

DRYA RATINGS

HOW TO APPLY FOR ONE, HOW WE DETERMINE THE
RATING, AND HOW TO OBTAIN A REVIEW

PHRF EXPLANATION WHAT IS PHRF

THE APPLICATION

THE RATING CERTIFICATE

THE REVIEW FORM

THE APPEALS FORM

RATING SYSTEMS

WHAT IS PHRF

- PHRF or Performance Handicap Racing Fleet Ratings

RATING SYSTEMS

WHAT IS PHRF

International Sailing Federation (ISAF)

- Founded in October 1907
- Originally as The International Yacht Racing Union
- Governing Body of Sailing
- More than 130 Nations as members
- Our USSail is the US member
- Yacht slips 2.2m worldwide, 800k in US alone

RATING SYSTEMS

WHAT IS PHRF

Three major rating rules

- Royal Ocean Racing Club IRC Rule 7325 members
- Offshore Racing Council ORR Rule 7600 members
- Performance Handicap Racing Fleet PHRF Rule 60-70,000 in the US alone
- Tonight we will only cover PHRF

RATING SYSTEMS

WHAT IS PHRF

- Yachts are like People
- Both have been made for centuries
- People have changed – Genetics, Diets, Life styles, Medicines, Larger and Taller
- Boats have also changed – Materials, Designs, Sails, Knowledge and Technology

RATING SYSTEMS

WHAT IS PHRF

- There are some 5600+ different yachts in our data base
- All shapes and sizes, ages spanning 80+ yrs and condition
- Similarly we have some 6 billion people around today
- Again all sizes and shapes, small and large, huge variation in age and condition

RATING SYSTEMS

WHAT IS PHRF

- People



- Yachts

- Brain

- Skipper

- Lungs

- Sails

- Legs

- Bottom Preparation

- Body condition

- Boat in racing shape

- Body coordination

- Crew work

RATING SYSTEMS

WHAT IS PHRF

- Consider if I put you all in a one mile race, same starting line?
- What do you think the results would be?
- Would everyone finish the same time?

RATING SYSTEMS

WHAT IS PHRF

- Yachts would be no different
- The results would be all over the chart. Some would finish before the others were halfway

RATING SYSTEMS

WHAT IS PHRF

- End Result
- For each and every yacht we need a fair handicap so it can compete on a level with all others
- A DRYA PHRF Handicap

RATING SYSTEMS

WHAT IS PHRF

- Premise of PHRF
- A fair rating that is based on a standard configuration that gives each competitor an equal chance to win
- Getting a PHRF rating

RATING SYSTEMS

THE APPLICATION

- **2015 MEMBERSHIP RENEWAL & YACHT REGISTRATION** **Registrations DUE FEBRUARY 21, 2015**
- Email (verify): _____
-
- Name _____ Club Affiliation: _____
- Address _____ City _____ State _____ Zip _____
- Home Phone: _____ Bus. phone _____ Cell _____ Fax _____
-
- *Check if **DO NOT** want data on member only web site.*
-
- YACHT DATA Sail #: _____
-
- Yacht: _____
-
- Design: _____
-
- Co-owners: (1) _____
-
- REFER to descriptions of the **Membership Categories** and **Rating & Certifications**.
-
- **Membership DUES Note:** Since D.R.Y.A. is a 501(c)3 charitable organization, DUES and DONATIONS (not Registrations, Certs or other charges) are tax deductible in accordance with provisions of the IRS Code.
- Sustaining.....\$ 55 USD _____
- Junior.....\$ 25 USD _____
- Collegiate..... **MCSA Member#:** _____ **Expiration:** _____ \$ 25 USD _ Associate
-\$ 55 USD _____
- Provisional\$ 55 USD _____
- **Supplemental Membership DUES Levels (ADDITIONAL cost to Membership level above)**
- Contributing Member.....\$165 USD _____
- Family Member.....\$ 25 USD _____

RATING SYSTEMS

THE APPLICATION

YACHT DESIGN Catalina 30 BS TM SD

ABBREVIATIONS

AC	Aft Cockpit	KTH, KET	Ketch
BS	Bowsprit	LK	Lead Keel
CAT	Cat Rig	MH	Mast Head Rig
CB	Centerboard	MS	Motor Sailor
CC	Center Cockpit	PH	Pilot House
CF	Carbon Fiber	SCH	Schooner
CUT, CTR	Cutter	SD	Shoal Draft
CWS	Central Winch System	SK	Swing Keel
DB	Dagger Board	SLP	Sloop
DK	Deep Keel	SM	Short Mast
FG	Fiberglass	T	Ton
FK	Fin Keel	TK	Twin Keel
FR	Fractional Rig	TM	Tall Mast
IK	Iron Keel	WD	Wood
IB	Inboard	WK	Wing Keel
K	Keel	VTM	Very Tall Mast

RATING SYSTEMS

The Application

- 2015 DRYA PHRF HANDICAP MEASUREMENTS
- Each boat owner requesting a PHRF rating must complete this application with all data printed and signature affixed.

- Submit to the DRYA office with the any current non-DRYA Certificates, ORR Certificate and Sail Certificates

- TO REGISTER FOR DRYA RACING: Check one racing class: OD ____ PHRF ____ CRUISING ____ JAM
- and one configuration: Spin ____ Asym ____ JAM ____

SAIL PREFIX SAIL NO YACHT NAME _YACHT CLUB AFFILIATION

DESIGN HULL# YEAR_

DIMENSIONS (MEASURED)

LOA LWL BEAM DRAFT DISPLACEMENT I Is J P

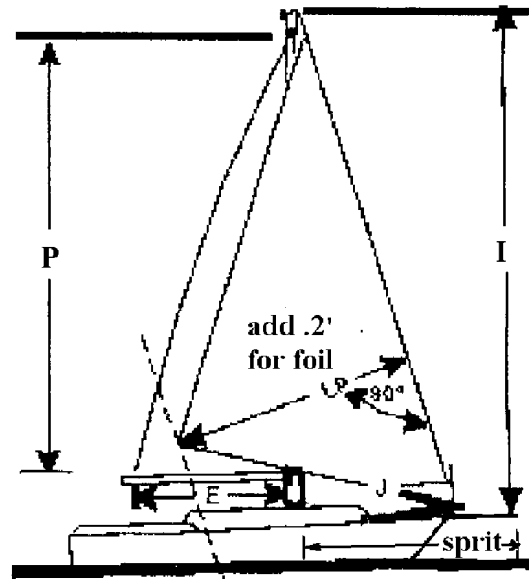
E SPL/Sprit

MAST (Check material) ALUMINIUM CARBON OTHER NUMBER OF SPREADER PAIRS 1

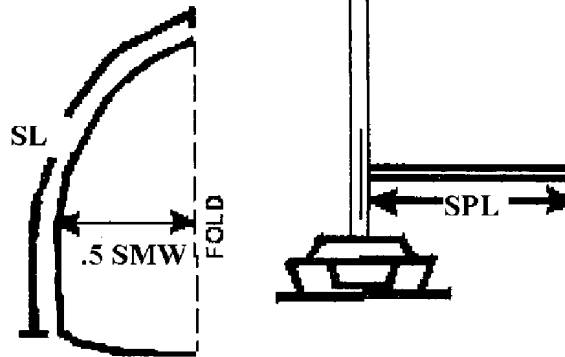
2 3 or more

Rating Systems

ASSUMPTIONS CONT'D



SMW MEAS



RATING SYSTEMS

The Application

SAIL MEASUREMENTS
GENOA LP

PROVIDE CERTIFICATES
MG

LARGEST #1

LARGEST SPINNAKER
AREA

SL

SMW

SMG

SFT

LARGEST ASYM
ASMG

ASFT

ASLU

ASLE
AREA

ASMW

CODE ZERO
ASFT

ASLU

ASLE

ASMG

YEAR FIRST USED
AP SPIN

MAIN
LARGEST ASYM

LT#1

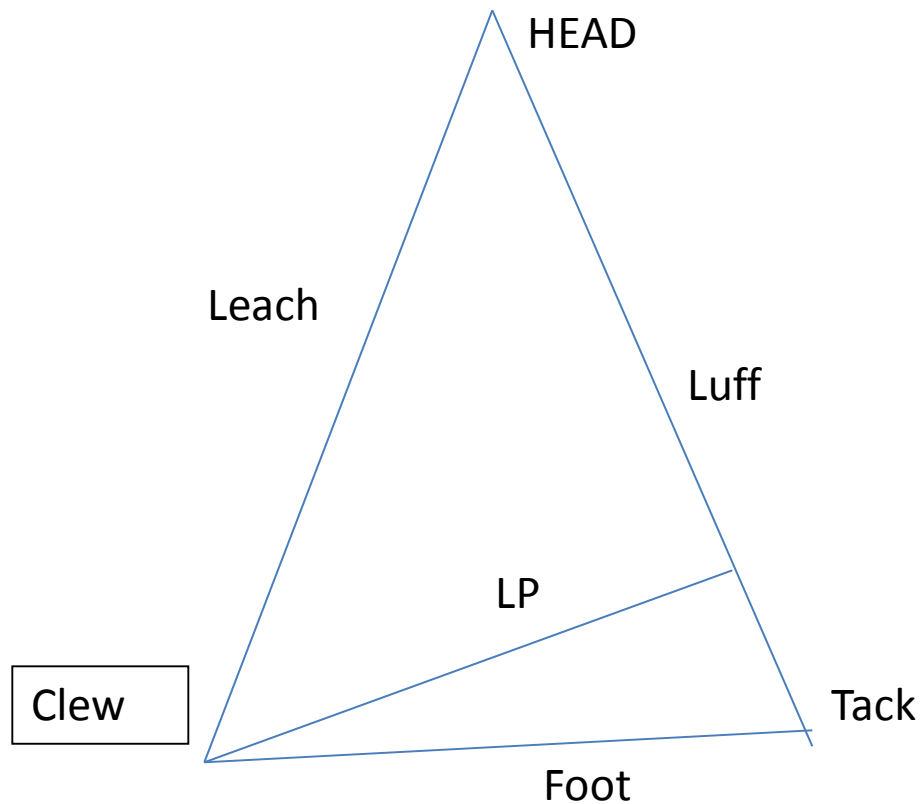
HVY #1
CODE ZERO

LT SPIN

Rating Systems

The Application

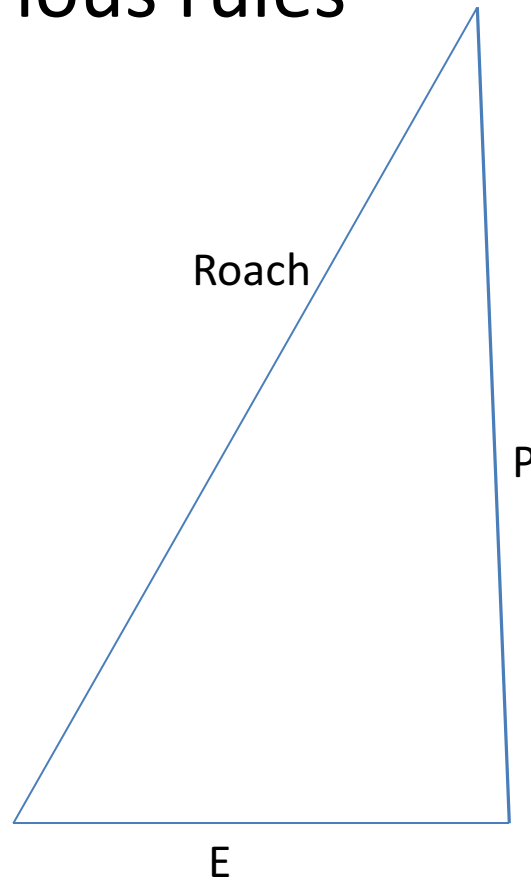
- Jib or Genoa $LP=1.55*J$ Max without penalty



Rating Systems

The Application

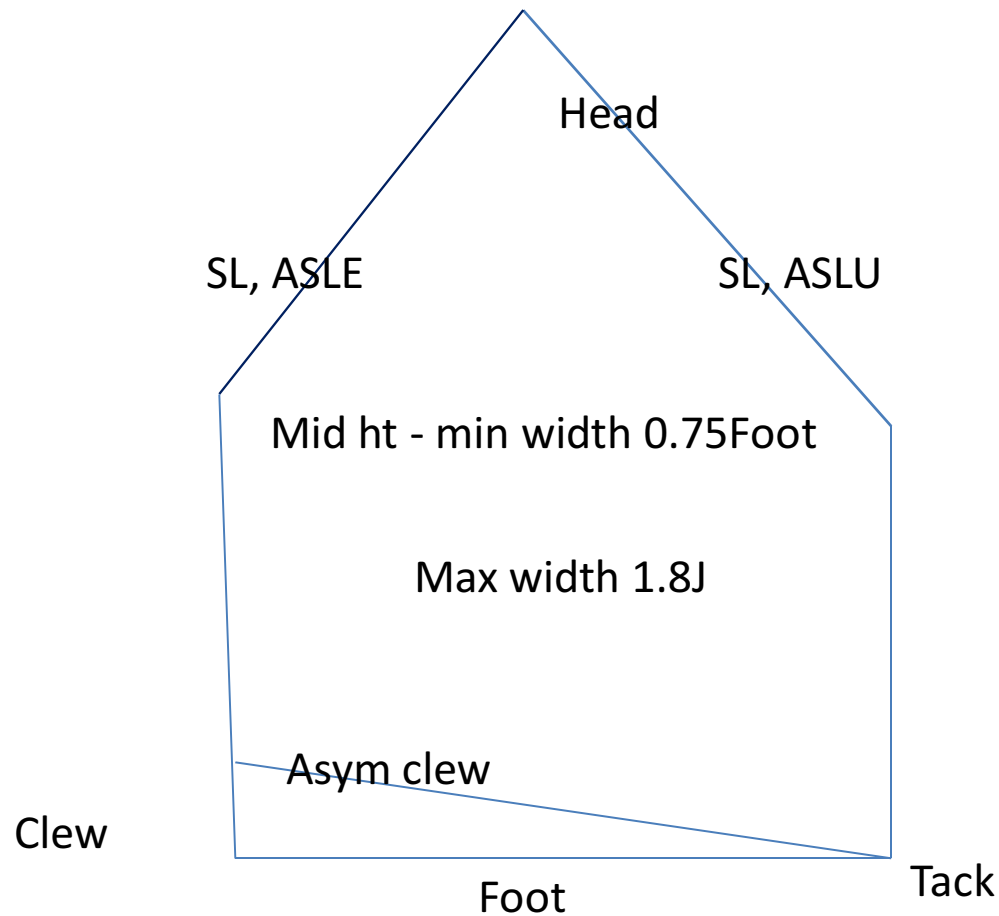
- Mainsail – Various rules



Rating Systems

The Application

- Spinnakers - Various rules



RATING SYSTEMS

The Application

- VARIABLES ENGINE; INBOARD EXP SHAFT OUTBOARD SAIL DRIVE
-
- PROP TYPE; FOLDING FEATHERING SOLID 2 BLADE SOLID 3 BLADE IN APERATURE
DIAMETER
-
- RUDDER; ATTACHED SKEG SPADE OTHER
-
- TYPE OF KEEL; FIN FIN + BULB TURBO FULL CB SHOAL DAGGER BOARD
KEEL BALAST MAT.
-
- ROLLER FURLER JIB YES NO IF YES MODEL MAKE AND NUMBER HEIGHT OF TACK
ABOVE DECK
-
- ROLLER FURLER MAIN YES NO IF YES IN MAST IN BOOM BATTENS HORIZ VERT
-

RATING SYSTEMS

The Application

- Have any modifications, extra gear been added/or removed since manufacture? Please outline below.
-
-
- Review DRYA Handbook Section 15 on www.drya.org for details on measurements and handicapping rules.
-
- **I UNDERSTAND THAT IT IS THE OWNER'S RESPONSIBILITY TO NOTIFY THE HANDICAP COMMITTEE ABOUT ANY CHANGES IN THE BOAT OR ITS EQUIPMENT. I HAVE READ THE SECTION 15 RULES AND WILL COMPLY WITH THEM.**
-
-
- Owner: PRINT Name _____ Signature _____ Date _____

RATING SYSTEMS

The Application

- Detroit Regional Yacht-Racing Association Application for All Credits Offered By DRYA in 2015
- **Yacht Name** _____ **Design** _____ **Sail #** _____
- **Credit for Roller Furling Genoas (RFG Credit)**
- I wish to apply for the roller furling genoa credit of +6 or +3seconds.
- To be eligible to apply for a credit, the owner must agree that the boat will carry on board only two
- (2) headsails with a LP greater then 110%. All provisions of Section 15 must be met.
- Each roller furling headsail shall be measured and marked by the sail maker for compliance and an easily visible **green**
- colored sticker applied, within one foot of the clew.
- Make and model number of Roller Furler _____ Height of new tack point above the deck _____ Measurements L-luff and JLL. See Sect.15.11 _____
- **Credit for Cruising Roller Reefing Genoa (CRRG Credit) Woven Dacron sail w/ UV protection**
- I wish to apply for the cruising roller reefing genoa credit of +9 seconds.
- To be eligible, boats applying for the cruising roller reefing credit shall use one and only one roller reefing headsail >110% for the entire racing season. All provisions of Section 15 must be met.
- Note: This credit will not be automatically applied to the race rating. It will be voted on by the HRB on a boat-by-boat basis. When this is not practical, the chief handicapper will have the authority to approve or disallow this credit.
- Each roller furling headsail shall be measured and marked by the sail maker for compliance and an easily visible **orange**
- colored sticker applied, within one foot of the clew
- Additionally, CRRG Cruising boats may only carry one asymmetrical spinnaker on board for the entire racing season. The use of a spinnaker pole is not allowed.
- Make and model number of Roller Furler _____ Height of new tack point above the deck _____ Measurements L-luff and JLL. See Sect.15.11 _____
- **Roller Furling Mainsail Credit (RFM Credit)**
- I wish to apply for the roller furling mainsail credit of +6 to +12 seconds. Units in feet.
- P _____ E _____ Roach
- Yes No Hollow Leach Yes No Battens Yes No
- To receive this credit, you must submit a sail certificate and comply with all provisions of Section 15.
- **Fixed Blade Propeller Credit**
- I wish to apply for the Fixed Blade Propeller credit. Circle one. _____ 2-Blade up to 9 seconds Diameter _____ Pitch _____
- _____ 3-Blade up to 15 seconds Diameter _____ Pitch _____
- To receive this credit, you must comply with the following: 1 – The boat uses the fixed bladed propeller all the time
- 2 – The propeller conforms to dimensions established by the manufacturer for that boat and submit a photograph of the installation.
- **Bow Thruster Credit**
- I wish to apply for the Bow Thruster Credit
- The HRB will assign a credit based on the information supplied. To receive this credit you must comply with the following:
- Supply the opening dimensions at the face of the hull and a photograph of the installation

RATING SYSTEMS

The Application

Now we have your complete application

What do we do with it??

RATING SYSTEMS

The Certificate

- Performance based data bases - USSAIL
- Velocity Prediction Programs
- Polar diagrams
- Comparison to Measurement Systems
- All yachts and sails are measured
- Rules and Assumptions

RATING SYSTEMS

The Certificate

- All data is by BASE rating
- USSail Data Bases – 60+ years of data
- Yacht Rig and data files – Sets standard
- USSail PHRF handbook - Ratings by area
- USSail High Low Mean Rating data base

RATING SYSTEMS

The Certificate

- The following applies to all three USSail data bases
- Covers some 5600 yachts in the USA
- Updated on an annual basis in January
- USSAIL ratings by local jurisdictions and includes local rules for wind and type of racing
- Specific assumptions for design basis

RATING SYSTEMS

The Certificate

USSAIL DATA BASE ASSUMPTIONS

- CONSISTENCY
- THE BOAT IS IN RACING CONDITION – INCLUDES SKIPPER AND CREW
- THE HULL AND APPENDAGES ARE UNMODIFIED
- THE BOAT HAS A FOLDING OR FEATHERING PROP OR RETRACTABLE OB
- THE SPINNAKER POLE LENGTH EQUALS J
- THE GENOA LP IS NO GREATER THAN 155% OF J
- THE SPINNAKER MAX WIDTH IS $1.8 * J$ AND MAX LENGTH SL IS $.95 * (I^2 + J^2)^{1/2}$

RATING SYSTEMS

The Certificate

USSail Rig & Boat Data

- **TYPE/CLASS I J P E DSPL WL KLDR CB DR PROP UPDATED ON**
- MORGAN 38 45.00 14.70 38.50 16.00 16000 28.00 3.80 8.30 APRTR 7/28/1995
- MORGAN 38 TM 28.00 3.80 8.30 APRTR 7/28/1995
- MORGAN 38-2 46.00 16.30 40.50 14.50 17000 30.50 5.00 APRTR 7/28/1995
- MORGAN 38-3/4 50.00 16.30 42.50 13.00 18000 30.50 5.00 APRTR 7/28/1995
- MORGAN 38-5 WK 50.50 14.67 42.17 15.67 17500 32.42 5.00 EXP 7/28/1995
- MORGAN 391 49.75 16.25 43.42 14.58 20000 30.50 505.00 EXP 8/10/1995
- MORGAN 40 KTH 47.00 14.80 40.30 14.60 22000 30.00 4.20 APRTR 7/28/1995
- MORGAN 41 49.50 15.90 43.50 17.50 19500 30.00 4.20 9.40 APRTR 7/28/1995

RATING SYSTEMS

The Certificate

● * **MORGAN 41CB** USSail PHRF Rating by Area

• CHESAPEAKE 132 C 05 3

• DETROIT	132	C	0	1
• EAST COAST CRS	132	A	97	0
• FLORIDA SUNCOAST	126	A	98	1
• HALIFAX	131	B	07	1
• LAKE ERIE	138	B	05	1
• LAKE MICHIGAN	132	B	06	1
• MID ATLANTIC	126	C	97	0
• NARRAGANSETT BAY	132	A		0
• NEW ENGLAND	126	C		0
• NORTH CAROLINA	138	C	04	1
• PUERTO RICO	129	C		1
• SE FLORIDA	138	C	88	1
• SOUTH BAY CR	140	C	08	1
• YRALIS	144	C	08	1

RATING SYSTEMS

The Certificate

USSail PHRF Low,High,Mean Ratings

• MORGAN 38	138	156	150
• MORGAN 38-2	132	150	141
• MORGAN 38-3/4	132	147	138
• MORGAN 38-5 WK	120	150	135
• MORGAN 40 KTH	168	183	174
• MORGAN 41	126	144	129
• MORGAN 41 CLASSIC	132	198	165

RATING SYSTEMS

The Certificate

BASIS FOR A RATING

- Measurement of boat and rig
- Sail certificates – all sails – use largest
- Configuration to be sailed - spinnaker or jam
- Any current certificates from other rating areas
- Polar diagrams or other info
- ORR rating certificates

RATING SYSTEMS

The Certificate

- Using the USSail data bases we can establish a base rating for the yacht
- We can verify the rating through Measurement Rules eg ORR
- If it's a brand new Yacht we have a slight problem – not in the data base
- Verify the rating through Polars, VPP or other Country Data bases or available race data

RATING SYSTEMS

The Certificate

- Base hull speed without planing $=1.34 * LWL^{0.5}$ the longer the waterline length the faster the yacht
- If enough power is applied you will go faster, the yacht will plane
- Engine power versus Sail power SA/D
- Stability

RATING SYSTEMS

The Certificate

- VELOCITY PREDICTION PROGRAMS
- STABILITY FACTORS
- $VPP(\text{sec/nm}) = \text{FACT} * 6176 / ((0.7 * \text{loa} + 0.3 * \text{lwl})^{0.5} * (\text{SAD})^{0.25})$ (units are feet and pounds)
- $RPP(\text{sec/nm}) = VPP - 400$
- where $\text{SAD} = ((I * J) / 2 + (P * E) / 2) / (\text{displacement} / 64)^{0.66667}$
(64lb is the weight of a cubic foot of seawater)

RATING SYSTEMS

The Certificate

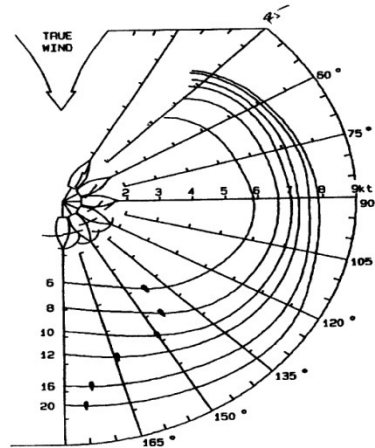
- Polars C&C35

small polar.jpg (JPEG Image, 1024x800 pixels) - Scaled (73%)

http://members.shaw.ca/parmesanshif/images/small_polar.jpg

C&C35

VTW	BEAT	RUN
4	3.8	142
8	5.4	144
10	5.9	150
12	6.1	164
14	6.2	170
16	6.2	173
20	6.3	173



1/3 beat, 1/3 reach, 1/3 run. Compute speeds from curves 8, 12 kts calculate the handicap for each, average and then combine for the overall handicap.

RATING SYSTEMS

The Certificate

Credits and Penalties

- Credits

Roller Furler Genoa Systems

Roller Furler Main Systems

Fixed blade Propellers

Bow thrusters

RATING SYSTEMS

The Certificate

- Penalties

Oversize sails or don't meet the rules

Oversize poles > J dimension

Rig modifications

Hull changes

Weight changes

RATING SYSTEMS

The Certificate

- Using the preceding info we establish a Base Rating
- Adding the credits and subtracting penalties from the base we arrive at a Race Rating (full spinnakers etc)
- From the Race Rating we apply an Offset to arrive at an Cruising or JAM rating
- Each yacht then has a base and 3 race configuration ratings
- New yachts will have T ratings
- Annual cost \$25-45/certificate

Rating Systems DRYA Certificate



Detroit Regional Yacht-racing Association

Organized 1912 - Incorporated 1992

23915 Jefferson, Suite 1, St Clair Shores, MI 48080

Albretz Yacht Club - Anchor Bay Yacht Racing Assoc. - Bayview Yacht Club - Crescent Sail Yacht Club - Detroit Boat Club - Detroit Sail Club
Detroit Yacht Club - Doublehanded Sailing Assoc. - Edison Boat Club - Ford Yacht Club - Greyhaven Sail Club of Detroit - Great Lakes Yacht Club
Great Lakes Singlehanded Soc. - Grosse Isle Yacht Club - Grosse Pointe Club - Grosse Pointe Sail Club - Grosse Pointe Yacht Club
Harbor Club North - Lake Shore Sail Club - North Star Sail Club - Port Huron Yacht Club - Sailing Singles - Sarnie Yacht Club - Southport Sailing Club
St. Clair Yacht Club - Storm Trysail Club - Thames River Yacht Club - Toledo Yacht Club - Windsor Yacht Club

COM DAVID SPIERS
3403 SUMMIT RIDGE DR
ROCHESTER HILLS, MI 48306

Valid for: 2011

SAIL# 6846 YACHT: IRISH MIST DESIGN: MORGAN 41 CB

Racing Rating **138** ASYM **144** JAM **150**

BASE RATING 132 PENALTIES: 6RFG11

RIG DATA	I	IS	J	P	E	SPL	SL	SMW	LP	rf	luf	rf	JL
USSA STD:	49.50	49.50	15.92	43.50	17.50	15.92						50.87	47.13
MEASURED:	49.72	49.50	15.90	43.50	17.46	15.85							
PERCENT:	100.44	99.56	100.00	100.00	99.77	99.56			150.75				92.64
PENALTIES:	0	0	0	0	0	0	0	0	0				

P KEEL: 0 P HULL: 0 P_MISC: 0 CREDIT_PROP: 0 CREDIT_RFG: 6 RF MAIN: 0

BOAT DATA BUILD DATE: 1969 P_TOTAL 6

LOA	LWL	BEAM	DRAFT	DISPL	PROP	KEEL	ENG
MEASURED:	41.00	30.00	11.25	4.17	20000	FEATHERIN	CENTERBOARD INB
USSA STD:		30.00	11.25	9.40	19500	APRTR	

SAIL DATA

ASYMETRICAL SPINNAKER

LUFF: 52.20 LEECH: 47.10 FOOT: 27.80 ASMG 28.30 ASMW: 28.60

AS ERROR

IB.MG:

Year Sail MAIN: 08 LT/MED #1: HVY #1: 10
first Used: .5/6 SPIN: 88 .75/8 SPIN: ASYM SPIN: 09

VPP DATA	VPP:	SAD:	DISPL LWL:	FACT:	IS+SPL VPP:	IS+SPL SAD	IS+SPL FACT:
	97	16.84	330.69	1.071	97	16.80	1.071

Yacht must be raced in above configuration for this certificate to be valid.

Notification of changes in rig, sails, sail ages, and yacht modifications is required as specified in Section 15 of the DRYA Handbook. Copies of Section 15 may be obtained on the DRYA web page or from the DRYA office. If any of the above data are incorrect or incomplete please send a corrected copy to the DRYA office as soon possible. A valid certificate will then be made available to you.

David Spiers: Chief Handicapper:

4/26/2011

Rating Systems

Valid List

"Find ways to share our sport. Invite a guest sailing."

DETROIT REGIONAL YACHT-RACING ASSOCIATION

2012 PHRF VALID LIST by Handicap as of 02-11-2012

If more information is desired it can be found in the Certificates on the internet at drya.com.

	SAIL	DESIGN	YACHT	LAST	CLUB	Hcp-S	Jam	Asym	Base	DRYA Config	Penalties	Credits:
PRF	38	R BOAT	BERNIDA	DECLERCQ	BYC	-15	0	0	0			
IRC A	40025	FARR 40 ODR	SOLUTION	FRANCIS	BYC/GPSC	-9	12	6	0		-9SPL & IS	
PRF				LUCIDO		0	0	0	0	J		
prf	5252	TP 52J/V	NATALIE J	O'NIELL III	BYC	0	0	0	0	S		
PRF 1	45151	NELSON MAREK SHY	C SPRAY	CAMERON	NSSC	0	24	18	6		-12SPL 6RFG12	
PRF	35009	ID 35	CHICO 2	WEYAND	BYC	26 T	38	32	36	A	-10rig/sails	
IRC A	35999	MUMM 36 ODR	VANGUARD	GORAN	GLYC	42 S	54	48	42			
J120	25329	J 120 AL ODR	IHNSANITY	IHNEN	CSYC	48 OD	60	54	48			
J120	25999	J 120 AL ODR	NIGHT MOVES	MISTELE	BYC	48 OD	60	54	48			
J120	50666	J 120 CF ODR	JAYHAWKER	SANDLIN	LSSC	48 OD	60	54	48			
PRF 1	23	MUMM 30 ODR	THE RED BOAT	VERMEULEN	DYC	54 T	66	60	54	S		
PRF 1	25475	BEN 40.7	NORTHERN SPY	STEIGENGA	DYC	54	66	60	54	S		
PRF 1	35427	BEN 42s7FRMHKites	EPIC	ADAMS	BYC	54 S	66	60	54	S		
IRC B	31377	SERENDIPIDY 43	BLITZ	SOUTAR	BYC	60	72	66	60			
IRC B	50250	SR 33 (C&C)	CHEAP SISTER	MAC PHERSON	CSYC	69 S	81	75	69		-6IS, -3OB	
PRF 1	25161	J 35	STEELIN GOLD	WHITE	PHYC	72	84	78	72	S		
IRC B	25633	C&C 41	TITAN	AITKEN	BYC	72	84	78	72			
PRF 1	33599	C&C41	COVERT	RYZYI	BYC	72	84	78	72	S		
PRF 1	43940	TRIPP 36	AFFIRMED	GEISZ	CSYC	72	84	78	72	S		
PRF 1	69311	J 35	GRIFFIN	HUNEKE	PHYC	72	84	78	72			
BEN 36.	143	BEN 36.7	MANITOU	BURKE	BYC	78 OD	90	84	78			
J105	406	J 105	SNAKE OIL	HARTHORN	LSSC	78	90	84	78		OD=87	

RATING SYSTEMS

Scoring

- What a rating means – scratch boat
- How a rating is used to score a race
- Time correction factors
- Time on distance and time on time

RATING SYSTEMS

Scoring

- TCF
- $TCF = 650 / (550 + \text{PHRF rating})$
- TCF = 1.00 in the middle of the fleet

RATING SYSTEMS

Scoring

- Time on Distance TCF factor

Here the elapsed time of a boat to finish the race minus the distance multiplied by the TCF factor give me the corrected time. The boat with the lowest corrected time is the winner. TOD is used by the majority of racing areas

RATING SYSTEMS

Scoring

- Time on time TCF factor

Here the elapsed time to finish the race is multiplied by the TCF to get the corrected time for each yacht. The yacht with the lowest corrected time is the winner. TOT is used when the rating spread of the fleet is large and the winds variable.

- Either system rarely changes the finishing order of the yachts

RATING SYSTEMS

Scoring

- Race Results TOT

Boat	Rating	TCF	Elapsed time	Corrected time	Place
J34	120	0.960	1:14:05	1:11:08	1
F3	102	0.986	1:13:04	1:12:04	2
Isl36	144	0.927	1:17:44	1:12:05	3

- Race Results TOD

J34	120	0.960	1:14:05	1:06:05	2
F3	102	0.986	1:13:04	1:04:16	1
Isl36	144	0.927	1:17:44	1:08:08	3

RATING SYSTEMS

Reviews

- Using race data to evaluate your rating. Races within the wind range 8 – 12kns
- Comparison with the boat in second place
- Number of seconds out of second place is the basic guide
- Discard results greater than 40 seconds. You had a bad day.
- Honest evaluation of how well did you perform. On the line within 10 seconds of the gun, how were my tacks and gybes, did I get all the wind shifts etc.

RATING SYSTEMS

Reviews

- Boat performance TOT 4nm race

Boat	Rating	TCF	Elapsed time	Corrected time	Sec/nm from 2nd
J34	120	0.960	1:14:05	1:11:08	-14
F3	102	0.986	1:13:04	1:12:04	0
Isl36	144	0.927	1:17:44	1:12:05	1/4

RATING SYSTEMS

Reviews

DRYA PHRF Review Board Handicap Rating Review form, Section 15.16 Submit this form and any supporting materials by Dec. 1 to:

Chief Handicapper, DRYA 23915 Jefferson, Suite 1, St. Clair Shores, MI 48080

Fax: (586) 778-1000 or email (preferred method): theDRYA@drya.org or spiersdjam@gmail.com

Sail No: 148 Boat Name: Ariel Design:

Tartan33

Owner/Skipper's Name: Mark W. Aitken Daytime Telephone No:

(313)310-5450

Address: 49364 Limestone Dr, Macomb, MI 48044 Evening Telephone No: (313)310-5450

Date Submitted: 11-30-14 Owner/Skipper's email: aitkenm@dteenergy.com

Submitted by: Mark W. Aitken (owner) Daytime Ph # Email

Boat Data:

Boat Design: Tartan 33 Current Base Rating: 159 Current Race Rating: 171 ASYM

Current Penalties and/or Credits: 6RFG14

Requested Base Rating: 168 Requested Race Rating: 180

Penalties from the DRYA Handbook Section 15.12 that should apply:

Credits from Sect 15 that should apply:

Summarize reasons for rating request: Ariel does not perform to polar diagrams especially to weather.

She does perform fairly close off the wind more than 75 degrees true. I think that the combination of
the shoal draft keel and the fractional rig affects her pointing ability more than anticipated by the models
especially in lighter winds.

RATING SYSTEMS

Reviews

Racing Data:

How many races & where did the boat under review participate in over the last two years? DRYA-16 2014 WYC- 8

How many races in the last two years did the boat finish in First? 0 Second? 0
Third? 1

How many did the boat finish last in its class in the last two years? DRYA-2 2014 WYC-4

If the boat had the requested rating last two years, how would it have affected the boat's top 3 finishes? no

It would only have changed one race from 8th to 7th.

Identify the two local boats you feel closest in overall speed to the boat under review? Next fastest? Albacore

What rating does that boat have? 174 Next slowest boat? ZubeneIgenubi

What rating? 192

Experience of the Person Submitting:

How many years have you sailed? 22 yrs How many years & where have you raced? 18 yrs. in lake St. Clair

What other types of boats have you raced, if any? Catalina 27, Flying Scotts,

Describe your performance in other types of boats: Did not do well in Cat 27 because just started learning, Flying Scott club

Champion. Winner of commodores Club oil can in 2002.

- **Other:** Describe any additional information you think is relevant and attach copies on any supporting material:

RATING SYSTEMS

Appeals

DRYA PHRF Review Board

HANDICAP RATING APPEAL form, Section 15.17

Submit to the DRYA office as described in Section 15.17 of the DRYA Handbook with a check for \$35. The yacht rating being appealed must have been reviewed according Sect 15.16 to be eligible for this Appeal process. The Owner/Skipper must make appeals, only. The Chief Handicapper may modify schedule.

Appeal / Review Request Submitted By:

Owner/Skipper: Jim Weyand Address: 29299 Franklin Road City, State, Zip: Southfield, MI 48034

Phone Number: Day 586-201-5985 Evening 586-201-5985 Fax Number: 248-544-7155 Email Address: jweyand@computerdata.com

Signature:

The above signature attests and acknowledges that all of the information relating to the DRYA PHRF appeal process has been read and understood, the appellant's boat has not been modified since the date the handicap under appeal was last assigned, and that the appellant agrees to abide by the decision of the hearing committee for a period of no less than two years from the date of decision.

Please provide as much information as possible on the boat you are appealing

Information on the Boat being appealed:

Boat Name & Sail Number: Chico 2 USA 35009 Design (Make / Mfg): 1D35 - Carroll Marine Date Manufactured: 1988 Length (Ft): 35

Owner's Name; Jim Weyand DRYA Class / Division: PHRF A

Current Racing Rating: 33 Proposed Racing Rating: 36

Current Base Handicap: 39 Current Penalties/Credits:-3 Proposed DRYA Base Handicap w/o Penalties/Credits: 39

APPEAL DESCRIPTION

Briefly and concisely describe the reason for your filing of this appeal form:

Admittedly Chico 2 had a successful season in 2014 in its class. However, when compared to the performance of other classes, the accomplishments of Chico 2 were much more modest. When the results of Chico 2 are compared to the results of other PHRF classes and comparable One-Design classes Chico 2 typically finished mid-fleet.

For the upcoming 2015 season the following changes are planned for Chico 2:

To assist the DRYA PHRF handicap board in determining the validity of the temporary sprit rule, Chico 2 voluntarily sailed in 2014 with the tack approximately 12 inches short of the maximum position. For the 2015 season we would like to move the tack point for the asymmetrical sail to the end of the sprit which will remain within 125% of the class-legal SPL. The new STL will be 18.0 feet.

Acquiring a new, smaller mainsail. This new, smaller mainsail will also be a square top but the size will equal the class-legal main sail.

RATING SYSTEMS

Appeals

<i>BOTTOM PREPARATION</i>	
When was the boat last hauled?	NA
What type of bottom paint is applied?	VC Offshore
How is the bottom paint applied?	Spray
How often is the bottom cleaned?	2 weeks
How is the bottom cleaned?	diver

<i>SAIL INVENTORY</i>					
SAIL	Sail Maker	Material	Ounces	Condition	Age (Months)
Main	Quantum	Kevlar/carbon		good	28
1st Genoa LP% =108	Quantum	Kevlar/carbon		fair	28
2nd Genoa LP% =					
3rd Genoa LP% =					
1st Spinnaker	Quantum	Airex 600		good	9
2nd Spinnaker	Quantum	Airex 600		good	14
Other					

RATING SYSTEMS

Appeals

SKIPPER AND CREW EXPERIENCE Number of years of racing experience for the skipper/owner 15

Number of persons in the racing crew including skipper 8

Number of crew members racing with the skipper more than 50% of the time on all races over the last two years 6. Typical racing experience of core crew: 10

RACES AND PERFORMANCE

How many races did the boat under review participate in over the last two years: 45

How many races in the last two years did the boat finish - First? 12 Second? Third?

How many races did the boat finish last in its class over the last two years? 5

If the boat had the requested rating last two years, how would it have affected the first 3 finishes?
no difference

Identify the two local boats you feel are closest in overall speed to the boat under review?

Chroma, Solutions

Next fastest boat? Solutions What rating does the boat have? -9

Next slowest boat? Chroma What rating does the boat have? 39

Briefly describe the number and type of PHRF races this boat sailed in each of the last two years, such as weeknight AYC, NSSC, LSSC, GPSC, WYC, etc.; DRYA Series etc.; NOOD & One Design, Area Championships. PH-Mac, etc. *(Use an additional page if necessary.)*

DRYA Season, full second half, Windsor Yacht Club Series, Windsor Overnight, BOD, Mills, Bayview Mackinac, Chicago Mackinac

RATING SYSTEMS

Appeals

RESULTS FOR THE LAST TEN RACES Excluding Windward/Leeward Races

Race Name	Class or Division	Number of Starters	Corrected Finish Position	+/- Sec/mi	To be 2nd in Class	Sponsor
1 Bluenose	A	6	3	-4		gpyc
2 Long dist	A	8	1	4		byc
3 Sweeps	A	5	1	4		DYC
4CSYC	A	7	1	60		CSYC

ETC

How many races did this boat finish this last season? (Approx.) 28 two seasons ago? 17

What percentage of the time did this boat finish in the top third of your section/class? 50

What percentage of the time did this boat finish in the middle third of your section/class? 15

What percentage of the time did this boat finish in the bottom third of your section/class? 35

BOATS THAT REGULARLY BEAT THIS BOAT ON CORRECTED TIME

Name/Design/Rating	Name/Design/Rating	Name/Design/Rating
1. Power Tripp/Tripp/54	2. Jhawker/J120/48	3. Hotticket/J120/48
4. Pendragon/Contessa 43/75	5. Funtech/J120/48	6. Baron/J29/117
7. Snake Oil/J105/90	8. Night Moves/J120/48	9. Nauti-Boys/J120/48

BOATS BEAT OR SAILED EQUAL TO ON CORRECTED TIME

Name/Design/Rating	Name/Design/Rating	Name/Design/Rating
1. Epic/Beneteau 42/54	2. Solution/Farr 40/-9	3. Bushwacker/Beneteau 40.7/54
4. Vanguard/Mumm 36/42	5. Not So EZ Money/Dehler 44/36	6. Blitz/ Serendipity 43/ 60

BOATS THE APPELLANT CONSIDERS INCORRECTLY HANDICAPPED

Name/Design/Rating	Name/Design/Rating	Name/Design/Rating
1. J120 Class/48		

RATING SYSTEMS

Appeals

OTHER RELEVANT INFORMATION

Chico 2 was exceptionally well prepared this year. The 2014 crew included former All-American sailors and many sailors that average in excess of 100 days of competitive sailing per year. This allowed Chico 2 to sail with an exceptional crew that has sailed for up to 10 years together.

Summary Requesting 3 seconds to his Rating

Rating Systems

- Thank you for your attention
- Questions and maybe some answers

David Spiers
Chief Handicapper DR YA