



PROTEUS RACE COMMAND

S/V RED BARON

Solomons to Oxford 2026

RACE OPERATIONS PACKET

Friday Aug 7 · warning 1100 · G“77” (south of Cove Pt) → Oxford Tred Avon R“2” · 26.78 nm daylight · time limit 8 h
(~1905)

S/V Red Baron · Olson 29 · sail #63243 · PHRF 111 · PHRF B · PENNANT 6 · VHF 71 race / 16 emergencies

Proteus Race Command

SAMPLE RACE OPERATIONS PACKET

Built for a real race, on a real boat, from official sources.
Yours is built for **your** boat, **your** rating, **your** fleet.

IN THIS PACKET

- 1 Executive Summary** · the race on one page: if you read nothing else, read this
- 2 Race Run Sheet** · the whole race by time, mile, and which side of the rhumbline
- 3 ETA Chain & Handicap Targets** · ETAs re-verified race morning (Fri 0240); confirm start order on the notice board
- 4 Bail-Out Plan** · emergency numbers, harbor ladder (Choptank doors added), the heat rule
- 5 Paper Backup** · polar targets, course waypoints, current windows, check-in & finish procedure
- 6 Float Plan & Crew Sign-In** · complete before dock-out: one copy ashore, one aboard

Paper is primary this race: the Oxford SIs carry no outside-help clause (RRS 41 default). Everything ships before the 1100 warning; the water is the referee.

Prepared race morning, Friday August 7, 2026 · Proteus Marine Intelligence Systems LLC · Solomons, Maryland

Order the packet for your race: proteus-marine-intelligence.com · Race Command

Executive *Summary*

The race on one page · v1.2 · **RACE MORNING Fri 8/7 0240** · weather refreshed (NWS 0223 issuance): **GO**. The 0630 brief is the last check: confirm PHRF B start order on the notice board before 0800.

The Race

26.78 nm downwind to Oxford. Warning 1100 at G“77” · SW 7–12 kt going S in the afternoon (veer now in the official forecast) · flat water · brutally hot (feels ~101°) · kite up nearly start to finish · finish ~1600 in sunshine. STORM RISK HAS MOVED TO AFTER DARK: the race window is clear.

We are the scratch boat: we owe time to the whole fleet. Winning means first across the line WITH margin: Diablo needs 1:22, Nicole 2:43, The Doghouse is boat-for-boat. Every parked minute is a gift to eleven other boats.

The Five Calls

1 SAIL HOT DOWNWIND: JIBE AT ~150°, NEVER SOAK.

The polars pay us to sail hot: optimal jibe angle is 149–152° in this breeze. Leg 2's rhumbline sits at ~165°; we do not sail it. Long jibe first, hot angles, jibe back. Soaking at the mark is slow-and-low for nothing.

2 PRESSURE BEATS GEOMETRY, ALWAYS.

Two more knots of wind = 19% more boat speed downwind. No shift or shortcut is worth that. Jibe on pressure, hunt the dark water, and treat a detour into breeze as a paying move.

3 LEG 3 (R“10” → LIGHT) IS OUR RACE.

The reach is this boat's peak (~7 kt). Conversion rigged BEFORE R“10”: sheet loaded, pole plan set, douse trigger agreed. In lulls heat up ~10° to rebuild speed, soak back in puffs. The afternoon right-shift makes this leg hotter and faster; it works for us.

4 THE EBB IS FOUL ALL AFTERNOON: SAIL THE EDGES.

Foul current 1300–1800 everywhere on the course. East side up the bay (James Island flats), Blackwalnut/Tilghman shore across the mouth, never the channel axis. Mid-channel chop = wrong lane, move.

5 UNDER 6 KT = SPRINT ALARM · STORMS: KITE OFF BEFORE THE GUST.

If wind drops below 6 before R“10”, push hard and douse early: the clock is now the time limit, not storms (risk slid to after dark). The discipline stands anyway: radar glance from 1300, kite OFF before any gust line, never during. Bail point: Choptank Light; Knapps Narrows or Oxford, 40 min either way.

HELM NUMBERS

run **150° / 5.1 kt** · reach **127° / 6.9 kt** · heat to **120°** in lulls · **jibe on pressure**

Check in astern of RC (flag L) before the sequence: sail # + souls, get the confirmation, or we carry a 20% penalty all day. Pennant 6 at the stern. VHF 71.

Slower than target at the angle = something is wrong (trim, weight, kelp): fix it before discussing it.

Race *Run Sheet*

Warning 1100 Fri · start ~1105 · 26.78 nm G“77” → Tred Avon R“2” · limit 8 h after start (~1905) · VHF 71 · PENNANT 6

TIME	MILE	LEG	WIND	CURRENT	WHERE VS RHUMB	CALLS
0900–1000	dock	Harbor Island → G“77” (3.6 nm)	SW 8	Weak fair flood	-	Pennant 6 up before lines off. Main up early, polar warm-up on the way out.
1000–1100	0	Start area / CHECK-IN	SW 8–9	Fair → slack	-	Pass astern of RC (flag L): hail sail # + POB, GET CONFIRMATION : 20% penalty without it. Mixed fleet: stay clear of big-boat wind shadows.
1105–1255	0–11	Start → Choptank R“2” (000°)	SW 8–9 · TWA ~135 broad kite	+0.1 fair → slack ~1200	Deep water early → EAST as ebb builds	Clean hoist in clear air beats line bias. Cove Pt LNG security zone is a hard line: jibes planned to never need the inside.
1255–1440	11–18.8	R“2” → R“10” (029°)	SW 8–9 · TWA ~165 run	Ebb building foul 0.1→0.3	EAST, James Island flats relief	Slowest leg : pure VMG, jibe on pressure. Thermal veers RIGHT ~5°/hr: favor right, stop short of laylines. Arrive set up for the turn, not overstood.
1440–1535	18.8–24.5	R“10” → CHOPTANK LIGHT (085°)	SW–SSW 9 · TWA ~127 kite reach	FOUL EBB, max ~0.4 @ 1530	Blackwalnut / Tilghman EDGES, never the channel axis	THE PASSING LANE . Conversion rigged BEFORE R“10”: new sheet loaded, pole plan set, douse trigger agreed. Wind-against-ebb chop marks the strong water; sail around it.
1535–1605	24.5–26.8	Light (PORT) → Tred Avon R“2” (~010°)	SSW 9 · run	River ebb ~0.2 foul → slack 1800	Mid-river pressure band	Light to PORT clears the Benoni bar. Finish at the favored end: lower ladder rung. Record boats ahead/behind at the line.
1300 →	all	STORM WATCH	-	-	-	Radar watch from 1300 (crew phone). Kite OFF before any gust line, never during. Bail decision point: Choptank Light; Knapps Narrows or Oxford, 40 min either way.

If Everything Else Is Forgotten

- 1. Check in, or carry +20%.** Pennant 6 at the stern. VHF 71.
- 2. The ebb owns the afternoon.** Sail the edges: east is the friend up the bay, the Tilghman shore across the mouth. Mid-channel chop = wrong lane.
- 3. The race is won on the R“10”→Light reach.** Be rigged for it before the mark, and beat the 1700 storm window home.

No live consoles this race: the Oxford SIs have no GPS-data/outside-help clause, so RRS 41 default governs: this paper and the GPSMAP are the tools. The water still beats the paper: SOG vs knotmeter settles every current argument in ten seconds.

ETA Chain & Handicap Targets

Computed Thu 8/6, re-verified **Fri 0240** vs the 0223 NWS issuance (SW 7–12 going S, no ETA-moving change) · cb1001 observed current matches the gate table · 0630 brief is the final check

WAYPOINT	COURSE	NM	WIND	ANGLE	CURRENT	SPEED	ETA
Choptank R“2”	000°	11.0	SW 8	-135°	+0.1	6.0	Fri 12:54 PM
Choptank R“10”	029°	7.8	SW 8	-164°	-0.1	4.4	Fri 02:40 PM
Choptank Light	085°	5.7	SW 9	+127°	-0.2	6.2	Fri 03:35 PM
Finish · Tred Avon R“2”	010°	2.3	SSW 9	-157°	-0.15	4.6	Fri 04:04 PM

Course = true heading to the mark. Angle = TWA (negative = wind to port; beyond ~150 = dead run, VMG jibing assumed). Current = along-course knots, + fair / - foul. Speed = VMC toward the mark.

Finish Fri ~04:04 PM · elapsed ~5.0 h · 3.0 h inside the 1905 limit · race window storm-free per the 0223 Fri forecast

Choptank Light call (03:35 PM): arrival lands on max foul ebb. Planned, not a problem: Tilghman-side edges, never the channel. Light-air case (SW 5–7) finishes ~1800, now clear of weather but tight on the day; sprint doctrine from the gun regardless.

Beating the Fleet: Actual Entry List (posted Thu 8/6)

WE ARE THE SCRATCH BOAT of combined PHRF B/C: every number is the margin WE must put on that boat at the line (at ~5.0 h elapsed). **They finish closer than this behind us, they beat us.**

DIABLO (114) 1:22 the match race: GovCup winner; bearing log on them all day	NICOLE (117) 2:43 2025 winner, TAYC local knowledge	THE DOGHOUSE (111) even boat-for-boat, first home wins	FALCON (126) 6:48 margin we need at the line
MOOVIN (132) 9:32 margin we need at the line	ORION (132) 9:32 GovCup 2nd, margin we need	CORDELIA (144) 14:59 margin we need at the line	GRAND CRU (153) 19:03 margin we need at the line
BIG TIME (159) 21:47 margin we need at the line	WINDROSE (162) 23:08 margin we need at the line	BARBA ROJA (165) 24:30 margin we need at the line	RULE OF THUMB 5.45 s / pt / hr margin ≈ 5.45 × (R-111) s per hour of our elapsed

Numbers above assume ~5.0 h: a longer (lighter) race GROWS every margin we owe. **Fast race = small debts: pressure is double-counted in our favor. Sprint early if it softens.**

Ratings as shown on the entry page (single column): verify against the live PHRF Chesapeake list before trusting; RC elects Handicap vs Random Course AFTER the race, no redress. If more boats sit below Cordelia on the page, this grid is incomplete.

Owe/save math: corrected = 3600 × TCF_us / TCF_them - 3600 per hour of our elapsed; TCF = 650/(550+rating). Verify every rating against the live PHRF list, not the entry page.

Bail-Out Plan

Olson 29, draft ~5 ft · GovCup ladder verified 7/23; Choptank doors added 8/6. **CALL AHEAD before diverting;** depths and transient space change

EMERGENCIES: VHF 16 → USCG Sector Maryland-NCR · TowBoatUS 800-391-4869 · Sea Tow 800-473-2869

Race Day: North Up the Bay, Then East

Solomons / Patuxent (start – leg 1): home water, minutes away for the first two hours: anything degrading early, turn around.

Calvert Cliffs · THE GAP (leg 1): no all-weather harbor on the west shore; Flag Harbor is GENUINE EMERGENCY ONLY.

Knapps Narrows / Tilghman (legs 2–3): THE mid-course door: fuel, slips, bascule bridge; shoal-prone, mind 5 ft draft at low water.

Oxford / Tred Avon (leg 4 on): TAYC Dockmaster VHF 72; full marina row. Cambridge across the river as the alternate.

HEAT RULE (the daylight version of the night rule): heat index ~100: rotate helm, shade, water every 30 min. A heat casualty is a medical bail: nearest dock with road access.

Harbor Ladder: South to North to Oxford

WHERE	WHAT'S THERE	CONTACT
Solomons / Patuxent	Strongest repair cluster on the course. Zahniser's (full-service, VHF 9), Spring Cove (fuel), Calvert Marina, Washburn's. Shelter: Mill Creek inside Drum Pt.	(410) 326-2166 · (410) 326-2161
Calvert Cliffs · THE GAP	No all-weather harbor. Flag Harbor Yacht Haven (St. Leonard): private, no transients, shoal-prone entrance; GENUINE EMERGENCY ONLY, call first.	(410) 586-1915
Knapps Narrows / Tilghman	Knapp's Narrows Marina & Inn: fuel, transient slips, restaurant dock; the cut-through between the bay and the Choptank. Bascule bridge; shoal-prone, call ahead on depth.	(800) 322-5181
Oxford / Tred Avon	TAYC dockage first-come/first-served, rafting OK, tender for anchor-outs. Marinas: Safe Harbor, Hinckley Bachelor's Pt, Campbell's (Jack's Pt & Town Creek), Oxford Yacht Agency, DiMillo's.	TAYC Dockmaster VHF 72 · club (410) 226-5269
Cambridge (Choptank S shore)	Municipal yacht basin + marinas up the river, the alternate if Oxford is untenable in weather.	hail VHF 16 · verify by phone

By Failure Type

Engine (sails fine): daylight and short legs: keep sailing toward Solomons (early) or Oxford (late); TowBoatUS for the final entrance, never a tight strange channel under sail.

Rig / structural: reduce load, nearest lee NOW (Patuxent, the Tilghman shore, Choptank south side), then assess. Don't press on a compromised rig.

Crew / medical: nearest dock with road access: Solomons early, Knapps Narrows mid-course, Oxford late. VHF 16 for anything serious.

Squall line inbound: kite off BEFORE the gust line. You are slower than the front; anchor in a lee EARLY (Tilghman lee / Dun Cove off leg 3) rather than racing a black sky to a marina entrance.

Every packet's bail-out page is verified for the race's course and the boat's draft before it ships; harbors, depths, and transient space are re-checked against current local information.

Paper Backup • *if the phones die*

This sheet + the GPSMAP are the no-electronics fallback, and this race, the race-legal toolset (no consoles; SIs have no outside-help clause). Boat polars · SI coordinates · NOAA predictions pulled 7/06, re-verified 8/06.

Polar Targets: Helm Numbers by Wind Speed

TRUE WIND, KT	4	6	8	10	12	14	16
Beat · TWA off the wind	45°	43°	41°	38°	37°	36°	36°
Beat · target speed	2.5	3.6	4.3	4.8	5.0	5.1	5.2
Run · gybe TWA	139°	145°	149°	152°	159°	166°	165°
Run · target speed	2.4	3.4	4.4	5.3	6.0	6.6	7.0
Reach 90° · target	4.2	5.7	6.5	7.0	7.5	7.8	8.2
Reach 120–135° · target (the leg-3 band)	3.5	5.0	6.2	6.9	7.5	8.1	8.8

Higher than beat TWA or lower than gybe TWA and faster than target = fine. Slower than target at the angle = something is wrong (trim, weight, kelp).

Course Waypoints (SIs · GPS Re-Entry Backup)

MARK	LAT	LON	LAT (D° M.M')	LON (D° M.M')
G“77” START, back-solved, VERIFY vs charted mark	38.3507	-76.3864	38° 21.04' N	76° 23.18' W
Choptank R“2” (STARBOARD)	38.5345	-76.3864	38° 32.07' N	76° 23.19' W
Choptank R“10” (STARBOARD)	38.6482	-76.3050	38° 38.89' N	76° 18.30' W
Choptank River Light (PORT)	38.6562	-76.1844	38° 39.37' N	76° 11.06' W
FINISH · Tred Avon R“2” ↔ blue flag (approx, verify)	38.6933	-76.1767	38° 41.60' N	76° 10.60' W

Current Windows on Paper (NOAA astronomical: the clocks, frozen)

Morning: weak fair flood through the start, slack ~1200, friendly water for the first hour.

Afternoon · the race: FOUL EBB 1300–1800 at both gates. Cove Pt max 0.51 kt @ 1612 · Choptank entrance max 0.39 kt @ 1532. Slack ~1800, fair inflow after (too late to matter unless we're slow).

The whole race is sailed on the foul ebb: edges, flats, never the channel axis.

Check-In, Finish & Radio (SIs incl. Amendment #2)

Check-in (SI 5.4): pass astern of RC flying flag “L”, hail sail number + persons aboard, receive VERBAL CONFIRMATION. Starting without it = 20% penalty, no hearing.

Start (SI 7): RRS 26. Warning 1100. Line = orange flag on RC ↔ G“77”. Class order per Thursday posting; confirm PHRF B start time on the notice board.

On the water (SI 5.3): oral SI changes are made on VHF 71 with verbal confirmation from each boat: LISTEN UP.

Finish (SI 10): line = Tred Avon R“2” ↔ blue flag on RC. Record boats ahead and astern; it settles scoring arguments.

Time limit (SI 11): 8 h after our start → DNF, no hearing. No self-timing this race.

After: TAYC Dockmaster VHF 72, rafting permitted, tender for anchor-outs. Retiring? NOTIFY RC first reasonable opportunity (SI 2.1).

Commercial traffic (SI 2.2): never exercise right of way against a freighter or tug: RC can protest off a report; burden of proof is OURS.

Scoring: PHRF ToT, TCF = 650/(550+rating); Red Baron TCF 0.9834. RC elects the scoring column after the race, neutral for us at 111/111.

Float Plan & Crew Sign-In

Complete before dock-out. Leave one copy ashore, keep one aboard in the nav station.

VESSEL: S/V Red Baron · Olson 29 · sail #63243 · PHRF 111 (PHRF B, Pennant 6) · draft ~5 ft · VHF: race ch 71, emergencies ch 16

VOYAGE: Solomons to Oxford Race: depart Harbor Island ~0900 Fri Aug 7 · start G“77” ~1105 · 26.78 nm to Oxford · expected finish ~1600–1800 (limit ~1905) · boat at TAYC / Oxford Fri night · return delivery Sat ~0700 or Sun ~0600 per weather; shore contact told which before dock-out.

IF NOT HEARD FROM by Fri 2100: call the shore contact below, then USCG Sector Maryland-NCR via 911 or VHF 16 relay.
TowBoatUS 800-391-4869 · Sea Tow 800-473-2869.

SHORE CONTACT (holds this plan): name _____ phone _____

Crew Aboard

#	CREW NAME (SIGN IN)	CELL PHONE	EMERGENCY CONTACT	CONTACT PHONE	MEDICAL / ALLERGIES
1					
2					
3					
4					
5					
6					
7					

Return Check-In

Finished / arrived Oxford: date _____ time _____

All crew accounted for: **YES / NO**

Shore contact notified of safe arrival: _____ (initials)

Return delivery departs (Sat 0700 / Sun 0600): _____

Back alongside Solomons: date _____ time _____

Shore contact notified, float plan CLOSED: _____ (initials)

A float plan only works if someone ashore knows to worry: hand this to the shore contact, not the chart table.