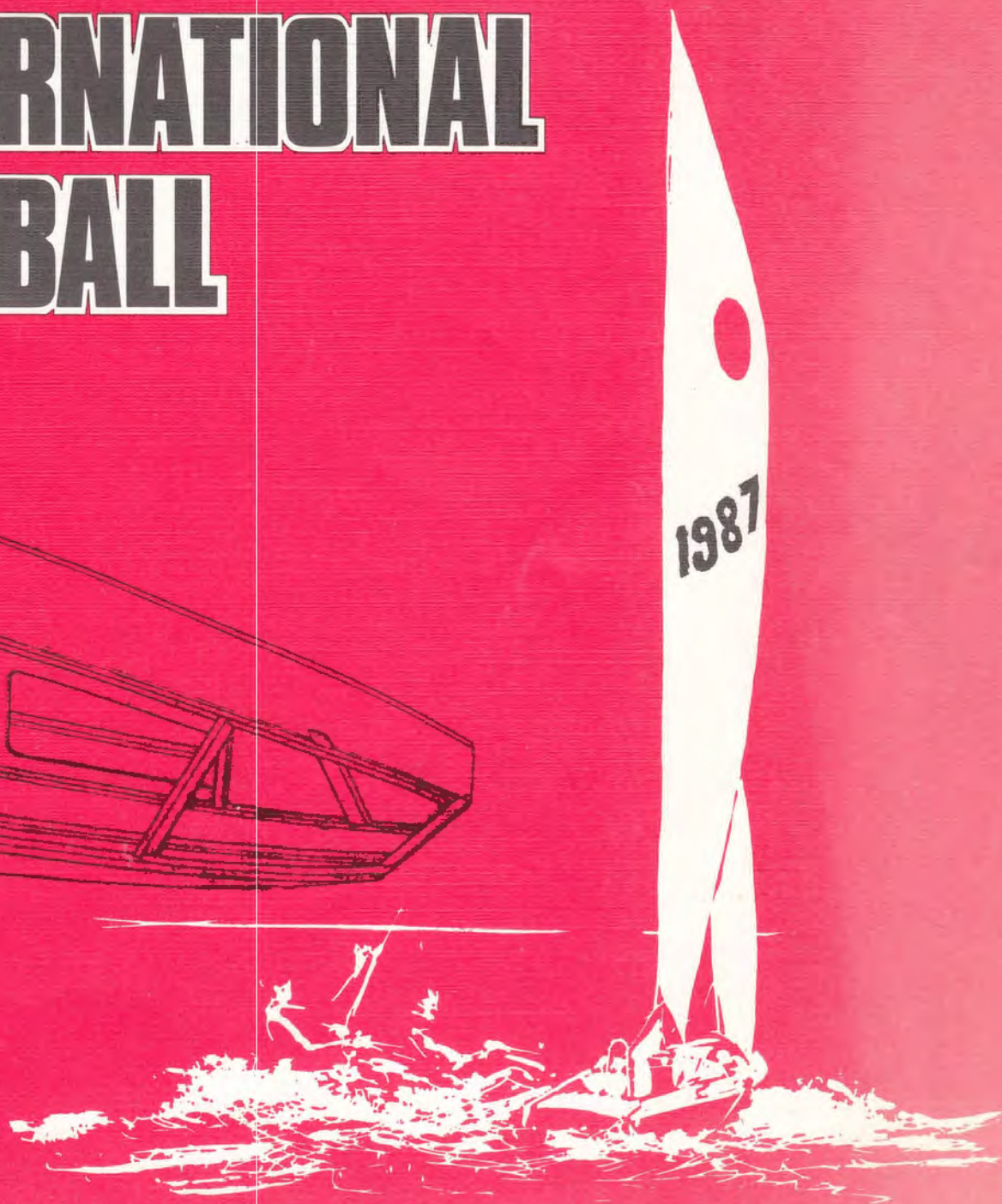
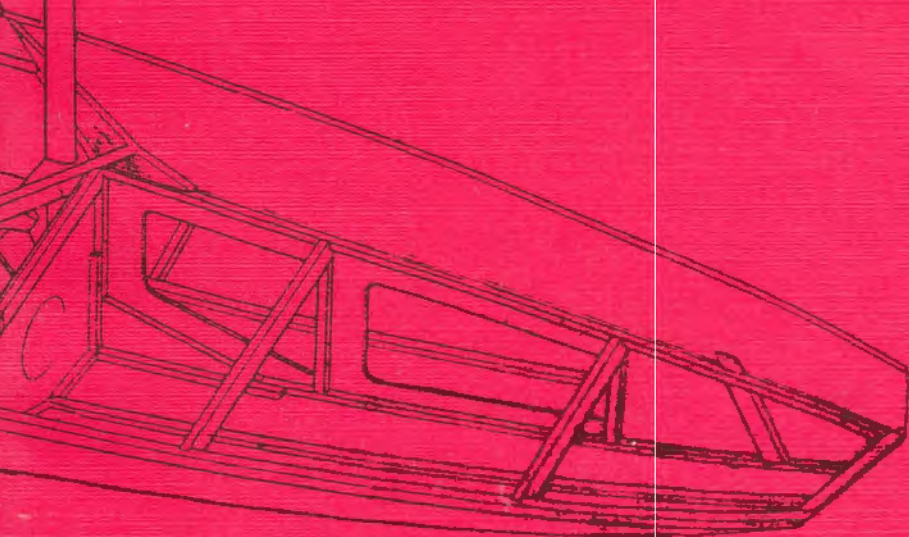


INTERNATIONAL FIREBALL



1962/1987 – 25th Anniversary Yearbook

FIREBALL SNOWBALL

as sponsors of the Fireball
we are delighted
with its continued
success

13919



Our business is solving design and engineering problems. Research and development engineers revel in the intricacies of industrial projects only to see their work swallowed up, unheralded and unsung, in the country's manufacturing processes. The continuous and visible success of the Peter Milne designed Fireball, therefore, has been of very great satisfaction to us.

Though the Fireball looked a potential winner from the prototype stage, we have always been very much aware of the enthusiasm and persistent endeavour of builders, associations and individual owners. For that immeasurable credit is due for the Fireball's present world-wide acclaim in top class racing.

Our sincere congratulations to all of you.

1962

1987

NORRIS BROTHERS LTD. Burrell Road, Haywards Heath, Sx.

INTERNATIONAL FIREBALL 25th ANNIVERSARY YEARBOOK

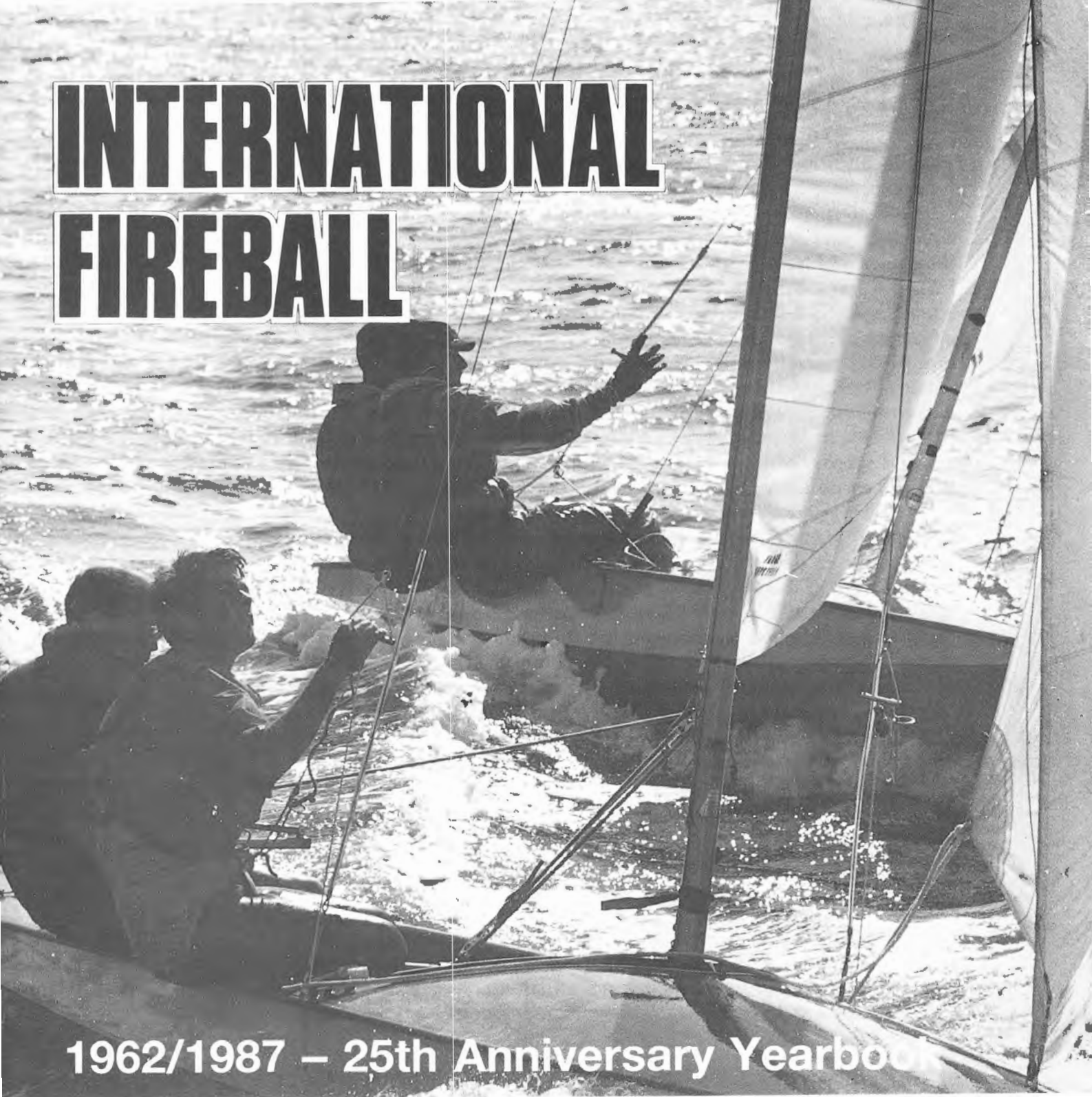
JULY 1987

ISSN 0307 4708

CONTENTS

Message from the Commodore	2
Antoine Goethals	
The First Twenty-five Years	4
Gordon Pollard	
National Class Associations	6
F.I. Executive Members	9
Twenty-five Years On	10
Peter Milne	
Officers of Fireball International	15
Building the First, and Many	
Other Fireballs	16
Jack Chippendale	
The World Champions	18
World Championship Trophies	19
Things I Will Never Regret	20
Bob Fisher	
The Early Years of the UK Fleet	22
Veronica Falat	
Peter Bateman up to Date	24
F.I. Licensed Builders	25
25 Years of Fireball in Europe	26
Lindy Preuss	
Thoughts on Sails	28
Alan Robinson	
Fireball Sail Plan	29
Canada - One Small Pocket	30
Bob Rose	
International Fireball Class Rules	32
Balling Down Under	34
Norm Hammon	
Fireball IS International	36
Running a World Championship	38
Adrian Bell	
African Round-up	42
T. Godwin, R. Hughes, M. Prentice	
Constitution of F.I.	46
Where the Sun Also Races	47
J. Overgaard, P. Cummins	
Fireball Building at Home	58
Peter Bond	
New Building Plans	60
Postscript	72
Richard Hughes, Editor	

INTERNATIONAL FIREBALL



1962/1987 – 25th Anniversary Yearbook

MESSAGE FROM THE COMMODORE

On the occasion of the celebration of the Silver Jubilee of our Class it is a pleasure for me to express on behalf of the Executive of Fireball International our thanks firstly to Peter Milne who in 1962 conceived and designed a marvellous boat, and to the many thousands of Fireball sailors and other devoted people who have helped to establish the Class all over the World; secondly to our official Sponsors, Norris Brothers, to Chatham Printers and to the advertisers for their financial assistance and support in the production of this Commemorative Handbook, a souvenir of our Silver Jubilee Year which I am sure you will find interesting and useful. Congratulations to Richard Hughes, the Editor, and to the contributors for an excellent job of work. In the pages that follow you will find a record of the International Fireball which after twenty-five years is best described by three words – **FAST, FRIENDLY AND FUN.**

It is no secret that dinghy sailing and Fireballing of course has, during the past decade, had its ups and downs and for a number of reasons which I do not propose to analyse here we have lost membership and some National Class Associations have closed down; the situation although serious is not dramatic and everyone involved in the International Fireball organisation must become conscious of the fact that he personally can help to improve it. The current recovery of the class in countries such as Belgium, Holland and the United States show that it is possible even in these times with enthusiasm to **go ahead.**

After blowing out the twenty-five candles of our Jubilee cake a question arises: 'What now for the next quarter of a century?' In other words – shall we either keep on a run and let events take their course, or shall we round the lower mark and beat towards the windward one making and implementing our own positive decisions? Clearly if our Class is to maintain its position in the forefront of the racing dinghy world we have to take the second course. Therefore let us all think about its future and put together constructive ideas for a progressive programme. In previous messages I have pointed



out some objectives to be realised and bis repetita placent I propose to repeat the more important points:

Fireball International is a world organisation and is managed in this way. Every Fireball owner, sailor or supporter has to be conscious of the fact that he is a member of an Association spread over many countries and avoid behaviour terminating with an 'ism' e.g. insularism, ultranationalism etc etc.... If the Fireball organisation is to be credible on a world basis the **N.C.A.s** and in particular the larger ones must to the best of their ability help and support F.I. in the realisation of the objectives of the constitution.

At the other end of the Fireball organisation we find the fleets and clubs where there could be a dynamic reactivation and a recruitment drive to bring back into the fold those Fireball owners and sailors who have drifted away from the class. Promotion of Fireball in sailing schools, youth classes etc will attract new members. In addition to the exciting qualities of the Fireball a major point of interest which must be exploited at fleet level is the scope for amateur construction of high quality boats at moderate cost for which the latest plans and building instructions especially developed for modern assembly methods are available.

Every year **F.I.** and the **N.C.A.s** organise World, Continental and National Championships of a high quality and it is my wish to see more crews from the smaller **N.C.A.s** participating in these regattas. With a little know-how and a lot of enthusiasm it could be possible for any Fireball sailor to gain experience of competitive sailing in a friendly and sporting atmosphere.

Finally I cannot over-emphasise the need for improved communication within the International Fireball Class and its promotion to the yachting world at large. Let us all – **SAIL FIREBALL – BUILD FIREBALL – WORK FOR FIREBALL – IN FIREBALL'S JUBILEE YEAR – better still EVERY YEAR.**

Antoine Goethals



THE FIRST TWENTY FIVE YEARS

By Gordon Pollard

Fireball is unique: A high performance sailboat in which the one-design features of hull, rig and sail plan have remained unaltered since its inception and which may be amateur built from plans without the use of an assembly jig.

With Peter Milne as Designer, Jack Chippendales Master Builder, Bill Kempner as progenitor of the Class and the support of the Sponsors, Norris Brothers, Fireball was an immediate success with dramatic early growth which has been maintained so that today the sail numbers approach 14000. To Peter we owe the creation of Fireball, to Jack its technical development and to Bill the establishment of a World-wide Class organisation – **Fireball International**.

Fireball was designed and the prototype built by Peter Milne in 1960/1 when he was working for Norris Bros, the designers and builders of Donald Campbell's Bluebird. The original boat is in the Norris Museum and Fireball 2 has, after years of service, recently been overhauled by Jack Chippendale who also produced the first professionally built Fireball, was introduced to the World of yachting at the Spring 1962 Isle of Sheppey One-of-a-Kind Meeting where it was sailed by the two Peters, Milne who nowadays is the Technical Editor of Yachting World, and Cook, the current Editor of Yachts and Yachting. I recall the enormous interest which this, at that time unusual, 'Scow' created when it planed around the course at a rate of knots.

Immediate response came in the form of so many orders that Chippendale

Boats were unable to handle the demand and brought in Plycraft as a second professional builder. Jack re-planned the construction so that no assembly jig is required and building from scratch is a straightforward 'do-it-yourself' operation. In 1966 his firm produced the first G.R.P. Fireball and for some years was the source of supply of official hull moulds for use by other Licensees. In 1974 following the advent of the building in a female mould method he developed a comparable 'stitch and tape' system for amateur construction. Although the boat performance characteristics have been strictly maintained by tight measurement limits, a degree of freedom in the cockpit and deck layout and the choice of fittings together with the adoption of spinnaker and trapeze have kept it up to date. Last year revised plans and instructions were prepared for amateur building using modern materials and methods.

The Fireball Association was formed under the aegis of the Sponsor in 1963, and in 1964 Peter Milne became its first Chairman. He was succeeded in 1965 by Bill Kempner, a top International 10 Square Metre Canoe sailor, who in that year with the expansion of the class overseas formed **Fireball International** to look after the interests of Fireball sailors world wide and organise the World Championships. In those early years he was ably assisted by Steve Schrier, the first treasurer of F.I. and Editor of International Fireball magazine, who also represented the Class in the negotiations with the I.Y.R.U. for adoption as an 'International' Class, and by Tim Goodman who followed on as Secretary/Editor.



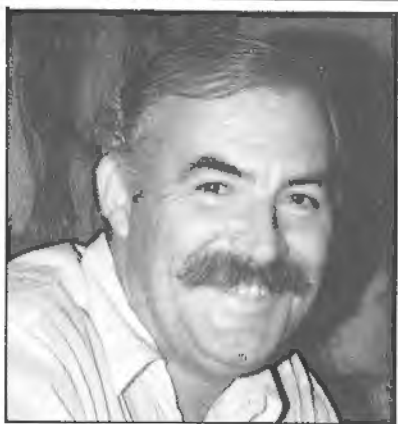
PETER MILNE



BILL KEMPNER



STEVE SCHRIER



MIKE WETHERALL



FRANK BERRY



GORDON POLLARD



JACK CHIPPENDALE

The Class is indebted to the many people who have contributed to its growth and well-being: in Africa to Gotz Klohn and Walter Davy, in Asia to Prince Bira and Jens Overgaard, in Australasia to Tony Scotford, in Europe to Patrice Briandet, Jean Martin and Lindy Preuss, and in The Americas to Claude Hoskin and Terry Moss in Canada, and to Jack Wanenmacher and Herb McKim in the U.S.A. The Fireball World Champions, all outstanding sailors, include Bob Fisher the well-known yachting journalist, Steve Benjamin another yachting writer and Olympic helmsman, Lawrie Smith and Nigel Abbott who graduated to 12 metre sailing in The Americas Cup, and Joan Ellis from the U.S.A., a fine helmswoman.

To-day there are over one thousand eight hundred active members of twenty-one National Class Associations supported by twenty-nine Licensed Builders: the International Fireball Class is proud of its record over the past twenty-five years and looks forward with confidence to the future.



ADRIAN BELL

NATIONAL CLASS ASSOCIATIONS

AUSTRALIA

President: Colin Gurr

Secretary/Treasurer: David Lewis, 1 Bolton Avenue,
Hampton, Victoria 3188, Australia
Tel: (03) 598 5200

Editor/P.R.O.: Darren Dunkley-Smith

Chief Measurer: Neil Loveland

BELGIUM

President: Roland Claeys

Secretary: Bob Claerbout, Hofmeierlaan 10,
8310 Brugge, Belgium
Tel: 050 350591

Treasurer: Pier Vermeieren

Editor/P.R.O./Chief Measurer: John de Clercq

CANADA

President: Paul McCorkindale

Secretary/Treasurer: Sally Cageorge, 487 Oxford Street,
Winnipeg, Manitoba R3M 3J1, Canada
Tel: (204) 452-1469

Editor/P.R.O.: Darryl Sonnenberg

Chief Measurer: Sandy Crevolin

CHANNEL ISLANDS

Chairman/Secretary/Treasurer: Ian Moisan
Boyne House, Bagatelle Road,
St. Saviour, Jersey, Channel Islands
Tel: 0534 26065

Chief Measurer: Ian Simpson

CZECHOSLOVAKIA

President: Ivan Vrana, Duchoslavka 6, 160 00 Praha 6,
Czechoslovakia
Tel: (0) 2-311 69 93

Secretary: Vera Bachtikova

Treasurer: Zdenek Paruzet

Editor/P.R.O.: Karel Smetena

Chief Measurer: Jiri Altman

Chief Trainer: Vladimir Myslik

FRANCE

President: Phillipe Gault

Secretary: Jean Martin, B.P. 17, St. Lunaire,
35800 Dinard, France
Tel: 99-463129

Treasurer: Robert Marty

Editor/P.R.O.: Harry Giaume

Chief Measurer: Jean-Paul Sotteau

GERMANY

Acting Secretary/Treasurer: Karl-Heinz Hopfner
D4050 Monchengladbach 3
Stettinerstr 74
F.R.G.
Tel: 02166 603761

HAWAII

Commodore/Secretary: David Brown, 46-439 Holokaa Street,
Kaneohe, HI 96744, U.S.A.

HOLLAND

President: Arnold Verkleij

Secretary/Treasurer: Anke Bardoul, Dreef 34,
4014 MK Wadenoyen, Holland
Tel: 03 446-1817

Editor/P.R.O.: Ad Verivers

Chief Measurer: Koninklyk Nederlands Watersport Verbond

IRELAND

Chairman: Edward Ferris

Secretary/Treasurer: Michael Martin, 3 Fortfield Road,
Terenure, Dublin 6
Tel: 01-906554

Editor/P.R.O.: Michael Murphy

Chief Measurer: Edward Ferris

Sail Measurer: John Lavery

ITALY

Secretary/Treasurer: Luigi Fornaciari, Via Ippolito D'Aste 3/9,
16121 Genova, Italy
Tel: 010 566780

JAPAN

President:

Secretary/Treasurer: Yutaka Okamoto, 3-6-19 Shinyamashita-Machi,
Naka-Ku, Yokohama-Shi, Kanagawa-Ken, 231 Japan

KENYA

Commodore: David Hollister

Secretary: Graham Alder, P.O. Box 46160, Nairobi, Kenya

Treasurer: John Trundell

Chief Measurer: Rod Bennett

NIGERIA

Chairman: Tony Godwin

Secretary/Treasurer: Anna Reece, c/o Tony Godwin,
33 Central Street, London, E.C.1

Editor/P.R.O.: Tony Godwin

Chief Measurer: Stewart Jones

SOUTH AFRICA

Chairman: Cormac Bradley

Secretary/Treasurer: Derek Robinson, P.O. Box 1138,
Carletonville 2500, South Africa
Tel: (01491) 3381

Editor/P.R.O.: Cormac Bradley

Chief Measurer: Walter Davy/Adam French

SWA/NAMIBIA

Chairman: Hagen Zimmermann

Secretary/Treasurer: Ursel Zimmermann, P.O. Box 2672,
Windhoek 9000, Namibia
Tel: 061 37146

Chief Measurer: Rudi Allers

SWEDEN

President: Kjeil Wester

Secretary: Ulf Danielsson, Artillerigatan 76 II,
11530 Stockholm, Sweden
Tel: 08 623169

Treasurer: Matz Kihlberg

Editor/P.R.O.: Mikael Westerberg

Chief Measurer: Hakan Nilsson

SWITZERLAND

President: Stephan Ritzler

Secretary: Dorett Hanhart, Breitestr. 5,
8400 Winterthur, Switzerland
Tel: 052 28 40 72

Treasurer: Christine Landerer

Editor/P.R.O.: Heike Widmer

Chief Measurer: Uno Holtmann

THAILAND

Commodore: Nigel Hardy

Secretary/Treasurer: Jens Overgaard, ESCAP,
The United Nations Building,
Rajadamnern Avenue, Bangkok 2, Thailand
Tel: 2829161-200

Editor/P.R.O.: Peter Cummins

Chief Measurer: Panasarn Hasdin

U.K.

Chairman: Veronica Falat

Secretary/Treasurer: Frank Berry, Alderfen, Neatishead,
Norwich, NR12 8BP, England
Tel: 0692 630394

Editor/P.R.O.: John Sawbridge

Chief Measurer: John Mayger

U.S.A.

Commodore: Craig Perez

Vice-Commodore: Chuck Hooker

Secretary/Treasurer: Scott Rovanner, P.O. Box 3973,
Walnut Creek, CA 94598, U.S.A.
Tel: (415) 939 4069

Editor/P.R.O.: John Sawyer

Chief Measurer: Bill Beard

YUGOSLAVIA

Secretary/Treasurer: Marko Kavcic, Skerljeva,
61210 Ljubljana, Yugoslavia

ZIMBABWE

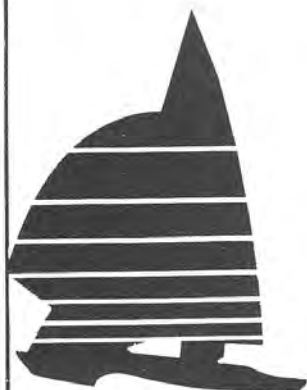
Chairman: Peter Harrison, P.O. Box 1771,
Bulawayo, Zimbabwe

1986 Results: 1st, 2nd Worlds
 1st, 3rd, 4th UK Nationals
 3rd Europeans
 1st Swedish Nationals
 1st, 2nd Kenyan Nationals
 2nd French Nationals



**SUPER
SPARS**

- Visit our New Showroom
- Superspar Masts, Booms, and Spi Poles rigged to the Alverbank Specification
- Fittings and Repairs
- For further information and friendly advice please contact Clive Robinson
- RAPID DELIVERY TO ANY ADDRESS WORLDWIDE



ALVERBANK SAILS LTD.

AGARD ST, DERBY, DE1 10Z, ENGLAND.
 Tel. (0332) 42586 Telex 377106



PAUL RAVENHILL



PETER BOND



RICHARD HUGHES



ANDREW PARTINGTON

EXECUTIVE OF FIREBALL INTERNATIONAL

COMMODORE

A. Goethals, Weidestraat 236, B 8320 Brugge, Belgium
Tel: 50-35 47 89

REAR COMMODORES

W. Davy (Africa), P. O. Box 81021, Parkhurst,
Johannesburg, South Africa
Tel: Home – 11 802 2016
Office – 11 442 7491

J. Overgaard (Asia), ESCAP, The United Nations
Building, Rajadamnern Avenue, Bangkok 2, Thailand
Tel: Office – 2829161-200 2829381-389

A.T. Scotford (Australasia), G.P.O. Box 713, Sydney,
New South Wales 2001, Australia
Tel: Office – 221-2366

J. Martin (Europe), B.P. 17, St. Lunaire, 35800 Dinard,
France
Tel: 99-463129

T. Moss (The Americas), 17, Caulfield Road, Rexdale,
Ontario M9W 1X1, Canada
Tel: Home – 416 743 5179
Office – 416 293 3673

EXECUTIVE MEMBERS

A. K. Bell, Solitude Wood, Kilmore Road, Lurgan,
Craigavon, Northern Ireland
(Past Commodore)
Tel: Home – 07622-23995
Office – 0232-667914

P. Bond, 3, Teme Road, Tolladine Road, Worcester,
England
(Technical)
Tel: 0905 22469

H. R. Hughes, 47 Chiswick Quay, London, W4 3UR,
England
(Editor)
Tel: 01-995 3109

P. Milne, Sutton, Church Lane, Eastergate, Sussex.
PO20 6UZ, England
(Designer)
Tel: 024-368 2196

A. Partington, 14, Malvern Court, Hill Rise, Brands Hill,
Slough. SL3 8RD, England
(U.K.)
Tel: 0735 45766

J.G. Pollard, St. Petroc, Meadow Bank, Kilmington,
Axminster, Devon. EX13 7RL, England
(Secretary/Sponsor's Representative)
Tel: 0297 32008

P.J. Ravenhill, 5, The Crescent, Witney, Oxon. England
(Treasurer)
Tel: Home – 0993 71593
Office – 0865 57514

TECHNICAL COMMITTEE

Peter Bond – Chairman

Neil Loveland – AUSTRALIA

Terry Moss – CANADA

Phillipe Gault – FRANCE

Adrian Bell – IRELAND

Walter Davy – SOUTH AFRICA

Gordon Pollard – Sponsor's Representative

Frank Berry – UNITED KINGDOM

John Mayger – Chief Measurer

TWENTY-FIVE YEARS ON

By Peter Milne

If there's one thing I dislike, it's looking back – especially when Richard Hughes asked me to do a piece based upon events that occurred a quarter of a century ago! I'm a firm believer in looking towards the future, but I'm always fully occupied just trying to cope with the present.

Order is orders, however, so I had better get into line.

Twenty-seven years ago the dinghy racing scene differed markedly from that of the present day: classes were more numerous and nationally rather than internationally based. Material costs were low (prior to the oil crisis in the 70s) but labour costs were high. This state of affairs fostered fervent interest in kit building and classes such as the Enterprise, G.P.14, Hornet, etc burgeoned because of this. All those years ago, perhaps only the Hornet could be termed a truly high speed racer intended for home building.

When proposing a new class, it is most important not to poach upon the preserves of existing successful classes: a new class, to succeed, must find its own pigeonhole.

In 1960 I was campaigning a Finn dinghy, but much interested in the outstanding speeds achieved by the 40ft (12.2m), A Class Scows raced in North America and affectionately known as 'Flying Sidewalks'. Provided sailing weight was kept to a practical minimum, a small, two-man scow promised an exciting performance and should prove simple to construct – ideal for home building.

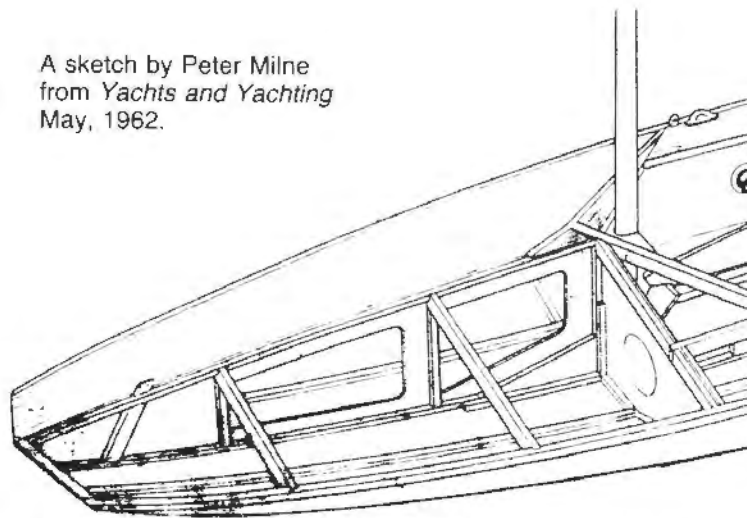
Fireball evolved upon the backs of envelopes in fairly short order. Ease of building and low cost of materials were of prime importance as was ease of construction. It was of equal importance, of course, that the boat had an outstanding turn of speed complemented by relatively vice-free handling both at sea and on inland water.

Like so many projects, Fireball remained a paper boat waiting for an opportunity to take it further than the drawing board stage.

The designer had been building a series of 13ft, waterjet-propelled powerboats for Donald Campbell and, when this work came to an end, the chance came to build the prototype Fireball in the winter of 1962. The boat was put together in a barn on Ditchling Common just north of Brighton. In that very first boat, the forward bulkhead was veed to match up with the angled carlins at the after end of the heavily cambered foredeck and the side tanks ran right aft to the transom. The after deck was open at the after end of the cockpit. Hull weight was down to 165lb (74.8kg). Proctors provided the mast and boom and the sails were made by Bowker and Budd.

Keith Musto and demonstrated the boat to Bill Smart, then editor of *Yachts and Yachting* magazine, on a blustery afternoon

A sketch by Peter Milne
from *Yachts and Yachting*
May, 1962.



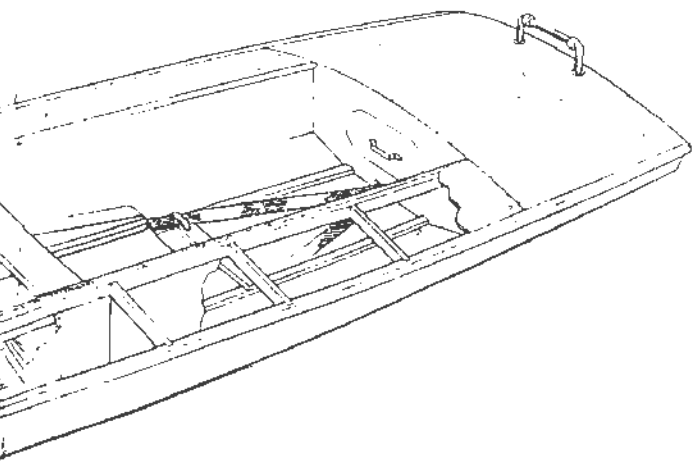
in February 1962. Bill was convinced that the boat had a bright future and, shortly after, an article appeared in *Yachts and Yachting* which stirred the interest of dinghy sailors both nationally and overseas.

There was no way that the first Fireball could be called a true pre-production prototype, so the designer, in close association with Jack Chippendale (who was to be the first builder to the class) turned the boat into a simple, home-builder exercise. The intention was that the boat should be really easy to assemble working either from full-size plans or from stage kits.

The first 'real' Fireball used precisely the same hull shape as its predecessor but a straightforward, transverse bulkhead now closed the forward and after ends of the cockpit, the sides of which were straight fore and aft and the foredeck was pitched rather than cambered in the interests of ease of assembly. Apart from a few other details which were introduced to ease the job of the home builder, this boat was essentially the same as the original. The hull weight was increased to 175lb (79.4kg) to produce a more realistic minimum weight and to correct the slight skittishness that was a characteristic of the very first boat.

Fireball is no beauty and, in 1960, differed radically from the generally held concept of what a racing dinghy should be. In those far off days, One-of-a-Kind events were popular and had some effect upon the popularity – or lack of same – of the class boats taking part. They served also as a useful shop window for new designs.

When the Chippendale-built boat made its debut at the first Sheppy One-of-a-Kind series, there were some amused grins on the faces of the pundits. The first race was held in light winds and, of course, the boat performed very much on a par with others of her size and weight. The establishment were,



however, somewhat startled to note that the boat's windward performance was just as sharp in these conditions as that of conventional, stemmed dinghies. Later in the series the wind got up and Fireball gave her first demonstration of her off-wind potential which, even today, is exceptional for a boat of her weight and with a useful waterline length of only 13ft (4.00m).

Fireball then took part in a number of One-of-a-Kind events and it became apparent that the boat's all-round performance in a breeze really did have something to offer and – big plusses at the time – she was cheap and easy to build either from scratch or from a kit.

Those were the early days. Working drawings and instructions were prepared for the home builder and Chippendale produced kits to various stages of completion.

When the boat was first marketed, it was kept as simple as possible so that it would appeal to penurious builders and owners who, perhaps, had only limited racing experience. As the class progressed, of course, sailing techniques and standards would improve and owners would be forever on the look-out for increased performance. Experienced dinghy sailors, who put the prototype through its paces realised that the performance potential was very high. It is important to learn to walk before running, however, and that is why the early boats were fitted out in the simplest way: there was no trapeze or spinnaker (although both had been evaluated on the pre-production prototype and the encouraging results quietly filed!).

To be ensured success a new class must score on four separate points: it must occupy a viable hole in the market, the boat must be of good basic design, a lively class association with knowledgeable committee must be formed as soon as possible and, finally, well-conceived rules must be in existence at the

earliest opportunity to control the boat and the class association. The class rules, in particular, are of vital importance, because it is they which control existing boats and guide the progress of the class.

I have done as I was told and recalled those time-blurred days of the '60s. The memories might – or might not – be of interest, but what is of vital importance is the current health of the class and its vigorous future.

From the beginning, strong interest was shown in the class. The French were keen to build, and then fleets and builders popped up in Holland, Canada, Germany, Scandinavia, Switzerland to name but a few countries.

Strangely enough, most countries are very partisan about the racing classes that they support. Perhaps it is Fireball's unusual appearance that allows it to appeal world-wide: the design does not have any obvious country of origin and, therefore, each feels that it is not supporting the product of a rival!

Twenty-five years ago, the call was for a simple and cheap boat, but it was always the intention that there should be room for development to ensure that the boat did not become out of date – as is frequently the lot of many strict one-design classes. Permitting some development also has the benefit of maintaining interest in the boats themselves (a comment made in the preamble to the class rules). There is no doubt that this characteristic also has a marked effect upon the extrovert and technically competent people that Fireball racing attracts.

When we were testing the prototype, we certainly did not foresee the drastic increase in material costs that lay just around the corner and we gave no thought to the possible building of the boat in glassfibre – that is only too obvious when looking at the hull shape. The oil crisis was years in the future and the boardsailing explosion was not even on the horizon.

Fifteen years ago dinghy racing was enjoying a worldwide boom, but growth rates for even the most popular international classes has slowed in the last decade. The hey-day might be over, but there is no reason why a well-run, truly internationally-based and popular class such as Fireball should not enjoy a really lively second twenty-five years.

I wonder who will be the hot-shots then and who the 'in' sailmakers? No doubt the International Committee will be debating a new clutch of controversial class and constitutional changes with the usual verve. Almost certainly there will be new constructional materials to consider. Heaven alone knows what the price for a new Fireball will be in the year 2112...









From: The Rt. Hon. Edward Heath, M.B.E., M.P.

HOUSE OF COMMONS

I am proud to have been the owner of a Fireball nearly twenty-five years ago, soon after I started dinghy racing.

"Blue Heather", as she was named, was a beautiful boat. I shall never forget the joy I felt as I took her over from the builders. Specially commissioned, she was superbly finished.

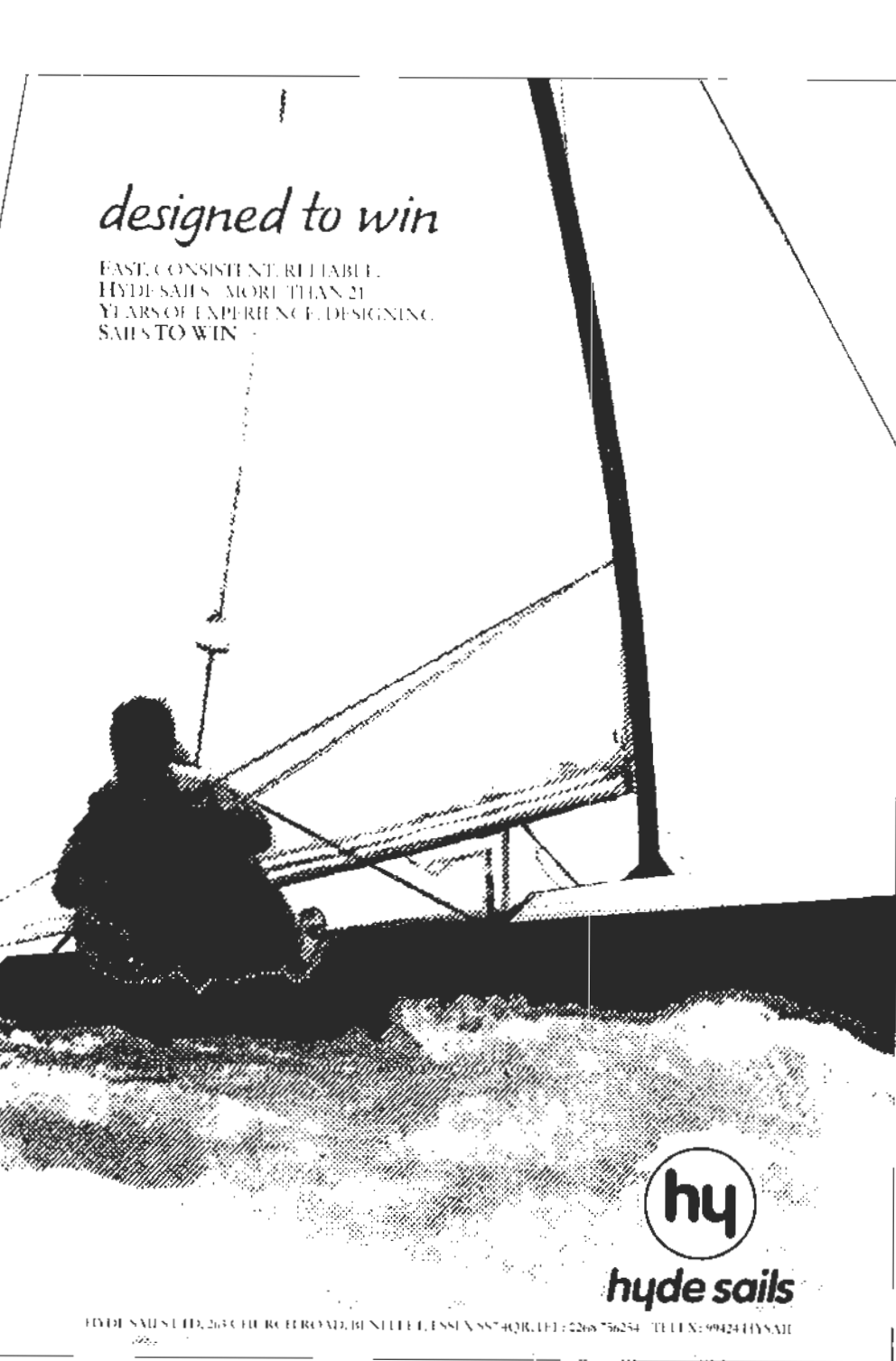
Helped and advised by Peter Bateman, the then world champion, she gave me and my crew a first-rate season's racing.

My Fireball tempted me to bigger things. It was the precursor of "Morning Cloud" and ocean racing, in which in later years Peter Bateman was also a member of my crew.

I look back with pleasure to the intense satisfaction I gained from my experience with "Blue Heather", pleasure which must have been shared by many owners over the last half century.

I send you all my warmest congratulations on the 25th Anniversary of the Fireball and I wish you happy sailing and great success in the future.

Edward Heath



designed to win

FAST, CONSISTENT, RELIABLE.
HYDE SAILS - MORE THAN 21
YEARS OF EXPERIENCE, DESIGNING
SAILS TO WIN.



hyde sails

HYDE SAILS LTD, 263 CHURCH ROAD, BENNETT, ESSEX SS7 4QR, TEL: 0268 756254. TELEX: 99424 HYSAIL

OFFICERS OF FIREBALL INTERNATIONAL

COMMODORE

1964-1965	Peter Milne
1965-1969	William Kempner
1969-1980	Michael Wetherall
1980-1983	Adrian Bell
1983-	Antoine Goethals

REAR COMMODORE

Africa	Gotz Klohn, Walter Davy
Asia	Jens Overgaard
Australasia	John Castle, Tony Scottford
Europe	Patrice Briandet, Jean Martin
The Americas	Herb McKim, Terry Moss

SECRETARY

1964-1966	William Kempner
1966	Ron Cohen
1966-1968	Steven Schrier
1968-1969	Timothy Goodman
1969-1981	Frank Berry
1981-	Gordon Pollard

TREASURER

1966-1969	Steven Schrier
1969-1981	Frank Berry
1981-1984	Antoine Goethals
1985-	Paul Ravenhill

EDITOR

1968-1970	Steven Schrier
1970-1976	Timothy Goodman
1977-1983	Lesley Brooman
1984-1985	Charles Parkinson
1986-	Richard Hughes

BUILDING THE FIRST, AND MANY OTHER FIREBALLS

BY JACK CHIPPENDALE

It was in early 1962 that Peter Milne arrived at my works at Fareham in Hampshire with what was to us then a most unusual design of dinghy. Peter was at that time employed by Norris Bros., and he came to enquire if I would be interested in developing the boat. Only a very quick glance persuaded me that here was a design that could hold enormous future potential, and we agreed to develop and promote it. As the design was such a departure from the classes then being sailed in the U.K. it was obvious that speed in launching was essential if the new class was to get established before attracting look alike designs, which would result in dissipation of the potential. So all the stops were pulled out, the design was lofted, and our first Fireball was set down.

From the outset it was apparent that Fireball was well suited to production as a kit and we set to work to build her in the conventional way so that kits could be produced in the manner then well established, i.e. frames and bulkheads fastened to the floor to set up a rigid structure to which the hull skin is fastened. Peter's design showed side tank fronts that curved fore and aft in plan, and so these would have to be installed later, as the photo of our first boat shows. Within two weeks we had lofted, patterned and produced the first hull; installed the side tank fronts and were ready to deck.

My usual practice in those days was to wander round the works of an evening after work and just look at the various jobs in the hope that outside the hustle of the working day I might hit on some little idea that would improve our building techniques. On this occasion it was, I remember, a warm sunny evening and I stood leaning on the transom of our prototype Fireball thinking of possible stages in the development of the kits. Looking through the boat I realised that in an otherwise simple boat, the only difficult job so far had been installing the curved side tank fronts, which followed the plan shape of the sheer in order to give parallel 8½" width side decks that were more normal.

A straight tank front would undoubtedly be much easier to install, but a straight line between the existing end widths gave a mid side deck over 12" wide. Too wide for sitting out, and with too much side buoyancy. A little juggling produced a good compromise giving the deck width we have now.

Suddenly it started to fit into place. Straight side tanks could be fitted between the bulkheads before planking of course, but we had a continuous structure that stood on its own. If we now provided a symmetrical bottom panel and perfectly matched bilge and topside panels we could get away from the established method of building with its floor-fixed permanent building set up, and have a free standing movable construction that had no choice but to produce an accurate hull, providing the panels themselves were accurate.

This is now old hat, and numerous boats are built by this means, but in 1962 it altered the whole outlook on the D.I.Y. building of racing craft. It also meant that home builder plans could enable a lot of Fireballs to be built quickly and so minimise the "look alike" threat. By morning it was all worked out, and I rang Peter Milne to ask if we could stop work on the prototype and build another boat in accordance with the idea I had just put to him. I pointed out the difference it would make to the home builder and that this would give the class a tremendous advantage. Peter said he would consult Norris Bros and come back to us. In an hour it was all settled, and we were doing the additional lofting.

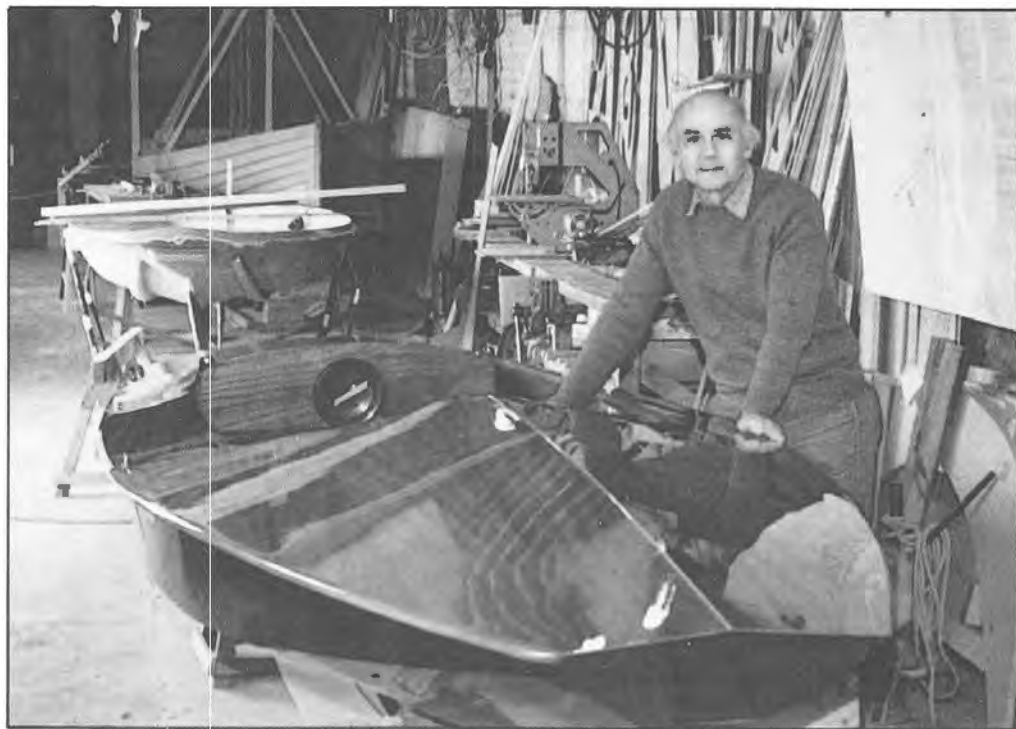
We now had a race against time. Yachts & Yachting were producing a series of articles on Fireball and photographs were needed showing the revised set up. In May 1962 Yachts & Yachting took the lid off Fireball with drawings, photographs and the complete instructions for building. Fireball had come to stay. The prototype was sold undecked to a Hayling Island owner, and after 25 years is now back with its builder. Its new owner, Mr. Christopher Mantel, asked us to restore it to as near its original state as possible. The original owner-fitted decks were still quite good, although a little damaged. Renewing them afforded us the opportunity we wanted, that of examining the insides of the tanks. After 25 years they were dry, and all that was given was another coat of paint. The plywood (in those days Utile) is as good as when it was built, rich in colour and with almost no stain. The boat has been converted to centre-main, and the owner has elected to retain this. He hopes to be able to take her back to her home water at Hayling Island to sail, and is good for many more years. My thanks are due to her new owner for allowing us the opportunity to have her to work on, and for wanting her largely kept to her original specification.

As a matter of interest the first standard Fireballs were sold at £185.00 ex sails in 1962. Norris's first boat was £265.00 inc sails.

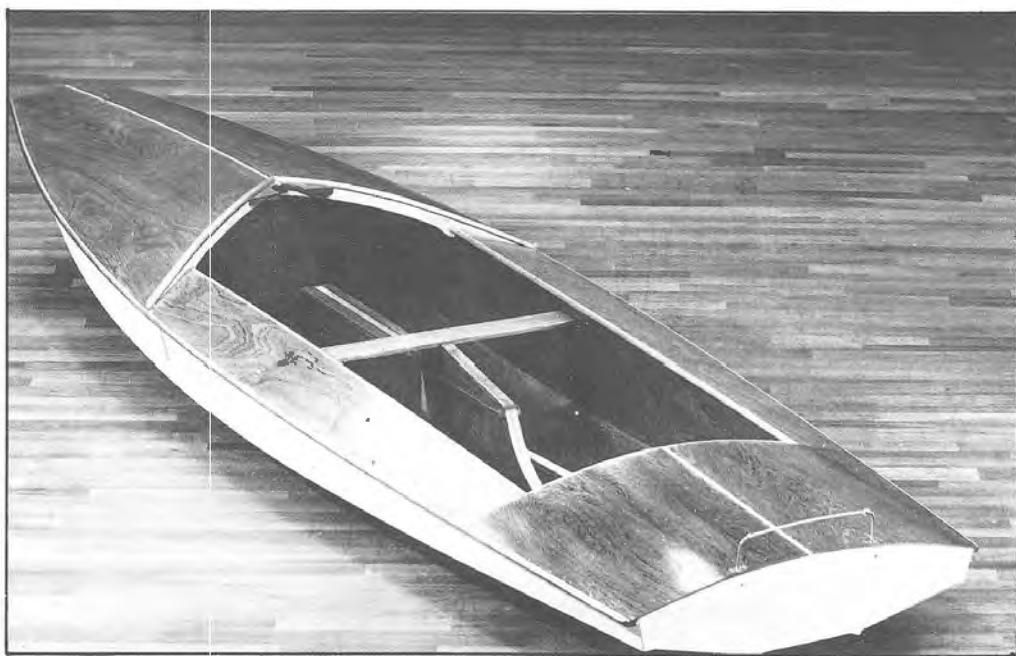
Incidentally I notice in International Fireball December 1986 the new updated plans, etc etc. You will find the drawings in the May 4th 1962 issue of Yachts & Yachting most interesting.



Jack Chippendale
and Fireball 2



A typical hull
from J's International
Boats, Belgium



THE WORLD CHAMPIONS

1966	Hayling Island Sailing Club, Hayling Island, England K1599 R. Fisher and R. Beales Great Britain	1977	Kinsale Yacht Club, Country Cork, Ireland US10149 S. Benjamin and T. Edmundson United States
1967	C. N. de Bendor, Ile de Bendor, France K2161 P. Bateman and J. Brooke-Houghton Great Britain	1978	Royal Varuna Yacht Club, Pattaya, Thailand K11218 L. Smith and A. Barker Great Britain
1968	Le Club de Regates de Brunnen, Lake of Lucerne, Switzerland K2161 P. Bateman and J. Brooke-Houghton Great Britain	1979	Monnickendam Yacht Club, Marken, Holland K12218 C. Read Wilson and P. Withers Great Britain
1970	Tralee Sailing Club, Fenit, Ireland K1570 J. Caig and J. Davis Great Britain	1980	Royal Natal Yacht Club, Durban, South Africa K11609 K. Slater and R. Parslow Great Britain
1971	St. George's Yacht Motor Club, Beirut, Lebanon K1570 J. Caig and J. Davis Great Britain	1981	Yacht Clubs of Weymouth, Weymouth, Dorset, England K12906 P. Morrison and J. Turner Great Britain
1972	North Carolina Yacht Club, Wrightsville Beach, U.S.A. G7533 J. Diesch and S. Warfvinge West Germany	1982	Frankston Yacht Club, Australia KA12768 C. Tillett and M. Rogers Australia
1973	Royal Torbay Yacht Club, Torquay, England K8520 K. Brackwell and R. Butcher Great Britain	1983	Cercle de la Voile d'Estavayer, Switzerland KA12763 S. Hamilton and D. Connor Australia
1974	Glenelg Sailing Club, Glenelg, Australia KA8178 J. Cassidy and W. Crisp Australia	1984	Richmond Yacht Club, Ca., U.S.A. KA13198 G. Smith and N. Connor Australia
1975	Societe des Regates Rocheliase, La Rochelle, France US9798 Mrs. J. Ellis and A. Ellis United States	1985	Club del Mare, Diano Marina, Italy K13482 A. Wetherill and M. Penty Great Britain
1976	St. Margaret's Bay, Nova Scotia, Canada US10149 S. Benjamin and T. Edmundson United States	1986	Pointe Claire Yacht Club, Montreal, Canada. KA13216 N. Abbott and C. Smith Australia



The World's Trophy

FIREBALL WORLD CHAMPIONSHIP TROPHIES

The Worlds Trophy

The Champion Crew's Trophy – Hublot

MDM Perpetual Trophy

Race 1 – The Moore Perpetual Trophy

Race 2 – The Villa Banfi Perpetual Trophy

Race 3 – The Rondar Cup

Race 4 – The Certina Trophy

Race 5 – The Mildara Wines Perpetual Trophy

Race 6 – The Bell Bowl

Race 7 – The Fireball Sponsor's Trophy

Hublot MDM Trophy

Certina Trophy

Moore Trophy

Mildara Wines Perpetual Trophy

Villa Banfi Trophy

Bell Bowl

Rondar Cup

Sponsor's Trophy



Things I will never regret

by Bob Fisher

Dick Lonton has a lot to answer for. back in 1963, when he was a slim young thing – hardly the gentle giant of today, Dick asked me if I would go to Tollesbury to measure four Fireballs that he and a few friends had built. An RYA Measurer in those days, I had little to dissuade me from that task. Had I known then what I know now....

For a start it was not a single evening's work and every evening that I went there meant attending the Sailing Club bar. My meagre fee rapidly dissipated. But what was more calamitous was that Dick invited me to sail his boat in the Championship, and worse, I accepted.

The boat was then unsailed. Dick had no idea how good it, or he, was, and neither for that matter had I. For me it was just going to be another weekend at Hayling Island and my measuring assistant and chauffeur, Gary Cowell, thought that he would come too, as our team manager. Grandiose titles – Gary was my drinking mate and he knew a good thing when it was offered.

Time passed – the summer flew away, as they did in those days when the sun shone and the strawberries and parasols were the regular features of Wimbledon – and I received a phone call to tell me that the Championship was the next weekend and asking me what arrangements I had made. I thought that by then Dick would have forgotten the original arrangement (and made others) but he insisted that I steer his boat. Gary said that it was alright with him and that he would provide the transport. Funny how these things go, isn't it?

We arrived, slightly breathless, at Hayling Island SC with ten minutes to go before what we thought was closing time. Wrong. They didn't seem to want to shut that night. Bill Kempner, who was one of my heroes for his Canoe and Hornet sailing, greeted me with the staggering news that he had me down as favourite to win. I laughed, knowing that the only time I had sailed a 'ball' had not been in anger, simply to see if they actually went where you pointed them – Peter Milne's 'Threepenny bit' hull had plenty of doubters in those days. The beer lessened the pressure.

That we shared the title with David Miles is now part of history but I can assure you that there was no one more surprised than me. Dick wasn't feeling a thing at the time because we had had more than enough before the final race,

which we won by over five minutes, and it hadn't worked off. The euphoria never wore off.

Which was why I built the odd boat in the following seasons. At that period in my life I had time to spare and quickly built a boat for the championship at Hunstanton, only to sell it to John Samworth and build another which was bought, post-championship, by John's mate Gerry Twells. And that is how the Nottingham County fleet came to being!

I had some scores to settle after that championship, not the least of which was how to get even with Ron Cohen, he who died for the love of a lady. It meant that I had to build another boat and that was why Pink Plymouth III (No 1599) came into being. Lonton had an influence on that too. Rather than go



to the World Cup Final at Wembley (and I had a free entry to the BBC TV area) I chose to go to Tollesbury SC Open Meeting which was where I found out that the sails that Peter Bateman had cut for me (when he worked for Seahorse Sails) were not the most spectacular. Peter and I met the next day and it was he who persuaded me (Keith Musto had been unsuccessful the year before) that the jib should be cut so that the clew was on the deck – in those days most were at least two feet above – and even then I was unsure.

The performance of the boat with this 'secret weapon' was enough to convince me – after all we won the World Championship with a race to spare – but not everyone. Lucien and Lindy Preuse wanted to buy my sails after the championship but asked, 'did I have a normal jib?'

From then on it was all down hill, notably the worlds at Brunnen (and Ron Cohen nearly had us locked up for not being able to pay the hotel bill which he had instigated and which situation was only resolved by selling all the spare gear and then, when not enough was realised, the boats) and a few Ones-of-a-Kind (Cohen again). My last efforts were at the front end, for a lady of course, and since then I have taken to the greater stability of a keel, but still with exciting boats that travel faster than they should. Why should you change the habits of a lifetime, even for Dick Lonton?



and 20 years
later at Broad stairs

Running before
the days of
spinnakers



**There's a thin Black line
between the Best & the rest
buy**



*We would like to extend our Congratulations to
Fireball International for reaching its Jubilee Year
and every success for the future.*

**Nicholes Boatyard, Yard Mead, Egham, Surrey, TW20 0AB, England.
Telephone (0784) 32264**

THE EARLY YEARS OF THE UK FLEET

by Veronica Falat

My own recollections of the early years of the Fireball class are somewhat vague. In the 1960s I was a junior crew in the Merlin Rocket fleet at Oulton Broad in Suffolk, and on the whole the Merlin sailors were (and some still are!) very suspicious of the strange-shaped craft that started to appear in increasing numbers, emerging from lofts and garages, their proud owners enthusiastically exclaiming what fun it is to build a boat!

The Fireball made an almost immediate impact on the dinghy sailing scene. The lightweight, good-looking hull appealed to people keen to sail fast and its ease of building meant that it could be acquired by people cheaply. One of the early amateur builders was Trevor Chapman (well-known to many of us the measurer at Fireball Championships for many years) at Snettisham Beach S.C. in north Norfolk. He recalls that it was an article in 'Yachts and Yachting' in 1962 showing the construction of Peter Milne's Fireball that first attracted him to the class. He soon acquired a set of plans and spent the 1962/63 winter building a Fireball in a beach bungalow. The cost of the boat including sails and cover was £125!

Trevor comments: "By today's standard it was very unsophisticated, with neither trapeze or spinnaker. The main was sheeted to a horse on the forward face of the transom. This meant that the boom extended to the transom so as to obtain the correct line for the sheet when close hauled. It also meant that when reaching, the boom would often plough a furrow in the wave to leeward. No chance of spilling wind but plenty of chance for a spill!"

But however unsophisticated, Trevor Chapman's Fireball obviously impressed other Snettisham sailors because

during the next winter 12 more boats were built, one of them by a Norfolk farmer, Frank Berry. (Frank had been a keen Firefly sailor having come 2nd in the Firefly nationals twice in the 1950's; Trevor had been his crew). Frank says that one of the interesting things about the early Fireballs was that they had open mast-gates; the masts used to bend backwards on the downwind legs (they had no spreaders) and there was a danger that they would pop out of the mast-gates and not find their way back in! He also recalls that to help in home construction the tolerances on certain measurements were much bigger than they are now (16mm instead of 8mm; he thinks some were even 1"!)

Interest in the class was widespread and enthusiastic. Both amateur and professionally built boats were popular and sail numbers had reached 500 by 1964. Frank's first boat was 508. At this time Jack Chippendale at his yard at Fareham in Hampshire was not only producing Fireball hulls and supplying equipment but also playing an important part in the organisation of the class. This included the issuing of licences to new builders at home and abroad, the promotion of the class by ensuring that good plans were available, selling plans on behalf of Norris Brothers, issuing certificates and doing lots of other secretarial tasks. It was not until 1965 when Peter Mackintosh became secretary that the U.K. Fireball Association started to play a greater part in the class's development, gradually taking control of the class away from the builders. (By this time Chippendale Boats had been joined by Plycraft in the West country as official Fireball builders in Britain.) During 1965 Chippendale Boats produced the first fibreglass Fireball, reflecting the interest and curiosity about this new-

fangled material in the mid '60s.

The class was growing quickly. By 1967 there were some very large fleets at clubs throughout the country, for instance some 60 boats at Snettisham. Frank Berry was now Fireball secretary. His predecessors in this post had been honorary secretaries but after a subscription increase to £3 the Association could afford to have a paid secretary. Meanwhile, the class was becoming well established overseas and Fireball International had come into being with Bill Kempner as Commodore and Steven Schrier as Secretary.

Nowadays when one thinks of the Fireball, one thinks of the spinnaker and trapeze as being fundamental to its nature as a high performance dinghy, yet in the early years both were absent. Sailing to windward in a good breeze must have been very hard work without a trapeze and running dead before the wind without a spinnaker must have been quite alarming at times. (Frank Berry does remember some very interesting capsizes!) In 1966 the trapeze made its appearance in the class and spinnakers were allowed in a UK national championship in 1968.

By 1970 the pattern of Fireball racing in the UK was basically the same as it is today with a busy open meeting fixture list and class racing at clubs throughout the country. (The 1971 handbook lists 111 UK fleets.) However the gear available and the sailing techniques used seem to have been rather different. The 1971 handbook included a section advising on boat handling the tip: "For normal trapeze work on the wind the crew should have his centre-line at the chainplates".

The changes that have happened within the class since 1970 seem to suggest that the early 70s were a turning point in the class's history, at least in the UK. The demise of Chippendale Boats at Fareham after the class association decided to grant more builders licences,



Peter and Christine Sandy –
Brunnen Worlds, 1968



Peter Bateman and Julian
Brook – Houghton
Brunnen Worlds 1968

which meant that the market for new professionally built boats was shared out between more builders, marked the end of an era. At its peak Chippendale Boats had produced some 300 Fireballs a year – a staggering number compared with the number of new boats built in this country today; since then the pattern has been set of several builders producing a relatively small number per year. Also, the number of home built boats has drastically diminished, reflecting the desire for competitive hulls for top-class racing rather than for boats that are cheap. In 1974 Peter Milne drew up plans for a stitch-and-glue Fireball and Jack Chippendale, by then back in business in Norfolk, produced the prototype. This was some encouragement for home building but in the long term did not

have a major effect. During the last 10 years the vast majority of boats have been professionally built.

It is interesting that there are now very few GRP fireballs produced in the UK. In the late 60s and early 70s fibreglass boats were quite popular, available from Rondar Boats, Moores and Plycraft amongst others. It's often said that GRP boats are well suited to club sailing; they can be left on a dinghy park all year and need little maintenance. Perhaps fibreglass has been used less in recent times because most boats are now built for the open meeting circuit and it has always been possible to build light, competitive hulls in wood.

The Fireball fleets around the country have tended to decline since the mid 70s and the membership of the association

has also suffered. Some of the clubs which had large fleets in the early days, eg Snettisham Beach and Kessingland, now have very few boats if any. It's hard to pinpoint the exact causes of this, but fortunately the class still has a highly respected place in the UK dinghy scene and with some 750 paid up members is still one of the biggest. Fireballs are now sophisticated, high-performance racing machines, with a well supported open meeting circuit, but the strength of the class still lies with the ordinary club sailors.



PETER BATEMAN, Fireball World Champion in 1967 and 1968, European Champion and twice winner of the CORK regatta in a Fireball, amongst many other titles, brings the story up to date.

The period since winning the world championships has been busy both in sailing and at home. I have now been married for 13 years and have 2 children, the oldest son sails an Optimist whilst the younger son is into tennis and gymnastics. My marriage coincided with a change in attitude to my career in sailmaking: at work I became involved with bigger and bigger yachts, dinghy sailing died and for 5 years I was crewing and helming in a wide variety of both racing and cruising yachts.

In 1979 I made a decision to leave sailmaking and became the Olympic coach for the British Yachting Team. I found this particularly challenging and interesting: unfortunately the boycott of the 1980 Olympics destroyed this enthusiasm. In sailing, the year was interesting as I was co-helmsman and watch captain on "Morning Cloud". During the Fastnet we sailed in the worst conditions I have ever experienced. In one of the Admirals

Cup races in the solent "Morning Cloud" was involved in a protest with "Police Car". Our protest was rejected but I ended up 12 months later working back in sailmaking with my opponent of that evening Chris Bouzaid.

Working at Hood Sailmakers led to sailing on maxis and large multihulls: the power and speed of these boats can only be understood after sailing on them. I cannot forget some special moments on the multihulls. The first time at 30 knots was on "Paul Ricard" with Eric Taberly, the second run at this speed resulted in the mast collapsing over the side. Sailing on "Elf Aquitaine" at 15 knots upwind and then out accelerating a "Hobie 18" in 25 kts of wind are similar high points. Evolving sails for these "monsters" challenged mind, materials and techniques and in a 3 year period saw the day's run record change from 350 miles to over 500, and the long standing Atlantic record decimated by these multihulls. I managed to keep most of

my sailing to within the sight of land, eventually I gave in and joined Chay Blythe in the two handed Round Britan race on the 65' trimaran "Brittany Ferries". Whilst I now understand the attraction of short handed racing I don't think I will repeat the exercise. At the same time I became involved with the exciting world of 12 metres and this has influenced my life since. I worked for Peter de Savary with the "Victory" challenge in 1983, then in 1985 was involved with the setting up the "New Zealand" challenge and last winter went to Fremantle to work with the "Steak n' Kidney" syndicate. The world of 12 metres is shown as the glamour end of sailing, and whilst the fields of endeavour reached are the highest in sailing, the cost in money, time, commitment, and disappointments are similarly high and any person wanting to become involved should consider their involvement carefully.

I now work for myself as a marine consultant and am just about to start work with one of the next Whitbread Boats.



INTERNATIONAL FIREBALL LICENSED BUILDERS

AUSTRALIA

P. & J. Brookes

19, Coprosma Avenue, Frankston, Victoria 3199

De Lange Sailcraft

7, Pentecost Road, Mornington 3931

Mark Rees Yachts

26, Montgomery Avenue, Mt. Waverley, Victoria

Gary Smith

10, Nelson Road, Sandy Bay, Hobart, Tasmania

Windward Mark Yachts

16, Avoca Street, Goolwa, South Australia 5214

BELGIUM

O.B.O. Marine & Surfing

Bleyenbergh, Voetbooglaan 11, 2180 Kalmthout

CANADA

Lightfoots

4520, Odlin Place, Richmond, B.C. V6X 2G5

FRANCE

Boatique Diffusion

26 rue due Colonel Gillon, 92120 Montrouge (Paris)

Chantier Nautique B. Lucas

Penetytosta, 29239 Gouesneau

ITALY

Cantiere Baruffaldi,

Via Orti Est No. 41, Chioggia Venezia

JAPAN

Okamoto & Son Boat Yard

No. 7-3 Shinyamashita-cho, Nakaku, Yokohama

Sun Marine Family Co.,

Toyohama Kusahana 24, Ninamichita-cho, Chita-gun, Aichi

Ken, 470-34 Japan

MALAYSIA

Freycraft Marine Industries SDN BHD

P. O. Box A-15 Inanam, Sabah

SOUTH AFRICA

Action Yachting

P. O. Box 36, Table View 7405, Cape Town

Highveld Boats,

41, Trollip Street, Brenthurst, Brakpan

SWITZERLAND

R. Matter

Bootsbau, CH 8265 Mammern, Switzerland

J. Steinmayer

Bootswerft, Weidestrasse 27, CH 8706 Meilen

THAILAND

Captain Sompong Kong Thai,

c/o Thai Navy Dockyard, Arun, Amarin Road, Bangkok 10600

UNITED KINGDOM

Giles Reinforced Plastics Ltd.,

1, Hatch Way, Kirtlington, Oxford, OX5 3JS

Malcolm Goodwin

St. Johnes Road, Wivenhoe, Essex.

High Performance Sailboats,

Furzebrook Road, Wareham, Dorset. BH20 5DU

Bob Hoare Racing Dinghys Ltd.,

35, Jumpers Avenue, Christchurch, Dorset. BH23 2ER

R. Moore & Sons (Wroxham) Ltd.,

Station Road, Wroxham, Norfolk NR12 8UT

Rowell & Morrison Ltd.,

24, Camperdown Terrace, Exmouth, Devon.

Severn Sailboats,

3, Teme Road, Tolladine Road, Worcester.

Stanley & Thomas Ltd.,

Nicholes Boatyard, Yard Mead, Egham, Surrey

Guy Winder

28, Foothill, Nab Wood, Shipley, Yorks.

U.S.A.

Carolina Fireballs

122, Edgehill Road, Wilmington, Mc 28403

Outer Limit Yachts

1073, Summit Avenue, Cleveland, Ohio 44107

Penguin Boats Ltd.,

c/o Grey & Johnson, 425 1st Street, Suite F., Los Altos,
CA. 94022

25 YEARS OF FIREBALL IN EUROPE

by LINDY PREUSS

As Richard Hughes asked me to write a report on the development of the fireball in Europe – apart from England – over the last 25 years,

I began by going through 25 years of bulletins. A fortnight, and the flat awash with assorted fireball bulletins later, I was more and more baffled on how to concentrate in one report all those thousands of happy hours, first sailed and then discussed, relived and described. So much happened in the single countries in these 25 years, that it hardly seems possible to convey in a few words just how much enthusiasm and honorary labour lies in these reports, but also how much joy, satisfaction and humour they represent, being frequently on par with the best of seatales. It was the very capacity for enthusiasm of FIREBALL sailors which led me to the conclusion that the world of FIREBALL could only be the best of possible worlds.

Twelve European countries can show a lively FIREBALL activity, with only three where this is absent. While it is true dinghy sailing has suffered in popularity over the past years, there seem to be signs of recovery, and it is likely that the FIREBALL, with its potential for home construction, the availability of good commercial boats, and its excellent class organization, will be more and more of an attraction for young sailors.

I won't quote too many names and dates for the detail would be excessive; rather, I will try to tell the tale of the beginning of the FIREBALL in the different countries, how it became classified, and of its present status.

SWITZERLAND

Pretty well in the middle of Europe there is a rather small Switzerland, with the rather big luck of having plenty of lakes large enough to suit dinghy sailors. As Lucien Preuss launched his first homebuilt fireball in December 1963, and Heini Rusterholz and Cyril Sturm brought their boat from the British Chippendale Yard, to Zurich a few hours later, the future of the FIREBALL in Switzerland was safely in their hands, well experienced in the Finn and Star Classes. Already in 1964 the Swiss Fireball Association was founded, and Preuss' watchful eye ensured that the committee remained uncontaminated by commercial interests, so as to guarantee its reputation as an impartial source of information, favouring the diffusion both of homemade and bought boats, and the unbiased representation of domestic and foreign yards. Also of great value was the fact that he was bilingual, and therefore able to contact the francophone part of the fireball fraternity right from the start, and to further its interest throughout Switzerland – something which has failed to happen in several other Classes; towards this, it has always been a policy that both German-speaking and French-speaking Swiss are to be represented in the committee of the SFA.

In the German-speaking area, FIREBALL had to overcome the competition of the Korsar, which ruled undisputed in Germany and Austria and not surprisingly had spread throughout German-speaking Switzerland as well. Nevertheless, the FIREBALL has been able to establish itself over the years and, thanks to its international distribution, has become a national team boat. Even today, when surfboards and yachts seem to have multiplied worldwide at the expense of dinghies, fireballs are strongly represented in Switzerland, and sailed by an increasing number of young teams. A new and technically advanced pattern, designed in Switzerland with a fiberglass hull, attractive wooden trimmings and minimal weight, should help to encourage new participants. The highlights for the Swiss were the 1968 World Championships in Brunnen, those of 1983 in Estavayer, and the European Championship triumphs of Jean-Claude Vuithier in 1972 and Philippe Durr in 1973.

GERMANY

In Germany, unfortunately, the FIREBALL never managed a real breakthrough. It arrived a year after the Korsar, a dinghy designed by a German shipwright, and highly suited to the German taste: it looks like a real boat, is built of real planks, and generally gives the owner the feeling of getting his money's worth – a Mercedes amongst dinghies, appearing almost overbearing when compared to the FIREBALL, with its lines more reminiscent of an ironing board or a coffin. The Korsar also quickly found a number of yards willing to produce it, and take care of its commercial distribution. The few fireball enthusiasts on the other hand, who for the most part had built their own craft, never managed to find a yard willing to produce fireballs in series and, therefore, to involve itself with their exhibition and distribution. As a result, FIREBALL sailors in Germany have remained a small and disjointed minority, which not even the 1972 World Championship victory of Jorg Diesch, later Gold Medallist in the Flying Dutchman Class, managed to take out of its relative obscurity. They are even prevented from hosting a European Championship in Germany, as they do not represent a Class recognized by the German sailing association (DSV).

FRANCE

A different story altogether was the fireball's introduction in France, where it came to notice and won sympathizers soon after winning the one-of-a-kind regatta in New York in 1962. As opposed to the Germans, French sailors tend to look more for functionality than prestigious

appearance, so that instead of the Korsar the main competition was the 470. Nevertheless, French fireball-sailors seemed ever ready to invent technical improvements: the trapeze was first used by them, they fought for the introduction of the spinnaker against the then current opinion of the English and, amongst others, the Swiss, and they built the first glassfibre FIREBALL. This tendency is still noticeable, and no regatta is complete without a Frenchman sporting a new "improvement" to his dinghy, rules or no rules. The French are a hospitable sailing nation, and their regatta venues are internationally appreciated; on the hand, the French prefer to stay at home (no wonder, with their cuisine), and they are an unfortunately rare sight in England, Italy and the Low Countries. Switzerland seems to be honoured at times, probably due more to the relatively good competition than to the good food.

ITALY

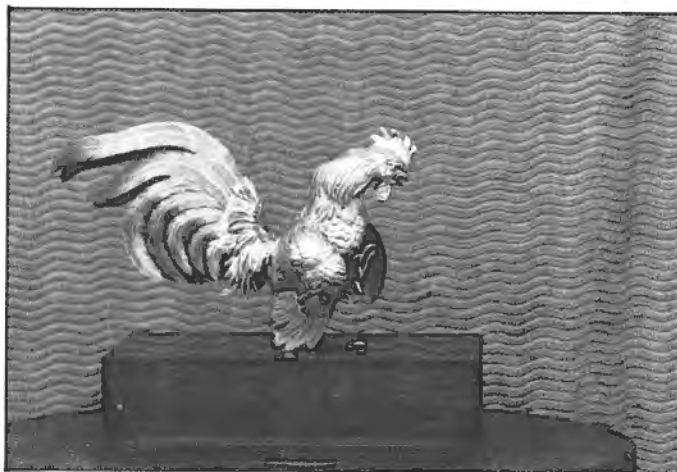
The first Italian fireball to race internationally turned up at the 1967 World Championship in Hayling Island, U.K. The first boats were homebuilt, but commercial production both in wood and in glassfibre soon allowed the Class to spread and gain nationwide recognition. Since Luigi Fornaciari took the Association under his fatherly care, and kept it there for over ten years (proving again the Italian's love for the family), the Class has grown apace and shown some more than praiseworthy activities: the European Championships in Bracciano in 1982 and the World Championships in Diano Marina in 1985 still raise the fondest of memories in all their participants. Italian fireball sailors would love to race more abroad, were "abroad" not synonymous with North and Cold, features less than congenial to a temperament worth cossetting and preserving, if for no other reason than for the good it does to us all – maybe another good reason for us to go and enjoy it in its home waters.

BELGIUM

In Belgium FIREBALL came early, thanks to the granting of a builder's licence to J. van Bisthoven, amongst whose splendid boats was the World Champion Fireball for Peter Bateman. The Class remains active, turns up occasionally at foreign regattas, and presents with its Nieuport-Week an interesting venue visited by many foreign crews. If the Belgian Class hasn't yet been able to arrange a championship at the European or World level, it nevertheless has provided Fireball International with a Commodore in the person of Antoine Goethals, whose election unfortunately brought for a time to the world of Belgian Fireballs the split generally present between Flemish and Walloons – a split which, in our case at least, seems to be in the process of healing.

HOLLAND

Neighbouring Holland has always been in close cooperation with Belgium. Its small fleet of FIREBALL sailors organized the 1979 World Championship in Monnikendam, a highly successful venue which



The European Fireball Trophy

Switzerland and Kenya
at 1970 Worlds, Ireland



Thoughts on Sails

by Alan Robinson

My earliest recollections of Fireballs was this 'new boat' that appeared at Hartlepool, my home club, 24 years ago. I first sailed in boat number 15 with Cliff Reynolds and this had yellow sails made by Lucas. I remember it having no spinnaker and in those days the jib window was about half way up the jib and was round in shape, the mast had no spreaders and was massive in section. Sailing on a calm day in a swell, as the mainsail was so full at the bottom, we would lie the paddle in the fullness along the boom to stop the sail flapping about as we flopped along on a run.

The late Alan Chester was another of these early 'Ballers' and his boat with a sail number in the twenties had red and white striped sails. The other boat I remember had a blue jib and we often raced them with our Enterprises and a couple of Scorpions, one with red sails and the other with dark blue sails. For most of my youth I grew to think of sails as being coloured and was astonished when returning to sailing in the early seventies to see thousands of Fireballs and not a colour in sight.

Even up until my first Fireball in 1974 mainsails were massive in terms of fullness, not only at the bottom but also with tremendous luff curve. Jibs of course were deck sheeted although by then the sheeting angle has been reduced even though they had little upper shape and were still very full low down. I remember winning a race at the Europeans in 1976 with huge fore and aft mast bend, and free swinging spreaders that reduced to an angle of less than 90 degrees between them. Only now as a sail maker do I realise that the sail must have had something close to 300 mm of luff round. Generally throughout the sixties and early seventies sails did not progress

much other than the refinements of full top batten and cunningham eyes (I bet Mr. Cunningham wished he had a world patent on the famous eye). Until the early seventies sails owed much of their shape to luff round and a combination of darts cut along the foot and luff. By the early seventies the idea of broad-seaming combined with increased rig tension and spreaders along with the full top batten started toward a slightly flatter mainsail and progressively flatter jibs, still deck sheeted. The South Africans had showed us the way with full mainsails sheeted well out with the traveller outboard, in contrast to the UK style of loads of mast bend and leech tension as used by Peter Sandy, Ken Brackwell, John Caig and Peter Bate-man.

The big change in sail design arrived when Steve Benjamin showed up at the Worlds with an ultra flat mainsail with maximum widths which produced a big roach and used the 'strut' combined with what was then seen as massive rig tension to keep the mast absolutely straight. This he complemented with a very full jib which kept its shape high up and was twisted off in a manner we now see as normal. Winning by margins which often saw him with a four minute lead at the first windward mark the strut and the flat main had arrived. At the next Worlds in Ireland, Smith and Barker ran a close second to him with a more compromise rig. This duel between the two completely different styles of rig was perhaps the milestone in Fireball rigs as even now we are reliant on two fundamentally different concepts of rig. Smith and Barker opted for a Proctor D and a main with a reasonable amount of luff curve which we now see as the pre-bend flexible fore and aft set-up with a close sheeted jib which was flatter in the bottom and fairly full in the middle allowing twisted sheeting.

The Benjamin rig was a powerhouse

approach with straight Z spar mast and the rig powered up at all times. Benjamin's crew Tucker Edmonson was extremely tall and weighed around 13 stone. Smith introduced the mainsheet hoop to the class along with a radical 'step backwards' – NO SPINNAKER CHUTE.

On the subject of spinnakers we saw the improved cloths do away with radial head spinnakers with the use of Dynac and HST 46 hard on the heels of siliconed German Polyant. The hard-leech big Tri-Radials gave way to the tight reaching Mini again largely due to the domination of Smith and Barker. A trend which the Kirks (UK) keep trying to reverse with maximum kites.

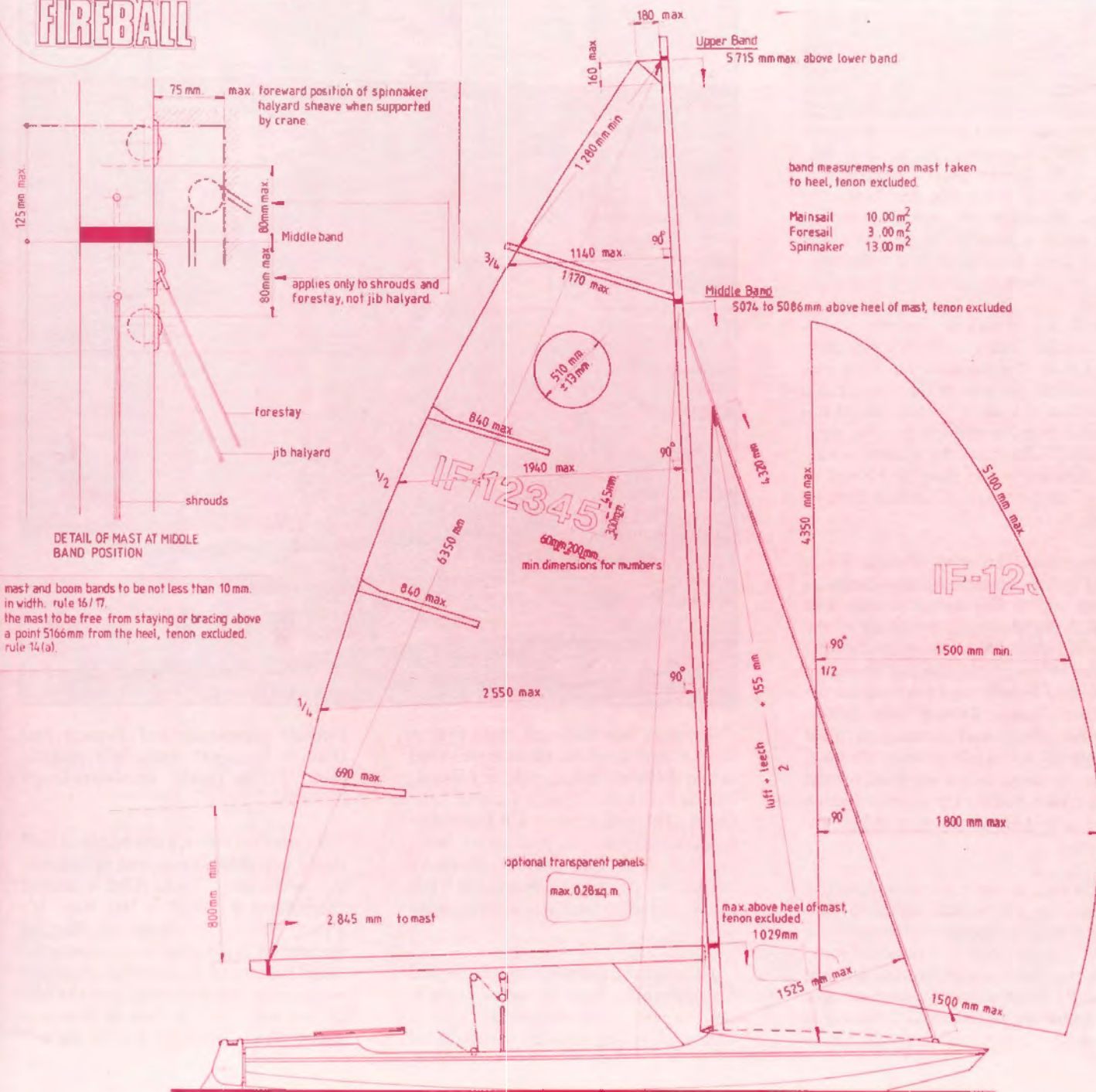
The feature in rig and sail design which is illustrated more than anything is the change in attitude to crew weight and the now accepted idea that Fireballs can be fast in completely different ways. Until the Smith and Barker era the class had been dominated by heavy, big people and our understanding of power control had not looked outside of the strong wind/big people syndrome. Then along came a lightweight pair with a 10 stone crew and proved the complete opposite, borne out by the fact that now the majority of top teams are probably 4 stone lighter than the once considered norm. This is now consolidated by the modern understanding of rig tension, spreader control and spar design.

I did have a frivolous attempt at going back to my original perception of Fireball sails and made myself a pink and yellow jib, but out of the four races I used it we were disqualified three times for being over the line... I think we shall not see any radical moves in sails until we launch ourselves into the high-tech phase, a move viewed with an understandable degree of caution. But then, speaking as a sailmaker, I feel I should learn from my pink jib mistake and.....Keep my head down.



INTERNATIONAL FIREBALL

1
8



SAILPLAN

REFER TO THE CLASS RULES FOR THE REGULATIONS CONCERNING
CONSTRUCTION AND REGISTRATION

Designed by Peter Milne
Drawn by David Redding

CANADA – ONE SMALL POCKET

By Bob Rose (KC11794)

Shortly after the Fireball was designed in 1962, it appeared in an out-of-the-way, little known place called Wabamun. Indeed when one first hears the name, one thinks of ... nothing really. The name is similar to no other and hence gives no clue as to its whereabouts. So where the devil is Wabamun?

Well, it's located in western Canada in an insignificant spot between the massive Rocky Mountains to the West and the endless prairies to the East. Lake Wabamun is a small Alberta lake that's frozen over five months of the year, eight hundred miles from the nearest ocean, less than thirty feet deep and home to one of the most active Fireball fleets in North America.

Yes, the Ukrainian Racing Team (URT) packs maximum enthusiasm and sailing into its five month season. Led by Ken Tichowsky, president of the Alberta Fireball Association (and of Ukrainian heritage), the URT is dedicated to racing Fireballs (and drinking the occasional beer). During the winter months, parties and meetings are held to whip the squad into a frenzy. By May, when the three feet of ice finally melts off the lake, the fleet is ready to launch the boats with absolute reckless enthusiasm.

To cram as many possible hours of sailing into the season, racing is held every weekend regardless of weather and water conditions. Thunderstorms, cryogenic water temperatures, drifters, weeds, frozen rigging, sunburn and hailstorms are all endured by this hardy bunch.



Through late May and early June a series of four weekend regattas are sailed at four different sailing clubs in Alberta. This is the classic Alberta Fireball June Series. The goal of every URT member is of course to win the June series. With brothers Ken and Roy Tichowsky leading the charge, the Wabamun URT always arrives in force and usually places well.

However the competition is fierce and the opposition from the other clubs is not to be underestimated. "Uncle Bobby" Haining with his international

Fireball experience and Francis and Hamish Ferguson with their magical boat, "Fer'tle Turtle" are always tough to catch.

To start the series, a five hundred mile round trip drive is required to compete in the Calgary Yacht Club's annual "Icebreaker Regatta" in late May. It's a truly classic URT weekend. Rigging the boat by headlights, and scraping the ice off the boat in the morning are always rewarded by hot competition on the four by two mile lake. A fleet of fifteen to twenty Fireballs for the start of the sea-

**NEW
SECTION**

Proctor's new STRATOS is designed to win!

Its combination of lightness and strength, coupled with a new tuning system, makes STRATOS potentially the fastest spar ever developed for the Fireball class.

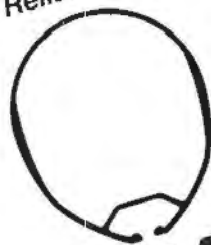
Ask for the STRATOS tuning guide now!
It is available direct from Richard
Hargreaves (04895) 83111 or any
Proctor Specialist.



**PROCTOR
MASTS**
Southampton (04895) 8311

Duncan Road, Swanwick.

1st for Speed — 1st for Reliability — 1st for Service



STRATOS

son event is always a good time to renew acquaintances from last summer. A quick six or seven races gives the URT a fix to hold them over until the following weekend.

After this marathon event, the URT returns home to Wabamun to compete in local events each weekend. As the weather warms up on each successive weekend, wetsuits are finally doffed in early July. But as the water and air warms, the winds drop off. The URT are masters at zephyr sniffing and roll tacking. Fun events are held such as John Henderson's Kapasiwin Sailing Club "Pink Flamingo" regatta.

By September, the summer begins to fade and temperatures begin to drop. Wetsuits are donned and the winds return. The season ends in mid October with the brisk Magic Rum Barrel and Thanks-giving Day Regattas held back to back at Wabamun.

For over twenty years, Fireballs have been popular at Wabamun. A fast, exciting, light, homebuilt boat, the Fireball has been a natural for sailing in this part of the world. The battle against the fiberglass classes has been tough on Fireballs in Canada. Elsewhere, the numbers have been steadily dwindling but not so in Alberta. Credit must be given where credit is due. The drive and enthusiasm of the Ukrainian Racing Team continues to hold the spirit and the fleet still thrives. In fact the fleet grew by two additional boats this year. 1987 is the second time in twenty five years that the Canadian Fireball Nationals was held at Wabamun. It's truly an honour for this one small pocket of resistance which refuses to die. As long as the Ukrainian Racing Team continues, Fireballs will race at Wabamun.



International FIREBALL Class Rules

Authority: International Yacht Racing Union, 60 Knightsbridge, London SW1X 7JX, England

Date of International Status: 21st August 1970

1. GENERAL

- (a) The objective of the International Fireball Class Rules is to establish the Class as one in which all matters affecting performance are strictly controlled. Latitude is permitted to maintain interest in fitting out, maintaining and racing the boats.
- (b) The official language of the Class is English, and in the event of any dispute over interpretation the English text shall prevail. The definitions used in the Constitution of Fireball International shall apply to these rules.
- (c) International Fireball boats and kits shall be made in accordance with the design of Peter Milne and strictly in compliance with these rules.
- (d) In the event of discrepancy between the rules and the measurement form the matter shall be referred to the International Yacht Racing Union (IYRU).
- (e) For all major international events all boats, spars, sails and equipment shall comply with the current rules.
- (f) The IYRU, National Authority, Fireball International (FI), National Class Associations (NCAs), Sponsor and Designer accept no responsibility in respect of these rules or any claim arising therefrom.
- (g) These rules shall be administered by the National Authority. Where there is no National Authority or the National Authority does not wish to administer the rules its function as stated in these rules shall be carried out by FI or its delegated representative (NCA).
- (h) The Executive shall be entitled to act in emergency without reference to the IYRU by issuing amendments and interpretations to the class rules provided that such decisions shall be promptly notified to the IYRU, to NCAs and to professional builders. Amendments and interpretations shall be operative upon approval by the Chairman and Vice-Chairman of the IYRU Centreboard Boat Committee and shall be submitted for ratification to the IYRU at its next meeting.

2. BUILDERS

- (a) Professional builders of the International Fireball shall be only those holding a licence under the copyright of the International Fireball to manufacture and sell International Fireball kits and/or build and sell International Fireball boats, and registered by the IYRU.
- (b) Additional professional builders may be licensed (in accordance with the terms of agreement between the IYRU and the Sponsor) with the support of the National Authority and at the recommendation of FI, provided that a requirement can be shown for additional builders.
- (c) Professional builders shall be responsible for supplying boats and/or kits within the

measurement rules and specifications. The builder shall at his own expense correct or replace any boat or hull of his manufacture which fails to pass measurement and failure to do so may be cause for cancellation of his licence.

- (d) (i) An amateur builder shall be authorised to assemble or build not more than one International Fireball per annum. The boat shall be registered in the name of the assembler/builder and shall not be transferred to other ownership within six months of completion, without prior permission from FI.
- (ii) An amateur builder shall, before the issue of an International Class Fee plaque 3(b)(ii), complete an official Amateur Builder's Licence Form (A.B.L.) undertaking that he himself will construct the boat in accordance with the rules of the International Fireball Class and that he will not employ professional boat building labour for this purpose.
Note: Professional boat building labour is defined as "one who builds hulls or parts of hulls for financial gain".
- (iii) Three copies of the A.B.L. shall be completed and signed by the amateur builder and countersigned by the Issuing Authority. One copy shall be retained by the Issuing Authority, one sent to the amateur builder and the other to FI, for registration.

3. INTERNATIONAL CLASS FEE

- (a) (i) The International Class Fee (ICF) payable in respect of professionally built boats and kits shall be based on 3% of the UK professional Licensed Builders' average retail price of the complete boat in the UK market. The ICF payable in respect of amateur built boats (from plans) shall be based on 2% of the UK professional licensed builder's average retail price of the complete boat in the UK market. The ICF includes the Designer's and Sponsor's fee of 62½% each or together, the FI administration fee of 21% and the IYRU administration fee of 16½% of the ICF.
- (ii) the amount of the ICF shall be reviewed annually by the Sponsor and agreed with the IYRU.
- (iii) The Sponsor shall be responsible for the collection and distribution of the ICF on the above basis.
- (b) (i) Professionally built boats and kits.
The ICF shall be payable by the builder whether or not the boat is subsequently measured. Payment shall be made direct to the Sponsor at his UK address. The Sponsor will issue an ICF plaque and two copies of an ICF receipt to the builder and a further copy for record purposes to FI. On sale of the boat or kit the builder shall hand the plaque and receipts (if not used to obtain a sail number - 4(b)) to the owner.
- (ii) Amateur built boats (from plans).
The ICF shall be payable by the Builder whether or not the boat is subsequently measured. Payment by the builder shall be made to the NCA or FI (the Issuing Authority) who will issue an ICF plaque and two copies of the ICF receipt.

Note: The Sponsor will issue ICF plaques and ICF receipts to FI for distribution to NCAs or direct supply to individual members of FI. All payments by amateur builders shall be remitted by FI to the Sponsor.

4. REGISTRATION

- (a) FI shall maintain a sail number register and shall allocate sail numbers to National Authorities or delegated NCAs or individual members of FI.
- (b) A National Authority or delegated NCA or FI (the Issuing Authority) shall issue a sail number to a builder or owner on presentation of two copies of the ICF receipt. These shall be endorsed by the Issuing Authority with the owner's name and address and the sail number. One copy shall be retained by the Issuing Authority and the other sent to FI for registration.

BALLING DOWN UNDER

By NORM HAMMON

Australia is vast Continent, being over 4,000 kilometres from Western Australia to New South Wales in the East, and approximately 3,700 kilometres from Tasmania in the South to Queensland in the North.

Yacht Racing in Australia is centred in six capital cities of the seven states which make up our Nation. It was therefore amazing that in about 1964, without any communication, Fireball development commenced almost simultaneously in Sydney, New South Wales; Melbourne in Victoria, and Hobart in Tasmania.

My first knowledge of Fireball was found in an English Yachting Magazine which featured a small article and outline of a cheap, easy to build, high per-

formance dinghy, by Peter Milne, which must have been the spark that ignited interest in our Class within Australia. This interest happened at a time when Yachting in Australia needed an intermediate high performance class which slotted in between the F.D. and 505 which were expensive to own, and the general purpose family boats such as G.P. 14, Heron, Mirror etc.

Accurate record of early Fireballs is uncertain except that the first Fireball was possibly built in Tasmania and sailed on the beautiful Derwent River Estuary in Hobart. At the same time in New South Wales, a fleet commenced at Bayview Yacht Racing Association on Pittwater, just north of Sydney.

The early pioneers of the Class in N.S.W. were John Castles, the Vick Brothers, John Hardie, and Tony Scotford who were instrumental in forming the I.F. Association of N.S.W.

Shortly following this time, two boats were built in Melbourne independently, and one of the owners, Carl Scott, commenced racing his new boat at Frankston Y.C., which started the fleet in that Club.

Ralph Neale and I were racing G.P.14s on Albert Park Lake in Melbourne at this time and used to discuss this new English design, claiming it would be an excellent performer on our flat water. Shortly afterwards Ralph had a new Fireball built professionally by Harold Lang in Sorrento. This boat was placed in the Melbourne Boat Show by the Albert Yacht Club and created immense interest, which no doubt assisted in the rapid growth in the Class in Victoria. International Fireball Class Associations followed in Tasmania and Victoria and in about 1965 the I. F. A. of Australia was formed to govern the class in this country.

The current Rear Commodore of Australia, Tony Scotford, was one of the pioneers of Fireball in New South Wales and was prominent in forming the Australian Association based in Sydney. Tony kept in constant touch with I. F. in the United Kingdom and commenced communication with State Associations regarding our class.

The First Australian Championships, were conducted in 1966 at Frankston Y.C. which was won by P. Moore and C. Grant from New South Wales.

State Associations were formed in South Australia, Western Australia and Queensland, and continued growth of the class was aided by a number of our

The Mk III FIREBALL FITTED COVER

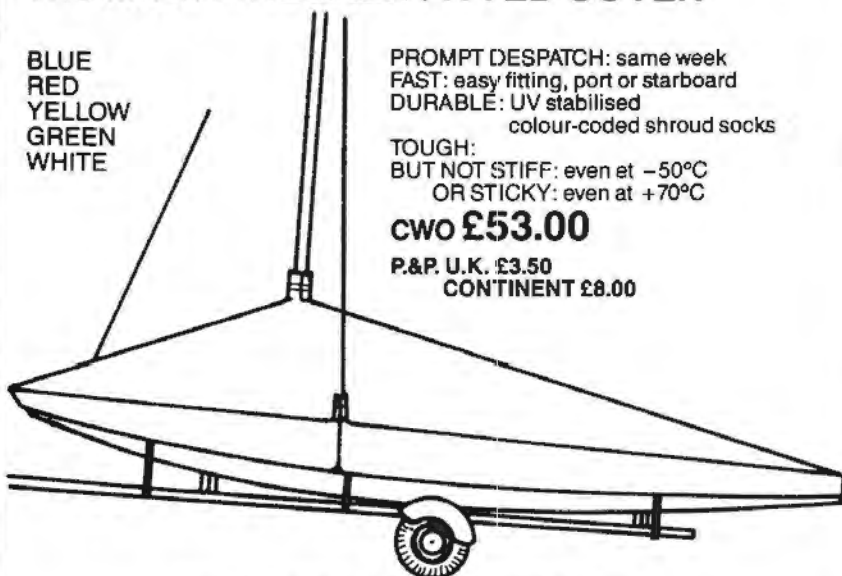
BLUE
RED
YELLOW
GREEN
WHITE

PROMPT DESPATCH: same week
FAST: easy fitting, port or starboard
DURABLE: UV stabilised
colour-coded shroud socks

TOUGH:
BUT NOT STIFF: even at -50°C
OR STICKY: even at +70°C

cwo £53.00

P.&P. U.K. £3.50
CONTINENT £8.00



EUROTECH MARINE PRODUCTS LTD.

4 WEST HALKIN STREET, LONDON SW1. Tel. 01-235 8273/4

Fireball owners travelling to England and joining in racing on the European circuit. These included Euan Michall (Victoria), David McKenzie (Victoria), Graham Vick (New South Wales), and Gordon Lucas (Western Australia), and during their stay overseas they completed in the Beruit Worlds in 1971, returning to Australia with the latest in Fireball techniques and gear.

Following this period the Australian Association adopted a policy to support one crew each year to complete in the World Championship, so as to improve the standard of racing in Australia and to bring back home the latest in Fireball trends and developments. From this point our competition improved, attracting some of the top skippers in Australia into our class.

It was not long before we had Chris Tillet sailing in South Australia. Gordon Lucas upon his return to Western Australia, 'Stumpy' Bruce Keir and Nigel Abbot in Melbourne to name just a few. The Class grew at an amazing rate with the bulk of Fireballs being in New South Wales and Victoria. The maximum known boats in each states was approximately:

New South Wales 250
Victoria 200
Tasmania 40
South Australia 30
Queensland 20
Western Australia 30

These figures have now declined in similar proportion to the number of monohull class racing in Australia. However Associations are still very active in each state, except New South Wales which is experiencing difficulties at present with lack of people and boats.

*continued on
page 63*



DESIGNED FOR YOUR BOAT RAPIDE R250C/F FIREBALL COMBINATION TRAILER

- * CORRECTLY BALANCED UNIT—TOWS WELL
- * NO LIFTING—LAUNCHER AND BOAT SLIDE ON AND OFF OVER ROLLERS
- * SHAPED LAUNCHER CRADLE
- * SNUBBER PREVENTS DAMAGE TO BOAT AND FINGERS
- * HOT DIP GALVANISED ROAD UNIT AND LAUNCHER FRAMES

WHAT OTHER FIREBALL COMBINATION TRAILER CAN OFFER AS MUCH AS THE R250C/F?

When designing this Trailer we have paid particular attention to the special requirements of a Fireball with it's long, light and narrow hull. The 9ft. 9ins. 'A' frame launcher is ideal for normal use. However, for trailing it is essential to have additional support further aft. We have achieved this and also provided support under the main bulkhead.

RAPIDE MAKE TRAILERS THAT MAKE SENSE



Honkley Engineering Co. Stringers Lane, Rossett, Nr. Wrexham, Clwyd.
Phone:— (0244) 570739

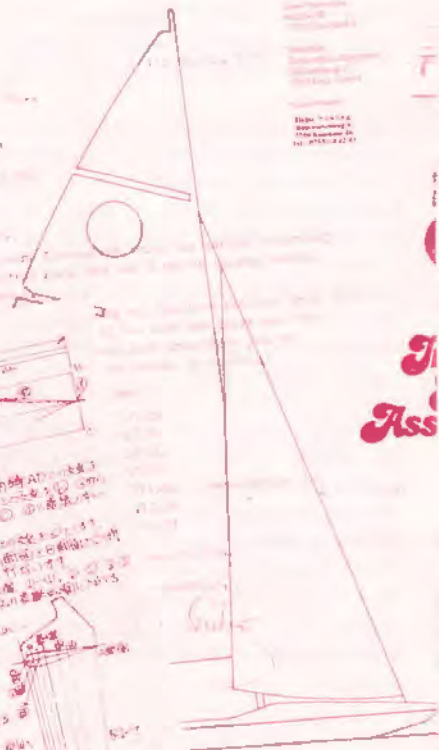
venska
FIREBALL
förbundets bulletin



FIREBALL IS I

● German Fireball Association

Japan
FIREBALL
Association



UK FIREBALL ASSOCIATION

BELFIRAS' INFO
OFFICIAL BULLETIN OF THE BELGIAN
FIREBALL ASSOCIATION

**25 JAAR
ANS**

'87/39
Juni Juli

NATIONAL CLASS ASSOCIATION
FIREBALL CSSR
KOMISE LUDNI TRDIT

UDRUGA TJAN VRAHA DUCHENJAKOVA I VODEN PLOVID I ČLOV
TRAJANJE: 1961-1991



FIREBALL ASSOCIATION NIGERIA
LAGOS YACHT CLUB
Mushinje Point P.O. Box 113 Lagos, Nigeria Tel: (01) 630301



Fireball International South Africa



Fireball Association
2 März 1985
Schweiz National jährlich
Fireball-Gazette



INTERNATIONAL!

FIREBALL
INTERNATIONAL
(ZIMBABWE)

1984-1985
ZIMBABWE

ASSOCIATION OF THAILAND

COMMODORE: NIGEL J. HARDY

INTERNATIONAL

FIREBALL

'Australian News'

TOOK
NOT OF
BUILD
SS
OOD!

ASSOCIAZIONE ITALIANA
FIREBALL

International Fireball Association of Australia

FIREBALL
NEWS

FEBRUARY

34



MAL



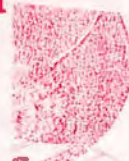
MICUX



BIEN

INTERNATIONAL FIREBALL FRANCE

1984-1985



FIREBALL
KENYA

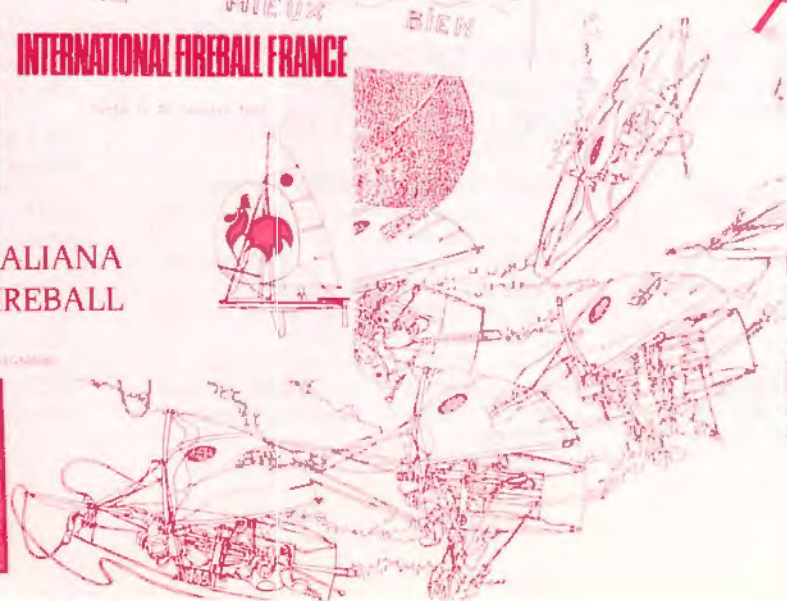
COMMODORE: COMMODORE J. J. J.

From the Fireball News, we have been receiving many letters from the Fireball community, and we are very grateful for the support and interest shown in the Fireball Association of Kenya. We are currently working on a new project, and we are very excited about the results. We will be publishing the results of the project in the next issue of the Fireball News. We are also working on a new project, and we are very excited about the results. We will be publishing the results of the project in the next issue of the Fireball News.

FIREBALL
holland



INTERNATIONAL FIREBALL FRANCE



RUNNING A WORLD CHAMPIONSHIP

BY ADRIAN BELL

VENUE

When a National Class Association is selecting a venue for the World or International Championship there are a number of considerations to be borne in mind:

Racing Area

The following are regarded as ideal in order that a fair racing area may be used. (While it is possible to have the pre-worlds regatta as part of an established race week, or in combination with events for other classes, Fireball International requires that for the World Championship the race area *must* be kept clear for the competitors taking part in this Championship).

Tideless conditions or an even overall drift. Areas with strong tides or uneven tidal distribution should be avoided where possible.

An area free from weed or other such impediments.

An area sufficiently far away from any headlands etc. so that relatively stable wind directions may be maintained.

The distance from the launching site to the centre of the area should not normally exceed 5 nautical miles.

The area must be clear of commercial shipping lanes.

There should be sufficient depth over the entire racing area to enable a Fireball to capsize and *not* stick its mast into the bottom, yet not too deep to cause difficulty in laying the racing marks.

Availability of Race Organizations Personnel and Equipment.

The proposed venue must have, or be able to draft in, the necessary experienced personnel required for the Race Officer's team, rescue, mark laying, beachmaster, regatta office etc.

The necessary committee boats, rescue boats, mark boats, radios etc. must also be made available at the proposed venue.

Adequacy of Shore Facilities

There should be a clubhouse or similar building available to act as a centre for the regatta, to provide changing accommodation, a meeting place for competitors, hearing of protests etc.

There should be facilities for parking and launching for up to 75 Fireballs as well as adequate car and trailer parking.

An area is required for the measurement, in any weather conditions, of hulls, foils, spars and sails.

Ease of Access

The venue should have good access to airports, ferry ports and to public transport. Competitors coming from overseas frequently do not have personal transport.

Availability of Accommodation

The venue should have an adequate amount of a wide range of accommodation, including camp sites, with good access to regatta centre.

Weather

The venue should be chosen together with the date of the event so as to give the best chance of getting a full range of wind conditions during the Championship.

FORM OF THE CHAMPIONSHIP REGATTA AND TIMING

World Championship Series

The series is a seven race series with only one race per day.

A spare day/s may be introduced with the approval of Fireball International.

A minimum of 2 days before the first race is required for measurement.

The absolute maximum number of boats permitted is 75 and normally Fireball International aims for a fleet size of between 50 and 60.

Fireball International is responsible for

the allocations of the number of World Championship places to each National Class Association.

Each National Class Association is responsible for organising their own method of selecting competitors to fill the places allocated to them and for advising the host country/class association as to the names of these competitors.

Pre-Worlds Regatta

A pre-worlds regatta is normally held immediately before the measurement days of the world championship to enable visiting competitors to get used to the conditions. In addition it allows local Fireball sailors to have an opportunity to race against the best in the world. It also affords the Principal Race Officer and his team a practice run.

There is no set format for this event. Usually it consists of a 5 or 6 race series over 3 or 4 days.

Timing of Championships

The timing of the event must be agreed with Fireball International and notice should be taken of the following points.

Do not select too early a date in the season as this does not give time to complete qualifying events and make the necessary travelling arrangements.

A time should be chosen so as to give the best chance of obtaining a full range of wind conditions.

If a significant proportion of the fleet has to send their boats by container to the event, choose a time that will reduce the amount of "sailing season" lost by these sailors due to their boats being in transit. Failure to take this into account is likely to reduce the numbers at the event.

Many Fireball sailors attend University or College. Try to organise the event outside term time.

RACE ORGANISATION

Principal Race Officer and his Team

Undoubtedly the Principal Race Officer and his team are the most important factors in a well run event. Experienced personnel are essential. Fireball International should be advised of the name and experience of the Principal Race Officer who will be running the event.

Sailing Instructions

These must be approved by Fireball International.

A draft set of instructions may be obtained from Fireball International which contain points that are specifically required by Fireball International – many of these are highlighted in the following paragraphs.

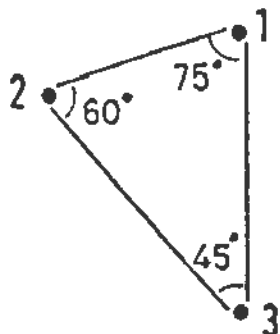
Sailing instructions should be available in several languages – but in the event of a dispute the English text is to be used.

If there are any alterations to the sailing instructions they must be made *at least 3 hours* before the start of the race in which such alterations come into force.

Courses

Courses should be laid sufficiently far away from headlands, cliffs etc., so that relatively stable wind directions may be maintained over the course area.

The Fireball course is designed so that the reaching legs give both a close and broad reach. The first reach should be set at 105% to the true wind direction and the second reach at 135% to true wind direction. This gives a course shape and internal angles as shown below.



The course consists of 4 rounds (triangle, sausage) and is normally between 11 – 15 nautical miles long. The length of course should be set so that the race takes about 3 hours to complete.

Starboard hand courses are not recommended.

In the event of a significant wind shift after the fleet has rounded the first mark, the course configuration may be re-established by laying replacement marks; making the appropriate signals and lifting the original marks after the last boat has rounded them.

Marks should be large and visible. The alternative set of marks used to relay the course in the event of a significant wind change must be easily distinguishable from the original marks. There should be a mark boat stationed at each mark.

Starting Procedures

Only fixed line starts are to be used for the World Championship, and generally to be recommended for other International events.

The starting area will normally be to leeward of Mark 3.

The Main Committee Vessel must be sufficiently large so as not to be obscured by a group of Fireball dinghies attempting to start close to the committee boat.

It is most strongly recommended that the outer limit of the line be defined by a second large committee vessel which should duplicate the flag signals being made by the main committee vessel. Experience has shown that the use of a small committee vessel and outer limit buoy leads to poor start line behaviour of competitors as they are unable to see the limit marks and/or committee vessel.

Fireball International would prefer that the disqualification penalty under a 5 minute or 1 minute mile is not used for World or International Championship series. Experience has shown that provided the starting line is sufficiently long (not less than 125% of the aggregate length of the boats entered), with large visible starting vessels or marks laid to give equal advantage to each and of the line, little trouble will be experienced. However, if it is felt absolutely necessary, to include this provision, then there must be reinstatement for all boats in the event of a general recall.

The Principal Race Officer should not attempt to start a World Championship race if the wind strength is less than 2 knots.

Rescue and Safety Systems

One rescue boat to every 10 – 15 Fireballs is generally recommended. It is suggested that there should be one or two larger vessels to act as "mother ships" to which any disabled Fireball can be tied during the race until they can be towed ashore at the end of the race.

There should be some system for recording the boats that have gone afloat and that they have safely returned. The particular type of system to be used is left to the discretion of the Club running the event.

Any local safety rules which will apply to Fireballs competing in World or International Championships must be discussed with Fireball International well before the date for the event. When these have been agreed, all National Class Associations must be advised so that competitors can have the opportunity of taking any necessary action before arriving at the event.

Scoring System and Results

The Olympic type scoring system, as given in I.Y.R.U. rules, appendix 5, is used except that

- (a) There is no minimum number of races to constitute the World Championship series and
- (b) There is no breaking of ties.

It is desirable that a copy of the results (even if they are subject to protest) should be made available to each competitor after every race. If this is not possible, then a copy must be posted on the Championship Notice Board after each race. An overall results sheet must be available for each competitor to take home with him at the conclusion of the event.

Protests and International Juries

For the World Championship, it is normal practice to have an International Jury to hear protests and not to permit the right of appeal.

*continued on
page 66*

5. MEASUREMENT PROCEDURE

- (a) This is a one-design class. Measurement shall be carried out using these rules. Only an official measurer recognised by the National Authority (or delegated NCA) and approved by it to measure International Fireballs shall measure a boat, its spars, sails and equipment. Payment for the measurer's services is the responsibility of the owner.
- (b) Two copies of the official class measurement form shall be completed and sent to the National Authority or delegated NCA or FI (the issuing Authority). The Measurer shall enter on the measurement form any deviation from the rules. In the event of infringement of the rules both copies of the measurement form shall be sent to FI for consideration as to whether or not a Measurement Certificate shall be granted. FI shall be empowered to grant dispensation in exceptional cases subject to ratification by IYRU. A dispensation shall be recorded on both copies of the measurement form which shall be returned to the issuing Authority.
- (c) A measurer shall not measure a boat, spars, sails or equipment owned or built by himself, or in which he is an interested party or has a vested interest.
- (d) All boats, spars, sails and equipment shall be liable to re-measurement at the discretion of the National Authority or Race Committee, but only by an official measurer.
- (e) All new boats, spars, sails and equipment shall comply with the current rules. Old boats, spars, sails and equipment shall comply with either the current rules or with the corresponding rules applying to them at the time they were made, except that the rules underlined and relaxations in the current rules shall apply to all boats, and that old sails shall measure under a single set of rules. Any alterations or replacements shall comply with the current rules.

6. CERTIFICATION

- (a) An official class Measurement Certificate shall be issued by the National Authority or the delegated NCA or FI (the Issuing Authority) on receipt from the owner or his representative of:-
 - (i) Evidence of payment of the current class subscription
 - (ii) Two copies of a correctly completed official measurement form.
- (b) One copy of the measurement form shall be retained by the Issuing Authority and the duplicate returned to the owner.
- (c) It is the responsibility of the owner to ensure that his boat, spars, sails and equipment comply with the class rules and that alterations or replacements to the boat, spars, sails or equipment do not invalidate the certificate.
- (d) Change of ownership and/or change of corrector weights shall invalidate the Measurement Certificate but shall not necessitate re-measurement. The new owner shall apply to the National Authority or the delegated NCA or FI (the Issuing Authority) for a new certificate.
- (e) No boat shall be permitted to race as an International Fireball unless it has a valid Measurement Certificate. A certificate is valid only if the owner is a paid up member of the International Fireball Class as shall be evidenced by the display of a current membership disc displayed on the forward face of the aft bulkhead of the boat and a current receipt attached to the measurement certificate.

- (f) Notwithstanding anything contained in these rules, the National Authority or the delegated NCA or FI (the Issuing Authority) may refuse to issue a Certificate and shall have the right to withdraw a Certificate which it has issued. FI shall have the power to withdraw a Certificate from any boat.

7. RECOGNITION MARKS

- (a) The International Class Fee plaque shall be affixed in a conspicuous place inside the cockpit of all boats on which the International Class Fee has been paid after 21st August 1970. It shall not be removed during the life of the boat.
- (b) The boat's sail number shall be cut approximately 2mm deep into the thwart in figures which are not less than 25mm in height.

8. HULL

All measurements referred to the aft transom shall be taken to the bottom of the aft face of the aft transom at its centreline: (station 0).

(a) Construction Materials

- (i) The hull shall be constructed of wood (solid or laminated timber and plywood) or fibre reinforced plastics or a combination of these materials. No other material shall be used for structural purposes except that it is permitted to use:

aluminium or steel struts and strain members supporting the centreboard case,
any low friction material on the inside of the centreboard case,
any material for chafing pieces on the deck or in the mast partners.

(ii) Wood

The following to be of marine grade plywood of nominal thickness of not less than 6mm. The thickness shall not be less than 5.4mm after sanding and scraping:

Centre bottom panel
Bilge panels
Centreboard Case Sides

The following to be of marine grade plywood of nominal thickness of not less than 4mm. The thickness shall not be less than 3.6mm after sanding and scraping:

Topsides
Bulkheads
Tanksides
Decking

(iii) Fibre Reinforced Plastics (FRP)

Fibre Reinforced Plastics hull shells comprising bottom panel, bilge panels, topsides panels, and aft and bow transoms shall be produced only by the Licensed Builders from hull moulds serially numbered by the Sponsor. The first boat built from each hull mould shall be measured and the written approval of IYRU obtained before construction of other hulls is commenced. All other mouldings for the completion of the hull in FRP shall be produced by Licensed Builders and shall comply with the class rules.

CENTRAL AFRICAN ROUNDUP

by Tony Godwin, Richard Hughes and Mike Prentice

NIGERIA

Lagos Yacht Club, founded in 1932, is a thriving multi-national club of some 400 members sailing Fireballs, Ospreys, G.P.'s, Shearwaters and Hobie 16'. Located within Lagos Harbour, the tropical climate permits all year round sailing and race days see an average of 75 boats competing in combined and class events.

The Fireball was introduced into the Club in 1972, gaining full class recognition the following year. Like so many clubs at that time the adoption of Fireballs was a contentious issue with powerful lobbies promoting the Fireball or the "470". Sense prevailed on the day, and the Fireball won its first contest in Lagos waters.

The boat was a natural fit between the established fleets of Ospreys and G.P.'s: whilst not requiring the muscular helms and crews of the Osprey, it nevertheless provided the exhilaration of rapid plan-

ing and trapezing not found in the G.P. The boat rapidly became popular with husband/wife, male/female teams. In keeping with the Club's multinational make-up, the Class is currently sailed by French, German, Dutch and U.K. teams.

From an initial class size of six plywood kit boats the fleet expanded to its maximum of 22 boats in 1982. Thereafter, and in tune with the decline in Nigeria's oil income, the class strength reduced to the current 11 boats, ranging from No 2788 "Dantesque" to 13075 "Gollum".

Whilst the Class currently lacks strength of numbers this is compensated for by the ability and enthusiasm of the top helms. In the past Lagos helms have participated in the Worlds and also visited and sailed against Naivasha Yacht Club in Kenya.

Within the Lagos Yacht Club's commit-

tee structure the Fireballs are also well represented and currently hold the Sailing Secretary and Handicap Chairman positions.

Looking to the future the Class is actively trying to recruit new members and to this end proposals are being finalised to build 4 or 5 new boats using the West System (due to import duties and bureaucracy difficulties it is now economically prohibitive to import new boats). It is hoped on completion of these boats that new talent will be introduced into the Class and that the Fireball will be seen rising and setting over Lagos harbour for years to come.

KENYA

In 1965 Philip Channing-Pearce made the first Kenyan Fireball and was to be seen hurtling around Lake Naivasha at an alarming angle of heel. This sparked off Tony Gasston and Richard Truran who made boats but without spinnakers in those days. In early 1966 Richard Hughes sailed in a Fireball in Mauritius and asked Henri Doger de Speville there to build him one for importation into Kenya. Thereafter the fleet grew and the inaugural meeting of the class association was held in September 1968, followed by the first championship at Lake Naivasha in June 1969 with ten boats on the water.

A problem for small fleets with inexperienced skippers was working out how some of the gear went together: when two of us ordered spinnaker kits, complete with those cranes and external halliards we could not make it work. After a very frustrating month or so, and much correspondence we discovered that the chandler in England had sent the halliards six feet short – so sorry, here are



Fireballs on Lake Naivasha

some others which should work!

There are four yacht clubs in Kenya: Mombasa on the coast, with steady winds, warm sea and super conditions, but with comparatively few enthusiastic dinghy sailors and almost no Fireballs, although we have held many events there; Nairobi where they sail on a small dam on the edge of the city and is now more of a disco and diving club; Naivasha, 50 miles from Nairobi, with a club house on an idyllic island looking over the lake, with keen sailing in Fireballs, 5-0-5s and Lasers; and Kisumu on Lake Victoria where there is also a keen fleet of Fireballs, amongst GP14s and a few five-ohs.

A recent aspect of the Fireball scene at Naivasha was the number of competent helms aged between 12 and 16 who, with their fathers on the wire, were appearing at the top of the results lists. The youngsters of 9+ were trained on Lasers, which they sailed two-up, and then Fireballs, which they could handle very well as helms, even if they couldn't reach the spinnaker pole fitting as crews.

Like so many other associations, the Kenya fleet has gone down in numbers recently, partially because short-term expatriates find a windsurfer less of an investment and more fun anyway, and also because there are fewer of them in Kenya than there were. Kenyan crews have appeared at numerous World and European Championships over the years, without disgrace, even if without great success.

UGANDA

The centre for Fireballs in Uganda was the Victoria Nyanza Sailing Club, near Kampala. The first six Fireballs were built by a consortium from one set of plans, which was to cause some trouble later. In Uganda they were given local numbers and gave their owners and visiting teams great fun for many years.

*continued on
page 62*

Severn Sailboats

THE FIREBALL SPECIALISTS

FOR A SHIP THAT CAN TAKE THE BUSINESS

3 Teme Road
Tolladine Road
WORCESTER

Tel: 0905 22469
anytime

Stage 1 Kit. Wood cutting list comprising best quality reliaply — plus all wood to complete a light, modern attractive Fireball. Including laminated foils and free copy of construction hints. All fittings, spars, paint, west etc. to complete.

Stage 3: Complete hull conventionally built using chines and overlapped hull planking method. Jib bars and hoop bulk head. All tanks sealed with West epoxy. All paint, spars, foils, fittings etc. to complete inc. royalty & VAT

PART EXCHANGE
WITH GOOD BOATS
CONSIDERED

Trailers & Trolleys: by Severn & Rapide

Hardware: Harken, Holt, RWO, ISP, Seasure, Yachtspeed etc. etc.

LARGEST STOCKS OF GEAR IN
THE UK

BEAT THE PRICE RISE — TOPPERS — Pay cash pay less.

Toppers, largest selection in the Midlands, new and second-hand, part exchanges our speciality.

SPARS FOR ALL CLASSES — Superspars — Z Spars — Proctor —

Needlespar — **SAILS —** by Hood — Alverbank — Severn —

COVERS by Topes — TROLLEYS, TRAILERS AND FOILS by

Severn and Rapide. **DRY SUITS AND JAVLIN CLOTHING, WEST**

EPOXY, PLYWOOD ETC. All ex. stock. Vast stocks of Fireball,

Laser and Topper gear. **TRY OUR MAIL ORDER SERVICE.**

RING PETER BOND.

(b) Length and Beam

The overall length from aft transom to forward edge of bow-transom, excluding bow protection strips, shall be 4928mm $\pm$ 13mm between perpendiculars. The maximum beam excluding gunwales shall not be greater than 1359mm.

The distance from the aft face of the transom to the bottom forward edge of the bow transom, measured along the bottom surface of the boat at the centreline, shall be 4802mm $\pm$ 15mm.

(c) Weight

The hull when painted and complete with all fixed fittings and toe straps, but less centreboard, shall weigh not less than 79.4kg. The initial weighing, or any reweighing for the purpose of changing correctors shall be done either:

1. Before the boat is launched for the first time, or
2. Provided the boat has been kept out of water, in a dry condition, with hatch covers removed, and cover off for at least 14 days.

If a boat is found to be under weight at the time of measurement, correcting weights shall be fitted to bring the boat up to the minimum permitted weight. The combined weight of the correctors shall not exceed 4.5kg. The correctors shall be fixed at the level of the underside of the thwart in a visible position. The weight of each corrector shall be officially stamped on it - this provision shall apply to all boats measured or re-weighed from 1st March 1987. The total weight of the correctors shall be shown on the Measurement Certificate. No correctors shall be removed or altered without the boat being re-weighed by an official measurer.

(d) Watertight Compartments

- (i) The forward face of the aft bulkhead shall be 762mm $\pm$ 13mm from the aft transom. The aft face of the forward bulkhead shall be 3200mm $\pm$ 13mm from the aft transom. The width between the inboard faces of the tank sides at:

1. aft face of the forward bulkhead shall be 946mm $\pm$ 13mm.
2. forward face of the aft bulkhead shall be 889mm $\pm$ 13mm.

- (ii) Two spinnaker boom storage tubes, not exceeding 80mm internal diameter, may be fitted. They may only be fitted into the forward and aft watertight compartments, provided that they are sealed to prevent water entering the watertight compartments. A spinnaker launching tube may be fitted into the forward buoyancy compartment for the sole purpose of setting and stowing a spinnaker. The under-deck part of the tube shall not cross the centreline of the boat. The entire unit shall be fitted so that the forward buoyancy compartment remains watertight.

Not more than two drainage tubes of not more than 26mm internal diameter may be fitted through the aft bulkhead and the aft transom, provided they are effectively sealed to prevent water entering the watertight compartments. Not more than two drain sockets may be fitted to each watertight compartment.

At least one, but not more than two removable hatches shall be fitted to each compartment to allow access. The opening provided shall not be less than 85mm in diameter. The hatches shall be in the cockpit sides, bulkheads or the aft transom.

- (iii) With hatches and drain socket plugs in place, the forward and aft bulkheads, tank sides, hull and decking shall form four separate and properly sealed off watertight compartments which shall be effectively watertight when racing.
- (iv) Except for normal fastenings and the items listed in (ii) above, no holes, tubes or concavities shall be made in the constructional surfaces of the watertight compartments.

- (v) FRP boats shall have 0.08m³ rigid 'non-communicating air cell foam plastics' buoyancy either attached to the underside of the side decks or integrally laminated within the moulded structure.
- (vi) If required by a statutory authority or by the sailing instructions, a wet buoyancy test may be applied to the hull as follows:
The boat shall be floated on its beam ends with the masthead touching the water. A load of at least 130kg shall be vertically applied to the hull. After a minimum of five minutes in this condition with one gunwale submerged the test shall be repeated for a minimum of five minutes with the other gunwale submerged. The amount of water in either side tank shall not exceed 5 litres. The hatches shall then be removed from the side tanks and the test repeated. The water found in the bow and stern tanks immediately following this test shall not exceed 5 litres.

(e) Cockpit

The cockpit is defined as the area bounded by the tank sides and bulkheads; not less than 75% of this area shall be undecked. The distance between the surface of the cockpit sole and the outside of the hull, excluding the bottom rails, shall not exceed 65mm. Each tankside shall run in a straight line, with a deviation not exceeding 8mm between the bulkheads when viewed in plan, and the face of the tank shall not deviate from the vertical by more than 8mm in the height of the tank when measured at the forward and aft bulkheads.

(f) Decking

- (i) The decking shall form the top of the buoyancy compartments.
- (ii) Foredeck and aft deck
Measured down the centreline of the forward bulkhead the height of the crown of the foredeck above the outside of the centre bottom panel shall be 539mm $\pm$ 13mm.
Measured down the centreline of the aft bulkhead the height of the crown of the aft deck above the outside of the centre bottom panel shall be 371mm $\pm$ 13mm.
The foredeck centreline from the crown of the forward bulkhead to the crown of the forward transom shall be a convex curve. The aft deck centreline from the crown of the aft bulkhead to the crown of the aft transom shall not deviate from a straight line by more than 3mm.
There shall be no concavity in excess of 3mm in the surfaces of the foredeck and aft deck.
- (iii) Side decks
The height, measured above the outside of the bottom panel, of the upper surfaces of the side decks where the side tanks join the bilge panels shall not be less than 412mm at the point 1980mm forward of the aft bulkhead and not less than 305mm at the point 300mm forward of the aft bulkhead. Between these measurement points the upper surface of the side tanks shall not be below a straight line.
The radius between the side decks and tank sides shall not exceed 19mm.
When measured athwartships the tops of the side tanks shall not deviate from a straight line by more than 3mm.

(g) Transoms

The measurements shall conform to Dimension Sheet One and be within the stated tolerances. The overall depth of the aft transom, measured down the aft face and including the thickness of the decking and the centre bottom panel shall be 254mm $\pm$ 13mm.
With the boat set up as required in rule 8(o), the aft transom shall not depart more than 8mm from the vertical.

CONSTITUTION OF FIREBALL INTERNATIONAL

1. Title

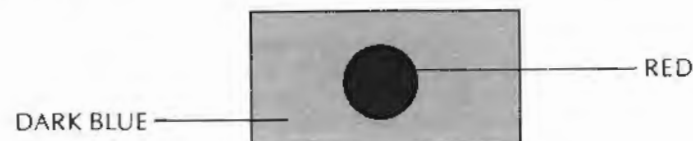
The title of the Federation shall be "Fireball International".

2. Flag

The Class Flag shall be:

Dark blue ground with red ball.

For Class racing International Numeral Pendant 8 shall be used.



3. Objects

The objects of the Federation are to promote and further the interests of the International Fireball Class throughout the world by:

- 3.1 Maintaining the One-Design characteristics of the International Fireball dinghy.
- 3.2 Co-ordinating and managing the affairs of the Class.
- 3.3 Making recommendations to and agreements with the International Yacht Racing Union (IYRU) concerning the Rules of the Class.
- 3.4 Encouraging and co-ordinating national and international competition in the Class.

4. Interpretation and Definitions

- 4.1 The official language of the Class is English and in the event of dispute over interpretation the English text shall prevail. The word "shall" is mandatory and the word "may" is permissive.
- 4.2 Throughout this Constitution (and the Class Rules) the following defined terms shall be used.
 - (a) The Federation shall mean the united body of International Fireball National Class Associations, Individual Members and Honorary Life Members named "Fireball International" (F.I.).
 - (b) "Honorary Life Member" shall mean any person so appointed by the Council under sub clause 8.5(a)
 - (c) "National Class Association" (N.C.A.) shall mean the International Fireball Class National Association organised in individual countries and officially recognised by F.I.
 - (d) "National Authority" shall mean the officially

recognised authority or organisation controlling and organising the sport of yachting and sailing on a national basis in any country.

- (e) "The Council" shall mean the council of F.I. consisting of the nominated representatives of N.C.A.s.
- (f) "The Executive" shall mean the Executive Committee of F.I. consisting of the Commodore, Vice-Commodore, Rear Commodores, Secretary, Treasurer, a representative of the largest (in voting terms (5.3)) N.C.A., a representative of the Technical Committee, a representative of the sponsor, the Designer, and such other members as the Executive may from time to time co-opt.
- (g) "The Secretary" shall mean the duly elected Honorary Secretary or the appointed Secretary as the case may be of F.I.
- (h) "The Treasurer" shall mean the duly elected Honorary Treasurer or the duly appointed Treasurer as the case may be of F.I.
- (i) "The Constitution" shall mean the rules governing the conduct of F.I.
- (j) "The Class" shall mean the class of sailing dinghies designed by Peter Milne and named "International Fireball".
- (k) "The Class Rules" shall mean the rules relating to measurement, construction and racing conditions governing the building of each International Fireball and its rating as a recognised boat within the Class for racing purposes.
- (l) "The Sail Number" shall mean the Class registration number allocated by the IYRU to the National Authority and issued to the builder of an International Fireball (The IYRU may delegate this authority to F.I.).
- (m) "The Fleet Number" shall mean the series number allocated by F.I. to a group of not less than four in number International Fireballs racing regularly together.
- (n) "Licenced Builder" shall mean a person, persons or corporation for the time being holding a licence from the IYRU for the production of International Fireball Dinghies and/or kits.
- (o) "Measurement Certificate" shall mean a certificate to be issued as provided in the International Fireball Class Rules.
- (p) "Valid Measurement Certificate" shall mean a certificate in which:

*continued on
page 50*

FROM WHERE THE SUN RACES *

By Rear Commodore Jens Overgaard and Peter Cummins

We are more fortunate here in Thailand than, perhaps, sailors in many other places because our Monarch is a good sailor (OK dinghy) and, hence, there is a lot of interest in and sympathy for dinghy sailors – even Fireballers.

His Majesty the King of Thailand uses on auspicious occasions a magnificent Royal Barge for ceremonial river parades, but old timers at the Royal Varuna Y.C. still fondly recollect an incident at the start line of a race, which was graced by His Majesty's paramitic corps, who knew the King's sporting spirit, and promptly luffed to foreclose an attempted "Royal Barge" to the consternation of most of the Admiralty called into perform the R.O. duties. They say that never were so many guns fired, flags hoisted, dipped and lowered at the same time as on that occasion.

The first fireball in Thailand was built by Dr. Rachot Kanchanavanit whose imprint on yachting in this Kingdom remains indelible. Enthusiastic about the new design appearing on the racing circuits of Europe in the Sixties, he ordered a set of plans and built a boat that left the fleet of Enterprises, OKs and Lighthnings, that were the racing dinghies of the day, standing still. Prince Bira immediately recognized that if he wanted to remain among the leaders, he had to have a Fireball.

One of the country's fine craftsmen by the name of Sanan, was given the plans and the job to build a Fireball that would beat that of Dr. Rachot.

That was the beginning and soon Prince Bira and Dr. Rachot were the men to beat if you wanted an elbow at the bar of the Royal Varuna Yacht Club after the races.

*As in 'Strine'

At the subsequent South East Asian Games in Burma, Fireball was on the menu. One had been built from an imported kit and the others from tea-chests. This event is said to be the origin of the sales boom Chippendale experienced thereafter.

Then came the "organized" period we now live in. We got a licenced builder, Oriental Marine, and the trapeze was introduced. Although first compared to "going out in the midday sun" it soon made Fireball the "graduate" boat of the Kingdom and has remained so ever since.

It culminated in the World Championship in Pataya in 1978. Largely organized by that indefatigable primus motor of yachting, Al Chandler, it saw Laurie Smith taking the Cup in front of over fifty international fireballers whose only distractions were their vivid memories of last night at Simon's Bar in South Pataya. I had this confirmed a couple of years ago, when I walked into the Richmond Y.C. during the Worlds by lovely Terry Thomas (KC), Terry Reynolds (SA), Brett Willets and many more of that superb sailing fraternity the Fireball has provided.

Although, like any other fleet, the Fireball in Thailand has had its "crests and troughs"; as we approach 1988, it is certainly cresting. Our builder Captain Sompong has even been able to export two boats to our neighbours in Malaysia, and soon we will probably see a fleet there too.

*continued on
page 62*



(h) Hull Sections

The measurements shall conform to Dimension Sheet One and be within the stated tolerances. The positions of the intermediate sections shall be established by measuring with a tape lying along the bottom panel.

When straight edge is placed upon either topsides, side decks, bilge panels or centre bottom panel in the same plane as the sections, no part of the surface shall be further away from the straight edge than 3mm.

(i) Centreboard Case

No part of the centreboard case or the centreline structure above the cockpit sole shall exceed 320mm in width, except for struts, knees or strain members, the total of which shall not exceed three on each side of the centreboard case. The fore and aft dimension of any strut, knee or strain member shall not exceed 50mm when viewed in plan. The slot shall not exceed 30mm in width. The sides of the slot opening in the bottom of the boat may be radiused. Slot closure strips are permitted.

(j) Centreboard Pivot

The pivot shall be centred $70\text{mm} \pm 7\text{mm}$ above the outside of the centre bottom panel, and $2698\text{mm} \pm 26\text{mm}$ from the aft transom measured along the bottom. The pivot shall be fitted passing through the centreboard pivot hole.

(k) Mast Step

The mast shall be stepped on top of the spur at the forward end of the centreboard case. The depth of the spur above the outside of the centre bottom panel shall be at least 135mm. The height of the heel of the mast above the outside of the centre bottom panel shall not exceed 165mm, tenon excluded, when the mast is positioned 75mm from the forward bulkhead.

(l) Gunwale Rubbers

The outer edges of these shall not project more than 38mm nor less than 6mm from the outside of the hull when measured at 90° to the face of the topsides. The gunwale rubbers shall extend the full length of the gunwales but may be rounded off at the extreme ends. The depth of the gunwale rubbers at the face of the topsides shall not exceed 30mm nor be less than 15mm.

(m) Chine Deflectors

These shall be triangular in section with outboard face flush with the topside and the upper face flush with the surface of the bilge panel. The deflectors shall extend forward of the aft transom for at least 3860mm.

The dimensions shall be within the limits stated below, except that for a distance not exceeding 305mm from the forward end, the deflectors may be faired into the hull:

Width of upper face $32\text{mm} \pm 2\text{mm}$

Overall depth measured at 90° to the plane of the bilge panel: 6mm minimum, 11mm maximum.

(n) Bottom Rails

The outboard face of each rail shall be at 90° to the plane of the centre bottom panel and lie on the knuckle formed between the centre bottom panel and each bilge panel. The bottom rails shall extend forward of the aft transom at least 2820mm. The forward 102mm may be faired into the bottom of the hull. The bottom rails shall be 10mm deep at the outboard edges and 32mm

wide. Both these dimensions shall have tolerance of $\pm 2\text{mm}$. The unfaired length of the bottom rails shall have level bottom surfaces to which the flat surfaces of the protection strips shall be fastened. The protection strips shall be metal or plastic and shall be a minimum of 3mm and a maximum of 8mm deep, and a minimum of 6mm and a maximum of 14mm wide.

(o) Rocker

With the boat upside down and the transoms supported on blocks of equal thickness on a level surface, a base line shall be set up directly above the centreline. One end shall be 305mm above station 0. The other end shall be 407mm above a point 4760mm from the aft transom (station 0) measured round the bottom panel.

In this rule, all measurements from the aft transom (station 0) shall be measured along the bottom surface of the boat at centreline.

At the following distances from the aft transom:

A	765mm
B	1580mm
C	2390mm
D	3208mm
E	3975mm

the vertical distance from the baseline to the centre bottom panel shall be within $\pm 8\text{mm}$ of:

A	231mm
B	164mm
C	125mm
D	137mm
E	229mm

A line pulled taut between the ends of the centre bottom panel shall in no place be more than 3mm from the skin.

A straight edge 300mm long placed on the bottom panel parallel to the fore and aft centreline of the boat and with its forward end opposite the lower edge of the forward transom, shall be nowhere more than 2mm from the surface of the bottom panel.

(p) Thwart

The thwart shall be of solid timber, 114mm $\pm$ 6mm wide and 16mm $\pm$ 2mm thick. Solid plywood or laminated timber is permitted. The radius of the edges of the thwart shall not exceed 16mm. The thwart shall be fitted with its forward edge 2134mm $\pm$ 13mm from the aft transom. The height of the top of the thwart above the outside of the centre bottom panel, or its extended plane, shall nowhere be less than 256mm.

(q) Self-draining Cockpits

No surface within the hull below the permitted deck shall divert water overboard or into the centreboard case.

9. SHROUD AND FORESAIL TACK POSITIONS

The lower end of the shrouds and their associated fittings shall be attached to the shroud plates which shall be fixed to the outside of the hull and have attachment holes not exceeding 10mm in diameter. The centres of these holes shall be not more than 2693mm nor less than 2641mm forward of

- (a) The particulars of ownership are up to date and entered on the Class register
- (b) Any endorsement required by the class rules has been duly entered.
- (q) "Certified Hull Moulds" shall mean a serially numbered registered mould to be used in the production of hull shells in fibre reinforced plastic
- (r) "The Sponsor" shall mean Norris Brothers Limited of Burrell House, Burrell Road, Haywards Heath, Sussex, England.
- (s) "The Designer" shall mean Peter Milne, M.S.I.A.

5. Affiliation and Voting Rights

- 5.1 F.I. is a Federation of the International Fireball N.C.A.s, Individual Members and Honorary Life Members.
- 5.2 All N.C.A.s shall be members of F.I.
- 5.3 Members of the Executive and registered Fireball owners domiciled in a country not having an N.C.A. may become Individual members of F.I.
- 5.4 An N.C.A. shall have a voting power according to the number of its paid up members existing at the 31st December in the preceding year and notified to the Secretary at the 1st April in each year on the following basis:

Up to twenty-five members	One vote
Twenty-six, fifty members	Two votes
Fifty-one, one hundred members	Three votes
One hundred and one to one hundred and fifty members	Four votes
One hundred and fifty-one to two hundred and fifty members	Five votes
Two hundred and fifty-one to three hundred and fifty members	Six votes
Three hundred and fifty-one to five hundred members	Seven votes
Five hundred and one to six hundred and fifty members	Eight votes
Six hundred and fifty-one to eight hundred and fifty members	Nine votes
Eight hundred and fifty-one to one thousand and fifty members	Ten votes
Plus one vote per two hundred additional members.	
- 5.5 The Commodore of F.I. shall have a casting vote
- 5.6 Individual and Honorary Life Members shall not have voting rights

6. Fees and Subscriptions

- 6.1 F.I. shall be financed by annual subscriptions from the

N.C.A.s and Individual members and the receipt of a proportion of the International Class Fee (International Fireball Class Rule 3) paid by the Builders of International Fireballs.

- 6.2 N.C.A.s shall pay a subscription for each of their voting members but subject to such minimum subscription as the Council may from time to time determine.
- 6.3 (a) Individual members shall pay such a subscription as the Council may from time to time determine.
(b) Honorary Life Members shall not be required to pay a subscription to F.I.
- 6.4 (a) Proposals for change to the rate(s) of subscription shall be circulated by the Secretary to members of the Council by not later than 1st March in each year.
(b) The rate(s) of subscriptions shall be determined by the Council by not later than the 15th April in the same year.
(c) N.C.A.s shall be notified of new rate(s) of subscription by not later than 1st June in the same year.
- 6.5 Annual subscriptions shall be payable by the 31st December in the same year and any N.C.A. in arrears shall have its voting rights suspended until the overdue subscriptions shall have been paid. The membership of an N.C.A. or Individual Member whose subscription is unpaid at the 31st March in the following year may be terminated

7. Management

- 7.1 The affairs of F.I. shall be managed by the Executive subject to the authority of the Council. The Executive shall be empowered to make payments and receive monies. Payments shall be validly evidenced only by the signature of the Treasurer or his deputy as appointed by the Executive.
- 7.2 Each N.C.A. shall nominate a representative to the Council and advise the Secretary accordingly. Nobody shall be elected, nominated, appointed (Commodore, Rear Commodore, Vice-Commodore, Secretary, Treasurer, Auditor, member of Executive, member of Technical Committee, Editor, Honorary Officer, etc.) without the preliminary agreement and support of his own N.C.A.
- 7.3 (a) The Commodore and Rear Commodores (Flag Officers) shall be elected by the Council
(b) Flag Officers shall hold office for a term of three years and may be re-elected for an additional term or terms
(c) Flag Officers shall be subject to the provisions of Clause 7.2 be nominated by an N.C.A. supported by not less than one other N.C.A.; nominations shall be notified

- to the Secretary by not later than the 1st April in the final year of office of the Flag Officer concerned.
- (d) In the absence of a nomination by an N.C.A. for the office of Commodore the Executive shall submit nomination(s) to the Council
- (e) In the absence of a nomination by an N.C.A. the Executive shall as occasion arises appoint a Rear Commodore in a particular area.
- 7.5 The Commodore shall, subject to the approval of the Council, appoint (and as occasion arises terminate the appointment).
- (i) A Secretary who shall be responsible for the maintenance of the records of F.I., the conduct of postal ballots and the dissemination of information to: The Officers of F.I., the members of the Council, the members of the Executive and the N.C.A.s.
- (ii) A Treasurer, who shall have charge of the funds of F.I. and make such disbursements as the Executive shall direct, keep an accurate record of the financial affairs of F.I. and present a draft annual statement to the Executive by the 1st February in each year.
- (iii) An Auditor, who shall certify the annual financial statements.
- 7.6 The Executive shall form a Rules and Technical Committee, which shall be responsible for advising upon the interpretation of Class Rules, for considering the requirements for amendments or addition to such rules, and for making recommendations to F.I.
- 7.7 The Executive shall be responsible for the issue of sail numbers and fleet numbers.
- 7.8 The Executive shall arrange World Championships of the Class, and co-ordinate the dates of National or Regional Championships as may be required. All matters pertaining to World Championships shall be settled by the Executive in consultation with the sponsoring club(s) and/or relevant National Authority.
- 7.9 The Executive shall be entitled to act in emergency without reference to the IYRU by issuing amendments and interpretations to the Class Rules provided that such amendments and interpretations shall be promptly notified to the IYRU, to N.C.A.s and to professional builders. Such amendments and interpretations shall be operative upon approval by the Chairman and Vice-Chairman of the appropriate IYRU Technical Committee and shall be submitted for ratification to the IYRU at its next meeting. (IYRU Rules for the adoption and control of International Classes refers).
- 7.10 The Secretariat shall be established in the U.K.

8. Powers of the Council

- 8.1 Subject to the provisions of these rules and in particular the objects of F.I. as expressed in Rule 3 the Council shall have absolute authority in the management of F.I. and the administration of its funds.
- 8.2 The Council shall be the body with power to make recommendations to the IYRU for changes in Class Rules.
- 8.3 The Council shall have authority on a simple majority of the votes cast to change the Constitution of F.I. subject to the approval of the IYRU.
- 8.4 A two-thirds majority of the votes cast by the Council shall be required to alter the Class Rules subject to the approval of the IYRU.
- 8.5 The Executive may in recognition of exceptional services to the International Fireball Class nominate and the Council appoint:
- (a) Honorary Life members.
- (b) Honorary Officers (e.g. Admiral) who shall hold office for life.
- (c) Honorary Officers shall be ex officio members of the Council and the Executive.

9. Meetings and Postal Ballots

- 9.1 Meetings:
- (a) A general meeting of the Council shall be held during the World Championships. The date time and place to be published by the Secretary. Officers and Honorary Officers and officially nominated representatives of N.C.A.s whose names shall be advised to the Secretary not less than thirty days before the opening date of the Championships shall be entitled to attend such meetings.
- (b) Council meetings may also be convened by the Executive to discuss the affairs of the Class and to plan its development and future conduct. No decisions to change Class Rules or the Constitution of F.I. shall be taken at such meetings.
- 9.2 Postal Ballots:
- (a) Voting of the council shall be by postal ballot.
- (b) Proposals for changes to the Constitution of F.I. or the Class Rules may be made by the Executive or an N.C.A. Proposals by N.C.A.s shall be submitted to the Secretary by not later than 15th April in each year.
- (c) Proposed amendments to the Constitution of F.I. or the Class Rules shall be circulated to members of the Council not later than 1st June in the same year. The

*continued on
page 54*

Class Rules—continued from page 49

the aft transom. The distance between the shroud plates at the sheer shall be $1324\text{mm} \pm 13\text{mm}$. The attachment hole for the foresail tack shall not exceed 10mm in diameter. It shall be $4566\text{mm} \pm 13\text{mm}$ forward of the aft transom.

The forestay shall be attached on the centreline of the foredeck not more than 51mm from the point of attachment of the foresail.

10. CENTREBOARD

- (a) The centreboard shall be of solid timber, laminated timber, solid plywood, fibre reinforced plastic or a combination of these materials. Regardless of the material used, the board shall float, even with holes drilled through the core. Protective strips may be applied to the edges.
- (b) The profile of the board, including any protective strips, shall be measured according to the Centreboard Profile Sheet. Measurements A, B and C are taken at 90° to the leading edge at the stated distance from the centre of the pivot hole. They shall be within the limits of measurement given on the Centreboard Profile Sheet.

The leading and trailing edges of the centreboard between the points of measurement for A and B shall not deviate from straight lines by more than 6mm.

The bottom part of the centreboard shall be within the area bounded by the lines PQ, QR and RS, where PQ and RS are straight extensions of the leading and trailing edges respectively and the angle PQR is 65° .

The distance PQ shall be 177mm. Point P is where line B cuts the leading edge. The pivot hole centreline is drawn through the centre of the pivot hole and parallel to the leading edge. The diameter of the pivot hole, whether bushed or not, shall not exceed 16mm.

- (c) When complete with any friction device the centreboard shall weigh not less than 4kg or more than 9kg.

11. RUDDER

- (a) The rudder blade shall be of solid timber, laminated timber, solid plywood, fibre reinforced plastic or a combination of these materials. Regardless of the materials used, the blade shall float, even with holes drilled through the core. Protective strips may be applied to the edges.
- (b) The rudder blade below the waterline shall not exceed a thickness of 25mm complete with its protective coating.
- (c) The rudder shall be fitted to the transom in such a manner that it will not part company with the boat during a capsize.
- (d) The weight of the complete rudder assembly including blade, fittings, tiller and extension, shall not be less than 3.0kg.
- (e) Except for the tiller extension, the assembly and fittings shall not exceed 100mm in transverse width.

12. WEAR AND DAMAGE

On a check re-measurement at a Regatta the Race Committee or Jury may allow additional tolerance for obvious wear or damage on wooden or FRP parts.

13. MAINSHEET

The points of attachment or lead of the standing part of the mainsheet to the boat, whether fixed or moveable, shall be contained within the areas defined below or the vertical extensions thereof:

- (a) The area contained by the forward face of the aft bulkhead, the forward edge of the thwart and the inboard faces of the tanksides.
- (b) The area contained by the forward face of the aft bulkhead, the outer edges of the gunwale rubbers and the imaginary line 25mm aft of and parallel to the aft face of the aft transom.

14. MAST

- (a) Shall be aluminium alloy, steel or wood and stayed by one pair of shrouds and one forestay only. The mast shall be free from staying or bracing above a point 5166mm from the heel, tenon excluded.
- (b) The mast may be braced by either one pair of spreaders going to the shrouds or one pair of diamond wires and associated struts which shall not be attached to the shrouds. Devices the purpose of which are to control the fore and aft movement of the mast, may be fixed below the top of the lower measurement band and forward of the mast on the foredeck centreline.
- (c) The tip weight shall be taken with the mast horizontal and supported at a point 50mm from the heel, tenon excluded. The weight shall be taken at a point 6735mm from the heel, tenon excluded. During weighing the halyards (including all shackles, swivels, etc., not permanently attached to the sails) shall be fully hoisted so that their eyes are hard against the upper halyard sheaves or leads. The lower ends of halyards, shrouds, forestay and trapeze wires (excluding any fitting for altering the tension of standing rigging which weighs more

continued on page 56



**NUMBER
ONE
SAILS**

New Road, Middlestown, Wakefield,
West Yorkshire WF4 4NS.
Tel: 0924-274073

Need we say more

exact figures of the Members' voting powers shall be circulated, together with the proposals.

- (d) Members of the Council shall record their votes upon nominations and/or proposals made under sub-clauses 7.3(c), 8.5(a) and (b) and 9.2(b) and (c) with the Secretary within eighty days of the issue of the notice by him. The detailed and complete results, mentioning all the members and their votes shall be circulated within thirty days.
- (e) Class Rule changes shall be put into effect after agreement with the IYRU.
- (f) Changes to the Constitution of F.I. shall be put into effect one month after the publication of the results of the ballot, and approval by IYRU.

10. Accounts

- 10.1 The Executive shall cause true accounts to be kept giving full particulars of:
 - (a) All monies, assets and liabilities of F.I.
 - (b) All monies received and expended by F.I. and of the matters in respect of which such receipts and expenditure arose.
 - (c) All purchases and sales of goods by F.I.
- 10.2 The Executive shall cause to be prepared and circulated to the Officers of F.I., members of the Council, members of the Executive and the N.C.A.s not later than 1st June in each year an annual financial statement which shall have been audited by the Auditor.
Members of the Council are required to vote on the accounts within eighty days of the day of issue and approval by a majority of those voting shall constitute acceptance of the accounts by the members of F.I.

11. Protection of One Design

- 11.1 The International Fireball Dinghy may be built only by amateurs and professional builders licenced by the IYRU. Before licencing a builder the IYRU shall receive the advice of the sponsor and the F.I. The number of licenced builders may vary in each country but where a territory is adequately served others will not normally be granted rights.
- 11.2 F.I. shall collaborate with the IYRU, National Authorities and the Sponsor in the allotment and issue of International Class Fee plaques and sail numbers for the International Fireball, and in the keeping of the fleet register, a register of licenced builders and a register of certified hull moulds.

12. National Class Associations

- 12.1 N.C.A.s shall establish their own constitution incorporating the relevant provisions of the Constitution of F.I. and the Class Rules. The Constitution of N.C.A.s shall be approved by the Executive and be subject to ratification by the Council.
- 12.2 N.C.A.s shall co-operate with the Executive and where applicable National Authorities in the control of the issue of sail numbers and the measurement and certification of International Fireball Dinghies.
- 12.3 N.C.A.s shall be responsible for the collection of building fees from amateurs and their transmission to the Secretary of F.I.

13. Racing (World Championships)

- 13.1 International Fireball World Championships shall be open to all N.C.A.s.
- 13.2 The direction of World Championships shall be the responsibility of the Executive (7.9) who will:
 - (a) Organise World Championships on an annual or biennial basis.
 - (b) Select the sponsoring N.C.A. and approve the venue.
 - (c) Establish the number of entries and allot places.
 - (d) Supply technical advisors and co-operate with the host club and sponsoring N.C.A. in the organisation of the event.

14. Disclaimer

The IYRU, F.I. N.C.A.s, the Sponsor and Designer accept no responsibility in respect of the Constitution of F.I. or the Class Rules or any claim arising therefrom

15. Dissolution

Dissolution of F.I. shall take place by resolution of the Council passed by a two-thirds majority of those voting. In this event and after payment of all liabilities the assets and funds of F.I. shall be disposed of as shall be directed by the Council on a simple majority of those voting.



Europe – continued from page 27

brought ample satisfactions to FIREBALL sailors, Dutch and other. It is always a source of pleasure in all countries when the untiring Ad Verwers and Aries Vink turn up with their crews.

SCANDINAVIA

Quite fascinating is the story of the success of the Swedes Carl and Sten Warfvinge. For the first three years, they were entirely alone with their homebuilt boat. In 1968 Carl Warfvinge and Rolf Nilsson raced in their first major venue at the Brunnen World Championships. The Class grew slowly to 25 boats: still too few to allow serious training in the usual sense of the word. All the same, Warfvinge and Nilsson needed only their two boats for training, showing a dedication and system seen elsewhere nowadays only amongst 12-metres. They would race each other, altering only one feature at a time in one of the dinghies; proved the feature its worth, it was adopted by the partner, and the next experiment would begin. The result was a first place for the Warfvinge brothers at the International Week in La Rochelle 1970, and a second place at the 1970 World Championship in Fenit, Ireland. Considering the small size of their fleet, the Swede's organization of two European Championships, in 1971 in Arild and in 1986 in Ronneby, becomes even more noteworthy. The Norwegian FIREBALL fleet is small and little heard of in the rest of Europe, all the more cause of pleasant surprise whenever Norwegian boats turn up at international events.

CZECHOSLOVAKIA

In 1965 I sent the first set of plans to Czechoslovakia. This was the beginning of an intensive correspondence which soon became a regular advisory service, and a year later the photos of the FIREBALL handbuilt in Czechoslovakia were on hand: handbuilt in the fullest sense of the word, as every bit of hull, sails, rigging and trimming had to be made up from scratch. Western material was unavailable, and locally made items scarce and scarcely suitable. Czech sailors – regardless what Class – appearing at Swiss events would receive FIREBALL material to take home, and I sent them innumerable packages of accessories until in 1976 we were finally able to visit Czechoslovakia in person and take part in two local regattas. Almost ashamed of showing up with a boat dripping, by Czech standards, with luxury fittings, we left behind whatever could be spared as a small gesture of thanks for the generous hospitality we met everywhere in the country. Numerous further mailings to Czech FIREBALL sailors over the following years doubtless played a part in the growth of today's active fleet of over 200 boats. In their current President, the Class has a highly able officer, who has been extremely successful over the past years in obtaining travel visas so as to allow a large number of Czech Fireballs to take part in international events. His absolute correctness towards both his country and the foreign Associations assured him of a resounding success: in which other European country – apart from the United Kingdom, home and castle of the FIREBALL – can one find

90 boats on the starting line of a National Championship race? It would be very good if more western FIREBALL crews were to add variety to the Czech events.

JUGOSLAVIA

Jugoslavia also has an active FIREBALL fraternity, members of which have already turned up at international events. They could well do with more foreign support in form of attendance of their regattas by Italian, Swiss and Czech crews.

IRELAND

Ireland, for most European FIREBALL sailors, is synonymous with Adrian and Maeve Bell, the untiring participants of nearly every World and European Championship event, in which they regularly appear in the first ten places. Adrian has moreover played a role of major importance as Commodore of Fireball International, when he set out the guidelines for the World Championships – and who would have known better than he – and ensured the strict enforcement of Fireball International's Statutes. The Irish Fireball Association can nevertheless name numerous other enthusiastic members as its own, and its reports laced with Irish humour make one wish for their company.



A European casualty at
the 1967 Worlds, France – but who?

than 0.25kg) shall be stretched along the mast and secured to it as close to the heel as possible; any rigging extending beyond the heel shall be supported and not weighed. Rigging for the spinnaker pole uphaul/downhaul and any wire strops shall be secured along the mast in their normal positions. The tip weight in this condition shall not be less than 4.20kg.

- (d) Permanently bent or rotating masts are prohibited. A permanent set of up to 40mm due to deformation is permitted in the line of the aft edge of the mast from upper band to heel when rigged in the boat without tension in the shrouds or bracing.
- (e) The bearing point of the eye, tube or sheave which supports the spinnaker halyard shall not be higher than 125mm above the bottom edge of the middle mast band, nor extend more than 75mm from the forward face of the mast.

15. BOOM

- (a) Shall be of metal or wood, and not permanently bent. A permanent set of up to 20mm due to deformation is permitted in the line of the top of the boom.
- (b) Booms shall pass through a ring of 105mm diameter. Fixed fittings serving solely to attach sheets, outhaul, kicking strap and spinnaker pole to the boom are excluded from having to pass through the 105mm ring.

16. MAST BANDS

- (a) The mast shall carry three painted bands of a colour strongly contrasting with the colour of the mast. They shall not be less than 10mm in width.
- (b) The top of the lower band shall not be more than 1029mm above the heel of the mast, tenon excluded. When racing the top of the boom shall not come below the top of the lower band.
- (c) The lower edge of the middle band shall not be more than 5086mm nor less than 5074mm above the heel of the mast, tenon excluded. The line of the luff of the foresail, when extended, shall not meet the forward side of the mast above this height. The points where the lines of the shrouds and of the forestay when extended meet the mast shall be within 80mm of the lower edge of the middle band.
- (d) The lower edge of the upper band shall not be more than 5715mm above the top edge of the lower band.
When racing, no part of the mainsail shall extend above the lower edge of this band.

17. BOOM BAND

The boom shall carry a painted band of a colour strongly contrasting with the colour of the boom. The band shall not be less than 10mm wide. With the boom fitted on the gooseneck and at right angles to the mast, the distance between the downward projection of the aft edge of the mast, disregarding local projection or cut outs, and the forward edge of the band shall not exceed 2845mm. When racing, no part of the mainsail shall extend aft of the forward edge of this band.

18. SAILS

- (a) (i) Sails shall be measured in accordance with Sail Measurement Instructions of the IYRU unless the class rules specify a different method.
- (ii) Each sail shall be approved by an official measurer who shall sign and date a mainsail or foresail near the tack and a spinnaker near the head. Details (maker and number) shall be entered on the Measurement Certificate. When the owner already has a certificate this

shall be done by an official measurer.

- (iii) Sails shall be of woven material and be capable of being stowed completely in a normal sail bag. Sails used in International Championships shall comply with the current rules with no exceptions under rule 5(e).

(b) Mainsail

- (i) The leech measurement shall be not greater than 6350mm.
(ii) The cross width measurement of the sail shall not exceed the following:

at quarter height	2550mm
at half height	1940mm
at three quarter height	1140mm

- (iii) The headboard shall not extend more than 180mm aft of the head nor exceed 160mm in depth.
(iv) The number of battens in the mainsail shall be four: the top batten shall not exceed 1170mm in length and shall extend to the mast. The distance of the top of the upper batten at the leech from the head shall not be less than 1280mm. The bottom batten shall not exceed 690mm in length and shall nowhere be less than 800mm from the bottom edge of the footrope. The two intermediate battens shall not exceed 840mm in length. The battens shall not exceed 50mm in width.
(v) One transparent panel may be fitted in the mainsail. It shall not exceed 0.28 sq.m in area, nor be less than 150mm from any edge of the sail.
(vi) A double luffed or loose footed mainsail is prohibited.

(c) Foresail

The foresail shall be a three cornered sail. A convex curve is permitted in the foot, but not

continued on
page 65

505 Sailors Look Up to Ullman

Next time you're pipped at the post,
check the winner's sails.
Ullman Sails get results, in all
manner of classes all over the world.
Ullman Sails are a fast improvement
for your 505.
Phone or write to Ian Southworth or
Ian Simkins for knowledgeable and
prompt attention and a consistently good
suit of sails everytime,
all the time.

Ullman Sails
A fast improvement

U S Ullman Sails (UK) Ltd, The Sail Loft, Port Hamble, Hamble,
Hampshire SO3 5NN. Telephone: 0703 454254

505 £255.00
Mains from £82.00
Jib from £224.00
Spinnaker from
All prices are exclusive of VAT

FIREBALL BUILDING AT HOME

by Peter Bond

The Fireball was designed as a home-built boat twenty five years ago. It was an immediate success and for the first three years eighty per cent of all Fireballs were home built. The aims and economics of the venture were the same as they are to-day: One could save 50% of the total cost by home building.

Though the hull shape is a strict one design, the freedom in cockpit layout which provided an impetus to its development also restricted the potential amateur builder. The plans failed to keep up to date with the better ideas and sophistications which evolved.

At last the plans have been redrawn to produce a boat which is not only sound, competitive and light weight but is aesthetically pleasing and compares as well, if not better, with most of her professionally built sisters.

The aim of this article is therefore to assist both newcomers and owners of Fireballs to build a competitive boat which will reflect the investment of two hundred hours work. That is – it would be a marketable commodity if and when it was put on the dinghy market. We calculate that it is possible to build and fit out without sails for about £1,500.

Weight

It is imperative that a competitive boat should be down to minimum weight when fitted out. The target being between 165 and 175lbs. The standard of timbers acquired from your local timber yard is intended for the building trade. Plywoods are Singapore or Phillipino

and whilst reputed to be marine grade are far inferior to European plys.

Any good boat builder will advise you in obtaining best quality timbers and ply. For the decks use four ply, which can be sapele faced. Hull panels are best five ply and cross grained. You should try to buy your ply in the summer, when it is dry and light, and store it out of the damp until required.

With weight in mind – if the hull is built in Winter, assuming that you are not building it in the living room, your garage should be kept at no less than 50 F. Water absorption in a cold damp garage can be dramatic. Using West Epoxy during construction and finishing, given normal maintainance, a well built hull using good timbers will show no significant increase in weight in the years to come. Indeed, using West to encapsulate the hull totally the boat should need correctors after fitting out. This is taking into account a s.s. hoop up to 1 kg and all fittings. Our sample boat turned out needing 3 kg of correctors with alloy keel band, Elestrom bailers, a 12 gauge s.s. hoop and all fittings. Chines were tapered to the ends, both transoms were 6ply, all leading to a boat which was light at the ends but with the central spine assembly running the full length of the boat giving tremendous stiffness. I believe the chines are essential in stabilizing the floor area. They weigh about three pounds but are the basis of a full-length scarfed joint between the bottom and bilge panels.

Types of construction

Several methods of construction are open to the amateur builder:

Conventional "Box Type" using chines and the usual bearers. History has proved this builds a sounder stiffer boat. There are still boats built this way, sailing competitively after twenty-five years. Utilizing over-lap planking

method gives a joint with simplicity and strength.

West filleted boat in female mould. This method is satisfactory and used by a lot of professional builders. Disadvantage would be, difficulty in fitting chines and the aquisition of a female mould.

Glass tape construction This became popular in the mid seventies, promising simplicity. Problems arose in obtaining a good finish with the raised glass weld. Time has shown that any water seepage rejects the glass and tape with disastrous results. This type of boat failed to maintain any sort of value after two years of use.

Tools and misc requirements

Power drill and a good selection of bits; jigsaw; stapler; power planer (not essential but would save about 10hrs); tenon saw; hand plane; three chisels 1/2" 3/4" 1"; claw hammer; pliers; level; square; spokeshave; selection of screwdrivers including Yankee, pump handle type; G. clamps – as many as possible.

5 litres of West 105 and fast hardener, 100g micro balloon filler 50g graphite powder; 100g Microfibre; 3,000 staples; 200 pan head self tappers; 100 3/4 x 6g countersunk brass wood screws.

Time required

Approximately 200 hrs plus 50 hrs painting and varnishing. Transferring offsets of bulkheads, panels etc to wood should not be rushed and will probably take 15 – 20 hours. Woodworking time is equally divided between the framing stage, that is cutting out panels and bulkheads, framing up the bulkheads tanksides etc and scarfing the main hull panels. Main space is not required until the assembly of these components is commenced. It is obviously more efficient to try to spend longer periods working on the project than a lot of small periods. One tends to forget important

stages of checking measurements etc if continuity is broken too often. An ideal situation is to coincide the project with a week's holiday. The momentum built up during a solid week's working would be dramatic.

Constructional Points of interest

Major ones in order of building are as follows.

1. Full length centreboard case hog involving the scarling of centreboard case sides to extension and using the light-weight packing to produce a substantial light-weight hog assembly which forms the rocker shape from bow to transom.
2. Carline moulded from scrap plywood using template to produce an enclosed mast gate transferring the stress of the chainplates to the mast partners.
3. Additional bulkheads West filleted into side tanks in chainplate area.
4. Mast partners carried through to forward web with mahogany pad on top of web to carry screw or strut mounting.
5. Inboard sheeting bars to carry adjustable jib fairleads which is more positive than having a block floating around on a stop.
6. Small bulkhead aft of thwart from template to carry hoop.
7. Decks cut out as per sheet layout modified with rounded cockpit corners. The carline line is blended in with the deck lines giving a smooth flow of deck forward through the carline area to aft transom. The main advantage is that the deck joints are taken off the bulkheads giving a sixth side to "box" construction. The rounded cockpit gives added strength to the hull form. The value of the deck in giving strength to the hull is greatly underestimated.
8. You may hear some enthusiast saying one should build a boat to one limit or another. This is not only illegal it is dangerous. The tolerances are so small as to be insignificant. They are for your protection to build in class. Many mea-

WEST SYSTEM[®] PRODUCTS

TO BUILD A BETTER WOODEN BOAT YOU NEED A SYSTEM



1 PREPARATION

It is important to build with wood that has been adequately dried. The moisture content of wood for composite should be as low as possible, ideally 12%.

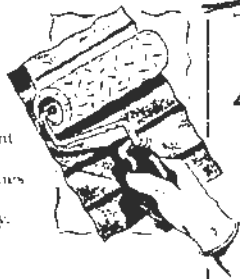


3 BONDING

The joint bonded with WEST SYSTEM epoxy becomes stronger than the wood being joined. Little clamping pressure is required to achieve a good bond.

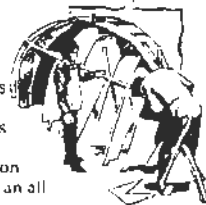
2 ENCAPSULATING

WEST SYSTEM resins stabilize the moisture content of the wood, maintain a set standard of physical properties and provide excellent dimensional stability.



4 CONSTRUCTION

WEST SYSTEM products eliminate the need for mechanical fastenings such as screws, bolts and rivets and therefore subsequent corrosion problems are non-existent in an all bonded construction.



WRA also market: SUPERSTIK — adjustable grade contact adhesive. CASCOPHEN — resorcinol resin glue. WOOD GLUE — ready to use PVA adhesive. EXTRA BOND — multi-purpose adhesive. SUPERFAST — two part epoxy resin adhesive. EPOPHEN — epoxy putty pack. CASCOVER — nylon sheathing.

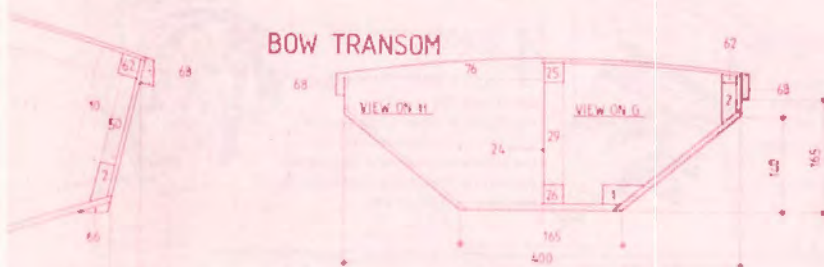
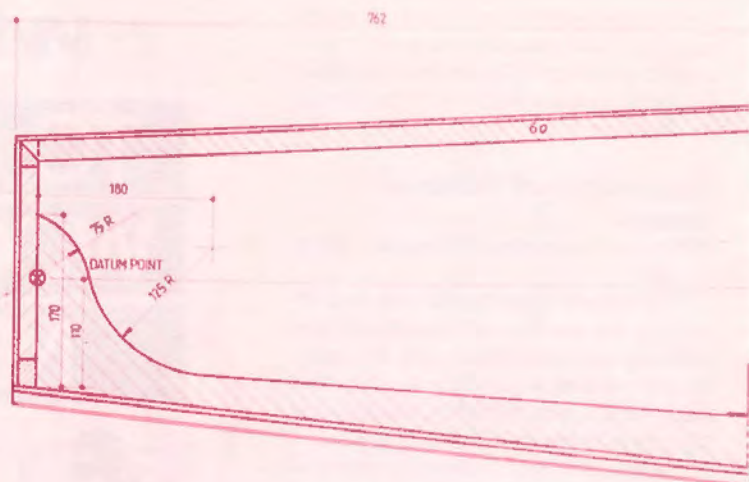
*West system is the registered Trade Mark of Gougeon Bros. Inc.

*West system Products have Lloyds Approval.



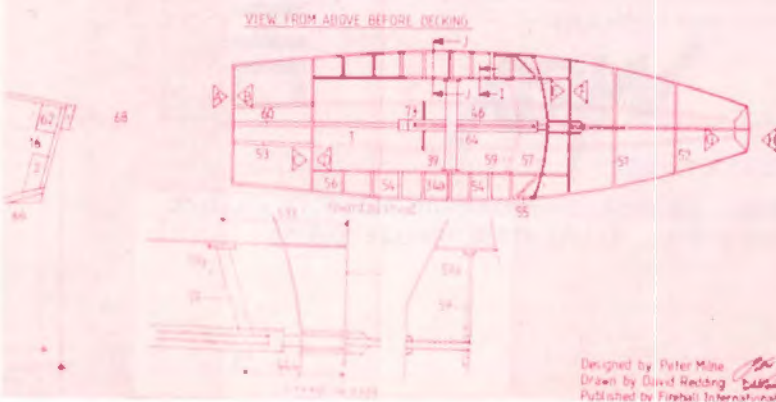
WESSEX RESINS AND ADHESIVES LTD

189/193 Spring Road, Sholing, Southampton SO2 7NY England
Tel: (0703) 444744 Telex: 47388 Wessex Resins

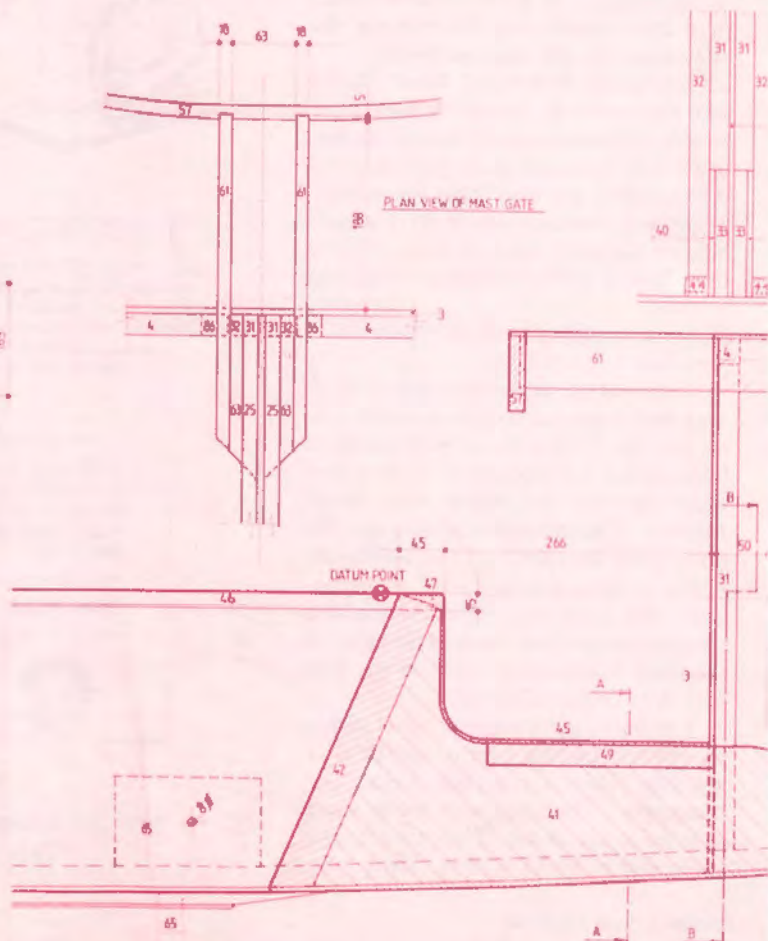


68 76 25 29 24 26 1 165 400 68 165

VIEW ON H VIEW ON G



VIEW FROM ABOVE BEFORE DECKING

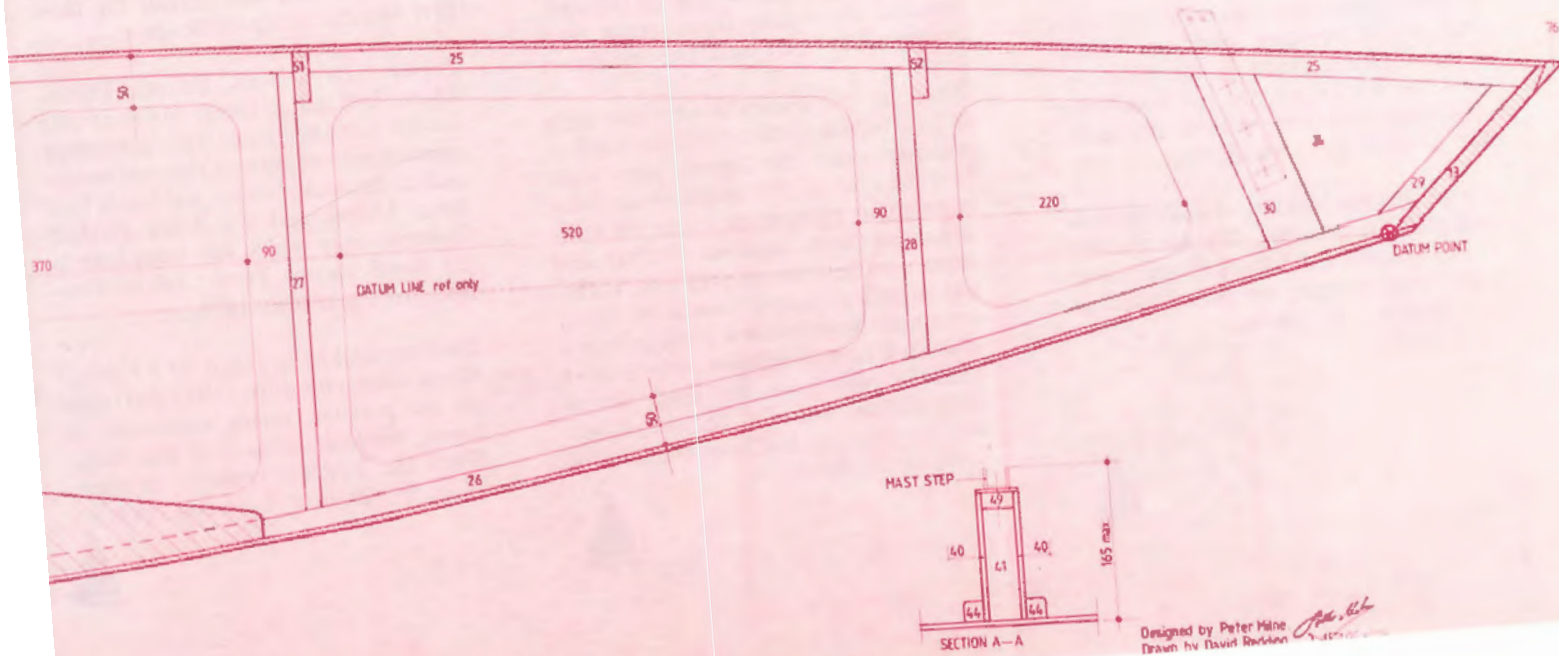
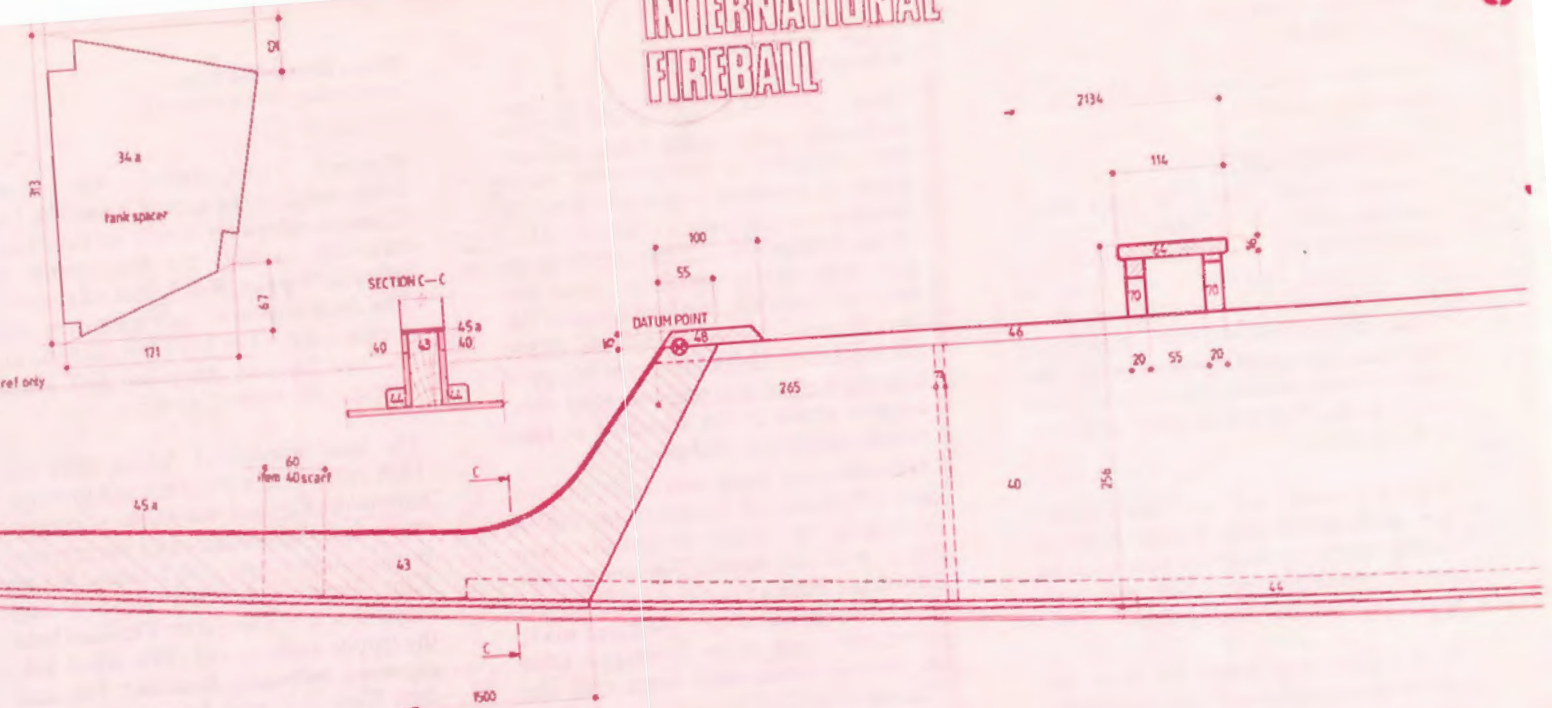


PLAN VIEW OF MAST GATE

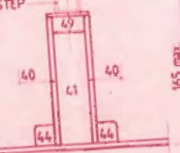
Designed by Peter Milne
Drawn by David Redding
Published by Fireball International

INTERNATIONAL FIREBALL

8



MAST STEP



SECTION A-A

Designed by Peter Haine
Drawn by David Rockman

surements are correlated, altering one can affect another.

FITTING OUT

Keep it simple! Don't let some expert chandler sell you a Christmas tree kit. Remember the fewer leads and blocks your control lines and sheets have, the smoother and quicker they will flow. What fittings you do have, make sure that they are good, proven items. Beware of new expensive items introduced early in the year before they have been tried in anger.

A good chandler will be pleased to help you with fitting out. Ensure however that he is actively involved with the class and is genuinely concerned with your speed and not his stock levels.

Have a good look round the fleets and choose systems that are functional rather than smart. Join a good Fireball club and whilst building your boat crew around various boats in the fleet and find out what suits you and your style of around

A good tip is to join a good Fireball club and whilst building your boat crew around various boats in the fleet and find out what suits you and your style of sailing. Involve your crew also as he has to use a lot of the systems.

I hope that the building of your Fireball will give you pleasure. The satisfaction of sailing with, and doing well with, your own 'Ship' is really something akin to the Fireball Special.

They were built of Israeli ply and mahogany, with Bruce Banks sails and Proctor masts – booms were locally made in wood or imported alloy, depending on the owner's means. Many of the fittings were home-made as the only boat fittings available were very large shackles for the lake steamer anchor chains – not really suitable. When the local fizzy drink company scrapped a bottle washer and stainless steel sheet became available the standard of local fittings improved enormously.

Mike Prentice made two boats, in 1969 and 1971, out of camphor instead of mahogany for its light weight, rot resistance and nice smell. His masts were converted from a Coot and an Albacore, and he fitted home-designed and made spi chutes, said to be developed from an Ankole ceremonial horn. All the Uganda boats had travellers made from Hillaldam sliding door gear which ran much better under load than gear from a chandler, but did tend to rust.

Lake Victoria has a short, steep chop and the noise of the Fireballs did keep the large crocodile away as he regularly watched the sailing from a rock sited between the start and the windward mark.

Three or four Fireballs were also built at Jinja Sailing Club in 1972 but the fleet was lost when the Uganda army took over the Club in 1973 and the boats were stove in to prevent their use by spies and agents from Tanzania. At that time Amin's soldiers also moved into VNSC and all sailing stopped for some years; some boats were lost and some managed to reach Kenya as refugees, where those Fireballs built from the single set of plans did not measure, because, it was said, the drawings had been copied with a fold in the middle.

Regional competition has been heightened by the annual Asian Fireball Championships for which we have been fortunate to have the sponsorship of Johnnie Walker (Red Label, of course). The Asians have already seen their first decade, starting in 1977 and, like the little man himself, they are still going strong ...or, rather, stronger.

The most successful Asians were the 1978 event which was held as a preliminary to the Fireball Worlds so, of course, we had the advantage of all the international competition. The visitors, led by Kim Slater and Nick Read-Wilson cleaned us up. Thereafter Thailand held the trophy right up till 1984, when Singaporean teenager, Benedict Tan and crew Shaw Her, took Johnnie Walker to Singapore. In 1986, with a big showing from Malaysia, Japan and Singapore, the Thais were in control of the young Japanese teams. No doubt, they are looking to 1990 – at home for the Fireball Worlds and abroad for their first America's Cup challenge.

Pupua New Guinea, Brunei, Darusalam, Indonesia, India, Malaysia and last but not least Japan have performed spectacularly at various regional events such as the Asian Games, the South East Asian Games and the Asian Fireball Championship which has been held at the Royal Varuna Yacht Club in Thailand every year since 1978.

Soon we shall be in Japan for a Fireball World Championship (1990), and based on my previous racing experience in Japan, we look forward to this event. When the Japanese embarks on something, they do in style, so don't miss it.



BALLING DOWN UNDER

continued from page 35

Each State conducts their own particular State Championship, and annually during the summer Christmas vacation, a National Championship is held, which also acts as a means of selecting a representative to the World Championships.

Since 1971, we have been represented at all World Championships, with some success. In 1974, we achieved a milestone in our history by hosting the World Championship at Glenelg, South Australia, which was won by John Cassidy and Wayne Crisp from Western Australia.

Again in 1982 at Frankston, Victoria, we conducted our second World Championship which was again won by a local crew, Chris Tillett and Mike Rogers from South Australia.

At present, we are busy preparing for the 1988 World Championship, once again at Glenelg, in South Australia and we expect a big contingent from the northern hemisphere to race in our wonderful sailing conditions 'Down Under'.

Australia has now developed a reputation of having crews of the highest standard in the world, and have demonstrated this by recent World Champions and many place-getters over the years:

Stuart Hamilton, David Connor – Switzerland 1983.
Gary Smith, Nick Connor – San Francisco U.S.A. 1984.
Nigel Abbott, Craig Smith – Montreal Canada. 1986.

Australia may be 'down under', but we will remain 'on top' in Fireball racing in the future.



SUPER SPARS

- ★ Computer designed taper maximises sail shape
- ★ Welded on aluminium shroud cage
- ★ Spinnaker sheave cage with optional ball bearings
- ★ Hook in T terminal arrangements for easy removal of shrouds and trapeze wires
- ★ Aluminium jib sheave cage, aluminium sheave – tensionless steel pin

Adjustment holes

- ★ Extra strong spreader bracket and spreaders giving full adjustment of length and angle – no drilling or messing around

Optional taper

Sliding eyes

- ★ Strong aluminium goussetack – the most reliable ever
- ★ Jib tension box, lever hook rack or cleat for halyards

why pay more

light reliable strong

winning formula

**★ Super prices.
★ Super quality.**

A top quality spar with a sensible price tag.

Most Rigging	£157.00
Boom	£59.00
from Spinnaker Pole	£39.50
	£17.00

Computer designed – strongest alloys – robust fittings.

Proven successes at championship level.

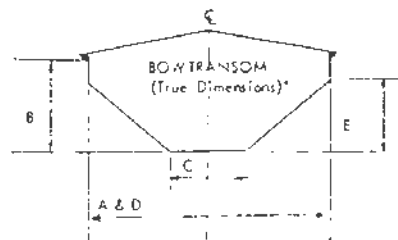
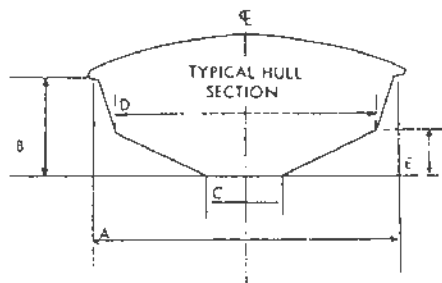
in 1986:

World's	2nd, 4th & 6th
Europeans	2nd, 3rd, 5th & 6th
U.K. Nationals	1st & 3rd



**International
Sailing
Products**

Unit 8, 1, The Mill Road Industrial Estate, FAREHAM, N73
Telephone Fareham (0329) 232103



*True dimensions measured
in plane of transom

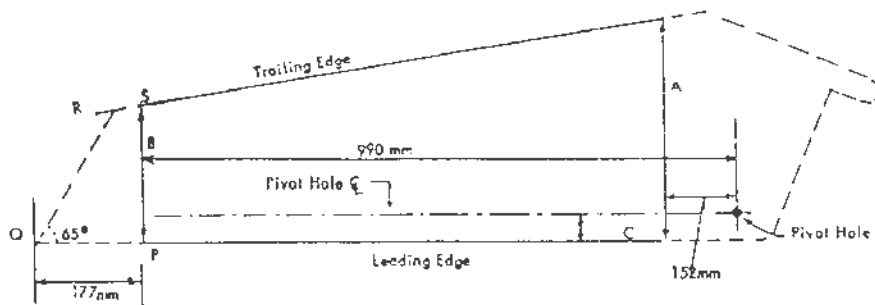
HULL SECTIONS	mm				
	A	B	C	D	E
After Transom	1060	155	343	1029	90
At 765 mm from aft face of aft transom	1206	241	390	1146	119
At 3208 mm from aft face of the aft transom	1225	365	375	1143	176

BOW TRANSOM	
	mm
A	400
B	165
C	165
D	400
E	140

- A. At underside of gunwale rubbers.
B. Underside of gunwale rubber to outer face of bottom panel.
C. At outer edges of bottom rails.
D. To intersection of outer faces of bilge and topside panels.
E. Between outer face of bottom panel and intersection of bilge and topside panels.

Tolerance on all dimensions on this sheet ± 8 mm.
Boats first certificated before 21 August 1970 are permitted ± 13 mm.

DIMENSION SHEET ONE



LINE	MEASUREMENT	TOLERANCE
A	381 mm	± 10 mm
B	229 mm	± 10 mm
C	57 mm	± 13 mm

CENTREBOARD PROFILE SHEET

in the leech. Only one cringle, eye or ring is permitted in the vicinity of the clew.

- (i) The length of the luff shall not exceed 4320mm.
- (ii) The diagonal measurement shall not exceed 1525mm. The measurement shall be taken from the outside edge of the sail at the intersection of the leech and the foot to the nearest point on the outside of the luff.
- (iii) The length of the centre measurement shall not exceed 155mm plus the mean of the measurements of the luff and leech.
- (iv) No battens or other form of stiffening are allowed in the foresail other than reinforcing patches made of similar material to that of the sail.
- (v) One transparent panel may be fitted in the foresail. It shall not exceed 0.28 sq.m in area, nor be less than 150mm from any edge of the sail.
- (vi) The luff of the foresail shall not enclose the forestay.

(d) Spinnaker

- (i) The spinnaker shall be a symmetrical three cornered sail. No headboard, battens or other stiffening device, other than normal woven cloth reinforcing is allowed.
- (ii) When measuring, the sail shall be folded in half with the tack and clew laid on top of each other, and laid on the floor as flat as possible with the just sufficient tension to remove wrinkles along the luff, the middle fold and the foot of the sail.
- (iii) The length of the leeches shall not exceed 4350mm.
- (iv) The length of the centre fold of the sail shall not exceed 5100mm.
- (v) The half width of the foot shall not exceed 1500mm.
- (vi) The half width shall at no point exceed 1800mm - this measurement shall be taken at right angles to the luff.
- (vii) The half height/half width measurement shall not be less than 1500mm - this measurement shall be found by laying the highest point of the sail directly below the centre of the tack and clew cringles. The resulting fold at half height must be made free of wrinkles and the measurement be taken round the edge of the fold.
- (viii) Where the clew and the tack cringles are fixed outside the edges of the sail, the point of measurement shall be the intersection of the lines drawn along the edges of the luffs and the foot of the sail.
- (ix) Only one spinnaker may be carried in the boat.

(e) Insignia

The International Fireball Class insignia shall be a red disc 510mm $\pm$ 13mm in diameter placed back to back on the two sides of the mainsail above the sail numbers.

(f) Sail Numbers

The class insignia, national letters and sail numbers shall be placed as laid down in IYRU Yacht Racing Rule 25. The letters and numbers shall be of the following minimum dimensions:

Height	300mm
Width	200mm (excluding number one and letter l)
Thickness	45mm
Space between adjoining letters and numbers	60mm

19. SPINNAKER BOOM

- (a) When fixed to the mast the distance between the extreme outboard end, including fittings and the nearest point of the mast, at the mast fixing attachment, shall not exceed 2025mm.
- (b) The spinnaker boom, complete with fittings, shall be capable of passing through a ring 64mm in diameter.

Running a World Championship *continued from page 39*

The I.Y.R.U. is currently forming panels of approved International Judges and advice on this matter should be sought from the host country's National Sailing Authority.

The National Sailing Authority is the body that sanctions the waiving of the right of appeal but Fireball International's approval must also be sought regarding the proposed members of the International Jury.

Although English is the official language of the class it is necessary that either members of the Jury protest committee are multi-lingual or that interpreters can be provided to assist during protest hearings.

In certain circumstances Fireball International may approve the use of a protest committee for the World Championship and the maintenance of the right of appeal.

Weighing of Wet Clothing

The Fireball Class rules limit the maximum weight of clothing to be worn by competitors. This must be checked during

the Championship and facilities to weight clothing in accordance with appendix 10 of the I.Y.R.U. rules must be provided.

De-briefing

There will be a person or persons designated by Fireball International to look after the class's interests during the event.

The Race Officers should meet with these representatives after each race, or as the need arises, so that any problems or difficulties can be discussed and the appropriate action taken.

SHORE ORGANISATION

Boat Parking

There must be no overhead wires between the boat park and the launching area.

There should be enough space for boats to be rolled over.

Space must be allocated to each boat.

There should be some facility for securing boats to prevent them blowing over in strong winds.

There should be supply of rubber tyres or other padding for boats without trailers.

There must be fresh water supply for

washing down boats.

There must be some form of security to prevent pilfering from or damage to boats.

Launching

There should be a Beachmaster who has complete control over all activities on the slipways, jetties etc. It is helpful if there can be people allocated to assist competitors during launching and recovery operations.

The launching area should be large enough to enable 2 or 3 boats to be launched at the same time.

Slipways should not be excessively steep and be free of weed etc.

The area immediately to seaward of the slipway should be free of obstructions. Many competitors use fixed rudder assemblies.

Launching facilities must be adequate to cope with wind strengths up to Force 6.

Changing Facilities

There should be adequate changing facilities for both men and women.

Showers should have sufficient hot water for *all* competitors.

PRICE LIST OF GOODS SUPPLIED BY F.I.

Car Stickers	25	: £4.00 postage paid, surface mail
	50	: £7.50 postage paid, surface mail
	100	: £12.00 postage paid, surface mail

International Class £38.00 each nett. Postage extra.
Fee Plaque

Measurement Certificates	1-9 copies	£0.25 each nett.
	10 or more copies less N.C.A. discount	
	15% nett	21p. Postage extra.

Measurement Forms	1-9 copies	£0.50 each nett.
	10 or more copies less N.C.A. discount	15% nett 43p. Postage extra.
Plans		£18.00 nett. Postage extra.
Rules	1-9 copies	£1.50 each nett.
	10 or more copies less N.C.A. discount	15% nett £1.27. Postage extra.

Payments to be made by International Money Order or in Sterling by cheque drawn on a London Bank – if payment is made in other currencies involving a deduction of Banker's charges the items ordered will be proportionately reduced.

Adequate lavatory accommodation should be provided and maintained.

It is desirable to have drying facilities.

Information – Championship Office – Protest Room

The Official Championship Office should be opened 3 – 4 days before the regatta starts and remain open 1 day after the last race.

The Office should be close to the boat parking area.

There should be a public address system so that messages may be transmitted.

The Championship Notice Board and Official Results Board should be near to the boat parking area.

The local weather forecast should be posted on the Championship Notice Board each day.

Unofficial notices should not be permitted on the Championship Board. A separate board for social events etc., should be provided.

A separate room must be available for the hearing of protests and other meetings of the jury.

Model boats, marks, wind and tide arrows etc., should be made available for the hearing of protests.

Measuring

Hulls, foils, spars and sails are measured before the start of the World championship. A minimum of two days must be left clear before the 1st race for this measurement.

Fireball International will normally supply a chief measurer who will specify the measurements to be taken and oversee the measurement teams.

The following should be regarded as the minimum number of personnel required for the measurement:

Measuring of hulls, foils and spars: 2 measurers, 2 assistants and 1 secretary. In addition helpers are required to assist the competitor in lifting and turning the boat. Measuring of sails: 1 measurer, 1 assistant and 1 secretary.

The measuring area for hulls, foils and spars should be covered and be protected from the wind. An area approximately 12 metres x 7 metres is required and there should be suitable facilities for weighing hulls. It is essential to keep a free passage-

way from the exit of the measurement area to the boat park so that boats can be moved quickly.

Sails should be measured in a separate dry covered area which must have a good clean floor. A minimum area of 12 metres x 7 metres is required and no footwear or wet sails should be permitted in this area during the measurement period.

Some measuring equipment may be provided by the Chief measurer but normally it is the responsibility of the host National Class Association. The National Class Association will be responsible for providing, in consultation with the Chief measurer, the necessary measuring equipment. This will normally be as follows:

Standard measuring cards

Certified Weighing scales of 150 kgs and 25 kgs

3 No. 10 metre steel tapes

3 No. 3 metre steel tapes

600mm and 300mm steel rules

Trestles to support the hulls

Hull section measuring square

Strong fine string line

2 pairs of calipers – inside & outside

Spirit level

Rubber World Championship sail stamp and ink pad

Permanent felt tip pens for signing foils and spars

Other equipment as specified by Chief measurer.

Repairs, Chandlery and Charter Boats

Arrangements should be made with a local sailmaker and boat builder for the repair of competitors' equipment during the Championship.

Competitors should be informed about the location of chandlery retailers as well as the sailmaker and boat builder. If a chandlery shop is not adjacent to the regatta centre it is desirable to arrange to have a mobile shop or caravan visit the site each day during the event.

There is a requirement for charter boats to be available for sailors from overseas who are unable or unwilling to transport their Fireballs to the event. Experience of previous World Championships indicate that up to 8 Fireballs may be chartered for use in the World Championship.

Charter boats should be new or in good condition. Competitors often bring their own sails. The charter fee should include for insurance cost for competing in the event and for any transport costs in getting the Fireballs to and from the regatta centre.

Medical Arrangements

Arrangements should be made with a local doctor and/or hospital in case of accident or illness during the event.

A well stocked First Aid kit should be located in the Championship Office.

Valuables and Security

It is desirable, where the public have access to the boats, to have security personnel during day and night. If possible, lights should be provided during darkness.

There must be somewhere that competitors can either leave, or lock safely away, valuable articles such as money, watches, handbags, cameras, passports etc.

If lapel badges are to be worn, details of when they are to be worn should be written into the regatta programme. Extra badges should be available for "camp followers".

Publicity

Generally every support and help should be given to members of the Press.

All sections of the mass media should be contacted well in advance of the Championship and given background information as well as the Championship details.

There should be a press handout each day during the event giving details and results of the racing.

Press and observer boats should be available. It is important that these should be under the control of the organisation to ensure that they do not interfere with the racing.

There should be an official photographer to supply prints to the press, as well as operating a service for the competitors.

The results should be sent to radio and T.V., as well as the newspapers, each day.

National Associations should be circulated with a preliminary notice about one

continued on page 70

- (c) The spinnaker boom may be used as a jibstick.

20. CREW

- (a) The boat shall be raced by a crew of two persons.
- (b) The total weight of clothing and equipment worn or carried by a competitor, including any buoyancy apparatus and trapeze belt or harness, shall not exceed 15kg when wet. To test this, all clothing and equipment worn or carried by the competitor shall be thoroughly soaked by submerging in water, and shall then be suspended to permit ready draining and allowed to drain for one minute, at the end of which period the weight shall be recorded.

Pockets or compartments designed to hold water as ballast in items worn or carried by a competitor are prohibited.

21. TRAPEZE

- (a) Apart from the toestraps, which shall be contained within the cockpit area, and a trapeze suspended from the hounds, which shall be used to support one person only, no other means may be used to support the helmsman or crew outboard while racing.
- (b) One flexible footloop, not exceeding 300mm in overall length, may be fitted to the gunwale on each side of the boat to support the crew. These loops shall not be used to support the crew's foot beyond the edge of the gunwale while racing.
- (c) A trapeze belt or harness shall not weigh more than 3.5kg and shall float.

22. PROJECTIONS

Apart from bow projection strips of maximum section 5mm, fore and aft, and 50mm deep, stern projection strips of maximum section 5mm fore and aft and 50mm deep, fitted at deck level, chine deflectors, rudder fittings, horse, shroud plates, bottom rail protection strips, centreboard slot closure strip and protection strip, self bailers, normal transom drain sockets, gunwale rubbers, hatch covers in transom, deck projecting not more than 15mm beyond the aft transom, no other form of projection or deflector shall be fitted to or through the outside of the hull shell.

23. SELF BAILERS

Two self bailers may be fitted. The total effective area of the bailing outlets shall not exceed 1290 sq.mm.

24. SHEET LEADS

No fixed part of the foresail or spinnaker sheet leads shall project beyond the outside edge of the gunwale rubbers when viewed in plan. The control lines for any floating (non-fixed) sheet leads shall run through or be attached to a fixed fairlead or block complying with the limitations for fixed leads except where such a control line is led permanently through the end fitting on a spinnaker pole.

25. PROHIBITIONS

The following are prohibited: hydraulic and pneumatic controlled equipment, underdeck jib furling gear, electrical or electronic instruments, transom scuppers, lightening holes in thwarts, sheets or halyards led through the watertight compartments, materials containing carbon fibres. Notwithstanding the provisions of Class Rules prohibiting the use of electronic equipment the use of an electronic timing device is permitted.

26. LIMITATIONS OF EQUIPMENT

The following rule shall apply to International Championships only and shall be specified in the Sailing Instructions.

In any one series a boat shall have not more than one mast, boom, centreboard and rudder and two suits of sails. These items shall be declared to the Race Committee before the start of the series.

In the event of serious damage the Race Committee may authorise the use of a replacement.

27. FITTINGS

A main sheet hoop which shall be removable for inspection and weigh not more than 1.5kg may be fitted and, if fitted, shall be included in the hull weight. The weight shall be officially stamped on it.

© 1987 IYRU Holdings Limited

Effective: 1st March 1987
Previous Issue: 1st March 1986



NO FOILS ARE FASTER **1st** **NATIONALS 1986** **MILANES and WHITE**



Rondar Boats Limited,
inc Milanés and White,

1c Indus Acre, Bowerhill, Melksham, Wilts. SN12 6TP.
Tel: (0225) 707550/707775. Telex: 444337 ACTBUS G. Fax: 02214 60953

ALL STAGES OF
CONSTRUCTION
FROM SHELLS TO
COMPLETE BOATS

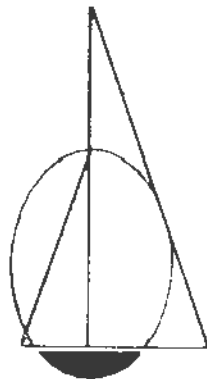
FAST FIREBALLS

SUCCESS IN 1985

— WORLDS, EUROPEANS AND U.K. NATIONALS — FIRST

high performance sailboats

Furzebrook Road
Wareham, Dorset
BH20 5DU, England.
Wareham (09295) 6222



Running a World Championship continued from page 67

year before the event and a feature article and full page advertisement should be sent for inclusion in FIREBALL INTERNATIONAL

SOCIAL EVENTS AND PRIZES

The social events of a Fireball International Championship are very important. Competitors come from all over the world, not only to sail against each other, but also to meet and enjoy the company of fellow sailors.

Opening Ceremonies and Receptions

The Opening Ceremony need not necessarily be a highly sophisticated event.

The trend in recent years has been against an emphasis of nationalism at the opening ceremony.

It is highly desirable to have some kind of welcoming reception to let officials and competitors meet and to help to break the ice. Often Local Authorities or Tourist Boards are helpful in promoting this reception.

Evening Social Events

There should be adequate events in the evenings to allow competitors to meet each other and to keep them entertained.

An event that highlights the host country's specialist entertainment is normally included as well as Dances Discos, Barbecues, Cocktail Parties etc.

Activities for 'Camp Followers'

If possible some activities should be arranged during the day so that 'camp followers' feel they are part of the event.

Local Tourist Boards are often helpful in suggesting trips that might be organised for overseas competitors and their friends, during lay days, measurement day etc.

Fireball International Council Meeting

Fireball International hold their Annual Meeting during the World Championship. This meeting should be included in the programme.

Prizes and Prizegiving

For The World Championship Fireball International provides a perpetual trophy for each Championship race as well as the overall trophy for the winning Helmsman and Crew.

The host Club and or Class Association should provide prizes for each day's racing as well as for the Overall Championship.

The daily prizes are usually presented at the evening social functions throughout the week. In order to give a greater spread to the prizes it is suggested that once a competitor has won a daily prize he is ineligible to win another. The daily prizes are therefore awarded to the highest placed competitors who have not already won such a prize. These arrangements for daily prizes do not apply to the race trophies. These are awarded at the final presentation to winners of each race.

It is suggested that prizes should be awarded to the top ten places in the Overall Championship.

The final presentation event should not be made too elaborate to avoid cost becoming so high that some competitors are unable to attend. The presentations and prizegiving should be so organised that they do not take an excessively long time.

Fireball International recommends the following order for the presentations

1. Presentations to organisers, helpers etc
2. Presentation of Trophies to individual race winners.
3. Presentation of overall Championship prizes from 10th place to 2nd place.
4. Presentation of Championship Trophy.

CATERING AND ACCOMMODATION

Catering

The Host Club should ensure that snacks and light meals are available, during the day, at the regatta centre and that bar facilities will be provided.

Details of restaurants in the locality should be given in the programme.

Accommodation

There should be a range of accommodation to cater for a variety of tastes in the vicinity of the Championship i.e. there should be Hotels; Guest Houses; Camping Site – with toilet and washing facilities and a Caravan Park – available for people to bring their own vans or to hire caravans on site.

The list of accommodation should be included in the advance publicity together with the person or body (eg Tourist Authority) who will co-ordinate enquiries and bookings. The list of accommodation should include details of costs and distance from the regatta centre.

TRANSPORT, TRAVEL & CUSTOMS ARRANGEMENTS

Importation of Fireball Dinghies

National Class Associations should be circulated regarding local regulations relating to the importation of Fireballs into the host country for the purposes of competing in the Championship.

The most convenient container and or ferry ports for the importation of Fireballs should be specified together with any carriers with whom special arrangements have been negotiated.

A person or body should be nominated to deal with Customs clearance of Fireballs coming to the Championship and to whom the relevant customs and transportation documents should be sent.

It is most important that National Class Associations should be advised of the time required to process the imported Fireballs through customs and transport them to the regatta centre so that boats may be shipped in sufficient time for the event.

Travel to, and in the vicinity of, the Regatta Site

National Class Associations should be advised of the best routes of travel from various airports, ferry ports etc., to the regatta site. This information should also be included in the pre-event publicity.

Details of public transport within the area around the regatta centre should be

given in the programme together with details of taxis and self-drive hire car firms.

If possible details of special coach or rail trips available to visitors to travel to places of interest in the area should be given to competitors along with their programme. (Tourist departments can usually help with these).



POSTSCRIPT

Among the material that has come my way while trying to put this book together are the articles from Yachts and Yachting of 1962, which have been referred to by a number of the nostalgics and which were the start of the Fireball firestorm around the world. In the June issue Jack Knights analysed the One-of-a-Kind at Sheppey, held in May that year, and writes: "... Fireball, brand new, unraced, not always given good starts but surely turning in a performance never approached by a single-hulled craft costing £188 less sails from a top builder." and of the sixth race which he described as none too sweet for the twelve boats which retired in the heavy weather: "The sensation of the race was the Fireball's second place just 20 seconds astern of the Osprey. The Five-O-Five rounded the last mark first but was overtaken by both Osprey and Fireball on the last beat home."

It is sparkling performance, together with maintaining interest in developments of internal layout and technique that maintains one's enthusiasm for the class, and I suppose is why I am willing to spend weeks and weeks of my precious time trying to put this book and the magazine together, because one gets no thanks or response – except for a cross letter from the South Africans.

Perhaps we should skip an issue and see if anyone notices or writes in to complain – at least I would know there were Fireballers out there. In spite of requests in the last issue of the magazine for material and photographs for this book, only three turned up! One was very welcome and immediate: Mr and Mrs Janssens de Bisthoven came to the Boat Show from Belgium with a large and valuable collection of old photographs, many of which have been used in the book. I am most grateful for the trouble they took and for the encouragement they gave me, as I thought at the time that their response was to be the first of many. In the event there was only two more – from Wabamun (that really is how they spell it) in Canada and from Nigeria. **MANY THANKS.**

When it became clear that contributions had to be extracted by persuasion, if not force, then I wrote two dozen letters to old champions, current class secretaries and many others, asking for specific articles by early May.

The first and almost immediate response was from the

busiest man: Edward Heath, writing just before the UK elections. Eventually, right up to early July, and after a good deal of chasing, some more material came in which could fill the number of pages the budget allowed. Whether it is enough for a twenty-fifth anniversary book I leave for you to judge, but if there is to be an issue of the magazine at the end of the year then you out there will have to start sending in your copy NOW.

My thanks to those who have contributed with text and photographs, to David Cooper and Sheila Flynn, late of UK Fireball News, and to Ian Marshall, painter of battleships, for the sketches.

Gordon Pollard sent me some bumph from the US Star Association which said that the Editor was the key man in any organisation as he was responsible for maintaining contact with the members, on which the class depended. This did do a little for the old ego, but the boost was soon swamped by the wash of paper – typescripts, galleys, page proofs, photographs, layouts, and typefaces, amongst which are lost my gas bill, now overdue, and various other urgent personal letters awaiting answers. If this reads as if I am swamped with self-pity as well as paper, then I probably am, because all the effort seems to produce so little response that one wonders why one does it – would Fireball International be any different if all we sent out were rule changes and dates of events? The answer lies with you the members, who hopefully will read this and even more hopefully will respond, and in time for the next issue.

There are many matters of importance for Fireballers to think and write about: IYR Rules 54 and 26; Whether alternative penalties, and which, are suitable for major championships; How hull weight distribution can be controlled; Are Fireballers the only class so ill-disciplined (or over-keen) on the start line that numerous general recalls are the rule rather than the exception and what can be done about it? How to stem the tidal wave of wind-surfers that sweeps away likely young crews before they even join the yacht club; Our relationship with other non-Olympic classes who suffer with us the shortage of official funds and recognition because of the overwhelming importance of the Olympics to national governments.

These and many other topics are of great importance to us as individual dinghy sailors and members of a large International class – they need discussion in your magazine.

Richard Hughes



The next issue of the magazine will be
in December 1987.

Copy date 1st October 1987.

Editor: Richard Hughes,
47 Chiswick Quay, London, UK,
W4 3UR.
Telephone (London) 01-995 3109

Published by: Fireball International,
Secretary: Gordon Pollard,
St. Petroc, Meadow Park,
Kilminster, Axminster, Devon, UK,
EX13 7RL
Telephone: (Axminster) 0297-32008
Cables: FIREBALL AXMINSTER

The views expressed in this magazine
are not necessarily those of the Editor
or of Fireball International.

Magazines and newsletters may
reproduce material with
acknowledgement to
INTERNATIONAL FIREBALL.

Readers are asked to mention
INTERNATIONAL FIREBALL when
responding to advertisements – it
encourages suppliers to advertise
again.

ADVERTISING RATES on application.
Advertising correspondence should
be addressed to the Secretary, Fireball
International (address above).

Printed by Chatham Printers Ltd.,
32 Chatham Street, Leicester, UK.
LE1 6PB.
Telephone: (Leicester) 0533-556696

Congratulations
to
FIREBALL
INTERNATIONAL
on its 25th Anniversary

with Compliments from
CHATHAM PRINTERS
printers of
INTERNATIONAL FIREBALL
since 1980

