P H R F - N B

P H R F - N B STANDARD ADJUSTMENTS GUIDELINES, SUBJECT TO THE INDIVDUAL BOAT SITUATION

1. GENOA SIZE

A.

LP% Lower Limit	LP% Upper Limit	Spinnaker Adjustment	Non-Spinnaker Adjustment
167.1	170	- 5	- 5
164.1	167	- 4	- 4
161.1	164	- 3	- 3
158.1	161	- 2	- 2
155.1	158	- 1	- 1
151.1	155	0	0
148.1	151	+ 1	+ 1
145.1	148	+ 2	+ 2
142.1	145	+ 3	+ 3
139.1	142	+ 4	+ 4
136.1	139	+ 5	+ 5
133.1	136	+ 6	+ 6
130.1	133	+ 6	+ 7
127.1	130	+ 6	+ 8
124.1	127	+ 6	+ 9
121.1	124	+ 6	+ 10
118.1	121	+ 6	+ 11
Less than 118%	118	+ 6	+ 12

B. Cruising Headsail + 6
Roller Furling Hdsl + 3

2) MAINSAIL

Standard 0

Oversize Mainsail Girths: For mainsails whose girths are greater than IMS standards, or greater than one design class rules, or for a change in size for a custom boat, ratings will be adjusted as follows: (% increase is the sail area increase as a percentage of P x E/2; e.g., boat with a P of 50 ft and E of 15 ft increases his mainsail girths which adds 25 sq ft. , his % increase = 25/50 X 15/2) x 100% = 6.7% for a -2 sec/mile adjustment.

% Increase	Adjustment Sec/mile
.1 % to 4%	- 1
4.1 to 8%	- 2
8.1 to 12%	- 3

12.1 to 16%	- 4
16.1 to 20%	- 5
etc.,	

E Changes: 3 sec/mile for every 15% of E P Changes: 50% of mast height adjustment

Hollow Leach +6

3) OVERSIZE SPINNAKER/SPINNAKER POLE/ASYMMETRICAL SPINNAKER

SPL	Sec/mile	SPL	Sec/Mile
up to 101%	0	111+ to 114%	- 4
101+ to 104%	- 1	114+ to 117%	- 5
104+ to 107%	- 2	117+ to 121%	- 6
107+ to 111%	- 3	etc.	etc.

3A) ASYMMETRICAL SPINNAKERS

1. For yachts who will use only an asymmetrical spinnaker tacked to the bow on the centerline
   i.e., no spinnaker pole or no symmetrical spinnaker with pole + 9
2. Oversize poles or bow sprits - see #3 above Variable

3B) ISP ADJUSTMENT

Spinnaker halyard height (ISP) greater than I -3 per 8% increase

4) MAST HEIGHT (Based on I)

Up to 101% of standard	0	107+-109% of standard	- 12
101+-103% of standard	- 3	109+-111% of standard	- 15
103+-105% of standard	- 6	111+& >% of standard	- 18
105+-107% of standard	- 9		

"I only" adjustments: 50% of mast height

5) PROPULSION

Position	No. of Blades	Type	Sec/Mile
Aperature	3	Solid	+ 6
Aperature	2 or 3	Feathering/Folding	- 3
Exposed to flow	2 or 3	Feathering/Folding	0
Exposed to flow	2	Solid	+ 6
Exposed to flow	3	Solid	+ 12
Sail Drive	2 or 3	Solid/Folding	Var
None/Insufficient	---	---	- 3
Outboard	2 or 3	Solid	0

6) MISCELLANEOUS

Other adjustment to base ratings may be made for modifications to hull or rig:

No Adjustment	0	Keel	Var
Other combinations	Var	Water Ballast	Var

Non Spinnaker Adjustment

** Compute Main SA/Genoa SA by $\frac{P \times E}{I \times J}$

** Adjust Spinnaker Rating by following to obtain Non Spinnaker Rating

Main/Genoa	Adjustment Sec/Mile
.50 + - .60	24
.60 + - .70	23
.70 + - .80	22
.80 + - .90	21
.90 + - 1.0	20
1.0 + - 1.1	19
1.1 + - 1.2	18
1.2 + - 1.3	17
1.3 + - 1.4	16
1.4 + - 1.5	15
1.5 + - 1.6	14
1.6 + - 1.7	13
1.7 + - 1.8	12
1.8 + - 1.9	11
1.9 + - 2.0	10
2.0 + - 2.2	9
2.2 + - 2.4	8
2.4 + - 2.6	7
2.6 + - 3.0	6
3.0 + - 3.4	5
3.4 + - 4.0	4
4.0 + - 5.0	3
5.0 + - 6.0	2
6.0 + - 7.0	1
> 7.0	0

NON-STANDARD ADJUSTMENT GUIDELINES

GUIDELINES, SUBJECT TO THE INDIVDUAL BOAT SITUATION

MISCELLANEOUS

1. LWL CHANGES FOR SIMILAR BOATS:

PHRF = .80 (PHRF +550) (- 1) LWL = LWL for Boat 1
or appoximately as follows: LWL = LWL for Boat 2

Boat size (LWL):	20	22	25	27	29	31	33	36	42	(ft)
/ ft :	14	12	11	10	9	8	7	6	5	sec/mi for each ft of LWL

For example: If a new boat is similar to a J-40 (LWL of 35'), but has a LWL of 36', we would give it a rating 6 sec/mile faster than the J-40.

2. DISPLACEMENT CHANGES:

5 sec/mile for every 1000 lbs, or approximately 10% of displacement ie., 800 lbs increase for 8000 lbs of displacement = +5 sec/mile.

3. KEEL/DRAFT CHANGES:

Shallow Draft 6-12 sec/mile Centerboard 6-9 sec/mile
Iron vs Lead 3 sec/mile Daggerboards 0 sec/mile

Adjust +3 sec/mile for every .5 ft of draft delta
For example - a boat which has a draft of one foot less than normal would receive a delta of +6 sec/mile.

4. WATER BALLAST:

-1 sec/mile for every 1% of displacement of water ballast i.e., 800 lbs of water ballast for a J-35 (10,000 lbs of displacement) = - 8 sec/mile.