



April 2014

## New M10 rules encourage K1s and portaging

The 2014 Marathon Series got under way in Canberra on Saturday March 15 with a big splash, in fact with a lot of big splashes. The course was rough and tough and wreaked havoc with those in K boats, in particular.

And with new rules providing for those opting for K boats to earn extra club points, there were more of these tippy beasts to be seen than usual, some of them in the hands of competitors who normally choose more stable craft.

The result of all this mayhem is evident with a quick glance through the results. The times are all over the place, some doing better than expected, others taking up to half an hour and more longer to complete the course.

All this cannot be sheeted home to the conditions. The new rules also provide extra club points for those in divisions 2 to 6 if they portage. Several Lane Covers decided to do this and so took longer than usual. The club earned 6 points from K1 paddlers and 10 points from portaging. It could have been more.

There was some confusion about how the new rules work, and Bob Turner, chairman of the Marathon Technical Committee, has provided this summarised explanation.

*If you register to paddle an "international class boat" (K1, K2, C1, C2) in any division and finish, you earn 2 points for your club. If you register to portage in divisions 2 to 6 and complete all the required portages, you earn 2 points for your club. There is no time compensation for those who elect to portage. If you portage a K boat in divisions 2-6 you earn 4 (ie 2+2) club points. Registering to paddle a K boat and/or to portage cannot be done online. It must be done on the day, before the race, in two folders at or near the registration desk. No club points are available for those who portage in division 1 and divisions 7-11.*

Bob added the following comment: "The Marathon Technical Committee hopes that these changes will be seen as further opportunity for your members (and for all paddlers) to continue to enjoy the Marathon 10 series, and that it will provide them with some options, some variety, and maybe some further challenges in their paddling."

Due to the closure of an upstream bridge, the course was extended out of the Molonglo River and some 500m into the lake. A front came through, bringing with it strong winds and cross waves. Having the lake part of the course close to the wall meant those who capsized (and weren't righted by two

rescue boats which were kept extremely active) didn't have as far to swim to empty their boats. The downside was that the wall set up a nasty rebound. There were 183 competitors.

Among the notable features of the event was the fact that dual member Matt Blundell is paddling for Lane Cove this year. He scored his customary win in division 1 and his expected points contributions throughout the year will go a long way towards enabling the club to achieve its stated ambition of topping the clubs series points score for the first time.

In division 6, with a crossing of Bass Strait tucked away in his CV, John Duffy had no problems with the wind and waves and won in 1.56.44. It

may be a long time before the organisers allow him to paddle in division 6 again. David Young, from a surf club background, found lots of runners on his Burton spec ski and was 3<sup>rd</sup> in 1.57.50 after doing the portages.

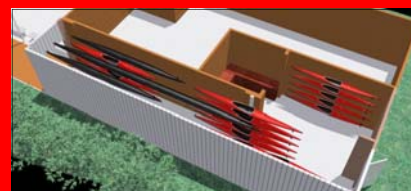
Wade Rowston continued the good racing form he has shown in the past couple of years and held off a TK2 for 2<sup>nd</sup> in division 5 in 1.57.58. He said a group of K1s in his division raced away from the start but apparently came to grief in the lake. Duncan Johnstone finished just outside the placings in 4<sup>th</sup>



Lined up for the briefing in Canberra: Tony Carr, Duncan Johnstone, Brett Franzi, John Duffy, David Young and Michael Day.

### FUNDING APPROVED FOR THE YAK SHACK

The NSW Department of Sport and Recreation has approved an LCRK request for funding of \$22,542 towards the cost of building a boatshed at the pontoon. Jeremy Spear, who has been leading the project, said: "The next stage is to firm up quotes, then we can appoint a builder and then get it built. It should take inside a month after we press the go button." The shed, previously approved by Willoughby City Council, will be a "lean-to" structure on the western or river side of an existing building. It will have accommodation for 30+ boats and other facilities.



in 1.58.12 and new member Robert Manning, in a ranking race, also portaged and showed with a 1.54.54 that he will be a strong competitor.

Some reports from other LCRK competitors:

Tom Simmat thought that if the organisers wanted to promote K1s, they could have kept the course away from the rough lake conditions and had more laps. He paddled a K1 and did the portages. He capsized twice and both times had to swim to shore and then carry his boat along to a small beach where he could safely re-enter the water. His time of 2.25.12 raised a few eyebrows.

Tim Hookins has three swims, each time while helping the same K1 paddler who had capsized. He also did the portages but to no benefit as he didn't know he had to register beforehand.

Phil Newman, inspired by Derek Simmonds' exhortations to all club members to compete in the M10 series, turned up and had to do a ranking race because the last time he raced was so far back in history all trace of him had disappeared from the records.

### M10 Race 1 Canberra Mar 15

Competitor	Div	time	Plc
Matt Blundell	1	2.00.56	1
Toby Hogbin	1	2.07.07	4
Michael Day	2	1.56.18	11
Dave Hammond/ Tony D'Andretti	3	1.47.11	5
Richard Barnes	3	2.03.45	15
Tom Simmat	3	2.25.12	16
Jeremy Spear	4	2.01.31	12
Phil Geddes	4	2.14.24	13
Wade Rowston	5	1.57.58	2
Duncan Johnstone	5	1.58.12	4
Tim Hookins	5	2.06.12	9
Robert Manning	5	1.54.54	Rnk
John Duffy	6	1.56.44	1
David Young	6	1.57.50	3
Anjie Lees	6	2.09.31	7
Bert Lloyd/ Don Rowston	6	2.13.16	12
Phil Newman	6	2.02.56	Rnk
Shane Gibson	6	2.11.28	Rnk
Ruby Gamble	7	2.29.19	7
Meg Thornton	7	DNF	
Tony Carr	8	1.33.27	6
Brett Franzi	8	1.36.47	Rnk
Ian Wilson	10	1.01.27	7

Div1=25k, divs2-7=20k, div 8=15k, divs 9-11=10k



No excuse any more for missing the turnoff to the pontoon park. This sign has been erected at the exit from Mowbray Road. How many of you have noticed it?

Michael Day had two swims, both times while turning around markers.

Phil Geddes, without usual double partner Paul van Koesveld, paddled a Stellar SEL and did the portages, and also fell in while chasing Jeremy

### Bridge to Beach Feb 24

Competitor	Categ	Time	Plc	Cat	plc
Tom Simmat/ Kobi Simmat	dbl	49.23	19	5	
Matt Blundell	40+	49.37	21	5	
Tony Hystek/ Alanna Ewin	Xdbl	52.31	38	5	
Matt Acheson	40+	57.59	81	20	
Tim Hookins	60+	1.00.20	96	4	
Okkie Esterhuizen	50+	1.03.24	124	24	
Jeremy Spear	50+	1.04.41	133	26	
Anjie Lees	W40+	1.26.14	242	12	
Meg Thornton	W50+	1.32.36	213	8	

### Open Water Series

Competitor	Categ	Time	Plc	Cat	plc
Matt Blundell	40+	1.24.31	20	10	
Tony Hogbin	40+	1.25.43	22	12	
Tony Hystek	50+	1.43.27	74	9	
Tim Hookins	60+	1.45.11	80	3	
Steve Newsome	40+	DNF			

### Botany Challenge Feb 15

Competitor	Categ	Time	Plc	Cat	plc
Long course Tony Hystek/ Richard Robinson	dbl	1.01.29	3	1	
Tim Hookins	60+	1.18.14	46	6	
Jeremy Spear	50+	1.19.47	54	10	
Phil Geddes	seakyk	1.25.47	63	1	
Anjie Lees	W40+	1.25.49	64	2	
Derek Simmonds	60+	1.30.52	68	10	
Meg Thornton	W40+	1.32.23	69	3	

### Pittwater Challenge March 8

Competitor	Categ	Time	Plc	Cat	plc
Long course Tony Hystek/ Richard Robinson	dbl	1.03.01	2	1	
Steve Newsome/ Craig Ellis	dbl	1.15.20	36	11	
Tom Simmat	60+	1.19.10	54	6	
Jeremy Spear	50+	1.21.34	65	12	
Paul van Koesveld	60+	1.29.04	86	13	
Meg Thornton	W OC1	1.31.34	89	1	
Peter Millard	seakyk	1.36.42	100	2	

### Cronulla Bay Runner Mar 22

Competitor	Categ	Time	Plc	Cat	plc
Long course Tony Hystek/ Richard Robinson	dbl	1.14.53	7	1	
Tim Hookins	60+	1.31.26	33	3	

Spear.

Don Rowston and Bert Lloyd, with about as much experience as you can cram into two careers, unexpectedly went for a swim from their Super-sonic.

Anjie Lees and Ruby Gamble camped by the river for two nights and loved it. Anjie stayed upright during the race but Ruby swelled the swimming ranks with three outs.



Overnight Canberra campers Anjie Lees and Ruby Gamble

And now we have to wait until May for the second race of the Marathon Series. Hopefully the Technical Committee will move more swiftly next year and grab available early dates before they are gobbled up by others.

In the Open Water Series – a combination of offshore and harbour racing – a highlight has been the performance in a double of Tony Hystek and Richard Robinson. Against some of the strongest paddlers around, they turned in a 2<sup>nd</sup> and 3<sup>rd</sup> in harbour races and a 7<sup>th</sup> in the offshore Cronulla race on March 22.

This has been part of their training for the Devizes-Westminster across southern England at Easter (see pages 4-5). They will be among the leading boats chosen to carry GPS trackers, and we will be able to follow their progress live, with updates every 90 seconds. Much of the race will be through Saturday night local time, which will be during the day on the Sunday in Australia. Details of how to follow the race will be emailed to members when available.

## LCRK trio off to the Yukon

It's a Yukon double event this year, and three Lane Covers will join with a close friend of LCRK to represent Australia in two enthralling endurance races through North America's grizzly bear wilderness.

First comes the Yukon River Quest, 715km, in far northern Canada on June 25-29. It is the longest annual canoe/kayak race in the world. Anjie Lees and Meg Thornton are going to tackle it in a double. They will be team 46 racing under the competitor name The Girls from Oz.

They will be joined by Therese (Buzz) Powell, a veteran kayaker from the northern beaches, who will paddle a single. She has 10 Hawkesburys, 3 Murrays and a Bass Strait crossing to her credit. She will be number 33 under the competitor name Buzz.

A month later, July 21, Buzz is going to back up for the longest – by far – canoe/kayak race in the world (but not run annually), the Yukon 1000. That's 1000 miles, or 1600km. Sydney to Townsville. With her will be the adventurer who is always searching for a new challenge, Richard Barnes.

They will paddle down the fast-flowing Yukon from Canada into Alaska in the Elliot Tomaree that Tom Simmat and Urs Mader used in the Yukon Quest last year. They will be team 5 under the competitor name Goldfish, the same name Richard uses for all his XPD-type races around Australia.

Richard said: "Our aim is solidly focused on winning by finishing rather than being first across the line. Buzz is doing all the training for both of us."

### Time trial tops the fifty mark again

The Wednesday time trial on March 19 saw 51 boats taking part. It's the third highest number ever, behind 55 last year and 53 back in 2007 when we had the biggest number of paddlers – 93 from 40 doubles and 13 singles at a special fund-raising charity event.



# What does the future hold for the Murray Marathon?

With the Murray Marathon attracting fewer and fewer competitors, the organisers have changed the date for this year's event from the traditional Christmas-New Year break to Nov 24-28. The February issue of *Kayak Kapers* reported that a question marks hangs over the future of this great endurance race and invited comment from our members. We received the following responses, the first two from former Murray handicap winners.

**Tom Simmat:** Unfortunately the bean counters from Red Cross went through the Murray Marathon, along with a number of other activities that they (the bean counters) felt were not delivering enough donation dollars compared to the resources spent. I understand there were at least three full-time paid employees on the event the whole year round and even more during the event, eg public relations. The YMCA had Lee who spent about 80% of his year's time on the Murray Marathon.



There were a couple of errors in the Risk Management Plan which for example had words to the effect that "the event will not be run when there is an extreme fire danger in the area". It would have been better if the words were to the effect "In the event of an extreme fire danger the committee shall take action to optimise the safety of the participants, volunteers, land crew and spectators." The result was that the committee had no option but to cancel parts of the race, even though the fire threat was not near the river or checkpoints and alternative arrangements could have been made.

The result of this was a lot of disappointment by participants and the full-length numbers dropped.

In defence of the YMCA, they do not have the resources of the Red Cross and stepped in to run the event on a shoestring budget when no-one else would. Plus they are a youth organisation and their priorities are to run an event for the youth of Victoria.

The change of date is directed at using the resources of the teaching staff at the schools to help to run the event. The numbers of school children at the event has slowly grown and the number of other relay and full-distance paddlers has gradually declined.

To run an event of this quality over that number of days in the Christmas holidays was a mega undertaking with a whole army of volunteers. Unfortunately I believe those volunteers are, to a degree, less likely to give their time to the less known YMCA than the prestige and background of the Red Cross.

This is also reflected dramatically in the gross funds raised.

So I feel very privileged to have been part of this amazing paddling iconic marathon event, under both the Red Cross and the YMCA, but unfortunately I understand the financial and volunteer resources for these activities are limited.

Unless a significant super sponsor

and organisation appears to run it, the Murray Marathon as we knew it will not survive.

Kids and all, I for one am going to do my best to support the YMCA and save some holiday time to participate or at least be involved in the November event.

**Tony Hystek:** Some thoughts...



1. The race is one of just 3 flatwater ultramarathons (more than 100km) in Australia. It is vital that it continue in its present 5-day format if at all possible.

2. There was a time when the race had internationals competing seriously for line honours. That prestige seems to have fallen by the wayside, and hence its attraction to serious ultramarathon competitors.

3. The current Christmas-New Year period is going to suffer increasing disruption due to extreme weather conditions. It has to move to another date to guarantee an uninterrupted event.

4. I envisage serious problems with paddlers themselves being able to take the week in November to compete, and for landcrew likewise.

5. The race must also be made more attractive to juniors. I compare this event with the Devizes Westminster race in the UK, where the 4-day version is specifically aimed as a challenge to junior school crews. (Watch <https://www.youtube.com/watch?v=YfcYDeYBKFY>) for what a race like this means to schoolkids. Could the event be moved to Easter? Could it become a 3 or 4-day event? Could it just go from Yarrowonga to Echuca over 3 days?

**Richard Barnes:** The decision has been made by YMCA, so let's get on with enjoying the new event, and supporting YMCA. There may be negatives, but we can also be optimistic. There should be fewer motorboats on the river. It should be cooler weather. There will be less chance of bushfire threat, and so less opportunity to cancel days, a very real turnoff in the last few years. It's still 404km of diverse and stunning scenery on Australia's biggest river.



**Meg Thornton:** Opinions are what you're asking for and wham bam here is a set of opinions with which I expect everyone else to passionately disagree.



Based on my 2013

experience:

1. Having the private school competition with aggressive sideline parent support groups with the star pickets/banners/rahrah sideline behaviour at every checkpoint aggressively pushing the single paddlers out of the way is a big turnoff. It makes it really difficult for the single paddler's support person to get a foot in, generating inappropriate angst (ps: I went to a posh private school - I know how it works).

2. The integrity of the iconic event is compromised with the breakdown of distance/number of days you can choose to paddle. The appeal of doing 400km is a significant personal goal. If you can easily opt in and out for the short version the integrity of the event is diminished. Compare with HCC which has stuck to its guns on maintaining format/not compromising for relay/smaller stage options etc to maintain the integrity of the event on a world footing.

3. This event is a huge personal undertaking. It deserves a gravitas appropriate for an iconic event that should have world recognition as one of the great feats. The current marketing strategy seems to take a marketing spin on the event in a youthful fun-park profile (have I hit the #GrumpyOldWoman button yet :).

4. I absolutely loved every single minute of the whole damn 400km. I fell out in the big crosswinds, I ripped my rudder off, I was close to last a few stages, I talked to everyone along the way. I finished. It was one of the best things I have ever done. I was not going for speed. Really, I don't care much about that. It was the experience. One of the best. And relatively/personally ... it was not as hard as HCC or RPM which have their own unique and different features. That doesn't matter. It is the Murray Marathon!!!

**Roger Deane:** I don't think it is up to a medium-sized suburban club in Sydney to tell the organisers of the Murray Marathon how and when to run it.



**Ruby Gamble** (in response to Roger Deane): It's important to provide input though, and it seems the consultation prior to the decision was fairly limited. We may only be small, but they're relying on a lot of clubs our size to participate.



**Richard Robinson and Tony Hystek are spending Easter in England. They'll be competing in one of the most gruelling kayak races in the world, the Devizes to Westminster, in the non-stop senior doubles. It's so tough that all other classes have to do the race over 4 stages.**

## 77 PORTAGES IN 202KM KAYAK RACE

by Richard Robinson

I had my eye on the Devizes to Westminster Canoe Race right back when I started paddling in around 2011, but hadn't really thought seriously about when I might do it until I approached Tony Hystek in early 2013 to see if he was interested.



At that time, he was planning on the Fish in South Africa and suggested it would have to be 2014 for him. As things worked out, the Fish didn't go ahead, so when Tony subsequently indicated he was good to go for 2014, what had started out as a "great to do at some stage" finally became a reality. Time between then and now has absolutely flown and it seems difficult to believe that as I write this, we have only 45 days to go.

### Background

Hailed as the "longest non-stop canoe race" in the world (I'm not sure exactly how accurate that is), the DW starts in the rural market town of Devizes in Wiltshire, to the west of London, and ends at the famous Westminster Bridge adjacent to the Houses of Parliament. The event is held over the Easter long weekend and comprises both a 4-day event and the more well known overnight event, commonly known as the "senior doubles". The overnight event is allowed only in doubles for safety reasons.

The concept of paddling from Devizes to the sea started as a pub "wager" in 1920 and the concept was revisited by some of the original participants in 1946. In 1947 the idea of paddling from Devizes to London via the then derelict

Kennet & Avon Canal in less than 100 hours was floated.

The original attempt failed, however the Devizes Scouts took on the challenge and during Easter 1948 a team of four 17-year-olds completed the course, arriving at Westminster in just under 90 hours. At that stage, the "race" involved the requirement to carry all your kit with you, unsupported by landcrew. This was essentially the beginning of the event as it is known today.

Over the early years of the race, the requirement to complete the distance unsupported by landcrew meant that military forces teams quite often dominated, especially teams from the Royal Marines and in particular the Special Boat Service – in effect this is essentially the type of stuff they trained for.

As competition flourished the inevitable bending of the rules began (read clandestine meetings in bushes in the middle of the night to receive food/gear), and in response to this organisers decided in 1971 to allow crews to receive support along the course. This was essentially the final development in the race format and is how the race stands today.

The current race record was set in 1979 and stands at 15

hours 34 minutes. Many doubt whether this will ever be broken, as going that fast requires some significant flow and kind winds, and the zealous approach to public safety being what it is today, I suspect the "right" conditions may never come around again. The closest crews have come in recent times was in 2000 when there was a projected finish time of around 15 hours 15 minutes before organisers pulled the lead crews off the river.

### The course

The overall race distance is 125 miles or around about 202km, so think of it as completing the Hawkesbury Classic at Brooklyn and turning around to paddle back to Windsor. If that isn't enough, there are the 77 portages, which range from small locks along the canal section to some very complicated and large lock/weir/island configurations along the Thames.

To make it a bit harder, the complicated portages commonly happen at night. To give you an idea of the intensity of the portaging, the first 35 miles from Devizes to Newbury has 34 portages, that's a portage every 1.7km.

Portaging is a real factor in this race. None of them is on a beach, so involve climbing up out of the boat on to banks of all varieties and heights. Having quite a few portages under our belt now has highlighted just how easy it is to strain a shoulder muscle, twist a knee or ankle or step on/break a paddle. That's before having to run down slippery/rocky tow-paths in the dark.

Another complicating factor is the diverse range of river conditions. The K & A near Devizes is narrow and shallow, in some areas only waist deep. Bottom drag can be a real factor and so can weed, which is one of the reasons

the Easter weekend was chosen. One section near Pewsey involves a long tunnel which by all reports is pitch black mid-way through.

Once competitors reach Reading (54 miles from the start) and the non-tidal Thames, the river widens significantly and (if fortunate) some flow towards the finish line begins. At this stage conditions are similar to those found in the HCC (relatively wide, meandering river).

Finally, at Teddington Lock (108 miles from the start), the Thames becomes tidal, and river conditions change significantly. Tide levels can vary by 4 to 5m and the resulting flow and river conditions can be quite impressive to say the least, featuring large eddies, standing waves and boat traffic.

### The weather

Weather at Easter in the UK can be highly variable. Early Easters have often been very cold, in some years snow and ice have been known to be a significant factor. In fact one of the fellows we have spoken to in our preparation commented on having the water in his camel back freeze!

Later dates fortunately are a lot more accommodating, how-







ever still cold by our standards overnight. While river flow is key to a good time, too much can make progress on the canal and river section challenging. Fortunately length of day is increasing fairly rapidly through April.

### Start time

One of the unique features about this race is that competitors nominate their own start time based on their predicted time to reach the “tideway”, that is, where the Thames becomes tidal. There is a fixed window of opportunity based on the time of high tide (30 mins before the high tide to 3 hours 30 mins after) and officials do not allow competitors to proceed outside that window. Arrive too early and you have to wait for the tide to start its run out, too late and you have missed the best of the tide and risk missing the lower cut-off, which means you have to wait for the next tide.

Timing on this section is all important. The quality of the run out tide was the deciding factor in the race win a few years back, with one crew having just that little bit better tidal flow on the tideway and taking the win.

### Boat selection

Given the vast difference in water conditions between the quiet narrow canals at Devezes and the very wide, fast flowing and rough Thames, picking the right boat can be quite tricky. In fact this is the one part of the race Tony and I have agonised over. It's very tempting to get the fastest, narrowest boat you can manage to minimise your time along the canal/non-tidal section, however arriving at Teddington and facing a screaming tide in the same boat could make for a sudden and ugly end to the race. Opportunities for re-entering the boat below the tideway are limited, and moored boats can make drifting downstream treacherous.

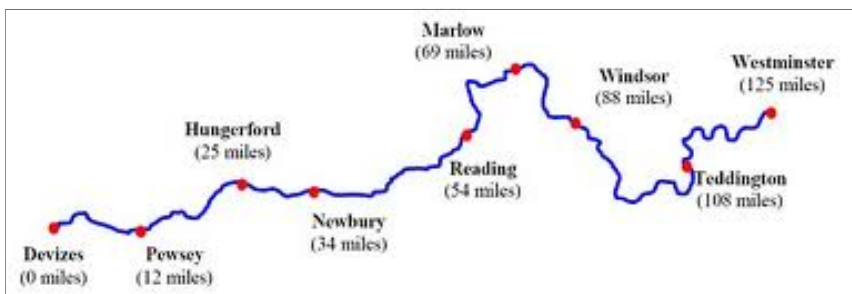
In the end we have taken the conservative option, and gone for a slightly wider boat than we have been using locally in the hope this will provide us that little margin of stability in the last 17 miles.

Fairly early in the piece we purchased a Zedtech AA K2 from a tremendous fellow by the name of John Mellelieu, who is the Bosun of the Longridge Canoe Club at Marlow. He has entered the race twice, and has been a gold mine of information and assistance, from portage diagrams and landcrew notes all the way to offering us the opportunity to try a few faster boats if we are not happy with the “Zed’s” speed. He has been an absolutely fantastic help and it's been a big confidence booster to have someone to bounce our concerns off.

### Our preparation

I'd like to say our preparation has been flawless but life has a way of intervening in that department. While I had a good level of fitness five or six weeks ago, intensive work commitments have meant I haven't been near the boat nearly as often as I had hoped, in fact not really at all over 3 weeks up to the end of February. Fortunately now things seem to be turning around and I should be in reasonable shape by Easter, although not the form I would have hoped when planning for this last year.

The most significant thing we have done to prepare was entering the Canberra 24hr. I hadn't paddled for around 3 weeks before that race and Tony was much the same. Our aim was to get in the boat and grind away (at a reasonable race pace) for somewhere over 16 hours and see how we felt, trial



nutrition and see if it threw up any issues.

In the end, given the complete lack of preparation, we coped pretty well. It showed us a few weak areas (Tony's back rubbing on the coaming, my leg going painfully to sleep after about 20km) but in the end we were pretty happy. We managed 164km in still water and while it wasn't easy, we still felt reasonable at the end, giving us the confidence we will be able to sustain a reasonable pace over the 18-20 hour time frame we are hoping to achieve.

Other preparation was cold-weather gear testing last winter on the Parramatta River in the late hours of the evening/early morning (once the River Cats stopped operating) and as much portage practice as we can stomach (that gets really tedious, let me tell you). Cold weather remains a big concern for me as we really don't get the opportunity to simulate that much here in Australia.

Our final opportunity to gauge our progress is to compete in the final race of the “Waterside Series”, a four-race competition, generally regarded as the preparation event for the DW, which takes place over various distances and locations along the Kennet & Avon Canal.

“Waterside D” as it is known, runs the 34 miles from Devezes to Newbury on April 6. Timing will be tight for that one. Tony and Alanna arrive in London on April 1 and Joy, Guy and I arrive on the 4<sup>th</sup>. Hopefully we'll be able to put in a decent time given the time changes/jet lag, and it's going to be really interesting to size up the competition and get a feel for how slow the canals are and how we will handle the portages.

We'll be entering the event with a few lingering problems. My leg is still not 100% from Canberra, and Tony has a niggling lower back issue, but I think we will be able to manage those problems on the night (a bit of adrenalin goes along way).

### Landcrew

We've been really fortunate in this regard. Alanna, Joy and Guy will form the core of our “support unit”, doing the necessary running around with food, drink, clothes etc at all hours of the night. We're hoping to have two vehicles running shift along the non-tidal Thames section, the first car driven by Tony and Alanna's friend Wiggy (a local) and a second possibly shared between a mate of Matt Blundell (Geoff Dixon) or even John, our “go to” kayak guy. It's going to be a long (and complicated) night for all concerned.

What is our prediction?

While it's hard to know an exact time just yet, we hope to start some time on Saturday afternoon and finish early Sunday morning. We would be happy with around 20 hours, given the amount of “unknowns” but if things go well on the night, we may be able to take an hour or so off that.

# Phil's DIY guide to making a rudder

by Phil Geddes

My article in the February issue of *Kayak Kapers* looked at rudder characteristics and how to use them. In this article I will look at how to select a rudder design and then how to make one to suit the purpose and conditions under which it will be used.



The first step in selecting a rudder design is to decide what it is to be used for. In the example here the intended use is for a flat-water, weedless underslung rudder. The rudder is intended to be used on an ocean racing ski.

## Sizing the Rudder

**Depth** The depth of the rudder was chosen based on experience with the use of a commercial weedless rudder 4 inches or 100mm deep and about 85mm wide, which was ok in flat water but lacked responsiveness and was limited to small chop and found wanting in massed starts where reasonably sized wash waves would be experienced. It was therefore decided to go for a 125mm-deep rudder with width of 75mm to give a higher aspect ratio to offset any drag increase of the deeper rudder.

**Side profile** Similarly it was decided to use an elliptical side profile for the rudder to further reduce drag in the straight-ahead position and particularly at higher angles of attack as this profile reduces tip vortices that induce drag. This should

result in a more sensitive rudder of reduced drag and better turning characteristics through reduced cavitation on the turn.

As the rudder is intended as a weedless rudder, a sweepback was required. On examining a number of studies on the effect of sweepback on drag and efficacy in shedding weed, it was concluded that sweep angles over 15° increased drag noticeably. To shed weed, sweep angles between 35° and 45° were found to be the most effective. A sweep angle of 38° was selected to ensure a combination of minimised drag and good weed-shedding characteristics.

**Section** On looking at a number of suitable hydrofoil sections a NACA 0012 was selected. This type has a maximum thickness of 12% of the cord which at 75mm gave a thickness of 9mm. The selection was made on a balance of drag in the straight ahead position and small angle of attack, together with the tendency of this profile to resist separation and cavitation at higher angles of attack experienced during tighter marker turns.

## Programs

To determine what these properties were and to evaluate various options, a number of programs and reference websites were used. Here is a selection of the most useful.

<http://vacantisw.com/loftdownload-1.aspx> LOFT 2011 - From Vacanti Yacht Design

<http://vacantisw.com/foil40.aspx> Foil 40 - From Vacanti Yacht Design

## Reference websites

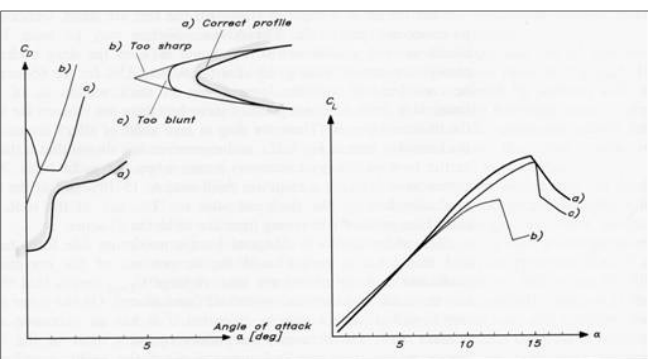
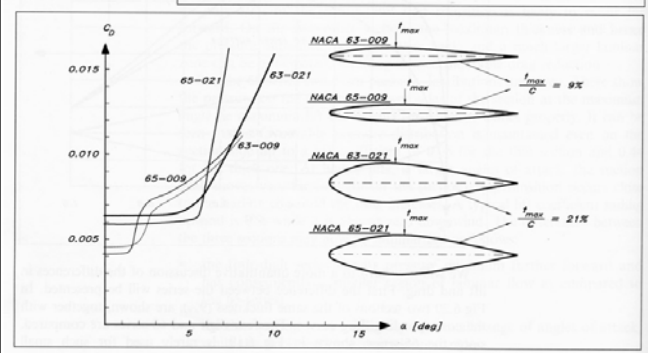
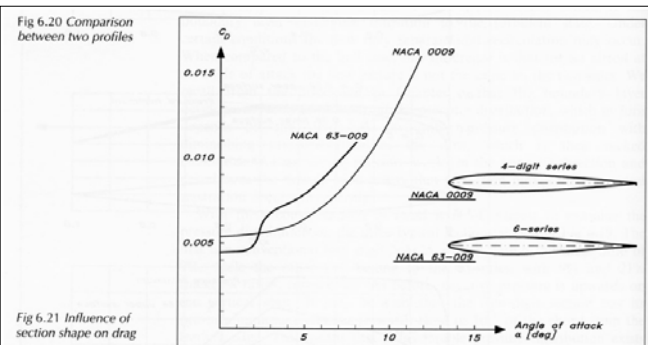
<http://www.airfoildb.com/foils/382> NACA 00 Series - - Foil dimensions and performance figures

<http://www.airfoildb.com/foils/410> NACA 64 Series - Foil dimensions and performance figures

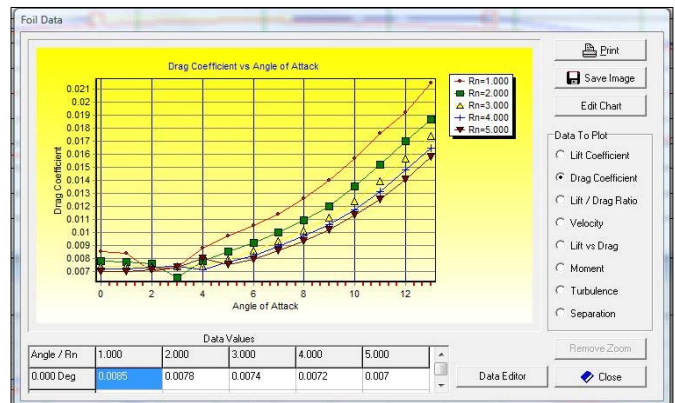
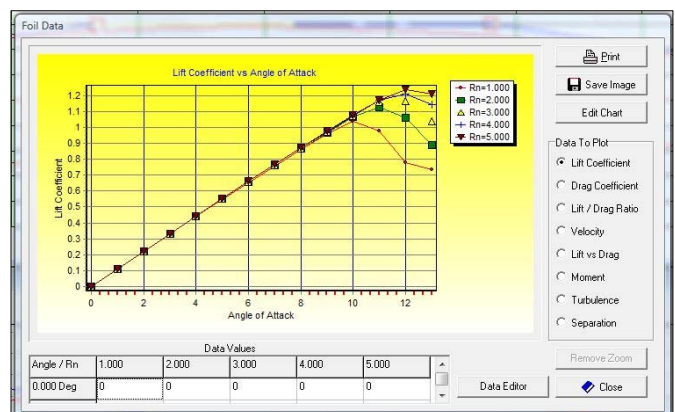
<http://www.sedation4.com/rudder.html> Article on Rudder Design and selection

Examples of some of the information obtained and used from these sites are shown in the diagrams and tables below.

## Profile Performance Evaluation



## Performance Figures obtained from the FOIL program





## Making a rudder

Having selected the rudder characteristics, they now need to be translated on to a rudder. In this case it was decided to make the rudder out of a piece of western red cedar which was well seasoned and had been selected for its fine grain. Previous experience has shown that for a 125mm-long rudder this material would be more than strong enough without the need for fibreglass or carbon fibre sheathing, though for larger rudders this would be an option, or if the rudder was to be used where it might experience impacts from rocks or heavy floating objects. If sheathing were to be used, the following shaping techniques would still apply but allowance would need to be made for the thickness of the sheathing.

The following steps were taken in the production of the rudder:

**1** To achieve the profile required and to ensure symmetry of the section, a roughing out technique was employed. As can be seen in this image, a straight-line profile was first marked out



and the rudder shaped to that. After this initial roughing out, final profiling was done with a file and glass paper. Each step was carefully measured and checked with a profile gauge for profile accuracy and symmetry of the section.

**2** Mark out timber and cut to outline Mark profile. Leading edge and trailing edge thicknesses, Mark the contour lines joining the intersection points of the straight line section profiles, as seen in step 1. This is the "U" shaped mark on the top surface.



**3** Use a fine saw, (a hacksaw is suitable) to make cuts 3-5 mm apart and to within 1mm of the straight profile line to allow for final fairing.



**4** Break out the waste between saw cuts.



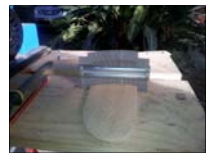
**5** Cuts broken out to produce initial rough profile on one side. Repeat on other side before proceeding.



**6** Rudder after cuts broken out, and smoothed with chisel showing rough profile. Redo marking out as necessary before refining profile.



**7** After initial smoothing with a file, check profile with profile gauge. Use the gauge to check both sides match and are symmetrical. Finish fairing with successive grades of glass paper, continuously checking the profile.



**8** To insert post, drill out a slot in the rudder in the area required. In this case a point near maximum thickness was chosen and this gave a small amount of balance to the rudder. The post was bent at the bottom at an angle matching the sweep and flattened to provide a good key for turning the rudder and to minimise the amount of material removed, maximising width of material available either side of the slot. The post was fixed into place with epoxy resin, completely filling the slot.



**9** Finished rudder after painting and finishing of rudder post.



## Evaluation – How did it work

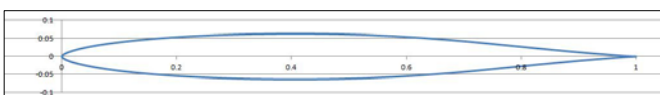
In operation the rudder has performed as designed. In particular the response and manoeuvrability of the ski has been enhanced, showing a more immediate reaction to rudder pedal input. This has led to an improvement in the ski's ability to keep on a washride and to make better marker turns.

Very little cavitation has been experienced in tight turns. Though the turn radius is limited by the hull characteristics of the ski (a Stella SEL), the rudder allows fast carving turns, allowing speed to be maintained throughout the turn, hence offsetting the larger turn radius imposed by the hull.

Performance in the straight ahead direction is very good with no noticeable loss of performance over the commercial weedless rudder. Reduction in drag over the larger general purpose rudder is quite noticeable both in feel and as measured in max speed by GPS.

Weed performance has proven to be effective showing no tendency to pick up weed even when paddled in weed-strewn locations like Narrabeen Lake.

## NACA 0012 Profile and Characteristics



## Example of Section data available

x	y 0010	y 63-010	y 65-010
0	0	0	0
0.5		0.829	0.772
0.75		1.004	0.932
1.25	1.578	1.275	1.169
2.5	2.178	1.756	1.574
5.0	2.962	2.440	2.177
7.5	3.500	2.950	2.647
10	3.902	3.362	3.040
15	4.455	3.994	3.666
20	4.782	4.445	4.143
25	4.952	4.753	4.503
30	5.002	4.938	4.760
35		5.000	4.924
40	4.837	4.938	4.996
45		4.766	4.963
50	4.412	4.496	4.812
55		4.140	4.530
60	3.803	3.715	4.146
65		3.234	3.682
70	3.053	2.712	3.156
75		2.166	2.584
80	2.187	1.618	1.987
85		1.088	1.385
90	1.207	0.604	0.810
95	0.672	0.214	0.306
100	0.105	0	0

## NACA 0012

Thickness:	12.60%
Camber:	0.00%
Trailing edge angle:	13.4°
Lower flatness:	23.90%
Leading edge radius:	1.80%
Max C <sub>L</sub> :	0.712
Max C <sub>L</sub> angle:	12
Max L/D:	34.142
Max L/D angle:	5.5
Max L/D C <sub>L</sub> :	0.626
Stall angle:	5.5
Zero-lift angle:	0
Cd - 0	0.012 - 0.025
High lift with small changes of Cd	
Cl	0 - 0.6



Justin Paine caught up with former member Marg McDonald while on holiday at South West Rocks recently. Marg came down from Coffs Harbour, where she now lives, for a paddle. Later this year, to celebrate her 65th birthday, she is going to walk the Way of St James pilgrimage from St Jean Pied de Port in France past the lower Pyrenees to Santiago de Compostela in Spain – 800km in 40 days, an average of 20km a day.

# Wednesday nights at the pontoon with Wade Rowston



The New Year has got off to an excellent start with a good number of paddlers coming along for the Wednesday time trial and enjoying some excellent conditions. It's always great to see paddlers improving, whether they are new or established paddlers. PBs have been recorded by Anjie Lees, Ruby Gamble, John Duffy, Rob Manning, David, Young, Michael Day, Matt Swann, Peter Millard, Ella Beere, and Dru Spork. Apologies to anyone I may have missed.

Lots of paddlers have been benefitting from the pre-time trial coaching sessions and advice, on and off water, provided Tony Hystek and Don Andrews. It's great for the standard of paddling in the club that Tony and Don happily pass on their paddling knowledge to fellow club members free of charge.

Also Don Andrews recently held a TK1-K1 transition coaching course on Narrabeen Lake over 5 consecutive Saturdays (2 sessions a day) for members of his bush walking club. As a club we provided 5 TK1s for which the trainees paid a fee. This raised a fantastic \$900 for the club. Many thanks Don! The 5 TK1s included

the two club boats, plus 3 lent by Janet Oldham (1) and myself (2).

There have now been 3 rounds of the Crudslime and Coffee Cups. The Crudslime Cup is currently led by Tony

place is John Duffy, followed by Tim Hookins in third. Heading up the Coffee Cup is Oscar Cahill, followed by John Greathead and Justin Paine.

There has been a steady build-up to the first Paddle NSW marathon Series race which was held in Canberra on March 15. Committee member Derek Simmonds has been whipping up enthusiasm and encouraging everyone in the club to have a go at the series this year to try and help the club win the Club points trophy for the first time.

Lights are now compulsory for all boats. Note they need to be one or two LED-light- strength only and they must shine a static white light. Please, no flashing or coloured lights. PFDs will be compulsory once daylight savings ends.

We extend a warm welcome to the following new members who have joined this year: Peter Millard, Phil Helmore, Helen Wortham, Sally Ellis (rejoining), Karen Darby, Ella Beere, Grahame Young, Jeff Collins, Colin Cook and Bert Lloyd (rejoining).

Happy Paddling!

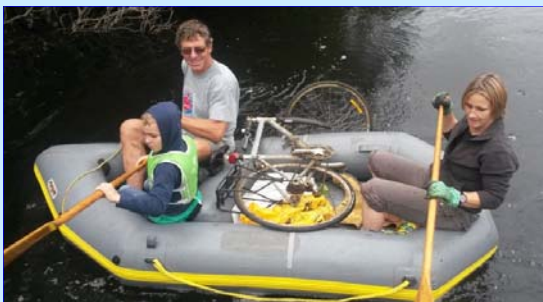


**Tony Hystek (black shirt) and Don Andrews (yellow) conduct an off-the-water coaching session**

(Keg) D'Andreti who has been showing good speed in a single while his usual doubles partner, Dave Hammond, is currently involved in dragon boat training on Wednesday nights. In second

## It's our river, let's keep it clean

We had another very productive Clean Up Australia Day (morning) on the Lane Cove River on Sunday, March 2. Some showers and a mega high tide added to the challenge of sloshing around in the mangroves retrieving rubbish. The area 500m-1000m each way from the pontoon on either side of the river was scoured and about 12 big bags of rubbish retrieved.



An almost pristine shopping trolley was found dumped near the mangroves next to Epping Rd bridge and the trolley collectors were called. The biggest find was a very good, undamaged bicycle which was fully submerged by the high tide. It was almost in working order and Joy Robinson's son Guy has been trying it out at home. Not sure what the outlook is for rust on that bike.

Other unusual items included a traffic bollard, a medium-sized styrofoam box of old bait and lots of fishing line and tackle. It's amazing the amount of rubbish that can be retrieved from the high water mark.

Many thanks to organiser Jon Harris and the following LCRK club members who participated: John Duffy, Paul Gibson, Joy Robinson and son Guy, Oscar Cahill and daughter Emer, Kenji Ogawa, Tony Hystek and Wade Rowston.



## Nature Notes

by Jon Harris

**Azure Kingfisher**

Family - Alcedinidae, Alcedo Azurea

This family of birds has 25 species worldwide, of which about 11 are found in Australia, and the best known of those is the Laughing Kookaburra which will be the subject of a future Nature Notes.

I have mostly seen azure kingfishers active throughout the day on our early morning training sessions in the area of Wirong ramp. It is a fairly small bird that flies rapid and short passages just above the water between overhanging mangroves, emitting a high-pitched whistle as it goes. The book says they grow to 18cm but I have never seen one larger than about 12cm.

They have a long black powerful bill, very short tail, rusty-red undercarriage and beautiful iridescent violet-blue back and

wings. They inhabit river banks, swamps, creeks and mangrove areas, plunging from shady overhanging branches to catch their prey which includes small fish, crustaceans, aquatic insects,



lizards, etc. They will often kill the prey by bashing it against a branch before eating it, just like the kookaburra.

Distribution is across the whole north-eastern seaboard, from the Kimberlys to Adelaide and inland to the Murray-Darling Basin, and occasionally seen in urban parks with creeks or ponds.

They form monogamous pairs and defend their breeding territory. Usually the nest is a burrow in a mud bank which can be up to a metre long and sloping upward for drainage. They lay 5-7 tiny white eggs but unfortunately the nests are sometimes inundated by higher than normal water levels.