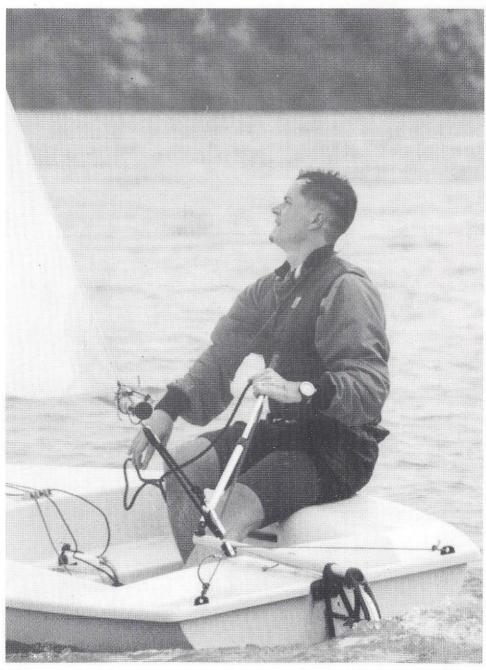
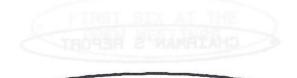
# **PERIHELION**





**Comet Class Association Newsletter** 



### NEWSLETTER NUMBER 35 SUMMER 1995

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#### Front cover:

Alex Reeve at the 1995 Inland Championships

(Photo: Anne Browning)

# CHAIRMAN'S REPORT

The funniest book I ever read was Coarse Sailing by Michael Green, he wrote about boating and the characters he had met while messing about in boats. In my half century of life I have met most of them, from the guys who do most of their boating in bar or caulking and varnishing some clinker built relic of good old days. The enthusiast who runs everything, (bit close to home that one) the reliable, the totally unreliable and from the novice, to the win-at-all-costs-my-life-depends-on-it type. They are all part of boating and sailing and they all bring colour and life to what we do. So I imagine there are as many reasons sail, as there are sailors and depending on our personalities we will pursue those reasons in our own way. Now to me sailing has an almost mystical quality, we use the wind and the water. The water liberates us from the frictions of gravity and we harness the freedom of the wind to our own use. Claptrap, or is it? well there is a point and as usual I have used a lot of words to say it.

Our one thing in common is the Comet Dinghy, we all pursue our pleasure through the Class, that's why we are members. Now for the Class to succeed we all need each other, the beginner, expert nut case, organiser, and uncle Tom Cobley and all and all. When we come together if something upsets us let's sort the problems out with good humour and tolerance. I'm not suggesting for one minute that if you have a gripe you should not complain but do it with a smile. If something can be done about the problem it will be easier to sort it out if we are all co-operating. I would ask the experts to help beginners who will be very unsure of themselves and possibly in their fist race to make allowances for their inexperience, we were all beginners once. Beginners be understanding of a competitor with their adrenaline pumping who's language is less than temperate, they are very involved in what they are doing and normally very embarrassed off the water.

I have a few apologies to make myself. The wrong telephone number for the Nationals contact was printed in the Open Meetings list but it is right on the Entry Form. The right number is 01795 521971 and that will put you in touch with Ken Brown. Sorry also that the wrong date for the Merthyr Tydfil Open appeared on the List at the Boat Show and a final grovel to those who were late for the reorganised start at the Inlands.

Finally I would like to thank all the organisers of Opens for the very pleasurable mystic moments they provided and for the adrenaline pumping reaches at Sutton Bingham. One last thought "is heaven a planing Comet in a force 4 wind"?.

John Windibank, Chairman

## FIRST SIX AT THE OPEN MEETINGS

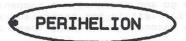
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					170	IA	EDITOR'S	-					
Shearwater					Car	Cam				Redditch			
						-							
	1	472	J	Sutton	1	657	M	Wilkins	1	334	E	Edwards	
	2	334	E	Edwards	2	555	J	Windibank	2	437	В	Hardy	
	3	565	R	Smallwood	3	559	R	Bryant	3	500	Н	Jaggers	
	4	534	J	Regnard					4	650	P	Hossell	
				Coleman					5	633	W	Edwards	
	6	73	L	Chisling						460	M	Govier	
	Merthyr		rthyr Tydfil		Fis	Fishers Green			Chester				
	1	334	E	Edwards	1	472	J	Sutton	8051	500	Н	Jaggers	
	2	565	R	Smallwood	2	657	M	wilkins				Edwards	
	3	419	P	Govier	3	500	Н	Jaggers				Edwards	
	4	460	M	Govier	4	188	S	Thompson	4	648	В	Hamilton	
	5	650	P	Hossell	5		A		5	650	P	Hossell	
	6	420	R	Edwards	6	518	R	Ballam				Ford	

## SOUTHERN AREA

#### Crawley Mariners and a second asky when a second second second

- 1 472 J Sutton 2 573 A Reeve
- 3 188 S Thompson
  - 4 626 L Dean
  - 5 427 D Todd
  - 6 492 I Beaumont

Note: These results are those that count towards the Traveller's Trophies. Results accrued by sailors who are not members of the Comet Class Association are omitted.



The next issue of Perihelion will be circulated in September 1995. Contributions to me by the end of August please.

Alan Browning.



### EDITOR'S NOTES

After Perihelion 34, which was mainly a non-racing issue, this one is a complete contrast, very much about racing.

In addition to the open meeting and Inland Championships reports and results, there is an article by Keith Lamdin in which he discusses the 1975 experimental right-of-way rules. Now, I thought that perhaps this article might be a little difficult to follow for those who had not got a copy of those experimental rules, so I have taken the liberty of obtaining the latest version from the IYRU and, with their permission, have added them as an appendix to Keith's article. You will find that I have placed these in the centre of the newsletter, so that if you wish you can unclip the two sheets. You might want to take them to the club if they are using the experimental rules. (They were very boring to type, and I apologise if there are errors.)

Open meeting advertisements included as loose inserts in this issue are for ICI, Slough; Chasewater; Aylesbury and Stamford.

The "Talking to - - - " idea seems to be have been appreciated and this issue contains the second one, talking to Henry Jaggers. Henry has been sailing a Comet for 7 years or more, achieving good results throughout that time. He has encouraged the growth of the Kingsmead fleet and for much of the time has been a member of the Class Association Committee.

In the "forthcoming events" section I have included telephone numbers, to save you having to look them up in issue 34. Also, note an early start (10.30) at Seafarers.

I had hoped that Andrew Simmons would write about the new factory premises, but he has been very busy, in particular promoting the new Trio boat. He promises an article on this topic next time.

On the first day of the Inland Championships Anne and I made a snap decision to go and see what was happening at Sutton Bingham. Anne had some film left in her camera and you will find some of her shots of the second race gracing these pages.

Alan Browning

## FORTHCOMING EVENTS

#### late JUNE to early OCTOBER 1995

Saturday	24th	June	ICI	Slough	open	Mark	Taylor:	602663
Sunday	9th	July	Chas	ewater	open	John F	roggatt:	ed T
							01255	813150
Saturday	15th	July	Cots	wold op	en	David		653918
Sunday	23rd	July	Ayle	sbury o	pen	Christ	ine Stack 01442	873557
Sunday	30th	July	Seaf	arers o	pen	John G	lover:	665408
							01327	883408
14 - 19 A	ugust	in the same	Mude	ford we	ek	Glynn	- Table 1	488508
							or 01202	478276
25 - 27 A	ugust:	: <u>Nation</u>	al Ch	ampions	hips at	Sheppe Ken Br		
						modelus		521971
							-	

(corrected)

Sunday 10th Sept Stamford open John Coppenhall:
01733 265789

Sunday 1st Oct Pingewood open John Vail:
01734 812174

NOTE The first race at Seafarers is to start at 10.30 am

### COMET INLAND CHAMPIONSHIPS

27-28th May 1995

The Comet Class made a welcome return to the lovely water of the Sutton Bingham Sailing Club, for their Inland National Champion-ships.

The 26 entries were greeted with force 4 to 5 winds blowing straight down the lake, much to the delight of the spectators who queued up with binoculars trained on the gybe mark.

The race officer set a long first beat into the teeth of the squalls and the three dominant helms of the championship, Alex Reeve, David Forsdike and Jake Sutton, rounded the first mark clear of the fleet with John Windibank just rounding ahead of John Coppenhall and Errol Edwards. The first mark was in a very exposed position and caused problems throughout the Championships which kept the well organised rescue boats busy. Alex Reeve steadily extended his lead throughout the race and was a clear winner from Forsdike and Sutton with Windibank in 4th and Edwards 5th. The light weight helms in the middle of the fleet were having a torrid time but there was only two retirements and Amy Luxford, on returning to sailing after an injury, was the first lady home finishing in a creditable 17th spot ahead of Fiona Cauter 19th.

Race 2 started with an increased wind and saw Coppenhall choosing the right end of a biased line to lead at the first mark. The testing conditions forced errors from all the helms and the lead repeatedly changed, but Reeve again had the edge and won from Forsdike and Sutton. Mark Govier achieved his best result with a 4th and the consistent Edwards again 5th.

The first act of the competitors on arriving for day two of the Championship was to tune into the weather forecast only to be promised gale force gusts and showers. The weather men for once were right and 16 competitors started the 3rd race and slogged their way through rain squalls and white water to the mayhem at the first mark. Near wipe-out conditions saw half the fleet capsize but there was still a championship to be won and the racing continued as fierce as ever. Simon Thompson joined the dominant three and was second for long stretches of the race but a masterful display of sailing by Sutton, who alone finished without a capsize, saw him finish well clear of Reeve who crept ahead of Forsdike on the last beat. Simon Thompson finished 4th with Coppenhall, sailing in his first championship, 5th.

The calculators were much in evidence before the last race as helms calculated the possible overall positions and 10 starters answered the call. The race was the most competitive of the series with virtual head to heads between Forsdike and Sutton and Thompson and Edwards. Alex Reeve established an early lead but Sutton was not going to give in and Forsdike, hiking out so far he would have been safer with breathing apparatus in the squalls, was just as determined. The Edwards/Thompson battle was

finally settled when Edwards hit a mark and capsized leaving Thompson clear in 4th place. David Forsdike finally capsized once too often which left Reeve and Sutton swapping places up the last beat. Sutton established a winning position but a lapped boat causing an extra tack let Reeve in by half a length.

The spectators were never bored with the spectacular planing and capsizing and most of the competitors returned looking as if they had been involved in the charge of the light brigade with the mud on the mast top looking like a badge of honour.

I know because I was there.

Max Boyce, Sutton Bingham S.C.

Final Results							
	1st	573	Alex Reeve	ICI Slough	2.25	points	
	2nd	472	Jake Sutton	Frensham Pond	5.75		
	3rd	513	David Forsdike	Welwyn Gdn City	7		
	4th	188	Simon Thompson	Crawley Mariners	14		
	5th	334	Errol Edwards	Chew Valley	15		
	6th	532	John Coppenhall	Stamford	19		
	7th	460	Mark Govier	Merthyr Tydfil	20		
	8th	650	Philip Hossell	Evesham	22		
	9th	555	John Windibank	Chipstead	22	Veteran	
	10th	419	Paul Govier	Merthyr Tydfil	24		
	11th	117	Michael Thompson	Crawley Mariners	30		
	12th	518	Robin Ballam	Crawley Mariners	30	Middle	
	13th	138	Tom Hasker	Sutton Bingham	38	Junior	
	14th	240	Brian Hunt	Walton-on-Thames	51		
	16th	174	Mike Baxter	Chipstead	54		
	17th	376	Amy Luxford	Welwyn Gdn	58	Lady	
	18th	575	Fiona Cauter	Chipstead	60		
	19th	508	Michael Smith	Redesmere	61		
	20th	276	Kathryn Boston	Viking	61	A A THE	
	21st	50	Diana Thompson	Crawley Mariners	71		
	22nd	623	E Olliver	Durleigh	73		
	23rd	62	Emer Power	Chipstead	74		



Alex Reeve - Inland Champion

### AT THE 1995 INLAND CHAMPIONSHIPS



Alex Reeve - winner of three of the races

These three fought for the title in a very close contest

(Photos: Anne Browning)



Jake Sutton - a very close overall second



David Forsdike - hard on Jake's heels,

overall third





Very wet but still smiling !



The rescue boats were kept busy !



Thirty Comets took part in the Crawley Mariners Y.C. open meeting held at Hedgecourt Lake on Sunday 14th May. The weather was bright and sunny but the wind was a light and variable southwesterly.

Jake Sutton took an early lead in the first race followed by Alex Reeve and David Todd. Jake proceeded to pull out a comfortable lead from Alex but behind these two Joost Taylor and Ian Beaumont had closed on David to contest third place. On the third of the four laps the 2nd to 5th placed boats found a "hole" in the wind and this allowed Simon Thompson to sail through from a distant 6th to claim 3rd place. Jake held his lead to win from Alex Reeve, Simon Thompson, Ian Beaumont, Joost Taylor and David Todd.

In race 2, Jake Sutton again took the lead on the first lap, followed by Len Dean, John Windibank (Chipstead) and Alex Reeve. The leading positions remained unchanged until the third lap when again the variable conditions resulted in Alex moving into 2nd place and Brian Welham (ICI, Slough) took 3rd position from Len Dean and John Windibank. Jake again took a comfortable win from Alex but Len moved ahead of Brian on the last lap to take 3rd place.

Alex Reeve made a good start in the final race and took the lead at the first mark followed by Jake Sutton and Simon Thompson with Michael Baxter (Chipstead) 4th and Keith Hiscock (Crawley) 5th. On the second of the four laps Jake took the lead which he held until the end, making his tally three wins from three starts. Alex once again took 2nd place with the next three places remaining unchanged.

#### Overall results:

1	472	Jake Sutton	Frensham Pond
2	573	Alex Reeve	ICI, Slough
3	188	Simon Thompson	Crawley Mariners
4	626	Len Dean	Kingsmead
5	427	David Todd	Crawley Mariners
6	492	Ian Beaumont	Crawley Mariners
1st Lady	62	Emer Power	Chipstead
1st Junior	285	Joost Taylor	Crawley Mariners
1st Senior	626	Len Dean	Kingsmead



#### (Simplification or a new ball game ?)

Many of you will'be aware of the IYRU initiative to simplify and improve the racing rules, with an evaluation and testing period, before considering adoption of a final version of these rules as the 1997-2000 International Yacht Racing Rules. (see Appendix below).

Following a short presentation at Aylesbury S.C. recently, I have obtained a copy of the experimental rules and spent some time considering them in comparison to the existing rules.

I should start by saying that the experimental rules are a clever attempt to reduce the rules, using simple and familiar language, and must represent the greatest step forward since the merging of the N.A. and R.Y.A. rules many years ago.

In looking at some of the design criteria for simplification, no one would quibble at the following:-

embody principles of fairness acceptable to most sailors discourage contact, and permit close manoeuvring with a minimum of anxiety

However, when the brief concludes:-

encourage sailing fast and discourage impeding others and minimise exceptions and rules for unusual situations I have to wonder where simplification ceases and a subtle attempt to influence the content of our racing begins!

I have written to the Racing Rules working party with some queries and comments and hope that their reply will clarify some of the issues.

In the meantime, the following may give a flavour of my concerns and indicate a hidden agenda.

The most obvious omission of all is the absence of any reference to luffing and, at the ASC meeting, this was indicated as meaning that luffing was prohibited.

I do not accept that this interpretation is necessarily correct solely on the basis that luffing is not specifically allowed or even mentioned. There is a new version of mast abeam, based on the mast line, which prevents a leeward boat from sailing above her proper course whilst overlapped but this should not prevent luffing up to the mast line position.

The next striking omission is that of any reference to onus of proof at critical points such as establishing overlaps or the mast line. Coupled with a new primary rule that every boat shall, if possible, try to avoid contact with another boat, such lack of onus of proof will make protest extremely difficult to resolve where there are no witnesses or on-water judges and the parties disagree on facts.

Further, there are a whole range of, perhaps, minor rule clauses which have been omitted, presumably, as part of the brief. Only experience will show whether they are necessary or can be covered by the primary rules such as:-

avoiding contact

changing course (and speed !), giving room and time and acquiring right of way, giving room and time.

Among the omissions are:-

Starting: assuming a proper course to start

before clearing the starting line and passing starting

marks.

Marks: altering course to round a mark

preventing a tack to round a mark.

Obstructions: when one but not both tacking continuing obstructions when obstruction is a mark.

Perhaps not insignificant and, certainly, opening up some potentially difficult situations.

I shall be interested to receive a reply from the  $\,$  IYRU working party and it may be that my concerns are unfounded.

Given boats sailing fast in relatively straight lines in open water on the beat and run, with gated starts and finishes, then I would accept that the experimental rules would suffice and perform an adequate job whilst making it easier for newcomers to join the sport and not be put off by the apparent complexity of the current rules.

If that sounds like Ultra 30's, 18' skiffs, Laser 5000's and the like with wings, trapezes and asymmetrics on their open water, up and down, crash and burn courses then fine.

I'm not sure how well it will translate to the river at Cam, the narrows at Chipstead or a northeasterly at Aylesbury but, perhaps, it will be interesting to try and see!

In the meantime, don't come by too close to windward 'cos I might still luff!

To be continued, no doubt!

Keith Lamdin (Comets 55 and 241)

#### Appendix:

### THE 1995 EXPERIMENTAL RIGHT-OF-WAY RULES AND DEFINITIONS

To use the 1995 Experimental Right-of-Way Rules and Definitions, the Notice of Race and the Sailing Instructions should state that they replace Part IV and the relevant sections of Part I of the International Yacht Racing Rules.

#### RULES WHEN BOATS MEET

These rules apply to boats sailing in or near the racing area that intend to race, are racing, or have been racing, except when the sailing instructions state that the International Regulations for Preventing Collisions at Sea or government right-of-way rules apply. However, a boat not racing shall not be penalized for braking one of these rules, except rule 4.

#### Section A - Primary Rules

#### 1 Avoiding Contact

Every boat shall, if possible, avoid contact with another boat.

#### 2 Changing Course

When a right-of-way boat changes course or speed, she shall give the other boat room and time to keep clear.

#### 3 Acquiring Right of Way

When a boat acquires right of way, she shall initially allow the other boat room and time to keep clear, unless the other boat gives up her right of way by her own action.

#### 4 Not racing

A boat not racing shall, if possible, try to avoid interfering with a boat that is racing.

#### Section B - Right-of-Way Rules

#### 5 Opposite Tacks

- 5.1 When boats are on opposite tacks, the port-tack boat shall keep clear.
- 5.2 When a starboard-tack boat is within two of her own lengths of a port-tack boat, the starboard-tack boat shall not change course if the port-tack boat would then have to take additional action to keep clear.

#### 6 - Same tack

#### 6.1 When boats on the same tack and

- (a) overlapped, the windward boat shall keep clear.
- (b) not overlapped, the boat clear astern shall keep clear.
- 6.2 When two overlapped boats on the same tack are within two of the longer boat's hull lengths of each other and an imaginary line abeam from the leeward boat's mainmast is behind the windward boat's mainmast is behind the windward boat's mainmast, the leeward boat shall not sail above her proper course unless she tacks.
- 6.3 When two boats on a free leg of the course are within two of the longer boat's hull lengths of each other, a boat clear ahead or a windward boat shall not sail below her proper course unless she gybes.

#### Section C - Tacking; Passing Marks and Obstructions; Other Rules

When a rule of Section C applies, the rules of Section B do not apply.

#### 7 Tacking

A boat tacking shall keep clear of other boats from the time she is past head to wind until she is on a close-hauled course.

- 8 Passing a Mark or Obstruction
- 8.1 Rule B applies at a mark or obstruction that boats are to pass on the same side, but not at a starting mark or its anchor line, or to boats on opposite tacks on a beat to windward.
  - 8.2 OVERLAPPED

From the time an overlapped boat comes within two of her hull lengths of a mark or obstruction until the inside boat leaves it astern on her proper course, whether or not the boats remain overlapped, outside boat shall give the inside boat room to pass the mark or obstruction, and the inside boat shall pass within that room. However, the inside boat will not be entitled to room if the outside boat was unable to give the room at the time the overlap began.

#### 8.3 NOT OVERLAPPED

From the time a boat clear ahead comes within two of her hull lengths of a mark or obstruction, until she leaves it astern, a boat clear astern shall keep clear, provided the boat clear ahead does not tack. If she does tack, rules 5 and 7 apply and rule 8 does not.

#### 8.4 TACKING AT A WINDWARD MARK

When two boats are approaching a windward mark on opposite tacks and then one of them tacks within two of her hull lengths of the mark, the boat that tacked

- (a) is not entitled to room
- (b) shall give room if the other boat becomes overlapped inside

her.

This rule makes exceptions to rules 8.2 and 8.3.

- 9 Tacking to avoid an obstruction Except at an obstruction that is a starting mark and its anchor line, when safety requires a close-hauled boat to make a substantial course change to clear an obstruction, and when she intends to tack but does not have room to tack and clear another boat on the same tack, she shall hail for room to tack. The hailed boat shall immediately either give such room, in which case the hailing boat shall tack as soon as possible, or hail 'You tack', in which case the hailing boat shall immediately tack and the hailed boat shall give the required room.
  - 10 Taking a Penalty A boat taking a penalty shall keep clear of other boats.
  - 11 Capsized, Aground, Anchored or Rescuing Unless unable to do so, a boat shall keep clear of a boat that is capsized or has not regained control after being capsized, or is aground, anchored, or attempting to help a vessel or person in danger.

#### DEFINITIONS

#### Clear astern and clear ahead; overlap

One boat is clear astern of another when her hull and equipment in normal position are behind an imaginary line abeam from the aftermost point of the mother's hull and equipment in normal position. The other boat is clear ahead. They overlap when neither is clear astern or when a boat between them overlaps both. The terms clear astern, clear ahead and overlap apply to boats on opposite tacks only when rule 8 applies.

#### Keeping Clear

One boat keeps clear of another when the other boat can sail her course without risk of contact.

#### Leeward and Windward

A boat's leeward side is the side on which she is, or when head to wind, was carrying her mainsail. The other side is her windward side. When two boats on the same tack overlap, the one on the leeward side of the other is the leeward boat. The other is the windward boat.

#### Mark

A mark is any object the sailing instructions require a boat to pass on a specified side. Its anchor line and objects attached accidentally or temporarily are not part of it.

#### Obstruction

An obstruction is any object large enough to require a boat more than one of her hull lengths from it to make a substantial change of course to pass it, or that can be safely passed on only one side. The sailing instructions may define a specified area as an obstruction.

Proper course

A boat's proper course is a course she would sail to finish as soon as possible in the absence of other boats referred to in the applicable rule. A boat has no proper course before her starting signal.

Racing

A boat is racing from her preparatory signal until she has finished and cleared the finishing line and marks or retired, or the race committee has signalled a general recall, postponement or abandonment.

Room

Room is the space a boat needs to manoeuvre in a seamanlike manner in the prevailing conditions, including space to tack or gybe where necessary.

Tack, Starboard or Port

A boat is on the tack, starboard or port, corresponding to her windward side.

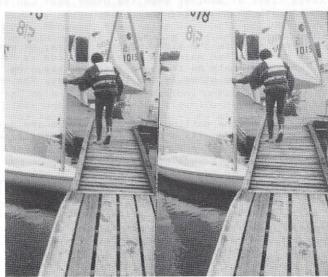
Taking a Penalty

A boat is taking a penalty when she is sailing toward the prestart side of the starting line or its extensions after her starting signal to comply with rule 51.1(b) or (c), or is making a turn described in rule 52.2(a) or Appendix B1, paragraph 1.1

The definitions Bearing Away, Close-hauled, Gybing, Luffing, Mast Abeam and Tacking are deleted. Other definitions are unchanged.

Note:

These experimental rules are reproduced here, with the permission of the IYRU, to put Keith Lamdin's contribution in context. The Editor did not have much time to type them and he apologises for any errors that have slipped through. Unfortunately, though he typed the italics for the defined terms, the printer did not obey!



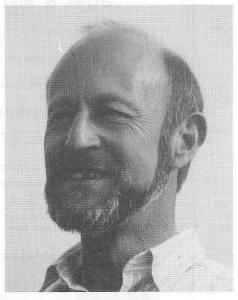
(Stereoscopic photo

Alan Browning)

### TALKING TO - - - HENRY JAGGERS

Alan Browning: Henry, you've been sailing Comets longer than most of us, supporting the Travellers series and Championships for many years. You have many good results to look back on, high placings in open meetings going back to 1988, and including most recently winning the meeting at Chester last month, and in our "Hall of Fame" you figure as the winner of both the Orbital Trophy and the Association Trophy in 1991. In other ways you've supported the Comet Class, being on the Association Committee since 1989 and you popularised the Comet so well at Kingsmead that from just your boat in 1987 the fleet expanded to over 30.

In October 1992 you moved to Ashby-de-la-Zouch, sailing at Staunton Harold Sailing Club and now join in a different set of open meetings, still with success. In fact, if Richard Smallwood had not transferred to Comets, you would have won the Northern Aphelion Trophy last season.



May I ask you where you first saw a Comet and what attracted you to the boat?

Henry: It was at the London Boat Show. I had been sailing Graduates both at Kingsmead and on their open meeting circuit since 1970 but by 1986 I had been thinking for some while about changing to a single-hander. Although my involvement with Kingsmead was getting greater than ever, my sailing was getting rather stale and it was time for a change.

What I wanted was a boat that was quick and easy to get on the water, required little maintenance, had a performance to compare with the Graduate, was drier and faster than a Topper and was more stable and a better match for my light weight than a Laser. I fell in love with the Comet at first sight at the 1987 Boat Show. Somehow it looked right and it seemed more than a coincidence that Keith Lamdin was the Association Chairman. I had known Keith for many years, we had both been on the Graduate Committee. But perhaps it was the vivacious Margaret Hylton that really 'sold' me the Comet. She and Barrie brought a couple of boats to Kingsmead that May for a demonstration and I ordered my Comet number 100 then.

I found it really well made, easy to rig and launch and a joy to sail, very responsive, early to plane but a remarkably forgiving boat, although its stability may not be obvious until you get used to it. In many ways it handled like a well-balanced Graduate. It was easy to roof-rack because of its lightness and you hardly knew it was there, but it was also very slippery (see note below) and I had dents in the car to prove it! This was before I bought an Easi-Loader.

Alan: Have you any comments on the development of the Comet since you've been sailing one?

Henry: I am quite happy with the amount of freedom we have at the moment, I think it's quite enough for anyone. To a large extent we all sail the same boat and that makes for very good competition. I have individualised my control lines, mainly for technical interest. I use the kicker ring system and also a spring shackle between the mainsheet block and the boom and these allow me to unhook the mainsheet and let the sail swing right out forward if I want it to.

Sometimes I have felt the need for the boat to be a foot longer, or have not such a fine bow, something to stop the nose digging in, but I've only once been badly caught out that way, the boat filled completely and capsized!

No doubt a lot of people could come up with a large number of niggly little ideas that might or might not improve the boat, but at the end of the day it's much better if the boats stay very, very similar.

It's a pity that the price has to go up each year, but it's very good value. It's still put together far better than any other boat of that type that I've seen. That's the advantage of being a small class with just one builder - Andrew Simmons does take a very personal interest in it.

Alan: You have taken your Comets all over the country for years now, have you found that the "circuit" has changed during this time?

Henry: The standard of sailing has gone up enormously. I don't mean so much the top 2 or 3, but the people behind them. There are a far greater number of people around now who are very competent. In the early days there were some of the names that are still around now, and there were ex-champions from other classes, for example Craig Moffatt, but although we used to get quite good turnouts for the open meetings, most were people who would never expect to win.

Alan: You've done pretty well with the Comet, particularly I believe in lighter winds. Have you any tips to help the less able?

Henry: Generally speaking, most of the types of places where Comets are sailed are smallish pieces of water and boat speed is not particularly important. A lot of it is down to concentration and you've got to pick up on the windshifts. Also you must concentrate on the variations in wind strength which are more pronounced on a small water. As my main rivals know, put me on an open water and I can't always do so well.

Yes, I think it's really down to concentration and quick reactions, just wanting to do well, taking advantage of every favourable situation and of the slightest change in the wind. You've

just got to stick at it and not give up. A number of times I've come off the start line last and, largely by keeping out of everybody else's way, have finished in the first three. I don't get involved in tactics with other boats unless it's absolutely necessary; it's far safer, and usually quicker, to keep clear. There are exceptions, for example on the last lap, if you are in a duel with just one other boat, you mustn't let the boat behind get past. But, generally speaking, I sail my own course.

I think I agree with Jake Sutton (Perihelion 33, page 9) that it's often very tempting to put the kicker on hard but probably not wise. I think the trim and balance of the boat are very important too, but those have to become second nature, if you're having to think about them you will be missing the windshifts.

At the end of a meeting people sometimes say their boat didn't go well and they ask what they were doing wrong. Most times all I can say is that I can't help because I was concentrating on sailing my own race and not watching other boats. That's a pity really, I would like to be able to help.

### Alan: Have you any comments on the sailing articles that appear in Perihelion?

Henry: About planing, when controlling the boat on the plane, you can tell straight away when you are planing by the appearance of the wake. Sometimes, especially in marginal planing conditions, and if I know that the way ahead is clear, I will watch the wake — but I have to make sure I don't hit anything!

On the question of running in strong winds, once it is up and running it's as stable as anything. It's different though if you get a sudden gust as well. I'm talking about flattish water, I don't care to be on the sea in a strong blow downwind.

This year I have in fact been taking an interest in teaching sailing. I was hesitant at first in case teaching RYA methods might ruin my sailing, but actually I don't think it will.

Alan: I believe you were very influential in stimulating the growth of the Comet fleet at Kingsmead. What was it like in those days?

Henry: My position at Kingsmead helped me. I was Vice-Commodore when I bought my first Comet in 1987 and Commodore in 1988 and 1989, so I was well known. The fleet built up very rapidly to well over 25 boats. In fact the situation was very ripe for Comets then. There was perhaps a bit more money around and we found ourselves with quite a few people in other fleets looking for a change, for example people like myself moving out of Graduates or youngsters moving up from Toppers and not wanting to risk the Laser. Since that time some have gone back to Graduates and other classes but there is still a very good fleet of Comets there.

## <u>Alan: Have you any advice on how to encourage the growth of a club Comet fleet?</u>

Henry: I wish I had. At Staunton Harold the Comet is not taking off at all. We have a very well established Laser fleet with some really top helms in it and those who don't fancy the Laser as such are more inclined to get a Laser Radial, there's a nation-wide promotion for that boat at the moment. It seems that boats are fashionable for a while but fleets can dwindle over a couple of years, back to nothing.

It depends an awful lot on the club. When I was at Kingsmead there were quite a lot of fairly competitive people interested in going to open meetings and it continued with the Comets. We would come back and report our successes and so on. Nowadays, if I report my successes at Staunton Harold it doesn't seem to have any effect. Also our water is not so good for Comets, at Kingsmead, a small water with very shifty and variable winds, the Comet handicap was generous.

You certainly do need to have a nucleus of 4 or 5 boats sailing on a regular basis, that does give encouragement. At Staunton Harold, in many ways we're coming to the conclusion that it's not the youngsters who are the Comet members of the future. We go out of our way to encourage members from wherever. Very many of the youngsters move away, go to college, just when they're becoming good sailors.

I think a lot of Comets are sold to people who don't belong to clubs anyway. They might be tempted to buy one to take on summer holidays.

Alan: You deserve our thanks for your time and effort given to the Committee over many years. Do you have any thoughts on Committee work?

Henry: I like to do what I can. I've always liked to have some involvement. It's more difficult now I'm further North than I used to be, I can't get down to Committee meetings very often. I enjoy making posters etc on my computer facility and am looking forward to the photographic competition - by the way not many entries have come in yet.

For new Committee members, I think you've got to find someone who enjoys that sort of thing. They might not know they enjoy it. Some people would like a definite sort of job, others like a general involvement. It's an old adage, but the people to ask to do jobs or join the Committee are the busy people.

It would be nice to encourage some new people to join in. When you do get people who have been on the Committee for a long time, after a while the rest of the membership takes it all for granted. If anyone shows the slightest interest in joining the Committee I think they should be encouraged, either by co-opting them on to the Committee immediately or giving them a job to do, not on the Committee. You will often find it easier to get people to do jobs if they're not on the Committee.

#### Alan: Have you used the Comet for anything else but racing?

Henry: Generally speaking, no. I don't even go out and practise, other than during a race. I feel much safer racing. I don't particularly like just cruising around.

I have taken it down to Cornwall occasionally but getting off the beach was quite tricky and I often had to surf in on a lee shore. During the summer season it is quite difficult to find a beach where you can get the boat down to the shore to launch it. I did find a reservoir near Redruth where they used to do day sailing, for which you paid £2, but it's all power boats there now, no sailing.

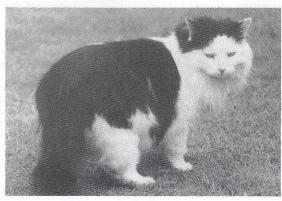
Alan: I notice your present boat, Comet 500, has the name "Cat's Whiskers", and throughout this chat your cat, Fred, has been trying to catch the limelight, in fact Anne seems to have spent much of the time trying to photograph him. But I suppose that even if she gets a good snap it won't qualify for the photo competition!

We've really enjoyed visiting you Henry, thanks very much for the contribution to our newsletter.

(Note: In Perihelion issue 7, June 1988, you will find an article written by Henry entitled "Light and Slippery" and from this the early information is quoted. The title we are assured referred to the Comet, not to Henry!)



Henry's boat name



Fred



Chester Sailing and Canoeing Club held their second Comet open meeting on the river Dee on Saturday May 20th and welcomed 10 visitors from 7 clubs who joined with 6 boats from the host club to provide keen competition.

This year's event, sponsored by Skilbeck and Jones (Opticians) Ltd, was held in medium and variable NW winds and provided excellent sailing for participants and spectators alike.

John Edwards of Chester showed everyone the way round the course in the first race to win from Henry Jaggers, Philip Hossell and Errol Edwards.

The second race was comfortably led by Errol Edwards before a capsize at the gybe mark let Jaggers through to win from Nigel Ford, John Edwards and Brian Hamilton.

In the third race, with final positions still to be decided, close marking in lighter winds provided the best race of the day with Errol Edwards securing a win from Hamilton, Hossell and Bill Ablett.

#### Overall results:

1	500	Henry Jaggers	Staunton Harold
2	633	John Edwards	Chester
3	334	Errol Edwards	Chew Valley
4	648	Brian Hamilton	Redesmere
5	650	Philip Hossell	Evesham
6	644	Nigel Ford	Chasewater

John Edwards (Comet 633)

## FISHERS GREEN OPEN

The open meeting at Fishers Green provided the Comets with a still chill easterly wind, but not unpleasant sailing conditions. The three races were to be based on courses set to take advantage of newly excavated areas of water.

The first race was led for the first lap by Simon Thompson after a good start. He was overhauled during the second lap by both Jake Sutton and Mark Wilkins with, it must be said, a little help from an indifferent wind pattern. These three maintained this order to the end of the race with the real 'racing' going on behind them.

Simon Thompson had another good start in the second race and initially was in the lead, but was caught by Jake Sutton and Henry Jaggers during the first lap who then pushed Jake all the way to the finish with Mark and Simon hotly disputing third and fourth.

Again, racing down the fleet was close, with the long runs set in the course providing some covering opportunities.

In a failing wind, the last race was all about settling the second, third and fourth places and of course the ladies prize.

Jake Sutton soon established a lead with Mark Wilkins in pursuit and Alex Reeve, making a late bid to get in the prizes, just third ahead of Henry Jaggers. This was as it finished with Robin Ballam scoring his best place, fifth, just ahead of Simon Thompson. The two ladies, Jenny Colclough and Karen O'Brien, both from the home club, finished seventh and eighth.

#### Overall results:

1	472 Jake Sutton	Frensham Pond
2	657 Mark Wilkins	Chipstead
3	500 Henry Jaggers	Staunton Harold
4	188 Simon Thompson	Crawley Mariners
5	573 Alex Reeve	ICI, Slough
6	518 Robin Ballam	Crawley Mariners
1st Junior	472 Jake Sutton	Frensham Pond
1st Lady	178 Karen O'Brien	Fishers Green
Fishers Green	Trophy:	
	178 Karen O'Brien	Fishers Green

# MERTHYR TYDFIL OPEN

#### 6th May 1995

The weather for this, the second event in the Western Region, was the exact opposite of that two weeks ago at Shearwater. We had blazing sunshine on the hottest weekend of the year so far with very, very light airs from numerous directions. By 11.30 the wind had filled in enough for us to start the first race.

In this Errol Edwards immediately took the lead and kept it from Mark Govier despite the following boats gaining a little each run.

The second race was a little more interesting with a very close start allowing Paul Govier to round the windward mark first. He was soon overtaken by Errol Edwards and Richard Smallwood; Errol taking the honours of the second race and the event.

The third race saw Richard Smallwood taking a clear lead quite early and keeping it from Paul Govier who finished only 5 seconds behind.

#### Overall results:

1	334	Errol Edwards	Chew Valley
2	565	Richard Smallwood	Shearwater
3	419	Paul Govier	Merthyr Tydfil
4	460	Mark Govier	Merthyr Tydfil
5	650	Philip Hossell	Evesham
6	420	Roger Edwards	Merthyr Tydfil

Mark Govier (Comet 460)



Redditch Sailing Club's annual Comet open meeting was held on 13th May 1995. In bright, cold weather with variable winds between force 2 and 5, the racing was close, with the event being decided on the last of the three races.

The first race was won by Henry Jaggers with W Edwards second. The second race was won by the overall winner, Errol Edwards with Brian Hardy second. The final race had Errol stamp his authority, winning again with Mark Govier second.

#### Overall results:

1	334	Errol Edwards	Chew Valley
2	437	Brian Hardy	Weaver
3	500	Henry Jaggers	Staunton Harold
4	650	Philip Hossell	Evesham
5	633	W. Edwards	Chester
6	460	Mark Govier	Merthyr Tydfil

### FLUID FLOW PART 2 CIRCULATION AND SAIL 'LIFT'

#### Some simple explanations of sail 'lift'

In books on sailing you will find a variety of explanations of why a sail can give 'lift' (the word 'lift' is used because much of the early study was related to aircraft wings). Some books explain it by the sail deflecting the wind, the lift being the reaction to the force needed to do this. Others say that the air has to go a longer distance around the leeward side than around the windward side and then invoke Bernoulli's theorem to infer a lower pressure on the leeward side.

Neither of these explanations are satisfactory, there is a lot of aerodynamics needed to explain why the air is deflected, and the distances along the two sides of the sail are blatantly the same! I do not blame authors for using these simple notions, for the vast majority of sailors will readily accept that sails do provide lift, and knowing more about it will not improve their sailing achievements much. Unless they are intrigued by the subject, they are wise to ignore it and get on with improving their sailing skill.

#### Circulation as the cause of lift

Continuing now only for those who <u>are</u> intrigued by the subject, let me first simplify things by considering for the moment only a sail of constant width (ie like our dagger board, not triangular like the Comet sail) and of a great length (for example an oar).

About 100 years ago the best minds thinking about this found that their calculations, based on very reasonable properties of air, gave precisely zero lift and precisely zero drag! However, in this theory it was found that the speed at the trailing edge (leech) was infinite, so their assumptions on what air was like were not good enough there. They could get out of the difficulty by adding a rotation to the flow, of such an amount that the air came off the leech smoothly from both sides and joined up again. This rotation they called 'circulation'.

This was found to be exactly what the air did do and the flow has both the simple features mentioned earlier, deflecting the direction of the wind and having a difference in distance on the two sides of the sail (because where we start from, where the flow divides, is <u>not</u> at the sail luff, but to windward of it!).

#### Properties of vortices

Now the circulation is a rotating flow and a rotating flow is a vortex flow. With their same properties of air, the theoreticians of long ago found that vortices had some very simple and important properties, mostly borne out in practise. In their theory, vortices, unless attached to a surface, move along with the air and never die away. They also either have to terminate on a surface (like a tornado wind does) or be complete 'vortex rings' (smoke rings are vortex rings). We now know that air has viscosity, which they didn't consider. You don't know what viscosity is? Well, an example is car engine oil, you would call it "thick" if it has a large viscosity. There are numbers on the can giving

you the viscosity, and I believe that in the early days these numbers were simply the time taken for a specified amount of the oil to come out of a tin with a hole in the bottom! Water and air have much less viscosity than engine oil, but enough to cause vortices to die away, albeit quite slowly. Because the slowing effect is at the outside edges of the vortices, the bigger the vortex, the longer it lasts.

#### The starting vortex

Practical experiments at about the turn of the century showed how the circulation is set up. Theoretically, if vortices never die away, then a single vortex by itself cannot be made! But two vortices, rotating at the same speed and opposite directions have zero total "vorticity" between them, and this is exactly what happens. It was found that when the sail first moves, or the wind first starts, two equal and opposite vortices are formed, one around the sail (the circulation), causing the lift, and the other at the leech which moves away from the sail and is left behind. The latter is called the 'starting vortex'.

#### Tip vortices

Considering now the more complex situation of a shorter sail (but still one the same width all along), the difficulty of vortices always ending on a surface or being in a ring is removed because the vortex does form a ring, part along the sail, part falling behind (the starting vortex) and these are joined by two more vortices from the top and bottom of the sail to the two ends of the starting vortex. So we have a vortex 'ring' shaped in a rectangle which is getting longer and longer. The two vortices from the ends of the sail are called, when applied to aircraft, 'tip vortices'. The energy required to maintain the tip vortices appears as drag, called 'induced drag' or 'drag-due-to-lift'. With our triangular Comet sail, 'tip' vortices still occur at the head and foot, the flow is even more complex, but the general principles are the same.

Sometimes tip vortices can be seen as lines trailing behind the wing tips of an aircraft flying fast and low. The rotating air has at its centre reduced pressure (not Bernoulli this time, but 'centrifugal force') and moisture in the air condenses there. When jumbo-jets land they set up very powerful tip vortices and they indeed persist for a long time, many minutes. This has led to strict rules delaying light aircraft coming in to land behind them.

Wind shadow So, every time our sail changes its lift, ie when we sheet in or out, or change heading on a beat, or the wind changes its speed or direction, vortices rotating in one direction or the other come off the leech and go away to annoy our competitors. They, and the tip vortices (and other turbulence as well) of course turn into the well-known wind shadow. We know that this extends for some distance to leeward (you remember big vortices die away slowly). The size of such vortices off a Comet sail will no doubt sometimes be about the size of a full roll of carpet!

#### An experiment on sail 'lift'

Don't take my word for it, you might like to try an experiment

using water in the bath. Forget the foam bottle just for once, switch the light on and move something (eg your hand) watching the shadow on the bottom of the bath. You will see, around the shadow, some indication of what the flow is like and possibly also some dark spots. The spots show where vortices are, because when the water rotates it makes a dip in the centre which acts like a lens. You can curve your hand into a "sail" shape, and perhaps see the starting vortex. This you remember is created the instant you move your hand but is left behind.

Further reading

All I have said above is 'old hat' to the aerodynamicist. I have done no research, merely read about in my studies many years ago. Much of the early research was done by two authors. In 1907, Lanchester published his theory of circulation as the cause of lift and tip vortices as the cause of induced drag. Then Prandtl did much practical work photographing the flows I have described (and much more besides). My textbook on this is dated 1934.

There is a more recent and easy-to-read article by Arvel Gentry on this sort of thing you might like to look at (see reference). His credentials are that he is not only an experienced sailor but a research aerodynamicist as well. Enjoy it!

Alan Browning (Comet 361)

Reference:

Arvel Gentry "How a sail gives lift". In "The best of sail trim" (Adlard Coles, paperback, 1989) page 256

# ANOTHER KNOT

Another instance has occurred when one end of the horse rope has come undone during a race. This time it was to one of the leading group of boats in a race during the Inland Championships, and it probably cost him at least one place in that race.

No doubt there are many ways to avoid this happening, for example binding the free ends of the rope, but when visiting Henry Jaggers for the "Talking to - - - " article he showed us his method, which looks as though it will never, ever come undone.

Henry's rope is long and is passed through one eye and then the other to form a complete loop and the ends are then joined. The knot there is a bowline loop in one end and the other end is attached to the loop by two hitches. The excess rope is tucked away and tape wound round as an additional safeguard.

In use, the mainsheet block is attached to only one of the cords, and the other passes below the tiller. The photograph shows how neat it looks.

Alan Browning (Comet 361)



# **Comet Class Association**

Affiliated to the Royal Yachting Association