PERIHELION







Comet Class Association Newsletter

COMMITTEE MEMBERS

JOHN WINDIBANK CHAIRMAN 2 Dogwood Close, Northfleet, Kent DA11 8PJ (0474 325653) ERROL EDWARDS SECRETARY 60 Ridgeway Road, Fishponds, Bristol BS16 3EA (0272 354494) DEREK COLEMAN TREASURER 5 Agars Place, Datchet, Berks SL3 9AH (0753 540877) HENRY JAGGERS Kingswood Riggs, Moira Road, Shelbrook, Ashby de la Zouch, Leics L65 TU (0530 563030) NORAH GOULD 32 The Dell, Kingsclere, Nr. Newbury, Berks RG15 8NL (0635 298074) STUART LINES NEWSLETTER EDITOR 1 Portobello Close, Chesham, Bucks HP5 2PL (0494 771430)

IMPORTANT NOTICE

Shearwater Open Meeting now Sat. 12th June

NEWSLETTER NUMBER 26 SPRING 1993

CONTENTS	PAGE
CHAIRMAN'S REPORT	2
GOODBYE!	3
A NEW BAILER	4
PERIHELION	4
NATIONAL SCHOOLS SAILING ASSOCIATION	5
OPEN MEETINGS 1993	6
DO YOU HAVE A COMPASS IN YOUR COMET?	9
1993 COMET NATIONALS	10
DO YOU HAVE A COMPASS IN YOUR COMET?	12
THE COMET FOR REALLY RAW BEGINNERS - PART 3	14

Front Cover: Scenes from last years Aylesbury Open Meeting.

CHAIRMAN'S REPORT

The beginning of the year is always a busy time for sailing committees and with projects that were new to us, the telephone bills were run up again, attempting to keep ahead of the problems.

The National Exhibition Centre Birmingham held its Annual Leisure Exhibition which incorporated a boating section and we participated by sharing part of the RYA stand. Birmingham being new to us, we enlisted the help of Margaret & Barry Hylton and Andrew Simmons. Margaret contacted Comet owners in the area to man the stand and Andrew mounted the excellent posters we had made from Dave Hudson's photographs.

The Show ended on an upbeat note, when the RYA circulated a questionnaire to all the participants asking 'which stand most successfully promoted sailing'. Redditch were judged first and the Comet Class were runners up. Just thought you'd like to know.

The Class committee looked at the cost of hiring a video player for the show but found that this would be about £200 for the week. After considering the position, the committee thought that it would be an asset to the class to own a video player which can be used at Exhibitions, Open and National Championships, and would be available for class captains and members for teaching and talks. The player and a second hand TV were purchased for just under £350 and it has done sterling service at the exhibition, so come on, you amateur film producers, send us copies of your Comet sailing videos that we can use.

Looking out of the window and watching the snow falling in qusting swirls, I could be fooled into thinking the new sailing season was months away, but by the time you read this the first open will be in just a few weeks. Our efforts to improve the profile of the Comets in the North and Midlands has paid dividends, with new Open Meetings this year at Chasewater, Stamford, Draycote and Redsmere Sailing Clubs, which all adds up The Open Meetings start at to an improved Open calendar. Sherewater, and I have been told that many members are planing to My first sojourn will be up to the Cam to renew my acquaintance with this very friendly club. It's a perfect spot for children with plenty of room for them to run about. The sailing is unique in our calendar, being the only river sailing we do, which sets different problems to be solved and adds to the variety of our circuit.

Fishers Green SC is another first for us, so all in all with so many new events and a very interesting list of opens, lets hope the season is as good as it looks on paper.

Perihelion is and has been much appreciated over the years and we were very sorry to hear that Stuart was standing down as its editor. Stuart is one of a rare species of people who volunteer for jobs and I was expecting to have to break a few arms or other forms of torture to persuade someone to replace him. Imagine my delight therefore when Alan Browning rang me and said that he would like to have a go at editing Perihelion. So this will be the last independently edited Perihelion by Stuart, because he has said that the next edition should be produced jointly by him and his successor. Thank you Stuart and good luck Alan.

Incidental, Alan, as a compass user I haven't had much of a chance to think about your tactical guide, but at first glance the idea looks interesting; watch this space.

Last but not least we have been asked to produce a Comet trophy insert and we hope to have it ready later this year. We are still finalising the design but it will be similar to the lapel badges, only round.

Well I hope I see you in orbit, but if I don't, have a good one.

John Windibank Chairman



This is the time when we say goodbye to some of our readers. Why? The reason, simply, is that their subscriptions are not upto-date and this is therefore the last copy of Perihelion they will receive.

If you have not received a 1993 membership sticker from the Treasurer, then you are probably in arrears. Please note that subscriptions are no longer collected by direct debit, as the bank charges were excessive.

So if you think this message applies to you, please contact the Treasurer and ensure you remain a member of our Association.

A NEW BAILER

After suffering the usual problems of leaking or broken plastic Super Shute self bailers, I decided to fit a slightly smaller stainless steel bailer without having to alter the hull or positions of the six fixing bolts. All that was involved was the making of a stainless steel clamp to hold the new bailer in position and a little sawing and filing of the new bailer.

I obtained a piece of 1mm thick stainless steel and, using a jigsaw, cut it out to the dimensions shown. To simplify the handling and cutting out, I started with a larger piece of metal and cut out the inner rectangle first - this also stopped the material from distorting.

Using the Super Shute as a drill jig, it was a simple matter to accurately drill the six fixing holes.

Unfortunately the new bailer only has a four hole fixing and none of these line up. Therefore the four corners had to be sawn off the two half moon shapes were filed out of the two longer sides for the central bolts. Before fitting it pays to put the new bailer in the hull and make sure it does not protrude beyond the outside of the hull. if it does, use one of the gaskets supplied.

It is now a simple procedure to fit the new bailer. With the six bolts on position line up the new bailer in the hull, then hold it in position with the clamp. Do not overtighten the nuts.

Using clear silicone mastic, I filled in the gap around the bailer and between the clamp plate and the floor. To stop mastic going everywhere I stick sellotape to the hull right up to the edges of the hole and around the clamp plate.

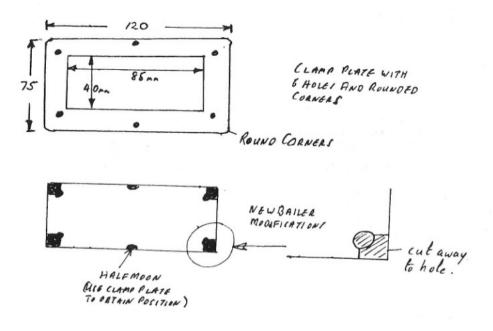
Once the mastic had been applied it was smoothed down with the excess going on to the sellotape. The sellotape was then pulled off leaving smooth clean edges and a nice clean boat.

Brian Dobson Kingsmead S.C.

PERIHELION

The next issue of Perihelion will be published in June. Contributions to me by the end of May, please.

Stuart Lines



NATIONAL SCHOOLS SAILING ASSOCIATION

The NSSA/RYA Thames Valley Youth Championships is being held at Farmoor Reservoir on May 29-30th. This event will be the centre point of the region's Year of Youth events and will involve the Regional Youth Regatta, the National School Sailing Association Championships, International Laser Junior Championships, International Cadet Under 14 Inland Championships, and as many other classes as I can involve. The Princess Royal has been invited to attend.

For more information call me on 0865 513097.

Nigel Vick

THE COMETS are COMING



BE 7HERE

*Change of Date



Date	Club	Area	Contact	Telephone
12.6.93	Shearwater Sailing Club }	West	{Alan Brown	0225 863579
	}		{Nic Cross	0370 82258
25. 4.93	Cam Sailing Club	North	Rodney Bryant	0223 290420
1. 5.93	Fishers Green Sailing Club	East	Steve Conroy	0992 713455
8 5.93	Redditch Sailing Club	North	Paul Thompson	0527 63543
16. 5.93	Crawley Mariners Sailing Club	East	Diana Thompson	0737 552482
22. 5.93				
	Inland (Championship	0	. 11.

<u>Inland Championship</u>							
29. 5.93 30. 5.93 5. 6.93	Merthyr Tydfil Sailing Club Chipstead Sailing Club	Mark Govier		0222 778459			
		East	Ralph Rowe	081 777 8650			
13. 6.93							
19. 6.93	ICI Slough Sailing Club	West	Tony Best	0895 448909			
4. 7.93	Chasewater Sailing Club	North	John Froggatt	0543 26805			
11. 7.93							
18. 7.93	Steeple Bay Sailing Club	East	Steve Monks	0277 821263			
25. 7.93	Aylesbury Sailing Club	West	Rob Kerry	0442 873557			
1. 8.93							
8 8 93							

National Championship								
13. 8.93 14. 8.93 15. 8.93	Gunfleet Sailing Club	Chris Hunt		0255 813655				
22. 8.93				157 36 1				
29. 8.93								
5. 9.93	Sutton Bingham Sailing Club	West	Gordon Parker	0458 223058				
12. 9.93	Stamford Sailing Club	North	John Copenhall	0733 265789				
19. 9.93	Draycote Water Sailing Club	North	Sandra Rice	0203 403478				
26. 9.93								
3.10.93	Pingewood Sailing Club	West	John Vail	0734 812174				
9.10.93	Redsmere Sailing Club	North	Steve Heyes	0625 583290				
17.10.93	Kingsmead Sailing Club	East	Allan Gillarist	081 393 4349				
24.10.93	Chew Valley Sailing Club	(Open Day)	Errol Edwards	0272 354494				

Orbital Trophy

Qualification for the Orbital Trophy will require attendance at :-

- 1. One Championship
- 2. Meetings in at least two of the three areas.
- 3. Six events to count
- 4. Ties will be decided on the results at the National or Inland Championships.



APHELION TROPHIES



WESTERN AREA

Shearwater Sailing Club ICI Slough Sailing Club Aylesbury Sailing Club Sutton Bingham Sailing Club Pingewood Sailing Club

Three events are needed to qualify and the best three results from the five available, will count. Ties will be decided by discards or the last head to head result.

Prizes will be awarded at Pingewood S.C. on 3rd October. Prizes will be awarded to all Qualifiers.

EASTERN AREA

Fishers Green Sailing Club Crawley mariners Sailing Club Chipstead Sailing Club Steeple Bay Sailing Club Kingsmead Sailing Club

Three events are needed to qualify and the best three results from the five available, will count. Ties will be decided by discards or the last head to head result.

Prizes will be awarded at Kingsmead S.C. on 17th October. Prizes will be awarded to all Qualifiers.

NORTHERN AREA

Cam Sailing Club
Redditch Sailing Club
Chasewater Sailing Cub
Stamford Sailing Club
Draycote Water Sailing Club
Redsmere Sailing Club

Three events are needed to qualify and the best three results from the six available, will count. Ties will be decided by discards or the last head to head result.

Prizes will be awarded at Redsmere S.C. on 9th October. Prizes will be awarded to all Qualifiers.

Chipstead Sailing Club

Comet



Open'93

Invitation

You are cordially invited to attend the 7th Chipstead Comet Open on June 5th 1993.

First race 11.00 am. Entrance £4.50; tea included. Excellent hot lunch for under £2. Licensed Bar at Club prices.

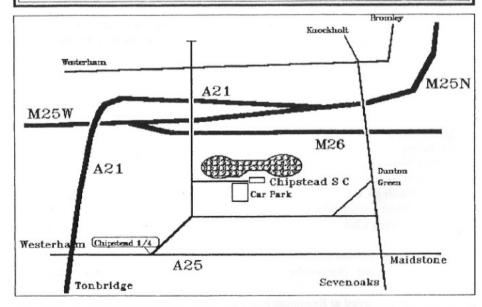
Three race programme: two to count.

Comfortable indoor accommodation for spectators and their families.

Ample car and trailer parking. Easy access from M25 via A21 and A25.

Come and compete at the home club of two successive Comet National Champions, and a home fleet of 34 Comets.

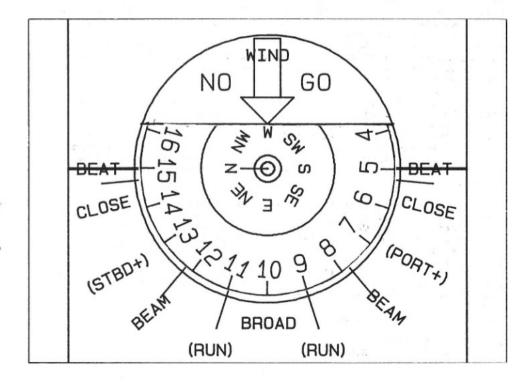
Contacts: Ralph Rowe: 081-777 8650 Mike Baxter: 081-462 2626



There is no access from the M26 to Chipstead without going to the Godstone turnoff J6. From M25N or W, leave on the A21 towards Tonbridge then the A25 towards Sevenoaks/Maidstone. There is a fingerpost - Chipstead 1/4.

DO YOU HAVE A COMPASS IN YOUR COMET?

In Alan Browning's article on the use of the Comet compass in the last Perihelion, the "beginners" version was inadvertently shown, which did not match some of the text. (Oops - Ed.) The correct illustration is shown here. This was, of course, designed with more experienced sailors in mind, sailing in inland races, and it really does include wind direction, more than two points of sailing and indication of start line bias.



1993 COMET NATIONALS

This year's Comet nationals are being held at the Gunfleet Sailing Club on 13th-15th August. For many Comet owners the Gunfleet will be a familiar name, having hosted Opens and nationals right from the word go.

As soon as the Comet went into production the Gunfleet's Clarke family bought three, starting the first fleet, and this was before the class had reached double figures! The popularity of the Comet increased, not only at the Club but nationwide and it was not long before the first National Championships were held and Gunfleet was chosen as the venue. Despite being a fledgling class it attracted much interest, not least from one onlooker who thought the Comet looked the ideal boat for him. Shortly afterwards, Keith Lamdin took delivery of his new boat.

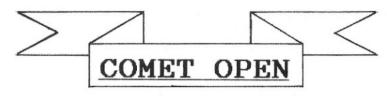
Ten years have gone by since then, the boat's popularity is still growing and, I am very pleased to say, still attracting a strong family interest. In fact one of the things that has always attracted Gunfleet to organising Comet events is the people who sail them. Many come from small clubs like ours and while the class attracts some first class sailors, it seems to avoid the aggressiveness and one-upmanship that some other classes seem to breed. Although there is keen competition, it always seems the gentleman (or lady) comes out on top. I am sure the rumour that the helms of two Comets arriving at the mark together both say "after you" is not strictly true but it is a nice fable.

The fact that the Comet is not selling by the thousand each year, that its latest sail number does not fill most of the sail area is no bad thing (though Andrew Simmons would not agree). At around 600, the boat is firmly established, its association is not run by faceless bureaucrats, the one big happy family atmosphere of the owners continues to grow and the Opens can be handled by small clubs like Gunfleet, the affinity growing ever closer.

And now maybe it is time for a commercial break:
The Gunfleet Sailing Club would be very pleased to welcome you to
the Comet National Championships. We are putting all out efforts
into ensuring this will be a three days to remembers, and a as
well as the usual features, we hope to have one or two small
surprises in store for you. So whether you are a regular
competitor or are just thinking maybe it's time to have a go, do
send in your registration form (enclosed in Perihelion) and start
looking forward to a lot of fun.

I look forward to welcoming you on the 13th.

Richard O. Walker Commodore, Gunfleet S.C.



at

Aylesbury Sailing Club

Sunday 25th July 1993
FIRST RACE 11.30
3 RACES

Entry fee £3.50 includes lunch, tea and prizes



Contact Rob Kerry 0442 873557



(Above) Winners of the 1992 Aphelion Trophies

(L to R) Northern - Mark Wilkins, Chipstead SC Western - Nancy Gould, Pingewood SC Eastern - Guy Wilkins

(Right) Guy Wilkins again, with his trophy for winning the Orbital Travellers Series



THE COMET FOR REALLY RAW BEGINNERS - PART 3

INTRODUCTION

As before, I've underlined my questions, to encourage experienced sailors to give advice.

I think now I am approaching "deep water", because, as promised, my thoughts are on sailing on the water this time and I can feel the breath of a host of wolves all around me! In particular, I risk the wrath of Keith Lamdin if I disagree with him occasionally. But I argue that he did not write the "Sailing your Comet" articles for the complete beginner, and it is inevitable that some of the thoughts in them I will not need yet and some, which I do need now, are not there. Keith could not have been expected to anticipate every problem of every beginner.

Each beginner brings a unique background to their sailing and each will encounter their own brand of problems. This surely augers well for a follow-up to my articles, for I am sure others will be dying to report all sorts of experiences that have not (yet) happened to me.

This third article contains some more thoughts based on the scribbling in my notebook. I have separated out my thoughts on gusts and my two most major problems, and end the article with some experiences which are approximately in the order they happened, up to my first practise races.

GUST PATTERNS

Gusts are very important to the beginner, particularly the stronger ones. For myself, I just do not have the time to spare when sailing to study clouds to predict gusts, and often there are no clouds. I just want to know what sort of thing to expect and how to cope. In books (e.g. Houghton, reference 1) there is much information on where to look for stronger wind, but little on gust patterns and what strength the gusts are likely to be.

On a couple of early sailing occasions I decided to return to the jetty after a single gust struck, but then I realised that many gusts only last for a few seconds, and, usually, the books were right in assuring me that it would be a few minutes before another one came along. Also, if I could only spend the odd moment now and then looking to windward, I could see them coming with the darkening water of little ripples.

There is one gust pattern that I have noticed occurring frequently: several minutes of near calm and then -- WHOOSH. force 3! I have found almost no mention of this in books for One book did help, in a depressing sort of way, beginners. saying that the fluctuation in wind speed you can expect in a "flawy" wind is about 1.7 times the average speed (Curry, ref 2). For example, in a wind of average force 2, you can expect variations down to almost nothing and up to nearly force 4! This means that with a Comet under you, you could suddenly find yourself in planing conditions when you expected a gentle sail. You will not be surprised when I say that I always observe the wind for some minutes before putting my Comet on the water! If any experienced sailors know of any other wind features as simple as that one to look out for, I would be grateful to hear from them.

MAJOR PROBLEM NUMBER 1: LATERAL BALANCE

My first persisting difficulty was lateral balance. After my initial shock at the lack of roll-damping in the Comet at low speed. I have needed to be convinced that things get better when the boat goes faster. Eric Twiname has written (ref 3) "all dinghies have one thing in common with bicycles: they tend to be more easily controlled and kept upright when they are travelling quickly". Also, Marchaj (ref 4) has convincing evidence that, on a run, dynamically unstable roll oscillation is a fact, and, especially with a una-rig sail and light hull (e.g. the Comet), rolling is more likely to occur at lower wind speeds. So it's rather like learning to ride a bicycle, being tentative brings In sailing this is a little worrying to the beginner at first because going fast gives the feeling of lack of control (and the opposite bank approaches quickly), and it does take some time to get used to speed. Really, I suppose the problem is that when going faster everything happens that much quicker and you have the feeling that you must do things quicker too, and doing the wrong thing can very quickly lead to capsize. However, I have noticed that good sailors in a stronger wind do not rush their actions, unless the wind is very unsteady.

Stronger winds

If I have deliberately to look for stronger winds to sail in I need to be prepared and plan what I am going to do about it. Obviously I will have to sit out more to balance the heeling force of the wind, and move my weight quickly across the boat, but I need an emergency plan, less drastic than Keith's "let go of the tiller and mainsheet". In the Comet articles he encourages me to pinch on the beat with sail eased a little but Eric Twiname goes further, saying (ref 5) that to sail to windward in strong winds you should keep the boat upright not only by sitting out strongly but if necessary "spilling wind from most of the sail". He also insists that "except in the most extreme heavy weather, a capsize is always going to be your own fault - never the wind's" (ref 6). So my emergency plan has to be: "if worried about the wind strength, ease the sheet and allow the sail luff to flap".

Gusts on the beat

At first I was tempted to tack as soon as a gust came, really I suppose because the act of luffing up during the tack reduced the heeling effect. This tendency I learned to resist and allow the boat to go faster, but it was replaced by the tendency to cope with gusts by easing the sheet first (emergency plan), rather than sitting further out. It seems to me that the best sailors keep holding the sail in during gusts, and immediately sit out more. I am well aware that I should adjust weight, rudder and mainsheet all at once, and coordinated too, but I'm not good enough for that yet. However, for now, as a beginners motto for coping with gusts on the beat, I propose "Move weight fast, rudder slow, sheet not at all". Easing the sheet should be reserved for real emergencies, e.g. when the burgee is likely to clobber a passing duck.

There is also a problem with the reduction of wind strength after a gust. It is all very well at the beginning of a gust to place the feet firmly on the floor and push the weight out over the side, but not so easy to get back in again quickly. I have not solved this one yet, but clearly it is a matter of fitness and practise. The necessity for keeping the boat upright receives (almost) unanimous agreement in the literature and because training in this can be done on land I am planning to build a home trainer, specifically to Comet dimensions, to improve my ability.

MAJOR PROBLEM NUMBER 2: BEATING

My second major problem is to develop some "instinctive" (automatic) control of the boat when beating to free my mind for other things, e.g. racing tactics. Sailing close-hauled well is a very important skill of racing, as can be seen by the spread of boats at the first windward mark (and as I found out personally in my first practise race, when all the GP14s and Enterprises went away from me into the distance).

I don't want to make this article over long, so I will reserve my comments on my appalling beating to next time.

OTHER EXPERIENCES AND PROBLEMS

Boat speed

I found to my pleasure that the Comet moved well even in a light wind and reefed too. Then I tried to stop it by letting out the sail and found that I couldn't! However, when I tried this near a tethered buoy, I was not doing so badly, the small wavelets were giving an impression of more movement than there was.

Mainsheet trouble

At first, the mainsheet kept getting tangled up in itself and around my feet. I was quite pleased that the simple remedy of kicking what was not needed to the back of the boat every so often cured that one. Once I managed to hook the (outboard part of the) mainsheet round a buoy when on a run, and have been careful not to do that again.





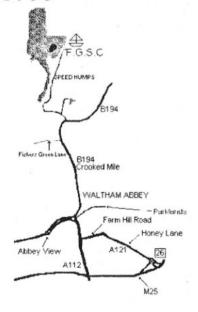
COMET OPEN MEETING

At Fishers Green Sailing Club (Waltham Abbey)

May 1st 1993

Briefing 10:30am 3 races 2 to count. Entry fee £4.00

For more details contact



Steve Conroy 0992-713455 Jenny Colclough 081-550-2695

Dagger board

On reaches I have soon become more comfortable half sitting on the forward seat despite the dagger-board being partly raised, but sometimes the knobs on the board do tend to catch in my buoyancy aid, particularly on a light wind run.

Foot positions

In light winds I have found it convenient to place only my aft foot under the toe strap with my forward foot over on the other side of the boat, moving the aft foot back just before tacking to push off. In stronger winds I've no doubt that I will need to put both feet under the strap though.

Widening vision

It took me eleven sails to wrench my eyes from low-level to look at the lower set of telltales! That is not as poor progress as it sounds, because the early sailing was reefed and the telltales were swallowed up by the mast.

Tacking

Thanks to the RYA level 2 course I took before tackling the Comet, I have had little trouble with tacking in light wind (but I have roll-tacking yet to learn). A worry I have had is the possibility of failing to get the tiller underneath the mainsheet. I did do that once or twice, so my notes tell me, but I suppose I sorted it out somehow (but see "tiller extensions").

Hand positions

I found myself for some reason holding my hands wide apart most of the time, holding the tiller extension at its end, I must have seen someone sail that way. This led to me trying to adjust the mainsheet during reaches with one hand! A look at the RYA video "At one with the wind" soon showed me that the thing to do is to keep the hands close together, so that the sheet passes over the tiller extension and you can use the tiller hand as a temporary cleat when adjusting the sheet. This normally required the tiller hand to be close to the link at the tiller. This affected tacking because there was the huge tiller extension behind me to cope with.

Using the tiller

A large part of learning skills is to discover how much control is needed at each moment of time, for example, in a car, much more steering wheel movement is needed when parking compared with 70 mph on the motorway. I am sure that at first I moved the rudder too much when practising beating, whanging it to and fro far too much. Often the rig tended to fall in on top of me and the telltales did all sorts of things. Consciously using less rudder movement (my beginners motto) reduced this tendency.

Tiller extension

I have found the standard Comet tiller extension very slippery to hold, especially when wet. On seeing Guy Wilkins' extension covered with material used by windsurfers, I see that I was not alone in this. However, I felt that a shorter extension for use in light winds was the thing for me, reducing my worry about getting it under the mainsheet in tacking, so I bought a telescopic tiller extension from Dinghy Leisure. This also is slippery, but not of course at the end, and I when necessary I can get a good grip on the joint between the two halves.

Run trouble

I have noticed a great deal of difference between the broad reach and the run, the run seems much slower and considering the possibility of rolling as well I try to avoid running if I can. I have not yet dared to heel the boat to windward on a run, I fear that it will dunk me in the water if I do! (lateral balance again).

I don't know what experienced sailors do but I find that <u>light</u> wind runs take such a time that I am tempted, and do, <u>pull out my</u> tiller extension a bit so that I am not so stretched holding the boom out. That won't be necessary in stronger winds I am sure, the wind will hold the boom out and the Comet's mast being so close to the stem I expect to be right at the back to counter the nose-diving tendency.

Sail trim on the run

I would like to end by throwing some meat to distract the wolves I've felt have been staring at me while I write this. It is about sail trim on the run. In the Comet articles we are urged to flatten the sail to give the largest sail area. There may be more to it than this, I think flattening the sail can reduce the tendency to roll.

Some years ago I was involved in work to do with parachutes, and learned that parachutes get their (dynamic) stability in two ways, either by a large porosity (porous fabric or holes in it) or by imporous fabric with a shape which had sharp edges so the flow is forced to separate at these edges to generate a stable vortex pattern. About 150 years ago, a chap named Cocking noted that an umbrella fell more stably point down than point up and made a parachute that shape, i.e. convex downward toward the wind. His theory was good, but his engineering wasn't, it had to have struts to hold it in shape and when he tried it (releasing from beneath a balloon) his parachute collapsed and he was killed (ref 7).

Now, our Comet sails are definitely imporous (or should be) and in his book, Marchaj (ref 4) attributes the rolling tendency to a non-steady vortex pattern, a set of large eddies forming alternately behind the edges of the sail leading to changes of pressure there. Now this is all very well for a bellying sail, but if the sail is flat and at right angles to the wind, changes in pressure cannot have any rolling effect whatever (except for a little skin friction). Any variation in pressure across the sail will of course try to yaw the boat as a whole, but not roll it

because the mast is vertical. If the sail is not exactly at right angles to the wind, there will of course be a wind force sideways, but, the pressure differences being near the edges of the sail, a flat sail will produce forces nearer to the wind direction than a curved one will. Marchaj does not mention this point, indeed I may be wrong, but he does propose an "anti-rolling" sail, which in practical tests was successful and was in effect a sail bellying the other way (i.e. towards you, convex toward the wind).

In the Comet we're not allowed to add an extra roll-suppressing sail, but in my opinion flattening the sail as much as possible should reduce the likelihood of self-sustaining rolling and, whether you believe that or not, I for one am going to pull my outhaul tight for all runs, and the kicker too if I can, to flatten the sail. This is in addition to pushing the dagger board down a bit to get below-surface damping (data in ref 4). As I said, I may be wrong in all this, there may be more in it than meets the eye (often is in fluid flow) but if so, I hope someone will quote me chapter and verse of the man who is right.

Alan Browning

Postscript: Some readers, even beginners like me, may be getting the impression that I'm not having much fun sailing my Comet in light winds, just a lot of worry ! I am aware that many people just like to get in a boat and have a go, whatever the wind, coping with disasters as best they can, but I think that this way is irresponsible when sailing alone. I remember doing a training course on crewing a safety boat, we towed one young lad out to retire, he had capsized 5 times in the same race but was still full of smiles. He has since taken advantage of the Club race training scheme and is now among the top Graduate sailors in the South. No, I do get great satisfaction when I improve a skill. from whatever lowly a level, and with sailing, usually alone, I want to do it safely and if possible without being frightened along the way (Eric Twiname has a story he relates in ref 8, of a motor racing driver struck by fear when sailing a dinghy that took charge of him on a run).

The experiences related above were in individual practise and in practise races. Since then I have raced a little in my club and my greatest achievement has been coming 22nd out of 35 starters in a Club handicap race. I actually saw 9 boats behind me at the finish, and presumably 4 more retired or I beat them on handicap. Maybe not "fun", but it did make me feel good and appreciate the efforts of my instructors, both live and those frozen in books.

References:

- 1. David Houghton "Wind strategy" Fernhurst books. 1984.
- 2. Manfred Curry "Yacht racing", G.Bell & Sons, 1930, page 126
- Eric Twiname "Dinghy speed v dinghy survival" in "More sail trim" (Adlard Coles, paperback 1990) page 130
- C.A.Marchaj "Aero-hydrodynamics of sailing" (Adlard Coles, 2nd edition, 1991), page 658
- Eric Twiname in "More sail trim" (see reference 3) page 128
 Eric Twiname in "More sail trim" (see reference 3) page 131
- 7. Gerald Bowman "Jump for it" Evans Brothers, 1955, page 22
- Eric Twiname "The heavy air run", in "More sail trim" (Adlard Coles, paperback 1990), page 136



CAM SAILING CLUB



Waterbeach Cambridge Tel (0223) 861551

OPEN MEETING

for

COMETS SUNDAY 25th APRIL 1993 FIRST RACE 11.00am

Refreshments and Lunches available

Entry Fee £3.50

Entries and Enquiries to:
R.T.Bryant
2 The Brambles
Balsham
Cambridge Tel. (0223) 290420

because the mast is vertical. If the sail is not exactly at right angles to the wind, there will of course be a wind force sideways, but, the pressure differences being near the edges of the sail, a flat sail will produce forces nearer to the wind direction than a curved one will. Marchaj does not mention this point, indeed I may be wrong, but he does propose an "anti-rolling" sail, which in practical tests was successful and was in effect a sail bellying the other way (i.e. towards you, convex toward the wind).

In the Comet we're not allowed to add an extra roll-suppressing sail, but in my opinion flattening the sail as much as possible should reduce the likelihood of self-sustaining rolling and, whether you believe that or not, I for one am going to pull my outhaul tight for all runs, and the kicker too if I can, to flatten the sail. This is in addition to pushing the dagger board down a bit to get below-surface damping (data in ref 4). As I said, I may be wrong in all this, there may be more in it than meets the eye (often is in fluid flow) but if so, I hope someone will quote me chapter and verse of the man who is right.

Alan Browning

Postscript: Some readers, even beginners like me, may be getting the impression that I'm not having much fun sailing my Comet in light winds, just a lot of worry ! I am aware that many people just like to get in a boat and have a go, whatever the wind, coping with disasters as best they can, but I think that this way is irresponsible when sailing alone. I remember doing a training course on crewing a safety boat, we towed one young lad out to retire, he had capsized 5 times in the same race but was still full of smiles. He has since taken advantage of the Club race training scheme and is now among the top Graduate sailors in the South. No, I do get great satisfaction when I improve a skill, from whatever lowly a level, and with sailing, usually alone, I want to do it safely and if possible without being frightened along the way (Eric Twiname has a story he relates in ref 8, of a motor racing driver struck by fear when sailing a dinghy that took charge of him on a run).

The experiences related above were in individual practise and in practise races. Since then I have raced a little in my club and my greatest achievement has been coming 22nd out of 35 starters in a Club handicap race. I actually saw 9 boats behind me at the finish, and presumably 4 more retired or I beat them on handicap. Maybe not "fun", but it did make me feel good and appreciate the efforts of my instructors, both live and those frozen in books.

References:

- 1. David Houghton "Wind strategy" Fernhurst books. 1984.
- 2. Manfred Curry "Yacht racing", G.Bell & Sons, 1930, page 126
- Eric Twiname "Dinghy speed v dinghy survival" in "More sail trim" (Adlard Coles, paperback 1990) page 130
- C.A.Marchaj "Aero-hydrodynamics of sailing" (Adlard Coles, 2nd edition, 1991), page 658
- 5. Eric Twiname in "More sail trim" (see reference 3) page 128
- 6. Eric Twiname in "More sail trim" (see reference 3) page 131
- 7. Gerald Bowman "Jump for it" Evans Brothers, 1955, page 22
- Eric Twiname "The heavy air run", in "More sail trim" (Adlard Coles, paperback 1990), page 136



CAM SAILING CLUB



Waterbeach Cambridge Tel (0223) 861551

OPEN MEETING

for

COMETS

SUNDAY 25th APRIL 1993

FIRST RACE 11.00am

Refreshments and Lunches available

Entry Fee £3.50

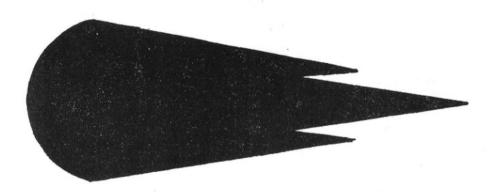
Entries and Enquiries to: R.T.Bryant 2 The Brambles Balsham Cambridge Tel. (0223) 290420

<u>Comet</u> <u>Open-Meeting</u> <u>Saturday 8th May</u>

Redditch Sailing Club
Arrow Valley Lake
Redditch
Worcestershire

For details contact PAUL THOMPSON Home telephone number 0527 63543 Office telephone number 021 706 2131

COMET



JULY 4" 1993 HARLOW BLACKWATER SAILING CLUB START 12.00

DETAILS: ALEX REINDORP
0268 415884

Dinghy Leisure



New for '93

Buoyancy aids, spray tops
and a range of sweatshirts
all customised for
Comet enthusiasts.

Available from January.

AMS Marine

Horsepond Meadow South Molton Devon EX36 4EJ

(07695) 4358

Dinghy Leisure

6 Wychwood Little Kingshill Great Missenden Bucks. HP16 OEJ

(02406) 3082

NOTICE BOARD

FOR SALE

Comet 242. Golden yellow. Good condition. Cover, small trolley, tiller extension, improved purchase lines. £895. Alan Rew 0444 811507 (Haywards Heath)

Comet 266. Dark green. Folding trolley, cover, grab rails. £1,100 ono. John Clarke 0270 878559 (Crewe)

Comet 346. Good condition. Launching trolley, Easi-loader roof-rack, mast and rudder bags, extension tiller. £1,100

Christopher Dann 0628 475342 (Bucks)

Comet 452. Dark grey hull. Very good condition. Combi trailer, grab rails, usual extras. £1,700 ono.
Richard Lines 0491 873510 (Berks)

Comet 459 Mauve hull, white deck. Excellent condition, only sailed twice. Launching trolley, cover, Easi-loader. £1,400 ono.

B. Runham 0708 730333 (Day)

0376 341044 (Evening) (Braintree)

Comet 562. New September 1992. Red. Trolley, cover and extras. £1,450
Mike Barker 0392 73298 (Exeter)



Comet Class Association

Affiliated to the Royal Yachting Association