

The Journal of the Electric Boat Association  
Volume 25 Number 2 Summer 2012

[www.electric-boats.org.uk](http://www.electric-boats.org.uk)

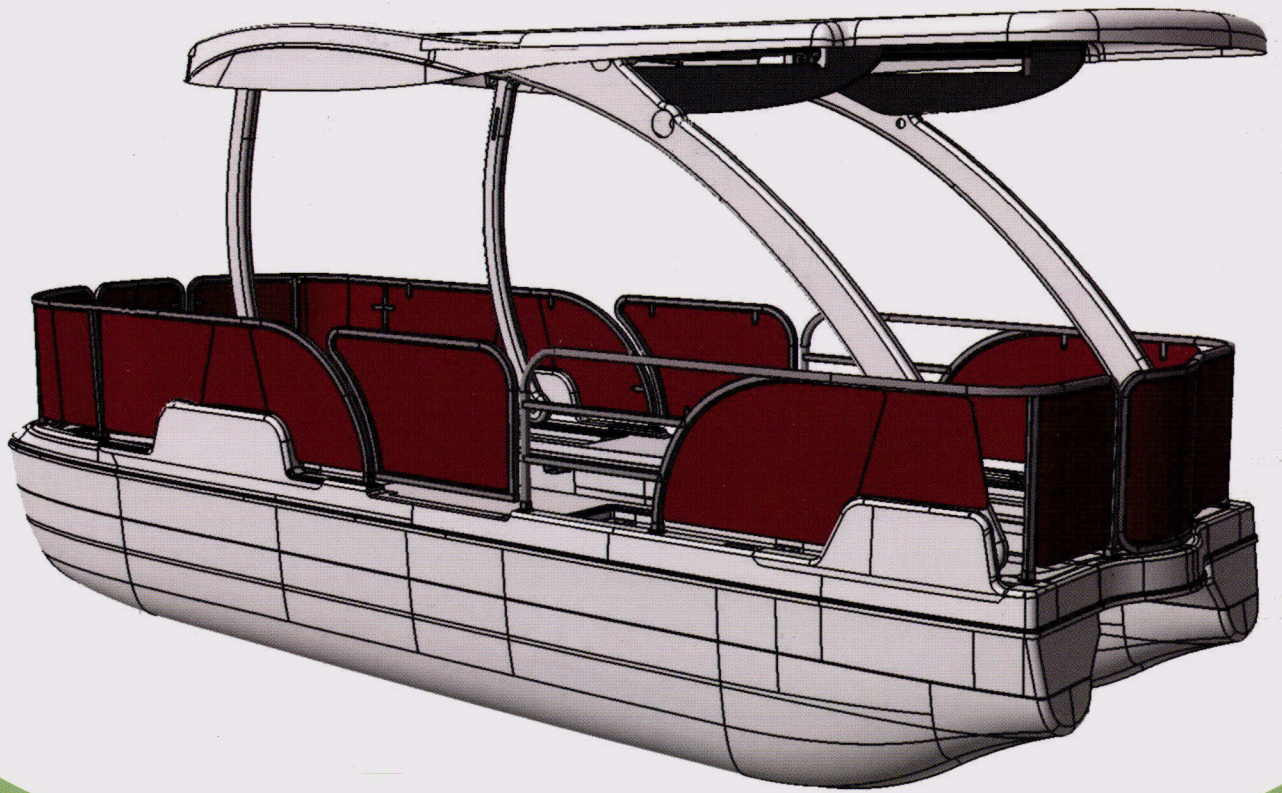
# Electric Boat **NEWS**



***Round the World by Solar Power • Boat Shows in Sun and Rain  
Jubilation on the Thames • A Born Again Steamboat***



# *Ride a Solar Wave!*



This is the much-anticipated, solar-powered, 8-passenger Loon, the new-millennium boat which says good-bye to petrol and extension leads. We are very proud of it and believe that it speaks to the times. We look forward to introducing you to its many benefits. Product launch spring 2012, dealership, purchase and investor enquiries welcome.



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# EBA Calendar 2012

## July

14th – 15th	EBA represented	Thames Traditional Boat Rally Henley-on-Thames
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*Boat shows at Salhouse Broad ...*

*Page 2*

## August

25th – 26th	EBA interest	IWA Campaign Festival Preston, Lancashire
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## September

14th – 23rd	EBA interest	Southampton Boat Show Mayflower Park, Southampton
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*... Beale Park ...*

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## November

12th	EBA interest	ICOMIA International Hybrid Marine Propulsion Conference, Amsterdam
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**Please note that events and dates may change, while some are still being planned. For more details, or notice of other events, check the websites or contact the EBA Secretary.**

**Cover Picture:** TURANOR PlanetSolar  
arriving in Monaco  
see report on page 5



*... and Hartford Marina*

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## Copy Deadlines

Material to be considered for inclusion in Electric Boat News should be sent to the Editor (preferably by email) by the following dates:

Spring 31st January  
Summer 31st May  
Autumn 30th September

For more information about the EBA contact

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150 Wayside Green, Woodcote, Reading, Berks. RG8 0QJ  
Tel: 01491 681449 email: [secretary@eboat.org.uk](mailto:secretary@eboat.org.uk)

Details of the other EBA Committee Members are on page 24

## From the Editor



The pictures of the drenched participants in the Queen's Diamond Jubilee Pageant (I was one of them) rather sum up our 2012 boating season so far. The Welsh Waterways Festival in April was abandoned because the site was under water, floods on the River Nene put paid to our EBA cruising weekend in May and the organisers had to cancel the first day of the Beale Park Boat Show in early

June when the ground turned into a quagmire. So far, only the Open Weekend at Hartford Marina has taken place in warmth and sunshine, but we are hoping for better weather for the remainder of our events this year.

EBA members who came to the Annual General Meeting at Wansford will already know that I've decided to leave the post of Editor, Electric Boat News at the end of this year. I took over at the start of 2003, so by then I'll have been doing the job for ten years, much longer than any other Editor in the EBA's history. I've enjoyed it very much but I now feel it's time to hand over to someone else with new ideas (so see the advertisement on page 19). As my first issue looked forward to the EBA's 21st Anniversary it will be appropriate to finish with the magazine featuring the celebrations for our 30th Anniversary and, I hope, end on a high note!

I'm looking forward to seeing lots of EBA members and boats at our forthcoming birthday weekend at Abingdon. We are all keeping our fingers crossed for fine weather at last for a memorable couple of days to celebrate our anniversary.

Sylvia Rutter,

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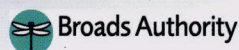
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Electric Boat News welcomes contributions from members and readers, although we cannot be held responsible for any damage or loss which may occur to this material. Items of interest include letters, reports of rallies, events, trips and cruises, articles and advice on building and running electric boats and on items of equipment. We also welcome manufacturers' reports on new equipment and boats.

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Electric Boat News is printed on well-managed FSC paper using vegetable-based inks. Printing plates are aluminium and are recycled, as are any surplus/old inks while printing blankets are shredded and used for rubberised play areas and footpaths. The wrapping it comes in is degradable and will break down in the soil.



We are grateful to the Broads Authority for their support for the Electric Boat Association

# Green Boats on the Broads



Green boats assembled on Salhouse Broad

## A report from Tobi Baker, Salhouse Broad Countryside Ranger and Co-organiser of this year's Green Boat Show..

The show has now reached its seventh year and for this one we made a few changes. It took place in May as part of the Broads Outdoors Festival and in order to expand we included 'Green Tourism', changing the show title to 'The Broads Green Boat and Tourism Show'. Although it was a cold and overcast Sunday, it could have been a lot worse if forecasts from earlier in the week had stayed true. Despite the cold and unseasonal weather the show had a pleasant and happy atmosphere with a much wider range of exhibitors than in previous years.

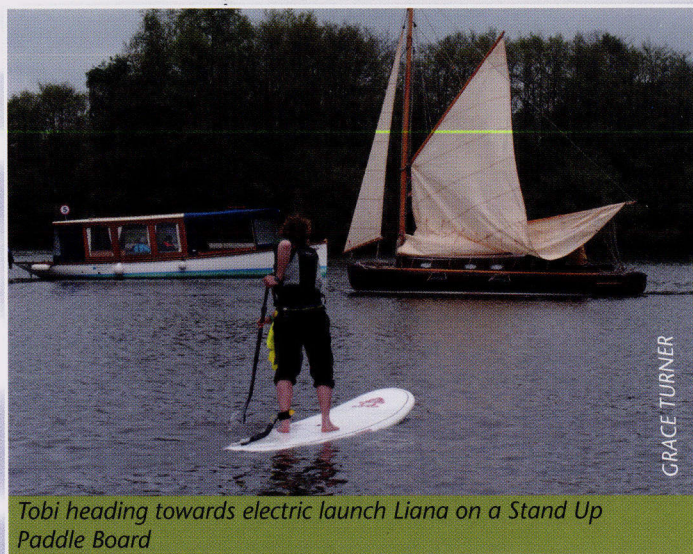
The majority of the 400 visitors arrived by car, but some took advantage of our 50% reduction in entrance fee for walking or using public transport. Only nine people arrived by Electric Water Taxi this year. Twelve boats moored up at Salhouse Broad, accounting for an eighth of the attendees.

We may not have had the perfect weather, but we had more exhibiting boats and more stands. Not long after the gates opened at 10 am, Becky Betts from Radio Norfolk's Treasure Quest arrived at the show searching for a clue. It finally came to light that she had to make a smoothie using the Vendablenda bicycle-powered smoothie maker in order to obtain the next clue.

Throughout the day Marion Leeper was telling stories around the Broad in various locations including, for one session, on the Norfolk Wildlife Trust's electric launch *Damselfly*. Susie Fowler-Watt and Alex Dunlop from BBC Look East arrived at 11.30 am, and Susie officially opened the show at 12 pm with a few words in the marquee. Following this, she and her daughter, along with the landowner Henry Cator and his family, took to the water to

join the 'Green Boat Procession' with other members of the public and the exhibiting boats. Once again the Norfolk Broads Concert Band provided us with some wonderful background music in the three sessions they played throughout the day.

There were plenty of opportunities for visitors to take free trips on the water. The Broads Canoe Hire Association were offering thirty minute canoeing sessions, Martham Boats were demonstrating their Stand Up Paddle Boards while Hunter's Yard



Tobi heading towards electric launch Liana on a Stand Up Paddle Board

were taking people out in *Rebel Reveller*. 24 canoes went out, and Hunter's took 79 adults and 15 children on their sailing excursions. Also running trips were *Damselfly* and the Broads Authority's Edwardian style electric launch *Liana* which operates from Hoveton Tourist Information Centre. Visitors were also given the chance to pedal power their way around the Broad aboard a luxurious pedal boat, now available for hire from Freedom Day Boats in Horning. The exhibiting boats also included the Nancy Oldfield Trust's electric cruiser *White Admiral*, Sailnorfolk's *Iara*, David Williams' *Mock Turtle* and *Terrapin*, the Broads Authority's diesel-electric Ranger's launch *Charles Collier*, Chris Crowther signing copies of his Broads based 'who-dunnits' aboard *Carte Blanche*, *Houseboat Heather*, a sustainably and environmentally friendly restored houseboat also selling nautical bits 'n' bobs and homemade preserves, *Scamp* an electric slipper launch and *Blue Marlin*, Peter Howe's sailing boat with outboard electric engine.

The exhibitors were spread out across the site, with stands located next to the beach and on the hill, as well as in the marquee. On the beach we had Bank Boats Canoe and Day Boat Hire, and canoe sales with Martham Boats and the Broads Canoe Hire Association. Norfolk Wildlife Trust and Hunter's Fleet set themselves up next to their respective boats to provide more information about their organisations. On the hill we had stands displaying solar panels from Starfish Installations and Norfolk Solar, The Canal Shop's composting toilets for boats, Boathouse fulfilling your green boating needs, the RNLI, Broads Society and the Canoe Man. The Broads Authority's stand was raising awareness of the 'killer shrimp' and 'check-clean-dry' initiative through a shrimp search on a canoe and trail around the Broad whilst entertaining children with their drawing competition. Treasure Trails Norfolk wrote a special trail for the day encouraging families to explore each and every stand, stamping their route map as they went.

In the field adjacent to the hill, Broadland District Council's Energy Bus was providing more information

on saving energy in the home whilst giving out freebies and Woodfarm Alpacas brought along their adorable (newly shaved) alpacas.

Also located on the hill were our food and drink stands. Scottydogs provided us with a variety of edibles, including a vegetarian five bean chilli option to go with jacket potato or burger (veggie or meat); Express Coffee Cars were once again supplying us with fresh coffee and teas from the back of their Smart car and Ole Slewfoot kept us lubricated with his fine ales (I particularly recommend his January 8th, available all year round).

In the marquee we found some new exhibitors: Jeckells the Sailmakers (based in Wroxham), Pocket Places – who provided the QR code and mobile website for the show, Silver Nature with beautiful handcrafted jewellery and Patrick Boswell signing copies of his new book 'Boswell's Broadland'. Fairhaven Gardens brightened up the place with their selection of plants for sale. In addition to these WiSpire arranged, for one day only, free wifi for those in and around the marquee area. The Wifi was received from Salhouse Church's mast and bounced around the area using a portable mast and car batteries. Having proved this could be done, we are now looking at the potential for receiving Wifi at Salhouse Broad on a permanent basis. Once again our Green Tourism Information stand provided information about the local area and the 'green' tourism available as well as offering freebies from Ecover and running the Smoothie Bike. Regular exhibitors came for the day: the North Walsham and Dilham Canal Trust, Pb Batteries, RSPB, Broadland Cycle Hire, Broads Spirituality and



A trip on Charles Collier

Hunter's Yard.

The Broads Green Boat and Tourism Show 2012 was a buzzing and enjoyable day out for all those involved. We will endeavour to continue our hard work promoting greener boating, tourism and thinking in our beautiful, magical Broadland. It is a wonderful area to live 'in', and to work here too. We need however, to respect it and protect it for future generations so they can also live, work and make the most of the area.

My thanks go to Peter Howe for his co-organisation, Russell Wilson on behalf of the Broads Authority for his support, to our volunteers for their hard work on the day and leading up to the Show, to Mr Henry Cator for providing us with the venue, to the exhibitors for providing the body and content of the show and to all the lovely visitors who made it a public event.



Electric slipper launch Scamp



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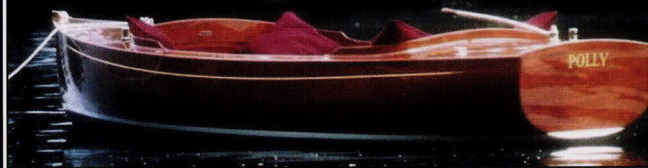
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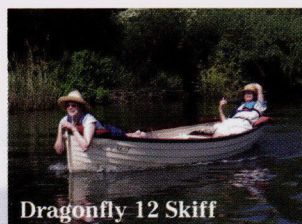


## The Thames Electric Launch Company

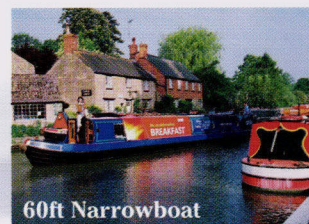
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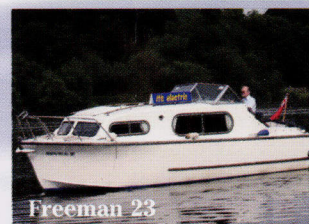
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# Round the World by Solar Power

**On 4th May MS TURANOR PlanetSolar became the first vessel to travel round the world using only the power of the sun. The largest solar boat ever built crossed the finishing line in Monaco after over 19 months and a journey of 58,308 kilometres (36,231 miles).**

Leaving Monaco on 27th September 2010, the boat followed a course close to the equator, with stopovers including Miami, Cancun, the Galapagos, Brisbane, Hong Kong, Bombay and Abu Dhabi – 28 countries in total. It now holds five current Guinness World Records: for the longest journey by a boat using solar power only, the first world

circumnavigation by solar powered boat, the fastest crossing of the South China Sea by solar power, the fastest crossing of the Atlantic by solar power and for being the largest solar powered boat in the world.

PlanetSolar has its headquarters in Yverdon-les-Bains in Switzerland. The catamaran, built in Kiel in Germany, is 35 metres long with a beam of 15 metres and a displacement of 85 tonnes; its upper surface is covered in 537 square metres of photovoltaic panels. Maximum engine power is 120 kW and average engine consumption is 20 kW (26.8 horsepower). After two years of design and construction it underpins many technological advances, especially in the field of composite manufacturing and storage of solar energy.

The expedition was supported by PlanetSolar SA and private partners including the Swiss watchmaker Candino and the German specialist in energy management Immosolar, as well as public institutions, including the

Swiss Confederation with 'Presence Suisse'. PlanetSolar used weather forecasts offered by MeteoFrance and an innovative routing software developed specifically for this expedition by HEIG-VD in Yverdon-les-Bains and the French firm ADRENA.

After its 19-month solar voyage and some maintenance work in the French shipyard La Ciotat, TURANOR PlanetSolar will now be spending the summer in the Mediterranean, starting in Barcelona and travelling on to Mallorca. To demonstrate what can be done with its batteries when they are fully charged it will power a variety of events such as concerts, light shows and exhibitions. The ship has shown that it is possible to sail around the world without using a single drop of fossil fuel. Now it wants to convince people of the commercial viability of solar technology.



## A Change of Scene for Ra

In April the Broads Authority's solar boat *Ra* moved to a new base at Whitlingham Country Park, where it will be running four trips a day around the Great Broad from now until the end of October. Expert guides will be on board to give information on the Broads and the wildlife that can be seen there.

*Ra* was the first solar powered passenger boat in the UK when it was brought to Norfolk in 2000. Specially commissioned by the Authority, the 30 ft 12 seater boat has been taking visitors on wildlife trips around Barton Broad. The move to Whitlingham, within reach of the city of Norwich, will allow more people, including wheelchair users, to take a Broads boat trip and learn more about the area.

## Investment for Torqeedo

The venture arm of the Bosch Group has acquired a minority share in EBA business member Torqeedo. The finance from Robert Bosch Venture Capital will help the company to expand and continue with the development of its range of electric outboard motors. Torqeedo's co-founder Christoph Ballin said that having Bosch's expertise in electric-mobility in its shareholder base couldn't be valued highly enough and it was something from which all their customers would benefit.

Two years ago, another part of the Bosch Group, Bosch Engineering, became a sponsor of the Mansura Trophy, organised by the Royal Thames Yacht Club and the Green Blue. The trophy is awarded every two years to encourage new developments in boats with hybrid electric propulsion.



## Clean Cleaner Cleans Up

EBA business members Grove Boats have launched the first zero emission cleaning boat, running on energy from the sun. The Solar SeaCleaner 400 is a catamaran four metres long by two metres wide which collects floating waste in harbours and swimming areas using a basket between its two hulls.

Two 1.8kW electric motors, one under each hull, make the boat very manoeuvrable, which is essential when working in tight spaces. The boat is made of aluminium for easy maintenance and is silent when moving and operating. The solar panels on the roof provide 600W of power, stored in a battery pack, enough for a full day's operation.

## Forum Members Wanted

The Windermere Lake User Forum is looking for four new members who will represent owners of powered craft, canoeists and rowers, transport providers and general users. The positions are voluntary and offer the chance to influence and shape the future use of England's longest lake.

The Forum, which was established in 2007, works in partnership with other bodies such as the Lake District National Park Authority, South Lakeland District Council and the Environment Agency. It provides specialist knowledge and advice between users and policy makers to make sure that decisions are based on accurate information and reflect the views of a wide range of lake users.

**For more information about joining the Forum contact LDNPA Catchment Project Co-ordinator Suzy Hankin on 01768 871409 or email [suzyhankin@lakedistrict.gov.uk](mailto:suzyhankin@lakedistrict.gov.uk)**



## Billy Bluelight Races *White Moth*

On May 5th a revival of the historic races in the 1920s between Billy Bluelight and the traditional Norfolk wherries was staged on the outskirts of Norwich. Billy Bluelight's great-great nephew, Andy Cullum, now a Broads Authority Ranger, watched the race which marked the beginning of two weeks of outdoor events, culminating in the Broads Green Boat and Tourism Show at Salhouse Broad on May 20th (reported on page 2).

The naturalist and author Richard Mabey fired the opening shots for 'Billy' and the Tri-Anglia Triathlon runners to set off against the wherry *White Moth* on a run to Bramerton and back. *White Moth* was built in 1915, later fitted with a petrol and then a diesel engine, and in 2005 had an electric propulsion system installed by EBA business member Rupert Latham. *White Moth* was welcomed back by an escort of boats and canoes and was on public view for the rest of the day.

## Lake Fee Reduction for 'Special' Users

Boaters who take their powered craft on to Lake Windermere just for special events or an occasional weekend rally will benefit from a new 'short-term' registration fee. All powered vessels on the lake have to pay the fee, which is currently £20 a year for a new registration and £15 for a renewal. This has meant that anyone bringing a boat for a two-day event still had to pay the full annual fee.

The Windermere Lake User Forum asked the Lake District National Park Authority to consider introducing a short-term event registration scheme, and this has now been agreed. There will be a charge of £25 for the event itself, plus an individual charge for each vessel taking part equal to 10% of an individual annual registration fee. Around ten special events take place on the lake each year, attracting up to 150 boats.



## Electric Boats in Venice

ExpoVenice, which has organised national and international events, is making plans to establish a permanent exhibition centre for electric boats. The location is the San Giuliano Park, the site of the 11th International Nautic Show in Venice, which is easy to reach by private and public transport. ExpoVenice will manage the operation, offering sales and marketing expertise and specialised staff to help clients and visitors. Customers will be able to use the boats on display, and arrangements with hotels and restaurants are also being planned.

For more information see the website [www.qdrs.eu](http://www.qdrs.eu) or email Edoardo Querici della Rovere on [edoardoqdr@qdrs.eu](mailto:edoardoqdr@qdrs.eu)

# Born Again – The Story of Emerald

EBA member Mike Early describes how a sad wreck was turned into a much loved steamboat, and now has a yet another lease of life as an electric launch.

We think *Emerald* was built in the late 1890s. I first saw her when my sailing club was given her for a November 5th bonfire party. She had been lying in the mud in Newhaven Harbour for some time and what a sorry sight she was. No transom, no decks, the top two planks missing and two big holes in the bottom where children had thrown some concrete slabs in. It is said that beauty is in the eye of the beholder. I looked and thought 'Mmm nice lines, that would make a nice steamboat' and for me it was love at first sight. So I parted with £25 and a lorry load of firewood and she was ours. Standing in our fireplace was a beautiful 1900s compound steam engine that I had bought some time earlier so my plans to own a steamboat were that bit closer.

The dilapidated hull lay in my front garden for a couple of years before



Wendy, Mike and Brian on launch day for 'Born Again' Emerald at Windsor

I had time to do any work on it. My next door neighbour was a boat builder, currently building Merlin Rockets. He said I must be mad to undertake such a rebuild and that she was beyond it. But while we were talking a client of his, a local school headmaster bringing his Merlin for repairs, spotted us and came over. He took one look at the hull and said:

"That's *Emerald*. I owned her in the early 1950s", so that was how we learned her name.

I moved *Emerald* into my workshop a mile away from where we lived and started work. It took me about sixteen years to finish her because when I had the time I didn't have the money and when I had the money I didn't have the time. When I got to the stage of putting the boiler in I asked John, my boat builder neighbour, to help and he couldn't believe it was the same boat he had seen all those years before. So with the boiler, engine, Windermere kettle etc installed she was finished at last. There followed eighteen really wonderful years steaming, with the whole family including grandchildren. We have very fond memories of picnics with sausages, bacon and jacket potatoes cooked over the glowing coals of the boiler.

However, the aging process was taking its toll, not on *Emerald* but on me. It became much harder after a good day's steaming to stand up



Emerald when Mike first bought her



*Emerald as a steam boat*

straight and I could hardly move, my back and knees were hurting so much. It was while we were at a lunch party of Steam Boat Association members at Selsey in April 2010 that we met up with Bill and Veronica Selby who had converted their steamboat *Serena* to electric power. We talked boats, and in particular electric boats. We were told how easy electric boating was and how nice all the EBA members were!

I had already noticed a few SBA members defecting to electric power. My good friend Peter Brennan had just converted *Haida*, and of course Ian and Sylvia Rutter had combined steam and electric in *Irene*. I was in the process of building a new boat to be called *Ruby* and it was on the drive home that my wife Wendy said "Electric boating sounds O.K. Why don't you make *Ruby* into an electric launch? It sounds as if it would be easier for you". I had just bought a beautiful new single cylinder steam engine for *Ruby*, but thankfully it was still sitting in our lounge fireplace and not in the boat. So it was agreed that *Ruby* would be electric and I contacted the Thames Electric Launch Company to do the work.

While steaming on the Medway in *Emerald* with Peter in *Haida* we were very impressed, because unlike us sitting waiting to get up steam he just arrived, launched, turned the key and was off. We had a great day BUT my son Julian noticed that we were taking on a lot of water. When we pulled

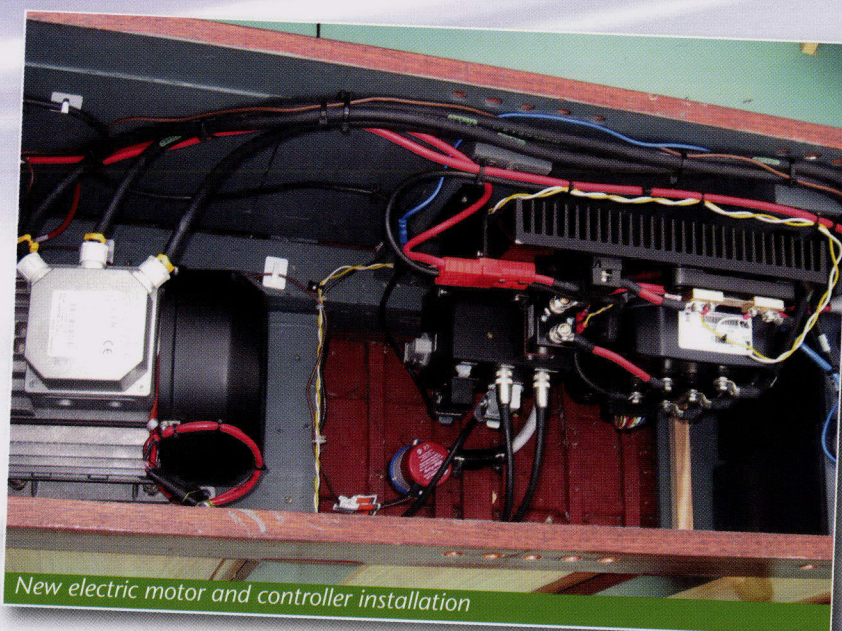
out – with some difficulty because of all the water in the boat – we found it was pouring out around the stern tube. When I investigated at home I found that the whole of the deadwood was rotten and we were lucky that we hadn't caught the prop on something because I think we would have ripped the whole lot off! So a big change of plans, forget about *Ruby* for a while, concentrate on getting *Emerald* back in the water but as an electric boat.

Well, as some of you will know, *Emerald* was Born Again at Windsor on 31st August 2011 where Ian Rutter and Emrhys Barrell put her through her paces. Wendy, my brother Brian and I were pleasantly surprised and had huge smiles on our faces for the rest of the day. In fact they are still there.

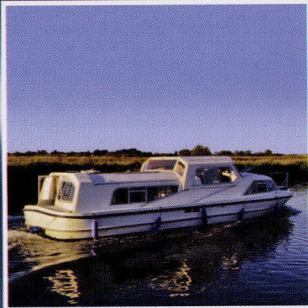
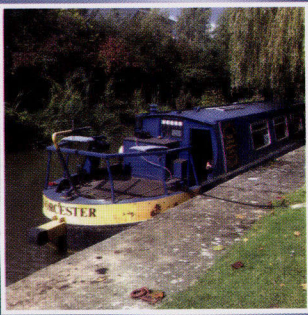
Since that first day we have been on the Wey & Arun for the EBA AGM and on Bewel Water with Peter on *Haida*. We've travelled from Windsor to Bourne End where we met up with Ian and Sylvia in *Eddy Current* for a nice pub lunch. Ian and Sylvia then cruised back with us as far as Boulter's Lock where we parted company and we made our way back to Windsor to pull out.

With Julian at the helm, his first time in an electric boat, we launched at Newhaven Harbour and went up to Lewes on the River Ouse. Unfortunately, not being used to electric boats, I made a mistake with the tide timings so we got to Lewes much too quickly and shot through the town where the river narrows with the tide running at about 6 or 7 knots. We then had to punch our way through the rough fast flowing water to get back to the harbour. I had another good idea and said to Julian "Let's just poke our nose out to sea into Seaford Bay." It was a flat calm day so we did and it was very nice, but as we turned back to enter the harbour – oh dear – the tide had turned and we had to punch the tide again. Never mind, we had a great time.

We are really enjoying our electric boat. *Emerald* can't wait to get her bottom wet again and I can't wait to hitch up the trailer and set off for another exciting day. Watch this space for news of progress on *Ruby*.



*New electric motor and controller installation*



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### Electric drive

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# Electric Boats for the Jubilee



Gloriana

Electric boats joined vessels of all shapes and sizes to celebrate the Queen's Diamond Jubilee on the Thames. At the front of the procession on 3rd June was the magnificent red and gold Royal Rowbarge *Gloriana* with a team of 18 oarsmen, including Olympic gold medallists Sir Steve Redgrave and Sir Matthew Pinsent. But rowing a 12 ton barge on the tidal river among a huge flotilla of other boats could have presented problems even for experienced oarsmen, so the rowers were given a bit of extra help. At the stern of the boat were two LMC motors connected to a pair of Sillette-Sonic saildrives to provide an additional 14 kilowatts of driving power. There was even an electric bow thruster. Although the Thames Barrier was closed for the pageant, reducing the tide to around one knot from the usual four knots, the organisers felt that an electric motor would be an ideal way to avoid any

problems, especially when stopping or manoeuvring.

Further back in the parade was *Lady Bea*, a Bates Star Craft belonging to EBA member Quentin Hoodless. *Lady Bea* was built in Chertsey in 1960 and has a diesel-electric propulsion system from EBA business members Fischer-Panda. She was part of a flotilla of Bates craft including (non-electric) *New Venture* with EBA members Gillian Nahum and Chris Taylor on board with their families.

Also taking part in the pageant were EBA members Colin and Lucie Henwood rowing their skiff *Gillian*, Pat and Paul Wagstaffe on a former London police boat *Off Duty* (Pat wrapped up in a Union Flag rug against the cold and wet) and Simon and Pat Davis, along with Margaret Callard waving a patriotic red, white and blue windmill, on Dunkirk Little Ship *Princess Freda*.

The day before the event in central London, the non-tidal Thames had its own celebration with a Diamond Jubilee Pageant at Henley-on-Thames. EBA members taking part included Guy Ferguson and Colin and Lucie Henwood, with EBA Secretary Barbara Penniall and Webmaster Nick Goldring dressed in patriotic colours on board Nick's electric launch *Silent Adventure*.



Barbara and Nick in the Henley Pageant



Bates Star Craft with Lady Bea centre

# Boats at Beale Park

The Beale Park Boat Show this year was scheduled for the weekend of 8th – 10th June. Unfortunately, as exhibitors were setting up there was very heavy rain and the ground became a quagmire, so Friday's show had to be cancelled. But the organisers worked hard putting down straw and matting on the muddiest areas of the site and a bright sunny day on the Saturday brought out the crowds for the rest of the weekend's events. Report by Sylvia Rutter with pictures by Ian Rutter.

The EBA stand attracted a lot of visitors interested in electric boating as well as EBA members old and new, including Nick and Barry Goldring who brought their electric launch *Silent Adventure*. Also 'drumming up support' for the EBA was the SteamHead Band who stopped to play some lively tunes on clarinet, saxophone, banjo and tuba.

EBA business members had a variety of boats on display. Lucie Henwood is pictured on the inside front cover

with the traditional Thames double skiff *Gillian*, beautifully restored by Colin Henwood, in which Colin and Lucie rowed in the Queen's Diamond Jubilee Pageant. Salters were showing their Skipper 15 Electric open launch and their Mystic 19'6 day cabin launch. On the Henley Sales & Charter stand was the Pebbles 3.4, a four-passenger launch built by the German company Rivers and Tides which can be powered by a petrol or electric outboard. The boats are built of a Lloyds registered sandwich construction using wood veneers and are so light at 60 kilos that they can be lifted on to the top of a car by two adults.

On the water was *Mr Volz*, Jim Coulam's new electric launch with a GRP hull and wooden deck. The Coulam 15 has a 2kW Mastervolt pod motor mounted under the hull with two Sonnenschein 200 AH gel batteries and a 24V 20 amp charger. Jim has recently become a service agent for Torqeedo, whose representative John Arnold was demonstrating the power of the Torqeedo Cruise 4.0 on the Beale Park lake. Several boats on display at the show could be used with Torqeedo outboards, including

the Nestaway  
dinghies  
and folding  
PortaBotes.

The Greenline 33 hybrid electric launch was also on the water and welcoming lots of visitors into its light and spacious interior. Its drive system combines a 5-cylinder Volkswagen



## Greenline 33

diesel engine with an electric motor/generator which uses 7kW in the electric drive mode and provides 5kW of electric power when driven by the diesel engine. Under electric power its top speed is 6 knots with a range of up to 25 nautical miles.

New EBA business members H & R Marine were advertising a new 25ft electric slipper stern launch which will be going into production later in the year. The Tacit 25, built by Severn Motor Launches, will have a GRP hull and hardwood decks and will be powered by a Torqeedo 4kW pod motor and lithium based batteries, offering more than 12 hours running at 5 knots from an overnight charge.

At last year's boat show, Water Craft magazine introduced a new event for inventive small boat enthusiasts: the Cordless Canoe Challenge, sponsored by Makita. It was such a success that a second Challenge took place this year with even more imaginative entries. The Challenge is a competition for boats under 16'3" (5m), not necessarily canoes, powered solely by one or more conventional cordless power tools. Boats compete two at a time on an L-shaped course on the Beale Park lake with the winner of each heat going on to the next round. Last year's overall winner, Tobi Vokuhl, was again competing, although due to pressure of work he hadn't had time to make any modifications, unlike some of the other competitors who had improved their boats following last year's experiences. There were also some interesting new



Coulam 15



The SteamHead Band drumming up support for the EBA

entries including the first underwater boat, described by its designer Dave Smith as a combination of a shark and a bendy bus. Unfortunately he had already discovered that *Something Fishy*

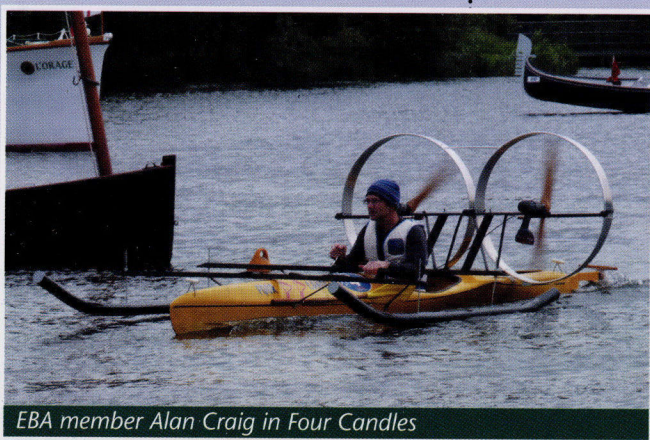
was not very speedy when on its early trials he was overtaken by a stickleback!

The fastest boat this year was *Velociraptor*, based on a Selway Fisher canoe and powered by four Makita

18V Nicad drills. Each drill was connected to the single propshaft by a clutch so that if one drill failed it was automatically disconnected. Owner Joe Rutland was presented with Makita's new package of 18 volt cordless tools including a drill/driver, grinder, jigsaw and torch, together with two lithium ion batteries and their fast charger. Makita also awarded two special prizes of their 14.4 drill/driver with drill set, two ni-cad batteries and charger. The first one, for the most imaginative entry, went to EBA member Alan Craig,

last pictured in EB News in his more conventional boat *Greenland* on the Wey & Arun Canal. His CCC entry *Four Candles* was an 'airboat' based on an old kayak with stabilising outriggers, powered by two Bosch 18V lithium drills. Winner of the special prize for the 'Most Elegant and Practical' boat was *Quackers*, a composite version of a West Mersea duck punt powered by a Makita BD452 cordless drill driving a 13" home made stainless steel prop. When Barry Goldring discovered that its designer and builder Jeremy Harris was also the owner of *Winsome*, a 17 ft electric launch with four solar panels, he whisked him off to the EBA stand where, with celebratory glass of champagne still in his hand, he was signed up as a new EBA member, the third one of the day.

**For the 2013 Cordless Canoe Challenge the organisers would like two electric boats to carry the judges and press. If you plan to visit the show next year and can offer a boat, please contact Pete Greenfield on [ed@watercraft-magazine.com](mailto:ed@watercraft-magazine.com) or telephone 01326 221424**



EBA member Alan Craig in *Four Candles*



New EBA member Jeremy Harris receiving his prize from Stuart McCrudden

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Originally built in 2003, the Hartford Slipper Launch is a classically styled electric motor launch that has had very little use and has been stored under cover for several years. She has been made using hi-tech wood construction techniques, with teak decks and a teak and holly cockpit floor. She is fitted with an electric outboard motor powered by 24 two-volt batteries. New batteries are now required, and will be included in the purchase price. Included in the inventory are the trolley, 4 wicker chairs, fold up teak table, flag pole and ensign, tonneau cover, and full canopy and frame with removable side panels.

# A Sunny Weekend at Hartford

**EBA business members Hartford Marina organised an Open Weekend for the 26th and 27th May and managed to organise beautiful sunny weather too, as Janet Dunning reports.**

In complete contrast to the previous weekend, when we held our AGM near Peterborough, the weather for the Open Weekend at Hartford Marina near Huntingdon was almost too hot for comfort. It was an unusual show in that staff on the EBA stand weren't rushed off their feet from the moment the gates opened to the public and they were able to look around the show without feeling guilty. That said, our visitors were genuinely interested in electric boats and the EBA, and we were able to recruit some new members.

The event was supported by a number of stands representing boating interests and there were other exhibitors appealing to the non-boating public. The birds of the Raptor Foundation drew the crowds whilst the Hook-a-Duck stall didn't seem to have many takers; it appeared that the younger element were more interested in stroking

an owl than grabbing a prize. The adults seemed happy to sit around in the sunshine and admire the boats on the water or chat to the boat-owners. Robin and Elk Boyes cruised from their nearby home in their electric Interboat *Avila* and other EBA members, Tim Keane, Les and Elaine Fidler and Julia Briars-Filby all came to offer support. The Hartford's skiff with an electric outboard was seen regularly speeding around the marina and we speculated whether they were on a mission or just enjoying themselves.

The social side of the EBA was not neglected. An invitation from Robin led to a small flotilla cruising up-river after the show closed on Saturday, consisting of Roger and Julia Woodhouse's skiff *Swan* powered by a Torqeedo outboard and Jeff and Jac Hide's launch *Mr E* with a Chinese imported Bison motor. Members enjoyed drinks, nibbles and convivial company on Robin's very extensive lawn and, after returning to the marina and preparing the boats for the night, the party then moved to St Ives and the home of Julia Briars-Filby. We sat on her patio sharing a selection of dishes from the local Chinese take-

away and in true EBA tradition the wine and conversation flowed freely until it became obvious that the midges thought we were providing them with a good meal and the length of the day was starting to take its toll on those who had risen early.

The weather on Sunday seemed even hotter but the sun encouraged more visitors to the marina and there was an increased interest in the EBA stand so we couldn't really complain. Roger and Julia scooped a prize in the weekend raffle, which turned out to be a boat cleaning kit. We shall expect future sightings of *Swan* to be dazzling. At the end of Sunday, some of us looked forward to a free weekend ahead before going to Beale Park and others headed for the IWA National Trailboat Festival at Stroud which was to take place the following weekend – the show season was well under way.



Avila

BARBARA PENNIAL



Swan and Mr E

ROBIN BOYES

# Beyond Batteries

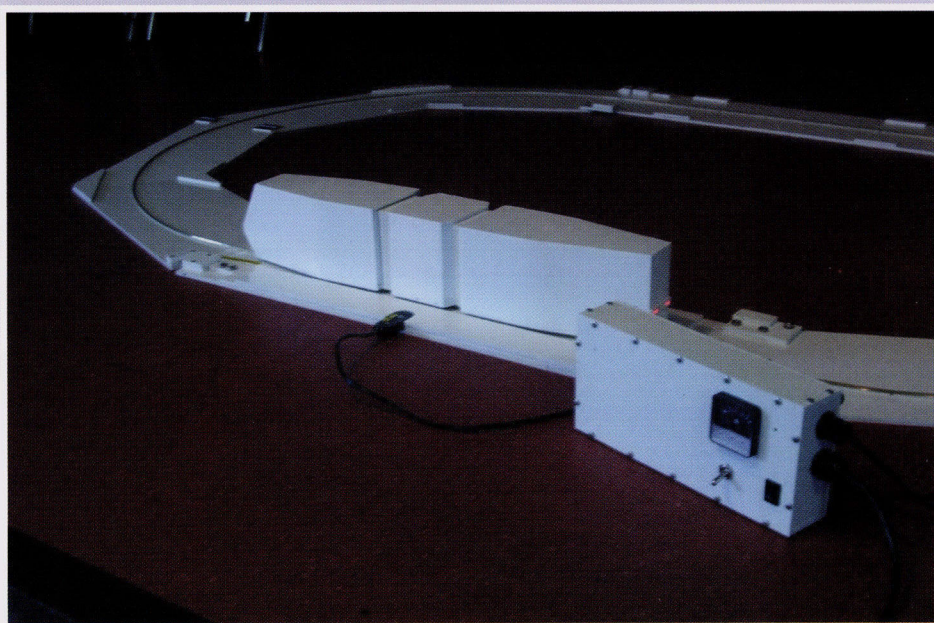
EBA member Rolf Schmidt owns the world's first solar-powered stern wheeler, *New Era*, which was featured in EB News in Autumn 2008. Recently he has been experimenting with a new technology which could take electric boats 'beyond batteries'.

Almost every electric boat in use today still uses batteries. Spending long hours recharging to store large amounts of electricity remains a major limiting factor in our pursuits. For owners of electric boats and other means of transport there now seems to be some light at the end of the energy-storage tunnel.

The science fiction novel 'The Fabulous Riverboat' by Philip Jose Farmer, published in 1971, described an electric paddlewheel boat which recharged itself with the speed and amperage of lightning: 'A giant step-down transformer of aluminum took the energy three times a day, sent it through Brobdignagian aluminum wires to a two-storey device known as a batacitor. This was a late-twentieth-century electronic discovery that could accept hundreds of kilovolts in a hundredth of a microsecond and could discharge it at any rate from a tenth of a volt to one hundred kilovolts...'

Given some poetic licence this 'batacitor', or battery-capacitor, is now known as an Electric (also Electrolytic) Double-Layer Capacitor or 'EDLC'. Other popular names are 'Supercapacitor', 'Supercap', 'Supercondenser' and (in the USA) 'Ultracapacitor'.

EDLCs have been around for about half a century. Unlike ordinary electrolytic capacitors they can hold so much charge that they can replace batteries in some applications. However, the way in which they store energy is fundamentally different. A capacitor stores energy in the form



The concept model tram

of electrical charge, whereas a battery stores energy through a reversible chemical reaction. As a consequence of this, the voltage of a capacitor does not remain near-constant as it does with batteries. Instead, the voltage is proportional with the amount of charge held in the capacitor:

$Q=C*U$  in which  $Q$  is the charge in Coulombs (one amp for one second),  $C$  the capacitance in Farads, and  $U$  the voltage. And to make it even more complicated the amount of energy  $W$  (in Joules) stored in a DLC is proportional to the square of the voltage:  $W= 1/2 * C * U^2$ .

Although not immediately obvious, there is a small practical advantage hidden in all this: with EDLCs you always know *exactly* how much energy is left in them by looking at the voltmeter, whereas with batteries the best you can do is hazard a guess.

At the same time it is true that their shifting voltage makes EDLCs more than a bit antisocial in the world of energy management. After all, most things that either supply or use energy work with fairly constant voltages.

The only practical way to use EDLCs to power something is to use a switch-mode power converter to convert a variable input voltage to a fixed output voltage and vice

versa. This is why EDLCs have been waiting on the shelf for decades for us electronics engineers to develop compact and efficient power converters. You can now find them busy bridging voltage differences in anything from phone chargers to railway locomotives.

From there it is only a small step to the kind of electronics that enables vehicles to be powered by EDLCs. In fact there are already some trams in Paris and buses in Shanghai which use this technology with success. The first EDLC powered electric boat is only a matter of time.

So what are the advantages and disadvantages of EDLCs when compared with batteries? Firstly, an EDLC can be discharged and recharged almost indefinitely. Unlike a battery, an EDLC is likely to outlive the vehicle or vessel that it powers.

A disadvantage is that an EDLC, at present, stores considerably less energy than a battery of the same weight or volume. It will take a few more years for EDLCs to equal batteries in this respect. There is however one great advantage that already makes EDLCs worthwhile in some vehicles and possibly in some electric boats. Unlike a battery, and as already mentioned, an EDLC can soak up a large amount

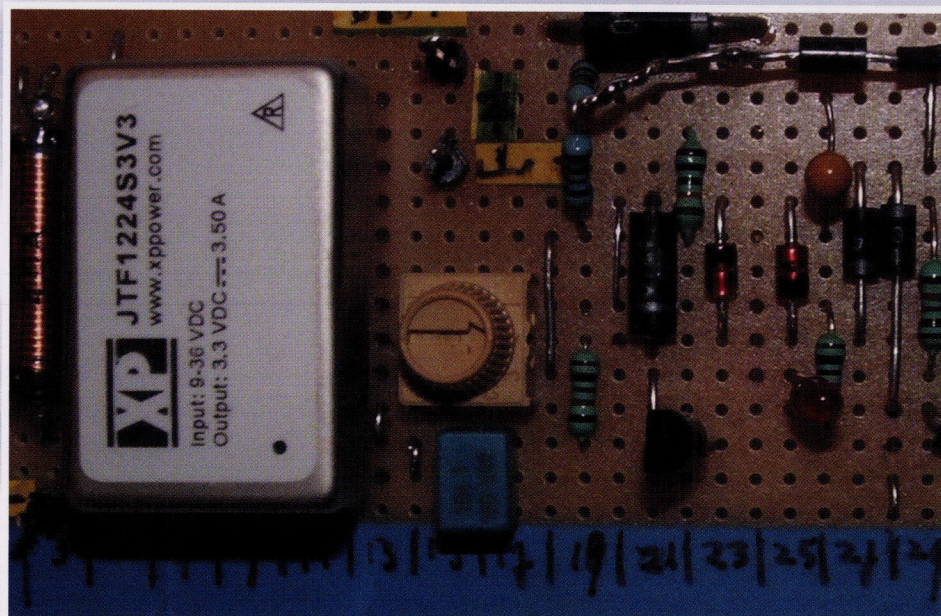
of energy in a very short time. This means that in some cases it may no longer be necessary to store all the energy on board for, say, a whole day's work.

In connection with one of my other transport interests, I recently built a concept model of a tram powered by EDLCs. The 1:22 scale model runs around a piece of track and makes a wonderful train set for grown-ups to play with. My tram does not have an overhead wire to supply it with power. It stores energy in EDLCs, but only a small amount; enough for about two to three runs around the test track. And yet this tram can keep running forever. The trick is that it takes a fast recharge to full capacity – in less than a second – each time it passes over a set of tiny contacts placed at one point in the track. You can see it in action on YouTube on my 'solarboatman' channel, or else just enter 'supercapacitor tram' into Google and the clip will come up somewhere on the first page of results.

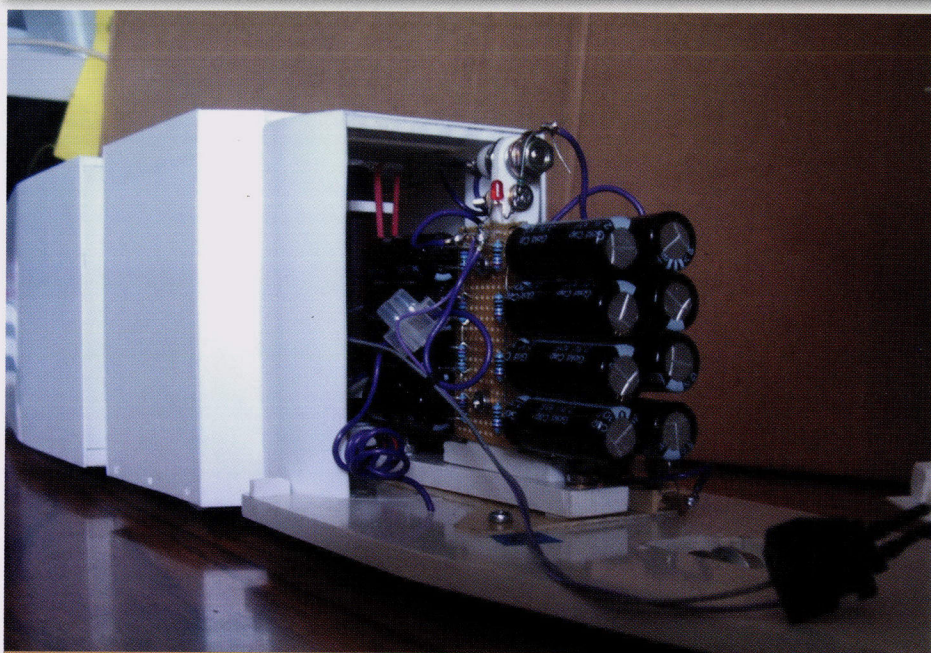
Similarly, an electric boat powered by EDLCs could recharge up to full capacity while spending even a few minutes docked at a suitable charging station. The electric ferries in Norway which featured in the last issue of EB News would have been the perfect candidates for this, had they survived to the present day. I have no doubt that the advent of EDLC technology will open up new possibilities for electric ferries and for electric sightseeing boats – any vessels that are used intensively to make frequent short trips.

It is also possible to combine EDLCs with batteries. In this scenario, the EDLCs can absorb extremely rapid top-up charges and provide a good part of everyday running power. The batteries take more of a standby role and avoid frequent deep-discharge, thus having an easier life and lasting considerably longer.

As mentioned, an EDLC can soak up a large amount of energy in a very short time. The other side of that coin is that it can release a large amount of energy in a very short time. A short-circuited bank of EDLCs may not just melt your wiring, but completely



*DC to DC converter and motor controller*



*EDLCs in the model tram*

vaporise it instead and part of your boat with it. Therefore every circuit must be protected by a fuse and an isolating switch, both with sufficiently high current-breaking capacity. Just like batteries, EDLCs must of course always be isolated when you work on the electrics.

Another thing to be aware of is that EDLCs do not like being charged beyond their maximum rated voltage. In this respect they are somewhat unforgiving and they make a mess when they blow up. It is good practice to have a voltage-limited charger, plus an additional sensing circuit that cuts charging independently in case of

over-voltage.

When EDLCs are connected in series for a higher voltage, each capacitor needs either a resistor or a voltage-limiting circuit connected across its terminals. This is to ensure that the voltage divides equally over the capacitors.

Experimenting with my EDLC-powered model tram has given me a feel and a liking for this technology. Given the time and resources, I hope to install EDLCs in my solar-powered paddlewheel boat *New Era* in the future as part of a shore-supply option. That would create a truly fabulous riverboat!

# Noticeboard



## Welcome to New Members

Private Members	Location	Boat where notified
Richard Baldock	Baughurst, Hants	Halcyon, Sadler 25
Malcolm Bridge	Rishworth, West Yorks	
Guy Cook (Welcome back Guy)	Beighton, Norfolk	Kobe, 27ft 1924 Hobbs canoe
Graham Frazer	London	Sasha, Bossoms 14ft launch
Judith Goodwin	Cookham, Berks	Water Rat
Jeremy Harris	Salisbury, Wilts	Winsome, 17ft launch
Michael Hatchard and Bruce Buck	London	Joanna
Clive Shaw	Southend-on-Sea, Essex	Melodie, electric canoe
Mark Walker	Leigh, Worcs	Green Woodpecker, under construction

At the AGM in Peterborough I proposed that some sort of Regional Structure should be reintroduced to the EBA. Adrian Dalziel and myself have offered to investigate how such a structure could be introduced and administered and, most importantly, what a Region should do to serve the members and the aims of the association. We have our own ideas, which include:-

- An annual Regional event, organised by local members.
- Social gatherings – afloat or ashore.
- Attendance, as EBA, at events organised by others e.g. Boat Clubs, IWA, Waterways Societies and Trusts.
- Involvement with member businesses in each Region to help promote them, electric boating and EBA.

Those are just a few initial thoughts. We look forward to hearing your views on activities, boundaries etc and perhaps a few volunteers may suggest themselves to be the first Regional Leaders!

**Tony Rymell.**  
([tony.rymell@btinternet.com](mailto:tony.rymell@btinternet.com))

Dear Barbara,

During the winter John Williams suggested that I find a home for an old prototype hydrogen fuel cell donated by the EBA. I was more than happy to do so and it is now being used at Sheringham High (at which I am Assistant Head) to demonstrate alternative energies in a very practical way. I would appreciate it if you would pass on to all concerned our thanks for this piece of equipment. Our head of Science is like a dad with a train set! Many thanks again.

**Dr. Andrew Richardson.**



Hello!

I just found your website through a link from Torqueedo. May I introduce myself – Michael Köhler, owner and designer of *Solarwave* an electric catamaran, actually the first absolutely self sufficient ocean-going electric yacht – running the engines, the complete (luxury) household (for up to 8 people sleeping and eating on board) and the tender with electric power. Only powered by the sun. No gas, no fuel, no sails – no other source of power, not even shore-power. The opposite – we are charging other boats regularly when they are short of power. Since two years with guests on board, cruising more than 5,000 nautical miles, we did not use fossil energy at all. You find more information on our website [www.solarwave.at](http://www.solarwave.at)

We would be very happy if you would inform your members about our project in your magazine. If you have further questions, do not hesitate to write me a mail!

Kind regards from sunny Greece  
**Michael**  
From: [office@solarwave.at](mailto:office@solarwave.at)

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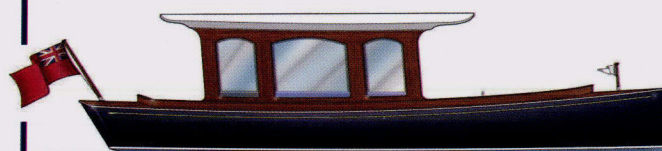
## Vacancy for Editor, Electric Boat News



The EBA is looking for an Editor for the Association's magazine to take over from Sylvia Rutter at the end of 2012. The work involves covering events, writing and editing articles, discussing the magazine layout with the graphic designer at the printers and checking proofs. The Editor also liaises with advertisers and the EBA's Advertising Manager and plans the layout of the advertising pages. Out of pocket expenses are covered and there is a small Honorarium.

If you are interested in this position, please contact EBA Secretary Barbara Penniall on 01494 681449 or email [secretary@eboat.org.uk](mailto:secretary@eboat.org.uk). Sylvia can give you more information about the job if you telephone 01628 476158 or email [editor@eboat.org.uk](mailto:editor@eboat.org.uk)

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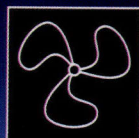


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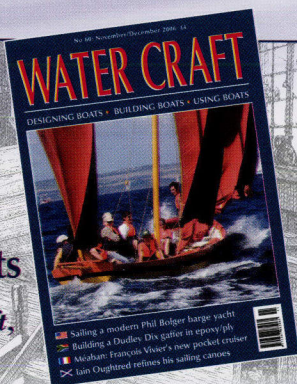
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Red boats and red bikes

# New Electric Boats Worldwide

**More electric boats are operating all around the world, as Kevin Desmond reports.**

A variety of electric boats have gone into service in France recently. In Brittany the City of Lorient's ferryboat operator, Cap L'Orient, has put an all-electric catamaran into service between Pen-Mané and the Quai des Indes. Built by STX France at their Lanester shipyard, the 22 metre boat can take 133 passengers and has space for 3 handicapped people and 10 bicycles. Two Azimuth pods give it a speed of 10 knots. Its main innovation, developed by its naval architects Stirling Design International and patented by STX, is its super-capacitor or EDLC energy storage system. The boat stores enough energy to make two return trips, and can then recharge on board in the short time it takes

to change passengers. It also has two rooftop solar panels.

Since April, the French city of Lyons has had its own hybrid diesel-electric ferryboat. Called *le Vaporetto*, and looking like a sleek 1950's Venice motor launch with a 7-strong uniformed crew, the 19.5 metre hull can take 70 passengers and 10 bicycles, and runs a 30 minute service on the 30-minute trip between the Confluent aux Terreaux quarter and St-Paul via Bellecour. The service is operated by the supermarket chain Uninail-Rodamco.

In western France at Les Sables-d'Olonne a 35-passenger solar boat is now running a ferry service between La Chaume and the centre of Les Sables. A second one will follow in 2013. Each boat costs around 500,000 euros.

And at Port-l'Houmeau in Angoulême a new hireboat/hirebike service called *Les Bateaux Rouges* has gone into operation, run by Benoit

Lorin. Three electric boats, with 5, 7 and 11 seats have been built by the Ruban Bleu shipyard in Nantes and can be rented along with some forty bicycles made by Arcade in La Roche sur Yon, ten of them electrically assisted.

Since founding their engine-manufacturing company in Denmark in 1974, Sven and Lars Hoyer of Hadsten have built up their business into a multi-national concern with subsidiaries as far afield as Poland and China. For electric boating, Hoyer can supply asynchronous low-voltage, three-phase, squirrel-cage motors. The Hoyer 440V Y is under 3.5 kW while the 440V D is more powerful.

In Casier, in the Trento Province of Italy, Barchiamo Boats have supplied their Accumot-engined *Zeus* 485 electric dayboats for rental in a number of locations including Casier, Sperlonga and Lake Maggiore.

In Germany the EFOY (Energy For You) fuel cell converts methanol into



Le Vaporetto

12 to 24 volt power on board a yacht. Combining it with a solar cell into a hybrid is even more efficient. In a fuel cell/solar cell hybrid, only the solar module generates electricity if the weather is fine and the EFOY remains in standby mode. If the weather is bad, or if it's dark or in winter, the power comes from the EFOY fuel cell.

This fuel cell system was developed some ten years ago by Dr Manfred Stefener who then established a start-up company in Brunnthal, near Munich, which he called SFC (Smart Fuel Cell). At first it was used by the military, for portacabins and for mobile homes. Then in November 2010, Ridas Yacht & Composites of Harjumaa in Estonia became the first boatbuilder in the world to integrate EFOY fuel cells as standard equipment on their yachts. The EFOY Fuel Cell has won many awards for innovation.

Volvo Penta already has a factory in Gothenburg, Sweden which is manufacturing an environmentally friendly hydrogen generator for powerboats from about 25' to 45'. Like the EFOY cell, the Volvo unit will simply make its own hydrogen gas out of conventional fuels, including ethanol, biomass, alcohol and biodiesel.

Further afield, in China a vessel which its builders claim to be the first lithium-hybrid passenger boat in the world has completed its shakedown trials on the Dalian Sea in front of the ODC Marine shipyard. Driven by

either two diesel engines of 400 hp or two electric motors of 75 kW, the 97-passenger, 18-metre ship designed by architect Eric Jean maintained a diesel speed of 20 knots, while also demonstrating its range of 2 hours at 6 knots in 100% electric drive. Since 2009, ODC has put two electric passenger boats into service, the second with 100% lithium energy.

And in South India the SunRider 6.2 has been operating for the past year, taking up to 10 passengers around the beautiful Kumarakom backwaters of the

Coconut Lagoon. She is the creation of two Kochin-based firms: Naval Architects and boat builders Navgathi Marine Design & Constructions Pvt. Ltd. and alternative energy specialist Team Sustain, at Kalamassery in the state of Kerala. Boats with higher passenger capacities have been designed and are awaiting orders.



EFOY fuel cell



SunRider 6.2

# Annual General Meeting

**This year's Annual General Meeting was planned as part of a cruising weekend on the River Nene near Peterborough. Unfortunately the rain came down and the river came up, so the cruising part had to be cancelled, but EBA members assembled at the Haycock Inn at Wansford on the evening of 19th May for the meeting followed by dinner. This is a summary of the proceedings.**

EBA Chairman, John Hustwick, welcomed members and thanked them for their attendance at a new venue and a new waterway. He reported a fairly successful year, although the EBA had not attended as many events as in the past. It was hoped that the increasing interest in electric cars might benefit the popularity of electric boating. He commended Sylvia Rutter on her work with Electric Boat News which was our most important selling point at events we attended. The Chairman said it was time to decide where we were going with the EBA. Membership was fairly static and to take the Association significantly forward it was felt we needed the advice of someone with a commercial business background. Members were invited to offer ideas and one could be the appointment of regional representatives to regularly co-ordinate with other electric boating enthusiasts in their area.

EBA Treasurer Don Wright was unable to attend the meeting but had presented the accounts for the year to 31st March 2012. Adrian Dalziel queried the amount of £340 insurance commission in the accounts. EBA Secretary Barbara Penniall explained that the insurance scheme for EBA members negotiated with Navigators & General attracted a commission for the EBA each time a member took out insurance with N & G via the Association. Adrian was unaware of this, which should be made known to members.

The Secretary read the Treasurer's report in which he explained the drop in income had been mainly due to reduced level of donations, but the previous year had been

an exceptional one when members had been very generous. Despite the income falling by about £1,000, the surplus increased to £2,942, largely due to a fall in the cost of attending boat shows and an increase in advertising which reduced the cost of printing EB News.

A new leaflet had been produced at a cost of £649 but this supply should last for a few years. The Secretary's computer had had to be replaced at a cost of £575 which will be depreciated over three years.

Last year the Treasurer had said a reasonable target would be to have reserves of around £10,000. We now have reserves of £11,242 but anticipate an expensive year with the 30th Anniversary celebrations.

Nick Goldring queried the amount in the accounts for website expenses as we had recently changed provider, but the Secretary explained these accounts were up to 31st March so did not reflect any saving at the moment. She also pointed out that the amount of £99 under 'Information Services' was due to the work of the Webmaster building a site for an EBA member and also producing CDs of the cruise last year. The accounts were adopted, subject to audit.

Malcolm Moss was unable to attend the meeting but had indicated his willingness to stand for reappointment and was reappointed EBA President.

Barbara Penniall was reappointed Secretary.

The Chairman reported that David Millin, Vice-Chairman Business Members, had decided to step down as he was nearing retirement. The EBA is hoping to appoint a replacement soon.

Janet Dunning had decided to step down as Advertising Officer. The Chairman thanked her for all she had done during her term of office. Roger Woodhouse has now taken over the position.

The Chairman said that Sylvia Rutter had said she would like to step down as Editor of Electric Boat News. Sylvia had been in office since just before the 21st anniversary until now when we are preparing for the 30th anniversary. In



that time the magazine had progressed immensely and she would be a hard act to follow. The members showed their appreciation with a round of applause. Sylvia will edit the next two issues in July and November, but would then like to hand over to someone else. The Chairman asked members to consider a possible replacement Editor.

The Secretary added that Sylvia submitted an article from EB News to Water Craft for six editions a year. Janet Dunning asked whether the magazine could be produced by a team of Editors, rather than one person. Sylvia agreed it was a possibility.

Richard Nash asked whether the advertising revenue covered the cost of printing. It was confirmed it almost covered the production costs, leaving the Editor's honorarium and about £250 per issue to be found. The Secretary pointed out that the magazine did not have to be produced 'ready for print'. The Editor sends the words and pictures and instructions to the printer with a flat plan to show what goes on each page, but the Association pays a professional designer to lay out the magazine. A draft of the issue is read by the Chairman and Secretary, then the Secretary and Editor both proof read before printing.

Richard Nash said there were commercial bodies who could produce the magazine if no-one came forward, but they would require commercial rates and the advertising costs required would have to be considerably increased. It was agreed this would not be a route to be followed.

Peter Frost said he had admired the magazine for a long time and could not believe that it almost broke even, and felt credit should be accorded to both the Editor and Secretary. He had assumed the magazine was subsidised to a very great

extent, as are most Association magazines.

The remaining EBA officers were re-elected: Chairman John Hustwick, Vice Chairman Private Members, Ian Rutter, Treasurer, Don Wright and Membership Secretary, Tony Dunning.

The Secretary introduced an idea brought up at the last committee meeting, that an incentive should be offered to members introducing new members. Currently, Business Members selling a boat, conversion or significant installation could offer a year's free membership but it was felt a scheme for private members should be offered. One idea was that the EBA would make a donation to a charity of the member's choice when they introduced a new member to the Association. Peter Frost said he had had some experience with similar schemes and proposed a 'recruiter badge'. Tony Rymell preferred the idea of giving a cheque to the member who could then pass it on and Gift Aid it. He said the badge was a good idea if it meant something to others, not just EBA members.

Richard Nash proposed distribution of a leaflet, aimed at people considering converting a boat or buying a new one, via volunteers to marinas and moorings. The Secretary said that around 2003 one member had proposed a similar idea and £3,000 had been spent on producing an A4 leaflet to be inserted in every issue of Practical Boat Owner and Water Craft. It had resulted in probably less than a handful of new members. Richard Nash said if that route was followed again, professional people would have to be consulted.

Tony Dunning commented that application forms coming in were mainly via the web. Over the past 17 months, 23 private members had received their year's free membership and in the same period 8 of those had renewed. Tony Rymell pointed out that apart from 3 magazines, these memberships had not cost the EBA anything, but producing a flier would incur some considerable expense. Offering

EBA members an incentive to attract more members would not cost anything until the new member joined.

Jeff Hide said that a car association of which he was a member annually produced a list of their members' names and telephone numbers so contact could be made. It was mentioned that up to 2008 an annual directory of members had been produced but it was discontinued as one of our cost cutting exercises. Barbara queried data protection but Jeff said if the membership passed a resolution saying they were happy to have their details circulated publicly, this would not be a problem.

Jeff queried sponsorship. Barbara explained we do receive sponsorship from the Broads Authority but other sponsorship was difficult to achieve as the EBA was not, and could not, become a charity in its present form.

Peter Frost said we should be asking ourselves why we want more members and what we are offering them to join. He felt they joined to be socially linked with like minded people, because they are interested in electric boating and for the benefits such as cheaper insurance.

Barbara confirmed that the queries she answered daily were either from people interested in converting a boat, building or buying one. They asked for technical support and wanted to join in order to meet people who had undertaken similar projects. She felt these reasons outweighed those who joined to uphold a principle.

She stressed that she felt her remit was to promote electric boating so was prepared to help enquirers rather than insisting they pay a subscription before receiving any information. It was hoped that a helpful approach would result in a membership application, but she would only put them in touch with business members initially and contact with other private members could be made after a membership application had been accepted.

Nick Goldring again raised the possibility of producing a Directory.

Barbara said the idea had been dropped

three years ago as it was costing the EBA £500 and was out of date before it was printed. Sylvia Rutter said she felt people rarely used it. Nick proposed updating the information say every 6 months and emailing it to members. Barbara said she already passed information to members proposing a cruise in a particular area

when they requested it. Nick felt the information could be emailed and if it was not required, the email could be deleted. The Chairman felt this would help if we could progress the idea of regionalisation.

Tony Rymell said the EBA used to have regional representation but it had faded away. For the past few years he and Adrian Dalziel had been representing the EBA in the West Country and Wales. He felt the only way to develop the EBA and get members more involved would be to have regional groupings and to have a clear mandate on what is expected from them. Tony offered their assistance to get a system established, draw up maps etc and submit a proposal for EB News. Each group would have a leader as a contact point and would arrange one event a year as a 'get together' and perhaps invite members from another group to join them. The AGM could be moved around regions each year with the arrangements being made by a local representative. Tony felt this would involve the members and enable the EBA to grow.

Adrian confirmed that Tony, as Chairman of the South West Branch of the Inland Waterways Association for about 30 years, had had experience of working with regional groups but as part of a national body. Tony said at present only a handful of members were prepared to trail boats to events around the country and he felt that there was nothing to be lost by trying to revive regional events. This followed a comment that the EBA might become fragmented. Tony said if their proposals were put in the magazine and the members said they were not in favour, the idea could be dropped.

The Chairman again thanked members for their attendance and ideas and stressed we needed input from the membership to take the EBA forward. Adrian made the point that although meetings were held, the membership was not kept informed of discussions taking place. Sylvia said a report of the AGM was always included in EB News. Adrian asked that minutes (subject to approval) could be published on the web.

Barbara again apologised for the unavoidable cancellation of the cruises and offered to return the registration fees. The members present donated their cheques towards the cost of the weekend and the Chairman drew the meeting to a close.

**The Nene cruise has been re-arranged for the weekend of 15th/16th September. Details have been sent to members by email.**



Dinner

# Electric Boat Association



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Contact: helenbest97@googlemail.com

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**Frolic 21 or similar.** Must have GRP hull in good condition with just enough timber trim to look the part. Electric drive, of course, with decent batteries and charger. Road trailer would help but not essential. Sensible price would ensure a quick sale.  
Contact Tim Barrett 07860 821023 or email tim-barrett@half-acre.co.uk

Pictures and details of all the boats for sale are on the EBA website [www.electric-boats.org.uk](http://www.electric-boats.org.uk) under 'Free Ads'.

Members wanting to buy or sell electric boats, motors, fittings or associated equipment are invited to submit a 50-word entry direct to the Editor (no agents or brokers). The information contained in members' private advertisements is provided by the advertiser and the Editor is unable to vouch for its accuracy. It is the responsibility of prospective purchasers to satisfy themselves as to the accuracy of the information given and of the condition of goods advertised.

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