

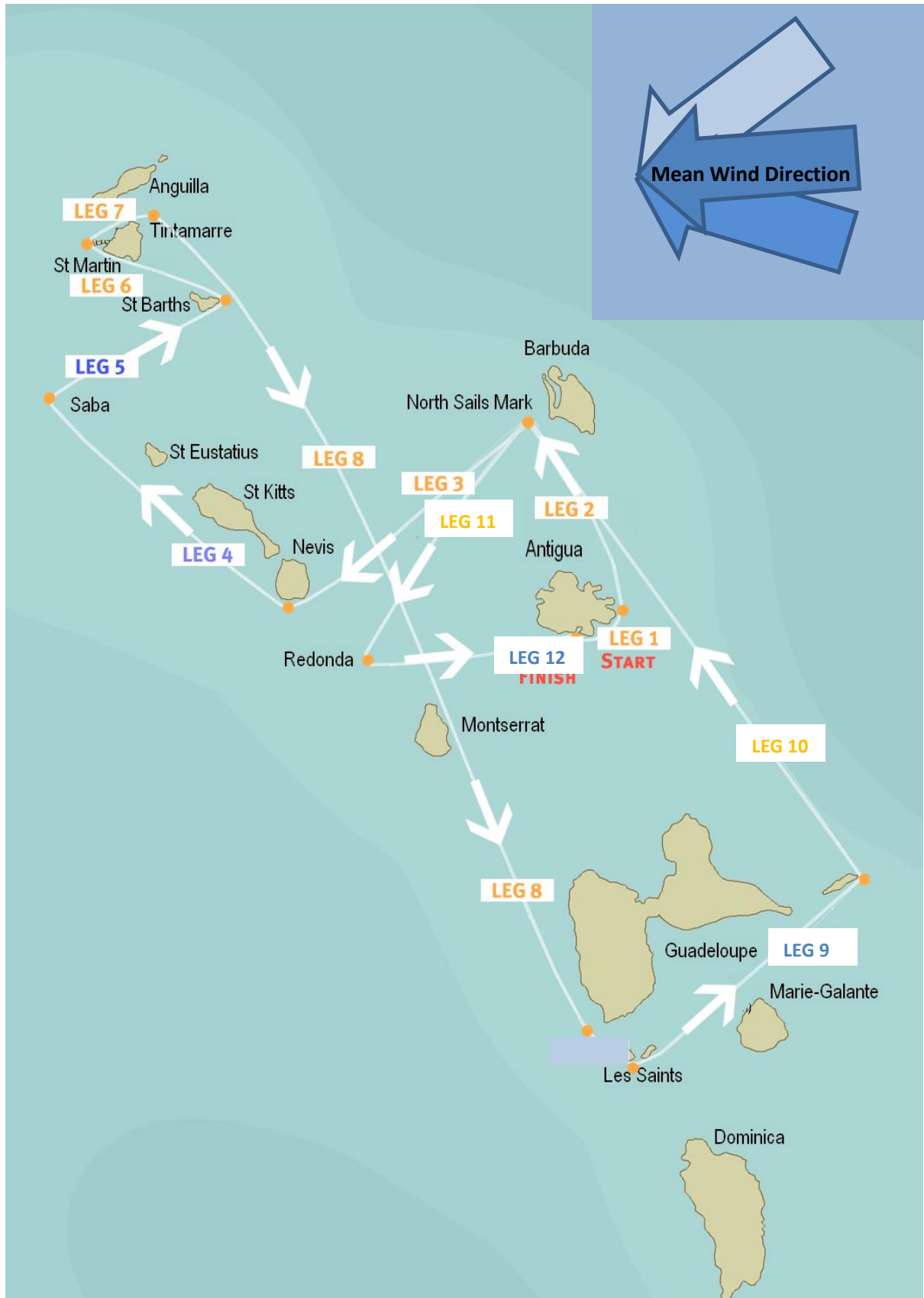
RORC Caribbean 600

February 22 – 23, 2015



Pre-race navigation notes

Course



Updated Weather Forecast

This final written forecast is based on the 2100 UTC Leebow Weather model. The most notable difference in this forecasts is a slight left shift in direction by 5 – 10 degrees throughout the forecast period, though still light at start time.

Start time the model has winds forecasted around 12kn – 14kn from 110 – 115T TWD. This would make a very tight lay to Green Island off the STBD end of the line, but we will check this on the water.

The leg to Green Island and onto the North Sails mark off Barbuda looks like the winds will go right to around 120T TWD, but decrease to around 11 – 12kn. This decrease in pressure will restrict the wrap in the wind around Barbuda, but may see the wind go to 125T TWD at the mark.

The leg to Nevis will start with the wind around 120 – 125 TWD @ 12kn. This will mean a 110 TWA for the start of the leg, so think about the Gennaker change sheet leads for this leg. Half way through the leg the wind should decrease a little and back to 110 – 115 TWD, which will free up the wind angle to a 120TWA, by the end of the leg the wind will have moved left more to 095 – 100 TWD. The mean pressure for the leg will be around 11 – 12kn, with a light spot in the middle around 10 kn.

Nevis to Saba should see a gradient wind direction of 095T and a mean pressure of 10kn. This will be affected majorly by wrapping and accelerations of the wind through the islands. In general the angle is expected to be around 135TWA on STBD all the way to Saba, where the TWS will increase to 12kn. Expect the TWD to shift left during the last third of this leg, to around 080 – 085T, making Saba easier to reach in one.

The upwind leg to St Barths will see a slight increase in TWS, and a right shift back to 100 TWD as we approach the layline for eastern St Barths.

Downwind to the west of St Marteen, will see little change in the gradient direction, though the TWS will be slowly increasing the whole time. Wind bends will be geographic here.

Upwind through the Anguilla channel will continue to see a gentle increase in TWS up to 15kn. The gradient direction is forecasted to shift right to 105T, though this is only likely closer to Tintemarre.

The long leg to Guadeloupe shows building pressure all the way, increasing to 18kn as we pass Montserrat. Direction is stable to begin with around 105T TWD, making it hard on the wind 45 – 50 TWA, but wind will steadily move left after Antigua freeing us towards the NW tip of Guadeloupe. By the top of Guadeloupe it is possible we may see winds up to 22kn and as far right as 070T in the wrap around the top of the island.

I expect to be at the wind shadow of Guadeloupe between 0900 and 1100 LT on Tuesday.

Once at Les Saints the gradient wind will be around 17kn from 080T, I would expect a slight right shift going up the channel to Les Desiradas, before the wind stabilises at around 085T for the remainder of the race.

From Les Desirades to North Sails there will be a slow increase to 19 – 20kn which should them remain until finish.

Safety

All crew on deck must wear lifejackets if the following conditions are in effect

- Between the hours of sunset and sunrise (between 18:13 Local time and 06:29 Local time)
- When alone on deck
- When the mainsail is reefed
- When the mean TWS is 25 knots or above
- When the visibility is less than one nautical mile

Race Course Summary

Multihull Class start is at 11:40

Leg	Course	Mode	Est Time (local)	Est TWA	Est TWS	Sails
1	Start to Green Island	Upwind	Day 1 11:40 – 12:10	Upwind VMG 47° TWA	12 - 14kn	J1; Full Main
2	Green Is. to North Sails (Barbuda)	Downwind	Day 1 12:10 – 14:05	Downwind VMG 135° TWA	14kn > 12kn	Genn; J2; Full Main
3	North Sails to Nevis	Broad Reach / Downwind	Day 1 14:05 – 16:50	Broad Reach 110° - 120° TWA	12kn > 10kn	Genn; Full Main
4	Nevis to Saba	Downwind	Day 1 16:50 – 20:10	Downwind VMG 135° TWA	10kn > 12kn	Genn; J2; Full Main
5	Saba to St Barths	Upwind	Night 1 20:10 – 23:30	Upwind VMG 47° TWA	12kn > 13kn	J1; Full Main
6	St Barths to St Martin	Downwind	Night 1 23:30 – 01:00	Downwind VMG 135° TWA	13kn	Genn; J2: Full Main
7	St Martin to Tintemarre	Upwind	Night 1 01:00 – 02:00	Upwind VMG 47° TWA	15kn	J1; Full Main
8	Tintemarre to Guadeloupe	Upwind	Night 1 02:00 – 11:20	Upwind VMG 47° - 55° TWA	15kn > 18kn	J1; Full Main
9	SW Guadeloupe to Les Desirade	Upwind	Day 2 11:20 – 14:40	Upwind VMG 55° - 50° TWA	19kn > 16kn	J1; Full Main
10	Les Desirade to North Sails (Barbuda)	Downwind / Broad Reach	Day 2 14:40 – 18:15	Downwind 135° - 125° TWA	17kn	Genn; J2: Full Main
11	North Sails to Redonda	Downwind	Day 2 18:15 – 20:10	Downwind VMG 135° TWA	17kn > 18kn	J1; Full Main (J1; 1 st Reef)
12	Redonda to Finish	Upwind	Night 2 20:10 – 23:00	Upwind VMG 45° TWA	18kn > 20kn	J1 ; Full Main (J2; Full Main)

RORC 600 Course phases

Start	Multihull Class, Pennant #8
Day 1	☀
Time	11:40 Local Time (15:40 GMT), Monday 18 th February 2013
Wind Speed	12 – 14 kts
Wind Direction	<ul style="list-style-type: none"> Avg 110 - 115°T TWD
Nav Notes:	<ul style="list-style-type: none"> Start line between orange triangle on Fort Charlotte and orange cylindrical buoy approximately 0.75nm south of Fort Charlotte We are the last start Warning Signal @ 11:30 LT

Leg 1	7nm, approx. 30 mins, Upwind, 13kn TWS
Day 1	☀
Start of Leg:	11:40 (15:40 GMT)
End of Leg:	12:10 (16:10 GMT)
Leg Notes:	<ul style="list-style-type: none"> 7nm beat, upwind to Green Island, leaving Antigua to port Stay close to the shore to make the most of lifts and out of the current Beware of smaller, slower boats as we catch up the fleet
Nav Notes:	<ul style="list-style-type: none"> Beware of sunken rock (charted) before Standfast Point, York Island

Leg 2	35nm, approx. 1 hour 40 mins, Downwind, 11kn TWS
Day 1	☀
Start of Leg:	12:10 (16:10 GMT)
End of Leg:	14:05 (18:05 GMT)
Leg Notes:	<ul style="list-style-type: none"> 35nm broad reach to North Sails inflatable mark, position 17°35'.02N 061°55'.02W, round to PORT Try to avoid sailing too high, as TWD will still go right as approaching the NS mark Beware of smaller, slower boats as we catch up the fleet SET UP CHANGE SHEET ON INBOARD LEAD FOR NEXT GENNAKER LEG
Nav Notes:	<ul style="list-style-type: none"> Shallow waters (Three Fathom Bank) after Green Island, on the rhumb line Charted at 4.1m

Leg 3	60nm, approx. 2 hours 30 mins, Broad Reach/Downwind, 12kn TWS
Day 1	☀
Start of Leg:	14:05 (18:05 GMT)
End of Leg:	16:50 (20:50 GMT)
Leg Notes:	<ul style="list-style-type: none"> 60nm downwind from North Sails mark to Nevis, Wind could be 120TWA at mark, so could be a tight Gennaker to begin with, then freeing up to a 135TWA May need inboard lead at the start of the leg, so change sheet should be set
Nav Notes:	<ul style="list-style-type: none">

Leg 4	50nm, approx. 3 hours, Downwind, 11kn TWS
Day 1	☀☾
Start of Leg:	16:50 (20:50 GMT)
End of Leg:	20:10 (00:10 GMT)
Leg Notes:	<ul style="list-style-type: none"> 50nm 130 - 140 TWA from Nevis to Saba, flat water, in the wind shadow of Nevis and St Kitts, leaving all islands to Stbd WIND SHOULD HEAD AS WE PASS THE GAPS BETWEEN ISLANDS AND HEAD UP TO SABA DO NOT sail hot above the Rumb Line and get sucked into St Eustatius Plan to defend the inside at Saba, and make most of the initial lift
Nav Notes:	<ul style="list-style-type: none"> Large wind shadow created by Nevis and St Kitts, in 2010 and 11 smart boats were 8nm off St Kitts Rounding Saba, wind first goes right, then becomes a header as the as the boat sails into clean air

Leg 5	35nm, approx. 2 hours 50 mins, Upwind, 13kn TWS
Night 1	☾
Start of Leg:	20:10 (00:10 GMT)
End of Leg:	23:30 (03:30 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 35nm upwind from Saba to St Barths, leaving St Barths and all outlying islands to Port • Rounding Saba, wind first goes right, then becomes a header as the as the boat sails into clean air • An immediate tack at Saba should pay with a lift along the islands, before taking back after 15 mins or so. Look for relief from the seaway by tacking back towards Gustavia
Nav Notes:	<ul style="list-style-type: none"> • Pay attention to Les Roches Rouges, uncharted shallow spot 17°50'.6N 062°50'.6W

Leg 6	25nm, approx. 1 hour 30 mins, Downwind, 13kn TWS
Night 1	☾
Start of Leg:	23:30 (03:30 GMT)
End of Leg:	01:00 (05:00 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 25nm downwind from St Barths to the western most point of St Martin, leaving St Martin to Stbd • Careful of Proselyte Reef, but make sure you gybe for just before Simpson Bay, as will get headed there, and continue on to the end of the island in one gybe.
Nav Notes:	Poor charting of Islands, Particular caution on Ile Pele

Leg 7	16nm, approx. 1 hour 15 mins, Upwind, 15kn TWS
Night 1	☾
Start of Leg:	01:00 (05:00 GMT)
End of Leg:	02:00 (06:00 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 16nm beat up the Anguilla Channel, to Tintamarre, leaving Tintamarre to Stbd • Tacking before Tintamarre often for lift. • Can go inside Spaniard Rock and back out
Nav Notes:	Beware of Spaniard Rock between Eastern Point and Tintamarre

Leg 8	130nm, approx. 9 hours 30 mins, Upwind, 15 – 18kn TWS
Night 1	☾ ☀
Start of Leg:	02:00 (06:00 GMT)
End of Leg:	11:20 (15:20 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 130nm upwind, leaving St Barths to Stbd and Guadeloupe to Port • Halfway point of the race • Work hard to stay upwind, pointing at NE tip of Guadeloupe • Plan to rest as next phase of the race is one of the toughest • Need to work hard to keep above Montserrat
Nav Notes:	<ul style="list-style-type: none"> • 2nm exclusion zone SW of Montserrat • Very large wind shadow off the coast of Guadeloupe - need to get onto the beach • Shores around the island have many lobster pots

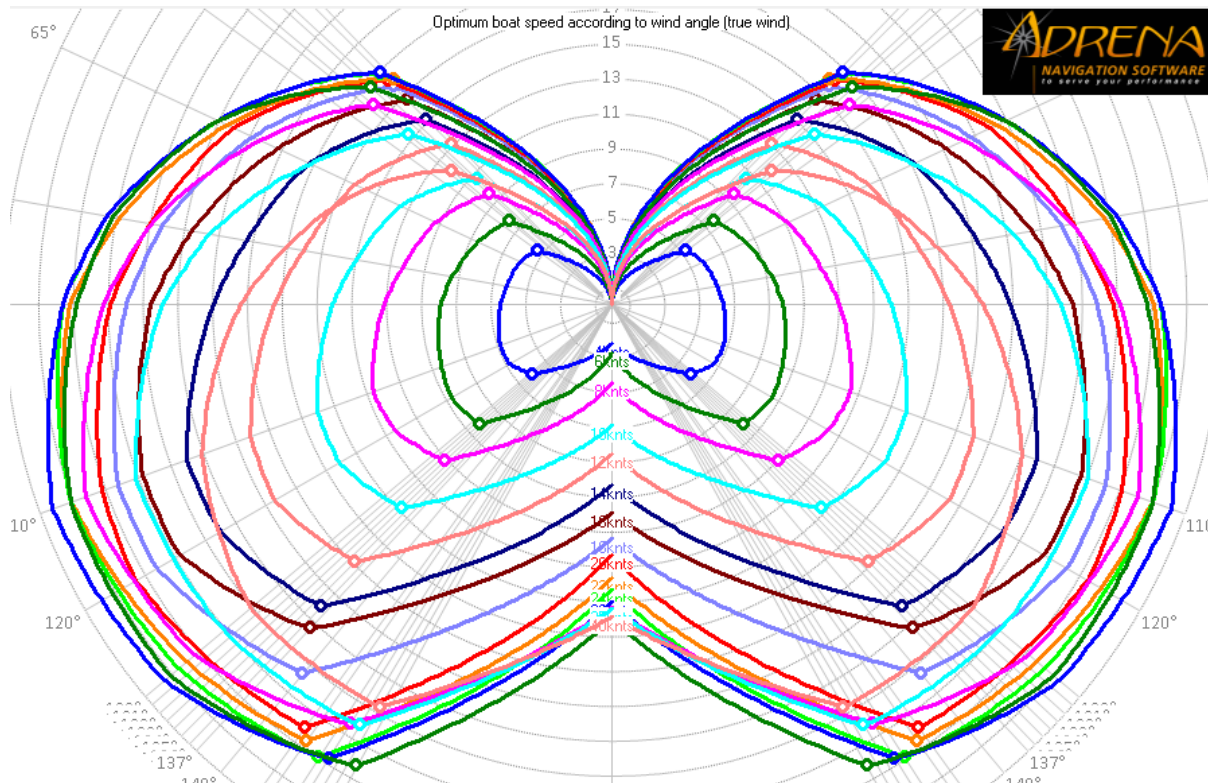
Leg 9	40nm, approx. 3 hours 15 mins, upwind, freeing up, 17kn TWS
Day 2	☀
Start of Leg:	11:20 (15:20 GMT)
End of Leg:	14:40 (18:40 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 10nm upwind beat to round the south west of Guadeloupe, leaving Les Saints to Port • Usually a large wind speed increase at the bottom of Guadeloupe • AIM TO TAKE AND EARLY TACK INTO Les Saints • 40nm Beat up to Les Desirades, leaving Guadeloupe and Les Desirades to Port • Expect difficult conditions through the channel, with stronger winds and current against
Nav Notes:	<ul style="list-style-type: none"> • Iles de la Petit Terre exclusion zone, defined by the 10m contour and marked by buoys off Terre de Bas • Shores around the island have many lobster pots • A lot of current through this channel

Leg 10	90nm, approx. 3 hours 45 mins, Downwind/Broad Reach, 17kn TWS
Day 2	☀
Start of Leg:	14:40 (18:40 GMT)
End of Leg:	18:15 (22:15 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 90nm from Les Desiradas to the North Sails Inflatable mark, as used earlier in the race • Usually the fastest leg of the course • Good Leg to Rest • Good chance to be lifted towards the end of the run, so happy to be a little low on course, almost pointing at Green Island • SET UP FOR INBOARD LEAD ON GENNAKER, even though next leg is likely J1
Nav Notes:	•

Leg 11	50nm, approx. 1 hour 40 mins, Downwind, 18kn TWS
Day 2	☾
Start of Leg:	18:15 (22:15 GMT)
End of Leg:	20:10 (00:10 GMT)
Leg Notes:	<ul style="list-style-type: none"> • 50nm likely J1, but could have Gennaker on inboard lead around the Antigua Convergence Zone. • Large wind shadow off the very high island of Redonda, but transition is fast
Nav Notes:	<ul style="list-style-type: none"> • Keep a safe distance off Redonda for the wind shadow • Redonda is not where the chart positions it

Leg 12 to Finish	40nm, approx. 3 hours, upwind, 19kn TWS
Day 2 - Night 2	☾
Start of Leg:	20:10 (00:10 GMT)
End of Leg:	23:00 (03:00 GMT)
Leg Notes:	<ul style="list-style-type: none"> • Final Leg to the Finish • Calmer seas in the lee of Antigua • Watch for wind bend and acceleration around the SW corner of Antigua
Nav Notes:	<ul style="list-style-type: none"> • Take care with approach to Falmouth Bay, with wind shadow, shifts and current • Call "Ocean One" on VHF06 when 5 miles off.

Phaedo3 Performance Polar v2.5 – 2016 Season



	J1	J2	J3	Gen																
TW@TWS	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	TW@TWS
40	3.7	5.8	8.0	9.1	11.8	13.7	15.1	16.1	16.5	16.7	17.0	17.1	15.7	14.1	13.2	12.5	11.6	10.5	9.5	40
45	4.2	6.6	9.0	10.2	13.1	15.1	16.6	17.7	18.2	18.3	17.8	18.9	17.6	16.0	15.0	14.1	13.1	11.9	10.7	45
50	4.8	7.4	9.9	11.2	14.1	16.3	18.0	19.2	19.8	19.8	19.4	20.5	19.4	17.9	16.8	15.8	14.6	13.2	12.0	50
55	5.4	8.1	10.5	12.0	15.0	17.4	19.1	20.5	21.3	21.4	22.0	22.0	21.3	19.5	18.3	17.2	16.0	14.5	13.2	55
60	5.7	8.4	10.9	12.3	15.7	18.4	20.2	21.7	22.7	22.9	23.5	23.5	23.2	20.9	19.5	18.5	17.2	15.8	14.5	60
65	5.9	8.5	11.2	13.4	16.3	19.2	21.2	22.5	24.0	24.4	25.0	25.0	25.0	22.3	20.7	19.7	18.4	17.0	15.7	65
70	6.0	8.8	11.5	14.0	16.9	19.9	22.3	23.9	25.1	25.9	26.5	26.5	26.5	23.8	22.2	21.1	19.8	18.2	16.8	70
75	6.1	9.0	11.8	14.4	17.4	20.6	23.4	25.1	26.0	27.3	28.0	28.0	27.9	25.4	23.8	22.6	21.2	19.5	17.9	75
80	6.2	9.3	12.2	14.9	18.0	21.3	24.5	26.2	26.9	28.8	29.4	29.5	29.1	26.9	25.4	24.2	22.6	20.7	19.0	80
85	6.3	9.6	12.6	15.5	18.7	22.1	25.6	27.1	27.9	30.0	30.6	30.6	30.0	28.1	26.7	25.5	23.8	21.9	20.2	85
90	6.4	9.8	13.1	16.1	19.4	22.9	26.5	27.9	28.8	31.1	31.6	31.6	30.8	29.2	27.9	26.6	24.9	23.1	21.4	90
95	6.5	10.0	13.6	16.7	20.2	23.9	27.3	28.7	29.6	32.0	32.3	32.5	31.5	30.3	29.1	27.7	26.0	24.1	22.4	95
100	6.7	10.1	14.1	17.2	21.0	24.8	27.9	29.4	30.3	32.7	32.8	33.3	32.2	31.2	30.1	28.7	27.1	25.1	23.4	100
105	6.8	10.3	14.4	17.7	21.6	25.6	28.4	29.9	30.8	33.0	33.0	33.9	32.8	31.9	30.8	29.5	27.8	26.0	24.3	105
110	6.8	10.4	14.6	18.0	22.1	26.0	28.7	30.2	31.2	33.1	33.1	34.2	33.1	32.2	31.1	29.9	28.3	26.6	25.1	110
115	6.9	10.6	14.6	18.2	22.4	26.1	28.9	30.3	31.4	32.9	33.0	34.2	33.3	32.2	31.1	29.9	28.5	27.0	25.7	115
120	6.8	10.7	14.4	18.1	22.4	26.0	28.7	30.2	31.3	32.9	32.8	34.1	33.3	32.0	30.9	29.7	28.5	27.3	26.3	120
125	6.6	10.8	14.2	18.0	22.4	26.0	28.3	30.1	31.3	32.1	32.5	33.9	33.3	31.7	30.5	29.6	28.6	27.5	26.7	125
130	6.2	10.9	13.7	17.7	22.1	25.6	27.5	29.9	32.2	31.5	32.5	33.6	33.2	31.3	30.2	29.5	28.7	27.8	27.1	130
135	5.6	9.6	12.6	16.5	20.9	24.4	26.2	29.2	32.0	31.9	32.5	33.2	32.9	30.8	29.9	29.5	29.0	28.2	27.5	135
140	4.9	8.5	11.3	14.9	18.9	22.3	24.1	27.7	31.2	31.7	32.4	32.6	32.4	30.2	29.5	29.5	29.1	28.4	27.8	140
145	4.4	7.3	9.9	13.3	16.9	20.1	21.8	25.4	29.5	30.5	31.6	31.6	31.7	29.2	28.7	29.0	28.8	28.2	27.6	145
150	3.8	6.2	8.6	11.7	14.9	17.8	19.6	22.9	27.1	28.2	29.7	29.3	30.5	27.7	27.2	27.7	27.7	27.2	26.6	150
155	3.3	5.1	7.3	10.3	13.9	15.6	17.4	20.3	24.0	25.3	26.9	27.4	28.7	25.5	25.0	25.6	25.8	25.4	25.0	155
TW@TWS	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	TW@TWS
TW@TWS	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	TW@TWS
UP VMG	5.22	7.44	9.46	10.58	13.05	15.09	16.62	17.73	18.3	18.1	18.85	18.93	18.69	17.71	16.65	15.65	14.45	13.14	11.99	
UP ANGLE	53	50	48	47	45	45	45	45	45	44	45	45	45	48	50	50	50	50	50	
TW@TWS	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	TW@TWS
DN VMG	6.0	10.1	13.0	16.6	20.6	23.9	25.3	27.5	30.0	30.5	31.0	30.8	30.4	28.4	27.9	28.1	27.9	27.2	26.6	
DN ANGLE	132	132	134	135	136	136	137	140	144	145	147	148	150	148	148	149	149	150	150	