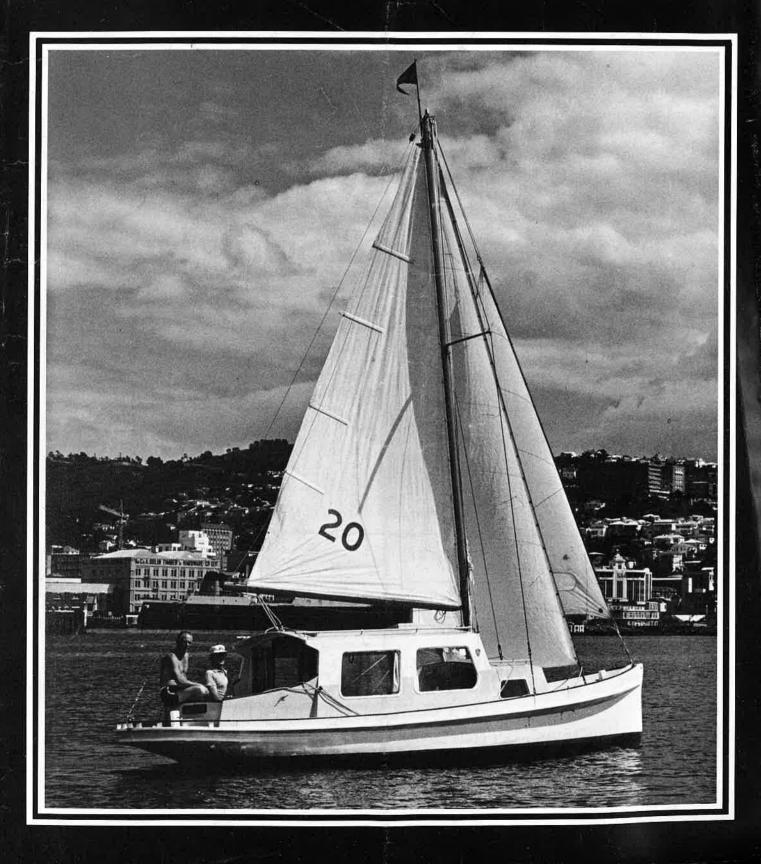
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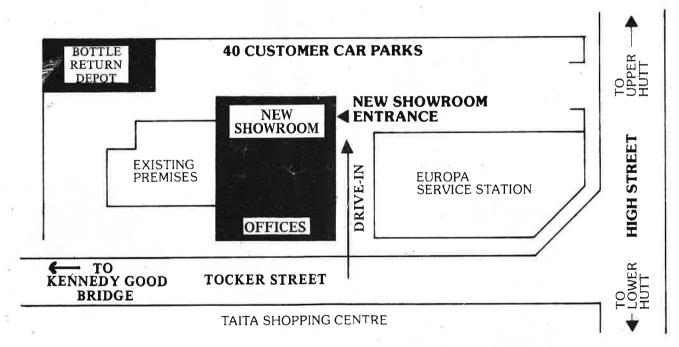
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## <u>The Rip</u>

Vol. 1, No. 1 APRIL 1980

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THE RIP is the official magazine of the Royal Port Nicholson Yacht Club Inc., Wellington, New Zealand.

EDITOR: Jeanette O'Shea; ADVERTISING MANAGER: Geoffrey R. Stagg; EDITORIAL STAFF: J. Barrymore Cronin, Lindsay R. England, Tessa C. Williamson; PHOTOGRAPHY: J.B. Cronin.

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Correspondence and advertising enquiries to P.O. Box 15122, Miramar, Wellington.

#### COVER

Keith Cameron's 100-year-old TANGAROA under present day rig on Wellington harbour.

QHAIR HAIR HAIRHAIR HAIR

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# Correspondence, love letters and advice

#### Sea sickness

"I must go down to the seas again, To the lonely sea and the sky..."

John Masefield's noble sentiment stirs many a heart on its reading, but, alas, few of our club members at present seem disposed to actually GO down to the sea.

What is happening to the very activity for which our club was founded so many years ago? We appear to be in the grip of the great nautical depression of 1980. Not for years have racing fleets been so small, and rarely has enthusiasm run so low.

A fleet of six first-division boats is about the most that we can expect to start on a Saturday. Offshore racing fares no better. Moves to get class racing for our one-time fleet of 7 or 8 Cavalier 32s failed from sheer lack of interest.

Whatever became of the Cruising Section of the club? Apart from monthly meetings, where are the picnics and the barbeques?

Winter racing was a non-event.

Even the organisation of the races, including such essential activities as laying the start buoy, has become unreliable.

The all-in fun races have had the poorest turnout I can remember.

Thank heavens for the few remaining sailors who do their best to keep sails on the harbour on a Saturday.

No doubt there are many good reasons for the waning interest, not the least being what we laughingly call our summer weather, and the prohibitive cost of racing a boat — helped not at all by the Government's savage imposition of sales tax. However, it is urgent that we take a very serious look at the situation, and see if there are ways in which enthusiasm can be rekindled, so that members will once again feel the urge to follow Masefield down to the sea.

- J.B.CRONIN

#### Match racing

I recall a trailer sailer match-racing series some two seasons ago which was organised outside either keeler yacht club in Wellington. It was an absorbing event that created a lot of interest.

Is it not time for our Sailing Committee to give some serious consideration to such an event? The lagging interest in Club racing must be of concern to the Club. "Why" is the difficult question — is it the cost of racing, crew problems, a sameness creeping into every Saturday — or what?

A match-racing series must be of interest, and surely it is not too difficult to organise!

- RUM-RUNNER

#### **Quarter-Ton Cup**

I have just realised that the World Quarter-Ton Cup is scheduled to be sailed in Auckland in November of this year, and the Half-Ton Cup exactly a year later in the same waters. One wonders what plans or thoughts our Sailing Committee has for:

- a. publicising the Quarter-Ton Cup, and
- b. promoting an entry (or entries) from RPNYC or, at least, from Wellington.

We have the skills in fund raising, the experienced crews and the enthusiasm. So why not an RPNYC yacht? If we can win such an event, our Club could seek to hold the next contest on our own harbour.

- AIM HIGH

#### **Wool Board Award?**

I refer to the interesting and informative article on yachting apparel in the December 1979 issue of NZ Yachting & Power Boating. I have tried, without success, to purchase one of the cream woolly hats by Sheep. Can you please tell me where they are sold?

- D. ANDRUFF (Editor's note: We understand the local agents are Wal and Cooch Ltd.)

#### Yachting could be fun

It seems a shame to me that the atmosphere at RPNYC is so intense. Important though serious yacht racing is, too great an emphasis on this heavy competition means that the Club runs the risk of effectively denying opportunities and facilities to those members who neither own nor crew the racing yachts.

I should like to see some effort being made to encourage the "amateur" sailors to be active participating members of the Club. For example, why not introduce more fun races — which would be sailed on Sundays and thus help to involve those who do not race in the Saturday competitions? Why not organise more, and regular, social evenings — and organise them in such a way that they are not just another typical evening at the Yacht Club? Why not make the Ladies' Race a 3-race series, with a suitable trophy awarded to the series winner?

I am sure you would find that if more effort were made to involve and attract more people to the Clubhouse then RPNYC would become an alive, vibrant, IN place to be.

- LADY MEMBER

#### Grape gripe

It is regrettable that the Friday night social activity of the club has been so severly inhibited by our nation's unnecessarily-restrictive licensing laws.

However, it is even more regrettable that our Wardroom Committee chooses to restrict our few remaining legal pleasures by its abysmal selection of table wines.

Members who wish to complement the creditable cuisine of our caterers with a passable wine are faced with the choice of heartburn or abstinence.

While admittedly it would be unreasonable to expect our hard-working and long-suffering bar staff to click off 10 000 clips for a bottle of Chateau Lafite Rothschild 1946, it is I

believe more than reasonable to expect a selection of at least four to six Australian labels — which, if bought with care and discrimination, need cost little more than our frequently-questionable local product.

Suggestions to this effect have so far evoked little but derision from the House Committee. However, a little knowledge and a good palate should not be confused with snobbery.

- WALLY THE WINO

#### Late starters

Might I appeal to the race organisers to give a little more thought to the plight of competitors whose boats are moored in Evans Bay?

Notices affecting the day's racing are not posted early enough to allow skippers to read them, then prepare their boats and be on the start line in plenty of time.

This criticism applies particularly in the case of early starts and social races. It is somewhat disconcerting to rush into the club at 8.30 on a Sunday morning to find the place deserted and no course posted, and yet to have to get around from the Bay rigged and ready for a 10.00 am start at RPNYC.

Likewise cancellations should be made earlier to avoid a lot of hassle, indecision, telephone calls, or breakneck motoring around the bay by delegated crew. It is no pleasure to pound up the Bay in a foul norwester to find the start-line empty.

Admittedly it will mean that someone will have to get up a bit earlier, but if the competitors are willing to get up early and go to a lot of trouble to be on time, should we not expect cooperation and support from the race organisers?

- BILL FROM THE BAY

#### Tell it to The Rip

Address it to
The Editor,
P.O. Box 15122,
Miramar,
WELLINGTON.

Martin O'Connor is an Evening Post journalist who has been a frequent and welcome visitor to the Club after becoming involved in last year's Southern Cross Trials publicity campaign. He has recently returned to Kampuchea to serve with the International Red Cross.

### Editorial

MAGAZINES and newspapers develop personalities and identities of their own.

Over months and years each publication gradually builds until it very nearly becomes a friend, foe, or confidante to its readers.

It develops its own philosophy, its own humour in its task of entertainer and informant, even campaigner.

It can make friends with you, break friendship with you, adopt a firm line, tackle the powers, help you sort out a problem, cause laughter or sadness, horror or pleasure.

Its powers are wide-ranging, free to the extent of the limitations of the law and the enthusiasm and competence of its staff and contributors. But it must reflect and cater for the movement, the achievements, the goals of the wider community it serves.

It cannot become a mouthpiece of an exclusive clique, so to protect its role and function it must have the widest possible participation of its community.

Its initial development begins with the essentials — choice of cover design, choice of body and headline types, choice of basic layout design — all these things have a large part to play in the formation of the magazine's identity.

The Rip, I believe, starts well. It looks good and the content has quality. From here on in participation of its readership is the key to its success, to the gathering and maintenance of its own momentum.

Things which happen to people and their yachts are interesting to others—the night, for instance, you found 250 kilograms of heroin stacked in plastic bags on top of Moaning Minnie, took the haul home and put it in the fridge where it remains to this very time, may sound dull and uninteresting to you, but to many others it could spark off action and even the urge to write about a similar occurrence.

And The Rip will have a far wider audience for your suggestions, gripes, and protestations than does the wardroom or bar.

It's taken nearly 100 years, I understand, to get the club magazine this far — participate now and solidly through the future and it will be its own reward during the next century.

It's with much pleasure and anticipation that I now launch The Rip, and as she slides slowly down the slip and into the postal system, I will forsake the tradition of breaking a bottle of champers over her. It makes the paper very soggy and the print very difficult to read. Anyway — good luck and God bless all who mail to her.

- Martin O'Connor.

The Performance Handicap Rating Fleet (PHRF) system of handicapping originated in America as an alternative to the IOR formula. In New Zealand it replaces the Mini-Rating formula. This report is intended to familiarise owners with the concept of PHRF and the benefits of obtaining a PHRF rating.

# PHRF — the alternative

It has never been the intention to replace IOR with PHRF. However, with the increasing dissatisfaction of New Zealand yacht owners with the IOR system of handicapping, and the ever increasing cost of keeping a yacht competitive under IOR, it was felt that a new national system of handicapping should be adopted, one which would give every yacht a chance of winning with only minimal cost to the owner.

A PHRF handicap is calculated by an Auckland-based committee. When a

yacht is submitted for a handicap the committee studies the yacht's race record over the previous two seasons. Its performance is compared with that of a yacht which has had its performance and ability proven at a national level (e.g. Koamaru), and on this basis the performance handicap is calculated. However, as a yacht may not have been sailing at its true level due to a variety of factors (e.g. poor helmsman, poor crew, new crew, old gear), a correction factor is applied.

By

#### **Richard Macalister**

In Wellington a PHRF Promotion Committee has been formed, consisting of B. Askew, W. Edwards, and R. Macalister, and it is their function to calculate the correction factor. This is done by grading each helmsman on a scale of 1 to 4, and consideration is given to other variables which may be adversely affecting the yacht's performance.

If a helmsman is grade 2, it is assumed that the yacht is being sailed at 97.5 per cent of its potential. The performance handicap is then taken to be 97.5 per cent and, to bring the boat to 100 per cent, the handicap is increased by 2.5 per cent. Thus the true handicap of the boat when sailing at full potential is reached, and the yacht will sail under this handicap when competing in PHRF offshore races.

Associated with the PHRF rating is the reliability factor, which relates to the estimated accuracy of the PHRF handicap. The greater the number of race results available, the higher the reliability factor and the less likelihood that the handicap will be altered.

Recently-launched, one-off yachts, without sister ships, will initially receive a D reliability factor. After one season's racing the reliability factor should be upgraded to a B. Stock/Class yachts (e.g. Cavalier 32s, Spencer 30s) have the advantage of many others of the type racing around the country. Thus, when one of these yachts applies for a PHRF handicap, it will receive the class handicap, which will give greater accuracy initially.

The major advantage offered by the PHRF system is that all yachts, whether designed to rate under the IOR rule or as cruising yachts, will have an equal opportunity of winning,

#### LISA — trials and tribulations

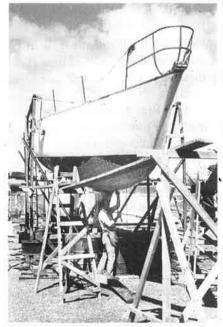
CLUB members will be wondering just what is happening to LISA after its rather sensational sinking in Plimmerton Harbour approaches during the Southern Cross Trials.

David Scott, LISA's owner, told us that while the apparent progress on the boat — presently on the hard at Evans Bay — was slow, there had been a vast amount of behind-the-scenes arranging to do. Essentially, the boat will have a complete refit.

Painting and varnishing of the exterior will begin almost immediately now that the offending hole has been expertly repaired by local boat builder, Tony Shearman. Watch out for the new racing blue bottom set against the white hullsides with gold trim.

The mast overhaul has been completed by rigger, Barry Swanson.

The Perkins 4/08 engine has been reconditioned and is now back in its rightful place, supported on beautiful new rubber mountings. The electrical system has been renewed from masthead to hull sensors, and the Brooks & Gatehouse instruments have been repaired and are being progressively installed.



Boatbuilder Tony Shearman nears the end of the long repair job on LISA at Evans Bay.

The new radio, which is ready to be installed, is an AWA Teleradio 110 single sideband model.

Topsides you can expect to see at least a new main. A new spinaker is also a possibility, and the crew believe it may even have a drop of colour in it.

The date of relaunching? Well. . .

if sailed by a good crew with good equipment. In other words, the best crew should win.

However, the Auckland committee recognises that no system is perfect and that PHRF is no exception. The chief disadvantage is that rating is open to the subjectivity of the assessors. But, as well as giving all yachts an equal opportunity of winning, the PHRF system has the advantages of reducing the capital cost required to

The RPNYC Sailing Committee has decided to sail offshore races under IOR and to replace Section II handicap with PHRF.

remain competitive and of letting every yacht remain competitive. Further, in contrast to IOR, PHRF requires only a few basic measurements (e.g. sail and freeboard). These are needed to ensure that yacht owners, having been given a PHRF rating, do not abuse it.

Should any of the measurements change a new handicap must be applied for, for the old becomes invalid.

At the last meeting of the RPNYC Sailing Committee, it was decided to sail all offshore races under IOR and to replace : Section II with PHRF. The major reason for this change is that the other major yachting centres have successfully introduced PHRF into their local offshore racing programme, with excellent results. The prestigious ocean races — Noumea, Suva, Lautoka — are also now sailed under IOR and PHRF.

All the Wellington race results from the 1979-80 season have been sent to the Auckland-based PHRF committee so that Wellington yachts will not be discriminated against when they apply for a PHRF.

Because of this change in the local offshore programme, it would be beneficial to skippers who intend to compete in the offshore programme during the 1980-81 season to apply for a PHRF as soon as possible. Application forms are available on the RPNYC notice-board. There is a nominal fee of \$20 when applying

### The storming of Somes

DETAILS of a top-secret mission to take Somes Island for the Royal Port Nicholson Yacht Club were released today, together with pictures by prominent "action" photographer J.B. Cronin, by a spokesman for unnamed members of the Executive to coincide with this first edition of The Rip.

Carried out by hand-picked representatives of top racing and cruising crews who are known to excel in bravery and drinking, the heavily-disguised vessel crept into the leeward side of Somes and dropped anchor.

While heavily-armed Agriculture and Fisheries seagulls swooped threateningly overhead, a cockpit party was held on board to discuss tactics. It was decided that an advance party



would swim ashore with the flag (they had forgotten to bring a dinghy), and implant the Burgee victoriously atop the highest peak.

A volunteer was then called for to



perform this crucial manoeuvre—but alas it was discovered that there were no swimmers among the party. The Vice Commodore (leader of the exercise) was prostrate with frustration as realisation dawned that the mission was threatened by lack of military planning.

However, members, take heart. Reliable sources have it that a further attempt to bring Somes under the RPNYC flag is currently being formulated by the Executive via the Minister of Agriculture and Fisheries.

# Club benefits from group insurance scheme

THE Club has a Group Insurance Scheme arranged with the LOMBARD INSURANCE COMPANY LIMITED.

Cover offered is based on the internationally-accepted "Institute

for a PHRF, which compares favourably to the \$150 for an IOR.

If there are any queries regarding PHRF, please ring Richard Macalister, phone 758-054.

I hope that skippers will support this change to the offshore scene, and I must again emphasise that, whether your yacht was designed as a cruiser or a racer, with a good crew on board it will be competitive under PHRF. Yacht Clauses" with some minor restrictions removed.

Rates are competitive, often lower. The big bonus from the scheme is that the Club benefits by a commission paid quarterly on all insurance placed through the scheme.

If you are already insured with the Lombard but are not sure that it is through the Club's scheme contact them and request confirmation. Remember that this benefits the Club. Business or domestic insurance placed with the Lombard also benefits the club, so contact them for a quotation.

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### **Commodore**

I AM pleased to have this opportunity to send greetings to all our members in this inaugural issue of our club magazine.

The Executive have, for some time, been conscious of the need for better communications and, under the guidance and enthusiasm of Jeanette O'Shea, we can look forward to a new era in club news.

Much of the success of the magazine will be dependent on you, the member. We need your news on club matters and welcome letters to the Editor. Our advertisers are also deserving of your support — their valuable assistance in defraying expenses is appreciated.

The season is fast drawing to a close, and members should be taking every opportunity to get on the water. There are still some interesting races, competitive and social, on the racing programme — so let's go!

Prize-giving this year will be a special event, and is scheduled for May 24

Our thoughts should also turn to the Annual General Meeting, to be held in June, and the important responsibility of members to nominate their effective management team for the incoming year.

The strength of the Executive, and committees, will determine our club's destiny, and more participation from members is desirable. It is fair criticism to say that not enough people volunteer their time to assist in running the club and, even a one-year stint is a worthwhile contribution. So this year, if you are asked to accept nomination, please give your time generously. It is not a great sacrifice, and can be rewarding.

Happy boating!

R.A. Manthel, COMMODORE

#### **Southern Cross Cup 1979**

THE final meeting of the 1979 Southern Cross Cup Committee was held on Monday March 10, 1980, and approved the Statements of Receipt and Expenditure relating to our Southern Region Team.

It is pleasing to report that the RPNYC Yachting Assistance Fund is now some \$2000 richer, this sum representing the surplus after meeting budgeted expenses. This amount is the direct result of a great effort in fund raising for the team, in the control of costs and expenses and, most importantly, the generous sponsorship of Beechey & Underwood, the Sharp Copier people.

The Club was, in the writer's view, fortunate in having a keenly-fought contest resulting in a team of three boats whose crews were prepared to meet very considerable costs from their own resources.

One can perhaps hope that very soon we shall see the 1981 Southern Cross Cup Committee formed and starting the promotion of our next team.

- L.R. England/TREASURER

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# Calling all lady members

HOW long is it since you last visited the Club?

No — we're not trying to make you feel guilty, but there must be many of you who — for one reason or another — do not take full advantage of your membership.

Maybe you simply don't like sailing? (Fair enough!) Maybe you feel there's no particular enjoyment to be gained from standing around listening to a group of yachties telling for the umpteenth time what happened when...?

Maybe it's the children — how to keep them amused if you bring them with you (because there's no one-one you can leave them with at home)?

On the other hand it may well be that none of that applies to you — after all, there are lady members who form part of the racing yacht crews. But. . . just ask yourself this question: How many lady members do you see in the Club? The answer will surely be: Far fewer than the men.

Before we go any further, let's make one point absolutely clear. This is not going to be a women's lib, sexist, equal opportunity or anything-else-you-may-care-to-think-of-type of article. All we are simply trying to say is that there should be opportunities for the lady members to become far more involved with what goes on. After all, how many of you will be, are, or have been married to Members? And would it not make life more interesting if you had some involvement in that time- and money-consuming hobby of his?

The suggestion has been raised that a Ladies' Committee be formed. Interested?

The role of the Ladies' Committee we see as:

- sponsoring more involvement and interest from the lady members — because RPNYC should be an exciting Club for all members;
- 2. allowing the ladies to have at least some say in the runing of the Club — therefore we would like to see a representative of the Ladies' Committee invited to attend Executive meetings;
- 3. injecting more life into the Club for example, by organising guest speakers who can talk and entertain on matters which are of interest to all members;
- 4. involving those of you who have young families by utilising the hall upstairs as a Kiddies' Korner (ghastly name, but it'll do for the meantime), where there would be books, board games, dart board, table tennis, pool (the Club has two tables!) etc, so that the children can amuse themselves and leave their parents free to do their own thing;
- 5. organising events (social or sailing) of interest specifically to you.

These are just our first thoughts. Hopefully we've sparked off some ideas with you.

Are you interested?

Will you help?

You will receive a letter within the next two weeks inviting you to the Clubhouse for a meeting to set up the Committee and pool all ideas and suggestions.

Do come along — the more, the merrier (and the bar will be open!).



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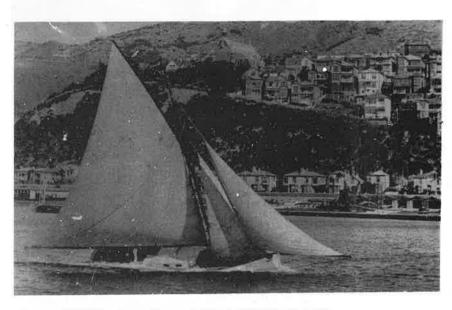
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On Saturday March 8, 1980, after competing in the Smith and Smith Motor Sailers' Race, Keith Cameron held a champagne party in the Clubrooms. The occasion was to celebrate the 100th year of his yacht TANGAROA, launched at Devonport, Auckland, in 1880.

# TANGAROA —

- Story by Gavin Loe



TANGAROA under full sail off the Boat Harbour shortly after her arrival in Wellington in 1911.

WHEN boating people gather over a jug a favoured topic concerns the construction of the ideal yacht. Steel, wood, fibreglass, concrete and other substances have their protagonists. Irrational prejudice and ill-formed bigotry are much to the fore in these arguments. With the aim of finding out what Club members really think away from the cut and thrust of debate we recently conducted a survey. Our chosen position was by the swinging doors leading into the bar and all who entered were asked this question.

"With what would you build the ideal yacht?"

Fifty-three per cent were old fashioned enough to come down in favour of wood, and quite a few specified kauri. Next-favoured was plywood covered with fibreglass. One, who had just read "The Brendan Voyage", specified cowhide.

If you hold the view that a yacht should last more than a season or two, all the present evidence supports the majority. All the mature vessels in the boat harbour are made of wood, and the doyen is TANGAROA, made of kauri, and launched one hundred years ago this March.

Some of the old hands (whose views we always respect) say that TANGAROA is the first RPNYC yacht to reach 100 years still in full commission. Whether or not this is the case we leave to others, but such a lifetime is remarkable anywhere in the world. With the help of the present owner we delved a little into her history.

#### Impeccable breeding

TANGAROA's breeding is impeccable. She was built in the yard of Robert Logan Snr. at Devonport and set afloat in 1880. Her design closely followed that of the builder's famous JESSIE LOGAN, launched a year earlier. With a length of 28 feet, a beam of just under 8 feet, and carrying an enormous press of canvas for her size, TANGAROA was very successful in the first years of her life. Then, as has happened to many a boat since, there were changes in the rating rules, and by 1884 she had lost her competitive edge, whereupon her owner, Mr Tom Kilfoyle, decided that cruising was best anyway.

TANGAROA performed successfully in her new way of life, but later owners returned her to the Auckland racing scene and she did well in heavier breezes. In 1911, by which time it had been converted from centreboarder to keeler, she was put on a train and sent to Wellington, where she has remained ever since.

Her first sail on the harbour for the new owners, Sid and Edward Williams, is well documented. On March 18, 1911, she joined in a race being held

Some of the old hands say that TANGAROA is the first RPNYC yacht to reach 100 years still in full commission.

by the now-defunct Port Nicholson Cruising Club. Being light and dry after her journey she had a great turn of speed and presented her counter to the fleet, which included KOTIRI, still around the harbour today.

In Edwardian times engines were not used for boat harbour manoeuvres. A crew member for many years, Harry Hardham, describes what it was like bringing TANGAROA to her moorings.

"I recollect on one occasion when

# a century of sailing

acting as forehand, going out on her long bowsprit to take in the jib while running into the boat harbour through a rather heavy backwash off the inner breakwater. being completely submerged, and then coming up out of the water drenched to the skin and spouting water like a whale. On another occasion at the helm, when running into the boat harbour under full sail in a fresh breeze, and rolling from the effects of the backwash, she rolled to starboard just as we were passing the end of the inner wall of the entrance and the mainsheet caught on a spike driven into the top of the wall.

By lucky coincidence the usual figure-of-eight knot was not tied in the end of the mainsheet, and it ran out through the blocks with a mighty shriek that had the siren of any fire engine beaten for noise and penetrating power, but no damage was sustained, and we rounded up, retrieved the mainsheet, and proceeded to moorings safely."



Major changes are evident in both the Oriental Bay background and TANGAROA's rig since 1911.



The roomy and comfortable interior of TANGAROA's new cabin.

By 1915 many yachtsmen were involved in the First World War. There was a crew shortage, and the owners of TANGAROA made her easier to handle by converting her into a yawl-rigged launch. The lead was removed with a cross-cut saw and with so little difficulty that the onlookers wondered how the keel had hung on for five years of Wellington weather. As the keel bolts had largely disappeared it was decided that the force of habit defied gravity in this instance.

#### AS GOOD AS NEW

During the conversion the timber was found to be as good as new, and it is no extravagant claim to say that there has been virtually no deterioration since.

From 1915 to 1933 not a great deal is known. It is said that Mr Warmington Snr made great use of her during his courting days, but we do not vouch for the veracity of this scintilla of gossip from a more gracious age.

However, in 1933 Mr Douglas Cameron joined the list of owners, and he kept her going until 1960 when he solu it to his brother Keith. Prior to this time Keith had been a partner with Jack Cox in the well-known veteran ATLANTA, though ATTIE, as she was generally known, hardly qualifies as mature, not being built until 1893!

Keith Cameron got to work on TANGAROA with the modern equivalent of the cross-cut saw and replaced the old deckhouse with a new one designed to allow him headroom for his six-foot-four-inch height. It is small wonder that the irreverent have been heard to refer to his ship as CAMERON TOWERS.

For all that TANGAROA is a handsome vessel, and under her modern cutter rig can produce a creditable turn of speed. She is very comfortable down below and her sails can be assisted with generous power from her new 30hp diesel engine. All in all she is a credit to her owner, and there appears to be no reason why she should not last another 100 years.

We wish TANGAROA and all who might sail in her over the next ten decades the very best.

Measuring yachts for their handicap rating is to most yachtsmen a complicated process that few understand. In this, the first of a three-part series, Bruce Askew, yacht designer and Club Measurer, will endeavour to unfold the mysteries of the Rating Rule.

# **Understanding IOR**

I DON'T know how far I will get in this episode or to what extent one should go without boring the readers. The request from the Editor was for a rundown on the Rule and the taking of measurements. I think a little of the history and theory of the rating game will help to clarify what follows. There will be no attempt to get to the finer points of designing to the rule, but the article will endeavour to point out the effects that certain modifications to the rule and past rules have had on yacht design and how trends in design are handled by the rulemakers. The whole system is in a state of permanent modification, the modifications are becoming smaller, and I think the system is working.

Super yachts are being produced every season, and people become alarmed but don't stop to examine why this is so. They complain about the rule and are often not critical enough of their own efforts, tuning, equipment quality etc. There is a tendency to follow the latest champion, whereas some of the older yachts (within reason) with the same budget dedication of owner-skipper-crew-sailmaker-painter etc, and a throwing out of all the junk, could get very similar results over a series.

It is a fairly simple exercise to make a champion that fits a very narrow set of conditions. If by coincidence or good management a contest venue obliges with these conditions, the ship does well and sets a fashion.

Most yachtsmen are aware of the relationship between the length of their yacht and the speed that can be maintained. The old saw that speed in knots is in proportion to the square voot of the waterline length in feet is fortunately one of those things that hasn't been modernised.

The speed-length ratio is usually expressed as a factor, i.e. .9 or 1.1 or 1.4 etc. Most displacement hulls reach an almost insurmountable barrier at 1.4, i.e. 7 knots for 25 ft of waterline.

By modifying the hull proportions,

building finer ends, flatter floors, less displacement or more beam to depth etc., this figure (the speed-length ratio) can be extended almost indefinitely.

Naval architects measure these features in many ways. There are two principal coefficients of fineness. Block coefficient, cB, is a relationship of displacement to a block of the same overall dimensions. Most yachts vary around .28 to .35. Prismatic coefficient, cP, is a more important one. It is the relationship of the displacement curve to a rectangle.

The yacht with the lower cP moves

more easily at low speeds and the higher ones have higher maximum speeds.

The actual shape of the curve has a bearing on performance. It also tells a little about the surface area, which also affects performance.

There is also the  $\frac{D}{L}$  displacement in feet and tons.  $(100)^3$ 

The yacht with the higher number requires more effort per ton to move it at a given speed. A heavy, short boat needs more power than a similarlyweighted boat that is longer to make the same speed when the speed-length



Moveable Appendage Factor or Low Rigging Penalty?

ratio is more than say 1.1. At the lower speeds the shorter one moves more easily as it has less surface, hence less friction.

The rule-makers have set out to establish these and other characteristics of a yacht by a system of measurements and calculation. In about 1425 the powers that were devised a formula to present a ship's cargo capacity to form the basis of a taxation or dues system. The formula was (LBP-Beam) x Beam x 1/2 Beam, the lot divided by 94 (LBP-B)xBx $\frac{B}{2}$ ,

which fairly represented the 94 average vessel of the day. One advantage of the system was that the tax collectors could take all measurements while a vessel was afloat.

LBP was (and still is) the length from the front of the stern, in the old days at deck level, to the after side of the stern post, also at deck level. This is now the forward side of the rudder stock.

Working vessels raced both informally and formally, and eventually yachts appeared. As racing in a miscellaneous fleet is unsatisfactory, probably arbitrary handicaps were first used, but the tonnage measurement eventually became the basis — not so much as a handicap but as a method of grouping yachts. This was the begining of the 1/2 ton, 1 ton etc. group.

About 1850 (400 years later) designers realised that depth was not measured, so boats got deeper and narrower, while stems actually sloped aft and counters became longer and longer.

It wasn't long before owners became alarmed at the trends and looked for other systems. The Americans used the Universal Rule, which tended to suit their type of craft (fairly shallow schooners). It was quite simple initially – 18 per cent of Length x square root of the sail area divided by the cube root of the 18%LVS ment in feet 3 D.

The definition of length and sail area were always discussion points.

The Europeans used the International Rule. It is more definite than the Universal and has altered very little since about 1937. The twelvemetre yachts are measured this way.

Also from Europe came the Scharen Kreuzen, where sail area was virtually the only restriction. Shirleen is one built to this rule.

The effect of these and other subsequent rules has allowed designers to exploit features to get the most satisfactory results, and because emphasis is placed differently, the yachts have tended to drift apart and actually become types — evolution.

Such yachts were not entirely suitable for the race to Bermuda so the Americans devised their Bermuda Rule also in 1937. The RYA used the formula .13 length x square root of sail area divided by the square root of beam x depth plus .25 length plus .2 square root sail area. (.13L x VSA + .25 L + .2 SA).

Our 1949 race to Lyttelton used this formula. It was the basis of the RORC Rule, the Mini Rating Rule, and with a few recent additions, the IOR Rule. So what is new?

The Bermuda and RORC Rules were developed to bring a heterogeneous fleet together to race while the IOR presumes 100 per cent efficiency. Towards the latter days of the other two rules pre-rule boats were hopelessly outclassed as new ships were developed to get the best out of the situation.

In drawing up the IOR Rule the technical committee has endeavoured to define and place a value on all the features that affect a yacht's performance. The basic features are Length, Beam, Depth, Sail area, Motor and prop. installation, Stability, Draught, Freeboard, and a few sundry penalties for unusual or expensive features. Having settled on the above basic formula subsequent efforts have been expended in standardising the techniques for measurers to follow, making adjustments to the calculations and blocking up holes in the system.

Although L,B,D,S, etc. are treated quite simply in the rating formula, considerable effort is required to arrive at the value of each factor.

A short summary of the principal symbols and their part in a yacht's life is probably in order at this stage. L. Length, being the factor that indicates a yacht's total potential. B. Beam is a factor that offers two conflicting features, one initial stability, referring to sail-carrying ability; the other, resistance to headway, especially at sea.

D. Depth, a measure of the hull depth,

#### Think it over

Are vou an active member. the kind that would be missed. Or are you just contented if your name is on the list, Do you attend the meetings, and mingle with the flock, Or do you stay at home and criticise and mock, Do you push the cause along, and make things really tick, Or leave the work to just a few. and talk about the clique, Think this over members do you know right from wrong, Are you an active member, or do you just belong?

not draught. It is also related to stability, weight, and resistance to headway.

Sc. Sail area, the yacht's engine. CGF. Centre-of-gravity factor. The yacht's ability to utilise its sail.

EDF. Engine and propeller factor. An allowance for carrying a motor and prop.

DC. An allowance for having a shallow draught or penalty for excessive draught. Centreboards are included. here.

FC. Similar to above, but related to freeboard.

DLF. Displacement length factor. A penalty if the yacht is very light.

MAF. Movable appendage factor. A bit more on centreboards and drop-keels etc.

SMF. Spar material factor. A penalty on exotic spar materials.

LRP. Low rigging penalty. This applies if the mast is so rickety that it requires shrouds below a certain height.

There are about 233 symbols in all.

The general rating formula applied at the present time is:

 $MR = \left[\frac{0.13Lx \text{ SC}}{BxD}\right]$ 

plus 0.25L plus 0.2 x SC plus DC plus FC] x DLF.

Rating (R) =MR x EPF x CGF x MAF x SMF x LRP x CBF.

There is a Mark IIIA version which allows older yachts options on how some measurements are interpreted.

This will be enough for a start, next time we will look at the methods used in arriving at a value for the various units.

### Random notes



By Fleet Scribbler

#### Cavalier fleet disbands

Two seasons ago Wellington boasted seven Cavalier 32s, and tentative proposals were made to organise a one-design series. Unfortunately the idea never got off the hard, and the opportunity diminished even further this year with the sale of Snow Oliver's CABOCHON to a Mana purchaser and more recently Frank Turvey's TINGARA to Auckland. However skippers of the remaining four. CALYPSO, NOR-EAST, SAPPHIRE, and ORIOLE, could still get it together.

#### Cruise-y

What is it "Ole Blue Eyes" — skipper of ORIOLE — has that wasn't dealt out to the masses? Seen cruising most fine Sundays with crew ratio heavily favouring the ladies. . . not much on either. Tut Tut!

#### Handcuffed

If that certain gentleman, skipper of MORORO, intends practising for the single-handed race by pitting his skills against the entire second division resplendent with full racing crews and winning two weeks running, will the deposed yachts be given special dispensation to carry full crew in the single-handed race against him? Or will he be fairly handicapped?

#### Alternative occupation

Well-known Wellington skipper and dentist by profession, on arrival in Sydney to take part in the Hobart Classic, over-celebrated the Tasman crossing a little while waiting for Customs. When the worthy gentlemen came aboard and produced the usual immigration form for completion, our friend could not quite recall his occupation, so by association wrote "Tooth" in the space provided. He probably should have added "Fairy" and allayed the resultant confusion.

#### Brains for hire

It has been noted that Vice Commodore Stagg is peddling his notable expertise to selected motor and trailer sailer skippers who wish to vamp up their performance, with somewhat spectacular results too: deposed the leading Evans Bay trailer sailer by a good five minutes and helped to bring Jock Holmes' VAGABOND in ten minutes ahead of the rest of the fleet.

#### Tough at the top!

Painting the clubhouse in traditional white with red and blue trim, GRANNY APPLE's Southern Cross Cup crew come to terms with the cruel realities of the credit card system.

#### Big rig

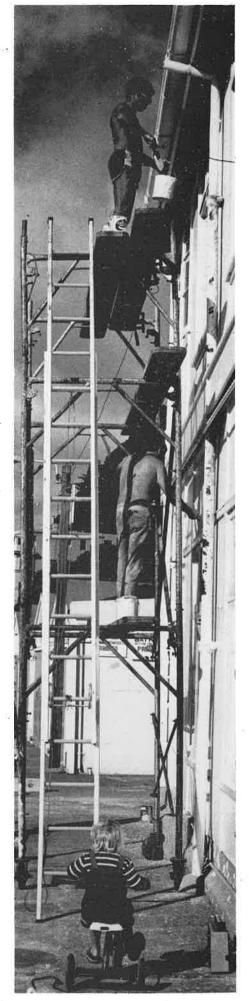
The maxi-ketch TA'AROA could be headed for a permanent berth in Wellington if there is any truth in the rumour that prominent city businessman (currently down to just one boat) is negotiating the purchase of same. TA'AROA, you will all recall, took line honours in an Auckland-Suva race.

#### Slow movers

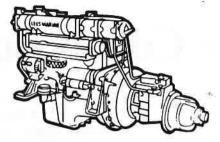
Hugh Poole was reported to have made an unprintable statement when he saw first CHINCHILLA and then WHISPERS II retire from a slow Bing Harris IOR Cup Race, thereby making it impossible for VIRGO to win by the necessary two places to clinch the 1979-80 inshore title.

### Where have all the offshore boats gone?

With trepidation we noted the cancellation of the Kapiti-Chetwode race, the second programmed offshore race to be axed this season due to lack of interest. The first was the once highly contested and prestigious Wellington-Akaroa, which was called off on the morning of the start when it was discovered that there were only two boats prepared to go. At the time of going to press, the Vice Commodore is proposing to convene a meeting of all racing skippers, crews, and interested parties to "post mortem" the outgoing season and to discuss positive ideas and suggestions for the composition of next season's racing calendar.



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### Vice Commodore

Since the last newsletter we have had a mixed bag of races. Jock Holmes bolted home in the first Motor Sailers' Race, while the second one was won equally convincingly by ANDROMEDA amongst much muttering from our older hands. Keith Cameron celebrated TANGAROA'S 100th birthday with friends, which was an outstanding occasion. Boy — what an achievement!

One of the badly-handled races this year by the Sailing Committee was the Veterans' Race. An unfortunate last-minute date change meant that many of our intrepid veterans missed out on one of the season's more important events. Our assurance is given that next year's organisation will make up for this unfortunate occurrence. Please accept your Sailing Committee's apologies.

The race was won in a convincing manner by Tony Ray sailing KOAMARU.

My boat of the month would have to be PUGWASH. Peter and Jenny have really got her going, and have convincingly won their last three starts, which included the Ladies' Race, by some great sailing.

WHISPERS II and CHINCHILLA have pulled out of two harbour races which has not done much to bolster the 1st Division. The recent Kapiti-Chetwode Race was cancelled owing to lack of interest, but I do hope that our last offshore race of the season — Kapiti-Picton — was better patronised.

KIDNAPPER looks like carrying off most of the silverware this season with some consistent sailing which highlights the interesting point that we have some very successful mixed crews this year, i.e. the Moodys, Suttons, Osbournes, Sleethy and Jill, and Jeanette O'Shea with Allan Martin, which is really good for yachting.

With the season drawing to a close, I would urge all yachties to get on the water. The weather has been really good lately — would you believe those easterlies — so at least let's end the season on a high note.

One last comment — there are some really amazing contests coming up over the next 18 months for NZ, i.e. World Quarter-Ton, Auckland, November 1980; Pan Am Hawaii, August 1980; Admiral's Cup, August 1981; World Half-Ton, Auckland, November 1981. What are we as a club going to do about participating in some of these exciting contests?

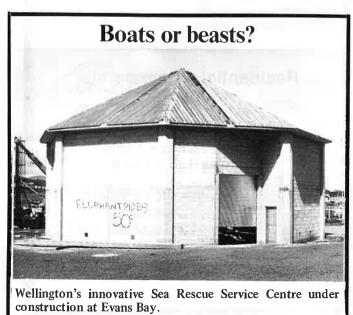
There are a lot of talented yachtsmen and organisers within the Club. Surely we can select a series and give it a go. Think about it. See you on the water. Good sailing!

Geoff Stagg, VICE COMMODORE

# Racing results

| BOAT            | RACES<br>SAILED | LINE<br>POINTS | HANDICAP<br>POINTS |
|-----------------|-----------------|----------------|--------------------|
| 1st Division (d | one more chan   | npionship race | e to sail)         |
| Whispers II     | 6               | 163            | 150                |
| Nizam           | 6               | 141.5          | 148.5              |
| Chinchilla      | 5               | 119.5          | 116                |
| Granny Apple    | 4               | 116            | 114                |
| Mardi Gras      | 3               | 83             | 78                 |
| Lisa            | 2               | 52             | 55                 |
| Savant          | 2               | 47             | 55                 |
| Kuriri          | 2               | 56             | 53                 |
| Thundercloud    | 3               | 45.5           | 47.5               |
| Vintage         | 2               | 42             | 47                 |
| Koamaru         | 2               | 40.5           | 44                 |
| Sequoiah II     | 2               | 44             | 41                 |
| Aztec           | 2               | 39.5           | 39.5               |
| Sobraon         | 1               | 27             | 27                 |
| Rhythm          | 1               | 13.5           | 13.5               |
| Ngatoa          | 1               | 13             | 13                 |
|                 |                 |                |                    |

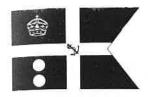
| 2nd Division | (one more championship race) |       |       |
|--------------|------------------------------|-------|-------|
| Kidnapper    | 7                            | 182   | 197   |
| Pugwash      | 7                            | 197.5 | 191   |
| Odette       | 7                            | 183   | 180.5 |
| Nirvana      | 7                            | 160.5 | 176   |
| Diaz         | 7                            | 171.5 | 167.5 |
| Iconoclast   | 7                            | 129.5 | 146   |
| Vintage      | 5                            | 130   | 120   |
| Virgo II     | 4                            | 116.5 | 106   |
| Montezunia   | 4                            | 94    | 89.5  |
| Cinjan       | 4                            | 97    | 85.5  |
| West Wind II | 1                            | 28    | 29    |
| Achates      | 2                            | 21.5  | 21.5  |
| De facto     | 1                            | 11.5  | 11.5  |
| Andromeda    | 1                            | 11.5  | 11.5  |
|              |                              |       |       |



| BOAT  3rd Division ( | RACES<br>SAILED<br>(Three more cha | LINE POINTS ampionships) | HANDICAP<br>POINTS |
|----------------------|------------------------------------|--------------------------|--------------------|
| Impala               | 6                                  | 161.5                    | 168                |
| Slomoshun            | 6                                  | 137                      | 134.5              |
| Kittyhawk            | 4                                  | 97.5                     | 97.5               |
| Otnip,               | 4                                  | 98                       | 96.5               |
| Tight Squeeze        | 3                                  | 87.5                     | 85.5               |
| Born Free.           | 3                                  | 67                       | 67                 |
| Limelight            | 2                                  | 59.5                     | 57                 |
| Frodo                | 1                                  | 29                       | 30.5               |
| Salty Dog            | 1                                  | 28                       | 27                 |
| Crossbow             | 1                                  | 25                       | 27                 |
| New Horizon          | 1                                  | 12                       | 12                 |
| Berontak             | 1                                  | 12                       | 12                 |
| Te Awana             | 1                                  | 12                       | 12                 |
| Maroro               | 1                                  | 12                       | 12                 |
|                      |                                    |                          |                    |

| IOR Inshore     | Championship – concluded              |
|-----------------|---------------------------------------|
| SECTION 1       |                                       |
| 1 st —          | Kidnapper                             |
| 2nd -           | Virgo II                              |
| 3rd –           | Whispers II                           |
| SECTION II      |                                       |
| 1 st —          | Kidnapper                             |
| 2nd -           | Virgo II                              |
| 3rd –           | Odette                                |
| Kidnapper and   | Virgo II were the only two boats that |
| completed the f | our races of the series.              |
|                 |                                       |

| BOAT          | RACES<br>SAILED | LINE<br>POINTS | HANDICAP<br>POINTS |
|---------------|-----------------|----------------|--------------------|
| IOR Offshore  | Championsl      | nip            |                    |
| Vintage       | 4               | 89.5           | 85.5               |
| Thunder Cloud | 3               | 62             | 54                 |
| Nizam         | 2               | 47.5           | 46.5               |
| Koamaru       | 2               | 45             | 41                 |
| Kidnapper     | 2               | 44             | 34                 |
| Nero          | 2               | 38             | 39                 |
| Aztec         | 2               | 38             | 61                 |
| Granny Apple  | 1               | 24.5           | 24.5               |
| Chinchilla    | 2               | 24.5           | 40.5               |
| Whispers II   | 1               | 21             | 23                 |
| Savant        | 1               | 20             | 23                 |
| Kuriri        | 1               | 20             | 19                 |
| Pugwash       | 2               | S=8            | 43                 |
| Sobraon       | 2               | £=0            | 34                 |
| Odette        | 2               | -              | 32                 |
| Nirvana       | 2               |                | 32                 |
| Iconoclast    | 2               | -              | 26                 |
| Tingara       | 1               | =:             | 21                 |



### Rear Commodore

#### Wardroom

The reduced hours allowed by the Ancillary Licence have severely reduced patronage of the bar. However, those still attending are provided with a greater range of refreshments, including a wide variety of wines. Pat Costello and her merry staff welcome you on Fridays, Saturdays, and Sundays.

Dining room

Regretfully numbers here are also well down on last year, possibly due to the reduced bar hours. David Wallace and his staff from Highway Caterers have continued to serve excellent meals at a very low price.

Please support your club dining room.

Membership

Membership checks will again be made within a few days. Please carry your card. Remember, by a special ruling of the Executive, Associate

Membership now includes unattached ladies

### Calendar

BAVARIAN BEER HALL, Friday April 18.

Singing and entertainment by the Bavarian Beer Hall Band. This costumed band provides M.C., song sheets and lots of fun. Happy hour and supper. Ticket system later.

Price \$5 each.

PRIZE GIVING, Saturday May 24.

Late licence and ticket system. Entertainment by our pianist.

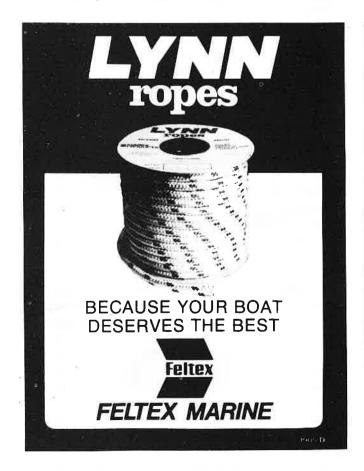
DINNER WITH GUEST SPEAKER, June.

Sit-down formal dinner - details later.



# Whitbread skipper to present prizes

Peter Blake, international yachtsman and proposed skipper of New Zealand's Whitbread Round the World Challenge Yacht CERAMCO NEW ZEALAND, will be our guest at the Club Prizegiving on May 24.





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