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PERIHELION

Newsletter 12

Comet Class Association

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NEWSLETTER NUMBER 12

AUTUMN 1989

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FROM THE CHAIRMAN

Looking back at the previous issue I'm glad to see that I was wrong again in that, instead of my gloomy prediction of a poor summer, we've had the most superb summer for years with the noted exception of the day at Aylesbury. Funnily enough, even with the prolonged hot spell we seem to have had plenty of wind for sailing particularly on the Saturday at Shoreham!

As the Secretary notes elsewhere, the attendances at the Open meetings have been a little disappointing, with the honourable exception of Chipstead, and specifically at Shoreham where the entry was lower than the previous Nationals at Eastbourne.

Shoreham proved to be an excellent sailing venue with good boat berthing, sheltered harbour launching and excellent sea sailing courses on the Sunday with the wind offshore. On arrival Saturday morning, it was blowing extremely hard with a large sea running with wind against tide and we asked the Club to set a harbour course although conditions were little easier with large wind shifts through the harbour buildings. Our thanks go to the members of Shoreham S.C. who worked extremely hard to give us good sailing and a pleasant barbecue and folk evening on the Saturday.

Organising these events is hard work both for the Clubs and the Association and we will only be able to maintain such a good programme for the benefit of members if the events are supported fully. It may be easier to stay and sail at your own club and not travel some considerable distances but I can guarantee you will both enjoy it and improve your sailing if you make the effort.

I hope to see some new faces at Gunfleet and Wilsonian in September and Bewl in October before the grand finale of Kingsmead where there will be a training day on the Saturday prior to the Open on Sunday 22nd October, details from Neil Beaton.

Our thanks are due to Kingsmead SC and its Commodore (Henry Jaggers!) for allowing us to hold the AGM in the Clubhouse at 6pm on the Saturday evening and the AGM Notice and Agenda is included in this Newsletter. Please submit any proposals or agenda items to the Secretary as soon as possible.

I would like to thank the new contributors to this issue of Perehelion, particularly Helen Cowern for the shore-side view of the Nationals (I'm sure your arm wasn't twisted too hard!) and John Finch for his first impressions of sailing "FLAME" - we hope you get many happy hours sailing her upright at Hampton Pier.

It all seems a very long time ago when I first saw a Comet sailing off the beach at Gunfleet and thought that it would be a nice boat just for holiday sailing! Perhaps it was a tactical error to offer a Nationals at Aylesbury Sailing Club to Andrew Simmons and even more so to fluke a win - little did I know then that it would lead to the position of Class Association Chairman!

Since then the class has grown rapidly and gone from strength to strength with old aquaintances renewed and new friends made as our class has become well established, particularly in the South East but, increasingly, in other areas as well.

It does all take a surprising amount of work and, as I said at the last AGM, I will not be able to continue in the position for another year. I do feel strongly that a fresh face is needed to give new impetus to the Association and I hope that volunteers for the positions of Chairman and Newsletter Editor will be found to be forthcoming.

I know that there are hackneyed phrases about "pressed men" and "Your Class Needs You!" but, if you really feel you would like to assist the future success of the Comet Class, please let me know and, better still, come and present yourself at the Annual General Meeting in October.

I can guarantee that you will get enjoyment and satisfaction from your future efforts!

Keith Lamdin.

EXCUSES, EXCUSES!

Please SIR.....

As Class Secretary it is one of my more onerous tasks to organise the sailing programme, with particular emphasis on the National Championships, and 1989 was no exception.

I live 18 miles from Shoreham S.C. and have enjoyed many big events there over the past sixteen years. For those who do not know, this club, previously known as Sussex Motor Yacht Club, was a mecca for top class helms. Large fleets of Tornado's, Hornets and Merlins packed the dinghy park - alas, this specialisation took its toll and today the current small membership is picking up the pieces. A small menagerie of boats litter the dinghy park and the clubhouse needs extensive repairs.

So, this was the venue for the 1989 Comet Nationals and I was looking forward to the event!

Then my daughter, Wendy, was selected to sail in the IYRU Womens World sailing championships to be held in Majorca at the end of June..... what could I do?

Well, what would you do? What was the choice? A delapidated Shoreham in a cool, wet England or a superb Club Nautico in El Arenal with swimming pool and luxury restaurants plus guaranteed temperatures in the 30's.

So, you guessed..... you did not see Steve at Shoreham 'cos he was EXCUSED!

Anon.

ANNUAL GENERAL MEETING

KINGSMEAD SAILING CLUB AT 6.00 P.M. SATURDAY 21ST OCTOBER 1989

AGENDA:

1. APOLOGIES FOR ABSENCE.
2. MINUTES OF PREVIOUS AGM.
3. MATTERS ARISING.
4. SECRETARYS REPORT.
5. TREASURERS REPORT.
6. CHAIRMANS ADDRESS.
7. ELECTION OF OFFICERS.
8. ELECTION OF COMMITTEE MEMBERS.
9. ANY OTHER BUSINESS.

BUFFET REFRESHMENTS AVAILABLE.

Note that any motion to be put to the AGM shall be proposed by two full members and shall be submitted to the Secretary in writing prior to the meeting.

FROM A NEW OWNER

As a dinghy sailor of mature years, if little expertise, I have had a number of boats starting with a National 12, in the days when 40lb steel plates were the order of the day and, despite the advent of 'terylene' sails, 'cottons' were not an unusual sight. With the added weight of the years I had worked down to a Topper, which proved somewhat uncomfortable for a frame that was becoming less resiliant and then, singlehanded Mirrors which boosted the confidence in a blow but proved to be rather a drag when the boat speed was less than that of the tide!

I became mildly interested in Comets when Jim, one of our veteran members, bought one about a year ago and held forth on the merits of its comfort and quality. After a period of light winds this year I became disenchanted with the Mirror, having to retire several times in the General Handicap races before the officials fell asleep! After looking at the very informative Comet blurb I was practically sold on the idea, but when a FOUNDER MEMBER of the club, Fred, came back from holiday having ordered one, I had to order Comet number 325, later to be known as "FLAME".

This was the signal for an immediate increase in wind speed. As one Mirror sailor said after a race, "it only needed the wind to go up by another force to blow the Toppers all flat and the Mirrors would have won"!

At last, after flogging the Mirror, with the odd tinge of regret and some misgivings, "Flame" arrived, delivered by Margaret Hylton within minutes of the appointed time. It was really more of a Comet seminar than a delivery, including washing, polishing and rigging the boat as well as such tips as tying a knot in the mainsheet to prevent the boom going out too far on a run. Having read the very detailed instructions and absorbed some of them, I was ready to go.

According to the manual, the first sail should be attempted in a light wind and so, when I arrived for the points race, it was blowing about Force 5! The sail looked rather large and so I put a couple of reefs in it. All went well at the start except I seemed to be beating 10 degrees closer to the wind than anyone else and I kept meeting the same Mirror which was sailing twice the distance in the time. No problems at the gybe mark, but a bit rocky on the dead run that followed it and so I put the plate down but the wind got behind the sail and the angle of rock reached 90 degrees! Must have the knot in the wrong place!

Having parted company with the boat I swam back to find the centre plate a long way above the water and very new and shiny. After slipping off a few times a friendly rescue boat lifted the mast and I managed to get hold of all those pretty ropes just behind the mast to pull myself in. This lead to an immediate modification; tying a rope on each side between the mast and the fixtures at each end of the rope horse.

Next race, still Force 5, but I couldn't keep reefing, a man has to have some pride. So, with the assistance of our star Laser jockey, I pulled every rope in sight until, as he said, the sail was swinging like a barn door and couldn't possibly give any trouble.

The first beat was not a success but I did reach the windward mark without mishap. As I eased of the mainsheet to turn onto a broad reach I suddenly found myself swimming again but, with the aid of my new mod, I was soon up again and set off on a screaming plane. This was very stimulating until it came to me that there was not much of the boat in the water and this could cause problems at the gybe mark. The fact that it was decorated with a couple of upended Toppers reinforced this view, so I was not surprised when my Comet joined them. Having capsized more in two races than I had in the previous four years I decided to retire. Just before I landed I decided to do one more gybe to get the hang of it before I went in and to everone's ill-concealed delight I went in, instantly!

Technique has improved, or the wind has dropped, since then. Fred and I duel happily with each other and the Pacer fleet; sailing has become much more interesting.

Should any of you experts wish to see how badly a Comet can be sailed you could join Fred, Jim and me and a good few other people in our General Handicap Open Regatta at Hampton Pier, Herne Bay, on 30th September and 1st October.

Ring me on Canterbury 712246 for details.

John Finch.

SECRETARY'S NOTES

My thanks to those of you who completed the Class Association questionnaire being 50% of the members. The figures have provided a good guide for our host clubs when preparing for their events and to your Committee in considering plans for forthcoming years.

Attendance at most Opens has fallen this year but the size and variety of the programme, together with the increasing size of some home fleets, has probably contributed to this trend.

We intend to provide a similar number of open meetings and training days next year and any views you may have on this subject will be much appreciated by any committee member.

Plans are already underway for a three day 1990 Nationals at Ardleigh Reservoir in Essex together with a tidal championship at Weston S.C. near Southampton. Looking further ahead we are talking to Brightlingsea for a championship in 1991.

If you have not yet supported any of our class activities this year then please make the effort before the end of 1989 - see you on the water!

Steve Kibble.

AYLESBURY S.C. OPEN MEETING

I suppose it had to happen but, having spent a generally warm, sunny and light wind week at the Graduate Nationals in the last week of July, we woke on Sunday 30th July to find the rain lashing down with a cold, strong northwesterly wind. After the best summer for years it really was a shame but, when I arrived at the entrance to the water, a few hardy souls had already turned up for an exciting day's sailing at Weston Turville Reservoir

I'm always grateful for those sailors who drive a long distance to support our Open meeting, particularly when they do not expect to scale the high bank! This year the visitors excelled by coming from as far afield as Doncaster, Bristol, Redditch, Downham Market in Norfolk and, inevitably and ODDLY ENOUGH, Bryan Hardy completed the trek from Appleton in Cheshire.

It was hard and miserable work getting the boats up and over the bank, rigged and sailed over to the club side but, at least, there was a hot drink waiting and soon a keen fleet of 17 Comets, with 12 visitors, was ready for the race briefing. Little did they know the pleasures still awaiting them!

I have always asked Brian Percival, a Aylesbury member of long standing and great seniority, to be Race Officer on the basis of his common-sense and consideration to the competitors. What went wrong this year I don't know except that he must have got out of bed on the wrong side! Well, I ask you! 8 laps and 4 gybes per lap with a gusty wind rising to force 5 in the rain squalls!

Great spectator sport from the bank though as the first race began with Damon Perrin, Andrew Pearce and Colin Wilcox getting clear on the long beat and being chased by Henry Jaggers, Keith Lamdin and James Withall. Soon there were upturned hulls of many colours spread around the water at every gybe and the phrase "rolling down the run" took on new dimensions of artistry.

Pearce and Perrin swopped first place regularly until the finish when, in a momentary aberration, Pearce missed the line and dropped to fourth behind Wilcox and Withall.

Fortified by the traditional Aylesbury lunch the fleet took the water for the second race under clearing skies but with the wind still blowing strongly. Perrin quickly got clear followed by Pearce and Jaggers at intervals with Withall gaining places to finish fourth and Tony Best and Wilcox disputing the minor places.

With the overall result settled and the wind easing slightly, Perrin and Pearce assumed their normal places followed by Best, Jaggers and Wilcox.

These results produced a three-way tie for third place which was resolved in favour of Jaggers from Wilcox and Withall with Tony Best improving race by race to be sixth overall.

After a well-earned tea and the prize giving held in pleasant late afternoon sunshine, including well deserved awards to the race officers for their part in the entertainment, it only remained to sail across the lake and load up the boats prior to the journey home.

My thanks to all who made this such a successful meeting.

Keith Lamdin.

SAILING YOUR COMET - PART 5

In previous articles we have looked at the techniques of sailing the Comet on the wind, off the wind and in the varying conditions of tidal waves. In this final article of the series I will cover the techniques necessary to improve boat handling in all conditions whilst tacking and gybing. In addition, I will look at the problems of avoiding and recovering from capsize situations working on the principle that prevention is better than cure!

The functions of tacking, gybing and capsize prevention place a premium on our knowledge of how the Comet works and so I will firstly recap on the basic theory which affects the handling of the boat and which determines the techniques and actions required for precise boat handling and crisis management.

The three elements which affect the way the boat works on any point of sailing are:-

the forces of thrust and heel created by the sail,
the length of lever created by the centre-board position and
the inertial effects of luffing or bearing away.

SAIL FORCES: The forces generated by the sail create varying effects depending on whether the boat is upright, heeled or has a degree of twist in the sail.

With the boat upright the centre of effort of sail forces acts towards the bottom of the sail with thrust acting forwards and heel acting horizontally across the boat. The extent of the heeling forces created by the sail is controlled by the sail shape and the lever length to the lateral resistance of the centreboard, (fig 1).

The exact direction of thrust and heel forces depends on the angle of the sail to the centreline of the boat and moves forward as the sail is eased. Ultimately, as the boom is eased forward of the mast, the functions of the thrust and heel forces reverse and a heeling effect is created acting to the windward side of the mast, (fig 2). The effect is exaggerated by any degree of twist in the sail which appears at the top of the sail and which, by virtue of the length of the lever to the centreboard, has a considerable effect on the boat, (fig 3).

Finally, if the boat is heeling, the forces generated by the sail act at an angle downwards towards the water causing the boat to be pushed down into the water as well as being heeled in the vertical direction. In the case of the Comet, this effect is stopped by the round bilge hull shape and a point of equilibrium is reached where the buoyancy of the boat exactly balances the downward component of heel forces, (fig 4). As the Comet heels there is a point of angle where the boat becomes remarkably stable and will remain balanced with the helm's weight counteracting the vertical heel and the boat's buoyancy countering the downward push until one or other effect predominates and the boat either comes upright or capsizes.

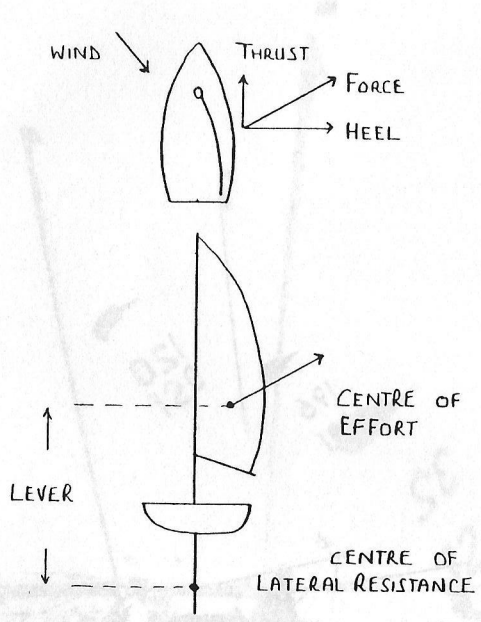
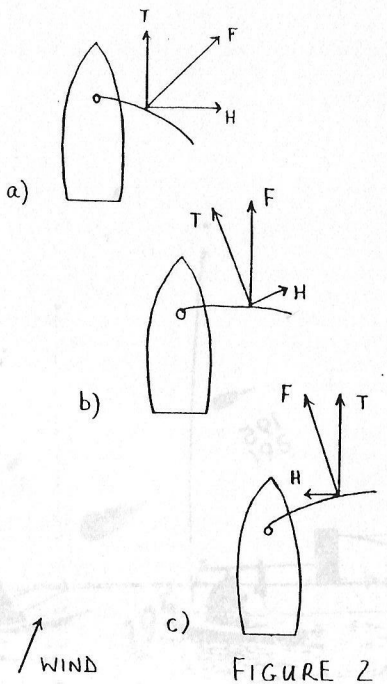


FIGURE 1



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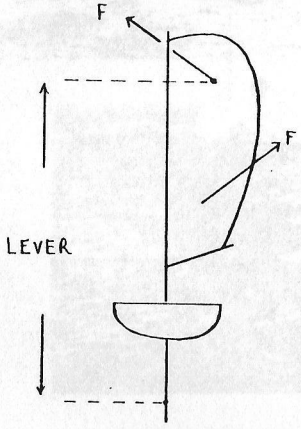


FIGURE 3

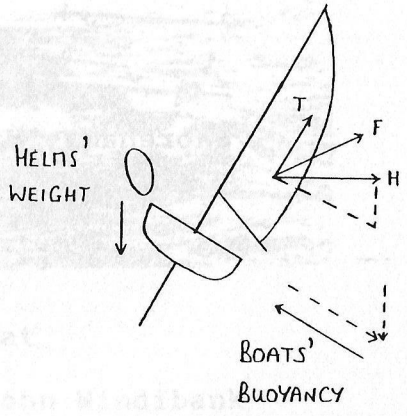
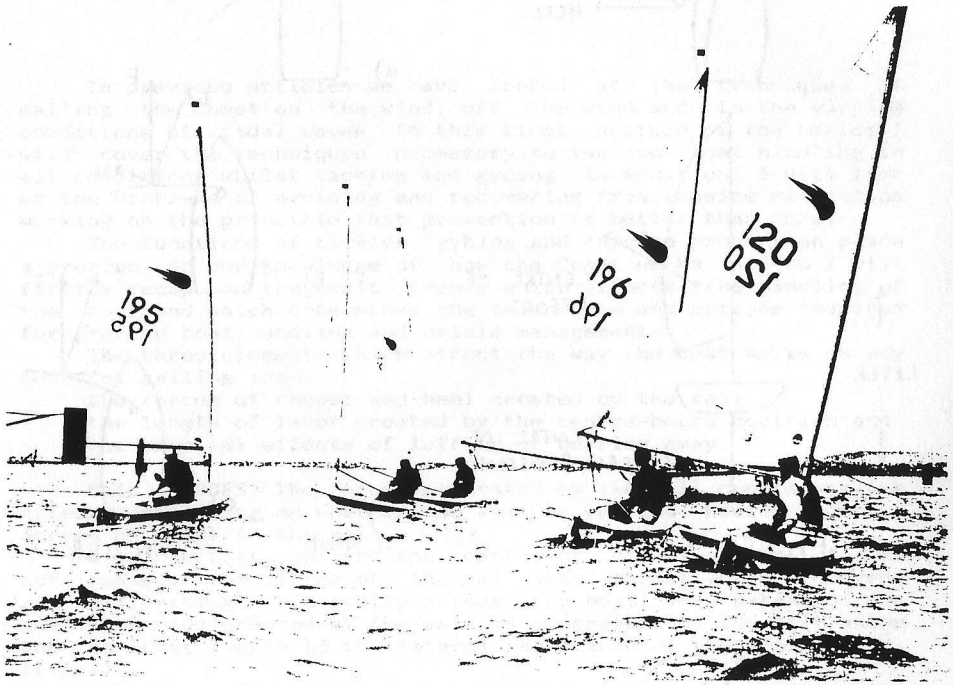
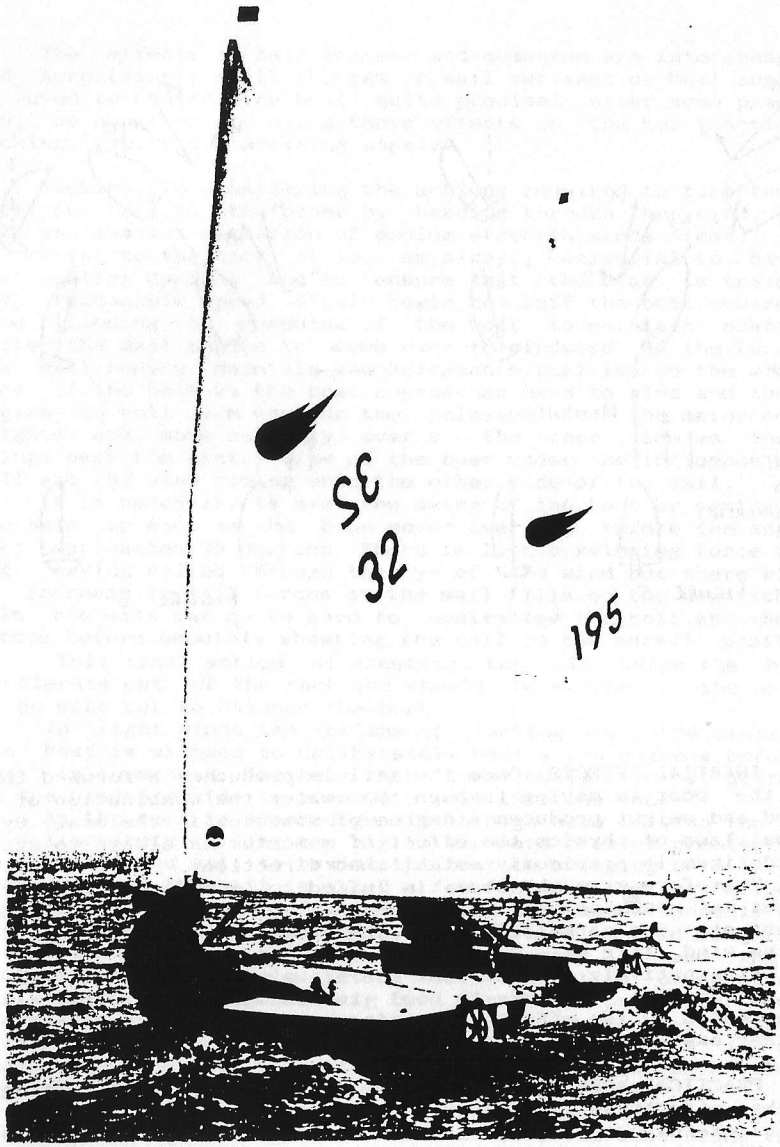


FIGURE 4



Shoreham - Waiting for the start



Up the beat

Robin Ballam and John Windibank

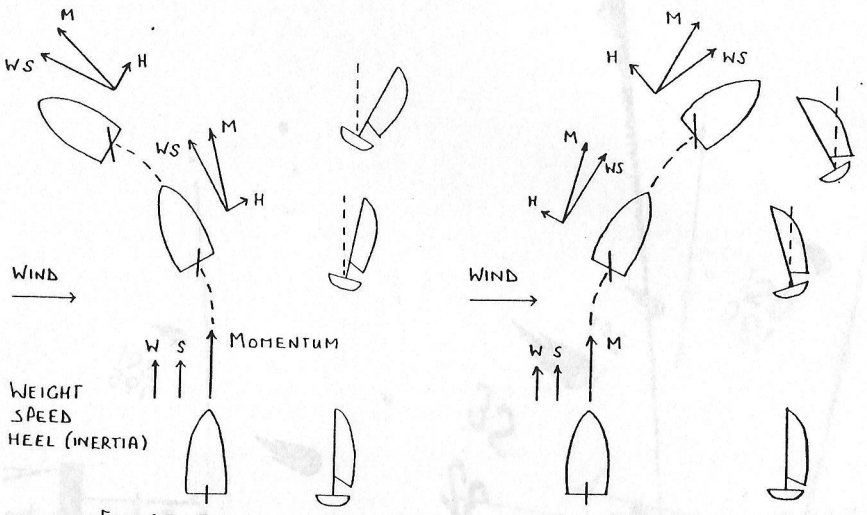


FIGURE 5

FIGURE 6

INERTIAL EFFECTS: Once the sail is producing a forward thrust and the boat is moving through the water the combination of hull speed and weight produces a degree of momentum in the boat. By the normal laws of physics the effect of momentum is always to attempt to continue in previously established direction.

Therefore, as the boat is luffed to windward, the inertial effect of momentum will cause the boat to heel to leeward and to accentuate the normal effect of the sail as the boat comes closer on the wind, (fig 5).

Alternatively, as the boat bears away from the wind, the boat has an inertial tendancy to heel to windward which will also be accentuated by the effect of easing the sail as the boat heads further away from the wind, (fig 6).

PRACTICAL APPLICATION: As a means of really understanding all of the effects outlined above and their interaction it is a very useful exercise to attempt to sail the boat without a rudder.

With the centreboard set half down, set a course with the wind abeam and the sail eased in order for the tell-tales to be streaming. Now slowly sheet the main in and the boat will begin to head into the wind as the centre of effort moves relatively aft and, conversely, if the sail is now eased the boat will bear away to the original course. Alternatively, with the sail set in one basic position, by letting the boat heel slightly to leeward, the effect of inertia will cause the boat to slowly luff up into the wind, while heeling the boat to windward will cause the boat to bear away from the wind.

The effects of sail forces and momentum are interchangeable and surprisingly small changes in sail settings or heel angle can be used to control the boat quite precisely after some practise. Now, we can look at using these effects in the key functions of tacking, gybing and avoiding capsize.

TACKING: In considering the actions required to take the boat from one tack to the other by heading through the wind, I will take the easiest situation of medium strength winds first.

Prior to the tack it is, as always, essential to have the boat sailing upright and to ensure that the boat is travelling with reasonable speed. Slowly begin to luff the boat towards the wind allowing the momentum of the boat to maintain boat speed while the mast begins to come over to windward as the forces in the sail reduce. Maintain the helmsman's position on the windward side of the boat as the boat approaches head to wind and the boat begins to roll over towards the helmsman. Ease the mainsheet out slightly and move smoothly over to the other side as the boom swings over the centre line of the boat under the influence of the roll and the wind coming onto the other side of the sail.

It is necessary to meet the swing of the boat by centralising the helm as soon as the boom moves over and before the angle of wake approaches 90 degrees. There is little swinging force in the rig having sailed through the eye of the wind but there will be an increase in sail forces as the sail fills on the new tack. The helm now sits out quite hard to neutralise the roll and the sail forces before smoothly sheeting the sail to the normal position.

This final action of sheeting the sail helps the boat to accelerate out of the tack and should be matched to the helmsman as he sits out to balance the boat.

In light winds the actions of tacking are quite similar but the boat is allowed to deliberately heel a few degrees before the tack is commenced. The helm then consciously sits out quite hard on the windward side to promote a roll into the tack.

As the boat is steered gently through head to wind the effect of deliberately rolling the rig to windward creates greater forces in the mast and sail to assist the boat in swinging onto the other tack. Again, the sail is eased a few feet and the boat allowed to pass well through the wind before the helm moves smoothly across the boat to the new windward side. The boat is held slightly off the wind while the sail is gently sheeted in and the roll neutralised by the helm sitting out. The action of sheeting the sail and of bringing the rig back upright helps to fan the sail across the wind and assists in establishing the sail forces to accelerate the boat out of the tack. Once the boat is moving again then the helm will slowly luff the boat to be as close as possible to the wind for the light wind conditions.

However, in strong winds, rather than attempting to roll the boat round, it is better and safer to sail the boat round through the tack.

The most important thing is to ensure that the boat is always upright and moving quickly before attempting the tack. If this means easing the main slightly and bearing away a touch then do so in order to create the necessary momentum. With this criteria established then ease the sheet slightly and smoothly luff the boat through the wind towards the new tack. As the wind forces reduce the pressure on the sail and the boat comes even further

upright, move quickly and smoothly across the boat and under the boom as it centralises. Stop the swing of the bow of the boat well before the sail fills on the new tack and ensure that you are sitting well out on the new windward side before the strong wind forces begin to heel the boat.

At this point, the original momentum of the boat will largely be lost and now the helm can bear away slightly to fill the sail, which is still slightly eased, and to generate boat speed on the new tack. Once the boat is moving and the helm is holding the boat upright then the sail can be slowly sheeted in and the boat pointed as high as possible on the new tack.

Tacking is a skill which needs practise to perfect but it is relatively easy in the Comet which is so responsive to small helm movements and weight movements.

The most common faults I see in watching people tacking the Comet are:-

1. Starting with the boat heeling too much which is then made worse by the inertia effects of luffing sharply towards the wind.
2. Swinging the boat too far past the wind which creates a sudden heeling effect on the new tack as the sail fills.
3. In conjunction with 2, being too slow to move across the boat in the stronger winds in order to balance the boat out of the tack.

I find that, as I tack, I spread my weight with my feet placed as widely as possible in the floor of the cockpit. Then, as the boom swings over and I meet the turn by centralising the helm, I can push off one foot to move out as far as possible on the new windward deck before settling with my feet under the toestrap.

GYBING: In many ways, gybing is the same as tacking but in reverse and the basic principles still apply. The action of easing the sheet prior to a tack and then bringing it in on the new tack to establish the sail forces is now the opposite.

On starting the gybe, slowly sheet the main in a few feet while also keeping the boat upright. Then, as the boom swings over in the gybe, allow the sheet to ease back out to the correct position which both takes some of the force out of the boom as it gybes and also begins to allow the sail to be set in the correct position for the new reach or run.

Obviously, with the sail remaining rather full of wind as it gybes away from the wind rather than tacking into the wind, there is generally more force in the swing of the rig during a gybe than a tack. This makes it essential to have the boat well balanced and upright during the gybe and to make the movements of the helm's weight both smooth and quick during the gybe.

To help take some of the sting and the pace out of the gybe it is essential to watch the movement of the boom and to steer deliberately against the swing of the gybe once the boat is about to sail directly downwind. If the swing of the boat is unchecked then the filling of the sail after the gybe together with the inertia effects of the change of course combine to create a force acting across the boat and causing the characteristic broach so often seen on the new course immediately after a gybe. This can be avoided almost completely by steering quite sharply against the direction of the gybe such that the new inertial effects act in opposition to the sail effects and cancel out. The boat will then be steering more directly downwind, the rig forces will be more fore and aft and the helm can establish his new position on the other side of the boat in a balanced way before resuming the course required, (fig 7).

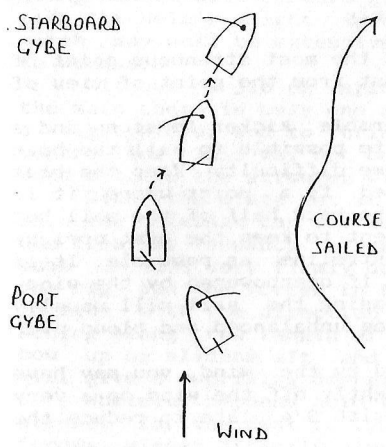


FIGURE 7

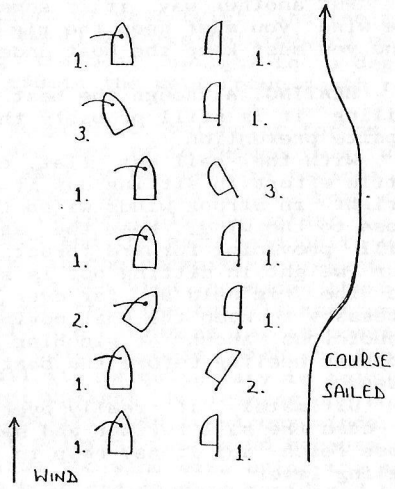


FIGURE 8

Again, in watching the way in which people gybe the Comet, the most obvious faults are:-

1. Gybing with the boom initially too far out and not being able to check the swing of the sail.
2. Swinging the boat too far round through the gybe and then broaching on the new course.
3. Gybing with either too little or too much centre-board. Whereas, on a tack, the plate must always be left full down for maximum efficiency, on a gybe no more than half plate is required for adequate boat control due to the higher boat speed which is maintained during the gybe. If more than half plate is used then there is a possibility of the boat tripping over the plate as the hull turns in the water whilst with little or no plate there is a lack of stability as the hull rolls in the water through the gybe.

Having now looked at the techniques required to improve the balance and control of tacking and gybing, I will finally consider the techniques of preventing capsizes in the Comet. It should be said that the Comet with its beam and round bilge hull shape carried well out from the centre-line is inherently a stable boat. However, with its light hull weight and single sail, not balanced by a jib, it will always be a lively boat to sail in a blow and particularly so downwind.

CAPSIZE PREVENTION: In general, capsize prevention is a matter of balance between the various forces created in sailing the boat and the position of the helmsman and the helm. It is all summarised in the requirement of keeping the boat UPRIGHT and if that is the only lesson learnt then these articles are worthwhile.

Put another way, it is sometimes said that in sailing against the wind you must keep the rig over the boat and in sailing down wind you must keep the boat under the rig.

BEATING: Although the beat may be the most strenuous point of sailing it is still probably the safest from the point of view of capsize prevention.

With the sail set flat, considerable kicker tension and a little effort in sitting out it is quite possible to sail the boat upright in strong winds without extreme difficulty. Keep the boat close to the wind, keep the sail eased to a point where it is still providing forward thrust from the back half of the sail but your weight in sitting out is sufficient to keep the boat upright and the rig held as far over the centreline as possible. It is necessary to keep the boat moving but, if overpowered by the wind, a judicious amount of pinching and easing the sail will usually stop any heeling before the boat becomes unbalanced and blown over sideways.

Ultimately, if really overpowered by the wind, you may have to ease the sail further and sail slightly off the wind on a very close fetch and it may help to sail with 3/4 plate to reduce the heeling lever.

At least, a capsize in these conditions will be to leeward leaving you sitting on the high and dry side before attempting to right the boat and sail on. It is most unusual to capsize into the wind, against the heeling forces, in these conditions but should a sudden lull occur and the boat fall in to windward on top of you, a sudden luff into wind will cause an inertia effect sufficient to hold the boat upright while you scramble back on the toestraps into the cockpit and balance the boat.

REACHING: In much the same way as beating there is no real problem in the beam reaching course as the helm's weight can be used quite easily to balance the reduced heeling forces of the sail. The heeling lever is further reduced by raising the centre plate slightly and the helm sits further back in the widest part of the cockpit giving a maximum effect to his weight. It is important to keep the bow of the boat up so that there is no real tendancy for the bow to dig in and trip the boat up and a firm hand is needed on the tiller to prevent any sudden broaching which will add to the heeling forces through inertia.

Any tendancy to heel can be counteracted by easing the sail slightly and then bearing away a little in order to balance the boat by having the hull under the rig. Once the boat is balanced and any tendancy for excessive heeling controlled then the boat can be headed back slightly into the wind to the required course.

It is quite unusual to capsize on a reach through basically being blown over and, like the beat, at least you are on the high side of the boat and it is relatively easy to recover. One way in which a broach can be worsened is if a sudden gust causes the boat to heel and the boom end, not being eased quickly enough, then digs into the water. Once this has happened the sail cannot be eased any further and the boat pivots towards the wind around the boom end in the water and quickly heels further over towards capsize.

The basic fault is in not easing the sail quickly enough when the gust hits and this can be counteracted by a short and sudden move to bear away which, through the effects of momentum, will heel the boat to windward and lift the boom end out of the water.

Now the sail can be eased to remove the excess forces and the boat headed back up to the original course.

RUNNING: Of course, the sailing leg which causes most problems in the stronger winds is the run or very broad reach. The reason is quite simple given the principles of boat balance. At the top of the main the combination of sail twist and the sail being eased well forward gives a heeling force to windward which aids the helm's weight in keeping the boat upright to a degree which may well be excessive and causes the well-known death roll to windward!

Without a jib or spinnaker to provide balancing forces for the main there is only one answer and that is to reduce twist with a tight kicker and to bring the sail quite well in towards the centre line. This may not be the fastest way to sail the boat down wind but, in the stronger winds, it is certainly the safest.

With the plate set at half down and the main held quite well in, the helmsman can sit well back in the cockpit to prevent the bow from any tendancy to nose dive. As the wind increases the boat must be held very firmly downwind so that the hull is kept under the rig and the forces in the sail are acting as far as possible in line with the direction of the boat's course. With the forces acting along the length of the hull it is quite easy to hold the bow up by sliding aft and the mast upright by leaning out which will give a suprising degree of stability even in strong winds.

Whatever happens hold the boat pointing down wind because any attempt for the boat to luff towards the wind will bring the sail forces almost directly across the boat and cause a rapid and high speed broach.

If, in attempting to sail directly downwind, you feel a slight heel to windward then a quick luff will push the mast back upright over you and, conversely, if the boat heels to leeward then bearing away briefly will counteract the movement. It is a balancing act which takes concentration and you must anticipate the helm movements so that they are all very small and the boat does not get out of balance in either direction, (fig 8).

CRISIS MANAGEMENT: Sailing the Comet need not become a crisis if you follow the basic principles of balance:-

1. Set the sail to control the forces generated.
2. Set the centre plate correctly.
3. Use the mainsheet continuously to control the angle of the sail forces to the centreline of the boat.
4. Use your weight out on the toestraps to balance the sail.
5. Use the helm to counteract the movements of the boat and keep the rig over the hull where you can control it.

DO'S AND DON'TS:

1. Do sail the boat upright.
2. Do ease the sail before a gust hits the boat.
3. Do not luff the boat if it is already heeling to leeward.
4. Do not, ever, bear away if the boat is already heeling to windward.
5. Do not let the sail out forward of the mast when sailing down wind in strong conditions.
6. Do use strong kicker tension in strong winds.

WHEN ALL ELSE FAILS!: Let go of the helm and the mainsheet and the boat will always come upright and head to wind giving you the opportunity to catch your breath and think about how you lost your balance!

COMET NATIONAL CHAMPIONSHIP 1989

At 5.00 am on Saturday 1st July, it was raining in Wednesfield. Not a lot of people know that!

It was 5.30 by the time we actually set out on our great trek south which started on the M54 and ended with a lengthy tour of Shoreham as Barrie had forgotten the map.

The first race was at 11.30 but, as we had arrived halfway through the briefing, Barrie decided to give it a miss. After seeing the swell in the harbour mouth like the Yangtze-Kiang Bore, one or two others remained onshore as well.

With the sea being 'a little rough', the course was set within the harbour wall. A combination of a long beat against the outgoing tide with a kami-kazi style run in the opposite direction produced some spectacular capsizes and several retirements. Conditions worsened during the race when at least half the river disappeared out to sea.

After lunch, groups of neoprene clad bodies gathered in the clubhouse and waited for news of the second race. And waited. And waited. In fact, by the time the Commodore of the Shoreham Sailing Club arrived with the news that conditions had calmed down enough for the second race to be held out to sea, most potential sailors had wandered off elsewhere. Others greeted the announcement of less wind with some scepticism and consequently a somewhat reduced fleet headed out of the harbour at about 4 o'clock.

By the time the last finishers had returned to shore, the Andrew Simmons Boat Maintenance Masterclass was in full swing dealing with the result of a port-starboard mix up and touching up the gel coat on the odd centreboard casing and mast step. (This would cause some panic the next morning before the first race upon the discovery that the centreboard/mast would not fit into said centreboard casing/mast step without some frantic filing down of excess gel coat)!

Upstairs, it was definitely more civilised in the bar. It's a pity there wasn't any real beer, but you expect that when you travel south of Watford.

Sunday morning was warmer and slightly less windy. With three races to fit in, the first two were sailed back to back round a course which was set way out to sea. I don't know whether you racing enthusiasts have realised yet but, if you want spectators and supporters at these events, it would be nice to be able to spectate and support something a little more interesting than tiny white blobs bobbing about on the horizon.

After four hours, the first Comets headed back to shore for lunch, during which we had the opportunity to watch a video of the previous day's racing and capsizing. Many became so engrossed that they had to be forcibly ejected to make the final race in time. In fact, the Championship was decided by the final race.

By 6.15 pm, most people were packed up and had gathered in the clubhouse for the presentation of various pots and prizes both for staying in the boat and falling out of it. After all the congratulations and votes of thanks, we bade farewell and headed back north to the sticks and a decent pint of Banks's Mild Ale!

Helen Cowern.

1989 NATIONAL CHAMPIONSHIP RESULTS

NAME	CLUB	POSITION
C. Sinclair	Chipstead	1st
R. Burridge	Crawley Mariners	2nd
A. Pearce	Kingsmead	3rd
J. Windibank	Gravesend	4th
G. Butler	Kingsmead	5th
P. Kibble	Crawley Mariners	6th
B. Mason	Pool Hall	7th
C. Robinson	Aylesbury	8th
R. Ballam	Crawley Mariners	9th
D. Perrin	Aylesbury	10th
B. Robinson	Hunts	11th
C. Wilcox	Stokes Bay	12th
D. Coleman	Kingsmead	13th
D. Hudson	Wilsonian	14th
K. Bullock	Kingsmead	15th
B. Hunt	Walton-on-Thames	16th
M. Hylton	Aylesbury	17th
H. Jaggers	Kingsmead	18th
R. Rowe	Chipstead	19th
T. Best	Kingsmead	20th
J. Hudson	Wilsonian	21st
H. Freeman	Bridge Works	22nd
G. Willis	Bewl Bridge	23rd
A. Wilcox	Denham	24th
T. Cherril	Kingsmead	25th
C. Moffett	Walton-on-Thames	25th
K. Lamdin	Aylesbury	25th

M. Hylton	Moffett Plate (1st Lady)
C. Robinson	Junior Endeavour
R. Ballam	1st Veteran
A. Wilcox	Capsize Trophy

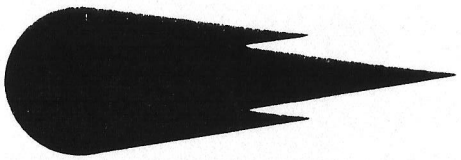
NOTICE BOARD

WANTED: COMET DINGHY
Contact Bert Stevens
Basingstoke 474186

FOR SALE: COMETS 213 and 214
1 year old, standard specification
£900 each
Contact Brenda Bradford,
Calshot Activities Centre,
Southampton 892077/891380

COMET 273
Dark blue hull, silver grey deck, keelband, hatch, coachlines, top cover, sail window, wind indicator, folding launching trolley.
VGC £1,100
Contact Mark Baker,
0249 75420 - buying Comet with different hull colour!

JUNIOR SIZE BUOYANCY AID AND WATERPROOF TOP
Condition as new.
£10 each or £15 for both
Contact Keith Lamdin
0582 665194



Comet Class Association

Affiliated to the Royal Yachting Association