

NORWICH & DISTRICT SOCIETY OF MODEL ENGINEERS

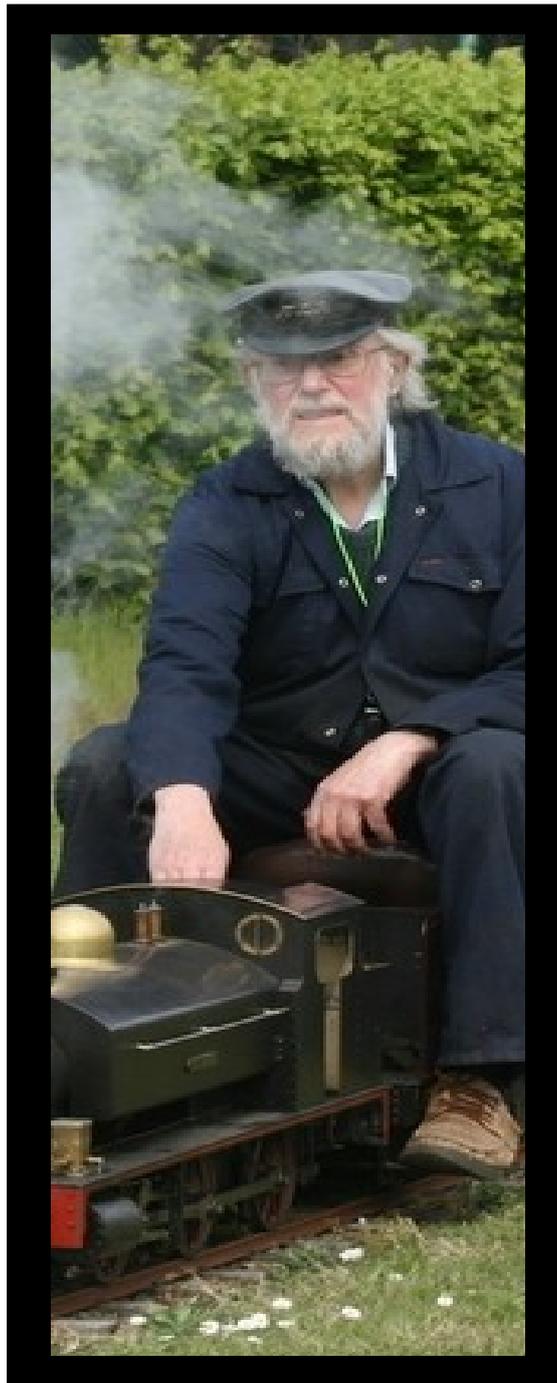
Founded 1933

Incorporated 1967

EATON PARK MINIATURE RAILWAY

e-BULLETIN

Dec19-Jan20



**John Peterson
1942-2019**

John Peterson

The society has lost another of its more senior members. We had not seen John (JP) since Feb of 2019 and shortly after he was diagnosed with a life limiting condition. He soon became very frail and spent his last months in a residential home. JP had been a society officer during his long membership, believed to date back as far as 1980, latterly serving as chairman during the turbulent times of 2015-16. JP was not one to sit idly by while wrong things happened and he resigned from the committee on a matter of principle in summer of 2016. Discovering the amount of time that freed up he took on other tasks, both within and without ndsme. He became the principal point engineer and up until he fell ill was constructing components for the new pneumatic system. Although he became increasingly frail in his last year or so, his mind was sharp as a razor and maintained an interest in national and international affairs. His trips abroad are legendary. JP was a mathematician and later developed techniques for mapping ancient sites, specializing in the Roman period, both in Britain and the continent. A graduate of Merton College, Oxford, as an academic, he was a passionate believer in the European project, particularly the *Erasmus* scheme, and he completed his PhD in 1992. His PhD work on Roman cadastres was both ground breaking and paradigm challenging and is still available on the net for to view. JP was a member of the UEA choral society in his “other” spare time besides being a longstanding local councilor at parish and district level. In an age of mediocrity, JP was a remarkable man. He will be missed by many, not least by ndsme.

The Bogie Project by Pete King

At the committee meeting in October 2019 it was suggested that the GL passenger truck wheelsets were in need of replacement, not immediately but possibly within the next year or so. When the new bogie frames were made in 2012/3 we used the wheelsets from the original bogies which had been in service since the GL railway was built c.2005.

The new frames were designed by Paul Reed and proved to be very good and easy to assemble. The various frame parts were laser cut and then fitted together like a 3D jigsaw. Once assembled they could be easily welded to make a very strong bogie into which the original wheelsets were fitted using new self aligning bearing units.

Four extra frame unit kits were also ordered for one of our members who has never completed his project and they were kindly offered back to the club at the original cost price. No wheelsets were available for these bogies and the suggestion was made that we should build the bogies and purchase new wheels and axles from 17D Miniatures. Two of the bogies were to be the basis for a flatbed truck to make for easy transportation of two full wheelbarrows of ballast (or anything else) up into the field when required and the other two, one of which would be braked, would allow for easy changeover of bogies into the passenger trucks as and when required until all the 24 wheelsets had been replaced.

The committee agreed a budget and I offered to do the work in my home workshop over the winter period.



Frames assembled ready for welding Frame ready for powder coating

Frame components which had been lying unloved in the platelayers hut were cleaned up, fitted together and welded ready for powder coating. Self aligning bearings were purchased and modified ready to accept the die springs. Spring aligning pins had been mislaid and Roger Montgomery kindly offered to make the 16 new ones.

The wheels and axles were ordered from *17D Miniatures* and collected just before Christmas. 17D also pressed the wheels onto the axles and then I painted them red in my lathe so they looked pretty and could easily be distinguished from the originals.



Self aligning bearing as purchased



Two bogies trial assembled



Wheels awaiting assembly



First completed bogie

The last bogie is to have brakes fitted and will take some time as I will try to improve the design to make the linkages more robust and, more importantly, make the brakes adjustable from above rather than having to turn the truck over each time an adjustment needs to be made. Hopefully the project will be complete before the running season begins at Easter.

The final photo (right) shows three completes new bogies ready to be inserted as replacements or into new stock. This has been a hugely worthwhile project and will see the rolling stock outlasting many of us!

Thanks are due to Pete King for the time of his own that he has put into this on our behalf (ed)



Engineering in Art

An Engine is Wheeled

by Terence Cuneo (1907-1996) for The Railway Executive, 1949.

Cuneo was a prolific English painter noted for his scenes of railways, horses and military scenes. He was also the official artist for the



DERBY LOCOMOTIVE WORKS

AN ENGINE IS WHEELED

BRITISH RAILWAYS

BRITISH RAILWAYS

Coronation of Queen Elizabeth II in 1953. The poster shows a BR Standard 2-6-4 tank that has just been lowered onto its wheels in the Locomotive Erecting Shops at Derby, and the scene is a hive of activity. The Derby Works had been in existence since the 1840s, and was central to the workings of the Midland Railway, followed by the LMS and London Midland Region in BR days. By 2006, the site had been closed and demolished.

Double Dyak

This is an article written by the late Barry Steel who spent many happy hours operating and maintaining the society loco known as The Dyak. In his own words...

For those who have not heard this before I will give you a resume of the history of the loco we call the Dyak. This loco was an "LBSC" design for an engine that model engineers could build to compete for the Sarawak Trophy. The trophy in the form of a silver casket given by a Mr George Stephenson, was for a 2½" gauge engine built to one design that would be simple to build and was judged to be a good working engine.

In the 1960s, through the good offices of the late Granville Cross, then the society's treasurer, Arnold Hoskins bought this engine (a doubled up "Dyak") and tender from the son of the late Arthur Arnold of Hempnall – for £150, a considerable sum of money (over £3000 today). During trials on our then small circular raised track it was found that several jobs were necessary. The wheels of the front pony truck derailed frequently and careful examination revealed that none of the wheels were to 5" gauge – more like 4⅞"! With the help of Ken Sykes, who was the society chairman at the time, the pony truck was regauged to 5" gauge. The engine then ran satisfactorily on 5" gauge track thanks to the long wheelbase of the coupled wheels. Other jobs done at that time included the fitting of a new pressure gauge and a new mechanical lubricator, the lever drive to which was altered to make it feed sufficient oil regularly. The twin ram water pump, axle driven of course, was overhauled to make it work better. Incidentally there was – and still is – a most efficient hand pump in the tender. Arnold fabricated a new cylinder drain cock to replace one that was broken and ground the rest so they were steam tight when closed and adjusted the operating rods connecting them to a lever in the cab. A new larger coupling was provided between engine and tender, with ¼" pins replacing the smaller pins which had become bent with use. Plastic tubes replaced coiled copper connecting pipes between engine and

tender. Finally, Arnold's late father in law's police whistle was fitted to provide audible warning of approach (It is still there today!)

The original boiler had a Belpaire firebox and it was later found that, although there were rather fewer stays that was desirable, the thickness of the copper plate somewhat compensated for this. It was also discovered later that a major fault in the design and construction of this original boiler/firebox was that the water gauge was too low down on the backhead. Even when water was up to the top of the glass it was doubtful whether the firebox crown was sufficiently covered by water.

"Double Dyak", driven by the then Lord Mayor of Norwich John Walker, hauled the first official train when the extended raised track was opened in 1974



Above – The Dyak driven by the Lord Mayor John Walker, when the present raised track opened in 1974. Also present on the train are Arnold Hoskins and Malcolm Greenfield

Soon after this event, the boiler developed leaks, presumably because the water gauge had been giving misleading readings. Because of this, and the difficulty Arnold had in moving the heavy locomotive without help to and from his bungalow (which was up a steep slope with several steps), he decided to pass the engine to myself for restoration and the fitting of a new boiler. With the help of my friend, the late George Mann, we tried to repair the old boiler but, as soon as we stopped one leak a new leak opened up.

The late Dick Stockings designed a new boiler, based on that for the 5" gauge Springbok. This was made commercially and I fitted it. Subsequently I made a new superheater, a new cab to suit the round topped boiler, rebushed the rods and valve gear and fitted an injector. The latest big job was the turning of new driving wheels and fitting them to new axles (up to 5" gauge), bushing the axle boxes and, of course, retiming the valve gear. Very recently, new clack valves have been made and fitted to the backhead and the superheater repaired. John Dabson made new safety valves for the new boiler.

It is worth noting that the Baker valve gear is unusual. It is not the most efficient of motions but is simpler to make than gears that require a curved eccentric link. This is a departure from the original design which specified Walschaerts valve gear.

The engine has always been a free steamer and the relatively small driving wheels make it a powerful hauler

Barry Steel

Members will probably be aware that the boiler Barry Steel mentions in the above account, dating from soon after the 1974 opening, has now been found to be not economically repairable, having lasted some 40+ years. A new copper boiler is being commercially made, to the spec of the old one, and is expected to cost around £3k. The versatility of, (and history behind) this loco meant there was no question as to replacing the boiler. It was an easy decision to make and no doubt, successors to us will be writing about this loco in another forty years!

Spotted on YouTube

Robertson, Phillips, and the History of the Screwdriver

<https://www.youtube.com/watch?v=R-mDqKtivul&t=378s>

Most everyone owns at least one screwdriver. But Canadians likely own a screwdriver that few outside Canada would recognize. Why? The differing fates of the *Robertson* and the *Phillips* head screwdrivers demonstrates that innovation is intimately tied to historical events. The History Guy remembers the forgotten history of the screwdriver.

Accessible Carriage Project

Following a year of successful fundraising, our accessible carriage was delivered in November 2019. It's an impressive bit of kit, weighing 350kg or 1/3 ton. Most of this weight is within a few inches of rail height so it is incredibly stable and braked on both bogies. Many thanks are due to Mike Fordham and his fundraising team. All the funding for this came from either outside the society or else from special train days put on for this purpose.

A training day is being arranged for Sunday 15th March for those members who will be using this, whether as driver, guard or platform supervisor.

Right - the members who unloaded the new car, together with Tony Martin of Cromar White, the manufacturers



Santa 2019



This year, as an experiment, we opted to run this over one day, not two. The weather was good and the day ran successfully. Next year we will probably repeat this format as it puts less strain on members. The signal box was nice and warm though!





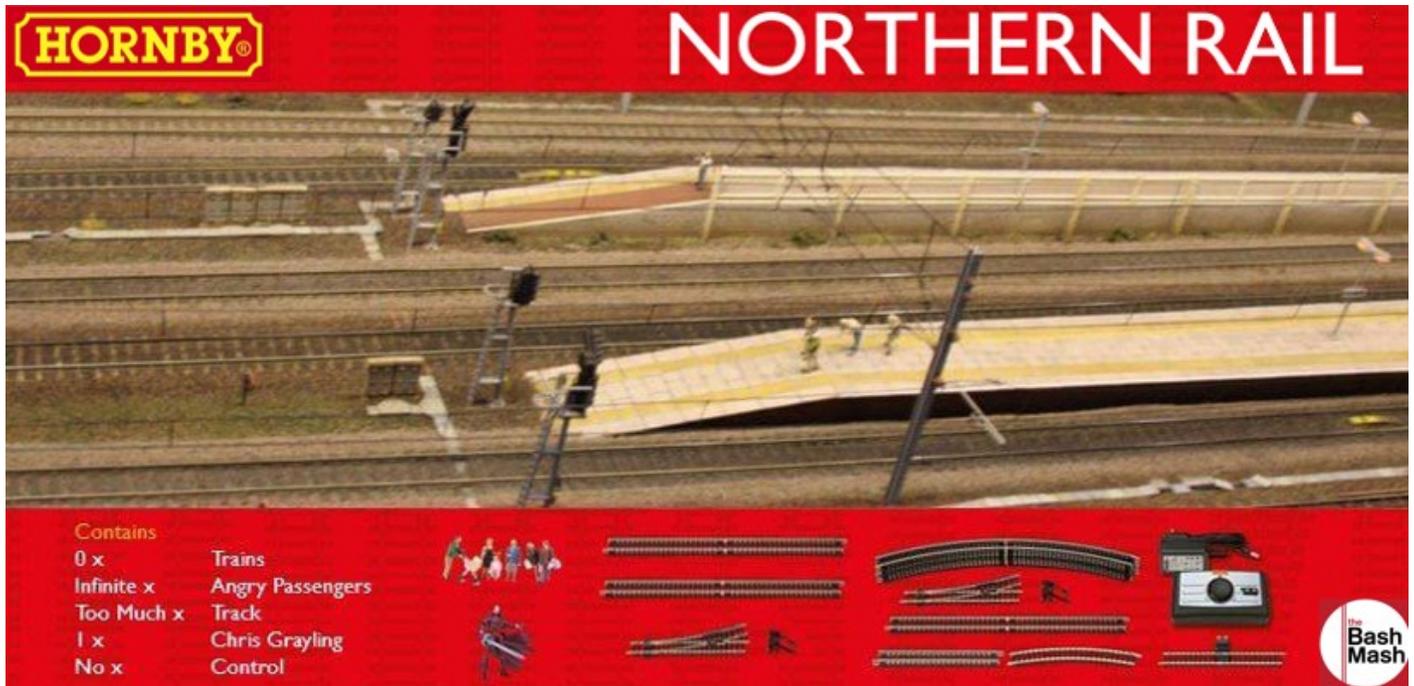
Thanks are due to all those members and their families who came along to help.



Fun on the Net



Spotted on the *Norfolk Orbital Railway* Fb page



This set contains...



The orbital railway's [Fb page](#) is well worth a look, with many interesting historical photos from past times in East Anglia.

Safety Spot

THIS CAN COST A FOOT!

By E. Lukacs, 1940. A poster for the Dutch Safety Institute in Amsterdam. The message is clear – watch where you walk! This message equally applies to members, at home or at the park. To this we would add wear stout footwear. Leather soles are a thing of the past but rubber soles are just as vulnerable.



STORAGE OF PRIVATE ROLLING STOCK AT EATON PARK - GUIDELINES

- Limited storage of private owner stock may be offered subject to conditions
- At the discretion of the directors and subject to any availability of space.
- Subject to owner removing stock on demand
- Owner must arrange their own insurance
- Such stock should be available for public carrying during the season



NDSME directors (committee) and officers as at Jan 2020

President	vacant	Company Sec.	Jim McDonell
Chairman	vacant	Membership Sec.	Andrew Shirley
Treasurer	Chris Eve	Publicity	Mark Rhodes

Other directors: James Horrex, Barry Fane, Peter King (PW), Mike Riches and Philip Moore (Estates), R Hendrik.

Other officers. Rolling stock – Roger Montgomery. Meetings organiser vacant. H&S – Andrew Shirley

Bulletin distribution, *digital* – Andrew Shirley, *hard copy* – Philip Moore.

There are other roles, that need filling. Contact the Company Secretary if you can help. The email is clubsecretary@ndsme.org



Forthcoming Events

- 12 Feb *Resuscitation – a vital subject for us all* – By John Hodgson
- 17 Feb No access to Eaton Park site 17-21 Feb
- 11 March Video evening with Chris Eve
- 15 March Accessible Carriage training day
- 08 April *The Joint Strike Fighter* by David Morton
- 13 May Monthly Meeting – tbc
- 06 June *Maxitrak Owners Club* visit to EP
- 10 June Monthly Meeting – tbc
- 08 August ndsme visit to Riverside Min Rly, St Neots.

For other events, see ndsme.org



Norfolk Railway Society

Founded 1955

www.norfolkrailwaysociety.org.uk

Annual Show

Poringland Community Centre

Overtons Way, Poringland,

Norwich, NR14 7BW

(behind Budgens supermarket)

Saturday 14th March 2020

10:30 to 16:30

Displays of Railway Interest

Model Railway Layouts

Society selling stands

Refreshments and Raffle

Entrance: Adults £3.00 Children (5-16) £1.00 Under 5's Free

Family Ticket (2 Adults + 3 Children) £7.00

Poringland is on a fast and frequent bus services from the City:

First Bus 40, 40A, 41 & X41

Go to www.norfolkrailwaysociety.org.uk

to see who we are and what we do!

In the *Just Eaton & Cringleford* Jan 2020 edition - a write-up of the Santa Special Day last December. We often feature in this publication which is delivered in the surrounding area



FULL STEAM AHEAD: The team take a trip one of the trains.

All aboard the Santa Special!

The Eaton Park Miniature Railway celebrated its fourth annual Santa Special day, giving a real treat for children and model railway fans.

Father Christmas spent a happy afternoon entertaining more than 140 small children while their parents enjoyed mince pies and seasonal fare in the hospitality marquee. The station at Parkside was specially decorated for the day, thanks to the efforts of society members and their families.

Santa said: "It was wonderful to visit this popular railway today and I can report that all my visitors had been good and I was able to give them all gifts."

"I am also very happy that a proportion of the funds raised will go to support local charities. I quite approve of this!"

Mike Fordham, duty officer on the day, said: "It was a nice day (for most of the time!) and the public came out to make this day another success story for the miniature railway in the park."

The day saw a steam and a diesel loco pulling trains around the circuit – the steam effects, not normally visible during the warmer operating season, were especially enjoyed by visitors

Mike Riches, owner of the popular blue diesel-hydraulic loco, commented: "It was a great experience for all of us, and a chance to give my loco a run out."

The event was held on the last day of scheduled public trains last year, but there were some pop-up days over the Christmas holidays and there are more planned for the February half-term.

Eaton Park Miniature Railway is operated



TIME OFF: The team's elves take a break before setting off on another trip.



by Norwich & District Society of Model Engineers (N&DSME), a "not for profit" organisation.

A portion of income from running trains is donated to local and national charities and the society exists to promote model engineering in all forms.

New members are always welcome and further information can be found at the society website, www.ndsme.org and the Eaton-park-miniature-railway Facebook page.

NEWS FROM THE CLUBHOUSE

Santa Day was discussed and it was noted that we carried 333 visitors. A similar format will operate in 2020.

Pete King is making good progress with new bogies for the rolling stock and construction of a utility wagon will begin.

It was noted that guards had been removed from machine tools. The directors restated that these should not be removed and that safety eyewear should always be used when machining metals. The Co Sec is arranging for an H&S inspection by a contractor.

Planning permission has been obtained for the new modular WC unit. This is expected to cost around £10K. An interest free loan will be sought from the Northern Federation.

It was confirmed that there would be no increase in membership fees for 2020 and also no increase train fares.

A training day is being organised for the new accessible carriage. Chris Eve is designing a logo for this car and a commemorative plaque is being designed. It will be unveiled by the Lord Mayor and Sheriff on Easter Monday.

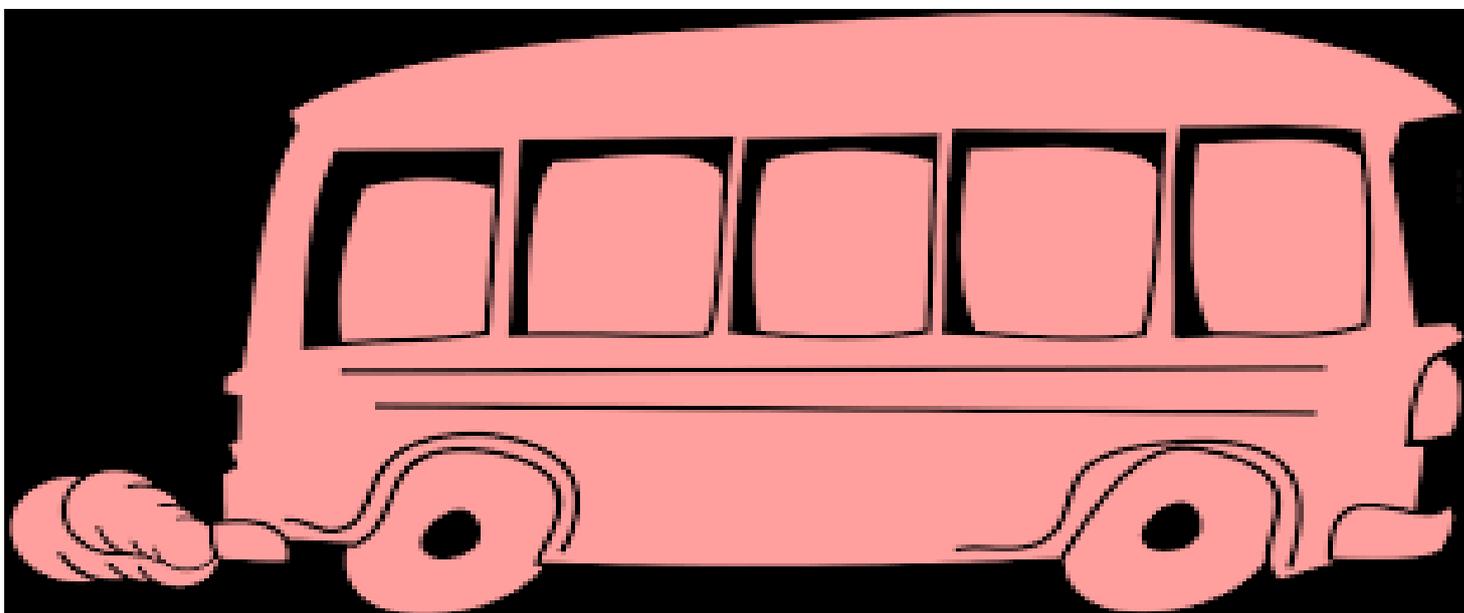
The new boiler for the Dyak is under construction. An approximate quote of c£8K has been obtained for a new boiler for the A3. No decision has been taken on this.

The treasurer reported that society finances were in a healthy state.

Please note that membership renewals are due soon. A form is included on the last page for you to print out

RAISED TRACK GROUP

There is a thriving 5"/3½" raised track group, meeting on the first Saturday of each month, plus other Saturdays too. This is in abeyance whilst temperatures are too cold and will resume when warmer weather returns



ndsme Tours...

Doncaster Exhibition Sat 09 May 2020

Coach to the exhibition - £tba. Departs tba

Contact Barry Fane or Roger Montgomery

ON THE MOVE? Be sure to let us know if any of your details change. Always inform the membership secretary so our records can be updated.

Lastly, a note from Mrs Gower,

Thank You

JUST A NOTE TO
SAY THANK YOU
FOR YOUR DONATION
THE BRITISH HEART
FOUNDATION
FOR NEVILLE

Ann Gower
r Family

####

MEMBERSHIP RENEWAL 2020-21

IF YOU ARE CURRENTLY A PROSPECTIVE MEMBER PLEASE INDICATE IN (1)

(1) Membership categories (please tick as appropriate)

Adult (18 and over)	£20.00	
Adult (75 and over)	£10.00	
Junior (under 16 and subject to supervision by a parent/guardian or other adult, who is a member.)	free	
Junior (16 and over and under 18)	£10.00	
Prospective Member (1st renewal)	£20.00	
Associate (spouse or partner)	£2.00	

(2) Please indicate your interest/s

Miniature Railways 7¼"	
Miniature Railways 3½" or 5"	
Model Railways	
Road Engines and vehicles	
Stationary Engines	
Clock & Watchmaking	
Miniature/model boats or aeroplanes	
Other (please specify)	

(3) Member details (capital letters please) **PLEASE USE A SEPARATE FORM FOR EACH MEMBER**

Full Name Age at 01APR20

Address

Postcode email

Phone

I agree to abide by the Rules of the Society (tick box)

I enclose my cheque to the value of £ made payable to *Norwich & District Society of Model Engineers*. Please include an SAE for return of receipt and membership card. Do not send cash in the post.

(4) Signature..... **Date**.....

General Data Protection Regulations (2018) Your personal details will be held securely in compliance with EU Data Protection legislation and not passed to anyone other than relevant society officers. If you wish your contact details to be put on a membership list that will be circulated to other members, please tick this box

Please return to Company Secretary (MEM), NDSME, Clapgate Farm, Morley Lane, Wymondham. NR18 9BT

For office use only

Recd by Mem Sec	Date	Receipt sent	Date
Cheque banked	Date	Mem No.	