

NEWSLETTER November 2022

Good Day Everyone. Well, that was a short month! It is me again as Chairman. The AGM report in this Newsletter will explain all. Also, welcome to Brian and Ted who volunteered to join the Committee. We are about full strength now, but always on the lookout for new blood.

Thank you for attending the AGM. We managed to get through it promptly, and all enjoyed a nice lunch and a catch up over a cuppa and cake. The catering was excellent thanks to all who helped.

Although the AGM was announced 'many moons ago', with a mention of it at meetings and in the last Newsletter, I think some people still forgot to come. It must be an 'age thing'. Someone once said to me," It's a good job my balls are in a bag or else I would forget them ".

Enjoy the Newsletter and please, if you have anything or ideas that might be of interest for future publication, send them in to Nev for consideration. Thank you.

Jonathan.

- ☐ Forthcoming Events.
- Tuesday 15th November: Workshop Morning.
- Wednesday 7th December: The Mike Sayers Trophy Evening Including Mini 'Bring and Brag'.
- Friday 9th December: Visit To Sylatech Kirkbymoorside. https://sylatech.com/.

This is a visit to a local engineering firm which has an investment casting process and specialises in manufacturing thin-wall, lightweight components. Their capabilities extend to RF/Microwave capability, and offer the custom design and manufacture of microwave sub-systems, assemblies and waveguide components. They also have CNC machining capabilities. Times for visiting will depend on numbers interested in the visit, and whether one or two groups need to be organised. Times will be transmitted to members when known.

• Friday 10th and Saturday 11th March 2023. *National Model Engineering Show* at Harrogate to be held at the Great Yorkshire Show Ground.





John Arrowsmith's Visit In May

PEEMS 2022 Annual General Meeting (AGM) on Friday 4th November 2022

Introduction.

The PEEMS 2022 AGM was held in *The Hungate Centre*. It was held during the morning, and ran into the afternoon to allow maximum attendance of members. Seventeen members attended.

Apologies for absence: David Proctor, Iain Hale, Ted Fletcher, Richard Llewellin.

Announcements.

The meeting began with Chairman Jonathan Milner thanking everyone for coming. Before the AGM began, there were several announcements.

Ken Hillier

PEEMS unfortunately lost a valuable member, Ken who died this year. Ken and his wife Anne were staunch supporters of PEEMS. Ken is sadly missed and our sympathies and best wishes go out to Anne.

Workshop Mornings.

The next workshop morning is on Tuesday 15th November. At the last workshop morning, only three people turned up, and then it was remembered that a reminder hadn't been sent out. Reminders will be sent out in the future, but it should be noted that the workshop morning is the third Tuesday in each month.

o Mike Sayers Trophy Evening and Mini 'Bring and Brag' on Wednesday 7th December.

The mini 'Bring and Brag' will be for those members who don't want to enter the Trophy competition, but still want to show their model(s). Currently, it is not known how many people will turn up and enter the competition. The Club needs to know the number of entrants for the Trophy competition and the number for the mini 'Bring and Brag'. In a few weeks' time, notifications and rules will be sent out by e-mail, and Jonathan will telephone those not on e-mail.

If anyone wants to enter the Trophy competition or mini Bring and Brag, but can't personally attend, a PowerPoint presentation would be acceptable. Mike Sayers will help with, or collate the PowerPoint presentation. If he is collating the presentation, he will need photographs of the entry.

o **Sylatech Visit** (formerly Micrometalsmiths of Kirkbymoorside).

This will be on Friday 9th December. Numbers of attendees are required. The company website (See page 1) indicates that this will be a fascinating visit. If there is a lot of interest, the visit may have to be split into two groups. Currently it looks like a morning visit. Members will be notified of visit times once numbers of attendees are known.

o Providing Cups Of Tea At Club Meetings.

Jonathan said the Club is looking for volunteers to serve cups of tea (and coffee) at the meetings. A rota system is probably not a good idea, as this requires people to turn up to the meeting when they might not be able to. The idea for the Club meetings is: the meeting is held; then there is a quick tea break; then the resumption of the meeting until 9.45pm at the latest; then there is washing up so we can close at 10pm.

o N.A.M.E. (Northern Association of Model Engineers).

For our information, N.A.M.E. have e-mailed us asking for nominations for the 'Young and Junior Engineer' Award. However, that section of membership is currently outside the PEEMS 'demographic'.

The AGM

Minutes of the 2021 AGM.

Proposal that the minutes of the 2021 AGM are correct. Proposed: Peter Bramley. Seconded: George Gibbs.

Matters Arising From The 2021 AGM Minutes.

No one had any matters arising from the minutes.

o Chairman's Report.

Initially in my mind, this year had appeared a 'bit slack' which may have been be a legacy of COVID. However, looking back in my diary, it has actually not been a bad year. In fact it's been quite interesting.

PEEMS returned to *The Hungate Centre* in May. Joy Andrews (the Memorial Hall manager) always made us feel very welcome in the Memorial Hall. Nothing was a problem for her, and she swapped rooms for the Club when necessary. However, *The Hungate Centre* caters better for PEEMS' needs, which it has done historically when big items have been brought in, such as Graham Sykes' Steam Rocket Bike. Parking is also better at *Hungate*. It's also on one level, which is better for carrying in heavy items. I didn't hear any complaints about the Memorial Hall from members, but, *The Hungate Centre* serves PEEMS' needs far better.

Visits During 2022

The PEEMS' 2022 Year started off with a visit to *Scarborough 'Mates*', which is run by PEEMS member lain Hale. I was impressed by the way *'Mates'* has been created and then 'got up and running' in such a short time. We all enjoyed *'Mates'* hospitality.

PEEMS were finally able to visit *Ellenroad Engine House and Steam Museum (Rochdale)* in May. The visit had been held off many times because of Covid, or because the boiler hadn't been fired up. It was well worth the journey. There was also a classic car show on at the same time with a few motorbikes.

In June, Brian and May Stevenson invited us to their garden party on 'Armed Forces Day' in Scarborough. That was another good day out. We thank Brian for arranging the flypast!!

The Saltburn Miniature Railway was also a good day out in June. I was also impressed with what they had achieved with such a small membership. Bob, who showed PEEMS around was a chemist who had turned his hand to mechanical engineering. He had a BSA 'Goldstar' motorbike on the platform, and he kick started it, drove along the platform, across the tracks, across the bridge and up the hill for his lunch. PEEMS went to the local pub for lunch. Nine people (members and partners) attended, and it was another good day out.

In October PEEMS visited the P2 *Railway Trust* at Hopetown Carriage Works, and the adjoining North Road Railway Museum in Darlington. They are building a Nigel Gresley P2 Class locomotive from scratch.

Ed: To add, in September 2022 PEEMS members visited Dick Craven's Motor Cycle Collection in Sutton-On-The-Forest, which was organised by Ted Fletcher.

These events get people 'out and about' and talking amongst themselves and others. This year, unfortunately, the visits haven't been as well supported as previous years. Some reasons may be: a) a particular visit wasn't someone's 'cup of tea' b) it's a long journey out for some. Thirty minutes away might not be too bad, but more than an hour or two away might be too far for some.

We have a list of potential visits for 2023 which will be published.

Demonstrations and Visiting Speakers during 2022.

We have also had a couple of workshop demonstrations this year. We had a TIG welding demonstration one winter night at the Club Workshop. It was a very practical demonstration and I learnt a lot. Paul Gammon also showed his wisdom and knowledge about work clamping at the Club Workshop. This latter demonstration had a good turnout.

We have had a couple of visiting speakers this year at *The Hungate Centre*:

The first was Jon Selby talking about his experiments with his 'ground effect vehicle' model demonstrators. He did say he would get in touch with us when he is testing at Wykeham Lakes so we can go and watch.

We also had Ivan Shaw talking about the flight testing of his 'personal' aircraft 'G-SEKR' which was a brilliant evening. Ironically, it was during Jon Selby's talk when PEEMS realised that our old projector wouldn't work with 'up to date' computers. PEEMS then decided as a group, to invest in some new technology, which we did. We got a new lap-top, projector, screen and speaker. When Ivan showed us his videos, the videos were clear and the sound was good. The evening proved we were right to buy the new equipment.

We have had a couple of interesting meetings during the year when Peter Bramley and Mel Doran talked about gear cutting. They demonstrated slightly different ways of gear cutting which was fascinating.

New member William Burrell gave a talk about his life at sea as a marine engineer. A good evening.

Another Club meeting featured members talking about the lessons learnt by their engineering mistakes (called: *'Tales From The Scrap Bin'*.)

John Heeley has also entertained us with his lo-tech methods of producing working models of steam turbines to be installed in model steam launches. [Ed: In some cases, the materials used were everyday kitchen utensils!]. John is very entertaining. Many thanks to John.

The only thing that hasn't happened yet this year is the *Mike Sayers Trophy* evening, but that will be held in December as reported earlier.

o John Arrowsmith's Visit.

The biggest event this year was John Arrowsmith's visit. John is the roving reporter for *Model Engineer Magazine*. It was very successful because everyone 'got stuck in'. I thank everyone for their models and help. The day was absolutely brilliant.

David Proctor had a meticulous plan which played a big part in the day's events going smoothly. The weather was good. John's wife Ann attended and she had a lovely day as well. We ended up having a great evening meal with John and Ann at the *Forest and Vale* hotel. John wrote a 'thank-you' note that was circulated to members.

It shouldn't be long before John's visit to PEEMS is featured in 'Model Engineer Magazine'. PEEMS intends to acquire a copy of the relevant Model Engineer Magazine for PEEMS archives. It will be interesting if PEEMS gets any more enquires about joining the Club after featuring in the magazine.

o The World Of Speed.

Paul Windross has kept PEEMS up to date with the *World Of Speed*, reporting from local venues Elvington Airfield, and Melbourne Raceway, both near York. I have attended a few events and seen Paul there. PEEMS should be getting Graham Sykes back in 2023 to give us an update on his steam rocket bike '*Force Of Nature*'. There is a report on Graham's trials following on in this newsletter.

o Membership.

We have a hard core of about forty members, and PEEMS needs to maintain the membership around that number to remain financially viable.

Club Accounts (Tony Leeming ~ Treasurer)

Members had received printed copies of the accounts. The was nothing unusual in the accounts for this year 2022. The biggest expenditure was the audio-visual equipment bought with Club funds. This expenditure was approved by the members at the EGM (Extra-Ordinary General Meeting) in September. If the equipment hadn't been bought, then the Club finances would have increased by about 4% which is good.

Tony was asked at one of the meetings to transfer some of Club funds into 'Reserves Held In The Bank', which has doubled the money in the 'Reserves Held In The Bank' fund.

Insurance, which is mandatory, is still a big expenditure each year.

Q: Is there anything the Club is going to buy next year?

Tony: Nothing is planned at the moment.

Approval of The Accounts for the Year 2022: Proposed Mel Doran. Seconded Chris Bramley.

A Discussion About Holding Meetings In The Mornings And Lunchtimes, Rather Than In The Evenings.

Jonathan said that while holding meetings during the day was a good idea, the problem was getting visiting speakers (many who work or run businesses). One idea is that when PEEMS has 'inhouse meetings' just involving members in the wintertime, such as the *Mike Sayers Trophy* and *Bring and Brag* or a member's presentation, we could hold those during the day time. This means that people don't need to drive to and from meetings in the dark. Then the decision would be; is it a morning meeting (9am starting with noon finish) or would that include a lunch time? Would people bring their own sandwiches to have a break half way through? Could the meeting start at 1pm and finish at 4pm? The latter timing would mean people having to drive home in the dark in mid-winter anyway.

Q: Might The Hungate Centre be used by other groups during the day, causing PEEMS to have to swap around?

Jonathan. Yes, that's a problem. PEEMS currently books *Hungate* for the first Wednesday evening each month. The reason we couldn't have the lunch time meeting on that date for the AGM, was that the centre was already booked by another group. This means that day time meetings may be Wednesday one month and Friday on another. The committee are still going to think about it. We were invited to have meetings at Scarborough. We have decided against that, because there is a maximum of six people from Scarborough, but it might mean fifteen people from Pickering going to Scarborough. On balance, the logistics means that we will not be taking up lain's kind offer of meeting at '*Mates*'.

Q: How does the attendance at this year's AGM compare with last year's?

Jonathan: We are slightly less this year at seventeen members, with four apologies for absence, and with a couple more absences due to personal circumstances, whilst last year there were twenty. Last year's AGM was held during the day too.

Comment: I prefer to have evening club meetings as I am working on my projects during the day. Having a meeting at lunchtimes would destroy the flow of the day.

Jonathan: We are trying to cater for the majority of Club members.

Comment: If we are having to change Club meetings to different times and days during the week, this is going to cause confusion. With every Wednesday evening each month we know where we are.

Jonathan: I agree but we have to discuss all the options with the members during an open AGM.

Comment: I also think our meetings should be open to people who work during the day, which would favour evening Club meetings.

Q: Can we have a vote on it?

Jonathan: Yes, but not all the members are in attendance at the AGM.

Colin: We can have a non-binding vote just to gauge the feelings on the subject.

Vote: In order to assess the feelings on the subject, a show of hands of those members in attendance at the AGM was agreed upon. By a show of hands, all members in attendance were in agreement that the Club meeting time should stay as it was**, that is, the evening on the first Wednesday of the month. [Ed: ** Except for special occasions such as this AGM]

Comment: As someone who comes from Scarborough, I would like to say this subject was brought up by another Scarborough person. We have discussed this and it is not practical to change the Club meeting to any other time so it should stay as it is.

Comment: I am not yet a member, but I came here on the bus which I caught at 9am in Scarborough and got to Pickering at 10.30am. It's very convenient by bus during the day. I would prefer the meetings during the day, and it would be a consideration in my joining the Club. The time I asked for a car share, there was no room in the car for me.

Comment: We have day time meetings on the third Tuesday of the month at the Workshop, so there is the option of coming to that.

Comment: Jonathan, you have mentioned weekdays, but there is the weekend as well where people can come during the day.

Jonathan: There's lots of other social events at the weekend. I think that the vote at this AGM shows that the majority here are in favour of Club meetings on the evening of the first Wednesday of the month.

o Subscriptions.

The Committee proposes that the annual subscription should be increased by £5. This is the first increase in almost ten years, and it is necessary so that the value of the Club's reserves are maintained in these inflationary times. We don't know if, for example, the *Hungate Centre*'s rents will increase.

Comment: I think you have done well keeping the subscriptions the same for the last ten years.

Vote: A show of hands showed all in favour of increasing the subscriptions by the amount proposed.

o Election Of Officers and Committee Members.

The current Chairman, Officers and Committee members all stood down to allow a free vote on the nomination of other members, who were invited to join the committee and take on the running of PEEMS.

There were a couple of nominations to join the committee.

Election Of Chairman

As Jonathan had stood down as Chairman, he asked the current Vice Chairman Colin Bainbridge to stand in for him whilst the members voted for a new Chairman.

There were no other nominations for the role of Chairman. Colin said that as no other members had been forthcoming in offering themselves as Chairman, Jonathan has kindly stated that he is prepared to stand as Chairman for another year with the members' approval.

Nominated: Tony Leeming. Seconded: Peter Bramley.

Colin asked if everyone was in agreement. Jonathan was re-elected as Chairman by a unanimous show of hands.

• Election Of Vice Chairman.

Jonathan said that Colin Bainbridge had very kindly offered to stand as Vice Chairman again.

Nominated: Tony Leeming. Seconded: Chris Bramley.

Colin accepted the position of Vice Chairman with the members' approval.

Colin Bainbridge was re-elected as Vice Chairman by a unanimous show of hands.

Election Of Secretary.

There were no other nominations for Secretary. Jonathan did say that if anybody wanted to be Secretary or hold any other Office, they would not be thrown in at the deep end, but would shadow the current incumbent for a while before taking on the role.

David Proctor the current Secretary had, (in his absence), previously accepted renomination as Secretary, with the members' approval, if there was no one else interested in the role.

Nominated: Mike Sayers. Seconded: Colin Bainbridge.

David Proctor was re-elected as Secretary by a unanimous show of hands.

Election Of Treasurer.

Tony Leeming has been Treasurer for a year and there were no other nominations for the role of Treasurer.

Nominated: David Proctor. Colin Bainbridge: Seconded.

Tony Leeming accepted the position of Treasurer with the members' approval.

Tony was re-elected as Treasurer by a unanimous show of hands.

Election Of Committee Members.

Nevile Foster is the current Committee member responsible for the Newsletter and Publicity. He had stood down.

There were no other nominations for this position.

Nevile Foster had agreed to stand again as a Committee member responsible for Newsletter and Publicity, with the members' approval.

Nominated: Colin Bainbridge. Seconded: Mike Sayers.

Nevile Foster was re-elected as a Committee member responsible for the Newsletter and Publicity by a unanimous show of hands.

Peter Bramley stepped down from the Committee but was willing to stand again for re-election with the members' approval.

Tony Leeming proposed that Peter stays on as a Committee member and Jonathan seconded that.

Peter was re-elected as a Committee member by a unanimous show of hands.

Ted Fletcher has said he would like to join the Committee, with the members' approval. Chris Bramley proposed that Ted join the Committee and was seconded by Nevile Foster.

Ted was elected as a Committee member by a unanimous show of hands.

George Gibbs (currently Workshop Manager) has stepped down from the Committee but was willing to re-join, with the members' approval. Alastair McLeod proposed that George re-joins the Committee and Mel Doran seconded the proposal.

George Gibbs accepted the nomination to re-join the Committee and continue as Workshop Manager.

George Gibbs was re-elected as a Committee member by a unanimous show of hands and remains Workshop Manager.

Brian Stephenson showed an interest in joining the Committee with the members' approval. Dave Dobson proposed the nomination and Rob Davey seconded the proposal.

Brian was elected as a Committee member by a unanimous show of hands.

Jonathan said that if anyone wanted to join a committee meeting to see how it works, it is on a Tuesday afternoon after the Workshop Meeting. It is on the third Tuesday of the month.

• Re-Elected Chairman Jonathan Milner's Remarks.

PEEMS wouldn't exist if it wasn't for the good bunch of chaps that you are (including those who couldn't attend the AGM). Membership is currently around forty, the same as last year. Hopefully PEEMS will reap the benefit of John Arrowsmith's article in *The Model Engineer Magazine*. The fact is that we live in a very beautiful part of the world. We are not surrounded by hundreds of thousands of people, but according to the Census the age of the population around here is higher than average. This means that we don't have many young people wanting to join up. Paul Hayward visited the local apprentice training school in Malton. However, after talking to their management more than once, he came to the conclusion that that avenue wasn't going to be fruitful in gaining membership for PEEMS.

PEEMS is twenty-one years old this year, and there's a lot of people to say "Thank you" to.

David Proctor's dedication to the Club has been invaluable.

Nevile Foster's work on the Newsletter has been excellent.

Thank you to Paul Hayward for his support and input when he was Vice Chairman. His family commitments have changed and he found he couldn't commit enough time as he would have liked to PEEMS.

Thanks to Colin as Vice Chairman, for standing in for me when I've not been able to attend meetings.

George Gibbs has had a busy year in spite of contacting Covid and having a fall, and he has spent countless hours in the workshop recommissioning the *Myford Super Seven* lathe he has donated to the Club. The recommissioning is 99% complete now. Thanks to George.

Without Mike Sayers' contribution to the Club, we wouldn't be where we are today. Thanks to Mike.

Peter Bramley is the backbone of the Club. Thanks to Peter.

Next year we are forward to exhibiting at the *National Model Engineering Show* in Harrogate. Hopefully there will be a good turnout. It's organised by an events office in Pickering, which is convenient.

Mike has done a lot of work so PEEMS can store their display stands on his premises, which he is kindly providing for free. This means PEEMS won't incur the storage costs it has been paying to date.

• The Chairman's Award 2022.

Finally, The Chairman's Award 2022 was awarded to Brian Stephenson for his outstanding models.



At the end of the AGM, PEEMS members sat down to a welcome pie and peas lunch along with fruit cake with cheese prepared, by Mike Sayers.

Some News From Paul Windross.

• Drag and Top Speed at Melbourne Raceway (York) and Elvington (York). October 2022.

Late on Saturday 8th October at Melbourne, after a few leakage problems, Graham Sykes Steam Rocket bike 'Force Of Nature' gave us a glimpse of its future potential.

It's the fastest accelerating motor cycle at Melbourne and ranked fourth against gas turbine cars and dragster cars that use Melbourne Raceway.

Unfortunately on Sunday, a fault in a valve safety actuator curtailed any more runs. If everything had been correct, it was going to have a 'full tank' and faster *De Laval* nozzles for a run at a longer distance at Monday's Elvington *Top Speed* event.

The video of 'take-off' is here:

https://youtu.be/nY3jx15T-2g

Please press on link. To return to the newsletter, click back arrow at the top left-hand side of the screen.



Monday's Elvington was mind blowing. A French competitor did 272 mph, and a 'William Formosa Head First, Laid Down' two-wheeler ridden by Guy Martin broke the 200mph barrier.

• A Report From Phil Wood Who Is Working With Graham To Prepare The 'Force Of Nature' Rocket Bike.

As Graham has mentioned, testing went well, and gave more data to work with. This run, in comparison with the first time I rode the bike, was a totally different experience. The first ride impression was 'blimey, that's got some shove'. Second ride; 'hmmm'. Graham showed me the nozzles that were going in for my go. Graham had his 'matter-of-fact' face on; the lads in the crew seemed to be grinning. "You better hang on" was heard to be said once or twice.....they weren't wrong!

Monday dawned, wet and windy.

The bike was filled and warming nicely by the time I called in to the 'Force of Nature' awning. I had no idea what to expect as I climbed aboard in the middle of Runway 26. I knew it was going to launch hard, based on my first experience.

I had my sensible head on by now, proper race mode engaged. Graham at the side of you becomes a very different person than in the Pits. 100% one to one, totally reassuring that he is there for you only.

Pre-run checks were carried out, all confirmed complete by Graham. Valves reset and everything was armed; this is the point you don't touch anything, keeping fingers and thumbs pointing up on the bars. The "OK" given by Graham that the track is clear, a loud "are you ready?" from Graham, with a nod from me. Then I heard the countdown, 5,4,3, left button pushed, 2, 1, big breath, right button push, a big bang from behind and then an indescribable force pushing you forward. I've honestly never felt anything like it, the bang is left behind and the bike moves in silence with amazing smoothness. You can actually feel the bike go light as the pressurised water is forced out.

Even with the side wind, minimal input was needed to go straight. Then it's chute out and brakes on. It's not every day you get to ride someone's dream creation, but then, it's not every day you get to see their happiness at seeing it perform.

As soon as we're back in the Pits, I say what I felt, and Graham and the lads are watching videos of the run and analysing where improvements can be made. The plan is decided for the next run out, even before the bike has cooled down.

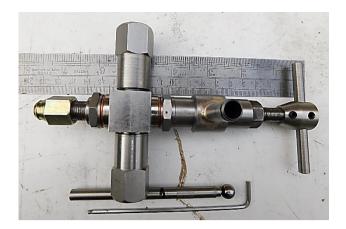
Still on a total high. If you could bottle the feeling the bike gives, you'd be a rich man. The next outing will be at Melbourne drag strip on the 8th/9th October (see above).

Many, many thanks to Graham and Diane for allowing me to be part of the team and of course the crew who work so hard preparing and monitoring the bike before and after each run.

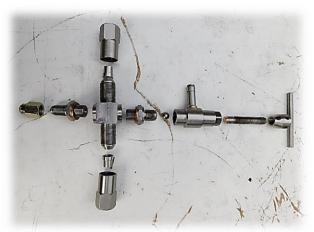
Phil

• Flash Steam Unit To Power A Motorbike Or Three-Wheeler ~ Continuing Development.

I am busy with my project cylinder head lubricator and generator steam pressure release valve.



Pressure Relief Valve



Pressure Relief Valve ~ Exploded View

The lubricator body started life as a 4.5"Ø x 14" long piece of 6082 aluminium.

Turning the outside was no problem until it came to boring a 2.5"Ø x 10" blind hole.

I had to remove the lathe tailstock as the lathe length was at its limit.

A rigid boring bar had to be made. Fortunately I had a square tool holder from a boring head that I had amalgamated to create a new hefty bar body.



Boring Bar



Boring

Not having a large enough steady, I used a draw bar in the lathe headstock to add a bit more holding security than I would have in the four jaw self-centre chuck.



Added Chuck Holding Security



Machining Outside Diameter

When the lubricator body is finished, a 2.5"Ø stainless steel floating piston is to be made. This piston will be pushed by water pressure, injecting the cylinder oil above it, through a restrictor into the cylinder head.

The cap for the lubricator, with various connections, is another job on my work list.

Item For Sale:

A while back Ted Fletcher brought a geared motor from a stair lift to a Club Evening. It was for sale with proceeds to go to Club funds. It is still for sale. Best offer secures.

Please contact Ted Fletcher if you are interested. Contact details are on the Members List.



Contact: