Issue No. 798 March 2018

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The News Sheet

This Month...

Chairman's Thoughts, Treasurer's Report, Raised Track News, Forthcoming General Meetings, Ground Maintenance Report, The February General Meeting, Marine News, Rocketman, Steam Cylinder Oil, Dates for your Diary, Call for Nominations form, Society Contacts.

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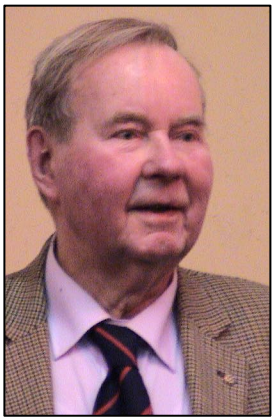
The Thoughts of Chairman Ian



January and February 2018 have been quiet months for the Society. The wintry weather has made it difficult at Tyttenhanger regarding the mixing of concrete but work on carting dry leaves and platform roof repairs and general maintenance of fences and walkways has progressed steadily. A curious inverted ramp has appeared by the ground level steaming bays; the material for the building of the new workshop has arrived and is so far virginal which is more than can be said of a large stock of abrasive discs which appears to have gone AWAL. Perhaps they have been removed to a place of safekeeping. So perchance the discs and sundry other items removed could be returned anonymously?

Unfortunately, my presence has been rarely felt at Headquarters due in the main to hospital visits to see the missus who is thankfully getting stronger; but I do miss enjoying the camaraderie so prevalent down Legion Way.

It is good to see that the News Sheet is getting stronger with articles written by members of the Club. It strikes me that the Club is composed of many self-selected and isolated groups. For several reasons they do not seem to attend General Meetings; consequently, the main vehicle for information exchange is the News Sheet and it is comforting to see the contribution of highly interesting articles from regular suppliers as well as occasional interesting items from members who have information or views to donate.

Another way that the Club can be welded into a cohesive group will be the 'get-together' in May at Colney Heath when members from all groups can meet and enjoy each other's company.
In the mean time have an active month.

Ian J. Chairman.

Raised Track Report

As previously advised, **the Raised Track is closed** until after we have obtained and installed a replacement sleeper for the rotten one removed in January. To make our life a little more comfortable when the winds are blowing across the fields, we have purchased a supply of windbreak material, similar to that already installed behind the Gauge One Railway, to fix along the fence past the Steaming Bays and right down to the corner of the site and along to the gate. This needs to be dealt with before the hedgerow start growing again.

With assistance I shall be doing the section from the existing windbreak down as far as the Containers, but I am relying on some support from those others who will benefit from the windbreak to complete the other sections. The undergrowth has already been cleared on this section, so the job is half done for them.

Various materials for the Steaming Bay projects will be arriving soon together with a large supply of fence panels, initially batch to be erected alongside the RTR from the Station down through the narrows to the Steaming Bays.
So there will be plenty of tasks for people to lend a hand to and on site training will be given if needed. Please come along on a Sunday or Thursday and lend a hand.

Mike F

Every Wednesday evening at Finchley. 8pm – 10pm.

Model railway groups ‘0’ and ‘00’ gauges, and ‘H0’ North American group. Perhaps you are a newer member and have not seen these layouts, do come along and see us, you will be made most welcome.

Front cover photo. Steve painting the roof of his new station building for our ‘0’ gauge layout at Finchley. Steve has scratch built this building after recently having scratch built a loading bay building of a similar style. The small ‘0’ gauge group meet most Wednesday evenings from 8pm to 10pm. There is always a break for tea at 9pm, kindly supplied by Mike A.

Forthcoming General Meetings

Unless otherwise indicated General Meetings begin at 8pm at our Legion Way Headquarters in North Finchley, usually ending at about 10pm. All members are welcome and we are always happy to see friends and family attending. We hope for a good attendance to support speakers. Please remember that many of the meetings depend on the club to provide the catalyst for a stupendous evening.

For more information please ring me.

Friday 2nd March. Work in Progress. Your chance to show us what you were up to in the winter. So if you were not ready in November, now is the time to show the Club your prowess and progress. Bits of Locomotives please but this is a General Meeting so any general engineering is most welcome.

Friday 6th April Adrian Garner, Monorails in the twentieth century. Adrian Garner has written a sequel to his previous book on mono-railways bringing it all up to date. The author will make the evening a one to remember.

Friday 4th May Annual General Meeting. The Annual General Meeting. This is a most important meeting where we summarize what great progress the Club has achieved in the past year. Where we plan for the future of the Club and where we elect members to take up various offices to run the Society for the forthcoming year. **Members only.**

Ian J
General Meetings Co-ordinator

Grounds Maintenance Matters - yes it really does!

Following on from my last report in the December News Sheet here is an update on what the grounds maintenance team have been up to at the Colney Heath Site.

Before I start I think I have just about exhausted my stock of merry quotes in the title of these articles to attract your attention to read them so from here on in future ones will be titles only – thank goodness I hear you say?

So, what has been happening on the grounds maintenance front? Well, the first notable thing to report is that we have recently had some very high winds with the result that many large pine tree branches have come down. This is in addition to the larch trees, which not only shed all their needles every winter but also constantly shed small pine cones and irritatingly small twigs. Fortunately none of the trees on site succumbed to the high winds but we now have enough wood to assist us in burning the remainder of this year's leaf fall as well as next winters as well. We have trimmed and stacked the smaller branches to use as kindling and the larger branches have been stacked next to them. You will be able to see the results of our efforts this summer as you go around on the raised track.

We have managed to have a few bonfires but there is still (at the time of writing) some way to go before we can consider the job done. The wet weather days seem to outnumber the dry ones by a considerable amount and if I can refer you to the December report wet leaves are best left where they are to dry then we can collect and burn them straight away. .

Inroads have been made to clear the jungle of brambles to the right of the raised track on the climb to the tunnel. We are not aiming to have a park like environment on site but clearing this area will provide us with an opportunity to plant trees, shrubs and bulbs to make this area more visually pleasing. Recently an apple tree has been transplanted from being a pot grown tree into the ground down just after the ground level tunnel on the left. In addition a spiral branched willow has also been transplanted having been grown literally from a stick put in water.

We have cleared the area where bonfires took place near the ground level tunnel and grass seeded this. For those who wish the site to remain 'eau natural' there are areas - notably *Dingly Dell* that will be left more or less completely alone for mother nature to do what she pleases. The only caveat being that we will keep the brambles in check as they do constitute a trip hazard - ask me how I know!! .

You may not believe it but we have filled some of the potholes in the lane leading to the track. The problem is with the large number of cars and vans which arrive each day with those walking dogs causes the potholes to reappear quite quickly. Again the really wet weather we have had magnifies the problem. Rather than carrying on as we have filling holes to no avail we will wait until the weather improves and we are nearer to the start of the running season before tackling the holes again. We also intend to cut back the branches on the left of the lane - notably the laurel poking through from the pumping station makes the lane quite narrow just after leaving the tarmac of Church Corner.

Well that's about all I have to report. If you fancy coming down to the Colney Heath site on a Thursday or Sunday morning to lend a hand there are plenty of jobs around the site (not just grounds maintenance) to keep you active.

Nigel G
Grounds Maintenance Team Leader.

Photos on following pages –
1. The lane leading to the track. 2. The apple tree in the new land. 3. The bramble free area. 4. Springtime at Colney Heath.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NLSME February General Meeting.
The Battle for Midway.
Ian J.

A goodly group of members attended Head Quarters on a cold Friday evening to hear a talk about the Battle for Midway on the fourth of June 1942 at the continuation of World War Two for the Pacific American Fleet in the Far East.

But first the group were welcomed with the announcing of the safety procedures, the raffle prizes and a request for folk to sign the attendance register.

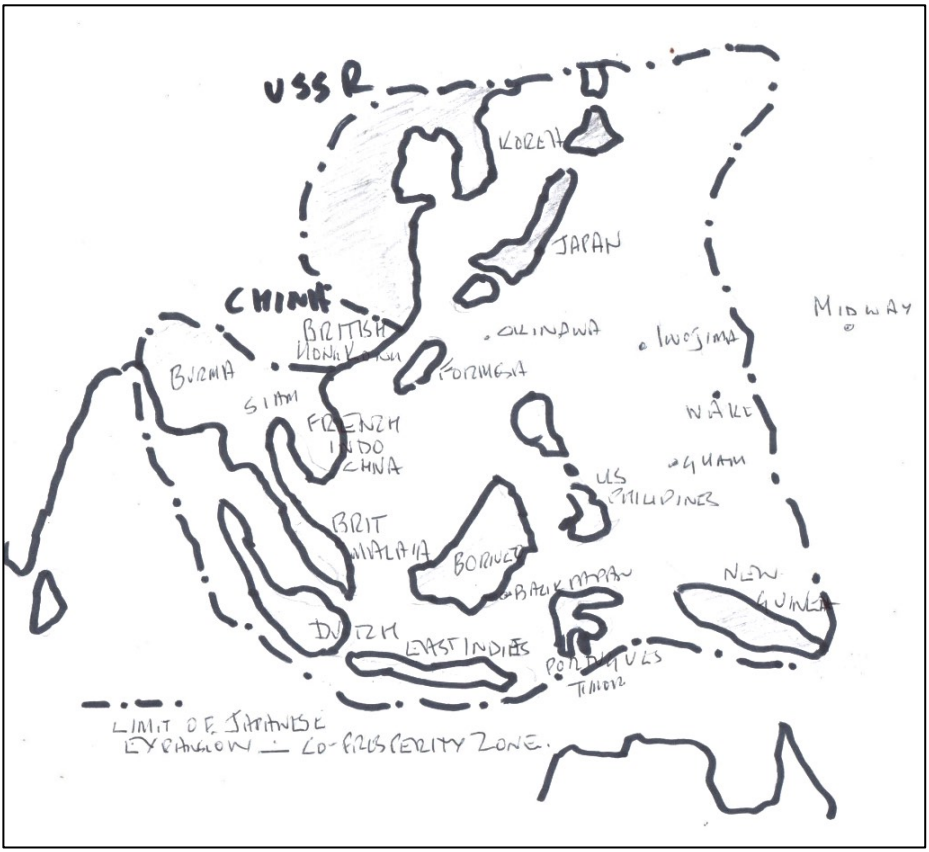
Commencing the talk Ian J indicated that when he was a young officer at sea in the Merchant Navy he had become fascinated with the war between the Eagle and the Sun. The ships he had sailed in had to navigate their way through mine swept channels to approach many Indonesian ports. At Balikpapan (East Borneo) where many Blue Funnel ships refuelled, the beach was littered with the detritus of war; in particular small Japanese tanks which had been abandoned during WWII seven years prior to his visit to that port.

At retirement Ian had enrolled on a MA course in Maritime History at Greenwich where he met Professor Willmott who lectured the class on the Second World War in the Far East. Interest was rekindled.
So. . . Why did Commander of the Fleet Admiral Yamamoto advance on Midway Island? It was of little strategic importance and would be extremely difficult to defend if he had been successful. Admiral Yamamoto used eight Aircraft Carriers, eleven Battleships twenty-one cruisers with associated protective screen and over four hundred aircraft which seems an awful lot of war machinery for just an isolated coral atoll.

A reason for the attack was that Yamamoto firmly believed that a divisive battle could win the war for Japan. If he were able to lure the US fleet out to Midway, then the Imperial Japanese Navy could win that divisive victory on his terms; unfortunately Yamamoto could not arrange the proposed battle on the terms he desired.

Another reason for a proposed victory and smashing up the American fleet was to use it to bargain with the USA regarding the 'Greater Prosperity Zone' (see map). Japan had captured virtually all the countries once possessed by the European Powers; they wanted the Americans to allow them to have this area as their Prosperity Zone for supply of raw materials and their market; on the

basis that if the Europeans did it first why not the Japanese?



The Great East Asia Co-Prosperity Zone.

In the early 1930's a prosperity zone was mooted by Japan. It was to liberate all the countries on the map from European Rule and to be led united by Japan; by an initially non-military means. Of course it did not end like that. But that was what Admiral Yamamoto would have liked.

The Admiral in charge of the Attack squadron was Nagumo. It was he who masterminded the attack on Pearl Harbour. Due to the dateline it is not appreciated while attaching Pearl Harbour simultaneously Japan was invading French Indo China, British Malaya, Dutch East Indies, Portuguese Possessions and the American Philippines. Nagumo's attack on Midway was meant to be a surprise but was certainly not; the Japanese Secret Code had been broken by

the Americans, so the surprise was on the other foot! The small American fleet with just three aircraft carriers was waiting to the North East of Midway for Nagumo.

At 0400 on the 4th June the Zeros, Kates and Vals were launched from the Japanese Carrier Fleet armed with bombs to attack Midway. The attackers were surprised because they found Midway alert and ready for them. Although many bombs were dropped the runway did not seem to be damaged, so the returning planes were to be reloaded with ammunition and have another go at the runways. At the moment of reloading, information was received by Nagumo that American ships had been detected so the heavier planes would need to be armed with torpedoes. At that moment fleets of Devastator Torpedo Bombers were detected flying towards the Japanese fleet. The Zeros were soon in the air again and tragically destroyed most of the Devastators losing many good new pilots and their planes. The heroic action of these American pilots did however prevent the re-arming of Nagumo's bombers, so bombs, torpedoes and fuel tankers were on deck and in the hangers.

The Yorktown, Enterprise and Hornet had sent out three fleets of Dauntless Dive Bombers but they got lost, were running short of fuel and heading for 'home' when they saw a Jap destroyer heading North West at a great rate of knots; guessing that the destroyer was re-joining the fleet, the Dive Bombers projected the course of the destroyer and flew along it to find to their surprise a real battle royal going on down below them between the Devastators and the Japanese ships and Zeros.

No one onboard the Japanese fleet looked up until it was too late. The Dauntless dive bombers attacked and within six minutes the prides of the Japanese fleet had been destroyed. Nagumo's hesitation meant that with bombs and fuel left unprotected on deck the ships were extraordinarily vulnerable. The Dauntless dive bombers ensured that the whole lot went up in a funeral pyre.

One Japanese Carrier Hiryu somehow escaped but was soon dealt with but not before the USN Carrier Yorktown had been fatally damaged to be later sunk by a torpedo from the submarine I-168.

So. . .In the space of a few hours the Japanese carrier fleet and its planes had been devastated and what was more tragic for Japan with this devastation the vast majority of Japan's experienced air crews had gone. Air superiority was not to be regained and those heroic US Devastators never flew in combat again.

Ian J

Marine News

I know it's not all related to marine section but at this time of year it is cold and wet overhead so the last thing to play with is anything else cold and wet.

No reason not to spend the winter months working on site repairs and improvements generally though. I installed some ice over the water to prevent leaves getting in but that is nearly worn out now and we have kept them clear on the grass surrounding the lake both to limit the amount blown into the water and keep the grass in fair order. As much as can be reached from the shoreline have been collected and I will get in the middle when the water warms a bit or should I say quite a bit. The woodwork just needs freshening up and we should be entering another season of sailing soon.

John D has cleaned and prepared the large Chester bench at the end ready for a coat of fresh paint he has kindly agreed to do.

Paul and Waz G are helping me (well to be honest they are doing most of the heavy work) lift and re-lay the concrete slabs, which form the entrance path to the lake and also the exit from ground level rail. This will also involve laying concrete up to the edge of the track line both sides giving easier level access across for any wheeled transport of persons or boats. By product of this work is the public also have an exit route from the unloading platform with less trip hazards. Tick a box for H&S.

I had an enjoyable day reverse running on the raised track on New Years Day along with many others who attended but it did give me personal cause for concern that when I entered the tunnel there was no way for any following loco to know if I was clear before they followed. That's why we placed a fixed set on the tunnel entrance for the normal direction of flow. To our rescue for any future reverse running, John R has wired in a switch to the main controls so we can now put lights 5 & 7 out facing backwards, then with the flick of a switch it gives both tunnel and loading bay the advance warning needed for safer reverse running. If you need to know more then catch me onsite and I will show you.

Next month I will give a bit more time to the members' day May 28th I spoke of last year. And of course the first Toy Boat Regatta May 13th.

George C
Marine Section Leader.

Rocketman

No, not Elton, David or Elon Musk.

But a cautionary tale. One to learn from.

A modeller of some small repute, with a little time on his hands, decided to do some detailing on a prized loco. Fitting push-pull gear to a metal 4mm scale G5, no less. No wife around, music on, cup of coffee - bliss.

Back in January, our hero had decided that despite having great success with Rocket Rapid medium viscosity superglue over the years, the time was right for a bottle of a Rocket Hot- super penetrating superglue. “Sets in 1-5 seconds” it says on the bottle. Just the thing, thought our modeller, for placing a small item first and transferring a drop of glue on a stick from a small blob in a milk bottle top onto the item to be fixed. Just like the runny plastic glue he was used to!

On the back of the bottle it says “keep out of reach of children” and “may bond skin in seconds".

So on the day in question, out comes the new bottle, off comes the lid, pouring begins to decant a small blob into a milk bottle cap .... but wait .... where is the nozzle ... and ..... why is there a puddle of glue all over the cutting mat, tools and .... OMG, this stuff is truly runny and tenacious and Capillary action had 3 fingers of one hand firmly stuck together. Turns out that the flow control nozzle had bonded to the lid and came away unexpectedly leaving the bottle fully open.

So what happened next?

Our hero’s first thought was “don’t panic”. Always a good start. Delay didn’t matter as 5 second setting time had long passed. Our hero had a second and subsequent thoughts like “don’t attempt to mop up with a cloth - you’d end up stuck to the work mat, cloth and who knows what else”. His first action was to negotiate a withdrawal between thumb, index and second finger. Luckily none were called Barnier, so it shouldn’t be too difficult. Fingers all work more successfully in unison, rather than as one bloc. Our hero knew Acetone - nail varnish remover - to be an excellent solvent for Superglue. But wait. Everyone has to use water based products these days, so Acetone is no longer used for nail varnish and thus there was none in the house. Our hero went to the bathroom and with a scalpel, and lots of running water managed to gently slide the scalpel blade, parallel with the skin, through the join between the first pair of bonded fingers. Then the same for the other pair. Liquid soap helps. No real

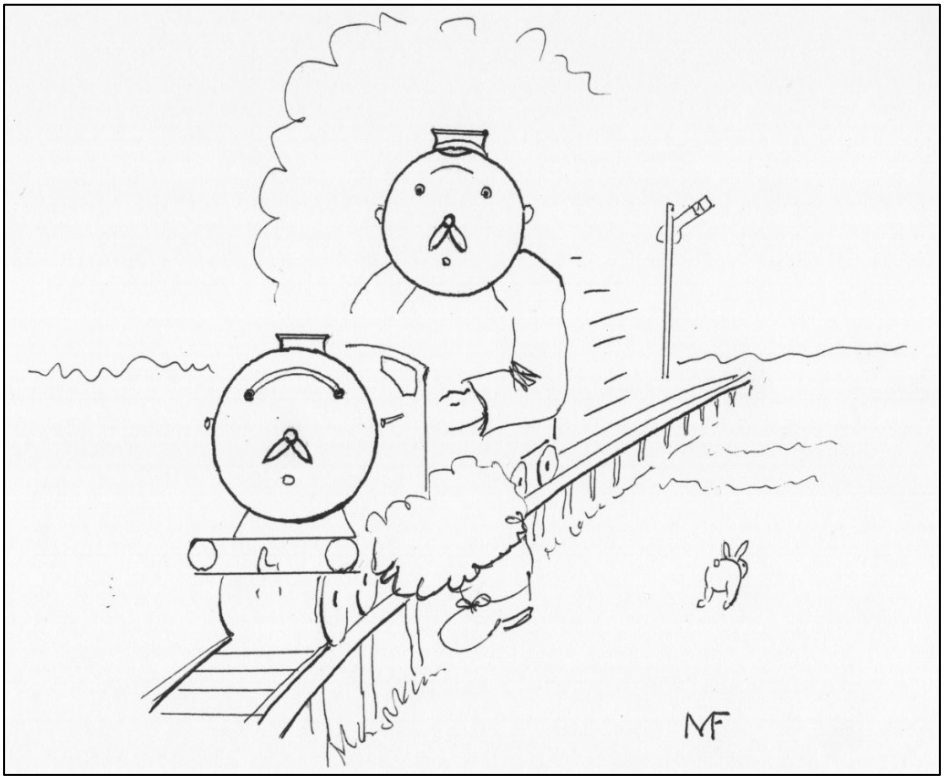
damage. Thereafter he gingerly collected the work mat and got it to the bath without spilling any residual runny glue. He gave it all a good soak.

In the end the only broken thing was the modellers pride. The tools, all cleaned up with water, Butanone (a solvent found in the modelling draw) a scrape, and light oil. The cutting mat was written off.

Let this be a lesson to all in care in the use of hazardous substances and reacting calmly in the event of a mishap.

No locos were harmed in the making of this epic.

From your modelling correspondent.



With acknowledgement and thanks to John Boothman for allowing the publication of his article on Steam cylinder oil – SCO

Are you using the most appropriate grade of steam cylinder oil?

When I have asked members what grade of steam oil they use the typical answer was “I dunno, I just bought it at such and such a show”. My own response also would have been similar.

Steam cylinder oil is interesting stuff; it has to provide lubrication at elevated temperatures; but for only one occasion/one use. Whereas motor oils, for example, are recycled continuously within the engine, by contrast SCO is introduced in small quantity into the steam flow, provides lubrication basically once only and is then exhausted with the spent steam. SCO is available in various grades mainly according to the operating temperature and also to the pressure/work duty of the cylinder.

Ordinarily the SCOs we come across are ‘compounded’ which means that they include fatty and soapy additives which act as wetting agents to improve emulsibility and metal wetting properties in the presence of wet steam or water. This enhances the ability of the lubricant to adhere to the cylinder wall. However, these types are specifically not suitable for model boat use, where exhaust steam needs to be condensed and oil and water need to be separated so as to avoid environmental contamination. Uncompounded ‘straight’ versions in similar grades are available for this situation.

At the higher, hotter end of SCO application, a main line railway locomotive could have steam raised at over 200 psi gauge pressure and be superheated to of the order of 1000 degrees F and, at the other end of the scale, we could have a garden railway loco with a low pressure wet-steam boiler with a steam temperature around 275 degrees F, or even Mamod or Wilesco toy steam engine. Around 50 years ago the late Jim Ewins instrumented the operation of a superheated 0-6-2, 5 inch gauge, tank engine and recorded steam inlet temperatures of 500 to 600 degrees F into cylinders operating at 250 to 300 degrees F. (ref Model Engineer March 1966; & the loco was reportedly based on LBSC’s ‘Minx’). Having regard to these various demands, SCOs are available in different grades according to their kinematic viscosity (similar to motor oils, but determined at 40 degrees C)

Steam cylinder oils are a narrow specialist product and are produced in Britain by only a small handful of specialist refiners/blenders who supply to heritage railways and for road locomotives and also supply and sell down to our model

engineering traders. The main producer/suppliers that I have found all are still run by descendants of their original founders.

Morris Lubricants Ltd. – Shrewsbury (1869) – (also Golden Film branded)
Caldo Oils Ltd. – St Helens (1922) – (incorporating Hallett Oils Ltd (since 2011) and using both 'Hallett' and 'Multispec' brand names)
Millers Oils Ltd – Brighouse (1887)
Smith and Allan Ltd – Darlington (1925) – (Vintage Oil)

The three principal grades of SCO are 1000, 680, and 460. The recommended uses of each grade are quoted below from the producers' websites. Smith and Allan Ltd. supplies only grade 460, the others supply all three grades.

Grade 1000 (sometimes listed as 90W) –

"This product has been specifically formulated for use in non-condensing models and with the co-operation of Stanley Steam Car owners…….. Additionally, this product can be used in all steam engines working up to pressures in excess of 250lbs per square inch, with either saturated or superheated steam. Recommended for valve chests, slides, linkages and general lubrication, by means of mechanical applicators, atomisers or oil can." (Morris)

"Compounded 1000 Cylinder oil. Specially for highly super heated Steam Locomotives, running on main line. Sentinel lorries and similar applications use this product." (Caldo – Hallett - Multispec)

"A heavy viscosity compounded steam cylinder oil with added fatty compounds. … for the lubrication of steam engine cylinders in locomotives and stationary engines working with either superheated or saturated steam." (Miller)

Grade 680 (Also Grade "T") –

"Compound Steam Cylinder Oils 460 and 680 are for use in most locomotives and stationary engines working with either saturated or superheated steam. ….. providing a strong lubricating film where needed to protect bores and valves. This is particularly important where very wet steam has to be handled at the cylinders.
Grade T compounded oil is for use in most Locomotives and Stationary engines working with saturated steam. It is produced from special cylinder stock treated with fatty compounds and particularly Tallow to provide superior lubrication even if wet conditions are encountered. The fatty compounds form emulsions which spread the oil on the internal surfaces, providing a strong lubricating film where needed to protect

bores and valves. This is particularly important where very wet steam has to be handled at the cylinders." (Morris)

"A heavier grade compounded steam oil. Designed for Steam Locomotives mainly on preserved lines, Traction Engines and Steam Rollers and Stationary Engines." (Caldo – Hallett - Multispec)

"A compounded oil of medium viscosity characteristics with added fatty compounds for the lubrication of steam engine cylinders in locomotives and stationary engines working with either superheated or saturated steam….designed for medium and high pressure engines." (Miller)

Grade 460 –

See above (Morris)

"Formulated for the lubrication of Steam Cylinders and treated with fatty compounds to form an emulsion which spreads the oil on the internal surfaces. Designed for lower steam pressures. This product in the main is suitable for Steam Models." (Caldo – Hallett - Multispec)

"A compounded oil of medium viscosity characteristics with added fatty compound. …designed for medium and high pressure engines … for the lubrication of steam engine cylinders in locomotives and stationary engines working with either superheated or saturated steam." (Miller)

"Select Compound Steam Cylinder Oil 460 is intended for use in locomotives and stationary engines working with saturated or superheated steam. The product has been formulated incorporating the use of fatty compounds to offer superior lubrication even in wet conditions. The use of fatty compounds promotes the forming of emulsions on internal surfaces, giving an excellent lubricating film for maximum protection of bores and valves." (Smith and Allan).

Do you still think that you are using the most appropriate grade of steam cylinder oil for your model?

None of these main suppliers appears any longer to sell SCO directly in smaller quantities suitable for most model engineers' requirements. Instead they are retailed generally through the various usual model engineering traders. Most commonly the Caldo grades 1000 and 460 are sold under the Multispec brand in half and one litre bottles labelled with the retailer's name (Caldo have their own in house label printing division). Millers' 90W grade (=1000) is available

from Blackgates. J P Oils Ltd of Wigan supply all grades of Morris's SCOs, including 'small packs'. Morris's and Caldo's Hallet branded and Smith and Allan oils are also available directly from these main suppliers in 5 litre cans or from some heritage full size steam suppliers.

In addition to the above heavy grades I also found Grade 220 SCO available from garden railway suppliers, but I haven't identified a maker. GRS in Princes Risborough and Dream Stream Garden Railways (Aylesford) sell this. C Bennis Supplies & Services (Southport), on e-bay, offer 220 and also 100 grade for Mamod & similar light models

> "Roundhouse recommend using 220 grade oil with their live steam garden railway locos. Our 220 Compound Steam Oil is a thinner oil compared to the 460 variety and is specially selected for use with Roundhouse internally gas fired live steam garden railway locomotives. This is actually compound bearing oil which has been selected by Roundhouse, after extensive research and testing, to be the best grade oil to use in their displacement lubricators."

Members might also be interested (but not very) in Z83 oil for Wilesco tinplate steam engines and similar oil for Mamod engines, which can be found in very expensive, one fluid ounce sized units.

John Boothman (Treasurer High Wycombe MEC)

A reminder of warmer days. Tracey, on steward duty, is about to drive the ground level train around the track to make sure the way is safe and clear for the visitors' rides. 3rd September 2017.

Dates for your Diary

MARCH		**2018**
Fri 2nd March		General Meeting at HQ, 8pm
Sun 4th March		Working party at CH. 9:00 – 12:30
Tue 6th March		Council Meeting at HQ, 8pm
Sun 11th March		Working party at CH. 9:00 – 12:30
Fri 16th March		***Deadline for copy to Editor for April News Sheet***
Sun 18th March		Working party at CH. 9:00 – 12:30
Tue 20th March		TSC meeting at St. Mark's Church Centre, 8pm
Fri 23rd March		Workshop evening with Mike H. Tooling. 8pm HQ
Sun 25th March		Working party at CH. 9:00 – 12:30
APRIL		**2018**
Sun 1st April		Working party at CH. 9:00 – 12:30
Tue 3rd April		Council Meeting at HQ, 8pm
Fri 6th April		General Meeting at HQ, 8pm
Sun 8th April		Working party at CH. 9:00 – 12:30
Sun 15th April		Working party at CH. 9:00 – 12:30
Tue 17th April		TSC meeting at St. Mark's Church Centre, 8pm
Fri 20th April		***Deadline for copy to Editor for May News Sheet***
Sun 22nd April		Working party at CH. 9:00 – 12:30
Fri 27th April		Workshop evening with Mike H. Tooling. 8pm HQ
MAY		**2018**
Fri 4th May		General Meeting at HQ, 8pm. AGM
Sun 6th May		First Public Running at Colney Heath. 2pm to 5pm
Sun 13th May		Toy Boat Regatta at Colney Heath (George C)
Tue 15th May		TSC meeting at St. Mark's Church Centre, 8pm

NB. Please notify Alan M (Secretary) of all meetings and other Society events for inclusion in the Society Calendar. Approval for special events still rests with Council and/or the Tyttenhanger Site Committee.