

ELECTRIC BOAT *News*

The Journal of the Electric Boat Association

Volume 11 Number 2 Summer 1998

ISSN 0969-031X



Windermere Preview

New products

**Quest for Competition
ideas**

Association News



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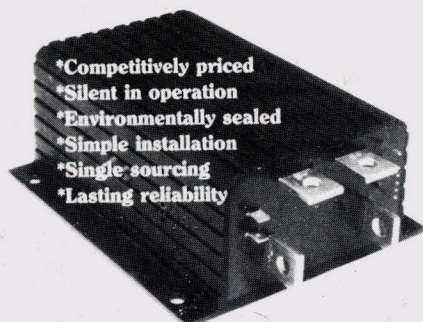


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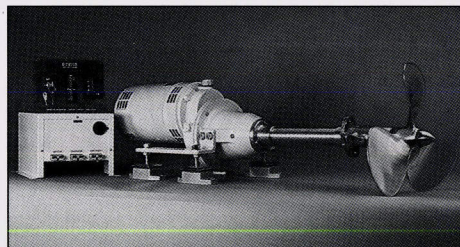
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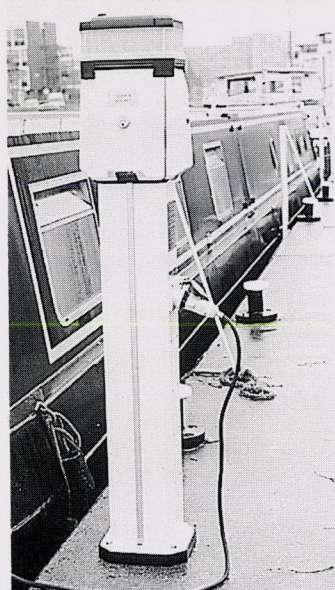
Come to the experts

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ELECTRIC CHARGING PILLARS

SUPPLIERS AND INSTALLERS TO
THE BRITISH WATERWAYS & ENVIRONMENT AGENCY



Hawkins Electrical Ltd has spent considerable time working with the British Waterways Technical Services Department in developing the charging pillar which is being used for the provision of power on inland waterways for the charging of boat batteries and providing power for general use.

The charging pillar is currently available in four designs:

- Type 1: 1 x 16A Socket Outlet
- Type 2: 1 x 63A Socket Outlet
- Type 3: 1x16a and 1 x 63A Socket Outlets
- Type 4: 2x16A Socket outlets

For more information about this project and other services we provide, please contact our sales department.



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EBA CALENDAR 1998

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

1998

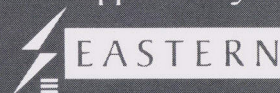
- JUNE 27-28 Lake Windermere Electric Boat Event
- JULY 11 Annual Electric Boat Rally
Thames & Kennet Marina
- JULY 18-19 21st Thames Traditional Boat Rally
Henley on Thames
- AUGUST BANK HOLIDAY IWA Inland Waterways Festival & Inland Boat Show
Salford Quays, Manchester
- SEPTEMBER 20 Environmental Boating Event, South Walsham.
Details - Broads Society 01493 722451 (evgs.)

Please let the Editor know of any other events for inclusion in this diary which may be of interest to Members

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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.

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Main picture - Alison Dingle of the
National Trust and Geoff Stevens and
Alex Akagi of Panasonic Batteries at the
launch of *Dapdune Belle* (see Home
News, pages 10 - 11)

Smaller picture:
One of the new Duddon 8 electric
launches introduced at Coniston for the
1998 season. (See Windermere Report,
pages 8-9)

On the current

Our close links with the Electric Vehicle Association give me the opportunity to scan their newspaper cuttings and to gain an inkling as to new developments. Most major motor vehicle manufactures have developed experimental electric cars and in some countries electric cars are readily available.

In April Peugeot UK announced that they would now be offering electric cars to fleet buyers on a fully commercial basis. Peugeot's decision to go for 'real' sales follows the success of trials as well as access to funding from the Government scheme Project Powershift and the EC Project Zeus, designed to help fleet purchases of alternative fuel vehicles.

It is clear that we must push for the inclusion of electric boating within these funding structures. Much progress is being made in the electric boating field but until we can get the market up to a self sustaining level it will continue to depend on the goodwill and pioneering spirit of EBA trade and personal members.

It is important that the Association follow up all the possible funding leads for the development of electric boating and our response to the Government's consultation on sustainability will refer to this issue.

By the time you read the Magazine we shall be on the verge of the Summer boating season. We have a number of events, led or supported by the EBA over the coming months and I hope to meet as many of you as possible during this time.

Tony Ellis

Tony Ellis, Editor

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Copy deadlines:

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

<i>Autumn</i>	1st August	<i>Winter</i>	10th November
<i>Spring</i>	1st March	<i>Summer</i>	1st May

Chairman's Report

With Summer upon us we are about to enter our busiest season. With enquiries being generated from our new Internet websites and from our programme of promotional events it promises to be a year packed with interest.

On behalf of the members of the EBA I welcome our new Membership Secretary, Richard Leeson. We were overwhelmed with applicants for this key administrative post — a very healthy sign. I send my thanks to all those who showed interest. Have no fear, we shall be in touch with other tasks you can help us with!

Richard is now busy setting up a membership database to help co-ordinate the growing level of interest and to improve communication between Members.

In the forthcoming boating season it is up to you to spread the word about electric boating. Come and see (and help) us at the events listed in the Calendar. Despite our professional approach we must not lose sight of the fact that much of the input to the EBA is entirely voluntary.

Happy (electric) boating!



Phil Horsley, Chairman

Electric Boat Association Management Committee

Meeting 29th April 1998

.....EXTRACTS.....

The Management Committee met on the 29th April 1998 at Triangle Management Services in Beaconsfield, courtesy of User's Group Chairman, Paul Jackson. Below is a selection of extracts from the many matters discussed.

Membership Secretary

In her outgoing statement, Pat Davis reported nine new private members and four new trade members over the Winter season. The Committee expressed their thanks to Pat for her contribution to the work of the Association.

The Chairman received an overwhelming response to the advertisement placed in the Spring 1998 edition of Electric Boat News for a new Membership Secretary. Five nominations were received and the Committee agreed to appoint Richard Leeson of Surbiton, Surrey.

It was suggested that a Directory of Members should be compiled, Region by Region. This would facilitate communication between members. All Members will be asked whether they object to the inclusion of their details in the listing.

Trophies

St Davids Trophy:

Contrary to the report in the previous EB News, this trophy is awarded at the Biennial General Meeting. The award is made to the person or company who has done the most to promote electric boating during the two year period so we still have to take into account activities during the current year. Nominations should be held until the end of 1998.

Emsworth Trophy:

Nominations for the award of the Emsworth Trophy (for the longest journey under electric power in the year) should be submitted to the Secretary by the end of June 1998 (the current nomination is in respect of the 168 mile journey undertaken by Brian and Margaret Pickess during their cruise which was reported in the Spring 1998 Edition of EB News). The trophy will be awarded at the Annual Electric Boat Rally which is to be held at the Thames & Kennet Marina on the 11th July.



Electric Boat News: Copy dates

It was agreed that the final dates for submission of copy material for Electric Boat News should be listed in each edition

(see Editorial page)

Classified Advertising

A 6-month trial of a classified advertisement on the work of the EBA has been inserted in *Canal Boat Magazine*. Trade members of the Association and others have also supported this new Electric Boating category. Enquiries were now being received in response to the EBA advertisement.

Environment Agency River Views

Derek Chamberlain had written from Florida to the Environment Agency magazine *River Views* on the subject of Thames charging points. The answer from the Agency included the address of the Association and enquiries were already being received.

Angela Eagle MP, Waterways Minister

Angela Eagle, the Waterways Minister has replied to the letter from Jim Keating accepting the invitation to join members of the EBA Committee for a cruise on an electric boat. It is hoped that this can take place in the late summer between the end of the holiday period and the opening of Parliament.

Articles of Association: Voting Rights

A further draft of changes to the Constitution of the Association was considered at the meeting. Once the full document is ready details will be reported in EB News.

Web Page: <http://www.geocities.com/yosemite/6173/>

Barbara Penniall was asked to pass on the thanks of the committee to her daughter for her assistance with the creation of the new page.

Shows, rallies and other events

Representatives of the Association will be attending a range of events over the coming season (as listed in the EBA Calendar on the inside front cover of EB News).

International Boat Show, Earl's Court 1999

It was agreed that Trade Members should be asked whether they were exhibiting at the International Boat Show and whether they might be interested in combining on an electric boating stand which would include a presence from the EBA.

EBA Pennant

Only one request had been received to the suggestion in the previous edition of EB News concerning a new EBA Pennant. It was agreed that prices should now be obtained for the production of an EBA sticker for use in cars and boat windows ("Electric Boaters do it quietly", "Cruise Electric - no noise - no pollution no fuss" etc.)

Charging points

Concern was expressed at the delay by the Environment Agency in the installation of charging points on the Thames. It was agreed that a letter be sent to the Agency enquiring as to the reason for the delay.

Schools Competition

Discussions had been held with PR Consultants, Olden & Co concerning the development of a Schools Competition which would promote and improve awareness of electric boating.

Representatives from the Company presented a document to the Meeting which outlined four possible forms of competition. Upon consideration it was agreed that Competition Number 2: *Junior (Electric) Boatbuilder of the year* was the most appropriate.

The aim of the exercise was to increase awareness of electric boating, rather than produce a direct cash return (although this would be a useful by-product). It was necessary to achieve a balance between the funds available to schools and the need to end up with products that the EBA would wish to be associated with.

Committee members were asked to consider the detailed implications / rules / regulations and other aspects of this (or any other) competition idea before deciding to proceed.

The presentation by Olden & Co was welcomed and it was agreed that they be asked to continue working with the Committee on the possible development of this project.



The solar-powered catamaran Collinda sails into Calais after the historic Channel crossing in July 1998

Borrow the Solar Boat COLLINDA during the 1998 Season

Loan:

Malcolm Moss, owner of the record-breaking solar powered boat *Collinda* wants to hear from any EBA member interested in borrowing the boat for demonstration at events during the season. Malcolm wants to promote the solar concept and the loan is free of charge.

Collinda weighs 1 ton and Malcolm suggests that a 4x4 would be preferable for towing from her current base in Leatherhead, Surrey.

Summer Solstice Fair, Globe Theatre, Bankside 20th-21st June

Malcolm will be demonstrating *Collinda* from a Pier on the Thames adjacent to the Globe Theatre at Bankside. He would welcome any assistance over the weekend.

Contact:

Malcolm Moss on 01372 278416 (office hours)

NEW PRODUCTS AND PROJECTS

Progress with Pike

In the last edition of EB News I mentioned the restoration of the 30ft Andrews electric launch *Pike* at Mike Dennett's yard. We now have photographs taken earlier this year illustrating the period reconstruction of the cabin. The layout will provide two overnight berths, a small loo compartment and sufficient galley space to boil a kettle.

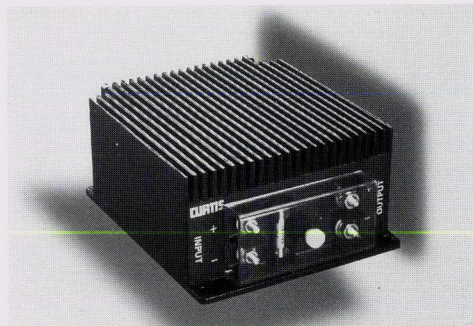
Pike will be propelled by a Lynch Motor powered by Chloride Motive Power batteries with installation by the Thames Electric Launch Company.



Curtis:

Launch of new DC/DC Converters

Curtis Instruments announce the launch of new series of 200 Watt and 300 Watt DC/DC Converters. Curtis advise that the new converters will provide power to auxiliary electrical circuits on electric vehicles without recourse to battery tapping which they point out is unsafe, damaging to the battery and may contravene EC regulations. The new converters are available in a range of models to cover 24 to 144 volt input with 12, 13.5, 24 or 28 volt input.



Marketing of charger range

Curtis also announce that they are to market the MicroPower range of high performance chargers from Scandinavia. Curtis see the move as a natural step from their position in the field of battery monitoring technology. All chargers supplied by Curtis under this agreement with MicroPower will carry a full 5 year warranty.

Further details: telephone 01604 629755 Fax: 01604 629876

Marine Energy Solutions distribute Dynasty Gel-Cell batteries

Marine Energy Solutions of Rochester have been appointed as a distributor of the US Dynasty Gel-Cell range of batteries. Marine Energy Solutions point out that the totally sealed, gelled electrolyte design of these deep discharge batteries means that they are completely leakproof and tolerant of the rigours offered by the marine environment.

Further details: telephone 01634 290772 Fax 01634 290773

Creative Marine launch their new range of Mayfly 16 launches

As forecast in the London Boat Show report in the last edition of EB News, Creative Marine have now completed development of their new range of Mayfly 16 launches. Models are now coming off the production line and they are available from the basic hull to the complete launch.

Of interest is the fact that the Mayfly16 electric model is cheaper than the same craft powered by a 9hp diesel engine. Optional extras include cushions, tonneau cover, canopy, half canopy, GRP cuddy (with fitted windows), oak decks and transom.

Further details of the Mayfly and other vessels in the Creative marine fleet: telephone 01692 407843 (Workshop) and 01692 538503 (evenings).



Designeta introduce new monitoring unit

Designeta Consultants Ltd announce the launch of a new System Monitoring Unit. The new fully programmable unit has been designed to give the boat owner all the information required to get the optimum performance from the boat, cruising or moored. While cruising the monitoring screen scrolls through eight parameters, including range and power consumption. While moored the unit can add control intelligence to a connected

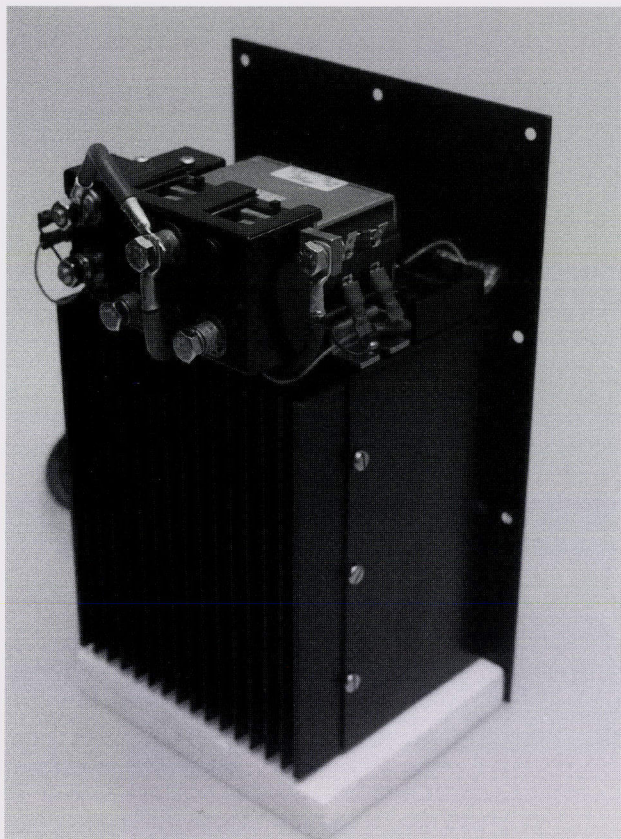


battery charger. If the boat is laid up it can also ensure a battery charge every 14 days.

At first sight the price of this model may appear higher than competing products. However, Jim Keating of Designeta points out that the unit comes complete with integral contactors and joystick, thus providing a number of savings, including reductions in wiring and installation costs.

Designeta also offers a hybrid power unit and a full range of control equipment, including a speed controller, intelligent battery charger and load conditioner.

Further details: telephone / fax 01494 510770



Lynch Motor Company launches new 14kW motor

The Lynch Motor Company have launched a new design of motor, based on the established Lynch disc-armature which maintains the present 200mm diameter frame size and gives up to 14kW continuous power from a motor weighing 11Kg.

The Lynch Motor Co. have recently finalised a manufacturing alliance with the Denis Ferranti Group in Bangor, North Wales where production of the Lynch Motor under ISO 9001 quality control can be increased to 25,000 units per year. Over 80% of Lynch production is exported to some 20 countries.

Recent marine achievements by the Lynch Motor Company include last year's Cross Channel journey by *Collinda*, the launch of the Oeco-Sachs/Lynch electric outboard at the Dusseldorf Boat Show in January and the introduction of the first Lynch electric bow thrusters by Hampton Automarine.

Details: telephone 0171 607 8141 Fax 0171 609 3625



Production model of the 29ft Evolution launched by Haines

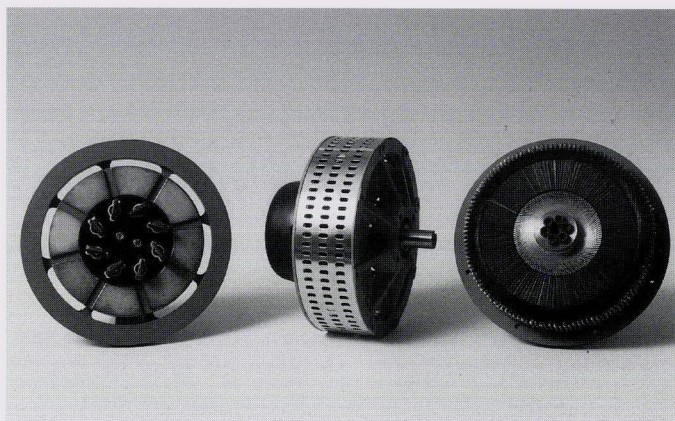
The first production model of the Haines 29 Evolution has been produced by the Haines yard in Norfolk. The boat is called *Jenny's Dream* and will be based on the Thames in the Henley area.

The boat is powered by the two kilowatt twin Brimbelow E-drive and incorporates many modifications and improvements from the prototype model which has been shown at many events including the 1997 IWA Festival at Henley and Eco Boat event at Oulton Broad.

Over a quarter of a ton has been trimmed from the overall weight of the prototype (much of this reduction being in the propulsion pack). This weight saving provides a wider cruising range on a single charge - or an increase in top speed of a knot.

The charging system is capable of a full overnight charge from any 13 amp shore supply.

Further details: telephone 01692 582180



NOTE: News of product developments, special one-offs and anything else of interest in product and technical terms are always welcome in the Editorial Office.

Technical Report

Compliance with the Boat Safety Scheme



Jim Keating interprets some of the requirements of the Boat Safety Scheme on electrical installation

Battery ventilation

The battery compartment must have a ventilation area close to the top of the compartment.

The minimum area in $\text{mm}^2 = \text{System Voltage} \times \text{Battery capacity in amp per hours (Ah)}$.

Note:

A 25mm (1") diameter hole has an area of approximately 500mm^2

A 50mm (2") diameter hole has an area of approximately 2000mm^2

Example:

For a 24V battery of 160 Ah the ventilation area would be $24 \times 160 = 3840\text{mm}^2$

Using:

25mm (1") diameter holes. $3840 \div 500 = 8$ holes

50mm (2") diameter holes. $3840 \div 2000 = 2$ holes

Or: a slot 40×100 (4000mm^2)

Ventilation of battery charger compartments

The battery charger compartment, unless it is very large (at least 10 times the volume of the charger casings) should also have the same ventilation area as the battery compartment. If the charger capacity is greater than 2.5kW then an electric fan must be installed so that it comes on when charging and continues to operate for one hour after charging has ceased.

Cable sizes

The cable size is determined solely by the maximum current supplied by your system, as their rated voltage of 600V is well above anything that will be met by a battery.

The following table is an extract from British Standard BS 6231 for single conductor in free air at maximum ambient temperatures of 35 C.

Conductor cross section Area in mm^2	Current rating Amps A	Overall diameter (including insulation)
6	48	5.1
10	68	6.8
16	95	9.2
25	130	10.6

The circuit must be protected by an appropriately rated fuse of lower capacity than the cable.

In order to protect the cable from fatigue due to vibration, the cable must be a flexible type made up of lots of small diameter wires (80 to 196 wires depending on cable size), and should be covered in a PVC sheath (*see note 1 below*)

Cables should be clipped every 0.3m (12"). If they are run in conduits, the conduit must be supported at intervals of 0.9m. Main circuits must be installed above bilge water level.

Note 1:

PVC insulated and sheathed cables shall not be run in direct contact with polystyrene thermal insulation.

A chemical reaction between the two materials causes the filler in the PVC insulation to break down, leading to the possibility of electrical shorts.



Electric Boat Association

East Anglian Regional Meeting

John Williams reports on the February meeting of the East Anglian region

Introduction:

On the 15th February 22 EBA members and guests gathered at the Bell Inn, St Olaves. In my role of Regional Co-ordinator, I was pleased to welcome our Chairman, Phil Horsley, Bill Seath and John Atkins of the Broads Society and guest speaker, Alan Boswell, Safety and Liaison Officer of the Broads Authority.

The Way Forward:

I took the opportunity to outline the changes that are taking place in the EBA and gave a brief resume of the proposals in the *Way Forward* document. Phil Horsley reaffirmed my introduction and explained the proposals for the new General Council and Regional Councils.



Guests at the East Anglian Regional meeting in February
L to R: John Atkins and Bill Seath of the Broads Society, Alan Boswell of the Broads Authority and Jenny Boswell

Experiments with charging plant:

I also told the meeting a little about the feasibility study which is being carried out into a new wind and solar powered charging plant at my Stalham yard. Chris Goodings of the Solar Energy Alliance went on to tell the meeting about developments in the field of solar and wind charging systems for areas where there was no mains electricity supply.

Silent Sensations – 20th September:

Bill Seath and John Atkins of the Broads Society invited the EBA to join them at their Silent Sensations event to be held at South Walsham Broad on the 20th September. They wanted to make it a combined Broads Society, Broads Authority and EBA Event.

Equipment:

Phil Horsley talked about fast moving developments in the field of battery technology. General discussion then followed on the prospect of standardisation of equipment for electric boats. It was felt that a Regional Meeting specifically on technical issues might be useful.

Broads Authority-Safety Standards and Charging points:

Alan Boswell talked to the meeting about the proposed Broads Authority Safety Standards and the particular effect these would have on electrically powered boats. He also referred to the policy of the Authority which aimed to encourage the conversion of day boats on the Norfolk and Suffolk Broads to electric power.

Next Meeting:

The next regional meeting is planned for the Summer, possibly early June. If any Members from out of the Region are in the area and would like to attend they should phone me on 01692 580953.

John Williams
East Anglian Regional Co-ordinator



Experimental wind and solar charging plant at John Williams Boats, Stalham

Preview – Windermere Boat Event 27th—28th June

Report by Tony Ellis
Editorial and Promotions



The jetties at the Windermere Steamboat Museum await you.

Latest information:

I am delighted to report that to date we expect four private boats, (ranging from 30ft Frolics to a rubber dinghy!) at the Windermere event. Trade Members are also offering active support with Bossoms bringing their Oyster14, Creative Marine their Mayfly, Bright Ideas their Derby and two boats from the Coniston Fleet.

The Association will be running a display stand and issuing leaflets to visitors. Other exhibitors will include Chloride Motive Power and Jim Keating of Designeta.

Timing:

With the level of interest it has been agreed by the EBA Committee and the Windermere Steamboat Museum that the event be extended to include the Sunday 28th June.

The hours will be 10.00 to 17.00 on Saturday 27th and 10.00 to mid-afternoon on the 28th June.

Preparation:

I visited Windermere area on the 19th and 20th March and met Ray Oliver, Manager of the Windermere Steamboat Museum and Geoff Leech, Manager of the Coniston Boating Centre.

This visit was very useful and gave me a much clearer idea of the possibilities and the range of facilities.

Coniston:

In view of our environmentally friendly image, I decided to travel up to Windermere by train and hired a bike locally for my nine mile journey over to meet Geoff Leech at Coniston. I have now walked a bike up more Lake District hills than you can shake a stick at — but the freewheel down the other side was worth the effort.

During my journey I cycled the Western shore of Esthwaite Water and came across the Hawkshead Trout Farm and Trout Fishing Centre. They told me that they had a fleet of a dozen dinghies powered by Minn Kota outboards.

On arrival at the Coniston Boating Centre, Geoff Leech took me on a tour of his domain. He is particularly



Three of the Mystics from the Coniston Boat centre fleet.



The Electric Event June 1998



Orchard Belle is based on Windermere and will be attending the event. She is owned by EBA Member Norman K Stoller MBE DL.

proud of his new Duddon 8 boats, built by Duddon Boats of Grisebeck. He took delivery of two of these craft earlier this year and he will be bringing one to the Windermere event together with a Duddon 4. The Coniston centre also has four Mystics and four Duddon 4's

A poster and handbill has been prepared and stocks have been posted to local attractions, Tourist Information Centres etc.

Practical arrangements

Steam and electric boats can be licensed for use on Lake Windermere

advance. Boats can be launched at the public slipway at Ferry Nab (just to the south of Bowness) which is managed by the National Park.

The Windermere Steamboat Museum have space for trailers to be parked in the field next to the Museum and there is ample parking in front of the Museum.

The event will be based around two 90ft jetties on the waterfront of the Museum and visitors with electric boats are welcome to stay on for the rest of the week. There will be no mooring fee but a donation to Museum funds would be welcome.

There are two 13 amp sockets at the lake end of the boat dock. It is suggested that those bringing boats should make every effort to bring their own portable generators where available.

Trips for visitors:

Interested visitors may be taken for trips from the jetty by trade attendees.

Presentation:

Arrangements are being made for a small reception and presentation towards the end of the Saturday afternoon and the Museum have offered the use of their tea room for this purpose.

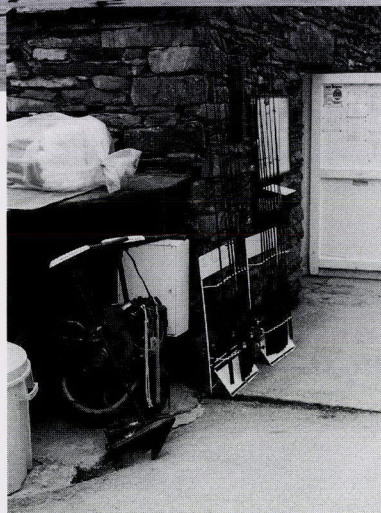
Invitees will include representatives from the National Park Authority, the local boat clubs, the RYA, conservation bodies and tourism interests. ■



Geoff Leech seems to have converted the Lake District to electric boating single handed. Following on the success of his Coniston base, he persuaded the Esthwaite fishery to introduce electric outboards and has also advised John Tyndall of the Glen Ridding Boat Hire Centre at Ullswater on the conversion of his fleet of Arran 16's.

Pre-publicity:

The Lake District National Park Authority have supplied us with a set of labels they use for distribution to press — national and local and to local attractions/organisations and contacts will also be made with local radio and TV.



The fleet of electrically-powered fishing boats on Esthwaite Water and (inset) the motors and fishing rods.

for the concessionary sum of £5 but a licence must be purchased in

HOME NEWS



Tony Ellis

All aboard!

National Trust goes Panasonic

At the end of March the National Trust relaunched their electric passenger boat with the name *Dapdune Belle* at Dapdune Wharf on the River Wey in Guildford. Until last year the boat was leased to the Trust by SEEBOARD. Panasonic Batteries have provided the finance which has enabled the trust to purchase the boat and they are also providing new Panasonic batteries to power the craft.

For further information on the service operated by *Dapdune Belle* contact Alison Dingle, Visitor Services Manager on 01483 561389.

Rosette joins the River Stour electric fleet

At Easter the River Stour Trust introduced a second electric launch, the *Rosette*. This new craft will operate from the Granary which is off Quay Lane in Sudbury, Suffolk. She can carry up to 10 passengers and will run between Sudbury and Henny. For further information phone 01787 211507.

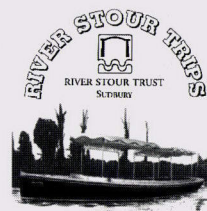


Illustration from River Stour Trust leaflet

INTERNATIONAL NEWS

Much of this news is abstracted from *International Electric Boat* (indicated by the initials *IEB*) produced by the Electric Boat World Information Clearing House run by Kevin Desmond (Founding Editor of *E B News*) from his base in France. For further information contact Kevin at Les Giranglais, 54 route de Latresne, 33 360 Carignan de Bordeaux, France. Tel: 0033 556 68 34 12.

Austria and Switzerland

In the last edition reference was made to the production of prototype runabouts by Klaus Boesch Motorboats. By mid-January three of their electric runabouts had been sold and were being used for trick skiing and wakeboarding - at speeds of between 15 mph (25 km/h) and 18 mph (30 km/h) for some 20 minutes.

Reference was also made to the banning of petrol engined craft from Austrian lakes. We now learn of another encouragement of electric boating in that a boat licence is not needed and there is no annual tax payable. *IEB*

France

Egretta

The 10m electrically powered Arcachon pinasse *Egretta* was built in 1996. Her development as a floating laboratory is under the supervision of a team of scientists at the IXL Electronics Laboratory of Bordeaux University. Originally

equipped with nickel cadmium batteries, *Egretta* has now changed to lead-acid.

Holland

EBA Member Jan Smulders reports with extracts from the January 1998 edition of *Electrisch Varen*, the newsletter of the Dutch Electric Boat Association.

Water buses in Amsterdam

Further news is given on electric launches in Amsterdam run by SESA (*EB News*, Spring 1998). The 8.10m vessels can cruise with 12 people (including skipper) for up to 12 hours on battery power. In good weather the solar panels provide sufficient energy for the boat to continue for as long as necessary. Hiring charges for the vessels are NFL 290 (£85) for the first hour and NFL 125 (£36.50) for succeeding half hours.

(Does anyone know how this compares with charges for the hire of conventional vessels of similar size in Amsterdam? Editor).

The two 5m vessels referred to in the last edition of *EB* news are now being built. *Electrisch Varen* expresses the hope that in the long run all of the tourist water buses in Amsterdam will be converted to electric.



SEEBOARD supports new boat on Wey & Arun

On the 3rd May Sally Hutchinson of SEEBOARD performed the naming ceremony for the trip boat *John Smallpiece*. The boat has been restored by the Wey & Arun Canal Trust and SEEBOARD funded the purchase of the electric outboard. The boat is named after the original Clerk to the Wey & Arun Canal Company and she will join the Trust's other passenger boat the *Zachariah Keppel* to operate on the Loxwood Pound.



Sally Hutchinson of SEEBOARD naming the John Smallpiece.

Viscountess Bury

In the last edition of EB News we reported on the transport of the *Viscountess Bury* to Lowestoft for restoration. Work has now commenced and the Viscountess Bury Trust is appealing for people to assist with the project in a variety of roles, from organisation to fund raising.

Contact Linda Ashton Tel: 01353 661226 Fax 01353 652921 or John Hardiment Tel: 01353 664780 Fax 01638 742230.

The insurance benefit of joining the EBA

Malcolm Moss of *Collinda* fame reports that his insurance brokers would not renew the insurance on the solar powered vessel for *any driver*. However, they are prepared to accept any *EBA Member* – another very good reason for joining the EBA!

(See page 3 for details of the free loan of *Collinda*)

Political support for electric boating

Officers of the Stichting Elektrisch Varen have recently taken the Dutch Minister for Economic Affairs and the Minister of the Environment for a trip on a solar powered launch. Incidentally, the Minister of the Environment has recently started driving a hybrid car - the Prius from Toyota (*John Prescott and his Jaguar - please note*).

Italy

Lino Beccati

The Fratelli Rossi boatyard at Viareggio have created a 15m hybrid passenger vessel, the *Lino Beccati*. The boat is equipped with a 10kW 90v DC electric motor from Mircrovett Imola (as used in the Fiat Panda electric car), driving a Volvo sterndrive. The boat can carry 162 passengers (62 sitting/100 standing) and operates from Porto Tolle in the protected Po di Maestra natural park in the estuary of the River Po. *IEB*

Venice

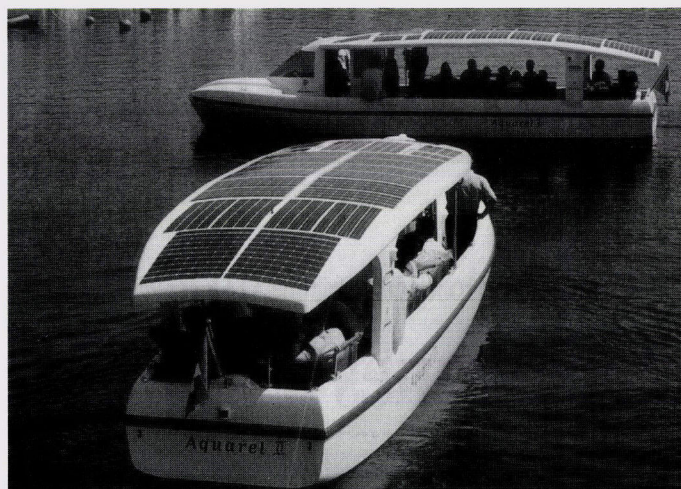
In November 1997 a delegation from the City of Paris visited Venice to inspect the Venice-based electric vaporetto *E1*. *IEB*

Switzerland

An extract has been received from the September/October

1997 edition of the French language magazine *Mobil Extract*. It refers to the development of the solar powered *Aquabus 1050* for Lac Lemman. The vessel is 10.5m by 2.5m and can carry 24 passengers and one crew. It is driven by a 48V Lynch motor and the solar panels/batteries provide a cruising speed of 7.5 mph (12 km/h) and a maximum speed of 9 mph (15 km/h).

The *Aquabus 1050* has been developed and built by MW-Line Sarl at a boatyard in Yverdon-les-Bains.



The *Aquabus 1050* introduced on Lac Lemman.

Post Bag

From: Michael Pugson, Paignton

"Re. the letter from Tony Sauer, I suggest that the Spring Edition of EB news has all the answers! After many years I have also decided that the layout by Jim Keating on page 4 is desirable, containing the basics of DC drive and AC generation (thus dispensing with the gas and CORGI and pleasing the galley slave with fast clean cooking).

We hired from Castle Narrowboats in order to prove the DC drive (as well as enjoy the beautiful Mon. & Brec canal), making the most of David Tolliday's expert electrical knowhow and experience - for which there is no substitute."

"Having previously considered AC drive and hydraulics (the latter since its use in a Morgan Giles boat - and I do like it); but electric drive from a reliable generator does seem to be the ultimate."

" My son and I have now got a 4 year old 52 ft narrowboat with a Lister engine and generator." " As part of our refit which will take at least 2 years we will gradually change to a hybrid."

"I have also bought a 1.7kW storage heater for the boat which will provide heat and ballast. This will be the first I have read about for use in a narrowboat! As we spend most of our time on a shoreline at the marina it will be particularly useful. We do have a solid fuel Squirrel stove but it is not very marina friendly!"

Hoping this gives Mr Sauer some encouragement."

From: Esteve Donno, Sorengo, Switzerland

" I am writing to express my appreciation of the welcome received and the opportunity to become a member of the EBA."

" From the Winter edition of EB News I was able to recognise the warmth of the Association which as a family is directing time and effort to the conservation of inland waterways by the promotion of alternative power sources."

" Understanding the drive of the active Members of the

EBA, I intend to become more deeply involved. By the time this letter is published I shall have finished my traditional boatbuilding course at the IBTC in Lowestoft and will have returned to Switzerland. I intend to direct my time and effort towards a fibreglass and combustion free boating environment for the Swiss Lakes."

"The decision to offer my skills in ways that will respect the environment is prompted in many ways by the existence of my two daughters of 8 months and 4 years. To quote an old Indian proverb *We do not inherit the Earth from our ancestors. But we borrow it from our children.*"

Email From: Don Limbocker Jr, Badsey Industrial Group

"Hi! My name is Don and I am with the Badsey Industrial Group Inc. We have created a new and luxurious electric boat, 20ft long and 8.5ft beam. A unique design with electric propulsion in mind from the start."

" Can anyone help us market this new product? should we join your Association? (*forms sent: Barbara*) If anyone can help, please contact Big Don on email don@accelenet.net or telephone me at the office on 714 444 4900 USA "

From: Guy Lane, Queensland, Australia

I recently removed the 13hp diesel motor from my 34ft steel sloop Ophelia and I wish to replace it with an electric motor and use the keel for the storage of batteries. I do not know whether it is feasible or where to start.

A suggestion has been made that rather than using the existing propeller shaft and propeller I weld two tubes into the hull and install a mini jet motor. Has this been done before with a yacht? Is there any advantage in using a jet drive over a standard prop and shaft?

Is it possible to trickle charge the batteries from the prop while the boat is sailing?

Information direct to Guy on PO Box 5538, Maroochydore Business centre, Maroochydore, 4458, Queensland, Australia.

Email from Lloyd Reeves in the USA

If any EBA members are ever in the States, check us out. We run an electric tour boat.

Lloyd Reeves, c/o Morro Bay Electric Boat Tours, 699 Embarcadero #9, Morro Bay, California, 93442 USA.



THE BROADS SOCIETY

Environmental Boating Event

South Walsham Broad

20th September 1998

Further details from the Sarah White, Secretary, Broads Society

Tel: 01493 722451 (evenings)

Broads Society - Broads Authority - Electric Boat Association



Charging Points

Network of hook-up points and prepayment cards from BW

British Waterways (BW) are looking into proposals for a network of electrical charging points in response to demand from boaters. BW's North Eastern Region already has 75 points and a network of 200 is anticipated.

The hook-up points provide power points for boaters using a standard 16-amp industrial outdoor socket and connector. In most instances the equipment will include a card reader to accept joint BW/EA pre-payment cards.

The hook-up points also create the opportunity for a national network of charging points for electric boats and BW is actively considering this in conjunction with the Association.

Charging Point lists: How you can help

Members can help us ensure that our lists of charging points are kept up-to-date by letting us know when they find a new one - or changes are made to an existing facility. To assist in this work we have enclosed a standard response form with this issue of EB News.

Information Sheets

Members are reminded that copies of the Information Sheets are available free of charge from the Secretary (please enclose a stamped addressed 9" x 7" envelope).

1. Product Guide and list of EBA Trade members (FREE TO ALL)
2. Solar power (recently updated by the Solar Energy Alliance)
3. Electrifying your boat
4. Hull design for electric boats
5. Lead acid batteries - operation and maintenance
6. High speed electric boats

In preparation: 7. Hybrid power for narrow boats

Non-Members can purchase information sheets at £1.50 each. The Product Guide and list of EBA Trade Members is available free to all enquirers - members and non-Members

2003

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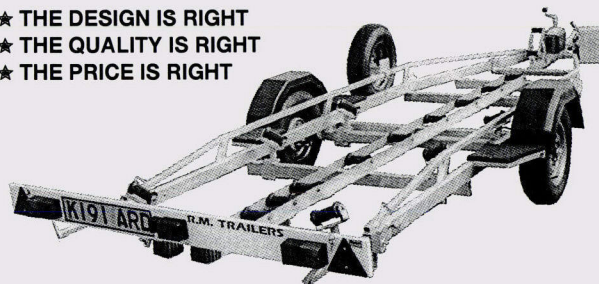
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*Anyone wishing to place classified advertisements should contact the
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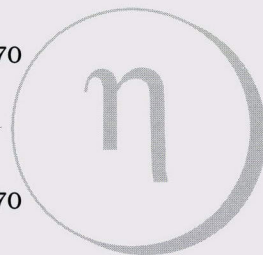
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Jim Keating

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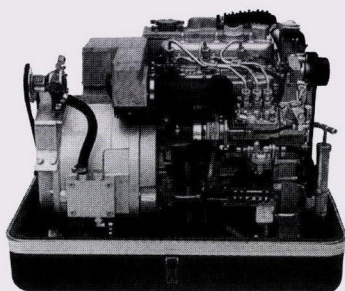
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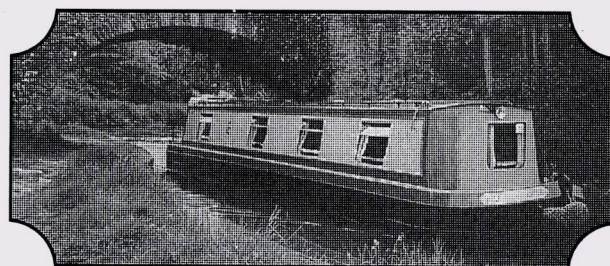
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Neuchatel, Switzerland
Columbia University, First in Class,
Solar Splash, Milwaukee, 1995



Camelot yacht on the
Norfolk Broads.



NRA's 'Lambourn' on the Thames

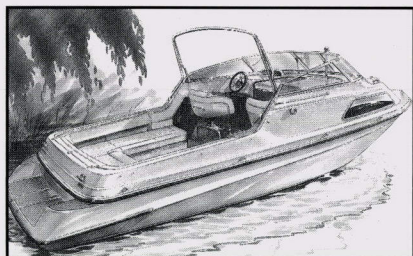
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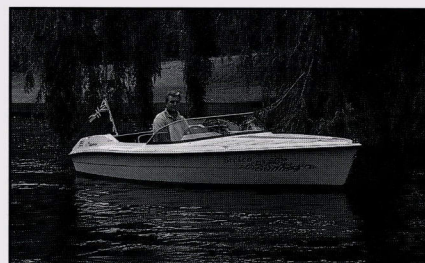
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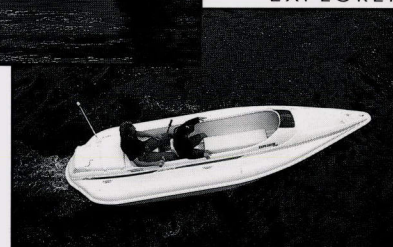
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