
The Coaching
Tech Singularity

www.mcbrideracing.com/ussncs

The Singularity

"A hypothetical point in time at which **technological growth becomes uncontrollable and irreversible, resulting in unforeseeable changes to human civilization**."

- Wikipedia

The Latest And Greatest

GoPro - hours of video/session

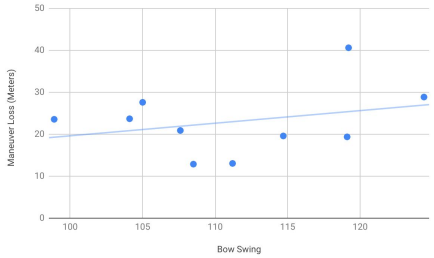
Drone - 100 gigs/session

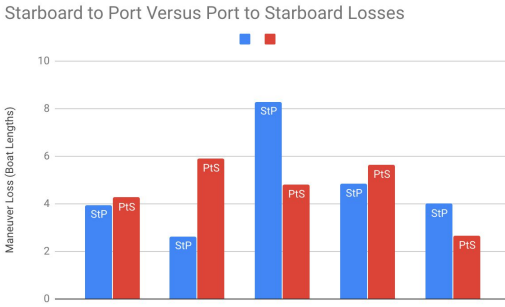
Hand Cam - dozens of videos/session

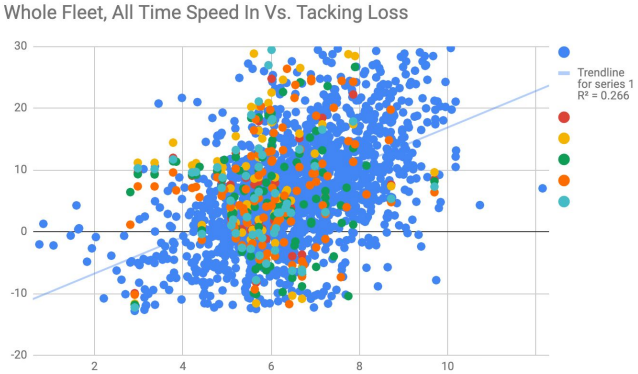
GPS trackers - 10k data points/session

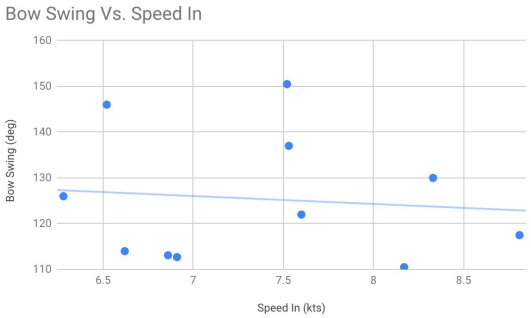
Telemetry Kit - 100k data points/session

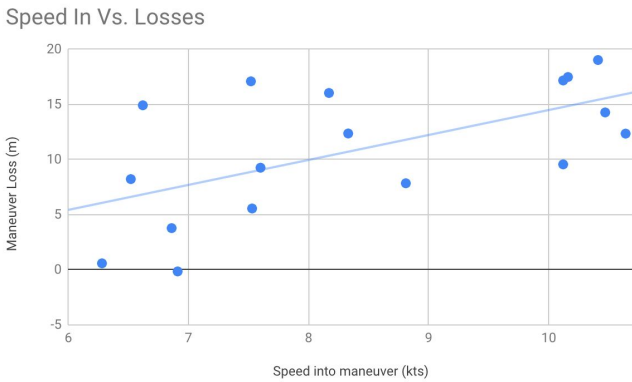
How To Have The Best Tacks

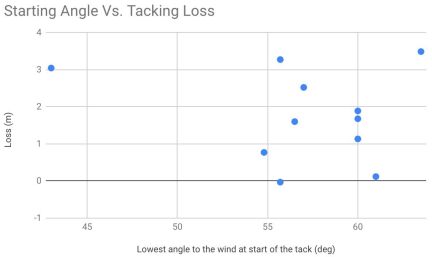


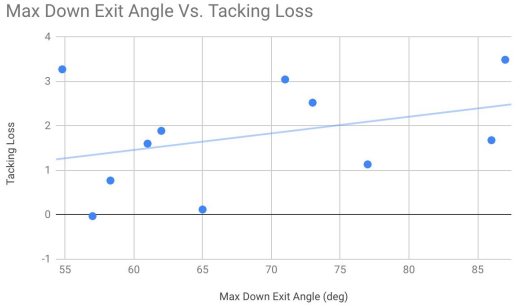












Oct11_2018	10/11/18	Tack	Paris/Anna		15:02:33	202	106	7.68	54.75	5.14	14.2	10.12	454.03		5.63	10.51	325		6.07	9.5646	1.9520								
Oct11_2018	10/11/18	Tack	Paris/Anna		15:03:43	200	106	6.58	50.77	4.75	12.98	10.64	295.6		5.69	9.62	91.36		5.74	12.3544	2.5213								
Oct11_2018	10/11/18	Tack	Paris/Anna		15:16:15	192	105	8.66	83.13	5.22	19.25	10.47	204		6.34	9.6	273.99		5.68	14.2773	2.9137								
Oct12_2018	10/12/18	Tack	Paris/Anna		14:18:44	294	100	7.87	62.6	5.33	15	10.41	130		6.51	10.1	88		6.73	19.0321	3.8841								
Oct12_2018	10/12/18	Tack	Paris/Anna		14:08:23	298	98	8.19	66.78	5.51	16.33	10.16	76		6.74	9.77	16.75		5.86	17.4907	3.5695								
Oct12_2018	10/12/18	Tack	Paris/Anna		14:42:07	300	102	8.39	95.57	5.93	22.609	10.12	70		6.5	10.71	55.27		6.93	17.1765	3.5054								
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:29:40	89	94	6.66	18.79	4.78	53.174	6.62	20.93	43	4.77	7.55	19.67	71	5.37	14.9254	3.0460	114	0.93	0.6	0.0576	0.3229	28	
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:32:00	86	100	5.82	???	3.87	36.84	6.52	16.74	60	4.2	5.93	8.37	86	3.88	8.2276	1.6791	146	-0.59	-0.32	-0.0972	0.8893	26	
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:32:28	88	102	6.16	143	4.05	32.66	6.28	13.4	61	3.95	6.87	15.49	65	4.17	0.5865	0.1197	126	0.59	0.22	0.1972	0.2179	4	
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:33:08	88	100	5.99	137.11	3.78	45.21	6.86	19.68	54.8	3.92	5.44	15.07	58.3	3.79	3.7806	0.7716	113.1	-1.42	-0.13	-0.8741	1.5003	3.5	
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:34:36	86	100	6.04	86.85	3.89	28.05	7.52	18.84	63.5	4.77	6.13	8.79	87	3.92	17.0989	3.4896	150.5	-1.39	-0.85	-0.1329	2.1913	23.5	Device Measurment Errors
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:36:06	86	98	5.93	80.7	3.79	26.79	6.91	7.53	55.7	3.94	6.14	4.6	57	3.53	-0.1469	-0.0300	112.7	-0.77	-0.41	-0.1345	0.6415	1.3	
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:36:57	84	106	6.93	146.38	4.14	41.45	7.53	15.07	60	4.53	7.22	20.93	77	4.09	5.5621	1.1351	137	-0.31	-0.44	0.2208	0.7247	17	
Nov10_2018	11/10/2018	Tack	Paris/Anna		13:39:55	84	98	6.65	78.14	4.28	23.02	7.6	18.42	60	4.81	6.57	7.53	62	4.37	9.2615	1.8901	122	-1.03	-0.44	-0.2883	0.7496	2	
Nov10_2018	11/10/2018	Tack	Paris/Anna		14:20:21	98	101	7.92	190.93	4.95	47.31	8.17	25.12	55.7	4.91	8.59	33.91	54.8	5.57	16.0447	3.2744	110.5	0.42	0.66	-0.3630	-0.2515	-0.9	
Nov10_2018	11/10/2018	Tack	Paris/Anna		14:21:30	93	100	7.48	18.84	4.69	18.84	8.81	10.05	56.5	5.28	7.67	4.18	61	4.69	7.8504	1.6021	117.5	-1.14	-0.59	-0.2161	1.6901	4.5	
Nov10_2018	11/10/2018	Tack	Paris/Anna		14:29:52	88	101	7.83	182	4.95	46.05	8.33	11.3	57	5.3	8.19	23.86	73	5.18	12.3675	2.5240	130	-0.14	-0.12	0.0210	0.2562	16	
Nov11_2018	11/11/2018	Tack	Steph/Maggie		18:25:02	72	93	8.07	219.59	5.42	52.75	8.18	25.12	57	5.25	9.04	25.96	47	5.99	10.8710	2.2186	104	0.86	0.74	-0.1319	-0.0420	-10	Sampling Rate too low
Nov11_2018	11/11/2018	Tack	Steph/Maggie		18:26:11	60	106	8.34	186.44	4.75	43.54	11.3	11.3	63.1	4.79	9.03	18.84	63.1	4.87	3.9189	0.7998	126.2	-2.27	0.08	-1.6851	2.0045	0	Sampling Rate too low
Nov11_2018	11/11/2018	Tack	Steph/Maggie		18:41:31	62	106	9.11	193.4	5.28	41.32	9.92	19.18	60	5.46	8.83	19.92	60	5.17	1.3328	0.2720	120	-1.09	-0.29	-0.4807	1.2909	0	Sampling Rate too low
Nov12_2018	11/12/2018	Tack	Paris/Anna		12:51:20	129	91	8.8	200	6.09	45.22	9.36	16.33	57.3	6.4	9.68	16.74	50	6.6	18.5963	3.7952	107.3	0.32	0.2	0.0263	-0.1830	-7.3	
Nov12_2018	11/12/2018	Tack	Paris/Anna		13:52:25	128	112	10.47	202.1	5.69	38.1	11.25	18.76	63	5.6	11.3	16.75	64	6.32	9.5106	1.9409	127	0.05	0.72	-0.6846	-0.6773	1	
Nov12_2018	11/12/2018	Tack	Paris/Anna		13:52:16	126	109	9.61	172.67	5.36	35.59	9.55	10.47	61.9	5.06	11.06	18.42	60.8	5.9	8.3842	1.7111	122.7	1.51	0.84	0.2277	-0.1456	-1.1	"Best Tack" video
Nov12_2018	11/12/2018	Tack	Paris/Anna		13:53:36	124	116	10.38	228.03	5.29	43.54	11.48	13.82	70	5.68	10.9	17.59	64	5.56	14.0546	2.8683	134	-0.58	-0.12	-0.2901	0.1891	-6	
Nov13_2018	11/13/2018	Tack	Steph/Maggie		17:38:26	164	94	7.3	109	4.85	29.27	8.93	11.45	52.7	5.69	7.71	11.03	55	5.17	17.1188	3.4936	107.7	-1.22	-0.52	-0.3427	1.7306	2.3	Sampling Rate too low
Nov13_2018	11/13/2018	Tack	Steph/Maggie		17:37:53	164	101	8.57	31.18	5.15	31.18	9.91	12.94	64	5.7	8.87	13.36	64	5.63	16.0403	3.2735	128	-1.04	-0.07	-0.6654	1.0815	0	Sampling Rate too low
Dec05_2018	12/5/2018	Tack	Paris/Anna	StP	13:44:55	339	94	8.19	215.09	5.47	51.63	8.17	21.87	62.6	5.15	9.53	23.22	56.5	6.5	19.3721	3.9535	119.1	1.36	1.35	-0.3883	-0.0004	-6.1	First Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	StP	13:44:55	339	94	8.3	214.85	5.53	51.63	8.08	21.87	60	5.13	9.66	23.22	51.2	6.64	19.4957	3.9787	111.2	1.58	1.51	-0.3928	0.0579	-8.8	First Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	PtS	13:46:09	336	92	9.11	196.05	6.32	42.19	10.01	13.81	49.4	6.82	9.59	12.47	58.2	6.81	20.8948	4.2642	107.6	-0.42	-0.01	-0.2870	0.1915	8.8	Second Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	PtS	13:46:09	336	92	9.03	196.35	6.34	42.19	10.08	13.81	47.6	6.86	9.41	12.47	71.5	6.61	16.9340	3.4559	119.1	-0.67	-0.25	-0.2238	0.5396	23.9	Second Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	StP	13:47:11	345	98	9.1	131.92	5.71	28.71	9.87	13.34	52.9	5.92	10.7	5.56	55.6	6.73	12.8703	2.6266	108.5	0.83	0.81	-0.2231	-0.5605	2.7	Third Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	StP	13:47:11	345	98	9.22	133.07	5.9	28.71	9.96	13.34	49.4	6.06	10.52	5.56	57.4	6.84	11.1814	2.2819	106.8	0.56	0.78	-0.3840	-0.6117	8	Third Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	PtS	13:47:56	340	97	9.08	184.19	5.96	39.77	10.44	15.38	52.9	6.91	9.84	14.03	71.5	6.44	28.8646	5.8907	124.4	-0.6	-0.47	0.0457	0.5861	18.6	Fourth Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	PtS	13:47:56	340	97	9.02	184.4	5.89	39.77	10.45	15.38	52.1	7	9.91	14.03	82.1	6.43	33.3305	6.8021	134.2	-0.54	-0.57	0.1882	0.6745	30	Fourth Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	StP	13:48:31	344	97	8.92	156.99	5.85	34.75	10.02	6.42	52.1	6.52	10.85	10.99	67.1	7.31	40.6118	8.2881	119.2	0.83	0.79	-0.2031	-0.6294	15	Fifth Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	StP	13:48:31	344	96	8.94	155.99	5.86	34.75	10.23	6.42	55.6	6.66	10.75	10.99	67.1	7.2	39.6453	8.0909	122.7	0.52	0.54	-0.1723	-0.2071	11.5	Fifth Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	PtS	13:49:07	343	88	9.2	148.26	6.49	31.45	10.84	9.21	52.1	7.41	10.07	8.79	46.8	7.06	23.5587	4.8079	98.9	-0.77	-0.35	-0.1945	1.1199	-5.3	Sixth Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	PtS	13:49:07	343	86	9.12	147.79	6.53	31.45	10.73	9.21	52.1	7.43	10.03	8.79	46.8	6.9	20.1652	4.1154	98.9	-0.7	-0.53	0.0350	0.9186	-5.3	Sixth Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	StP	13:49:36	345	95	8.77	91.7	5.84	20.76	10.13	7.38	48.5	6.87	10.71	11.93	55.6	7.05	23.6914	4.8350	104.1	0.58	0.18	0.2301	0.3595	7.1	Seventh Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	StP	13:49:36	345	94	8.83	91.75	5.9	20.76	10.16	7.38	53.8	6.63	10.66	11.93	54.7	7.14	21.6960	4.4277	108.5	0.5	0.51	-0.1564	-0.0138	0.9	Seventh Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	PtS	13:50:03	345	90	8.99	143.46	6.07	31.25	10.72	8.37	54.7	7.2	9.75	16.74	50.3	6.83	27.6042	5.6335	105	-0.97	-0.37	-0.3159	0.8796	-4.4	Eighth Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	PtS	13:50:03	345	90	8.93	143.25	6.07	31.25	10.69	8.37	49.4	7.25	9.76	16.74	51.2	6.79	27.2917	5.5697	100.6	-0.93	-0.46	-0.1976	0.9485	1.8	Eighth Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	StP	13:51:03	342	92	8.01	90.27	5.43	22.16	8.84	8.14	51.2	5.8	9.73	8.79	63.5	6.79	19.5895	3.9979	114.7	0.89	0.99	-0.3607	-0.6054	12.3	Nineth Tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	StP	13:51:03	342	93	8.02	90.2	5.46	22.16	8.95	8.14	51.2	5.88	9.84	8.79	60	6.74	19.2018	3.9187	111.2	0.89	0.86	-0.2307	-0.1377	8.8	Nineth Tack
Dec05_2018	12/5/2018	Tack	Paris/Anna	PtS	13:52:53	346	93	8.89	80.15	6.01	17.93	10.44	7.61	50.3	6.85	9.62	4.57	60.9	6.55	13.0430	2.6618	111.2	-0.82	-0.3	-0.2798	0.9655	10.6	Tenth tack
Dec5Samsu	12/5/2018	Tack	Paris/Anna	PtS	13:52:53	346	93	8.93	80.27	6.05	17.93	10.47	7.61	48.5	6.92	9.68	4.57	64.4	6.99	16.0700	3.2796	112.9	-0.79	0.07	-0.6286	0.5712	15.9	Tenth tack
Dec6Samsu	12/6/2018	Tack	Kate/Charlotte	StP	13:41:02	60	88	7.9	268.36	5.62	66	7.8	23.44	53.9	5.49	8.99	18	56.2	7.01	34.9953	7.1419	110.1	1.19	1.52	-0.6785	-0.3302	2.3	
Dec6Samsu	12/6/2018	Tack	Paris/Anna	StP	13:41:02	60	82	7.67	257.54	5.75	66	7.37	23.44	50.4	5.67	9.14	18	56.2	7.21	38.8686	7.9324	106.6	1.77	1.54	-0.2884	0.2076	5.8	Thurs Dec6 GOPR0183 - 4:32
Dec6Samsu	12/6/2018	Tack	Kate/Charlotte	PtS	13:42:15	50	94	7.7	138.66	5.17	36	8.25	11.72	47	5.52	8.85	17.17	59.6	6.15	26.0793	5.3223	106.6	0.6	0.63	-0.2057	-0.0346	12.6	
Dec6Samsu	12/6/2018	Tack	Paris/Anna	PtS	13:42:20	50	86	7.69	139.64	5.53	36	8.67	15.07	51.6	6.3	7.55	10.47	53.9	5.66	18.2749	3.7296	105.5	-1.12	-0.64	-0.1520	1.2617	2.3	Thurs Dec6 GOPR0183 - 5:50
Dec6Samsu	12/6/2018	Tack	Kate/Charlotte	StP	13:43:20	55	88	7.91	121.45	5.62	30.57	8.57	5.86	47	5.86	8.96	15.91	50	6.56	22.9757	4.6889	97	0.39	0.7	-0.4242	-0.3101	3	

The Role Sheet

Tacking			
Entry		☐ Explosive “roll up” ☐ First step (back to wing) in sync ☐ Turn keeps boat under sailors	Team enters the tack in sync with each other. Weight in sync with steering; boat stays under sailors. Weight unloads quickly so that turn can accelerate.
Middle		☐ 2 step plant ☐ Helm to gantry (fast turn) ☐ Smooth through the middle ☐ Movements in sync	Turn accelerates as weight transfers smoothly from old front to new front with feet planted in the center. Skipper and crew are moving in sync with new load to keep boat flat while boat pivots.
Exit		☐ No shuffle necessary ☐ First step to tow rail ☐ 3 step total	First step of the exit hits wing tow rail, and weight drops before exploding out to the wing with final 2 steps. Skipper switches tiller to overhand grip, and

Integrate Technology With Your Existing Routines

Skill Drills

Boat Handling

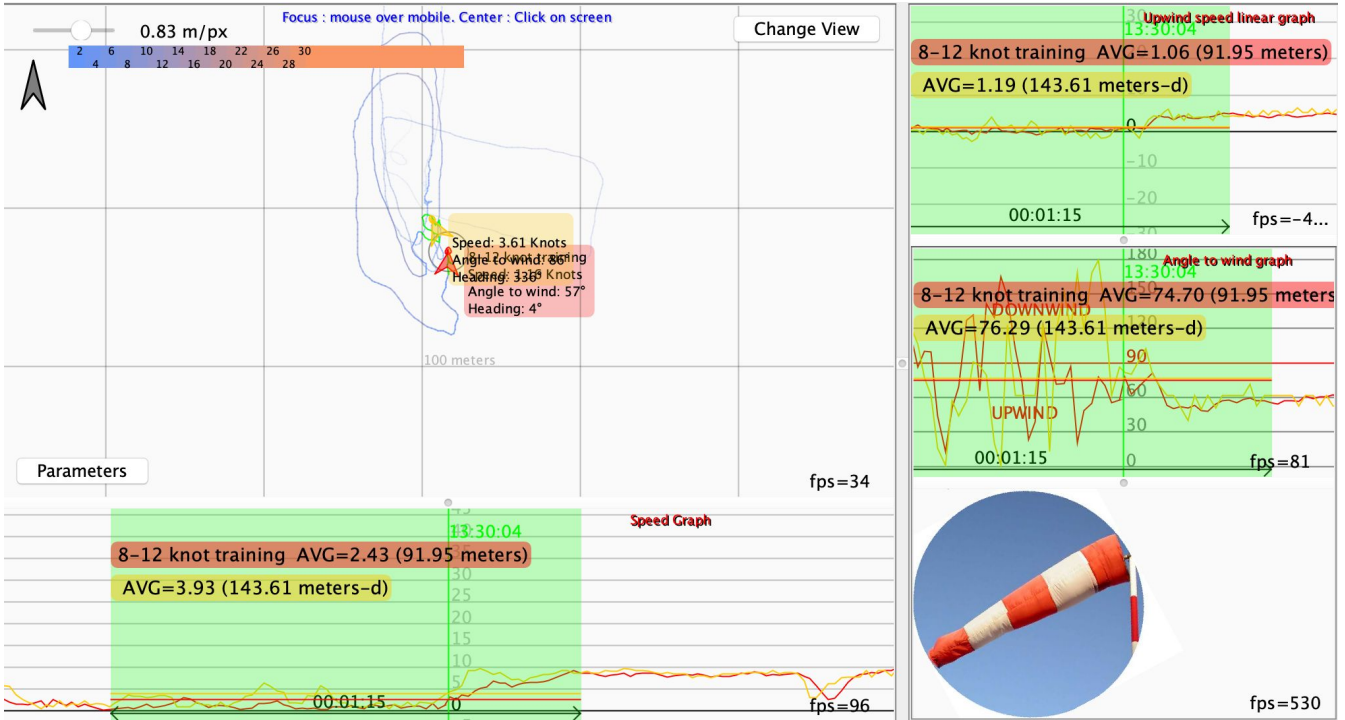
Speed

Starting

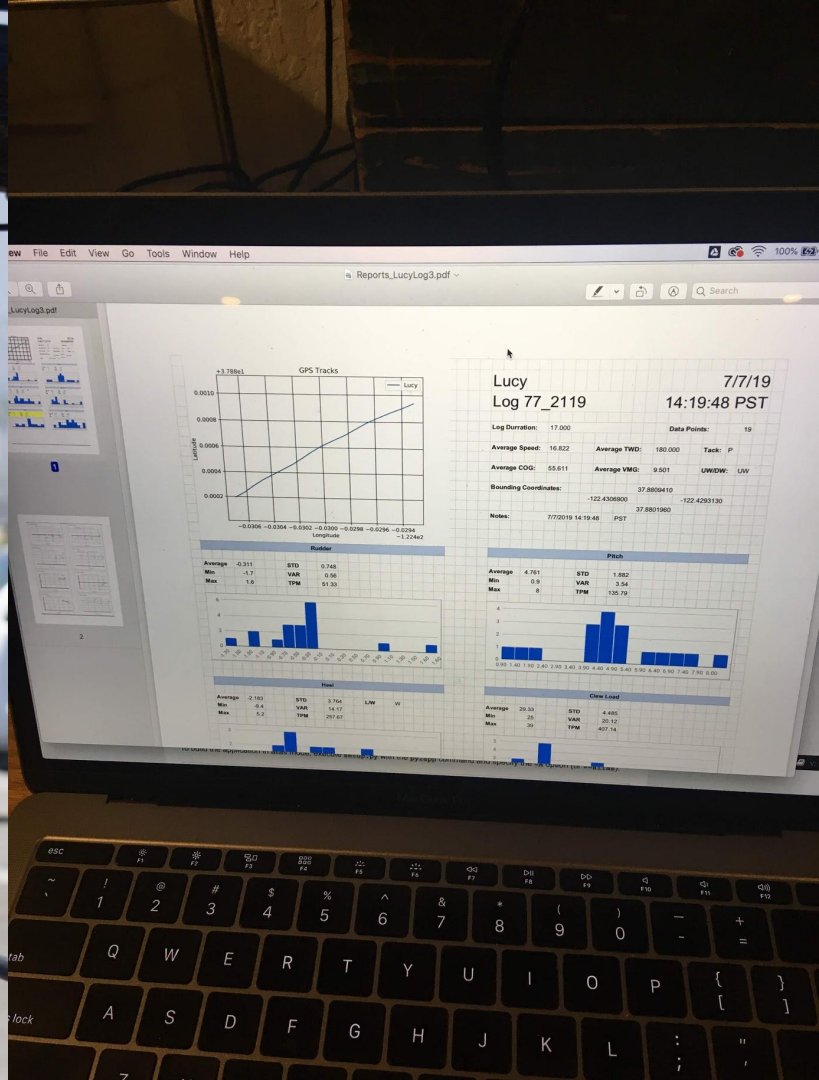
Racing

GPS Data

GPS Action Replay for manual measurements




TruSail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Reports_LucyLog3.pdf
GPS Tracks
Lucy
Log 77_2119
7/7/19
14:19:48 PST
Rudder
Pitch
Heel
Clew Load

Use GPS To:

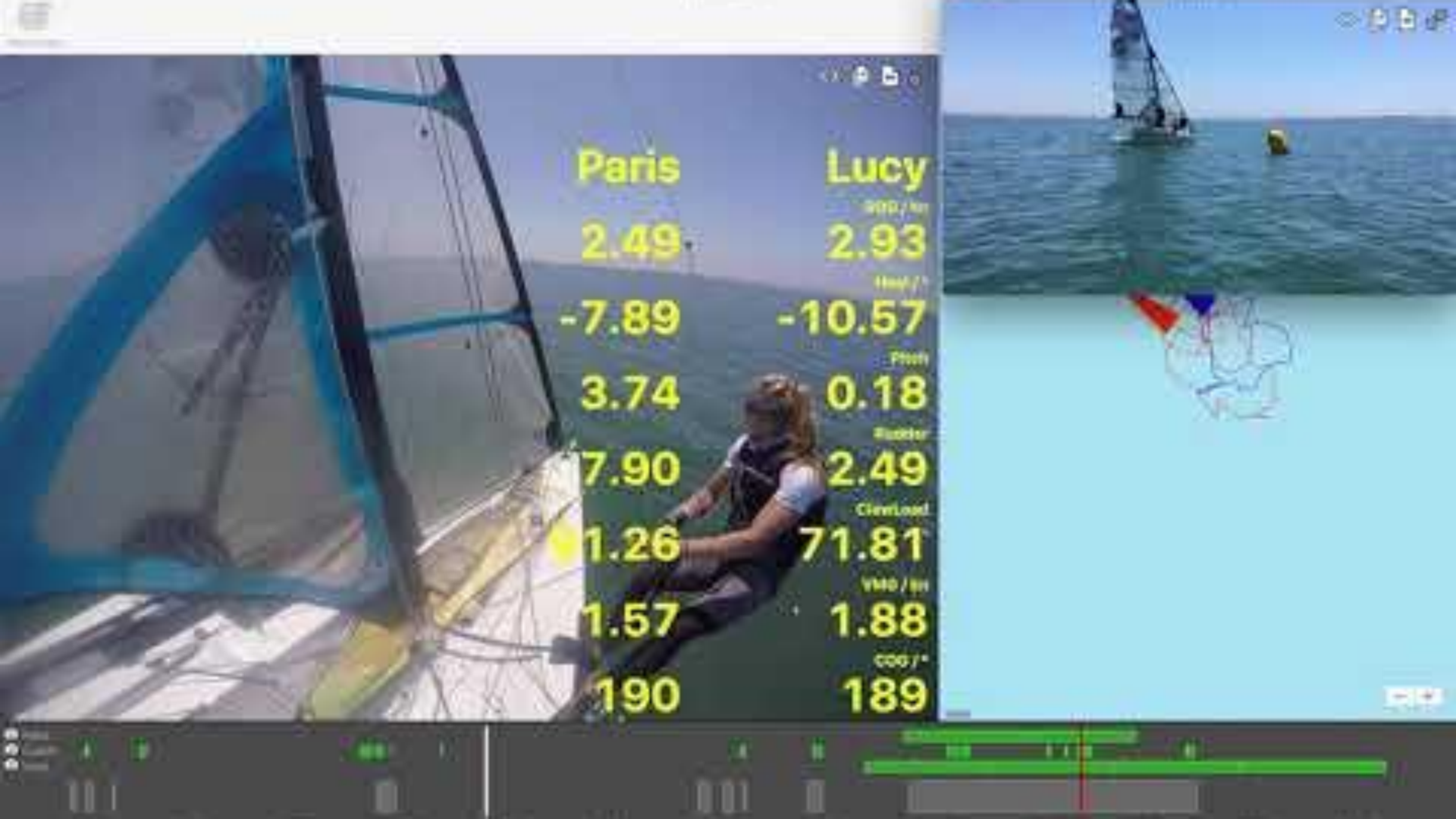
- Study boat handling technique
- Study boat speed technique
- Look at tactical racing situations

Cameras

Hand Cams

Action Cams

Drone


Paris
Lucy
2.49
2.93
-7.89
-10.57
3.74
0.18
7.90
2.49
1.26
71.81
1.57
1.88
190
189


-18°
PITCH
10
-7
-10°
ROLL
GARMIN

Information + Emotion = Good Coaching

“Easy on the entry turn, then explode across the boat”

“Rip down on the wire”

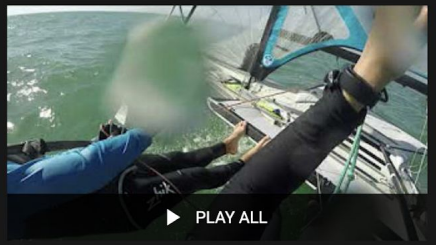
“Dance through the boat”

Woosh sound of the bell-curve flatten

What is the WORST piece of coaching tech?

The Sailing Lair

Search



Wilmot Private

27 videos • 16 views • Last updated on Nov 21, 2020

Unlisted

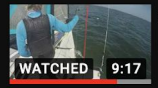
No description

McBride Racing

WATCHED 11:50

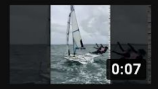
Skipper Perspective Light Air Gybes
McBride Racing

Skipper Mechanics Downwind
McBride Racing



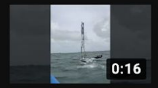
Skipper Perspective Downspeed Sliding Practice
McBride Racing

IMG 3436
McBride Racing



IMG 0094
McBride Racing

IMG 0384
McBride Racing



IMG 0095
McBride Racing

IMG 9243
McBride Racing

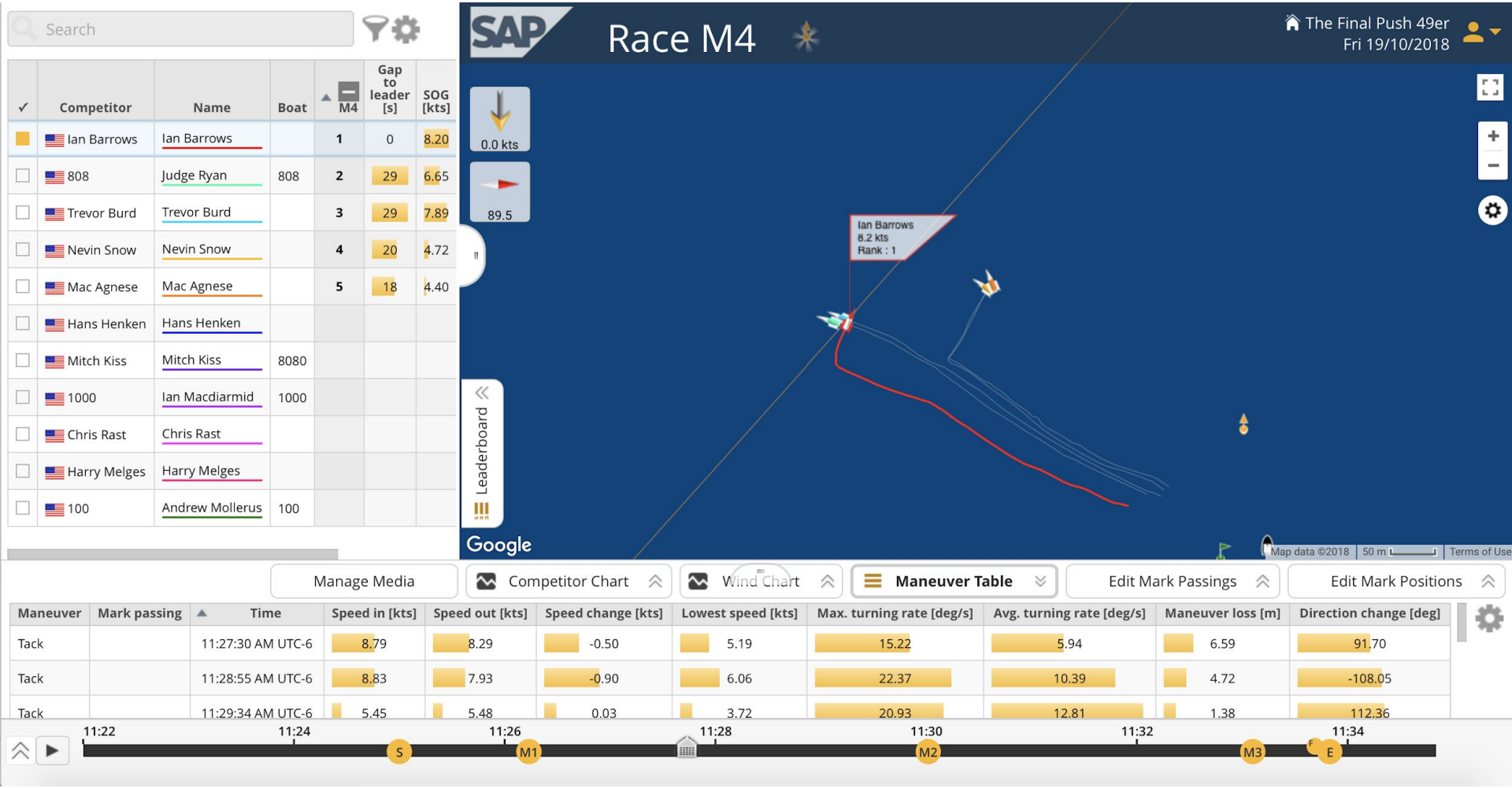

zhik

Muscle Memory + Visuals = Boat Handling Inception

Best visuals for highlight reel:

1. Head cam
2. Hand cam
3. Boom cam

Wind


Search
Competitor
Name
Boat
M4
Gap to leader [s]
SOG [kts]
Ian Barrows
Ian Barrows
1
0
8.20
808
Judge Ryan
808
2
29
6.65
Trevor Burd
Trevor Burd
3
29
7.89
Nevin Snow
Nevin Snow
4
20
4.72
Mac Agnese
Mac Agnese
5
18
4.40
Hans Henken
Hans Henken
Mitch Kiss
Mitch Kiss
8080
1000
Ian Macdiarmid
1000
Chris Rast
Chris Rast
Harry Melges
Harry Melges
100
Andrew Mollerus
100
SAP
Race M4
The Final Push 49er
Fri 19/10/2018
0.0 kts
89.5
Ian Barrows
8.2 kts
Rank : 1
Leaderboard
Google
Map data ©2018
50 m
Terms of Use
Manage Media
Competitor Chart
Wind Chart
Maneuver Table
Edit Mark Passings
Edit Mark Positions
Maneuver
Mark passing
Time
Speed in [kts]
Speed out [kts]
Speed change [kts]
Lowest speed [kts]
Max. turning rate [deg/s]
Avg. turning rate [deg/s]
Maneuver loss [m]
Direction change [deg]
Tack
11:27:30 AM UTC-6
8.79
8.29
-0.50
5.19
15.22
5.94
6.59
91.70
Tack
11:28:55 AM UTC-6
8.83
7.93
-0.90
6.06
22.37
10.39
4.72
-108.05
Tack
11:29:34 AM UTC-6
5.45
5.48
0.03
3.72
20.93
12.81
1.38
112.36
11:22
11:24
11:26
11:28
11:30
11:32
11:34
S
M1
M2
M3
E

Racing

GPS - Best for measurements & quantitative racing feedback

Drone - Best for real understanding

Move the Needle

Align & Simplify Your Tools - One mission per training block

Communicate - Be the human translator for the machines