: Ken McKinley, Locus Weather, 207-236-3935, 207-596-4972, locuswx@midcoast.com

Forecast for yacht trip from Bristol, RI to Antigua

Desired Departure Date: Tue 24-Nov-20, 2000 UTC

Date and Time Prepared: 2130 UTC Mon 23-Nov-20

Average speed of yacht: 7.5 knots

### **Weather Factors:**

At 1800 UTC Monday: Strong low pressure was centered over northern Maine with a cold front extending south-southwest across Cape Cod and through the western Atlantic to the northern Bahamas. A secondary cold front extended west from the low to Lake Huron. Strong high pressure was centered north of Lake Superior with a ridge extending south to another strong high center over northeastern Arkansas.

The low will intensify as it moves northeast this afternoon and tonight and will be centered over the northern Gulf of St. Lawrence tomorrow morning. The cold front will swing quickly east to its south and will pass Bermuda later tonight. The northern high center will move east tonight while the southern high moved east-northeast, and by tomorrow morning the northern high center will be located south of James Bay with the southern high over West Virginia with its circulation extending over most of the western Atlantic. The southern high center will move to the lower Chesapeake region tomorrow evening with the northern high center moving southeast into northern New England by that time. The southern high center will weaken tomorrow night and dissipate by Wednesday morning with the remaining high center near Cape Sable at that time and a strong ridge extending southwest through the lower Chesapeake region and over the southeastern U.S. The high will move east through Wednesday with the ridge shifting south in the western Atlantic, extending from about 40N/62W southwest to northern Florida Wednesday evening.

The ridge will edge only slowly south through Wednesday night and Thursday and by Thursday evening its axis will extend from about 38N/60W to central Florida. The ridge axis will shift south to near Bermuda by midday Friday while farther west it remains anchored over northern Florida. The ridge will become stationary Friday night but weaken a bit, then will edge south to around 30N south of Bermuda by later Saturday. The ridge will remain in that position through the end of the weekend, though farther west it will shift south to the central Bahamas. The ridge will become a bit stronger again early next week and by later Monday will extend from about 32N/60W to the central Bahamas by Monday evening.

### **Analysis:**

It still appears that strong NW winds will prevail for departure tomorrow morning with seas likely to be a bit choppy in more open areas of Narragansett Bay. Seas will be higher over open Atlantic waters, but winds will become lighter through the afternoon and evening which will allow seas to subside.

There are a few changes in the forecast today having to do with the ridge axis shifting a bit farther south later in the week. This will lead to a longer period of winds forward of the beam from Wednesday through the end of the week. Winds speeds will be rather brisk from later Wednesday through Thursday night. Winds will become lighter through Friday and will remain light through the weekend with the wind direction finally backing to the east by later Saturday as the yacht moves south of 30N.

Easterly winds are then likely to prevail for the remainder of the passage to the islands.

The orientation of the Gulf Stream along the route has changed slightly with the southernmost eddy having shifted a bit to the east. However if the route is adjusted eastward then the yacht would encounter adverse current once through the eddy for a considerable distance. With that in mind, the route proposed

in the preliminary forecast yesterday still appears to be the best choice. As a reminder, this route goes through a waypoint of 32.0N/67.0W. The latest altimetry chart is attached showing the route to that waypoint.

A good deal of motoring will be needed once the winds go forward of the beam, though some motorsailing may be possible at times, particularly on Wednesday when the wind veers a bit to SSW. Motoring may still be needed during the weekend due to light wind speeds.

The forecast is presented for departure from Bristol tomorrow morning, and uses the route detailed above and shown in yellow on the altimetry chart.

#### **Forecast:**

Time: Tuesday morning 11/24/2020 (1200 UTC, 0700 EST)

Expected approximate position: departing Bristol, RI

Forecast Winds: NW 17-21 kts with higher gusts

Forecast Sea State: 2-3 ft in upper Narragansett Bay, higher over more open bay waters to the south

Comments: Partly cloudy. Winds becoming lighter in the afternoon veering to NNW toward evening. Seas up to feet once clear of Narragansett Bay, but subsiding through the afternoon.

Time: Tuesday evening 11/24/2020 (0000 UTC Wednesday, 1900 EST)

Expected approximate position: 40.3N/70.8W

Forecast Winds: NNW 12-16 kts

Forecast Sea State: 3-5 ft

Comments: Fair weather. Winds lighter overnight, veering to NE by midnight, and to SSE by daybreak. Seas subsiding.

Time: Wednesday morning 11/25/2020 (1200 UTC, 0700 EST)

Expected approximate position: 39.0N/70.2W

Forecast Winds: SSE 7-10 kts.

Forecast Sea State: 2-4 ft.

Comments: Fair weather. Winds veering to SSW by midday and increasing through the afternoon. Seas building a bit.

Time: Wednesday evening 11/25/2020 (0000 UTC Thursday, 1900 EST)

Expected approximate position: 37.7N/69.6W in Gulf Stream

Forecast Winds: SSW 14-18 kts

Forecast Sea State: 3-5 ft.

Comments: Partly cloudy, a brief shower or two possible. Seas somewhat short and steep in the Gulf Stream. Winds backing to S later at night, a bit lighter.

Time: Thursday morning 11/26/2020 (1200 UTC, 0700 EST)

Expected approximate position: 36.4N/69.0W in current west of cold eddy.

Forecast Winds: S 13-17 kts

Forecast Sea State: 3-5 ft.

Comments: Partly cloudy. Winds a bit stronger through the day.

Time: Thursday evening 11/26/2020 (0000 UTC Friday, 1900 EST)

Expected approximate position: 35.1N/68.5W

Forecast Winds: S 15-19 kts

Forecast Sea State: 3-5 ft.

Comments: Partly cloudy. Winds a bit lighter through the night.

Time: Friday morning 11/27/2020 (1200 UTC, 0800 AST)

Expected approximate position: 33.8N/67.9W

Forecast Winds: S 13-17 kts

Forecast Sea State: 3-5 ft.

Comments: Partly cloudy. Winds lighter through the day

Time: Friday evening 11/27/2020 (0000 UTC Saturday, 2000 AST)  
Expected approximate position: 32.5N/67.3W  
Forecast Winds: S 8-12 kts  
Forecast Sea State: 3-5 ft.  
Comments: Fair weather. Winds light through the night, backing to SE. Seas easing

Time: Saturday morning 11/28/2020 (1200 UTC, 0800 AST)  
Expected approximate position: 31.2N/66.8W  
Forecast Winds: SE 6-9 kts  
Forecast Sea State: 2-4 ft.  
Comments: Fair weather. Winds backing to ESE through the day, remaining light.

Time: Saturday evening 11/28/2020 (0000 UTC Sunday, 2000 AST)  
Expected approximate position: 29.9N/66.4W  
Forecast Winds: ESE 6-9 kts  
Forecast Sea State: 2-4 ft  
Comments: Fair weather.

Time: Sunday morning 11/28/2020 (1200 UTC, 0800 AST)  
Expected approximate position: 28.5N/66.0W  
Forecast Winds: ESE 7-10 kts  
Forecast Sea State: 2-4 ft.  
Comments: Partly cloudy. Winds backing to E in the afternoon, a bit stronger.

Time: Sunday evening 11/28/2020 (0000 UTC Monday, 2000 AST)  
Expected approximate position: 27.2N/65.5W  
Forecast Winds: E 8-12 kts  
Forecast Sea State: 3-5 ft.  
Comments: Partly cloudy. Winds a bit stronger farther south.

Time: Monday morning 11/29/2020 (1200 UTC, 0800 AST)  
Expected approximate position: 25.8N/65.1W  
Forecast Winds: E 11-15 kts  
Forecast Sea State: 3-5 ft.  
Comments: Partly cloudy, a passing shower or two possible.

Time: Monday evening 11/29/2020 (0000 UTC Tuesday, 2000 AST)  
Expected approximate position: 24.5N/64.7W  
Forecast Winds: E 10-14 kts  
Forecast Sea State: 3-5 ft.  
Comments: Partly cloudy, a few passing showers. Winds stronger farther south overnight, seas a bit higher.

*NOTE: Positions given above are not necessarily intended to be waypoints, but rather just a general location for purposes of providing weather conditions in that area. These positions should not be used for navigation.*

### **Recommendations:**

Recommendation is to depart as planned from Bristol tomorrow morning, as long as the headwinds which will require extensive motoring are not a concern.

Wind speeds will not be excessive during the passage and seas will remain manageable.

Call or email with any questions. Please confirm departure tomorrow when it occurs, and plan to send position/condition reports each day around 1200 UTC (0700 EST). I will send updates by around midday each day starting on Wednesday. Please send a test email on the inReach system prior to departure.

NOV-23-2020

CoastWatch NOAA/AOML  
Altimeter/GTS Interface

