

2020 MAST Race Results - Race 4

Division Results

Race Course: W/L

Course Conditions: Wind 15 - 18 Waves 1-2

Start	Boat	DIV	Base PHRF	DIV Pre-race PHRF	Finish Time	Start Time	Elapsed Time	DIV Correction Factor	DIV PHRF Time	Spin	DIV 10 minutes	DIV Spin Decimal	DIV Spin Correction	Code	Penalty	DIV Corrected Time	DIV Points	DIV PHRF Adjust	Div New PHRF
3rd - 6:30	Eclipse	1	126	130	19:15:02	18:30:00	0:45:02	1.05882	0:47:41	N	4.77	1.10	0:00:00		00:00	0:47:41	0.75	-9	121
3rd - 6:30	Snowballs Chance	1	126	120	19:15:26	18:30:00	0:45:26	1.07463	0:48:49	N	4.88	1.13	0:00:00		00:00	0:48:49	2	-6	114
3rd - 6:30	Sabotage	1	69	60	19:11:42	18:30:00	0:41:42	1.18033	0:49:13	N	4.92	1.14	0:00:00		00:00	0:49:13	3	-3	57
3rd - 6:30	Silvergrrl	1	111	102	19:15:23	18:30:00	0:45:23	1.10429	0:50:07	N	5.01	1.16	0:00:00		00:00	0:50:07	4	0	102
3rd - 6:30	Austral	1	120	122	19:17:27	18:30:00	0:47:27	1.07143	0:50:50	N	5.08	1.17	0:00:00		00:00	0:50:50	5	2	124
3rd - 6:30	Blue Pearl	1	93	97	19:15:44	18:30:00	0:45:44	1.11283	0:50:54	N	5.09	1.17	0:00:00		00:00	0:50:54	6	2	99
3rd - 6:30	Wanderer	1	108	112	19:17:48	18:30:00	0:47:48	1.08761	0:51:59	N	5.20	1.20	0:00:00		00:00	0:51:59	7	2	114
3rd - 6:30	Rogue	1	51	47	19:13:21	18:30:00	0:43:21	1.20603	0:52:17	N	5.23	1.21	0:00:00		00:00	0:52:17	8	2	49
3rd - 6:30	The 19th Hole	1	75	79	19:16:35	18:30:00	0:46:35	1.14467	0:53:19	N	5.33	1.23	0:00:00		00:00	0:53:19	9	2	81
3rd - 6:30	Skelday	1	102	106	19:18:50	18:30:00	0:48:50	1.09756	0:53:36	N	5.36	1.24	0:00:00		00:00	0:53:36	10	2	108
3rd - 6:30	Bandito	1	108	112	19:20:26	18:30:00	0:50:26	1.08761	0:54:51	N	5.49	1.27	0:00:00		00:00	0:54:51	11	2	114
3rd - 6:30	Vela	1	90	94	19:22:12	18:30:00	0:52:12	1.11801	0:58:22	N	5.84	1.35	0:00:00		00:00	0:58:22	12	2	96
3rd - 6:30	Anafi	1	114	105	23:00:00	18:30:00	4:30:00	1.09924	4:56:48	N	29.68	6.85	0:00:00	DNC	00:00	4:56:48	16	0	105
3rd - 6:30	Antonia	1	126	130	23:00:00	18:30:00	4:30:00	1.05882	4:45:53	N	28.59	6.60	0:00:00	DNC	00:00	4:45:53	16	0	130
3rd - 6:30	Berserkir	1	0	0	23:00:00	18:30:00	4:30:00	1.30909	5:53:27	N	35.35	8.16	0:00:00	DNC	00:00	5:53:27	16	0	0
3rd - 6:30	Kristin Marie	1	117	117	23:00:00	18:30:00	4:30:00	1.07946	4:51:27	N	29.15	6.73	0:00:00	DNC	00:00	4:51:27	16	0	117
2nd - 6:25	Usual Suspects/Cavallo	2	153	153	19:11:47	18:25:00	0:46:47	1.02418	0:47:55	N	4.79	1.11	0:00:00		00:00	0:47:55	0.75	-9	144
2nd - 6:25	Cattywampus	2	132	132	18:25:00	18:25:00	0:00:00	1.05572	0:00:00	N	0.00	0.00	0:00:00	CB	00:00	0:00:00	1	0	132
2nd - 6:25	Nautical Sun	2	144	129	19:11:16	18:25:00	0:46:16	1.06038	0:49:04	N	4.91	1.13	0:00:00		00:00	0:49:04	2	-6	123
2nd - 6:25	Amok	2	153	157	19:13:14	18:25:00	0:48:14	1.01839	0:49:07	N	4.91	1.13	0:00:00		00:00	0:49:07	3	-3	154
2nd - 6:25	Firewater	2	159	161	19:16:46	18:25:00	0:51:46	1.01266	0:52:25	N	5.24	1.21	0:00:00		00:00	0:52:25	4	0	161
2nd - 6:25	Rum Line	2	132	132	19:15:08	18:25:00	0:50:08	1.05572	0:52:56	N	5.29	1.22	0:00:00		00:00	0:52:56	5	2	134
2nd - 6:25	Caravel	2	159	152	19:18:08	18:25:00	0:53:08	1.02564	0:54:30	N	5.45	1.26	0:00:00		00:00	0:54:30	6	2	154
2nd - 6:25	Athena	2	147	149	19:18:32	18:25:00	0:53:32	1.03004	0:55:08	N	5.51	1.27	0:00:00		00:00	0:55:08	7	2	151
2nd - 6:25	Wild Goose	2	138	137	19:22:06	18:25:00	0:57:06	1.04803	0:59:51	N	5.98	1.38	0:00:00		00:00	0:59:51	8	2	139
2nd - 6:25	Footprints	2	156	160	23:00:00	18:25:00	4:35:00	1.01408	4:38:52	N	27.89	6.44	0:00:00	DNC	00:00	4:38:52	13	0	160
2nd - 6:25	Mirasol	2	141	141	23:00:00	18:25:00	4:35:00	1.04197	4:46:32	N	28.65	6.61	0:00:00	DNC	00:00	4:46:32	13	0	141
2nd - 6:25	SOGO	2	132	132	23:00:00	18:25:00	4:35:00	1.05572	4:50:19	N	29.03	6.70	0:00:00	DNC	00:00	4:50:19	13	0	132
2nd - 6:25	Tibateau	2	141	132	23:00:00	18:25:00	4:35:00	1.05572	4:50:19	N	29.03	6.70	0:00:00	DNC	00:00	4:50:19	13	0	132
1st - 6:20	Borealis	3	168	168	19:07:26	18:20:00	0:47:26	1.00279	0:47:34	N	4.76	1.10	0:00:00		00:00	0:47:34	0.75	-9	159
1st - 6:20	Yeah Buoy	3	192	194	19:10:24	18:20:00	0:50:24	0.96774	0:48:46	N	4.88	1.13	0:00:00		00:00	0:48:46	2	-6	188
1st - 6:20	Wild Card	3	168	161	19:09:09	18:20:00	0:49:09	1.01266	0:49:46	N	4.98	1.15	0:00:00		00:00	0:49:46	3	-3	158
1st - 6:20	Juniper	3	189	193	19:12:09	18:20:00	0:52:09	0.96904	0:50:32	N	5.05	1.17	0:00:00		00:00	0:50:32	4	0	193
1st - 6:20	Lady Ayr	3	162	166	19:11:00	18:20:00	0:51:00	1.00559	0:51:17	N	5.13	1.18	0:00:00		00:00	0:51:17	5	2	168
1st - 6:20	Aequitas	3	165	164	19:17:36	18:20:00	0:57:36	1.00840	0:58:05	N	5.81	1.34	0:00:00		00:00	0:58:05	6	2	166
1st - 6:20	Stimulus	3	279	272	19:27:29	18:20:00	1:07:29	0.87591	0:59:07	N	5.91	1.36	0:00:00		00:00	0:59:07	7	2	274
1st - 6:20	Raido	3	216	220	19:28:27	18:20:00	1:08:27	0.93506	1:04:00	N	6.40	1.48	0:00:00		00:00	1:04:00	8	2	222
1st - 6:20	Anticipation	3	177	177	23:00:00	18:20:00	4:40:00	0.99037	4:37:18	N	27.73	6.40	0:00:00	DNC	00:00	4:37:18	15	0	177
1st - 6:20	BeBop	3	175	171	23:00:00	18:20:00	4:40:00	0.99861	4:39:37	N	27.96	6.45	0:00:00	DNC	00:00	4:39:37	15	0	171
1st - 6:20	Carina	3	165	167	23:00:00	18:20:00	4:40:00	1.00418	4:41:10	N	28.12	6.49	0:00:00	DNC	00:00	4:41:10	15	0	167
1st - 6:20	Cool Change	3	177	177	23:00:00	18:20:00	4:40:00	0.99037	4:37:18	N	27.73	6.40	0:00:00	DNC	00:00	4:37:18	15	0	177
1st - 6:20	Jamboree	3	255	249	23:00:00	18:20:00	4:40:00	0.90113	4:12:19	N	25.23	5.82	0:00:00	DNC	00:00	4:12:19	15	0	249
1st - 6:20	Minnehaha	3	252	252	23:00:00	18:20:00	4:40:00	0.89776	4:11:22	N	25.14	5.80	0:00:00	DNC	00:00	4:11:22	15	0	252
1st - 6:20	Sloop City	3	234	233	23:00:00	18:20:00	4:40:00	0.91954	4:17:28	N	25.75	5.94	0:00:00	DNC	00:00	4:17:28	15	0	233

2020 MAST Race Results - Race 4

Fleet Results

Race Course: W/L

Course Conditions: Wind 15 - 18 Waves 1-2

28 boats racing

Boat2	Fleet Pre Race PHRH	Fleet Elapsed Time	Fleet Correction Factor	Fleet PHRF Time	Fleet 10 Minute	Fleet Spin Decimal	Fleet Spin Correction	Code2	Penalty2	Fleet Corrected Time	Fleet Points	Fleet PHRF Adjust	Fleet New PHRF
Eclipse	134	0:45:02	1.05263	0:47:24	17:46:06	2:15:28	0:00:00		0:00:00	0:47:24	0.75	-15	119
Cattywampus	136	0:00:00	1.04956	0:00:00	0:00:00	0:00:00	0:00:00	CB	0:00:00	0:00:00	1	0	136
Borealis	166	0:47:26	1.00559	0:47:42	18:28:34	2:25:16	0:00:00		0:00:00	0:47:42	2	-12	154
Usual Suspects	153	0:46:47	1.02418	0:47:55	18:59:43	2:32:27	0:00:00		0:00:00	0:47:55	3	-9	144
Snowballs Chance	123	0:45:26	1.06984	0:48:36	20:39:18	2:55:26	0:00:00		0:00:00	0:48:36	4	-6	117
Amok	161	0:48:14	1.01266	0:48:51	21:13:31	3:03:20	0:00:00		0:00:00	0:48:51	5	-3	158
Yeah Buoy	189	0:50:24	0.97429	0:49:06	21:51:00	3:11:59	0:00:00		0:00:00	0:49:06	6	4	193
Sabotage	54	0:41:42	1.19205	0:49:43	23:18:02	3:32:05	0:00:00		0:00:00	0:49:43	7	0	54
Silvergirl	106	0:45:23	1.09756	0:49:49	23:32:47	3:35:29	0:00:00		0:00:00	0:49:49	8	0	106
Nautical Sun	117	0:46:16	1.07946	0:49:57	23:51:48	3:39:52	0:00:00		0:00:00	0:49:57	9	0	117
Wild Card	157	0:49:09	1.01839	0:50:03	0:07:44	3:43:33	0:00:00		0:00:00	0:50:03	10	4	161
Juniper	197	0:52:09	0.96386	0:50:16	0:38:10	3:50:34	0:00:00		0:00:00	0:50:16	11	4	201
Austral	128	0:47:27	1.06195	0:50:23	0:56:04	3:54:42	0:00:00		0:00:00	0:50:23	12	4	132
Blue Pearl	97	0:45:44	1.11283	0:50:54	2:08:39	4:11:27	0:00:00		0:00:00	0:50:54	13	4	101
Lady Ayr	170	0:51:00	1.00000	0:51:00	2:24:00	4:15:00	0:00:00		0:00:00	0:51:00	14	4	174
Rogue	55	0:43:21	1.19008	0:51:35	3:48:58	4:34:36	0:00:00		0:00:00	0:51:35	15	4	59
Wanderer	116	0:47:48	1.08108	0:51:41	4:01:18	4:37:27	0:00:00		0:00:00	0:51:41	16	4	120
Firewater	163	0:51:46	1.00982	0:52:16	5:27:35	4:57:22	0:00:00		0:00:00	0:52:16	17	4	167
Rum Line	136	0:50:08	1.04956	0:52:37	6:17:00	5:08:46	0:00:00		0:00:00	0:52:37	18	4	140
The 19th Hole	83	0:46:35	1.13744	0:52:59	7:09:57	5:21:00	0:00:00		0:00:00	0:52:59	19	4	87
Skelday	110	0:48:50	1.09091	0:53:16	7:51:16	5:30:32	0:00:00		0:00:00	0:53:16	20	4	114
Bandito	116	0:50:26	1.08108	0:54:31	10:51:15	6:12:04	0:00:00		0:00:00	0:54:31	21	4	120
Athena	151	0:53:32	1.02710	0:54:59	11:57:44	6:27:25	0:00:00		0:00:00	0:54:59	22	4	155
Caravel	145	0:53:08	1.03597	0:55:03	12:06:25	6:29:25	0:00:00		0:00:00	0:55:03	23	4	149
Vela	98	0:52:12	1.11111	0:58:00	19:12:00	8:07:38	0:00:00		0:00:00	0:58:00	24	4	102
Aequitas	160	0:57:36	1.01408	0:58:25	20:11:13	8:21:19	0:00:00		0:00:00	0:58:25	25	4	164
Wild Goose	146	0:57:06	1.03448	0:59:04	21:45:56	8:43:10	0:00:00		0:00:00	0:59:04	26	4	150
Stimulus	271	1:07:29	0.87698	0:59:11	22:02:08	8:46:55	0:00:00		0:00:00	0:59:11	27	4	275
Raido	224	1:08:27	0.93023	1:03:40	8:49:07	11:16:14	0:00:00		0:00:00	1:03:40	28	4	228
Anafi	114	4:30:00	1.08434	4:52:46	6:39:02	18:10:18	0:00:00	DNC	0:00:00	4:52:46	44	0	114
Anticipation	177	4:40:00	0.99037	4:37:18	17:31:46	9:36:15	0:00:00	DNC	0:00:00	4:37:18	44	0	177
Antonia	134	4:30:00	1.05263	4:44:13	10:06:19	6.56	0:00:00	DNC	0:00:00	4:44:13	44	0	134
BeBop	167	4:40:00	1.00418	4:41:10	2:48:42	11:44:48	0:00:00	DNC	0:00:00	4:41:10	44	0	167
Berserkir	0	4:30:00	1.30909	5:53:27	8:17:27	3:47:08	0:00:00	DNC	0:00:00	5:53:27	44	0	0
Carina	169	4:40:00	1.00139	4:40:23	0:56:05	11:18:48	0:00:00	DNC	0:00:00	4:40:23	44	0	169
Cool Change	177	4:40:00	0.99037	4:37:18	17:31:46	9:36:15	0:00:00	DNC	0:00:00	4:37:18	44	0	177
Footprints	164	4:35:00	1.00840	4:37:19	17:32:46	9:36:29	0:00:00	DNC	0:00:00	4:37:19	44	0	164
Jamboree	255	4:40:00	0.89441	4:10:26	1:02:37	18:43:15	0:00:00	DNC	0:00:00	4:10:26	44	0	255
Kristin Marie	117	4:30:00	1.07946	4:51:27	3:29:25	17:26:32	0:00:00	DNC	0:00:00	4:51:27	44	0	117
Minnehaha	252	4:40:00	0.89776	4:11:22	3:17:30	19:14:23	0:00:00	DNC	0:00:00	4:11:22	44	0	252
Mirasol	141	4:35:00	1.04197	4:46:32	15:41:56	14:43:15	0:00:00	DNC	0:00:00	4:46:32	44	0	141
Sloop City	242	4:40:00	0.90909	4:14:33	10:54:33	20:59:52	0:00:00	DNC	0:00:00	4:14:33	44	0	242
SOGO	132	4:35:00	1.05572	4:50:19	0:46:27	16:48:56	0:00:00	DNC	0:00:00	4:50:19	44	0	132
Tibateau	145	4:35:00	1.03597	4:44:54	11:44:28	13:48:27	0:00:00	DNC	0:00:00	4:44:54	44	0	145

2020 MAST Race Results - Race 4

Deciphering the MAST Scoring Results*

DIV Pre-race PHRF: This is the PHRF used in this race. It was adjusted in the previous race. At the beginning of the season it is the same as Base PHRF

Base PHRF is assigned at the beginning of the season

DIV Correction Factor is a calculation of the handicap based on PHRF

Correction Factor = $A / (B + PHRF)$

- Where "B" is a wind factor MAST uses an average wind number (550).
- "A" is adjusted so the Correction Factor equals 1.0 for the average boat in the fleet.
- Correction Factor = $720 / (550 + PHRF)$

DIV 10 minutes: Spinnaker corrections are calculated per 10 minutes sailed. This converts DIV PHRF Time to number of 10-minute segments using the formula

$$= ([@DIV PHRF Time] * 1440) / 10$$

DIV Spin Decimal: Boats choosing to fly a spinnaker will be penalized 13.848 sec. for each 10 minutes sailed. This calculates the penalty by the fraction of an hour using the formula

$$= ([@DIV 10 minutes] * 13.848) / 60$$

DIV Spin Correction: This calculates the penalty in seconds using the formula

$$= ([@DIV Spin Decimal] / 1440)$$

DIV PHRF Time calculated with

$$= ([@Elapsed Time] * [@DIV Correction Factor])$$

PHRF Adjust:

- Division: Yachts finishing 1st, 2nd, and 3rd in their division have their PHRF rating reduced by 9, 6, or 3 seconds respectively. The 4th place boat's PHRF is not adjusted. All other boats who competed in the race have their PHRFs increased by 2 seconds. This adjustment is made within individual divisions - comparing a Division 1 boat to a Division 2 boat isn't meaningful.
- Fleet (MAST Cup): Yachts finishing 1st, 2nd, 3rd, 4th, 5th and 6th in the fleet have their PHRF rating reduced by 18, 15, 12, 9, 6, and 3 seconds respectively. The 7th, 8th, and 9th place boats' PHRFs are not adjusted. All other boats who competed in the race have their PHRFs increased by 4 seconds.

DIV Corrected Time = This is the final time for the race calculated with the formula

$$= ([@DIV PHRF Time] + [@DIV Spin Correction] + [@Penalty])$$

New PHRF: This is the PHRF used for the next race.

2020 MAST Racing Division Results - Race 1

Start	Boat	DIV	Base PHRF	DIV Pre-race PHRF	Finish Time	Start Time	Elapsed Time	DIV Correction Factor	DIV PHRF Time	Spin	DIV 10 minutes	DIV Spin Decimal	DIV Spin Correction	Code	Penalty	DIV Corrected Time	DIV Points	DIV PHRF Adjust	Div New PHRF
1st - 6:20	Jamboree	3	255	255	19:24:15	18:20:00	1:04:15	0.89441	0:57:28	Y	5.75	1.33	0:01:20		00:00	0:58:48	0.75	-9	246
1st - 6:20	Minnehaha	3	252	252	19:24:15	18:20:00	1:04:15	0.89776	0:57:41	Y	5.77	1.33	0:01:20		00:00	0:59:01	2	-6	246
1st - 6:20	Poggy*	3	222	222	19:24:15	18:20:00	1:04:15	0.93264	0:59:55	Y	5.99	1.38	0:01:30		00:00	1:01:18	3	-3	219
1st - 6:20	Anticipation	3	177	177	19:24:15	18:20:00	1:04:15	0.99037	1:03:38	Y	6.36	1.47	0:01:28		00:00	1:05:06	4	0	177
1st - 6:20	COOL CHANGE 4*	3	177	177	19:24:15	18:20:00	1:04:15	0.99037	1:03:38	Y	6.36	1.47	0:01:28		00:00	1:05:06	2	0	179
1st - 6:20	Borealis	3	168	168	19:24:15	18:20:00	1:04:15	1.00279	1:04:26	Y	6.44	1.49	0:01:29		00:00	1:05:55	2	0	170

Code: CB, DNF, DNC appear here

Penalty: adjustments for starting early or other penalties

*A division scoring report is shown here. Fleet scoring uses the same calculations.