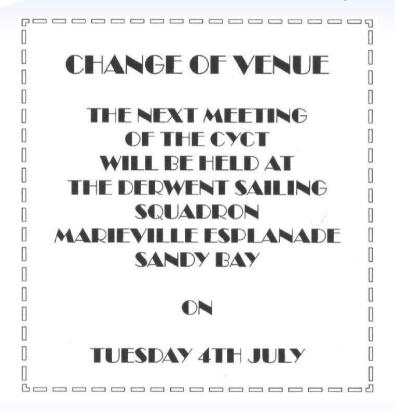
Albatross

Volume 32

No 6

July 2006



Newsletter of the Cruising Yacht Club of Tasmania

THE CRUISING YACHT CLUB OF TASMANIA INC.

PO Box 605 Sandy Bay 7006 www.cyct.org.au

Commodore		
David Bryan	H 6239 6679	Charon
Vice Commodore		
Rosemary Kerrison	H 6273 4192	Obsession
Rear Commodore		
Milton Cunningham	H 6247 6777	Boots n' All
Treasurer		
Dennis Lees	H 6229 7603	Kiap
Secretary		
Lindy Jones	H 6229 4901	Awittaka
Editor		
Dianne Catchpole	H 6224 0421	Willyama
Committee		
Chris Creese	H 6223 1550	Neptune
Andrew Boon	H 6228 5807	Reflections
	M 0428 309 901	
Membership Officer		
Annick Ansselin	H 6267 4852	Windclimber
Warden		
Keith Wells	Н 6267 1168	Windrush
Quartermaster		
Barry Jones	H 6272 5660	Lalaguli
Albatross mailing		
Chris Creese	Н 6223 1550	Neptune

LIFE MEMBERS

Derek Farrar Erika Johnson Ken Newham Doris Newham

Deadline for copy: 2nd Tuesday of month
Please send all material for Albatross to
The Editor, Dianne Catchpole, 32 View Street, Sandy Bay 7005
Email: editor@cyct.org.au Fax: 6223 2561

Editorial

Please accept my apologies for the errors in last month's Albatross, especially for the incorrect spelling of new members Neville and Helve Cann's names. Congratulations to those intrepid sailors who have been out on the water during this cold weather.



Many thanks to Roger Locke for his major contribution to this month's *Albatross*. Have you solved a technical problem on your boat? Why not tell other members about it by writing a story for *The Albatross?* Now that the weather is cooler why not tell us all about the cruises you enjoyed last summer?

Looking forward to meeting many of you at the annual dinner

Happy sailing

Di Catchpole Willyama

	processor and the second	
Contents		
Commodore's Report	2	
Vice Commodore's Report	3	
Rear Commodore's Report	4	
Minutes	6	
Cruise of the Year Award	9	
The Club Easter Cruise	12	
On Datum	15	
Bowen Bridge	21	
Our Coach Trip to Canada		
	HOUSE HOUSE HOUSE	

COMMODORE'S REPORT

Joy and I had a great time in Canada, Alaska and the USA. We were jet lagged and not feeling well enough to attend the last General Meeting and I thank you Rosemary for filling in for me at such short notice.

As a club we will be signing our lease agreement with the National Trust this week for the Mariner's Cottage. This has taken a long time to come to fruition. I remember Helen talking about this lease and its slow progress when she was Commodore.

It was pleasing to hear that the Donald Sutherland Navigation Trial went off well. Congratulations to those people who made this day a great success. I would like to thank our sponsors for their donations of prizes. Congratulations to Leo Foley as the winner.

With snow on the ground at home on the Sunday morning of the long weekend, we decided to sit by the fire and keep warm rather than catch up with those of you on the cruise to Dover, as planned. Hopefully we will have our new boat by the time of the next cruise.

Our 'new to us' boat, called 'Freelance' is almost ready for the trip south from Sydney. I am hopeful that we can bring her home on the weekend of 30 June, 2006 subject to a good weather window and that Hans and Fed Van Tuil who are bringing her south, will have no problems on their trip.

I personally am looking forward to the change in venue for our general meetings at the Derwent Sailing Squadron (DSS) club rooms in Sandy Bay. Our preliminary discussions with DSS manager Andrew Davidson indicate that we will be able to use the new venue for our July meeting.

Thank you to everyone for filling in for me whilst Joy and I were on our overseas trip. Joy declares it was not a holiday as it was too organised and there was no time to sleep in! We always had to get up and do something.

Enjoy your trip to England Barry and Margaret. I will take care of the Quarter-master products in Barry's absence.

Yours in safe boating

David Bryan AFSM

VICE-COMMODORE'S REPORT

Awittaka, Andromeda, Windrush, Kalesia and Obsession braved the cold long weekend in June and travelled to Dover on the Saturday morning. We met rain as we got to near Huon Island and this stayed with us until Sunday morning when sunshine greeted us. All went ashore to have a barbecue on Rabbit Island and with a raging fire to warm us, had a very pleasant time.



With our Autopilot finally working, we set sail for the upper Channel area early Sunday morning, experimenting with this as we worked our way up. Bird of Dawning, Talisman 11 and Talasea who had been at Surges Bay for the weekend joined us at Little Peppermint Bay, which was bathed in sunshine for a lunchtime barbecue.

Sunday 25th June we hope to see some members at Pear Tree for a picnic. On Sunday July 16th we will go to Stockyard for the day to have a lunchtime barbecue weather permitting.

The Cruising Yacht Club Anniversary Dinner is on Saturday 5th August and I am still negotiating with Ports Corporation for entry to Constitution Dock. More information will be on hand at the July General Meeting.

Happy sailing Rosemary



REAR COMMODORE'S REPORT

There is a change to the guest speaker for July; this has previously been advertised as Patricia Locke who will now be our guest speaker in August.

For July the subject is **Aboard "Brittannia"**The guest speaker for July is Allan Shaw – that is, retired Petty Officer Shaw, RAN.



Allan will recount how, in his younger days when still an Able Seaman, he was a member of the ship's company on the Royal Yacht "Brittannia". For the technically minded, Allan has some facts and figures about the ship itself, and for those more interested in Royal protocol and ceremony, he will tell us about life on board (and perhaps a tale or two about the guests!).

Tuesday 1 August 2006

Patricia Locke is the guest speaker for the August general meeting. Patricia's topic is "Cruising in Tasmania and the Bay of Islands". The power-point presentation will include a section on "What To Do Whilst Cruising" and ends up with a lovely trip to Port Davey.

Saturday 5 August 2006

Annual Anniversary Dinner. See the advertisement in this issue for details. Please book early.

First Aid Course

I am still looking for further participants to enable the club to have a marine first aid course conducted by St John Ambulance Australia. Participants of the course would be able to obtain a discount on replacement of first supplies and first aid kits. If you are considering bringing your vehicle, home and boat first aid kits up to date, the discount would certainly defray part of the cost of the course. Please contact me if you are interested.

Milton Cunningham Rear Commodore

YOU ARE INVITED TO ATTEND THE

ANNUAL DINNER



of the

CRUISING VACHT CLUB OF TASMANIA

at 6.30 pm on

Saturday 5th August 2006 For a Banquet at the SIAM GARDEN RESTAURANT

81a Bathurst St, Hobart. (near Elizabeth St)

Banquet Cost: \$30 per head (BYO wine only)Beer and spirits available at the restaurant

Please confirm your booking by advising Milton Cunningham
Email: milton.cunningham@bigblue.net.au
or phone: 62476777 (ah)
and by making payment to the Treasurer.

Your early booking and payment would be much appreciated.
If possible please pay at the July meeting

RSVP 27th July 2006

Minutes of the General Meeting of the Cruising Yacht Club of Tasmania held at the Regatta Pavilion, Queens Domain, Hobart at 2000 hours on Tuesday 6 June 2006.

WELCOME

Vice Commodore Rosemary Kerrison, in the absence of Commodore Dave Bryan, opened the meeting and welcomed 28 members and 3 guests.

APOLOGIES

Dave Bryan, Dennis and Wendy Lees, Chris and Kevin Hussey, Hans Van Tuil, Robert and Margaret Grey, Malcolm McDougal, June and Drew Burgess and Brian Links.

GUEST

Jose Navarro and Janette Denby and Jim Forest. Jose and his wife are prospective members who arrived in Tasmania in May 2000 and operated the Castle Bar and Restaurant in Lenah Valley. Jose is now semi-retired and has recently purchased a vessel from Beauty Point.

Janette and Jim are from Boston and have been cruising the Pacific for the past 9 years in their vessel 'Dancer'. They sailed to Tasmania in January 2006 and will remain here for the rest of the winter cruising the Tasmanian waters.

MINUTES OF THE PREVIOUS MEETING

That the Minutes of the May 2006 General Meeting, as published in the June 2006 edition of the *Albatross*, were a true and accurate recording of that meeting. Moved Barry Jones, seconded Paul Kerrison, and **carried**.

BUSINESS ARISING

As reported in the May edition of the Albatross.

COMMODORE'S REPORT

Due to the absence of Commodore Bryan, his report was not forthcoming.

VICE COMMODORE'S REPORT

Provided results of the Donald Sutherland Navigation Trial which was recently conducted on 27 May 2006. Eight vessels participated in the trial and Andrew and Judy Boon were thanked for preparing the course. Leo Foley and Cheryl Price were the winners and Leo was presented with the Rostan jacket which was kindly donated by Eddie Hidding at Bay Chandlery. Other winners included Paul and Rosemary Kerrison (4 litres of anti-fouling paint kindly donated by Watyl Paints) and Malcolm McDougal who received a gift voucher which was kindly donated by the Fibreglass Shop.

Approximately 40 guests thoroughly enjoyed the meal and service provided by staff at the Mermaid Café in Kettering.

Upcoming sailing events include:

June 10/11/12 cruise to either Huon or Dover area;

June 25, cruise and picnic at Pear Tree;

July 16, cruise to Stockyard Point; and

August 20, cruise to Little Fancy Bay.

ACTION: Secretary to write and thank sponsors (3) for donation of prizes.

REAR COMMODORE'S REPORT

Advised that the navigation forum advertised for this evening would not progress due to the absence of Brian Links because of illness. However, Andrew Boon agreed to provide a presentation on a navigation aid.

Advised of the following presentations:

July 2006, guest speaker Patricia Locke, presentation on cruising; and August 2006, presenter yet to be announced. In the absence of securing a presenter, Patricia Locke has kindly offered to provide another presentation. Information provided regarding annual dinner venue on 5 August 2006, the cost will be less than \$30 (BYO).

The Hobart Port Authority is still to be approached regarding visiting yachts to the port of Hobart for attendance to the above function.

ACTION: Rosemary Kerrison to follow up with the Hobart Port Authority.

GENERAL BUSINESS

Proposal to change General Meeting venue to Derwent Sailing Squadron: The following Motion was put to the members:

'That the Cruising Yacht Club of Tasmania moves our general monthly meeting on the First Tuesday each month from the Regatta Pavilion grounds to the Derwent Sailing Squadron'.

The contents of the letter from the Secretary/Manager of the Derwent Sailing Squadron (dated 28/4/06) inviting the CYCT to share the facilities was read out to the members.

A number of Speakers to the motion then participated in discussions which resulted in the following amended motion being proposed:

Amended Motion

'The general meeting recommend to the Committee of the Cruising Yacht Club of Tasmania that a series of meetings be held at the Derwent Sailing Squadron at a time to be determined by the Committee of the Cruising Yacht Club of Tasmania'

Moved Keith Wells, seconded Barry Jones, and carried.

'D'Entrecasteaux Waterways'

Dave Davey outlined tasks to be undertaken by working party throughout the revising of the D'Entrecasteaux Waterways publication. He outlined the additional areas to be included and circulated examples of the improved quality of maps. Several members outlined problems experienced with the current edition which included the binding of pages and the tendency for the front cover to curl. It is expected that the revision will be completed in 2 month's time with publishing of the new edition completed before the end of 2006.

.

Member requiring old brass anchor light:

Recommended that member visit Roscoe's Boat Bits in Napoleon Street Battery Point and also explore the 'Trading Post' publication.

GENERAL MEETING CONCLUDED 2100 HOURS GUEST SPEAKER

Rear Commodore Milton Cunningham introduced Andrew Boon who acquainted members with the OziExplorer and provided a practical demonstration of its capabilities and value as a navigational tool. The OziExplorer is a GPS Mapping Software which runs on PC or laptop and will work with Magellan, Garmin, Lowrance, Eagle, Brunton/Silva and MLR GPS receivers for the upload/download of waypoints, routes and tracks and most brands of GPS receivers for real time tracking of GPS position (moving map). It is ideal for planning trips for boating and 4WD as well as real time navigation aid.

In conclusion, Vice Commodore Rosemary Kerrison thanked overseas visitors Janette Denby and Jim Forest for attending the general meeting.

MEETING CLOSED

The meeting closed at 2135 hours.



Andrew Boon presents the trophy to Navigation Cruise winner Leo Foley

Cruise of the Year Award 2006

The premier cruising award of the CYCT is the Cruise of the Year award. This is a nominated award and is not necessarily awarded each year. The Cruise of the Year sub-committee has recommended the following guidelines when considering nominations for the CYCT Cruise of the Year.

- 1. The award is to be given to the most outstanding cruise of the year by a Club member in a Club boat. However, under exceptional circumstances a cruise by a Club member taking full responsibility for a non-Club boat may be considered;
- 2.It is not essential that an award be made in any year if no cruise is considered worthy;
- 3. Nominations for the award to be requested, and all other known cruises to be considered. The Vice Commodore should prepare a shortlist for presentation to the Committee;
- 4. The boat and crew should be appropriate to the cruise concerned. This criterion is intended to cover such aspects as the seaworthiness of the boat, the experience of the crew and the planning involved. It would preclude the award being made for a voyage classed unseaman-like;
- 5. The crew capability should be sufficient to undertake the cruise in a seaman-like manner but it is envisaged that providing this criterion is met then a weaker crew be more favourably considered than a stronger crew; 6. Motive power. It should be recognised that the challenge to the crew of a sailing boat is substantially greater than to the crew of a motor boat in respect of handling ground tackle, navigation and exposure to the elements etc:
- 7. Whether the cruise is breaking new ground or is in waters previously visited by any crew member;
- 8.A portion of the cruise should have been taken during the current Club year;
- 9. The crew should (preferably) have lived on board for the period of the cruise;
- 10.An article for the Albatross should be encouraged as a sequel to the award, NOT mandatory for the award. This is the case where an article in Albatross has not previously appeared;
- 11. Nominations should be sent to the Secretary.

Cruising Plaques

It is proposed that Cruising Plaques be awarded to Club boats doing significant cruises. It would be an automatic award to those who fulfil the

LINDISFARNE BAY BOAT YARD

- Slipping/Workshop Hire, Engine/Mast Hoist
- Jetty Hire Available
 Yacht Delivery/Raft Hire
- Boat Surveys Repairs/Fitouts to all types of craft
 - Painting Engineering/Mechanical/Electrical

MOORING SERVICES



Phone Malcolm on 0408 I23 805 to book your service. Malcolm McDougall - Masters Certificate 5 & Engine Drivers 2

> Diver can be arranged Servicing Channel area every 4 to 6 weeks

Cruise of the Year Award (cont)

- 1. The boat must cruise beyond the state boundaries or circumnavigate Tasmania:
- 2. The plague is only awarded when the boat returns to her home port. (Note: This does not include a boat purchased interstate and delivered to her new home port in Tasmania);
- 3. Only one plague is awarded for any particular cruise irrespective of the length of time taken to complete the cruise or the distance sailed:
- 4. The plaque is only awarded after the owners have written an article(s) for the Club journal or spoken about the cruise at a Club meeting;
- 5. The plagues are not awarded for events organised by other clubs, nor are they awarded retrospectively:
- 6.It is feasible that a boat winning the Cruise of the Year could also be eligible for a cruising plaque.

Deadline for applications is 10th July 2006

The Oyster Cove Marina, Chandlery, & Brokerage

If you are...

Slipping

6267 4418

Chandlery

6267 4300

Rigging

0419 497 850

Buying or selling

6267 4259

Come down and see us at Kettering. Open 7 days.

Our hours are: Monday - Friday: 0830-1700 h

Saturday: 0900 - 1600 h

Sunday & Public Holidays: 0930 - 1230 h

Phone 03 6267 4300

Email: oystercovechandlery@bigpond.com

The Club Easter Cruise

We had contemplated a cruise to the east coast at Christmas, but commitments led to the time being too short and so I arranged for a few days off after Easter, and a 12 day break, ideal for the east coast.

The Club also scheduled a cruise in that direction for Easter, and although not at the April meeting, a couple of past commodores were pressed into service as cruise leaders.

I called the only three boats I was aware of showing interest, and made a loose arrangement to rendezvous in the upper Channel on Thursday evening, ready for an early start on Friday.

The usual last minute calls and so on meant I was late leaving work and so the Coast Radio sched was on as we motored out of Kettering. Barquero called after the sched to say she was in Quarantine, all alone, and had decided not to make the trip because of a need to return on Sunday.

The four day forecast at this stage was looking like northerly, southerly, stronger southerly and then moderating, perhaps.

There was no sign of the other two boats in any of the anchorages discussed, there was no response on the radio, and there was a magnificent moon...so we went to Sloping Island and anchored near Kalimna at 10.15 after a good trip motoring with a useful jib for most of the way. Talasea was following us.

On sorting things out in the morning I found phone messages from Endurance saying she was in Monk Bay, and during breakfast Somerled called to say she had us in sight and was coming to visit, having left Kettering about 5 am.

We arranged for an 11 am canal passage, and all three rendezvoused south of Fulham Island at 10.45. Tony was his usual accommodating self and passed us straight through and the passage out through the narrows was uneventful, following the recent instructions from Mast.

The passage was uneventful, but outside the narrows the northerly was exerting its influence. Somerled decided that gentlemen don't sail to windward and headed around the corner, advising that he was going to Fortesque. Due to radio range, we didn't hear from them again, but believe she returned to Hobart on Monday.

Meanwhile Andromeda hoisted a reefed main, and Endurance a staysail and they romped north at about 7 knots through Mercury Passage and then across to Spring Bay. By the time we arrived the northerly had gone and the sou'westerly set in; varying only to go more southerly over the next couple of days.

Endurance advised that the shallows north of the Marion Bay narrows were not for him and they were going to explore the outside route home. Saturday proved too boisterous, but they set off again on Sunday aiming to spend the night at Fortesque or Port Arthur, and home on Monday.

During Saturday evening social hour, I discovered what a failure I had been as cruise leader, as the Club had advertised a Maria Island Cruise, and we hadn't been there. Next time perhaps.

Andromeda stuck her head out on Sunday, and moved down to Prosser Bay, anchoring off Shelley Beach. We joined the locals who all walk their dogs along the beach between 4 and 5 pm, and made several new friends, all canine.

Monday was forecast for the end of the southerly, to be replaced by building northerlies, and a few days of north west, westerly, southwesterly, and all that sort of stuff with numbers like 20, 30, 40 and words like strong, gale and storm being mentioned often. This didn't look like the sort of east coast cruise I had envisaged, and so we headed south after breakfast, arriving at the narrows an hour after maximum flood, but before the northerly got up too much.

Again we were let straight through, although Tony sounded surprised that we were on our own. I didn't explain.

Norfolk Bay had a north easterly and so the eastern side looked good, and we went around the corner of Dunbabin Point and met up with Kalimna and Talasea who had wisely decided that the forecast didn't suggest east coast weather.

That night I listened to the traffic at the Canal, as Tamar Marine Haphazard, and later Intrepid, sailed through on the Three Peaks Race. This was at about 10.30 pm, and later the forecast northerly struck. At the 10.00 am sched for Three Peaks boats next morning, Haphazard advised that he was 43° 13' south and had had 40 to 50 knots for 4 hours during the night. I understand that Haphazard completed the event.

We spent a couple of nights inside Dunbabin, and then moved down to Sommers Bay, pausing only to get some very good flathead in a short time. Ashore we met up with the crew of Temeraire IV and a couple of other boats, and one thing led to another until it was bed time.

By now it was Thursday, and past Easter for even the most generous of employers, but a few days of annual leave works wonders and so we decided on a shopping excursion. Phone calls to a couple of birthday girls had elicited the information that the Taranna shop may be closed, and so after a quick look in Little Norfolk Bay to check the overnight possibilities (NW strengthening then SW), we motored up Eaglehawk Bay and anchored a little east of Tony and Sallie Creese's jetty from where it is only about a kilometre walk to the shop.

The shop provided all the fresh extras we were seeking and the restaurant in the same building served a very good meal of scallops and all the trimmings.

Taranna had been marginal and so we elected for the hour to windward directly into a 15-20kt NW to reach Monk Bay for the night. We were joined by four other boats including Kalimna and Talasea, who must also have been on leave. The forecast remained NW, SW, moderating, building NW, SW....

A low tide produced some good mussels next morning, so we took them across the bay to the lee of Premaydena Point for lunch. A good motor sail over with the jib in 15 -20 knots of south wester provided a good ride and put some charge into the batteries. The wind had moderated to about 10 knots for the return journey after lunch, but we still easily made 7.2 to 7.3 knots. Monk Bay was by then deserted except for a fast aluminium runabout which appeared from the south just before dark and set a long net just north of us. It was collected at 9.00 am the next morning.

Saturday lunch was taken at Sommers Bay. Norfolk Bay is a great place for a run across the bay. It is about 4 or 5 miles from side to side or top to bottom, and 7 or 8 miles on the diagonal.

Amnesia and Obsession arrived on Saturday evening, and the cruise continued, culminating with a night near Lime Bay before a quiet crossing back to the Channel for lunch on Anzac Day at Killora. Flathead were found in various parts of Norfolk Bay, and some other areas tried without success.

After 12 days, we ended our East Coast Cruise and returned to work, or at least some of us did.

On Datums – or Data

Many of you will have noted that the datum, or base measurement for tides in Hobart, was changed at the beginning of this year.

The effective zero tide is now 370 mm above the old zero. This means that whereas last year we had predicted tides in Hobart ranging from lows around 0.45 (Feb 8th) to 2.06 (Jul 21st), this year the extremes predicted are 0.10 (Jan 30th) to 1.62 (Jul 11th).

The old datum was referenced to zero on the automatic tide gauge at the Hobart Ports Corporation office, which is approximately Indian Spring Low Water (ISLW).

The new datum is based on Lowest Astronomical Tide (LAT). This, as the name suggests, is the lowest tide calculated from astronomical predictions, which provides the figures given in the tide tables.

Actual tides are also affected by air pressure, wind and various other things like tsunamis. The timing of tides is most affected by wind whereas all factors can cause variations in height. Thus tide records provide different results from the tidal predictions.

The Marine Board of Hobart summarised tidal records for the port in 1986, and TasPorts continues to record tidal data, although it is not regularly processed.

The 1986 summary is in the form of a graph showing tide heights and numbers of tides at that height. The drawing was updated to at least 1994 with tidal extremes.

The highest tide recorded in Hobart was 2.55 (ISLW) on 25th July 1988. Those of you who were around that day may remember that water came up over the road at Franklin Wharf. I believe the cause was a prolonged south easterly with low pressure. This is 480 millimetres above highest astronomical tide, which is given as 1.7 m on the new edition of Aus 171.

The lowest reported tide for Hobart was 0.05 (ISLW) on 14th December 1985. This is more than 300 mm below the lowest astronomical tide and an indication that you could end up with less water than that predicted by tide depths.

The Marine Board graph suggests that only about 20 tides in 12 years fell below the lowest astronomical tide level so it doesn't occur very often.

The change in datum is part of a move to change Australian tidal information onto a common rational set of data. Tidal predictions available from Bureau of Meteorology for at least Hobart and Spring Bay are now on the new datum. Tide datum for calculation is taken from the datum used for the largest scale chart for the principal port being considered. Thus the production of the new chart has led to the use of the new tide datum.

Tidal data is available from other sources and is often included with electronic chart data from suppliers such as C-Map and Navionics. Navionics tides, for example, are on the new datum for Spring Bay and Impression Bay, but the old one for Hobart. Be sure you know which datum your charts are using.

The Hydrographic office is gradually republishing charts to enable the use of the common datum. At the same time the horizontal, or should that be spherical, datum is being altered.

Those of you with chart plotters or using GPS positioning on charts will have been aware that the GPS datum did not always agree with chart datum. For example the later printings of the 1972 edition of Aus 171, Hobart to Norfolk Bay, carried the warning that satellite derived positions should "...be moved .09 minutes southward and .08 minutes westward to agree with this chart".

What this means, is that maps have to be drawn from a known starting position, and the publishers have to decide on this position. Drawing part of a curved surface, which is the surface of the earth, onto a flat piece of paper, invariable means that things get a bit out of line if you go too far. Hence the need for agreement between mappers of how the variations are to be handled.

The 2006 edition of chart Aus 171 says that positions derived by satellite to WGS 84 can be plotted directly on the chart. WGS 84 is the World Geodetic System 1984 which is now widely adopted.

Some years ago Tony Sprent gave a very detailed and informative talk to the Club on the different mapping datums which are used, and the need for the changes. Basically the centre of the earth varies a bit and better methods of measuring come along, plus the thing isn't really a sphere and so the apparent centre varies with your location on the earth.

While you are considering the distance from Hobart to Dennes Point, it doesn't matter, but when you have twenty odd satellites trying to work out where you are, it helps to have the best possible model.

GPS receivers generally have WGS 84 set as a default datum. This has been selected as the most reliable overall datum and is the one onto which Aus charts are being converted. My GPS has about ten screens full of optional datums, varying from North America 1927 to Zanderij and including five separate 1936 datums for England Scotland Wales and associated islands.

C-Map have advised that all charts they use are converted onto WGS 84 datum for inclusion in their system.

The previous edition charts for this region used Australian Geodectic Datum 1966 (AGD 66). Most GPS receivers can be changed to this datum, however this is not recommended because we rarely work only with one chart and would be moving from one datum to another when crossing chart boundaries. All charts will eventually be republished with the new datum.

I don't know whether this will be just in time to establish another geodetic datum and start the process over again....

The new edition of Aus 171 uses LAT as a datum for depths instead of the ISLW used by the previous edition. The effect of the change is that the predicted depth at any location should increase by the change in datum, 370 mm.

Inspection of the depths indicates that the new edition predicts a little less water over the bottom at some locations. For example Gypsy Shoal used to be shown as 10 metres, and is 9.8 with the new datum. The sand bar across Eaglehawk Bay now has 1.0 metre cover at low tide over it whereas it used to have 1.4 m. This suggests that the new charts also include updated soundings for at least some locations.

Land based data is also changed, and some coastline detail is upgraded. For example Mount Stewart on Tasman Peninsula has dropped from 145 m to 128 m, and Coal Mine hill has disappeared off the chart. Mures is now a feature on the Port of Hobart chart, and the old railway yard has gone.

With the new editions of charts, the hyrdographic office is adding a zone of confidence diagram which relates to the accuracy of the information shown on the chart. Most of Frederick Henry Bay and Norfolk Bay is shown as level C, with the explanation that horizontal information is reckoned to be +/- 500 m and depth +/- 2 m +5% of depth, and "...depth anomalies may be expected." We know from experience that the accuracy around Norfolk Bay is much better than this, but the guaranteed accuracy, or lack of it, is a bit of a worry. The same level of accuracy is shown for Bathurst Channel and Harbour on the current edition of that chart.

This has covered some basic changes and explanations of vertical and horizontal data, but there is a lot more information and detail available for those who are interested. Tides for example are also considered in terms of mean higher high water or mean high water springs, mean low high water and a variety of other levels. Six levels of tide are shown on a typical chart.

Charted heights are often shown relative to MHHW, although if you refer to a land map, heights are normally shown relative to Australian Height Datum (AHD). MHHW is shown as 1.5 for Hobart on Aus 171 (2006) but was 1.6 on the previous edition of Aus 171 (1972) and 1.4 (relative to ISLW) on Aus 172 (1972) and on the old Marine Board graph and. That is, although the datum has changed by 370 mm, MHHW has changed only by 100 mm on charts.

AHD used to be defined in Hobart as 1.2 m above chart datum (ISLW), which is 930 mm above the new LAT datum, putting it 570 mm below the present MHHW on Aus 171. This means that land maps will show land as being half a metre higher than will charts. This does not generally have any great consequence, unless somebody is trying to give a very accurate height. It is an indication of the futility of trying to describe some things too accurately.

We won't mention the old State Datum for heights which was used before AHD was introduced to Tasmania and used into the 70's. The State Datum (165mm below AHD if I recall) still causes difficulties for people using old site plan levels, particularly if the drawing doesn't show a datum.

On Tides

Tides are generally calculated for individual Standard Ports and then Secondary Port tides are referenced to the Standard Port. In 1998, the Standard Ports for Tasmania were Stanley, Devonport, Burnie, Georgetown and Hobart.

Generally there are two high and two low tides per day. These are called semi-diurnal tides. Tides are affected by both semi-diurnal (half day) and diurnal (daily) influences to a different extent at times of the year and vary with locations.

When diurnal influences are significant, there is a large difference between the height of the two daily highs and lows. The Australian National Tide Tables use an arbitrary formula to determine the significance of the diurnal effect and use this to divide Standard Ports into those with predominantly diurnal tides, and those with predominantly semi-diurnal tides. Hobart has pre dominantly diurnal tides, while Stanley, Burnie, Devonport and Georgetown have predominantly semi-diurnal tides.

This means that successive highs and lows in Hobart and secondary ports, from Swan Island to the Pieman clockwise, are often quite different. For example on Good Friday, the successive tides for Hobart were 0.61, 0.96, 0.79 and 1.21. The second low was only 170 mm below the previous high, but the second high was 250 higher than the first high.

The first high occurred at 0911 at Hobart, which translated to about 1130 at Dunalley.

The effect of this was that there was fairly slack water for quite a long time to get through the canal that day, but the high was not a particularly high high. According to Aus 171, mean lower high water at Hobart is 1.0, and so the 0.96 was below the mean for the low high water.

Which brings us to some of the other tidal data shown on charts.

Where a port is considered to have diurnal tides, the two heights for the day are considered to be significant, and so the average higher high, lower high, higher low and lower low are given. These are abbreviated to MHHW, MLHW, MHLW and MLLW. Mean sea level and highest astronomical tide are thrown in, as MSL and HAT. Lowest astronomical tide is zero for the location and so doesn't have to be shown.

If the port has semi-diurnal tides, the seasonal variations are considered to be of greater significance, and so the tidal averages shown on the chart refer to higher and lower spring tides (maximum) and higher and lower neap tides (minimum). These are shown as MHWS, MHWN, MLWN and MLWS.

This does not mean that ports with diurnal tides are not affected by seasonal variations. It is just that the seasonal variations are considered less significant than the daily variations for these ports.

Tidal predictions are calculated using harmonic constants which have been measured for the site being predicted. There are up to 22 different parameters each with two constants given to 3 or 4 significant figures used in the calculations.

If you have the harmonic constants for a secondary port, and tables for the Standard Port, tides can be calculated for the secondary port. For example, tides at Bramble Cove can be calculated from the Hobart tides.

Some find it easier to own a chart plotter with tide data which includes Bramble Cove but the calculation for Bramble Cove only involves 10 of the possible 22 parameters, so it's not too bad really. I must admit that the chart plotter is much quicker though. Not that it makes a lot of difference for Bramble Cove where the Highest Astronomical Tide is 1.0 m and the daily variation from higher high to lower low is typically not much more than half a metre.

Highest and lowest astronomical tides are taken from the figures calculated over a period of 19 years. Astronomical tides predicted do not reach these levels in every year. Tidal levels vary in a cycle of approximately 18.6 years.

Levels quoted for mean sea level and other significant levels are averages over the 19 year period and so can vary with time.

Ref. Australian National Tide Tables, 1998, published by the Hyrdographic Service of the RAN.

Roger Locke. Andromeda



A barbeque on Rabbit Island

Bowen Bridge

One of the consequences of the change of tide datum in Hobart, is that we have "lost" 0.8 of a metre in clearance under the Bowen Bridge.

The old chart 172 gave the clearance as 15.2 metres for a width of 46 metres under the navigation span.

The new edition of Aus 171 offers 14.4 metres under a 46 metre width of the same span.

Where has our 0.8 metres gone?

The previous edition of Aus 172 gave clearances measured above Mean Higher High Water, which is 1.4 metres above the Indian Spring Low Water chart datum. The total height to the top of the clearance was 15.2+1.4, or 16.6 metres.

The new edition provides clearances above Highest Astronomical Tide which is 1.7 metres above Lowest Astronomical Tide, the new datum, which itself is 0.4 of a metre above the old ISLW datum. The total is 14.4+1.7+0.4, or 16.5 metres. So we've been

done for 0.1 metres somewhere along the way. Perhaps the bridge is settling.

Clearance under the main span is not the full story, and attached is part of an article I wrote before the Club boats travelled to New Norfolk a few years ago.

The Bowen Bridge.

A document produced by the Department of Main Roads in 1978, describes the then to be built Bowen Bridge.

There are to be 8 spans of 109 metres on a grade of 0.79%. This means that the clearance increases by 0.86 metres, or 2.8 feet, with every span toward the west.

The navigation clearance is given as 15.2 metres over a width of 46 metres, or half the clear distance between the piers. This is the same as the clearance now shown on charts, and so it seems that the bridge was built as described in the booklet. The chart says that the 15.2 metres is measured above a certain high water, which is 1.7 metres above chart datum.

On October 26, 2002, high water is 1.63 metres so the clearance is expected to be close to the advertised clearance.

The maximum clearance is greater than the clearance over 46 metres, but we don't know the curve of the beams and so don't know how much extra is available.

The navigation span is the fourth one from the western side. On the basis of the above information, clearance under successive spans toward the west is 16.1 metres. 16.9 metres and 17.8 metres.

The westernmost span ends at the shore but the river bank slopes steeply, and boats can approach quite closely, with care.

Based on the new datum, the corresponding vertical clearance from Highest Astronomical Tide under the western spans, is 15.3 metres, 16.1 metres and 17.0 metres.

R S Locke,

Ref Second Hobart Bridge, January 1978.



OUR COACH TRIP TO CANADA

We were met at Vancouver Airport by APT representatives and introduced to our tour guide Anita around 10:00 am on 6 May, 2006 and were whisked away by coach through flat farming country on excellent roads to get to the ferry terminal and go to Victoria, the capital of British Columbia on Vancouver Island. We saw huge and lovely homes (none of them brick) along the way and we caught a ferry similar in size to Spirits I and II. We had lunch on the ferry as the trip took a couple of hours and at the same time admired some beautiful and secluded homes surrounded by spruce forests on the smaller islands. It was all lovely and green and quite picturesque. When we left the ferry we travelled on for another 20 minutes to our beautiful hotel, the Grand Pacific.

The next day we took a scenic tour and then visited the very beautiful Butchart Gardens which in late spring were 'magic' - a mass of beautiful blooms colour, green lawns and so pretty, particularly the tulip beds. We found Victoria a very pretty place but the only thing to spoil it were the untidy power poles with the messy lines hanging quite low. I cannot imagine why they have not put them underground. In the afternoon we were back at our hotel and we took a leisurely and relaxing horse drawn carriage ride through the streets and a park where we saw chipmunks. We saw the Dubois yachts having completed their race and lying in Victoria harbour. They were not dissimilar to Volvo'70s in size.

We left Victoria by a different route the next day and went to a different part of the island to catch a ferry back to mainland Vancouver, and we stopped along the way at various scenic places. On the ferry we watched the tall buildings of Vancouver in the distance and we headed straight for the mountains after disembarking. These were coastal mountains not the Canadian Rockies and we travelled to Whistler getting there around 4:30pm after passing through some superb scenery. Whistler was a spectacular place but the trip on the next day (9 May) in the first half of the morning was scenery unsurpassed There were very high snow capped mountains, snow to the road level, many glaciers and spectacular falls. There were huge rivers, glacial moraine, and so on. We were told the rivers turn red with sock-eye salmon spawning during September -October . each year. I cannot imagine that. Then there was farming countryside with very rich soil and a warmer climate. Again we climbed into high country with snow but not so spectacular were the mountains and we arrived at Kalowna by 4:15pm. David and Don

checked out the marina but the boats I'm told were too small. The 'Grand Okanagan' is set on a picturesque lake and again the meals there were excellent as they had been thus far.

We left early the next morning for Banff and travelled first through some spectacular mountain scenery with snow caps, glaciers, deep ravines and rivers. I thought it was good the day before but this was even better. These were the Columbian icefields and mountain chain. It was awesome and magnificent. Then we travelled through agricultural areas with lots of orchards in full blossom. It was a very flat fertile area. After lunch that day we got back into the mountains again and again this scenery was even better. What beautiful sights we saw. Words cannot describe it and photos do not do it justice. We were so blessed with good, clear weather and it wasn't really cold. Then we arrived in Banff and we were totally overwhelmed by our accommodation - a 'castle' there - Banff Springs Hotel, it was huge, nine stories high and spread out. Through our bedroom window we looked out at the snow covered peaks in every direction and down on the Bow River and the golf course and everywhere were the beautiful Canadian spruce trees. We had seem many deer along the way and tiny squirrels, gophers and mountain goats with huge horns. Someone spotted a bear from the coach but I missed it.

Next day (10 May), a beautiful, if cold (12 degrees) day, we travelled through the township of Banff which is quite pretty with homes there worth millions of dollars, and along the side of the Bow River taking in many different views of the mountains.

The most spectacular thing we did was to take a trip up to the summit of Sulphur mountain on the Banff Gondola. There were 360 degrees of beautiful mountain and valley scenery - a sight etched in my mind forever. It was so beautiful and we had the clearest, the most perfect day. We spent two nights in Banff and had a chance to relax and even do some shopping.

We had had some very early starts and long days of travelling and then dinner lasting up to 2 hours and we were climbing into bed exhausted and I got a bit lazy keeping my diary up-to-date as I was too tired to write each night.

(Top be continued)