

# ELECTRIC BOAT *News*

The Journal of the Electric Boat Association

Volume 8 Number 3 Autumn 1995

ISSN 0969-031X



**EBA SUMMER MEETING  
AUSSIE SOLAR VOYAGES  
THAMES E-BOAT HISTORY  
MAIDENHEAD PAGEANT**




# USE OUR CRAFT TO POWER YOURS

Chloride Motive Power batteries and chargers. The ultimate in clean, quiet power for dependable performance in electric boats. The combination of traditional skills, advanced technology and unrivalled support services that have made Chloride Motive Power No 1 in Europe. The perfect choice for every boat afloat.

**CHLORIDE  
MOTIVE POWER**  
Batteries · Chargers · Service

CMP Batteries Ltd (Sales Dept), Salford Road, Over Hulton, Bolton BL5 1DD  
Telephone: 01204 64111 Fax: 01204 62981

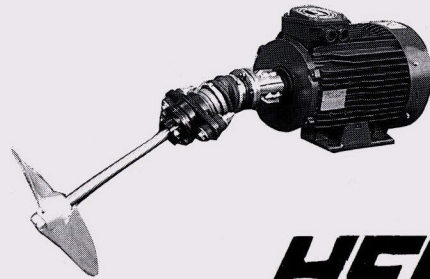
DEPENDABLE POWER FOR A WORLD ON THE MOVE 

## 380 Volt AC Propulsion

# 'elektra'

## Diesel Electric Drive and Powergeneration in ONE

- ★ Almost unlimited power . . .
- ★ Almost unlimited range . . .
- ★ AC comfort on board . . .



# HFL

Further details from:  
**HFL Marine International Ltd**  
**HFL House, Lockfield Avenue**  
**Enfield, Middx, EN3 7PX**  
**Tel: 0181 805 9088 Fax: 0181 805 2440**

## SILENT RUNNING . . . . .

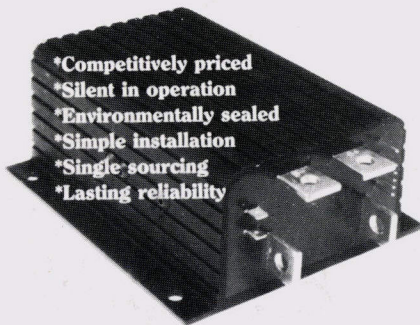


### Speed Controllers from Curtis

*YOUR CAPTAIN'S CHOICE  
FOR ELECTRIC LAUNCHES AND NARROW BOATS*

**From 125 Amps to 600 Amps  
From 24V to 120V**

*ON THE GRAND UNION CANAL  
OR THE NORFOLK BROADS*



- \*Competitively priced
- \*Silent in operation
- \*Environmentally sealed
- \*Simple installation
- \*Single sourcing
- \*Lasting reliability

# CURTIS

WORLD LEADERS IN DC MOTOR  
SPEED CONTROLLERS  
Curtis Instruments (UK) Ltd, 51 Grafton Street, Northampton  
NN1 2NT Tel (01604) 29755. Telefax (01604) 29876



# CLASSIC BOAT

M A G A Z I N E

Wishes all Electric Boat sailors a  
direct current and is pleased to offer  
you a special subscription rate

- |                             |   |
|-----------------------------|---|
| UK                          | <input type="checkbox"/> £25.00 - save £10.40 (normally £35.40) |
| Overseas surface            | <input type="checkbox"/> £35.00 - save £14.50 (£49.50)          |
| Europe & Eire (Airmail)     | <input type="checkbox"/> £41.00 - save £10.50 (£51.50)          |
| Rest of the World (Airmail) | <input type="checkbox"/> £56.50 - save £19.00 (£75.50)          |

Mr/Mrs/Miss \_\_\_\_\_ Please complete in block capitals

Address \_\_\_\_\_

Postcode \_\_\_\_\_ Tel. No. \_\_\_\_\_

Please commence my subscription with the \_\_\_\_\_/next available issue

I enclose a cheque for £ \_\_\_\_\_ payable to Link House Magazines Ltd.

Please charge my Access  Mastercard  Visa  Amex  Diners

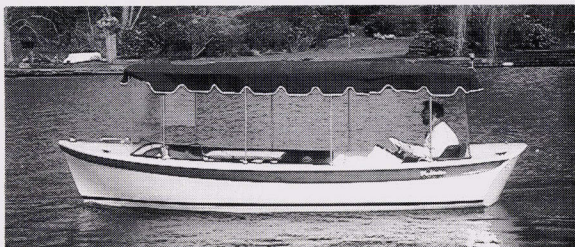
Card No. \_\_\_\_\_

Expiry Date \_\_\_\_\_ Signature \_\_\_\_\_

Please return this form to: Classic Boat, Subscriptions Department,  
120-126 Lavendar Avenue, Mitcham, Surrey, CR4 3HP.

ebn 1

*The wind in the willows . . .  
is all you will hear*



## Voltaire 18

*The perfect electric launch  
for rivers and lakes  
Up to 8 hours cruising on one charge  
Seats 8 adults comfortably  
Easily towed behind a family car*

The Thames Electric Launch Company  
PO Box 3  
Goring-on-Thames  
Reading RG8 0HQ  
Tel: 01491 873126 Fax: 01491 872217

# COLTON

E. C. CONNECTORS CO. LTD.  
PEGASUS WORKS,  
329 FRONT LANE,  
UPMINSTER, ESSEX RM14 1LW.  
Tel: (01708) 226485.  
Fax: (01708) 221191

E. C. CONNECTORS CO. LTD  
6 HAINGE ROAD,  
TIVIDALE, WARLEY,  
WEST MIDLANDS B69 2NB.  
Tel: 0121 522 4112.  
Fax: 0121 522 4174.

## ELECTRONIC CONTROL SYSTEMS

**ELECTRONIC CONTROL EQUIPMENT FOR:  
ELECTRIC BOATS, MINING LOCO'S, FORK-  
TRUCKS, MILKFLOATS AND ALL D.C. POWERED  
ELECTRIC VEHICLES.**

**AGENTS FOR:  
SEVCON TECH/OPS LTD., ANDERSON POWER PRODUCTS  
(Battery Connectors), REMA BATTERY CONNECTORS.**

**REPAIRS TO CONTROL EQUIPMENT CARRIED OUT IN OUR  
OWN FACTORIES INCLUDING:  
SEVCON, CABLEFORM, GENERAL ELECTRIC and  
LANSING BAGNALL.**



CASTLE NARROW BOATS  
USE SEVCON ELECTRONIC  
CONTROLLERS—  
Supplied by COLTON

## EBA CALENDAR 1995

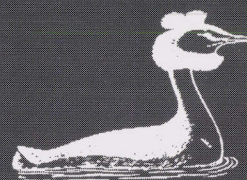
Some of the events which may be of interest to EBA members.  
The EBA may be present at some of the events,  
perhaps with its own stand.

- SEPT 2** Cookham Regatta. Parade of Boats  
**SEPT 10** Broads Rally  
**SEPT 15-23** Southampton Boat Show  
**SEPT 27-28** *Move Electric '95* Conference & Exhibition, Trentham Gardens, Stoke-on-Trent  
**SEPT 29-30** *Citilec* Demonstration of Electric Vehicles, Oxford
- 1996**
- JAN** London International Boat Show  
**MARCH** EBA Start-of-Season Dinner  
**MAY** Nottingham Boat Show  
**MAY 11-20** International Rally and Competitions, Bordeaux  
**JUNE** Ninth Wargrave Rally  
**AUG** Traditional Boat Rally, Henley  
**AUG 24-26** IWA National Waterways Festival, Windmill End  
**AUG 31** Cookham Regatta, Parade of Boats  
**SEPT** Broads Rally  
**SEPT** Southampton Boat Show

Notice of other events to Edward Hawthorne, please,  
on 01628 521606

## SPONSORS

Electric Boat News has been  
published thanks  
to generous  
sponsorship  
from  
**Eastern Electricity.**



Electric Boat News is published quarterly by the  
Electric Boat Association.

No material from it may be reproduced or reprinted without permission.  
Whilst we take every care to ensure the accuracy of the contents, the  
EBA cannot be held responsible for any errors which may occur, or for  
any actions that might be taken as a result of this material. Also, views  
expressed in the magazine are not necessarily those of the EBA.

Electric Boat News welcomes contributions from readers and members.  
If you have anything you think might be of interest, please send it in.  
Bear in mind however that due to circumstances sometimes beyond our  
control, we cannot be held responsible for any damage or loss which  
may occur to this material.

Items of interest include letters, reports on rallies or events, reports of  
particular cruises or trips, articles or advice on building or running  
electric boats, and reports on items of equipment. We also welcome  
manufacturers reports on new items of equipment or boats.

Printed by: Headley Brothers,  
The Invicta Press, Queens Road, Ashford, Kent.

# The Journal of the Electric Boat Association

Volume 8 No. 3 Autumn 1995

**Editor:** Roy Devereux, 50 Upper Park Road, Camberley, Surrey, GU15 2EE (Phone/Fax: 01276 63009; Email: dex@cix.compulink.co.uk)

**Chairman:** Phil Horsley, 1 Kipling Close, Thatcham, Newbury, Berks RG13 4AY (Phone/Fax: 01635 868265)

**Secretary & E B News Advertising Manager:** John Gardner, 8 Glebe Wood, Bagshot Road, Bracknell, Berks RG12 3SD (Phone/Fax: 01344 483841)

**Treasurer:** Peter Cook, 'Straw Bonnet', Spade Oak Reach, Bourne End, Bucks, SL8 5RQ (Phone/Fax: 01628 521899)

**Membership Secretary:** Mrs Pat Davis, Whytegates, Berries Road, Cookham, Berks, SL6 9SD (Phone: 01628 521189)

**Users' Group Chairman:** Edward Hawthorne, Waters Edge, Riversdale, Bourne End, Bucks, SL8 5EB (Phone/Fax: 01628 521606)

**Founder editor:** Kevin Desmond

Cover pictures: *Main picture: Boys of Prince Alfred College, Australia, in 'Sunboat' in which they cruised 2,000 km in 28 days under solar power. (Article on page 4-5). Picture by Malcolm Gray, Designer and Project Co-ordinator.*

*Smaller picture: Members at the EBA Summer Meeting in June.*

## The Chairman writes ...

Hello again,

What a lovely summer we are having. Jill, my wife, and I have certainly been making the most of it. Back in June we took part in the Maidenhead Festival and River Pageant. At the kind invitation of Pat and Paul Wagstaffe, we joined *Wagtail V* and entered the pageant dressed in period costume. We also very much enjoyed watching the re-enactment of Gregory's painting at Boulter's Lock (see page 3) which was so well organised by fellow committee members Pat and Simon Davis.

We have also had enjoyable days with Emrhys and Linda Barrell on board their new *Electron* and also with Tom Ballance on his recently restored *Plover B*.

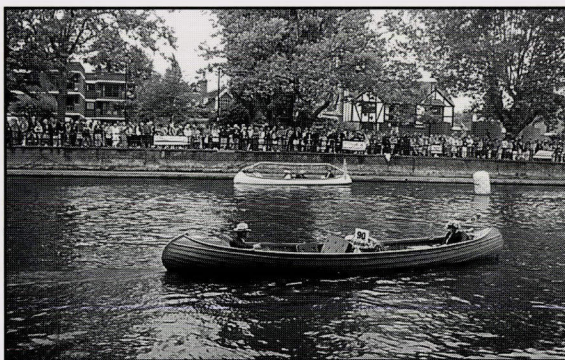
The Association's Biennial General Meeting was held in June and that was another good day with lots of interesting conversation and trials of electric boats. The turnout was a little disappointing but we will hope for stronger support next time - it does help us to have your backing and to hear your views.

Don't forget the items on the calendar on the opposite page - particularly the Broads Rally and the Move Electric Show. And don't forget the endurance and speed challenges which will need competitors.

Enjoy this issue of *E B News* and carry on enjoying your electric boating,

Your Chairman,

*Phil Horsley*



*Snap! Two electric canoes, Gena and Libelula, take part in the Maidenhead River Pageant*

## ... and from the editor

All editors are pleased to hear from their readers and I am no exception. *E B News* reaches far and wide these days and I receive correspondence from all over the world. In one period of 24 hours recently I had a fax from Hong Kong, a phone call from Switzerland, an article and pictures in the post from Australia and an electronic mail message from - well, I don't know where, actually, because e-mail addresses don't give much indication of where they come from (see mine, above!).

As well as correspondence from members, the *E B News* editorial office also receives copies of a number of 'sister' publications. The American EBA regularly sends copies of their bi-monthly newspaper-style *Current*, and the Dutch Association has put us on their circulation list for *Electrisch Varen* - from which, as regular readers will know, we frequently quote (translated) items. The editor of *Batteries International* sends us his magazine and the Electric Vehicle Association regularly posts their useful press cuttings service keeping us up to date with all mentions of electric propulsion in the popular and technical press. Someone has even given our name to the Denver Electric Vehicle Council (whose address, oddly, is Boulder, Colorado) and they too send us their monthly newsletter.

Our thanks to them all. As I say, we can never have too much!

*Roy Devereux*

# SUMMER MEETING 1995

from a Special Correspondent.

The morning of June 3rd dawned dull and drizzly but, as usual, hope springs eternal and members were soon congregating at Hamble Mill Marina, where, by kind permission of Peter Jones, the marquee had been erected and the caterers were hard at work setting up for lunch and meanwhile serving coffee. Any optimism we may have earlier had about the weather was unfounded. As the day proceeded, the

editorial quality of the *News*. The increased size of the Summer issue had been possible since there was plenty of news to report and John Gardner had been successful in increasing our revenue from advertising, thus covering the additional costs.

Sadly, four members of the Management Committee have found it necessary to resign due to changing personal and business commitments, so we must thank Gillian Nahum, Fraser Brown, Dennis Tye and Stephen Thackray for all their efforts through the years. We welcome Peter Cook who is taking over as Treasurer, along with Jim Keating, David Higgins and Derek Chamberlain who nobly "stuck their hands up" at the appropriate moment. The remaining committee members were returned, unopposed.

We are active with the Parliamentary Waterways Group and have established dialogue with electric boat associations in the USA, Holland and France.

The circulation of the *News* is steadily increasing and we hope, this year, to be able to place the journal with library reading rooms, canal societies, etc. Please feed any ideas you may

have to John Gardner. We are working on the basis that every reader of the *News* should be thought of as a prospective Member.

Finally, we will soon have a very attractive Association tie, part of the proceeds of which will be donated to the Viscountess Bury restoration.

Our User Group Chairman, Edward Hawthorne, gave both an apology and a welcome. He apologised for Percy Gick who is recovering from knee surgery but welcomed Derek Chamberlain who has been in hospital and was in fact released for the day to attend! Edward reiterated the comments about our efforts with overseas associa-

tions and the steady increase in our overseas membership. He also reminded members of the availability of our series of Information Sheets. These were available at the meeting and can be obtained from John Gardner.

Edward asked members for their ideas for a winter meeting, the last having been cancelled due to lack of interest. Was it too serious?, should it simply be a social occasion? Edward would welcome your views.

New organisers are needed for the Wargrave Rally; any offers? We hope to stage an endurance record contest at the Broads Rally in September. The rules have yet to be defined, suggestions again would be welcomed. In a similar vein, we want to organise a new world record speed attempt; a cross channel (there and back) attempt and a solar powered long distance record, more of which later.

During the Meeting, two awards were made. Gillian Nahum received the St. Davids Trophy from Marjorie, Viscountess St. David for her long time contribution both to the industry and to the Association. Jack Henley received the Emsworth Trophy from Edward Hawthorne for his epic voyage of 172 miles through 60 locks on the Thames in his electric canoe, *Cymba* (reported in the Spring 1995 edition *E B News*).

At the conclusion of the formal business, there was a short, but lively question and answer session and members and guests enjoyed a buffet lunch and a drink or two.

Notwithstanding the unremitting weather, several boats were to be seen on land and in the water and our thanks go to those who brought vessels for the occasion.



Gillian Nahum is presented with the St David's Trophy by Marjorie, Viscountess St. David.

drizzle became "persistent precipitation!".

Nevertheless, a number of members and guests turned up and we were soon underway with a brief Biennial General Meeting. Our Chairman, Phil Horsley, reported that whilst we have 12 Trade and 148 Private members, our membership has remained static since 1993 and asked all present to help in the drive for new members.

Phil went on to draw attention to our finances which, with a static membership and the probable loss of our sponsorship from Eastern Electricity, need a boost. Nevertheless, we shall not be reducing our commitments, the next of which will be our presence at *Move Electric '95* in September, at Trentham Gardens, Staffs.

Phil then introduced all the Management Committee Members and in particular thanked Roy Devereux for the



Jack Henley receives the Emsworth Trophy from Edward Hawthorne.



## Turning the clock back at Maidenhead

One of the most enduring images of the Thames is of a host of elegant boats tumbling out of Boulter's Lock on a sunny afternoon at the end of the last century. This famous picture, "Boulter's Lock, Sunday Afternoon" painted just 100 years ago by Edward J Gregory, has been reproduced a thousand times in books and posters.

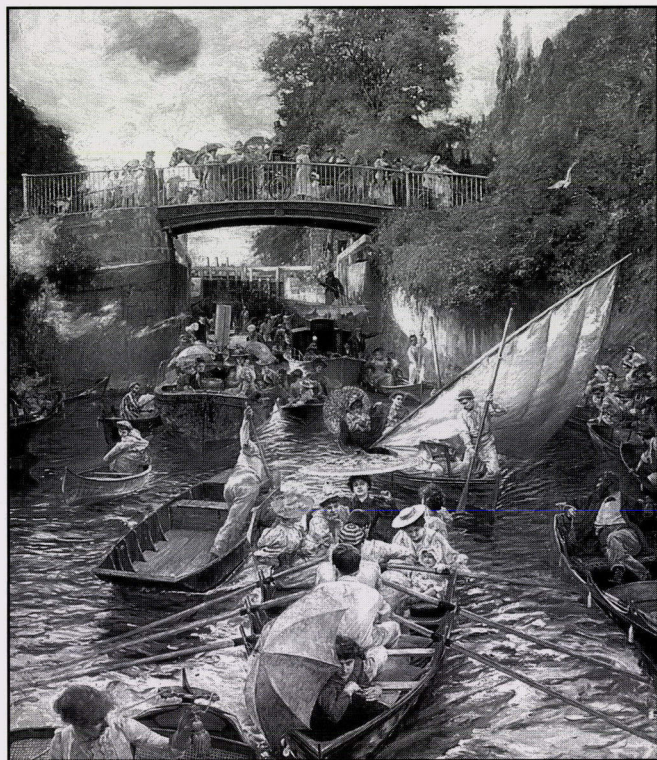
About a year ago, enterprising local residents Pat and Simon Davis (EBA members and owners of the *Celandine* fleet, featured in the Summer 1994

edition of *E B News*) had the bright idea of re-creating this scene to mark the picture's centenary. For over a year they planned, persuaded and cajoled and the result of their infectious enthusiasm came to fruition on the 24th of June.

Hundreds of spectators lined the river bank in Maidenhead to see a great waterborne pageant, which included many electric boats, and then Boulter's Lock was closed by the NRA for half an hour while the famous scene was

carefully reconstructed.

Enthusiastic local boatowners not only brought all the right boats - the punts, the skiffs, the canoes, the gigs - which Gregory had portrayed, but they dressed in exactly the right costumes and patiently manoeuvred into, well, *nearly* the identical positions. I love that lady in the foreground with the parasol - and don't miss the pony and trap up on the bridge with the groom in his top hat!



## EIGHT GLORIOUS YEARS. Can this be the end of the Wargrave Rally?

The eighth Electric Boat Rally was held on Sunday 11th June at "Willowmead", Wargrave, the delightful home of Mr and Mrs Jack Wyatt on the Berkshire bank of the Thames. For once, the weather was unkind and this was reflected in the low number of boats which attended. Nevertheless, the day improved sufficiently for people to sit out on the lawn for lunch in the traditional manner.

The decanter for the best-presented boat was won by *Natalie*, a 15 ft Bossom's electric-powered skiff brought by Gordon and Peter Claisse. Gordon explained that his wife had arranged for the garden of their house to be open to the public that day so he was not allowed to take any flowers to decorate the boat - they all had to be bought in!

The traditional raffle raised £100 for The Sue Ryder Home, Nettlebed - a charity chosen by this year's host.

Sadly, the organisers of the Wargrave Rally - Ken Barge, Peter Butler and Doug Cornwall - have announced that, after eight successful years, they are ready to hand over the torch to some one else.

**Who will take up the challenge?** It is too delightful an occasion to be allowed to die. Peter says that the bank account remains open for the time being, carrying a modest sum to start off next year's event, together with some 85 names on the computerised mailing list.

If you would be willing to organise this friendly get-together next year, contact Ken, Peter or Doug - or write to *E B News*. There is an EBA Information Sheet on "Planning a Rally" written by Ken Barge and, indeed, the EBA might be able to help.

# AUSTRALIAN CLAIM TO SOLAR DISTANCE RECORD

In our Spring 1995 issue we reported the solar-powered voyage of 1033 nautical miles completed by Bud Roberts in the USA. This brought an immediate response from a reader, Bob Slatyer, saying that several earlier solar voyages in Australia had exceeded Roberts' distance. E B News invited Bob to give further details. Here is his report:

The Murray Darling river system is the only long distance navigable waterway in Australia. Consequently it was the venue chosen for a number of recent voyages made to establish a distance record for a solar powered vessel.

Three voyages have been made, each one longer than the previous one, and a boat is being prepared for another voyage in early Summer 1995. At that time of the year, November - December, snow melt and rain in the mountains normally provide good river flow, ensuring adequate depth of water as well as some assistance from the current.

**December 1988 to March 1989 - Alan Colbeck - "SOLECIST" - 986 nautical miles.**

This trip was a one-man, low-budget, operation and rates as a remarkable achievement by any standard. It undoubtedly set a distance record for the longest voyage on inland waters by a solar boat at that time.

Alan came originally from England, from Leeds, and spent seven years as a Merchant Navy Radio Officer before migrating to Australia in 1950. He then worked in Armidale, on the northern tablelands of New South Wales, until he retired in 1985 and moved to the coast where he was able to spend more time on water-based activities.

Starting with a 16 foot dory which he had built some years previously, Alan cut two feet off the stern to lighten it, fitted 5 x 45 watt "Solarex" panels in the form of a canopy and a 12 volt Mariner T21 outboard. The only control was that already fitted to the motor. A battery was floated across the line. Voltage was monitored and not allowed to drop below 11.5 volts on load. This gave a speed of 2.5 to 3 knots.

Reaching Swan Hill just before Christmas, Alan took a holiday until after New Year, then continued to Murray Bridge. The lock keepers, who

verified his log-book, told him that his was the first solar-powered boat that they had seen.

**4th December 1992 to 1st January 1993 - Prince Alfred College - "SUN BOAT" - 1080 nautical miles.**

This project was the brainchild of Malcolm Cray, head of the Art and Design department of the College. Guided by the school staff, the students, whose ages ranged from 14 to 18 years, designed, built and operated the twin-hulled craft. The boat was 10 metres long with an overall beam of 4 metres. Material of construction was "Divinylcell". The 1,152 solar cells produced an average of 60 amps at 24 volts. The boat had sophisticated equipment to control the output of the solar panel as well as the two propulsion units which were modified Evinrude electric outboards. Speed was between 5 and 6 knots.

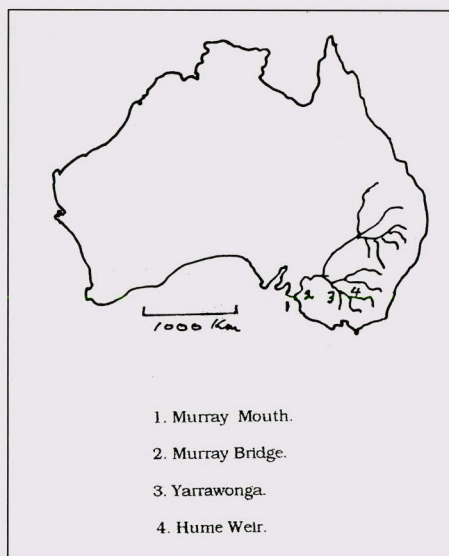
A voyage down the Murray seemed the logical way of testing their boat but the Prince Alfred College team did not at that time know of Alan Colbeck's voyage. The first that they knew of a prior trip by a solar boat was when people on the river told them of it.

For a large part of their voyage they were plagued by adverse weather - thunderstorms, high winds which were mostly contrary and heavy rain. The normally placid river was whipped up into choppy seas. In places there were trees blown down across the river causing further delays.

The boat was normally manned by a crew of three and was accompanied by a motor boat which also carried some camping gear and food in case they were not able to rendezvous with the better-equipped land based support party.



Alan Colbeck in SOLECIST 11



Hume Weir to Murray Mouth: 1198 nm  
 Yarrawonga to Murray Mouth: 1075 nm  
 Murray Bridge to Murray Mouth: 61 nm



**February to March 1993 - Alan Colbeck - 'SOLECIST II' - 1137 Nautical Miles.**

Being dissatisfied with the performance of his dory, Alan built a 5 metre catamaran with a beam of 2 metres and fitted 540 watts of solar panels and a Mercury T 21 outboard. This gave a speed of 3 knots. Battery and controls were as before.

Hearing of the Prince Alfred College voyage, Alan decided to try to better their record so started from the Hume Weir. Because it was later in the season, river flows were decreasing and water levels dropping, so he lightened the boat by taking out a lot of equipment.

Numerous problems arose during the voyage. The portage around Yarrawonga Weir went smoothly but the next day a snag holed the port hull necessitating a makeshift patching job.

Not long afterwards the weather changed from fine and hot to heavy rain, headwinds and low temperatures. When the rain stopped, the headwinds continued. Next, the electrical connections on the motor burnt out.

When Alan reached Murray Bridge, the southerly winds were making conditions hazardous in the open waters of Lake Alexandrina between Murray Bridge and the mouth of the Murray so, having exceeded the distance covered by Prince Alfred College's SUN BOAT, he decided to terminate there.

**Solecist 11:** 5.1 metre catamaran, beam 2m.

**Solar panels:** Solarex 4 x 90 watts and 4 x 45 watts.

**Motors:** Mariner T21 Stalker, thrust 21 lbs at 20 amps, plus Mercury T21 thruster with direct drive battery.

**Control system:** None. (Panel output and battery voltage monitored and battery voltage not allowed to drop below 11.5 volts on load).

**Speed:** 3.5 mph

Colbeck says that the speed was the same when running two motors or one. "The extra thrust seems to be cancelled by the extra drag", he explained.

### ABOUT THE AUTHOR

Bob Slatyer is a retired industrial chemist who lives at Mosman on Sydney Harbour. He has been messing about in boats, on and off, since the age of ten. He gained a knowledge of electronics while serving as a radar technical officer in the Royal Australian Navy.

Having been part of the team which staged the solar car races across Australia, he is enthusiastic about the potential of solar power and its applications on the water.

Although he has visions of much better things, he has not yet progressed beyond an electric-outboard-powered dinghy and canoe.

### THE RIVER

The Murray Darling basin covers an area in the South East of Australia about one-seventh of the total area of the continent. It was in these rivers that Australia's only long distance inland water transport system was developed.

As railways were constructed, they displaced the river steamers until by 1920 river traffic had virtually ceased. More recently, some of the steamers have been restored and operate tourist cruises. There is also a great deal of recreational boating - mostly centred on the larger towns.

A series of weirs and locks has been constructed with the dual purpose of providing a reliable supply of water for irrigation and of reducing the variations in river depth, which in the natural state varied over a wide range.

At present the Murray River is navigable from its mouth on the Southern Ocean to the weir at Yarrawonga, a distance of 1075 nautical miles, although at times of low water there are some difficult places. There is no lock at the Yarrawonga Weir but the river upstream is navigable to the Hume Weir, a further 123 nautical miles.

The tributaries which feed into the Murray from the north have very variable flows. They were only navigable by the steamers in times of flood and now are blocked by numerous weirs, none of which have locks.

## ARE YOU UP TO THE SIKA CHALLENGE?

**SIKApower '95** will be the first competition of its kind at the Southampton Boat Show. Contestants are required to build a boat in their own time to be raced on the first two days of the Show, powered by small electric outboard motors. Sika will give £50 towards materials, six tubes of SikaFlex and provide an electric outboard motor.

The aim of the competition is to produce fast, manoeuvrable and low-cost boats powered by motors of equal performance. This should provide an interesting spectacle for visitors and fun for the competitors. Prizes will be awarded for the winning craft as assessed by measured sprints and the races.

The craft may be built of any material and may take any form but must be legally car-topped on an average family saloon to the race site in assembled or unassembled form. Assembly time from transportable to launched form must not exceed 10 minutes, excluding attachment of the electric outboard. The craft must carry at least two crew members or ballast up to 150 Kg.

Each boat will be provided with a Minn Kota Electric 65T outboard and a heavy duty battery giving zero speed maximum thrust of 16.3 Kg. (Each motor weighs 7 Kg and has a 30in shaft length which can be adjusted to any height below the sternboard cramps. There are 5 forward and 3 reverse gears).

The Minn Kota motors are being supplied by EBA member Emrhys Barrell of the Thames Electric Launch Co., who is himself planning to enter the competition.

Give him a cheer at Southampton!

*SIKA is a Swiss-owned company based in Welwyn Garden City. They manufacture a range of marine adhesive/sealants suitable for bonding, sealing and deck caulking. The product can also be used for direct glazing for windscreens and portholes.*

## Electric Boats on the Thames 1889-1914

by Edward Hawthorne

review by Roy Devereux

Edward Hawthorne's handsome book brings together for the first time the story of electric boating on the Thames. It must surely, to use that overworked phrase, become the definitive work. Years of research have clearly gone into it.

The author has drawn on many sources, from personal memories and private collections of photographs to back numbers of old magazines and newspapers as well as archives lodged in museums and libraries around the country. The wealth of illustrations - photographs, line drawings, brochures, letters, price lists and catalogues - is quite remarkable.

The book spans the period between the 1880s when the electric boat first became capable of competing with the steam launch and the first World War when electric boating was threatened by the inexorable growth of the internal combustion engine. This quarter-century was the era of the great pioneer electric boatbuilders on the middle Thames; the years when King Edward VII and Queen Alexandra could often be seen passing through Boulton's Lock in an electric saloon launch.

The book brings to life, with much well-researched detail, legendary figures of the Victorian and Edwardian age; men like Moritz Immisch, electrical engineer and entrepreneur - perhaps the greatest name in the history of electric boats - and Viscount Bury, a staunch supporter of Immisch who went to meet Thomas Edison in the 1870s. Immisch and Bury joined forces to form the General Electric Power & Traction Co and built the largest passenger electric launch in the world, the *Viscountess Bury*.

A reproduction of that company's price list shows that you could hire the *Viscountess* for 15 guineas a day ("including a man in charge and all lock dues") or you could buy one of the company's 28ft launches

"highly finished in mahogany or cedar" for £285.

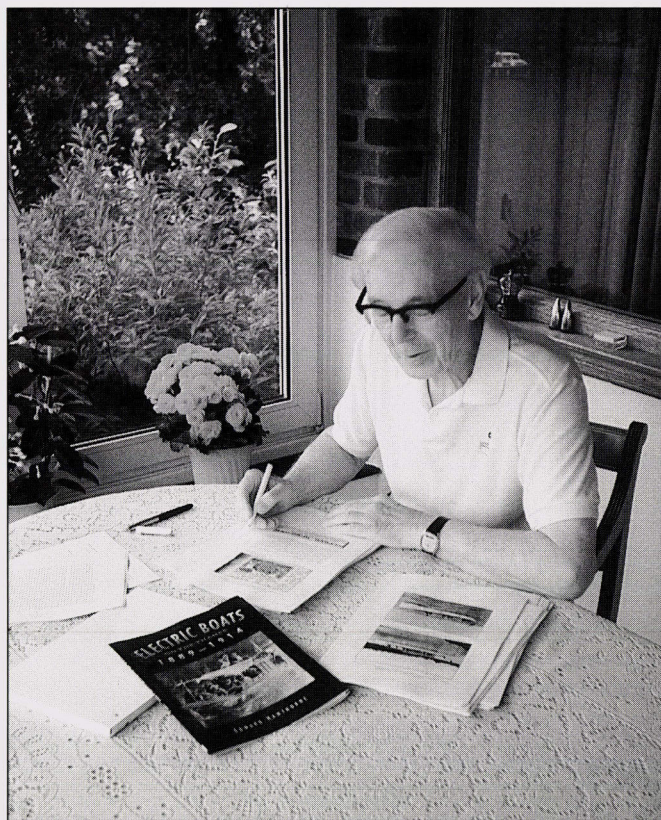
After reviewing in depth the histories of the leading boatbuilding companies of the time, the author turns to the stories of individual boats, many of which are still in use. I found it most intriguing to come across some familiar boat names - like *Gena* and *Liddesdale*, electric canoes built in the 1920s by the Ray Motor Co at Maidenhead, both of which took part in the Maidenhead River Pageant this summer! Not to mention *Beazie*, Beatrice Lillie's electric canoe which was on display at the London Boat Show last year.

For the technically competent, a generous section of the text is given over to developments in electric propulsion systems, including a discussion on charging points. (Immisch's solution to this perennial problem was to equip barges as floating charging stations).

Although the title only promises the story from 1889 to 1914, the last two chapters review the inter-war years 1918 to 1939 and the revival of electric boating after 1945, bringing the story up to the present day and the age of the Electric Boat Association.

Both scholarly and readable, this fascinating, detailed study of the boats, the people who built them and the people who owned and used them is clearly a labour of love, the culmination not just of a brief period of research but many years of interest in and involvement with

electric boats. This book will interest anyone who enjoys our waterways, it will be a fascinating source of reference to anyone in the boating industry and will appeal to everyone who looks back fondly to the whole *fin de siècle* age of elegance.



*The author correcting the proofs*

**Edward Hawthorne is chairman of the EBA's User Group. He has been interested in boating and the River Thames from childhood, and he rowed for Cambridge in the 1940 Boat Race. A mechanical engineer by training, he worked on aero-engine and gas turbine development and subsequently built up a management consultancy. He now lives on the Cookham Reach of the Thames and it was here that he and his wife Dinnie first discovered the benefits of electric boating.**

*Electric Boats on the Thames 1889-1914* by Edward Hawthorne. 224 pages. Published by Alan Sutton Publishing Ltd, Stroud. £18.99



## Committee changes

At the Summer meeting and AGM it was announced that four of our committee members, Gillian Nahum, Fraser Brown, Dennis Tye and Stephen Thackray, were to stand down - all for personal reasons. They all are long-standing and well-known figures in the EBA: Gillian was a past Chairman, Fraser was our Treasurer, Dennis was our link-man with the NRA and BW and Stephen was not only our technical expert on charging points but also kept our stock of EBA Information Sheets. They will all be missed.

But, as our AGM reporter says, some more brave volunteers "stuck their hands up", so we welcome them to the team.

**Peter Cook**, who comes from an accounting background, is our new Treasurer. Peter bought an electric boat last July ("a pretty Frolic") and he says his wife much prefers it to their earlier cabin cruisers. He will be the contact for EBA T-shirts, ties, pennants, etc. The new ties, incidentally, are very smart and cost only £10, incl p&p, - £2 of which goes to the Viscountess Bury



*The new boys: l to r: David Higgins, Jim Keating, Peter Cook, Derek Chamberlain.*

Fund.

**Jim Keating** is the MD of Designeta Consultants. He has been a member of the EBA for two years. He sails at Bourne End on the Thames but he is building an electric boat "ready for when he cannot sail any longer". Jim is to be our Technical Liaison Officer, with particular reference to the new boat standards being set by BW/NRA.

**David Higgins**, who is based at Stratford-on-Avon, has been a regular contributor of snippets and letters to *E B News*. He has long been interested in waterway restoration in his area and he is keen to see those waterways

carrying "decent" boats. He owns two steamboats but at his wife's instigation, replaced the steam engine in one of them with an electric motor.

**Derek Chamberlain**, a member of the EBA for several years, lives on the Thames and has a Frolic moored in front of his house. He has a holiday home in Florida and while out there he has represented the EBA at meetings of the American E B Association. He plans to be at the EBAA annual meeting at Naples, Florida again this year and will report the event for *E B News*.

## Broadly Speaking, Silence is Sensational!

**Peter Howe writes:**

Beautiful South Walsham Broad will again be awash on Sunday 10th September with electric boats, sailing dinghies and rowing boats, proving yet again how these waterways can best be enjoyed - quietly.

This special day of 'Silent Sensations' is being organised, as it was last year, by the Broads Society in collaboration with the Electric Boat Association - with support from Eastern Electricity and the Broads Authority. The event will give the public another chance to rediscover the joys of tranquil boating with opportunities for trips in electric boats.

All members of the EBA are invited to bring their own boats - launching facilities are available - and locally-owned electric boats will also be present. On shore there will be exhibi-

tions and displays by electric boat manufacturers, the Broads Society, Eastern Electricity and other groups.

An "all-comers" endurance trial for electric boats will take place around a prescribed course on the day. Any electrically powered craft may be entered and the objective will be to complete a twenty mile course in five hours without recharging. Prizes will be awarded to all participants.

'Silent Sensations' is part of an ongoing campaign by local EBA members and the Broads Society to encourage the use of electric boats on the Broads - where there is a vast potential for electric propulsion.

The event will run from 10.0 am to 4.0 pm on Sunday 10th September on South Walsham Broad. For more details contact Peter Howe at Camelot Craft on 01603 783096.

\*\*\*\*\*

The 'endurance trial' was sparked off by Kevin Desmond's article in our last issue when he recalled his record-setting 24-hour cruise with Rupert Latham in 1986.

Kevin has challenged the EBAs of Britain, USA, France and the Netherlands to organise local 'heats' in order to produce an entrant for the international trials in Bordeaux next year. The French eliminator is taking place on the River Erde at Nantes on Sept 2nd, the Stichting Electrisch Varen are aiming for an autumn contest and the EBAA hopes to hold the US trials in Naples, Florida, in November. The final is scheduled to take place between May 11th and 20th 1996 on the 1km-long non-tidal lake at the time of the International Trade Fair at Bordeaux - which last year attracted some 300,000 visitors.

This could be quite a showcase!



**Dear Editor,**

I am a member of the EBA and we are marine consultants and agents for a number of marine products.

We have an interest from a factory owner in South China who plans to build under licence a small battery-powered runabout for chartering by the hour at a newly-formed lake resort. I immediately thought of your article in the last issue of *E B News*: "Lego Goes Electric".

This small boat would not be marketable if assembled in the UK as the freight would be crippling, although possibly the mouldings could be stacked and put together here. These are the kind of areas I would like to talk to the manufacturers about. Could you please put me in touch with Bossom's Boatyard?.

If you know of similar products for our client's consideration, details would be appreciated. I should add that chartering small fun boats by the hour is a fast growing feature in China, with a huge future potential. Currently they are powered by small gasoline outboards, with the obvious reliability hazards, and I hope to see electric power catching on.

With best regards,

**Bob Young.** (YBDSA member)

AutoLink Asia Ltd, 46 Hing Keng Shek, Sai Kung, Hong Kong. Tel: 27196443; Fax: 852-27196824

\*\*\*\*\*

**Dear Sir,**

I would like to apply to become a member of your Association, upon reading some of your magazines loaned to us by a friend in Port Lincoln, South Australia.

We are the proud owners of an electric launch and we hope to set up a permanent business from the above address in the near future after my husband and I visit the UK and hopefully meet some folks like yourselves to gain experience and expertise in this new (to Australia, anyway) industry.

Yours very sincerely,

**Noelene Le Couilliard**

"Gold Coast Electric Boats", 55 Gibraltar Drive, Isle of Capri 4217, Queensland, Australia.

\*\*\*\*\*

**Dear Editor,**

## Solar boat records

The pages of Electric Boat News describe several new and old distance records by solar boats and Kevin Desmond is attempting to collect all records. One which has not been mentioned in *E B News* is the 1990 journey of Matthias Wegmann's "Basilisk" from Basel in Switzerland to Denia in Spain, travelling via Rhine, canal de la Marne au Rhin, canal de l'est, Saône, Rhône, canal du Rhône à Sète, and Mediterranean, a total distance of 2000 km.

Is this a record? The trip was not continuous, as Matthias Wegmann stopped at several places for sightseeing and also repairs.

What conditions should be specified for solar boat distance records? Are such records meaningful? Should the state of battery charge be required to be the same at the end of the trip as at the beginning?

Any modern solar boat can travel indefinitely in all normal conditions just as sailboats can, so that pure distance records are not really meaningful unless further qualified by recording the conditions and the elapsed time, so that the distance record becomes an average speed record. Speed records must further be divided into pure solar speed, where batteries must be disconnected, and long distance records which must either be long enough to be able to neglect the battery's initial charge or must be started and finished with the battery discharged or at a defined level

of charge.

The only officially measured record I am aware of is my 1989 one measuring exactly 100 seconds over 100 meters. It was raining at the time. In sunshine, the same boat does 5.4 knots unofficially measured. At least one boat is around which can presumably do better than this (Radeau, Switzerland), but the owners were never interested enough to measure the solar speed exactly. I am still waiting for someone to offer a solar speed prize in order to get things moving a bit.

Yours faithfully,

**Theodor Schmidt**

Ortbühl 44, CH-3612 Steffisburg

*Editor's Note; Mr Schmidt has sent two interesting articles on solar boat voyages in France and Switzerland - with pictures. We hope to feature them in E B News soon.*

\*\*\*\*\*

**To all Newsletter editors:**

With the creation of Environmental Protection Agencies in the USA, the UK and elsewhere (who will be laying down a rule programme for the elimination of noise and pollution, including the waterways of pleasureboating), the challenge of our Electric Boat Associations becomes more crucial than ever.

It will no longer be sufficient to say "We've got the boats, the equipment and the charging systems". Instead, we should positively project ourselves: "This is how we envisage that Lake X, River Y or Canal Z could be made quieter and cleaner, whilst still retaining the gaiety, fun, delight and exhilaration of watersport shared by all.

We should invite representatives of the new EPAs to regular committee meetings of our EBAs. We must never be kill-joy puritans. We are merely wishing to help others to move the 130 year-old pastime of motorboating into a less stressful 21st Century.

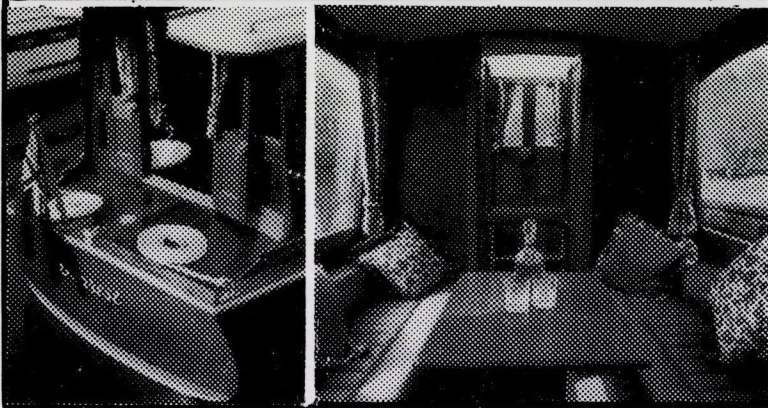
**Kevin Desmond**

Electric Boat World Information Clearing House,

"Les Girlandais", 54 route de Latresne, 33 360 Carignan de Bordeaux, France.



**a classic of perfection**



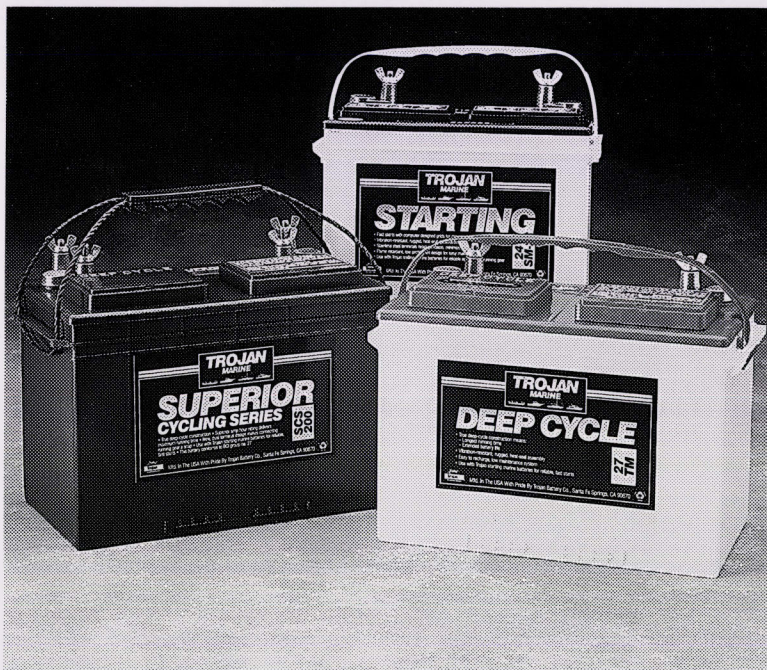
*For a Brochure:*

**John Williams Boats  
The Staithe  
Stalham**

**Norfolk NR19 9DA  
Telephone: 01692 580953  
Facsimile: 01692 582132**

# TROJAN MARINE BATTERIES

Most battery manufacturers just make batteries. Trojan make history. In business for nearly seventy years, Trojan are Americans No 1 manufacturer of Deep Cycle long life batteries.



The Superior Cycle Series has been developed for marine applications, details of these, together with our full range of motive power, standby power batteries and chargers are available by contacting our sales/technical department



**Industrial Battery Systems Ltd.,**

Unit 8, Denington Court, Denington Road, Wellingborough, Northants, NN8 2QR. Tel: (01933) 441419 Fax: (01933) 442107