

The Newsletter of the Sydney Amateur Sailing Club



December 2021

SYDNEY AMATEUR SAILING CLUB

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October

COMING EVENTS

FRIDAY 7 JANUARY 2022

First Friday Twilight race for 2022

SATURDAY 8 JANUARY 2022

Point score race for Super 30s, Classic Division, Cruiser Racer Division and Cavalier 28 Division

SATURDAY 15 JANUARY 2022

Point score race for Super 30s, Classic Division, Cruiser Racer Division and Cavalier 28 Division

SUNDAY 16 JANUARY 2022

Point score race for Sunday Classic Non-spinnaker Division and Sunday Non-spinnaker Division

SATURDAY 22 JANUARY 2022

Point score race for Classic Division and Mixed Fleet Division. Sheep Station Series race

WEDNESDAY 26 JANUARY 2022

186th Australia Day Regatta

SATURDAY 29 JANUARY 2022

Point score race for Super 30s, Classic Division, Cruiser Racer Division and Cavalier 28 Division. Around Islands Tea Pot Trophy race for Super 30 Division and Codock Trophy race for Cruiser Racer Division

SUNDAY 30 JANUARY 2022

Point score race for Sunday Classic Non-spinnaker Division and Sunday Non-spinnaker Division

SATURDAY 5 FEBRUARY 2022

Point score race for Classic Division and Mixed Fleet Division. Sheep Station Series race

SUNDAY 6 FEBRUARY 2022

Metre Boat Rally

SATURDAY 12 FEBRUARY 2022

Point score race for Super 30s, Classic Division, Cruiser Racer Division and Cavalier 28 Division

SUNDAY 13 FEBRUARY 2022

RANSA Regatta

SATURDAY 19 FEBRUARY 2022

SASC Sesquicentenary Regatta

NEED THE TENDER?

Call Nancy K on 0418 678 690 or Jack Millard on 0418 678 819 (race days)



SIGNALS FROM THE COMMODORE

Again, we are indebted to past SASC Commodore John Jeremy for producing another issue of the *SASC News*. As has been observed by others, the SASC boasts a rare collection of old Commodores, perhaps Classic Commodores would be a more appropriate classification. Just last weekend one of these Classic Commodores squeezed *Lonely* above the start line and only the week before two Classic Commodores returned to the pontoon with a timber mast no longer pointing to the heavens. My immediate predecessor is also in frequent attendance and spent a good part of the winter overseeing the dinghy shed refurbishment, treasuring our books and either servicing or driving our club vessels. We have Classic Commodores on our starting teams, delving into our archives and elsewhere being useful. Gratitude is extended to you all from the incumbent.

We end the year with at least a few races under our belts and doubtless with a renewed passion for our beautiful pastime. Despite the pandemic we have welcomed a steady stream of new members, all potential Classic Commodores and the Club remains in sound financial order. A new range of apparel has been released to coincide with next year's 150th celebrations and planning for those celebrations is well advanced. Our staff continues to contribute to the Club's fraternal ethos and have dealt with the challenges of the year with aplomb. Issues with the COVID-19 pandemic continue to surface and the Board is of the unanimous opinion that entry to the Club will remain restricted to those who have been double vaccinated.

The New Year will see Rule 46 come into effect whereby crews of yachts participating in sailing races, including those conducted by the SASC, will need Australian Sailing Numbers. This can be obtained through either Club membership or SailPass. Yes, it involves bureaucracy, but the Club has introduced procedures on our website which streamline the process. Just occasionally things can go very badly wrong, at sea or in the harbour, knowing the numbers aboard a vessel and their identity will be the first question asked of race officials, it is not an unreasonable question.

Wishing smooth seas and fair winds to all members, especially to those heading south on Boxing Day such as member Vanessa Dudley in her 24th race.

Sean Kelly



Photo John Jeremy Fagel Grip enjoying perfect sailing conditions in the Idle Hour Trophy race on 23 October

THANK YOU INTERNATIONAL PAINT



The SASC would like to thank International Paint for their generous donation of Micron AP anti-fouling paint for the Club's starter's boat *Captain Amora*









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The 186th Australia Day Regatta will be sailed on Wednesday 26 January 2022

The Notice of Race will be available at www.sasc.com.au and www.australiadayregatta.com.au



THE COMMODORE, FLAG OFFICERS AND DIRECTORS EXTEND THEIR BEST WISHES TO ALL MEMBERS FOR A HAPPY CHRISTMAS SEASON AND GOOD COVID-SAFE SAILING FOR 2022

BEST WISHES TO ALL OUR STAFF ON BEHALF OF ALL MEMBERS WITH THANKS FOR THEIR SUPPORT AND EFFORTS OVER ANOTHER VERY CHALLENGING YEAR

SEASONS GREETINGS FROM PAULA, KAREN AND CATHERINE (ADMIN AND RACING) ROD AND ROY (BOATSHED), PETER (CLUBHOUSE), AND ALL THE TENDER DRIVERS AND STARTING TEAMS



SAILING AGAIN!



Photos John Jeremy Lolita and Huon Chief starting in the Idle Hour Trophy race on 23 October, the first race day after the lockdown



Clewless? revelling in the perfect conditions



Flying Brandy and Cherub after rounding the Nielsen Park mark



Wilding 3, Samphire, Clewless? and Rapid Transit approaching the Nielsen Park mark

A MILLION KEYSTROKES LATER...

The sesquicentenary archive project undertaken by Fred Bevis is nearing completion. David Salter reports.

"I don't know how many hundred of hours I've put into it — thousands, probably — and millions of keystrokes, reams of paper and multiple cartridges of ink."

Fred finishes that reflection on a characteristic chuckle. To him, compiling the new digital archive has been an engrossing retirement project — an exhaustive labour of love. For the Club, his efforts have already produced a precious resource that makes our history accessible in the digital age.

The original object of the project was simply to digitize the existing club records. But by the time this task concludes next year as a celebration of our 150th anniversary it will have grown well beyond that modest brief.

Bevis is ideally suited to the challenge. Initially trained as an accountant he was the Finance & Administration Manager of an engineering firm when the first generation of IBM computers was introduced to the business world. Fred immediately grasped the potential of computer power. "My real interest was in mining the raw data and turning it into information", he remembers.

Fred and his trusty laptop hard at work on the archive project

That approach has now guided his strategy for the current SASC project. His starting point — "the primary record" — was the Club's Annual



Reports. They exist from 1954 to the present day. "I've collected every member that's in the annual reports, and every yacht that's been mentioned. But there were obviously a lot of members who'd already been members for 30 or 40 years in 1954."

A key supplementary source was the yacht registers contained in those Annual Reports. In addition, Fred unearthed a register of yachts prepared for the Club's 50th anniversary in 1922.

The key to then spreading his research net further back into club history was the Trove website of newspaper articles. "I started with newspaper reports on the founding in 1872, then I looked for the race reports.

"I've now got a print-out of what boats competed in the first ten years, and until 1899 — the skippers' names and the boat names. I put them in an Excel file, with the date of the race, and whether they were in the Anniversary Regatta or an SASC Club race. I can sort that out by boat name and owner's name, and fill in the early years."

Bill Gale then contributed pages of hand-written notes suggestion some additions, corrections and deletions, particularly in relation to boats designed by his father Cliff.

Two additional side-projects have greatly enhanced the scope and detail of the archive. Peter Hamilton created a full index of the two books published on the history of the Club. Meanwhile, John Jeremy presented the entire *SASC News* in a digital form to allow the creation of an active index, again the work of a tireless Peter Hamilton. This can take the reader directly to any article from almost 7,000 items.

Members Name 2021 10 16	Given (First) Name	2	Year Joined Club	Join(j) or Exit(x) Year not known	Racer - not a memb but a Div winner on HB	Ann Rep Yr.	Last Year in an Ann. Rep.	Yrs. SASC Meb.	Past ion ife ife ife Me nb.	Cur Meb type: HL LM ALM OM IM ACM CM YM	Boat Name	Sail No.	Boat Class, Type, Designer	Past Boat Name or Sail No (used to trace a boat)	Season Gold Medal - Yr. & Div.	Kelly Cup Win. (Year)	Forster Cup (Inter state compete. 1922 54)	Anv. Regt/ Aust Day Reg. (div. plc.)	Lord Howe Island Race, Visit, & BBQ (C=Crew on yacht)	Syd. Hob. Race (C=Crew on yacht shown) WBF visit	South port/ Gold Coast Race (C=crew on yacht shown)	Hon Starter S	SASC Book/Page Ref. CB-100th SC 125th (book - CB or SC, page No., "P" if photo)	LINKS Book 1(CB) Rook 2(SC) SASC News Hon, Boards	LINKS Book 1(CB) Book 2(SC) SASC News Hon. Boards	LINKS Book 1(CB) Book 2(SC) SASC News Hon. Boards	LINKS Book 1(CB) Book 2(SC) SASC News Hon. Boards
Wood D G	Dennis	м	2005			2009	2021	16		ом	Antares	343			wc	2016											
Rozakis C A	Costa	м	2006			2010	2021	15		ом	Antares	A42			2011 D2 2011 D2s												
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Skellett R C			2011			2013	2013	2			Antares	A42			2013 WC												
Hughes R W		м	2014			2016	2017	3			Antares	A42															
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Campbell H G	Harry	м	1920			1973	1980	60	м		Aoma												CB 73 204 205p	Book 1 p3	Book 1 p8		
Atkins K N			1980			1998	2003	23			Aotea	A31															
Daintree D C			2003			2003	2007	4			Aotea	A31															
O'Donnell J M		м	1965			1968	1968	3			Aoth	A60															
Murnin L		м	1921			1921					Apache	A23											CB 77	Book 1 p3			
Aikman G		м	1932	j×		1932			_		Apache	A7															
Kennedy J W S		м	1947			1954	1970	23			Apache	A7			1949												Hon, Board
MacLaurie T W						1954	1955	3	_		Apache	A99															
Bear V Dr			1970			1970	2000	30	_		Aphrodite	A98	Bluebird														
Ahlers G O		м	1977			1978	1979	2	_		Apples	A133	-														
Ahlers J A		м	1977			1979	1979	2	_		Apples	A133															
McNamara A		м	1977			1979	1987	10	_		Apples	A133															
Brecknock P J		м	1977	L		1982	1990	13	_		Apples	A133			1982 QT	<u> </u>		L	<u> </u>	<u> </u>		<u> </u>		<u> </u>			
Griffin J	John	м	2005			2006	2021	16			Apre Vous	A70						-		<u> </u>				<u> </u>			
Watson B J	Bruce			<u> </u>		1995	2021	36	_	ом	April	A186				<u> </u>	-	-		<u> </u>			-	<u> </u>		-	\vdash
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Begg H M		M		-	-	1960 1971	1968 1979	15	_	-	Aquarelle	A74 A67			1972 D4	-		-							-		Hon. Board
Chapman W H Chapman R	Russ	м	1972			1980	2017	45			Aquarius Aquarius	A67	Daydream Daydream		1976 D2 1980 D2 1985 D7 1992 D7							2003-13					Hon. Board
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Watts P J		м	1984			1994	1998	14	-		Arabesque	4408															
Benjamin P		м	1959			1960	1967	8			Araluen	A44															
Raffan J V		м				1967	1974	8			Arana	A127											CB 212p	Book 1 p8			
Robinson G		м	1873	j×		1873			_		Araucano				1874 2nd Cl								CB 15	Book 1 p1			
Howe W R		м	1959			1960	1966	7	_		Arawa	A149															
Watts S J	Stafford	м	2018			2020	2021	3		ом	Archilles	PH46															
Firth-Smith J	John	м	1989			1996	2017	28			Archina	A101		A2						1994			SC 11 58 59p	Book 2 p2			

A page from the archive, sorted by boat name

Those extra resources encouraged Bevis to refine his data base. "Out of all that I have an index of every member, the date they joined, and the last time they were mentioned in an Annual Report and the boats that they've owned. I can chronologically show the boats that members have owned during that period."

Club Captain Alice Murphy then spent many hours arranging those data files on the web and showing Fred how to create the hyperlinks that now connect the wealth of material for specific searches.

Does this massive accumulation of cross-referenced information run the risk of becoming an endless task, like painting the Harbour Bridge? "At some point I've got to draw a line under it", Fred concedes.

"But there are two primary things which need to be done. One is to educate our members how to use it. I'm looking to make a video to show members how to use it—to paint a picture of what's there — what's available — and then how to use it.

"The next thing is that I've got to document how it's to be maintained in the future, and tag the responsibility to a Board member who will confirm that the archive has been updated each year. It's only useful is if it's current."

AN ARCHIVE QUIZ

- How many boats named *Norn* feature in *SASC News* between August 1998 and August 2021?
- Which of the Club's trophies was misplaced by the bank?
- How much would SASC have charged to quick-slip a yacht of 11 metres LOA in January 1999?
- How messy is Irritable Bowl Syndrome?
- Which character from the Goon Show wrote a letter to the editor of SASC News?
- What is the Grellis Index?
- How many photos of *Cherub* appear in *SASC News* between August 1998 and August 2021?
- What shouldn't we tell BHP or Glencore about Cremorne Point?
- What is the 10th Nautical Commandment?
- Why should SASC expect compensation from the Department of Defence as a result of the recent decision to obtain nuclear-powered submarines from USA or UK?
- The propensity of competitive yacht owners to choose racy names for their yachts seems *au naturel*. *SASC News* features yachts named *Streaker*, *Wet Kiss*, *Caress*, *Eve's Delight*, *Bottoms Up*, *Vanity*, *Barely Legal*, *Mischief*, *Whisperer*, *Indulgence*, *Wild Oats*, *Midnight Rambler* and so on . . . Perhaps it is not surprising that topics in SASC News have included Tender Usage, Best of Brest! What is the **least** lascivious yacht name you have come across? To kick-start your thinking, how about *Cold Shower*?

Peter Hamilton



The dedicated work of members like Fred Bevis with his team and Mark Pearse is making the archives of the Club and those of other Australian institutions more accessible to members. There is still much to do, for example can you identify this yacht? Sail numbers would help!

CRUISING IN COMPANY TO PORT STEPHENS

by Chris Manion First held in November 2020, this BBQ cruise was an alternative to the Lord Howe Island event when COVID-19 prevented access to LHI. It turned out to be a great week and the Soldiers Point Marina (SPM) staff made it most enjoyable.

In 2021 we had planned for 10–15 boats to do a similar trip over seven days including the October long weekend. However regional area pandemic restrictions stopped that and, in mid-September, was decided to aim for a departure from Sydney on Monday 1 November with a BBQ gathering planned for 5 pm on Thursday at the SPM. The moons aligned for 11 yachts to succeed this time with NSW opening up on 1 November.

Samphire was off on Monday 1st with crew Tim, my son, and his mate Jordy leaving Mosman Bay late in the morning on the way to Coaster's Retreat, Pittwater. What a great sail with the crew organising the fishing lines — and a fish caught on the passage. An ENE wind of 12–15 knots was perfect with it building through the afternoon and moving NE. Coasters was a little exposed to the NE so we moved to the bay just south Morning Bay where it was calm — a perfect night for eight of the yachts heading to Port Stephens — Samphire, Tula, Le Mistral, Huon Chief, Double Dutch, Minnow, Splash and Have Fun.





December 2021

It was an early start for most with 48 n miles to Newcastle Harbour and the NCYC marina. *Double Dutch* took their time to set off as they had arrived at Morning Bay quite late on the Monday night. It was motor sailing at 6 am until mid-morning when the NE wind had settled in and, by early afternoon, *Samphire* had the full main with the self-tacker (No. 4) earning its keep — how good is this self-tacker to balance the boat in 20+ knots. No fish were caught this day, but many dolphins were swimming with us. As we eased sheets for Newcastle Harbour entrance, we were doing 10 knots and enjoying the ride in company of a few friends from SASC — *Tula* and *Le Mistral* — who were also romping along.

We sorted out our marina berths, enjoyed good showers and were off to the yacht club bar. It was Melbourne Cup day, who would have known, and there was a crowd still in the club with the ladies wearing head gear and well-dressed men looking like it had been a big day. Who won — still running was the general response. We headed outside into the beer garden. We had all had a few great days sailing with plenty of sun and wind and no discussion about COVID-19, what a blessing. We had an additional boat join us — *As You Do* who had been ahead of the pack in Newcastle, which is what this is all about, a group of sailors enjoying the escape from Sydney with no COVID-19 concerns.

Wednesday was another early start with an expected building NE wind expected; we had only 27 n miles to Port Stephens. No more fish were caught on *Samphire* that day though Tim did get us up to 12.4 knots

The marina at Soldiers Point again proved a safe and hospitable rendezvous





Of course there was always time for a spot of Cosh-Dover marine engineering work, this time in *EZ Street* down a wave. Sheets eased into Port Stephens, around Tomaree Headland then the run down the bay to Soldiers Point which is about an hour from the heads. It had been another sunny day — the wind was NE all day with 20–25 knots as we arrived. The sea state was not too bad for *Samphire* with her high topsides and she was very dry for the crew.

Darren and his marina staff were again exceptional when we arrived as they had been 12 months earlier. *Huon Chief* had engine issues and they towed her to the marina where Mr Cosh could attend to their problems the following morning. Yes, the resident SASC 'Mr Fix It' had arrived in *EZ Street* after a mission to look at new cruising waters south of Sydney Harbour — but more on this in the future. Trevor sorted out the fuel line issue and made the crew of *Huon Chief* very happy by lunchtime on Thursday. Some of us went walking up Mt Tomaree with its beautiful views, looking out for *As You Do* which was still to arrive from Newcastle. *Minnow* had gone to Broughton Island before the BBQ.

With 11 yachts and 45 people in attendance, with a special appearance by a few like David Salter and others via the motorways, we had a most enjoyable BBQ. We started with a few showers though they were short lived and all enjoyed the evening. This may become a regular escape for us all. A few crews used it as a warm-up for their trip to Lord Howe Island the following week, including *Ariki Tai* and *Double Dutch*. The staff and facilities are excellent at SPM and nothing became an issue, not even the glass table which did not last the night.



Photo David Salter

The marina again proved to be an ideal location for the gathering



Photo Chris Manion

Dinner time in Samphire at Broughton Island

On Friday morning a few of us, *Samphire, Tula* and *Le Mistral*, headed for Broughton Island. What a good decision that was. It's a great place to visit although we only had a night. We did some exploring on the island, caught five eatable fish and had a very peaceful night in Coal Shaft Bay in a strong NE wind.

On Saturday morning, *Samphire* headed south to Pittwater, with *EZ Street* and *Le Mistral*, in a building Nor'easter blowing up to 25 knots with full main and a poled-out head sail doing 8–10 knots. Then back to Sydney Harbour early for the SASC Sunday race which in we had a good result. This was a great week and the cruise will be on again for sure.

Samphire and Le Mistral in Pittwater on the way home



TOWARDS 150 YEARS

A story from the SASC online Archives — *why we will never be Royal* Why are we the plain 'Sydney Amateur Sailing Club' when there exists

by Bev Schurr

- Royal Sydney Yacht Squadron
- Royal Prince Alfred Yacht Club
- Royal Motor Yacht Club
- Royal Sydney Golf Club
- Royal Randwick Racecourse, and even
- the Royal Sydney Easter Show?

The story begins in 1954. The Royal Tour by Queen Elizabeth and Prince Philip that year was a huge event in Sydney. In August 1953 the Sydney Amateur Sailing Club had resolved to donate £25 towards the cost of the Royal Regatta which was to be held in Sydney in February 1954 and which was part of the entertainments provided during the Royal tour. The Royal tour finished in Perth in April 1954. In May 1954, club member R Stevens (member 1917 to 1965, Life Member) suggested that the Amateurs apply for a Royal Charter. It was resolved that inquiries be made about the correct procedure to obtain one (*The Amateurs (1972)*, p 44).

The procedural issue was addressed at a club meeting in February 1955 (ibid, p 44):

The Commodore from the Chair explained that a Royal Charter was not necessarily what this Club requires and it may be sufficient to request permission to use the word "Royal" in our present title.

The meeting resolved:

Royal Prefix — A petition to the Premier stating the reason for the request giving details of membership, background, financial standing. If the Premier approves he will forward the request to England — request to be prepared.

The issue seems then to have been put to one side. That is not surprising given that in 1955 the Club made its first offer to buy the present clubhouse on Cremorne Point. Negotiations to buy or lease various sites continued until January 1962 when contracts were signed (*ibid*, p 46).

Nothing further seems to have happened until 1969. At that time Australia was preparing for the 1970 Royal Tour and the celebration of the bicentennial of Captain Cook's voyage up the east coast of Australia in 1770. This seems to have re-ignited interest in all things royal. However at the September 1969 Meeting of the Club it was noted that the opportunity to become "Royal" had passed (*ibid*, p 54):

Centenary Celebrations Committee applied for "Royal" prefix and the Governor replied that Her Majesty had declared twelve months ago that no further "Royal" prefixes would be granted.

Another modification to the Club's name was sought in July 1966 when the Commodore suggested that the name of the Club be changed to "Sydney Amateur Yacht Club Limited". However at a meeting in November 1966 the resolution failed to obtain the necessary three-quarters majority and was lost (*ibid*, p 51).

THE COANDĂ EFFECT ON UPWIND SAILING

by Stuart Anderson When sailing into the wind sailors spend a lot of time making sure that the curvature of their sails are just right to drive the yacht at its maximum speed. But why does a stream of wind follow the outside curvature of the sail? Why doesn't the air just hit the forward edge of the sail and keep on going in a straight line?

Air bending around the curvature of a surface is explained by the Coandă Effect, named after the Romanian aeronautical engineer Henri Coandă (1886–1972), who first described this phenomenon. His study has huge implications, not just for sailing boats but also for air foils and aircraft wings.

Going back a step it is useful to look at the air we live in. The atmosphere from sea level to 100 km above consists of molecules of nitrogen, oxygen and some other gases. Under gravity (9.812 m/s²) these gases are pulled to the surface of the earth. The only gas light enough to escape the earth is hydrogen. The result is that each of us is carrying around this huge column of air that has a mass of 10,328 kg per square metre. The more familiar pressure expression of this is 1,013.26 mbar. This pressure is referred to as being one atmosphere. By comparison, to keep the carbon dioxide dissolved in a bottle of champagne the pressure inside the bottle is approximately five atmospheres. At sea level air has density of 1.205 kg per cubic metres and a viscosity that is around one thousand times less than that of water. Viscosity is a measure of the internal attraction between the molecules and it plays a critical role in the Coandă Effect.

We are living in this invisible thick gas which is able to exert large forces when subject to some change or interaction. Air, like water, moves from a high pressure to a low pressure. An example would be the afternoon sun heating up the air over coastal land. The land is able to absorb heat must quicker than the sea. This causes the air over the land to become relatively hotter, expand and become less dense and rise, resulting in less pressure over the coastal land. The air over the sea is at a higher pressure and it moves in towards the lower pressure air on the nearby land, creating an on shore wind.

The sail can be thought of as a thin curved air foil similar to the wing of a bird in the way it works. Moving forward some air passes below and some above. Air will follow an adjacent surface that curves away from the flow as long as the curvature of the surface is not too great.

To explain this, when sailing at just the right angle into the wind, a stream of air passes over the forward edge of a curved sail. This air is able to drag along some of the other air molecules just behind the outside edge of the sail. This dragging along is due to the attraction, or viscosity, between the air molecules. Having less air behind that edge of the sail creates an area of low pressure. The air on the other side of the wind stream is at normal atmospheric pressure, which is a slightly higher pressure compared to the air next to the sail. The result is that air from the high pressure area will move to the low pressure area next to the sail. The wind stream is pushed onto the curved outside of sail. As long as the curvature of the sail is not too great, the wind will remain attached and "stick" to the curvature of the sail even though that curvature is away from the initial direction of the wind. This is the Coandă Effect.

For example the wind may make contact with the edge of the sail at say 35°, relative to the centreline of the boat, and follow the curvature of the sail, and exit at 65°. After a certain distance along the curvature of the sail the air stream moves from steady smooth flow to turbulent chaotic flow and no long remains attached to the sail. When the tell-tails attached to the sail are horizontal the wind is smooth. Whilst the wind is smooth it exerts a useful force on the sail.

The next concept is that the wind on the curved side of the sail increases its speed. It is similar to an open house front doorway facing a very strong wind. As the doorway is closed the same amount of wind is forced to go through the smaller gap between the edge of the door and the door frame. The wind speed increases. This is described as conservation of flow rate. For example wind passing through an open doorway with an area 5 square metres at a speed of 10 metres per second the flow rate is 50 cubic metres per second (5 m² × 10 m/s = 50 m³/s). If the door is closed half shut the doorway now has an area of 2.5 square metres (5 m² × 0.5 = 2.5 m²). With the same volume of wind passing through the smaller doorway gap the wind speed must increases to 20 metres per second (50 m³/2.5 m² = 20 m/s).

A sail going towards the wind can be thought of as an open doorway. As the curvature of the sail is adjusted by the sheet attached to the clew of sail and at just the right angle to the wind it also acts like a closing doorway. The air on the other side of the wind stream next to the sail is somewhat incompressible and also acts similar to the edge of the doorway. The steady flowrate of the wind is forced between these two barriers, the outside curve of the sail and the incompressible air. The air has nowhere else to go and must speed up. The result is that the wind speed on the curved side could be twice that of the windward side.

This increase in wind speed has enormous implications on the forces on the sail.

Whilst the air stream remains smooth, the curve in the sail causes the air stream to constantly change its direction. This is defined as centripetal acceleration, v^2/r , where v is the air stream velocity and r is the radius of curvature of the sail. The mass of the air stream undergoing the

centripetal acceleration results in a force on the sail. This is similar to say a 20 kg object being rotated on a 2 m rope at 15 m/s (29 knots), the force would be 2,250 Newtons (F=m.v²/r). This along with the direct force, or dynamic force, on the sail from the wind pushing on the windward side of the sail (F= ¹/₂ .air density.v².projected area of sail) less water and wind drag, drives the boat forward. To get a feel for the forces at play, someone who weighs 70 kg will exert a force on the earth of 687 Newtons (F=70 kg. 9.812 m/s²). The radius of the sail may be increased or decreased by adjusting the sheet attached to the clew of the sail, or trimming. Increasing the radius of the sail is be desirable as the wind speed increases as this will help the wind stream stay attached to the curvature of the sail and decreases the force on the sail.

A sail that is completely flat and without any curvature would have no centripetal acceleration and only have the relatively smaller windward component of the wind to push the boat forward. In the case when travelling directly downwind, as the boat approaches the speed of the wind, the relative speed of the wind and boat becomes less and less and so the dynamic force on the sails becomes less and less. The boat can never go faster than the wind and will never even reach that speed because of water and wind drag.

When sailing upwind sailors can exploit the Coandă Effect on sails by optimising the curvature of the sail and maximise boat speed in the knowledge that the wind will stick to outside of the sail as long as the wind angle is just right.

References

Streeter & Wylie (1979), Fluid Mechanics, McGraw-Hill Anderson (2003), The Physics of Sailing Explained, Sheridan House Landell-Mills (2020), Sailing into Wind is Explained by Newtonian Mechanics Based on the Mass-Flow Rate, European Journal of Applied Physics Babinsky (2003), How do Wings Work, Cambridge University, Physics Education



SUNDAY DRIFTER



Photos John Jeremy

It has to be a very keen, or perhaps desperate, race officer who will start a race in very light winds from the west on a north east course, but that happened on Sunday 7 November. *Hoana, Anitra V, Josephine* and *Caprice of Huon* found enough wind to get going



As forecast, the wind went to the NE and *Clewless*? made good progress before it, but not for long as the wind soon changed again to every point of the compass, never exceeding 10 knots



Just back from Port Stephens, Samphire found enough wind to finish the shortened course at Shark Mark and win her division



Cherub drifting towards the finish in a fading easterly. Just after she finished the wind came in from the NW at about 8 knots. The storm in the background may have been responsible

FRIDAY TWILIGHTS START AGAIN

December 2021



The first Friday Twilight race on 29 October was abandoned because of a nasty westerly, but those present enjoyed dinner on the wharf



The barbeque in action again, at last!



A brisk southerly arrived for the start on Friday 19 November. Dancing with the Wind seemed to enjoy it



Everything was under control in As You Do



Division 1 on the way into the southerly under familiar grey skies



Free Spirit, Cherub and Anitra V about to finish. Free Sprit finished second after As You Do in Division 1

A GLANCE ASTERN



Photos John Jeremy

Sunrise over Pittwater, January 1997



Where are the lifejackets!. The SASC tender service at Coasters Retreat on Good Friday 1997

ON THE WATER



Photo Mike Warner

Mister Christian wins by half a nose! A perfect finish for the Classic Division on Saturday 20 November



Always a sad sight — the gusty westerly was too much for Vanity's mast on Saturday 13 November

AROUND THE CLUB



Photos David Salter

An avian visitor enjoying the spring sunshine on the wharf. Seagulls have been busy also — one yacht in the Bay (which won't be named) had two seagull nests on board (but not at the same time)



White cockatoos have been plentyful (and noisy) this spring. Fortunately they don't seem to fancy wooden masts, but have been known to remove Windex

NEW MARITIME ASSETS



Photo Australian Antarctic Division

Seen here crossing the southern Indian Ocean, Australia's new Antarctic research and supply ship, Nuyina, arrived in her home port of Hobart on 16 October after a 47-day 12,958 n mile delivery voyage



RAN photograph Based in Western Australia, the second of the RAN's new replenishment ships, HMAS Stalwart, was commissioned on 13 November

HOLIDAYS AT THE SASC

Members often decide to work on their boats during the holiday period — boats at the Club for work should be moored at the piles in order that the pontoon is available for members to pick up and drop off guests and other short-stay visitors.

New Year's Eve in Sydney will be a special day and many members may want to join in the celebrations with a picnic at the clubhouse or afloat, assuming COVID-19 leaves us alone.

There will be a tender service over the holiday period during the hours below. It would help greatly during busy periods if members could use their dinghies when practicable and by picking up passengers from the wharf. On New Year's Eve, it would make it easier for everyone if members could refrain from securing their boats at the pontoon except to pick up or drop off guests, and then for the shortest time possible. The kitchen and barbeque facilities will be available, but the bar will not be open.

TENDER SERVICE

No service on Christmas Day, normal service on the following days.

Saturday 18 December 0900 – 1800 Sunday 19 December 0900 – 1800 Sunday 26 December 0900 – 1800 Monday 27 December 0900 – 1800 Tuesday 28 December 0900 – 1800 Friday 31 December 0900 – Sunset Saturday 1 January 0900 – 1800 Sunday 2 January 0900 – 1800 Monday 3 January 0900 – 1800

The office will be closed from COB Wednesday 22 December 2021 to the morning of Tuesday 4 January 2022. Racing will be closed from COB Friday 17 December 2021 to the morning of Friday 7 January 2022 (first Friday Twilight 7 January). The Boatshed will be closed from COB Thursday 16 December 2021 until Monday 11 January 2022.

MANAGE YOUR GARBAGE

Despite clear signs, some people are still putting garbage containing recyclable materials in the general garbage bins. This requires our garbage contractor to spend time sorting through the garbage — **at the Club's expense**.

The problem arises from sheer laziness amongst those coming ashore from boats or enjoying the facilities of the Club.

Please — sort your garbage before dumping it in the bins — it's not rocket science and you will save the Club money which is much better spent on other things.

REMEMBER THE NEIGHBOURS

We share our little patch of paradise with our neighbours. Please ensure that you and your guests avoid parking inconsiderately and, when leaving the Club, do so quietly and without inappropriate behaviour.

December 2021

WHARF RULES — A REMINDER

With the holiday season just about upon us, many members will be looking forward to days on the water or at the Club completing that essential maintenance on the boat before the summer season begins. So that all may enjoy everything the Club has to offer, please ensure that the wharf rules are observed at all times. As a reminder, they are set out below.

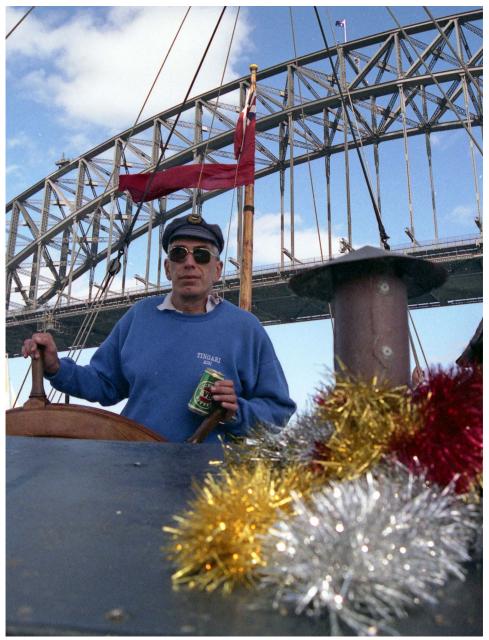
- 1. No yacht shall moor on the pontoon in the area reserved for dinghy launching.
- 2. No long term work on yachts during the weekend or Public Holidays should be carried out while moored to the pontoon. Such work should be carried out while yachts are moored fore and aft to the wharf and piles in front of the Clubhouse.
- 3. Yachts moored to the pontoon should ensure bows and sterns do not interfere with the touch and go area at the end of the pontoon and so allow easy access to this area for the Club tender and other vessels.
- 4. Owners/skippers must remain on the Club premises while yachts are moored to the pontoon and wharf area. No yacht attended or otherwise is permitted to remain overnight on the pontoon and only attended yachts are permitted to remain overnight while moored to the wharf.
- 5. Members may use a Club dinghy but must return it within a reasonable time to the dinghy shed. Under no circumstances may a Club dinghy be left on a mooring.
- 6. No dinghies may be left on the pontoon.
- 7. Masts after removal from yachts are to be carried to the grassed area south of the Clubhouse. Long term work on masts is not permitted on the wharf.

Obstruction of the dinghy launching area on the pontoon by moored boats causes considerable inconvenience to members who use dinghies.

Please keep this area clear at all times



FROM THE ARCHIVES



The Editor rarely appears in the SASC News, but with the Christmas Season nigh he felt an appearance in *From the Archives* might be excused. Not particularly fond of corporate Christmas parties, he found a good way to enjoy one in December 1996 at the helm of the replica *Bounty*. She sailed just like any sailing vessel really, but was not as responsive as *Tingari*

NEW MEMBERS

We welcome the following new members:

- Tim Aitken David Bell David Cave John Fox Andrew Greenslade Hulusi Sogutlu
- Cally Armstrong Simon Brookes Michael Finney Tracy Fraser John Leyden

TENDER HOURS

Members are reminded that the hours of operation of the Club's tenders are: Saturday/Sunday (EST) 0900–1700 Saturday/Sunday (DST) 0900–1800 Friday Twilights 1600–2100 (approx)

TENDER DRIVERS NEED A BREAK TOO

On some days the demands on the duty tender driver never slacken. They need a break just like everyone else, so please avoid calling them between 1245 and 1315 so they can grab some lunch.

SASC SHOP

Subject to availability

SASC Branded Merchandise

Club Burgee – Medium 30cm X 45 cm	\$41.00				
Racing 'A' flag (new stock)					
Racing 'A' flag (old stock)	\$20.50				
Wide-brimmed sun hat S/L	\$36.00				
Club Cap – one size fits all	\$32.00				
Men's Cotton Polo shirt – short sleeve	\$65.00				
Women's Cotton Polo shirt – short sleeve	\$65.00				
Men's Sailing SPF 50 shirt – long sleeve	\$55.00				
Women's Sailing SPF 50 shirt – long sleeve	\$55.00				
Unisex Navy Blue Rugby Top	\$82.00				
SASC Water Bottle	\$15.00				
Club Tie	\$25.00				

NEWSLETTER DEADLINE

The next *SASC News* will be the February 2022 edition. Contributions from members, which are always welcome, should reach the editor by Friday 28 January 2022. Contributions can be in hard copy or sent by email. Photographs are also very welcome.



Caprice of Huon trying to make the best of the very light and flukey wind to get to the finish of the Sunday race on 7 November (Photo John Jeremy)

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