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Volume 16 Number 1 Spring 2003

Electric Boat **NEWS**

The Journal of the Electric Boat Association



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• Memories of the Mary Gordon***



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WANTED

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Is there a volunteer amongst our members who would be willing to take on this role when Gill Sauer steps down in April?

Current advertisers have to be invoiced, either quarterly or annually, records maintained and cheques banked.

It is hoped the Advertising Manager would be pro-active in seeking potential new advertisers and passing on names and addresses for Barbara to approach.

The position is not very time consuming but is one more task that otherwise falls to the Secretary.

If you would like to know more, please contact

John Hustwick on 01621 742367

email john@mhustwick.freemove.co.uk



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EBA CALENDAR

May

3rd	EBA Event	All-Electric Boat Show, Huntingdon
4th	EBA Event	EBA Cruise on River Great Ouse
16th – 18th	EBA represented	Boats on Show, Penton Hook
23rd – 26th	EBA represented	National Trailboat Rally, River Stour

June

6th – 8th	EBA represented	Beale Park Boat Show, Pangbourne
21st	EBA Event	EBA 21st Anniversary Celebrations, Bisham Abbey, Marlow
28th	EBA interest	French Solar Challenge, Normandy

July

13th	EBA interest	Steam and Electric Boat Day, Sudbury
19th – 20th	EBA represented	Thames Trad Boat Rally, Henley

August

22nd – 25th	EBA represented	IWA National Festival, Beale Park, Pangbourne
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September

6th – 7th	EBA represented	Silent Sensations and Norfolk Cruise weekend
12th – 21st	EBA interest	Southampton Boat Show

October

tbc	EBA Event	Laying Up Supper, Maidenhead Rowing Club
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For further details of the above, or notice of other events,
please contact the Secretary

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Chairman: John Hustwick

33 The Street, Latchingdon, Essex CM3 6JP

Tel/Fax: 01621 742367

e-mail: john@mhustwick.freemove.co.uk

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150 Wayside Green, Woodcote, Reading, Berks RG8 0QJ

Tel: 01491 681449 Fax: 01491 681945

e-mail: eboat@mail.com

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please send advertising to the Secretary.**

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Cover Picture: Bisham Abbey

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Electric Boat Association

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The Electric Boat Association is on the Internet.

The World Wide Web Address is: www.electric-boat-association.org.uk

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CONTENTS & EDITORIAL

Contents

- Page 2** Cedric takes the Solar Challenge
- Page 5** 21st Birthday at Bisham
- Page 6** News
- Page 8** Boat Shows
- Page 10** Learning the Ropes
– *tips for better boating*
- Page 12** Notice Board and Letters
- Page 13** Boat and Breakfast
– *where to stop on the Upper Thames*
- Page 14** Technical Report:
– *Volts, amps, watts – and horses*
- Page 15** News from the Stour
- Page 16** Conference Call
- Page 18** Save the Mary Gordon



As the new Editor of Electric Boat News I am looking forward to an exciting summer of electric boating. After starting in style with the Launch Supper at Maidenhead we have Boat Shows at Huntingdon, Penton Hook and Beale Park (more details on page 8)

and then the highlight of the season with the EBA's 21st Anniversary Celebrations in the beautiful setting of Bisham Abbey on the Thames. And that only takes us as far as June, with lots more to come later in the year. I hope to meet as many EBA members as possible at these events and will be interested to hear your views on the magazine.

I would like to thank everyone who has written or telephoned to wish me luck in the (rather daunting!) job of editing Electric Boat News and I'm very grateful to all those who have contributed to my first issue. Please keep the contributions coming in. News from home and abroad, practical tips, historical items, letters and photographs are all very welcome. If you have questions on technical or other aspects of electric boating we will try to answer them – if the editorial team can't, other members may be able to. Above all, enjoy your boating, and let's make this Anniversary Year a very special one for the EBA.

Sylvia Rutter

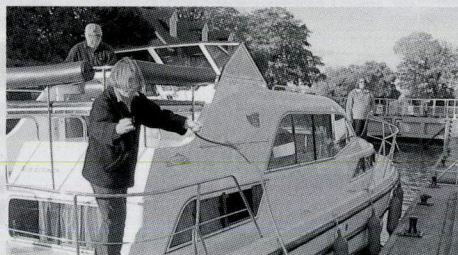
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Copy Deadlines:

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

Summer Monday 2nd June 2003



Rope tricks page 10



Charging points page 13



What's the story? page 18

CEDRIC TAKES THE S

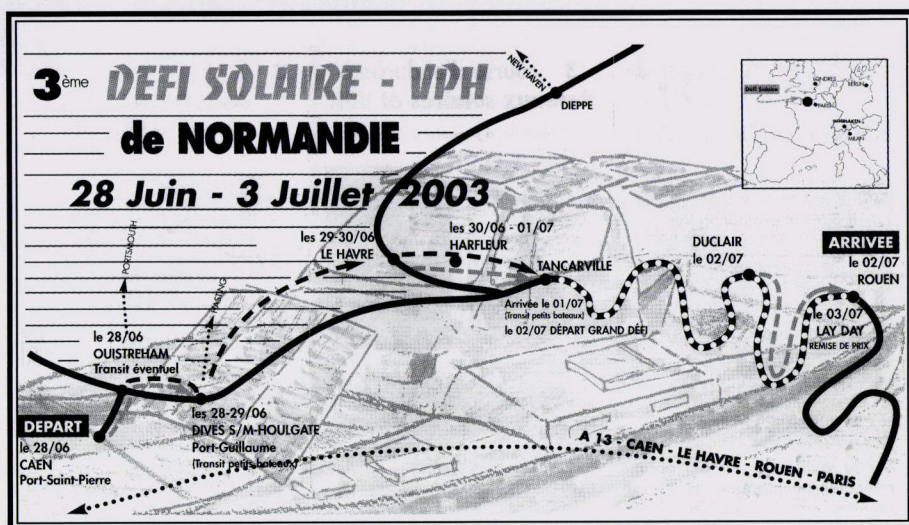
The international French Solar Challenge takes place in Normandy from 28th June to 3rd July – with at least one British participant.

Sylvia Rutter reports

Cedric Lynch, holder of the EBA's St. Davids Trophy for a significant advance in the field of electric boating, has registered his solar-powered canoe for the 3rd French Solar Challenge in Normandy. Travelling up the River Seine from the Channel port of Caen to Rouen in the course of a week the solar-powered boats of all types will meet in a grand finale at the international gathering of tall ships taking part in 'Armada Rouen 2003' for a festival of solar and sail power.

The Challenge is organised by Concept Hélios Propulsion who aim to promote the use of solar energy in leisure and navigation. There will be two courses: one of 100 nautical miles with sea crossings at Dives-sur-Mer and Le Havre for the larger boats and a shorter course of 50 nautical miles in four stages for all types of river craft. The organisers say the objective of the Challenge is 'to promote the meeting and racing by users and builders of boats propelled by solar energy and to broaden this emerging sport to long distance competitions'.

Cedric is getting advice from Malcolm Moss who won the EBA Solar Challenge Trophy for the first solar-powered crossing of the Channel in his boat *Collinda*, using a Lynch motor. Malcolm competed in the first French Solar Challenge in 1999 and found it an exciting experience although fairly hair-raising at times when the tide was especially strong – 'worse than on the Lower Thames at the Globe Theatre' he said.



Plan of Course

Malcolm said the first event was well organised with escort boats. *Collinda* had a 36 ft. yacht to escort her in the preliminary stages but in the final stage the yacht had to go ahead leaving *Collinda* to just make Rouen before the tide turned. Road transport was provided for the smaller vessels to the various stages, which included manoeuvring competitions.

Boats taking part in 1999 came from Germany, Switzerland and Italy as well as France, with Malcolm as the only British competitor. A trimaran built in Brittany was the winner. The reception at Rouen

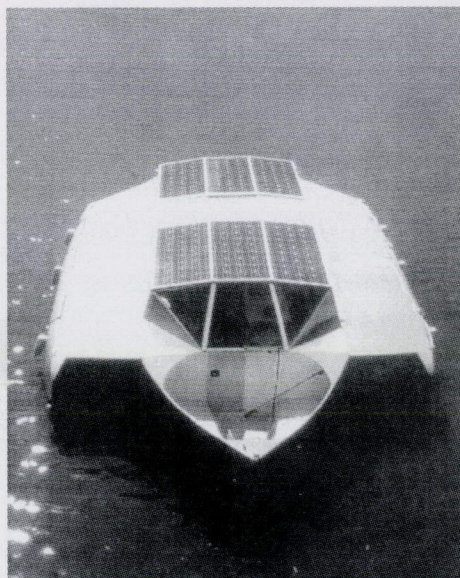


Cedric Lynch in his solar powered canoe Photo: Ian Rutter

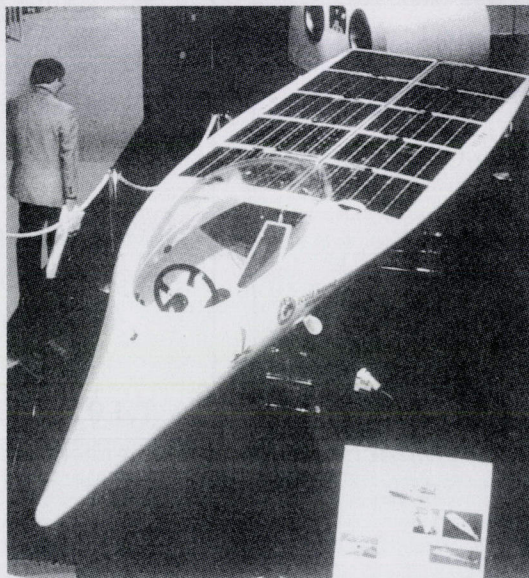


Collinda Photo: Ian Rutter

SOLAR CHALLENGE



Competitors come in ...
Photo: Solartis



...all shapes
Photo: CHP



...and sizes
Photo: CHP

docks with a million visitors among the Tall Ships was fantastic, Malcolm said. He might be tempted to take part again this year but would need an experienced crew.

Cedric says he will have to modify his canoe before the Challenge, installing permanent buoyancy aids and waterproofing the electrics in case they come into contact with salt water. He plans to take the canoe to France on the cross-Channel ferry on the roof of his van. He would like to try the section of the course which includes a sea-crossing but will check the weather on the day and if the forecast is bad will not attempt this stage.

The organisers of the Solar Challenge say they would like more British competitors 'to keep a balanced gathering with the continentals'. Participants may be eligible for help with accommodation and travel expenses.



Malcolm and Cedric on board Collinda
Photo: Ian Rutter

Journey's end among the Tall Ships at Rouen



If you would like to take part

Concept Hélios Propulsion at 13 Allée Aliénor d'Aquitaine,

76 240 Bonsecours, FRANCE

Tel/Fax 0033 2 35 80 29 77

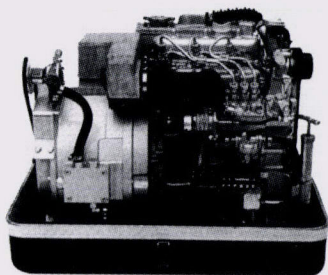
can supply registration forms and the competition rules

- or email pboegner@aol.com for more information.



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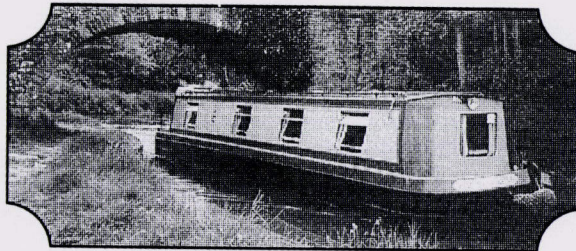
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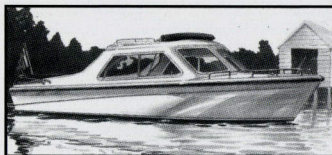
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21st BIRTHDAY AT BISHAM



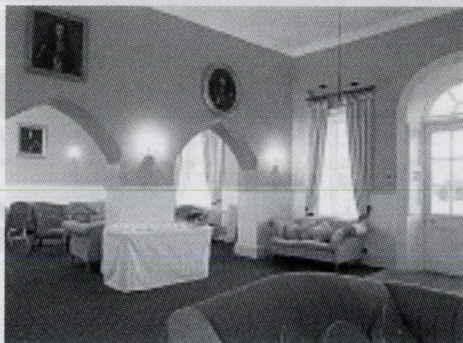
*Rear view of the Abbey
Photos: Bisham Abbey National
Sports Centre*

Prince William's birthday, the publication of the new Harry Potter book and the day the EBA celebrates its 21st Anniversary – June 21st is a very important date, so if it isn't in your diary yet, please put it in now.

All EBA members should by now have received their official invitations to the 21st Anniversary Celebrations which will begin with the formal Biennial General Meeting of the EBA, including the re-election of officers and presentation of trophies. After a light lunch the afternoon's events will include a grand cruise and some not too serious boat-handling challenges with afternoon tea followed by a barbecue dinner in the evening.

Look at the picture on the front cover and imagine the foreground full of electric boats. In its 800 years Bisham Abbey has seen some interesting sights, including visits by Henry VIII and Elizabeth I, but hosting the biggest gathering of electric boats ever held should still be something special.

The oldest parts of the Abbey date from 1138 AD when it was home to the Knights Templar. Later it belonged to the Hoby family who made a considerable impact on the building by carrying out a number of alterations. Their influence is still felt since the ghost of Lady Hoby is said to haunt the building. (It is not recorded whether she likes boat trips).

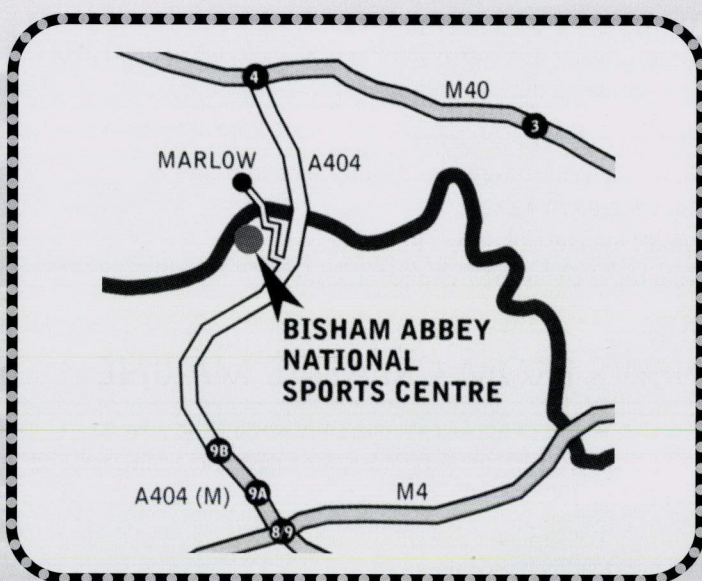


*Room allocated to the
EBA which opens on
to the lawn and patio*

the home of the Lawn Tennis Association, the British Weightlifters Association and the British Judo Association.

Bisham Abbey is midway between Junction 4 of the M40 and Junction 8/9 of the M4. If you take the A404M from either motorway you will reach the Bisham roundabout with signposts for the centre. There is a very good public slipway at Marlow almost opposite the Abbey. Boat owners and friends can take advantage of the offer of free mooring for the whole weekend to explore a most attractive stretch of the Thames.

To make this Celebration an event which members will remember for years to come we need as many people and boats as possible. So do come, even if just for part of the day on Saturday, but making a weekend of it would be even better.





Geehi at Goolwa

MURRAY CHARGE POSTPONED

The 'River Murray Charge', an electric boat voyage down Australia's longest river featured in last autumn's edition of EB News, has been postponed because the severe drought currently affecting Eastern Australia has left river levels dangerously low. Charles Fitzhardinge reports that he hopes to reschedule the run

when better conditions return, possibly in September.

The 'Charge' should have finished at the Murray Mouth port of Goolwa to coincide with the biennial Goolwa Wooden Boat Festival on 15th/16th March. Charles attended anyway, trailing his 19ft electric boat 'Geehi' the 1600 km overland from Sydney and



Cygnet on Lake Burley Griffin

exhibited the boat both on the water and on a stand for Lynch and ETEK electric motors.

Charles adds that his company has recently supplied a Lynch motor for a tour ferry operating on Lake Burley Griffin in the centre of Canberra.

Formerly the steam powered 'Jenny' the boat has been re-named 'Cygnet' by her new owner Jim Paterson and is understood to be running well in her new form.

Further information from:

Charles Fitzhardinge, Woolwich Electric Boat Co
Tel. 61 2 9879 4222

Email: charles@woolwichmarina.com

Website: www.woolwichmarina.com

NEWS FROM CREATIVE MARINE

Creative Marine in Norfolk are currently working on a Frolic 21 'Classic' with electric propulsion for a customer at Bourne End on the Thames. It will be an open launch of solid mahogany with a longer foredeck than usual and the interior specifically designed to suit the customer's requirements.

For more
information
contact:

**Julia Lawson at
Creative Marine**
Tel.: 01263 570100

Email:
creative.marine@talk21.com

Website: www.creativemarine.co.uk



DAVID SMITH

Sad news came in February with the death of boatbuilder David Smith. Edward Hawthorne shares some of his memories:

David's skills in boatbuilding were first directed to electric boats in 1990 when, at the age of 75, he undertook to fit out *Mystère*, a Frolic 21, in the style of the traditional mahogany Thames launch. Forced by early ill health to give up his boatbuilding business in Maidenhead, he eventually was able to spend his winters restoring a boat, usually slipper launches, and his summers looking after his large garden, both of which gave him great joy.

The quietness of the electric boat encouraged him to seek out a hull which he could fit out to his own design. After much searching he found the Winkle Brig sailing boat whose hull could be adapted to his requirements. His first boat found a ready buyer and when he could no longer do the work himself Guy Wootten took over and continued their production. Between them a number of boats were produced and can be seen cruising on the Cookham to Henley stretch of the Thames. When he was no longer able to work on his boats, he took to making models of those with which he was familiar and donated them all to raise funds for cancer research.



David Smith with 'Mystère' and Malcolm and Dinnie Hawthorne Photo: Edward Hawthorne

David loved the river. He would walk for miles along the towpath calling in for a chat at the boatyards along the way and on most days during the summer he would go out on his own dayboat, mooring

up for a sandwich at his favourite spots along the Spade Oak reach. Always willing to help, courteous and welcoming it was a pleasure to be shown his latest boat project or be taken round his delightful garden.



SOLAR BOATS IN SWITZERLAND

MW-Line SA provided four solar-powered electric boats, each taking up to 60 passengers, for the Swiss Expo 02 last year. Two are for sale 'at very attractive prices' the company says. The Aquabus C60s are catamarans fitted with new motors from MW-Line called EE-2s. During the six months of the national exhibition, based around three lakes near Neuchâtel, the boats carried a million passengers and docked 30,000 times.

MW-Line has made over 22 solar-powered electric boats for 4 to 60 passengers and sold them to customers in France, Italy, Switzerland and Luxembourg. The company has now been asked to produce boats which can carry from 60 to 100 passengers and the Aquabus C100 catamarans will be under construction by the end of this year.

More information from:
Richard Mesple
MW-Line SA
Tel.: 0041 24 430 40 70
Email: info@mwline.ch
Website:
www.mwline.ch

FORUM ON INLAND NAVIGATION

Chairman John Hustwick and Secretary Barbara Penniall represented the EBA at a forum in Oxford on March 1st.

Barbara reports:

An audience of thirty representatives of boat clubs and Thames users attended a recent open forum, organised by the

RYA's Inland Navigation Panel, to hear presentations from the Environment Agency, the Wilts and Berks Canal Trust and the Cotswold Canal Trust.

A member of the audience questioned whether the Boat Safety Scheme had achieved any noticeable increase in safety since its inception four years ago. Responding to this, the EA's Thames Waterway Manager, Eileen McKeever pointed out that the BSS was largely based on original Thames Launch Regulations which all craft had been expected to comply with on a voluntary basis. However,

she did say that statistics had shown a decrease in the number of incidents on the River since the Scheme was introduced.

The Chairman of the Inland Navigation Panel, Robert Lee Warner, drew attention to the Marine Coastguard Agency's launch of an Inland Waters Small Passenger Boat Code covering all boats carrying up to twelve passengers.

At present such boats are unregulated, but the MCA is proposing the introduction of advisory standards for boats and their crews which will affect clubs and societies with trip boats or anyone organising open days at which people would be invited to get afloat. A public consultation period is open until the end of May and the MCA is inviting comments. The draft code is available at www.mcga.gov.uk/inland_waterways and the final version is due to be published in the autumn 2003.

NEW ELECTRIC SLIPPER LAUNCH

Thames Electric Launch Company have fitted a 2 kW Combi Outboard Motor to a new slipper launch built by Hartford Marina in Huntingdon. The motor is hidden within the stern deck

and the standard 2-speed mechanical switch has been replaced with the Telco variable electronic speed controller.

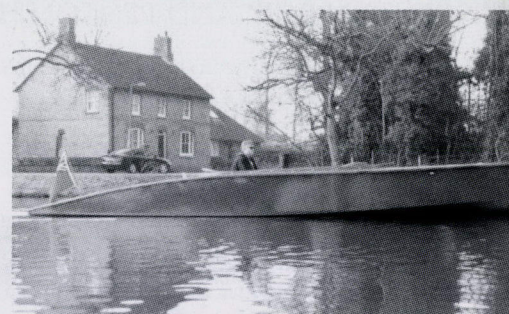
This large day boat, which will be fitted with four Lloyd loom chairs and a fridge, will allow up to six people to cruise in comfort and is likely to be on display at the Huntingdon Electric Boat Event in May.

More information from
The Thames Electric Launch Company
Tel.: 01491 873126
Email: thameselectric@goring.co.uk

NEW ECO BOAT WORKING GROUP

The Norfolk and Suffolk Boatbuilders Association has formed an eco boat working group for the Broads area to investigate ways of encouraging and promoting environmentally friendly boating in design and construction. They would like to hear from anyone, not just in the Broads area, who can offer an input into this group.

More information from Peter Howe
Tel.: 01603 783096
Email: peter@camelotcraft.co.uk

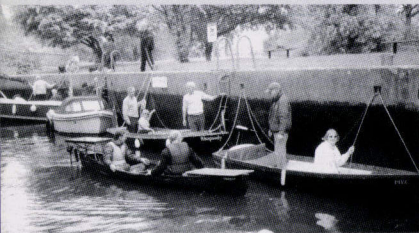


Aquabus C60 at Expo 02



*John Hustwick talking to Eileen McKeever
 Photo: Barbara Penniall*

BOAT SHOWS



Huntingdon 2002
Photos: Barbara Penniall

EBA ELECTRIC BOAT EVENT 3rd and 4th May HARTFORD MARINA, HUNTINGDON

This will be the second all-electric boat event at Huntingdon, building on the success of last year's show. Hartford Marina has superb facilities for exhibitors and visitors with an excellent family restaurant/pub on site. The EBA will have a marquee for the display of leaflets and equipment and hopes to encourage people living close to the River Great Ouse to experience the delights of electric boating. There is an easy slipway with help at hand if required and the Environment Agency will waive licence fees for the weekend.

Saturday's event starts at 12 noon and runs until 6 pm. On Sunday there is an informal cruising day on the River Great Ouse for EBA members, friends and anyone seriously interested in electric boating. The morning will be spent cruising to a neighbouring village, probably Hemingford Grey, and stopping at a pub/restaurant for lunch. If the weather is good the cruise may continue as far as St. Ives. Members are welcome to bring trailable boats or (space permitting) join in on boats already there.

Further information from EBA Secretary, Barbara Penniall.

BOATS ON SHOW 16th to 18th May PENTON PARK AND PENTON HOOK MARINA, CHERTSEY

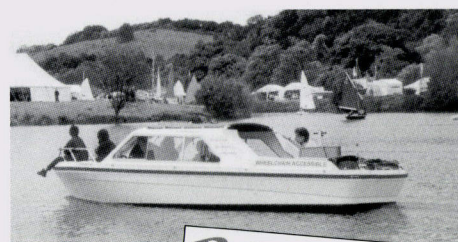
Boats on Show returns to Chertsey on the River Thames with boat builders and craftsmen, chandlery and craft stalls expanded across the site. New for this year are the boat jumble, a boat rally on the river, free trips on a Thames passenger boat, a fairground and other family attractions. The RYA/Honda Youth RIB Challenge regional finals will take place on the lake during the show.

All visitors will have the chance to Try-a-Boat on the river or lakes. EBA member Robin Richardson will again be demonstrating his *Phoenix 21*, which was one of the most popular boats with the public at last year's show, and also hopes to have a wheelchair accessible version of this boat on display.

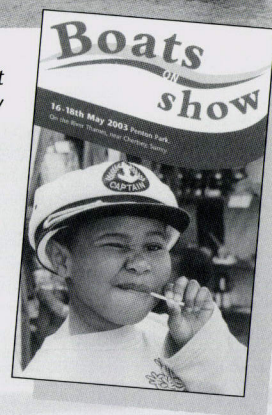
The Show is open from 10 am to 6 pm on the Friday and Saturday and from 10 am to 5 pm on the Sunday. Ticket prices are £6 adult, £3 child and £15 for a family (tickets booked in advance are cheaper).

Further details from www.visitthames.co.uk/boatsonshow or for a leaflet ring the Environment Agency's information line on 0845 601 5336.

For more information on tickets or display space email info@boatsonshow.co.uk or ring 0870 241 10 10.



Wheelchair accessible boat
Boats on Show



Beale Park

Photos:
Barbara
Penniall

Beale Park
Organiser
Richard
Howard

BEALE PARK BOAT SHOW 6th to 8th June BEALE PARK, LOWER BASILDON

The focus of the Beale Park Show is a seven acre lake, surrounded by meadow and pasture land and joined by a navigable channel to the River Thames. There will be plenty of variety to ensure there's something for everyone, from dinghies to day boats and classic craft to contemporary cruisers. As well as displays on land visitors can also get on to the water and try the boats.

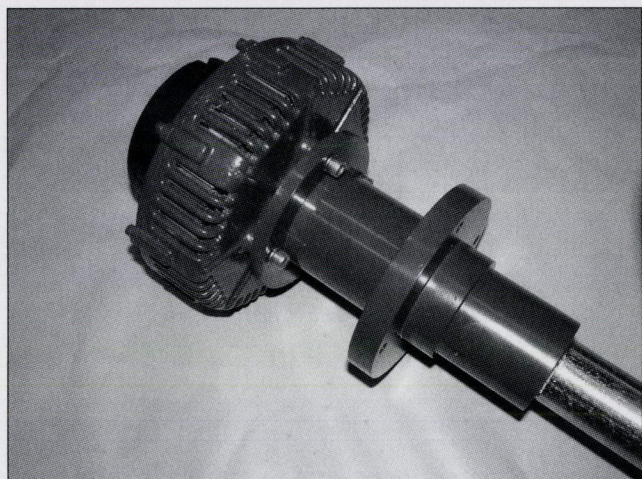
The Wooden Boatbuilders' Association, the British Small Boatbuilders' Association, the Electric Boat Association and the Steam Boat Association will all be taking part and supporting the Show. They will be joined by chandlers, other boatbuilders and equipment manufacturers.

Entrance to the Show is £5.50 for adults and children under 16 get in free. A 2-day ticket costs £10 and entry to the Show also includes the Wildlife Park and attractions.

The Show Organiser is EBA member Richard Howard Tel. 0118 984 5207

Email: bealepark@bun.com Website: www.bealepark.co.uk

Lakeland Electric Boat Centre



Aquapella 5000

SYSTEM DESCRIPTION 'HITECH'

The complete Aquapella 5000 system consists of:

- Stern tube, shaft and flange assembly, including seal-leak sensor, seals, thrust bearing and flexible coupling.
- PMG 132-R motor 48 Volt, 4.8 kW nominal power, including bushing and rubber damper plate.
- Speed controller CPM 110-48 including main circuit breaker.
- Joystick Hitech (Polymer).
- Display with key switch in Hitech (aluminium) execution.
- Charger 30A, microprocessor controlled, inverter type, programmed for a variety of batteries.
- Cable set for control signals.
- Quick connectors for motor and batteries 4 pieces.
- Battery interconnection terminal plate for 12 batteries max.
- Manual.

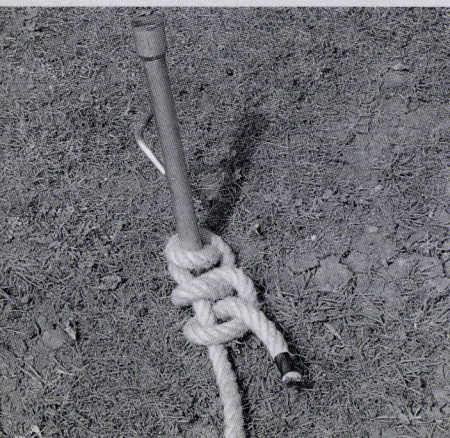
Not included are:

- Propeller
- Batteries
- Main protection fuse(s)
- Power cable set

These items can be offered specially, tailored to the application

**Unit 4, Ullswater Rd Business Park, Ullswater Road, Penrith Cumbria CA11 7EH
Tel: 01768-840211 Fax: 01768-840212**

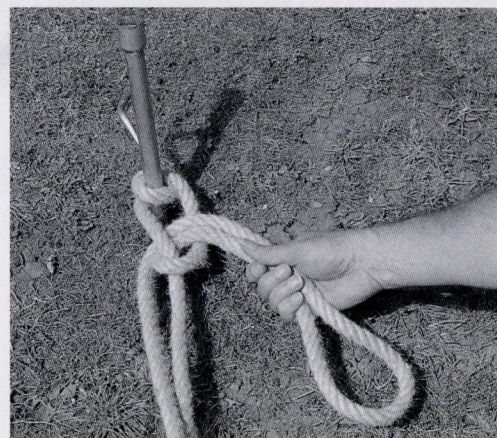
LEARNING THE ROPES



Round Turn and Two Half Hitches



Making a loop



Releasing a half hitch

Whatever electric boat you own, if you want to get maximum fun from your time on the water, there are certain tips and techniques that will stand you in good stead. Emrhys Barrell offers some good advice.

Whenever you go boating on inland waters, handling ropes is an essential part of the day. Get them right and you will have a great time. Get them wrong and you will be in a knot.

- Every boat should have a bow and stern line. Dinghies should have a bow line that is at least 5m (16ft) long, which will allow you to pass it round a bollard at a lock. The rope should be at least 10mm diameter, to make it easy to hold. Dayboats and cruisers over 15ft should have lines that are at least 8m (26ft) long. This will allow them to pass round a bollard, then back down to the cleat on your boat. Diameter should be 12mm or more, depending on the size of your craft.
- Type of rope is down to personal preference and your budget, but it should be either nylon or polyester. Don't use polypropylene. This may be cheap, but it goes hard and brittle with age, and leaves you with splinters in your hands.
- Keep your ropes clean and free from knots and frayed ends. If a knot appears, it should be teased out with a soft point such as a biro, otherwise it will jam round a ring or in a crack in the lock wall. If the knot has gone hard and tight over the course of a season it can be softened by immersing it in a cup of boiling water.
- Every year you should clean your ropes in a bucket of hot water and washing powder. Just leave them to soak overnight, then rinse them out.
- Don't use your cruising ropes for your permanent mooring lines, otherwise they will get hard and dirty. Make up a separate set, which can use cheaper rope.
- Bigger boats should have a third longer line, which can be used for springs or difficult moorings.
- If you are only going to learn one knot, then the one should be the *Round Turn and Two Half Hitches*. Simple to learn, simple to tie, this can be used for everything on board, and is both secure and easy to release. It can be used for mooring, round a bollard, cleat, ring or post. It can be used for holding fenders, tying down the cover, or lashing down your canoe on the roof of the car.
- The name is a bit confusing, as it would be better called *Two Round Turns and Two Half Hitches*. This is because you should take it twice round the post or ring, then make two hitches round the standing part of the line. If you only go once round, it will slip.
- This is a versatile knot. If you tie it in the middle of a long line, the hitches can be made with a loop of the rope for speed. If you are only using it to stop temporarily, and want to release it quickly, just make one half-hitch with a loop of the rope. Pulling the end will release the knot.
- Always keep ropes neatly coiled and stowed. This will make them ready to be used or thrown at any time. Don't just leave them in a bundle in the bottom of the boat.
- To coil a rope, always start at the fixed end of the line. This will allow any kinks to work their way out as you go. Take hold of the fixed end in one hand – for right-handed people this should be your right hand. Draw the left hand along the rope to a convenient length, then bring it to your right hand. This makes

Electric Boat Association

UK Business Members' Product Guide

President: Prof. Aitken Clark

Hon Vice-Presidents: Fiona, Dowager Countess of Arran; Edward Hawthorne



CRUISE ELECTRIC – NO NOISE : NO POLLUTION : NO FUSS

Alternative Energy/Solar power/Wind generators

- David Cartwright Boatbuilder
- Engineered Solutions
- Ecocats Ltd

Batteries

- Bossoms Boatyard Ltd
- Chloride Motive Power
- Ecocats Ltd
- Peter Freebody & Co
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Nauticalia Boats,
- Pb Batteries (SE) Ltd
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Battery State Meters

- Bossoms Boatyard Ltd
- Curtis Instruments (UK) Ltd
- Ecocats Ltd
- Peter Freebody & Co
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Boat Hire – Launches

- Bossoms Boatyard Ltd
- Avon-Boating
- Hambleden Sales & Charter Ltd
- Lakeland Electric Boat Centre
- Phoenix Fleet Ltd

- Rivertime
- Swancraft
- John Williams Boats

Boat Hire – Narrowboats

- Castle Narrowboats

Boat Safety Scheme Inspector

- John Williams Boats (Steve Birtles – Corgi Registered)

Boat Sales

- Bossoms Boatyard Ltd
- David Brownjohn Boatbuilders,
- David Cartwright Boatbuilder
- Classic Launches
- Creative Marine
- Ecocats Ltd
- Peter Freebody & Co
- Haines Marine
- Hambleden Sales & Charter Ltd
- Lakeland Electric Boat Centre
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- Salter Bros. Ltd
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Chargers

- Bossoms Boatyard Ltd
- David Cartwright Boatbuilder
- Chloride Motive Power
- Curtis Instruments (UK) Ltd
- Ecocats Ltd
- Peter Freebody & Co
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Nauticalia Boats
- Pb Batteries (SE) Ltd
- Phoenix Fleet
- Reading Marine Co

- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Charging Pillars/Points

- Bossoms Boatyard Ltd
- Nauticalia Boats

Controllers

- Bossoms Boatyard Ltd
- David Cartwright Boatbuilder
- Curtis Instruments (UK) Ltd
- Ecocats Ltd
- Peter Freebody & Co.
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co.
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

DC-DC Converters, DC-AC Inverters

- Bossoms Boatyard Ltd
- Chloride Motive Power
- Curtis Instruments (UK) Ltd
- Ecocats Ltd
- Peter Freebody & Co
- L.E.M.C.O.
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)

Electric Conversion

- Bossoms Boatyard Ltd
- David Brownjohn Boatbuilders
- David Cartwright Boatbuilder
- Creative Marine
- Curtis Instruments (UK) Ltd
- Ecocats Ltd
- Peter Freebody & Co
- Haines Marine
- Henwood & Dean Boatbuilders
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Lynch Motor Co.Ltd
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co

- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Electric Fun Boats/Leisure Craft

- Bossoms Boatyard Ltd
- David Cartwright Boatbuilder
- Salter Bros Ltd
- * John Williams Boats

Electric Fuel Cells

- * Ecocats Ltd

Electric Inboard

- Bossoms Boatyard Ltd
- Ecocats Ltd
- Peter Freebody & Co
- Haines Marine
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Lynch Motor Co.Ltd
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK,
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Electric Outboards

- Bossoms Boatyard Ltd
- Ecocats Ltd
- Lakeland Electric Boat Centre
- Lynch Motor Co.Ltd
- Nauticalia Boats
- Thames Electric Launch Company
- John Williams Boats

General Boat Builders

- Avon-Boating
- Bossoms Boatyard Ltd
- David Brownjohn Boatbuilders
- David Cartwright Boatbuilder
- Classic Launches
- Creative Marine
- Ecocats Ltd
- Peter Freebody & Co
- Haines Marine
- Henwood & Dean Boatbuilders
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Thames Electric Launch Company
- John Williams Boats

Generators

- Fischer Panda UK Ltd
- Peter Freebody & Co
- Nauticalia Boats
- Reading Marine Co
- Stelco Yachttechnik (UK)

Hour Meters

- Curtis Instruments (UK) Ltd
- Peter Freebody & Co
- Lakeland Electric Boat Centre
- L.E.M.C.O.
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)

Hybrid Motors

- Ecocats Ltd
- L.E.M.C.O.
- Lynch Motor Co.Ltd
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Insurance

- Navigators & General

Plugs, Sockets, Connectors

- Curtis Instruments (UK) Ltd
- Ecocats Ltd
- Peter Freebody & Co
- Lakeland Electric Boat Centre
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Repairs

- Bossoms Boatyard Ltd
- David Brownjohn Boatbuilders
- David Cartwright Boatbuilder
- Creative Marine
- Peter Freebody & Co
- Haines Marine
- Henwood & Dean Boatbuilders
- Lakeland Electric Boat Centre
- Nauticalia Boats

- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Sterngear, Steering Etc.

- Brimbelow Engineering
- Peter Freebody & Co
- Lakeland Electric Boat Centre
- Nauticalia Boats
- Phoenix Fleet Ltd
- Reading Marine Co
- STELCO UK Ltd
- Thames Electric Launch Company
- John Williams Boats

Surveyors, Consultants

- Paul E Bennett
- Engineered Solutions
- Ecocats Ltd
- Peter Freebody & Co
- Haines Marine
- Lakeland Electric Boat Centre
- Nauticalia Boats
- Reading Marine Co
- Stelco Yachttechnik (UK)
- Thames Electric Launch Company
- John Williams Boats

Trailers

- Lakeland Electric Boat Centre
- Nauticalia Boats

Trip Boats

- Avon-Boating
- Coniston Ferry Services
- John Williams Boats

Avon-Boating

Tel/Fax: 01789 267073
email: boats@stratford.u-net.co.uk

Mr Paul E Bennett

Tel: 07811 639972
email: peb@amleth.demon.co.uk
www.amleth.demon.co.uk

Bossoms Boatyard Ltd

Tel: 01865 247780
Fax: 01865 244163
email: info@bossoms.co.uk
www.bossoms.com

Brimbelow Engineering

Tel: 01692 582707
Fax: 01692 580036
email: brimbelow@freenet.co.uk

David Brownjohn Boatbuilders

Tel: 01491 412580

David Cartwright Boatbuilders

Tel/Fax: 01986 785322
email: dcboat@freeuk.com
www.dcboat.com

Castle Narrowboats

Tel: 01873 830001
Fax: 01873 832341
email: castle.narrowboats@btinternet.com
www.canaljunction.com/castlenarrowboats

Chloride Motive Power

Tel: 01204 64111
Fax: 01204 62981
email: sales@cmpbatteries.co.uk
www.cmpbatteries.co.uk

Classic Launches

Tel/Fax: 0118 948 2629
email: classic.launches@btopenworld.com

Coniston Ferry Services

Tel/Fax: 015394 36216
email: conferry@lakefell.co.uk

Creative Marine

Tel/Fax: 01263 570100
email: creative.marine@talk21.com
www.creativemarine.co.uk

Curtis Instruments (UK) Ltd

Tel: 01604 629755
Fax: 01604 629876
email: email@curtisinst.co.uk
www.curtisinst.com

Ecocats Ltd

Tel: 01752 822 703
email: info@ecocats.com
www.ecocats.com

Engineered Solutions

Tel/Fax: 01780 754327
email: h.s.arbon@gateway.net

Fischer Panda UK Ltd

Tel: 01202 820840
Fax: 01202 828688
email: info@fischerpanda.co.uk
www.fischerpanda.co.uk

Peter Freebody & Co

Tel: 01628 824382
Fax: 01628 820238
www.boatbuilder.co.uk

Haines Marine

Tel: 01692 582180
Fax: 01692 582441
email: mary@hainesmarine.co.uk

Hambleden Sales & Charter Ltd

Tel: 01491 578870
Fax: 01491 579383
Email: gillian.nahum@virgin.net
www.hambledensalesandcharter.co.uk

Henwood & Dean Boatbuilders

Tel: 01491 571692
Fax: 01491 411514
email: hdboat@globalnet.co.uk
www.henwoodanddean.co.uk

Lakeland Electric Boat Centre

Tel: 01768 840211
Fax: 01768 840212
email: martin@lakelandelectricboats.co.uk

L.E.M.C.O.

Tel: 01404 44132
Fax: 01404 47050
email: sales@lemcoltd.com
www.lemcoltd.com

Lynch Motor Co.Ltd.

Tel: 0207 607 8141
Fax: 0207 609 3625
email: info@lynchmotor.com
www.lynchmotor.com

Navigators & General

Tel: 01273 863420
Fax: 01273 863401
email: enquiries@navigatorsandgeneral.co.uk
www.navandgen.com

Nauticalia Boats

Tel: 01932 254844
Fax: 01932 254775
email: info@pushtheboatout.com
www.pushtheboatout.com

Pb Batteries (SE) Ltd

Tel: 01206 792449
Fax: 01206 860438
email: pbbatts@FSBDial.co.uk

Phoenix Fleet Ltd

Tel: 01692 670460
email: boats@phoenixfleet.com

Reading Marine Co

Tel: 0118 971 3666
Fax: 0118 971 4271
email: readingmarine@compuserve.com

Rivertime

Tel: 01628 777727
email: boating@rivertime.com
www.rivertime.com

Salter Bros

Tel/Fax: 01865 243421
email: Admin@salterbros.fsnet.co.uk
www.salterbros.fsnet.co.uk

STELCO UK Ltd

Tel: 01491 838304

Stelco Yachttechnik (UK)

Tel: 01603 737830
Fax: 01603 722117

Swancraft

Tel: 01491 836700

Thames Electric Launch Company

Tel: 01491 873126
Fax: 01491 872217
email: thameselectric@goring.co.uk
www.thameselectric.com

John Williams Boats

Tel: 01692 580 953
email: johnwboats@aol.com
www.johnwilliamsboats.co.uk



Lassoing a bollard

the first loop. Draw the left hand along again the same distance to form the second loop. Tie the loose end round the coil to keep it together.

- You may see boats with their ropes coiled in a ring on the deck. This is called cheesing-down, and is highly decorative, but totally useless for throwing the line.

Lock Tips

Locks are an integral part of our rivers and canals. They come in many different shapes and sizes, but the principles remain the same.

- Practise the art of lassoing a bollard. Coil the rope in your right hand. Take hold of the free end of the rope in your left hand, then throw the coil over the post or bollard. Be ready to quickly re-coil the rope when you miss the first time! Get everybody on board to practise this on the riverbank on a quiet afternoon when they are letting their lunch settle.
- When going upstream in a lock, always bring the end of the rope back down from the bollard to a cleat on your boat, then back to your hand. This is known as taking a turn, with the turn round the cleat taking all the strain if the boat should surge to and fro



Taking a turn round a cleat Photos: Emrhys Barrell

as the lock fills. As the water level rises you can take up the slack in your hand.

- Going down in a lock it is not usually a good idea to take this turn, as the rope can jam, and there is not usually so much load.
- If you are standing on the lock-side with the line in your hand, again take a turn round the bollard and back to your hand. This will allow you to take in or let out line, while still retaining control of the boat.
- If your boat is at the head of the lock, the water will be more turbulent, and you will have to take greater care. If there are no other boats, keep back down the lock. If you are in small craft, let larger boats in first.
- If you are in charge of raising the paddles or sluices, take care to do this gently or you will cause boats to surge to and fro.
- Small boats can hang on to the chains in a lock, but beware that these will be weedy and green. It is generally a better idea to take a rope round a bollard if you can.
- Watch the lock-keeper for instructions. They are in charge of the lock at all times, and you must follow their signals. They will always be helpful, but are not there to catch your lines unless you get into difficulties.
- If you are unsure as to your abilities to lasso a bollard, put a crew member ashore at the landing point to walk up to the lock and catch your lines. They should make themselves known to the lock-keeper, and make sure they are on the side he will be directing you to.

EBA Member Emrhys Barrell (Tel. 01491 873126) is the author of the Inland Waterways Manual, which covers all aspects of owning and handling boats on rivers and canals.

NOTICE BOARD



PRODUCT GUIDE

This edition of the magazine contains the annual guide to the products and services offered by our UK business members. The Product Guide is regularly updated throughout the year; to get the latest copy, contact the Secretary.



NEW ADVERTISING MANAGER NEEDED

This month we are saying goodbye to Gill Sauer, who has been playing a vital role in managing the advertising for Electric Boat News. We need someone who will be prepared to replace her. Volunteers should contact the Chairman, please.



STANDING ORDERS

If you don't already pay your annual £25 subscription by standing order, please consider changing to this method, as it makes the job of the Secretary (Barbara) very much easier. Why not change the next time it's due – your bank will need the following information:

The Electric Boat Association

Account No 4273 7084

Sort Code: 72 – 00 – 04

Girobank plc, Bootle, Merseyside, GIR OAA



WEB MASTER NEEDED

This is an appeal to anyone familiar with web pages. The EBA has a very simple site, without complicated gizmos, but which needs updating from time to time. If you can help, please contact the Secretary



WELCOME TO NEW MEMBERS

Name	Vicinity	Boat(s) where appropriate
PRIVATE MEMBERS		
G A Wells	St. Neots	Pug
Paul Clark	Reading	Shardeloe III
Rod Graham	Bideford	Carolann
Peter Snowdon	Austria	Salizada II
Nick Goldring	Reading	Silent Explorer
Steve Bissenden (welcome back Steve)	Watford	Poohsticks
Rod Saunders		Marlow
BUSINESS MEMBERS		
Elcon (Europe) Ltd		Reading

LETTERS

Farewell from Tony Ellis

After a second term as editor of around two years, the Winter edition proved to be my final copy. Unfortunately, because of personal pressures on my time – not least having a very demanding day job – the Committee and I have jointly agreed that I should hand over the task to a new editor.

I should like to take this opportunity to thank all the contributors during my watch who have been so generous with their knowledge and experience. I also offer my best wishes for the future of the EBA.

Tony

From Theo Schmidt

(This is the second part of Herr Schmidt's letter, commenting on Paul Lynn's articles about Solar Flair, which is continued from the last edition of EB News)

Paul Lynn further mentions the lamentable fact that commercial outboard motors have poor efficiency motors and propellers. This results because standard DC motors turn too fast for directly driven correctly sized efficient propellers and in order to save the cost of a special motor or a gearbox the manufacturers must downgrade both the motors and the propellers: the former turn too slowly and the latter too fast to be efficient. In spite of this,

the manufacturers' compromises can be quite good and it is difficult to improve matters even with specialist skills like the capability of rewinding motors or building propellers. We did realise dramatic improvements by fitting a Minn-Kota motor with planetary gears and a large propeller, but at a completely uncompetitive cost and the loss of the "weedfree" attribute. This motor was capable of propelling a small boat safely against Force 6 wind and waves with less than full electrical power.

I think it is easier and cheaper to build a custom inboard drive from scratch, perhaps using one of the excellent Lynch motors which are now available in smaller sizes. A good engineer can even attempt an outboard motor: here a good mounting and waterproofing are the most challenging. The main thing is to provide some measure of step-down gearing and choose a large enough propeller with a sufficient pitch. Conventional motor boat propeller-sizing methods fail at this, however suitable programmes for high-efficiency drives are available. I will be happy to send EBA members who have a computer and an email connection an appropriate program. This can be used to design an own propeller or to choose a good available one. Such custom drives do require more work than using or improving commercial outboard motors and are generally less practical than these, but the efficiency will be dramatically better and with the high cost of solar panels and batteries prove economical in the long run.

**Theo Schmidt, TO Engineering, Ortbuehlweg 44
CH-3612 Steffisburg Email:tschmidt@mail.mus.ch**

BOAT AND BREAKFAST



*Wagtail at Lechlade
Charging Point*



*Cambrai Lodge
Photos: Paul Wagstaffe*

Paul and Pat Wagstaffe, who won the EBA Emsworth Trophy in 1991 for their long distance Thames cruise aboard their launch *Wagtail V*, offer this very useful guide for electric boating on the Upper Thames. When we were planning *Wagtail V* we agreed that on longer voyages we would spend every third night in a B and B with a hot shower and home comforts. We have visited and used a variety of accommodation close to most of the Environment Agency Charging Points. The list is not exhaustive and we hope that other EBA members will add to it with their own experiences. The locations mean that it is possible to cruise up to Lechlade and back in an open electric boat or to launch at Riverside Marina at Lechlade and voyage downstream with the current and increased range between recharges.

1. LECHLADE LOCK CHARGING POINT

Tel: 01367 252309 Cambrai Lodge, Oak Street, Lechlade, GL7 3AY 01793 762527 Mobile 0860 150467 Mr Tichener Modern house with en suite available. One room has a four poster Bed. 10 minutes walk from Lock. 5 Minutes from Riverside Marina which also has electric points.

2. SHIFFORD LOCK EA CHARGING POINT

Tel: 01367 87247. Chimney Farmhouse, Chimney on Thames, Aston, Bampton OX18 2EH 01367 870279 Mrs Kinch 15 minutes walk along path from lock to Farmhouse. No evening meal but Trout Inn with mooring 30 minutes away by water.

3. The Ferryman Inn

Bablock Hythe, Northmoor, Nr Witney, Oxon, OX8 1BL 01865 880028. 7 modern bedrooms. Evening and lunchtime meals. Mooring on frontage – mind the shallow area. 25 metre orange outdoor lead will reach 13-amp socket. 3-pin socket in Disco/Function room.

4. Bossoms Boatyard Ltd

Binsey Lane, Medley, Oxford OX2 0NL 01865 247780 Tom Ballance. Electric Boat Builder. Electric Point by prior arrangement. 20 minutes walk to City of Oxford with a wide range of accommodation. **Tourist Office Tel No. 01865 726871.** 8 minutes to The Perch Inn. Meals.

5. SANDFORD LOCK EA CHARGING POINT

Tel: 01865 775889 Pub at site – Meals only. 15 minutes walk to Oxford Four Pillars Hotel **01865 334444 NB:** Mooring is adjacent to a public footpath and best recommended for daytime charging while you have a meal.

6. Upper Reaches Hotel, Abingdon

Thames Street, Abingdon **01235 522556** High-Class Hotel-restaurant. Other EBA Members have stayed here and run power out to the hotel mooring.

7. BENSON LOCK EA CHARGING POINT

Tel: 01491 835255 10 minutes walk to B and B – Brookside, Brook Street, Benson, OX10 9JJ. **01491 838289**
Mob 07979 813302 Clive and Jill Folley

8. GORING LOCK EA CHARGING POINT

Tel: 01491 872687. 5 minutes walk to Miller of Mansfield, High Street, Goring **01491 872829** Accommodation and meals.

9. SHIPLAKE LOCK EA CHARGING POINT

Tel: 01189 403350 On the lock island. Tea room at lock (daytime) 15 minutes walk to Shiplake Station with train access to Henley or Twyford. Henley Tourism Office **Tel via 0906 4700867**

10. COOKHAM LOCK EA CHARGING POINT

Tel: 01628 520752. 15 minutes walk to Cookham High Street. Guest House/ Restaurant – Spencers, The Pound, Cookham. **01628 522793**

We will try to identify accommodation near the lower EA Lock Charging Points in a later edition of EB News.
Do any Members have any other suggestions?



Chimney Farmhouse



Miller of Mansfield

NOTES

- Do please drive up the river and check out the accommodation yourselves to ensure it meets your own requirements. Lechlade is a pleasant 90-minute drive from the Maidenhead area.
- The EA Charging Points can be booked with the lock keeper. You need to plan to arrive at least 30 minutes before the lock keeper goes off duty. They offer two blue 16 amp outdoor sockets.
- Take at least one, ideally two, 25 metre orange extension leads with blue 16 amp connectors at each end plus a caravan style short connector from a blue 16 amp fitting to a standard 13 amp household fused plug (obtainable from chandlers and caravan suppliers).
- There are other boatyards and waterside hotels and restaurants that can offer electrical connection if you ring ahead and ask. There is a full list in *THE RIVER THAMES BOOK* by Chris Cove Smith. New Edition 2003.
- The B and B will have local Taxi Numbers if you want to break your journey or need supplies.

TECHNICAL REPORT

Electric Points 'Volts, amps, watts – and horses'

In the first of a series of short articles on technical aspects of electric boating, EBA Technical Officer Paul Lynn jogs memories about some basic units of electricity and power.

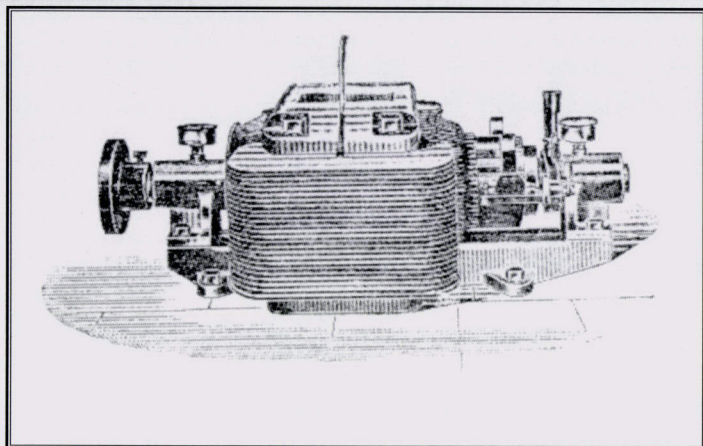
We hop on board, flick a switch, and begin cruising with 'no noise, pollution, or fuss'. But what is going on below deck, and how does electricity from the batteries actually work for us? From time to time it's helpful to remind ourselves of a few basics.

Current flow in an electric circuit is often likened to the flow of water in a pipe. When the tap is turned on, pressure forces water through the pipe – the greater the pressure, the greater the flow. Similarly an electric battery provides electrical 'pressure' measured in volts (V) which causes current measured in amps (A) to flow through a motor or other device when a switch is closed.

The generation of useful power requires both pressure *and* flow, in other words both volts and amps. Electrical power, measured in watts (W), is simply given by their product, thus $W = V \times A$. For example a 12V battery supplying a motor with 50A is producing $12 \times 50 = 600W$. So is a 60V battery bank which supplies 10A. There are many possible combinations of volts and amps for a given level of power.

Although an electric boat may have many electrical devices and services (lights, pumps, kettle ...), most of the battery power is used for propulsion. A small electric canoe might manage rather well on 240W using a small motor drawing 20A from a 12V battery. A 20-ton narrowboat cruising at 4 mph (6.4 kph) might need 3600 watts, or 3.6 kilowatts (kW), which could in principle be provided by taking 300A from a large 12V battery bank. However in practice we invariably achieve higher power ratings by using more 'pressure' and less 'flow' – more volts, less amps.

There are two main reasons for this: large currents are hard to switch and control; and they demand fat cables if power losses in the cabling are to be kept within acceptable limits. Fat cables are expensive and difficult to install. So our narrowboat motor would be better designed to obtain its 3.6kW by taking, say, 50A from a 72V battery bank. In fact the power loss in any cable is proportional to the square of the current it carries. So in this example, by reducing the current from 300A to 50A (a factor of 6), we would reduce cable loss between batteries and motor by 'six-squared' or 36 times. This is clearly a big improvement. About the only disadvantage is that the higher system voltage (72V rather than 12V) may cause safety



concerns because voltages above about 50V are potentially lethal, especially in a damp environment.

Note that the system voltage can be increased by connecting a number of batteries 'in series', like daisies in a daisy chain. For example, we may obtain 72V by connecting six 12V batteries in this way.

Our examples of 240W of power for the small canoe and 3.6kW for the narrowboat are rather extreme, and most EBA members' boats cruise happily at intermediate power levels. However we must remember that the power required to drive any electric boat through the water is heavily dependent on boat speed. If you normally cruise at 4 mph (6.4 kph) and take 1 kW from the batteries, raising the speed to 5 mph (8 kph) might typically require about 1.8 kW. We generally pay a big penalty for quite modest increases in speed. This has an important implication. If your batteries are getting low and you are worried about not reaching your destination, reduce speed and take it more gently!

And how about the 'horses' in my title? Well, the main point is that any value of electrical power has a precise mechanical equivalent, traditionally measured in horsepower (HP). In fact 746 watts equals 1 HP. So if your motor takes 1.5kW from the batteries, it is consuming almost exactly 2HP. The electric canoe, running happily on 240W, consumes just under one third of

one horsepower. Why, then, are most boat petrol/diesel engines rated in HP whereas our electric ones are rated in watts or mechanical thrust?

Could it be that manufacturers are keen to discourage comparisons? I hope to say more about engine power, thrust and speed in a future article.



NEWS FROM THE STOUR

RIVER STOUR NAVIGATION

In February the Environment Agency announced the long-awaited outcome of the public consultation on options for the future development of the River Stour navigation. Their decision is to support development of the river for use by light craft only i.e. canoes, small sailing craft and rowing boats which can be manually transported around river structures. However, the Agency agreed that a further study into the possible options for future development of the river for use by steam or electrically powered vessels would be desirable.

EBA Chairman John Hustwick has asked that the EBA be allowed to have a positive role in the assessment process and pointed out that electric trip boats are already operating on the Stour. In reply Anglian Waterway Manager, John Adams, has said that he would welcome the involvement of the EBA in his review of electric boat technology, which might become an Agency R & D project, and which will take account of the experience of electric boat only waterways elsewhere in the world.

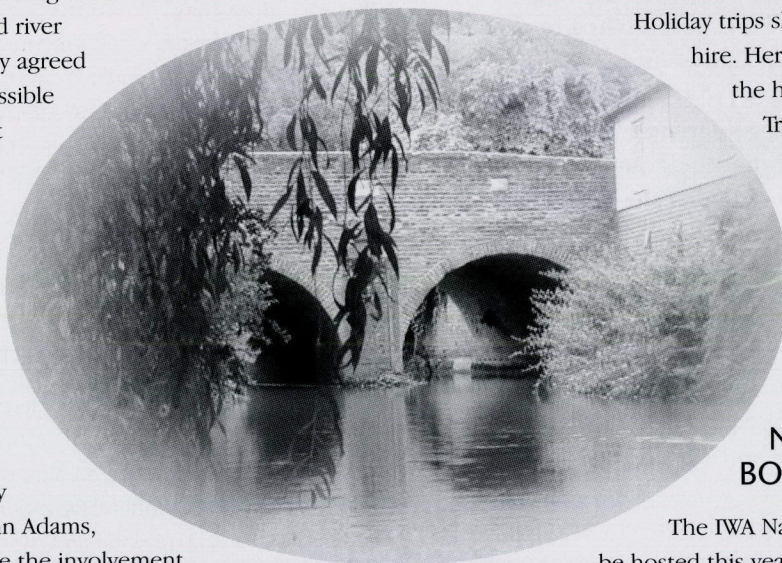


Trusty II at Flatford Photo: River Stour Trust

ELECTRIC BOAT TRIPS ON THE STOUR

Easter weekend marks the start of boat trips on the Stour at Flatford and Sudbury. *Stour Trusty II*, a Frolic 21, is the only powered craft licensed to operate on the lower Stour between Stratford St Mary and Brantham, a distance of approximately 5 miles. In addition to her regular Sunday and Bank Holiday trips she is also available for private hire. Her sister ship, *Rosette*, is based at the headquarters of the River Stour Trust in Sudbury.

For more information contact: The River Stour Trust, The Granary, Quay Lane, Sudbury, Suffolk, CO10 2AN Tel.: 01787 372171



River Stour
Photo: Environment Agency

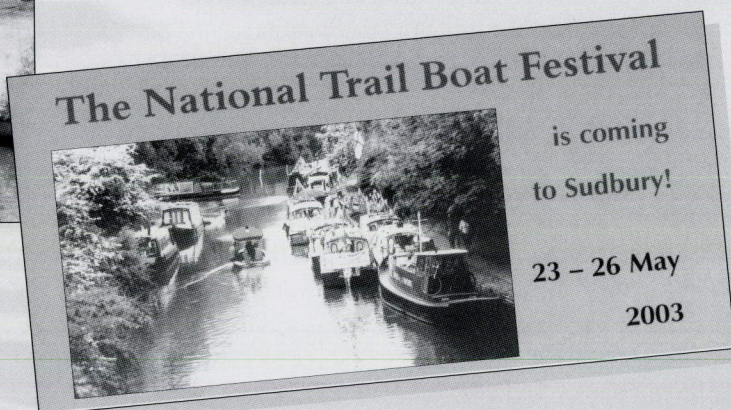
NATIONAL TRAIL BOAT FESTIVAL

The IWA National Trail Boat Festival will be hosted this year by the River Stour Trust at Sudbury over the whole of the late May Bank Holiday weekend from 23rd to 26th May.

The emphasis on the Saturday will be on boating and water-based activities, with an illuminated procession in the evening. On the Sunday the focus changes to a Country Fayre alongside the boating and Bank Holiday Monday will be a Family Fun Day.

The Trust say they are particularly keen to see steam and electric boats attending the festival.

For more information contact the Trust Secretary Alan Davison on 01473 310923.



CONFERENCE CALL

The EBA was represented at the recent international All Electric Ship Conference in Edinburgh. John Hustwick reports.

AES₂₀₀₃

In July last year Stephen Hames of British Waterways and myself, representing the EBA, were invited to prepare papers for the All Electric Ship Conference, which was to be held in Edinburgh in February 2003. We were also asked to present these papers at the conference. The organisers of the conference had agreed that the event in 2003 was all about, as the title says, 'broadening the horizons' and this meant including papers and presentations about electric boats and electric propulsion developments on inland waterways. As it transpired, Stephen Hames and I were the 'broadened horizons'.

The conference which is a biannual international event – the last one was held in Paris – was organised by The Institute of Marine Engineering, Science and Technology (IMarEST) and the Société de l'Électricité, de l'Électronique, et des Technologies de l'Information et de la Communication (SEE) and is a forum for everyone involved in the study, development and manufacture of electric propulsion and electrical systems for all types of ships, both commercial and naval vessels. Up to now the conferences had concentrated on sea going vessels and developments in the associated technologies.

However, the organisers had realised that there was an opportunity, perhaps even a need, to demonstrate to the more traditional thinking organisations taking part that there was in fact another area which should be explored, namely the small craft and inland waterways market. This of course was a field which many of them knew little or nothing about and so it was our opportunity to enlighten them on the subject. By the way, I should point out that in general their idea of an 'all electric' ship means that it is actually diesel-electric, i.e. a diesel engine drives a generator which produces the power for the propulsion motors and all the other electrical energy requirements on board. For many of our members, 'all electric' means just that, a battery and/or solar panel provides the power without the aid of a diesel engine.

The conference attracted approximately 280 delegates from around the world – places as far apart as Japan, Brazil, USA, Nigeria, Scandinavia and of course Europe and the UK. The delegates represented universities and scientific centres, ship classification societies, navies, defence and shipbuilding organisations and ship owners. Well known names such as Rolls Royce plc, BAE Systems, ABB, Alstom, Siemens and P&O had various delegates attending the conference.

In order to get a wide cross section of papers presented over the 2 days of the conference it was split into parallel sessions, two each

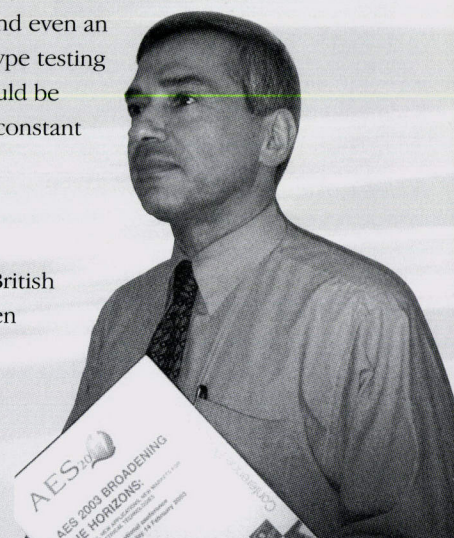
morning and two each afternoon covering different groups of topics. Each session was chaired by a different person and as it turned out our session, called Inland Applications, was chaired by David Mattick of Rolls Royce plc who happened to own a narrowboat, which I might add was diesel powered! However, he was very interested in the concept of electric boats and he became even more interested when I mentioned *Switched Off*. Tony and Gill Sauer's electric narrowboat. From the questions asked and comments made by delegates – there were a number – it seems that a lot of the 'big boat' people cannot get their heads around the fact that it takes very little energy to propel a boat on an inland waterway. One almost had the impression they thought we were defying the laws of hydrodynamics, until of course we mentioned the example of barges in the early days being pulled by one horse. Mind you, I think some don't look at the horsepower of a 'hay burner' as being the same as an 'oil burner'!

I am not intending to give a detailed account of our papers, other than to say that my paper gave an overview of the types and sizes of small craft in the leisure market, the history and the reasons for going electric and Stephen Hames's paper gave a review of what British Waterways had done and were going to do with electric propulsion, including the current development work being undertaken. If anyone particularly wants to see the complete papers, they should get in touch with me and I will arrange to send them copies. The papers have been printed in the conference proceedings and will also be put on CD-ROM by the IMarEST.

In summarising, I think we were lucky to have the opportunity to contribute to the conference and, more importantly, promote our type of electric boats in front of a very large marine based audience. Approximately a quarter of the delegates attended our presentations, which was good to see; however every delegate had a copy of the EBA leaflet in their delegate pack and therefore should at least know who we are if nothing else. It is hoped that inland waterways will be seen as an area where there is plenty of scope for market development, both for new boats and conversions, and even an area where small scale prototype testing of equipment and systems could be carried out in calm and fairly constant conditions. Only time will tell how much impact we made at the conference.

Finally, I would like to thank British Waterways and especially Helen Webb at Watford, for helping put my presentation material into Power Point ready for the conference.

John Hustwick



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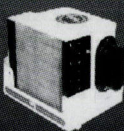
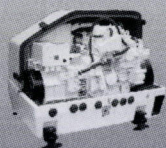
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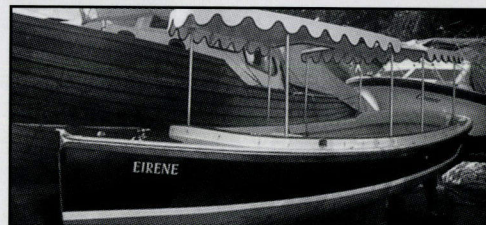
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SAVE THE MARY GORDON



*The Mary Gordon in 1944
Photos: Peter Harrold Collection*

The 'Mary Gordon' was an electric pleasure boat, typical of many which operated on the River Thames and numerous municipal lakes in the late Victorian and Edwardian era. She is believed to be the oldest original electric launch still in existence, and is in urgent need of restoration. The Mary Gordon Trust aims to return her to working order as one of the few remaining examples of this important part of our maritime heritage and to use her to carry passengers once again on Britain's oldest canal, the Fossdyke. Peter Harrold, Chairman of the Trust, tells her story.

The 'Mary Gordon' was built in 1898 on the Thames of teak planking on oak frames by Sergeants, boatbuilders of Eel Pie Island. At that time electric launches were very popular on the Thames and she was one of the largest. She was ordered by Leeds City Council and named after the wife of the then Mayor of Leeds. Taken to Yorkshire by steam lorry, she was launched on Roundhay Park, Leeds in 1899 where she plied for trade until about 1923. She then worked on the Wakefield canal, and during this time was fitted with an aeroplane engine and propeller from a Blackburn Bomber, then being developed at Brough, East Yorkshire (now British Aerospace). This was mounted on a cradle on the stern, with the huge propeller completely unguarded!

In 1943 Frank Baines, Esmond Bates and Mark Woodcock brought her to Lincoln in a wartime trip which took 5 days and required 26 different pieces of paper from the War department. The first two gentlemen are still alive and are providing the Trust with

a wealth of information regarding this remarkable craft. By the time she was moved to Lincoln she had been fitted with a marinised model T Ford engine, running on petrol/paraffin. She took many children on trips between Lincoln and Gainsborough, including free trips on VE. day. To work the Tidal Trent, Frank fitted a second T Ford engine and the wing mountings are still evident. However, the sandy River Trent took its toll on the prop shafts and trips were soon restricted to the Fossdyke canal, and her power reverting to a single engine.

In 1948 she was sold to the legendary William 'Skipper' Ross Hendry and it is during the period of his ownership that most people remember her, taking thousands of Lincoln folk between Brayford Pool, Lincoln and the Pyewipe Inn or Saxilby. Many tales are still told of the colourful character of this old skipper. Passengers would be told on arrival at the Pyewipe that the 'Mary Gordon' would be returning to Lincoln in 20 minutes. Often, over an hour later passengers would be waiting on the boat whilst the skipper was still partaking of a 'sample'. On at least one occasion, a passenger had to be recruited to steer the boat back to Brayford Pool!

The landlord at the Pyewipe began charging a penny deposit on bottles and glasses, and the old skipper soon realised that this could be a lucrative sideline. 'All aboard! Ladies and gentlemen bring your glasses and bottles with you' was the cry and on the next trip, he would take back all the empty glasses and bottles and claim the deposits. For the next twenty years or so the 'Mary Gordon' plied between Lincoln and Saxilby, giving many Lincoln children their first experience of a boat trip. Many of those children have fond memories of this important part of their childhood.

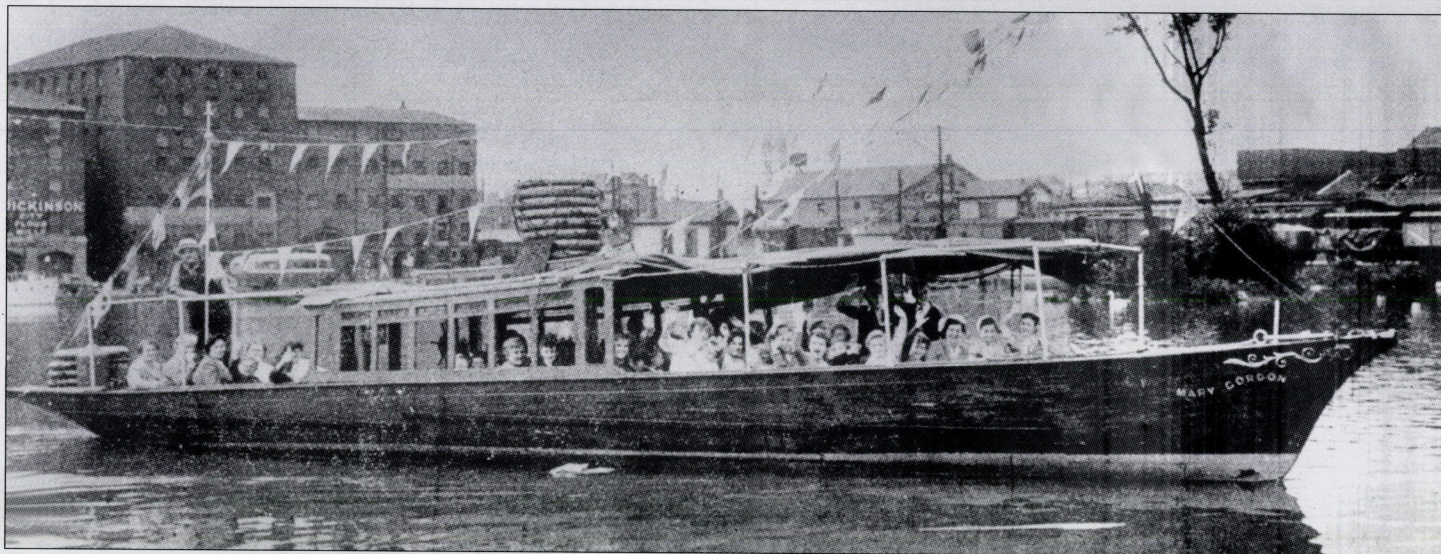
Dressed overall, the boat was a regular feature at water carnivals through the 1960's. Skipper Ross was unfortunately knocked down by a car, from which he never properly recovered, and he died shortly afterwards. In about 1969 the

boat was sold to Tony Ellis (not our previous Editor) who carried on the trips for a while, before selling her again to a local consortium who planned to take her to London. They got as far as Nottingham, where she eventually sank and lost her cabin top and many of the original fittings.

In the late 1970's Graham Mackereth rescued her from dereliction on the Trent. In the 1980's she was taken by road to Hartlepool, where British Ship-building apprentices undertook some restoration. This included replacing most of the teak



*Skipper Ross with small boys on Brayford Wharf in front of the Mary Gordon
Photo: Lincolnshire Echo*



The Mary Gordon in the Brayford Pool in 1948

planks below the waterline with larch, and fitting new oak ribs. Leeds City Council was sponsoring the work with a view to her being returned to service on Roundhay Park. The scheme was wound up following the cessation of shipbuilding on the Tees, and the 'Mary Gordon' was due to be burnt as there were no facilities to store her, and her ownership was uncertain.

Again she was rescued by Graham Mackereth and brought back to his boat yard at Preston Brook, Cheshire. In May 1999 Graham offered her to the people of Lincoln. At a public meeting at the Pyewipe Inn over 40 people turned up to express their interest in restoring the 'Mary Gordon' and seeing her back on the Brayford once more. The Friends of The Mary Gordon was formed to maintain public interest by way of newsletter for a nominal annual subscription, and also help with fund raising and publicity.

The boat was purchased from Graham Mackereth for £1 and was brought back to Lincoln by KDJ Haulage, and craned into position by Abba Plant Hire Ltd, both companies giving their services free of charge. Recognising the 'Mary Gordon's' historic importance, she has been included in the National Register of Historic Vessels – the equivalent to a building being given listed building status and a notable achievement.

The Mary Gordon Trust – aims and objects

A charitable body, The Mary Gordon Trust, has been formed with the aim of restoring the craft to her original state as authentically as practicably possible, for use by the public – especially the children of Lincoln and Lincolnshire.

Restoration

Steve Mills of Mills Dockyard, Sawley has provided us with a detailed estimate (£148,000) for renovation to a very high standard. The cabin will be in mahogany with a centre cabin similar to the

original. A modern battery driven electric motor and control unit will be installed.

Support

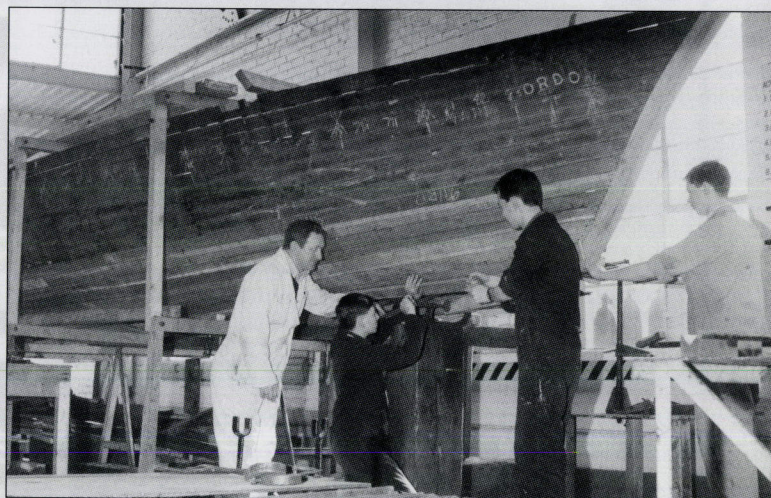
The project is fully supported by British Waterways, Lincolnshire City and County Councils and Brayford Trust. Lincolnshire County Council has awarded a grant of £4,000 and the Trust has raised over £20,000 in cash and benefits in kind. With the help of the Lincoln City Council lottery officer, an application is being made to the Heritage Lottery Fund for help towards the restoration costs. This is a time consuming process, but the application is nearly complete.

To find out more, visit the website:

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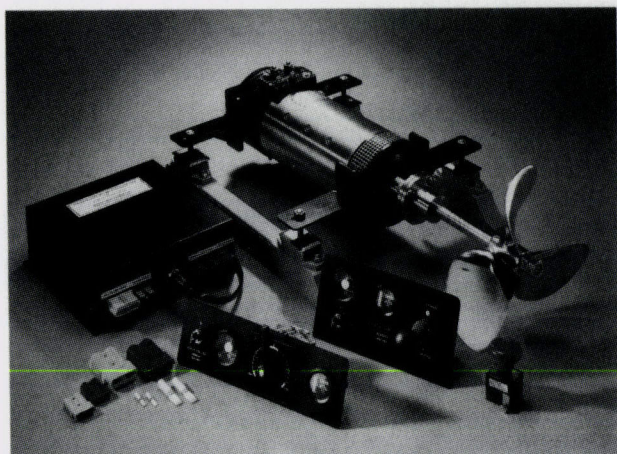
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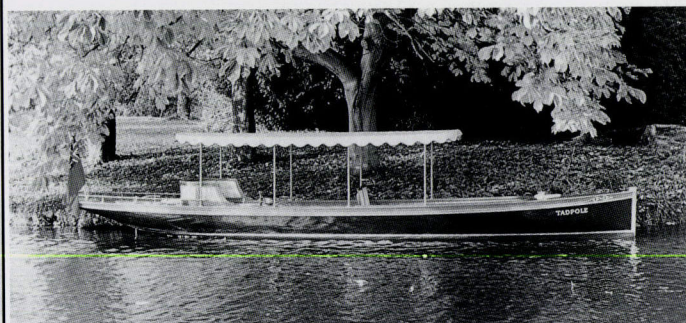
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