

1). INTRODUCTION:

Here is the second of the new Reefsteamers Waybill series.

The Reefsteamers Waybill is meant to supplement the current Reefsteamers Depot Reports with more regular news releases, but in a summarized form so I can get it out quicker and in a more consistent fashion.

The Reefsteamers Waybill should also provide a more regular communication channel for our Organization. As fun as the traditional Depot Reports are to create (and to read), they are by nature, a reactive effort. That is, they come out after the event, project, drive or crisis is over – sometimes several weeks after.

I fall even more behind when I have marketing or communications work to do, as marketing is always higher priority than reports of any kind. No Marketing = No Passengers = No Income! The core of the Reefsteamers Waybill is such that I can complete it and proof the text within two work sessions.

As I have time free, I will continue with the traditional Depot Report style essays – but the photos will tend to span a longer period of time – or perhaps document an entire project. Or they might be funny people pics, or sunset shots, or whatever takes my fancy.

With classic irony, this particular Waybill is quite a lot longer than I originally planned as it includes a brochure from Aidan McCarthy, as well as some external letters and write-ups.

2). GENERAL WAYBILL VS. MEMBERS-ONLY EDITIONS:

A standard Reefsteamers Waybill, like this one, will be distributed to all Reefsteamers Members, our Guest Email List(s), the other Steam Operators and also uploaded onto the on-line media. (As per the existing Reefsteamers Depot Report.)

However, Waybills with member-specific instructions or news will have those items included in a unique version. These special versions will only be emailed to registered and paid-up members.

The general sections of those Member-Only Waybills will be the same as the standard version.

3). 2013 MEMBERSHIP RENEWALS

Thus, you need to update your Reefsteamers Membership if you haven't done so yet, if you don't want to miss out on special communications and offers. Membership Liaison Lauren Ackerman says to remind you that the 2013 Reefsteamers Membership renewals are currently open. You will find the forms on Reefsteamers' FaceBook page and on the Reefsteamer Website.

Please send all membership queries to membership@reefsteamers.com.



P01 - The tired, homebound train enters the yard at the end of a long, hot summer's day. Thanks to our volunteers, we can have confidence that there will be a morning after. (Pic – 3 Nov 2012)

**4). OPEN DAY VOLUNTEERS:**

Don't forget that we are still canvassing for volunteers for the coming Reefsteamers Depot Open Day to be held on Saturday, 27 July 2013. Please send your Open Day-related queries through to Lauren 'Smidge' Ackerman at marketing@reefsteamers.com.

As Lauren actually does have a life outside of Reefsteamers (Surprise! ☺), please do not use private emails or phone numbers.

The following main areas or projects have been identified as needing attention for the Depot Open Day. Each one is already under the auspices of an individual who is to make the arrangements and will be the team leader. This list is included for reference only and to give you some idea of where we need volunteers.

However, please do NOT try to contact these people at this early stage of the project. Please only use Lauren's marketing address to maintain a single point of contact for efficiency.

The responsible people are reminded that there is a meeting planned for them at 11am on 8th June at the Depot, to discuss progress of the arrangements.

EVENT \ CATEGORY:	RESPONSIBLE PERSON:
Public Relations	Diana Sanderson and Lauren Ackerman
Catering	Elize Sewell
Ablution Facilities / Tables and Chairs	Aidan McCarthy
Indoor exhibits	Tony Elliot and John Gundry
Outdoor Exhibits	Simon Bennett
Kiddies Area	Petro Geldenhuys
Security	John Hammill
Safety	Dennis Edgar
Paramedics	Petro Geldenhuys and Lauren Ackerman
PA System	Simon Bennett
Credit Card Machine	Mike Dyke
Photos	Diana Sanderson
Memorabilia	Victor Mienie and Hennie Mienie
Multi-Media Displays	Lee Gates
Depot Manager	Gordon Bennett
Locomotive Preparation	Shaun Ackerman
Coach Crew Roster	Diana Sanderson
Locomotive Crew Roster	George Hoddinott
Vintage Cars	John Hammill and Dennis Edgar

5). CLASS 15F 2914 FIREBOX REPAIR PROJECT:

George Hoddinott has seemingly been very quiet on the Class 15F 2914 project, but it is still progressing even if the old rail basher is gathering dust on her fresh black primer coat. The last round of testing work on the locomotive's foundation ring revealed the ring to be a total write-off. In the SAR days, it was so poorly poured and then forged that there are embedded pockets of slag the size of golf balls. As a result, there are some major hidden cracks and not just in the usual corner sections either. The new welds to fill in the previously-discovered cracks in the RHS rear corner were simply causing cavities within the material and not bonding properly. The idea of transplanting a foundation ring from a donor 15F locomotive was considered and then abandoned. (What a nasty and labour-intensive job THAT would have been!)

However, we are following a new path, to convert Class 15F No.2914 to a welded firebox design, such as on the more modern 25NC and GMAM, and to eliminate the foundation ring altogether. The proposal has been discussed with Andrew King as well as OSG (Our Boiler Inspectors), and they have approved of the idea. As with any work involving cutting into or patching a locomotive's pressure vessel, a set of drawings have to be produced to illustrate the concept. So far, the rough concept drawings have been approved.

Basically, the inner and outer sheets of the firebox will be closed off at the bottom by welded sections of half-round pipes. This is a common modern boiler standard and is called 'Trough Construction.' The GMAM and the 25 Class families have 'troughed fireboxes' rather than separate riveted foundation rings.



P02 - The raw-looking Class 15F No.2914 on Sat, 23 March 2013. She was then having even more rear-end hardware removed for better access to the ash pan and the condemned firebox foundation ring.



P03 - The original specification welded-trough style firebox base of a GMAM locomotive is visible on this very dead boiler. Notice the lack of the typical double row of closely-spaced diagonally-offset rivets at the bottom of the firebox (now the left) to hold a foundation ring in place.

George is busy preparing eight hand-drawn design drawings to be submitted to OSG for official approval. The new welded firebox footer design requires four lap joints, so those joints need designing as well as determining the welder's certification.

An extra row of firebox flank stays will have to be installed. Six of the washout ports and the two blow down cocks will be moved. In addition, the sliding cleats that hold the rear of the boiler onto the frames will need to be relocated and modified. But there, we will emulate the 25 Class design, so it won't be a total redesign.

In the meantime, the (in)famous firebox corner patch has been approved by OSG, including the proposal drawing, the materials and the welder's certifications. The corner patch will soon be welded in by Vescon.

**6). A NOTICE FROM THE RAIL SAFETY REGULATOR:**

Reefsteamers was recently served a notice from the Rail Safety Regulator concerning unauthorised personnel riding on the footplate, and/or firing and operating the locomotives.

I have been authorised to include the letter's text into this edition of the Reefsteamers Waybill, as people sometimes seem to think that we are just making up the rules as we go along, or that we are just being difficult.

However, the RSR are serious about what they say.

This has been an issue before. And remember that with emails and modern communication methods such as FaceBook, Skype and Twitter, rumours can spread very quickly. So please be very careful about what you do and do not be afraid to say a firm 'No' to requests for 'a go' on the footplate.

I have been instructed to warn you that if any crew member allows an unauthorised person on their footplate with the engine in motion, that individual will be suspended from Reefsteamers locomotive service.

I have reproduced the text of the Prohibition Directive below, but the originals are available for inspection.

Railway Safety Regulator (RSR): Prohibition Directive:

It has come to the attention of the Railway Safety Regulator that some tourist operators may be considering allowing tourists or members of the public to drive and fire their steam locomotives.

As a result of the above mentioned, this PROHIBITION DIRECTIVE is issued under Section 36 of the National Railway Safety Regulator Act , 2002 (Act 16, 2002 as amended), to inform you that the following condition is a threat or may be a threat to safe railway operations.

- 1) It is a very dangerous practice to allow members of the public, or any other unqualified person, to operate a steam locomotive, even if it is done under supervision. Only persons that are suitably trained, assessed and certified by an accredited assessor will be allowed to operate steam locomotives or any other locomotive.
- 2) No person that is not directly involved with the operation of the steam locomotive is allowed on the footplate while the locomotive is in motion.

Therefore, your organization is prohibited from allowing these practices on its trains.

This Prohibition Directive does not relieve you, as the Operator, of your responsibility to manage the safety of your operations and to take any actions that you may deem necessary should the threat identified above become an immediate threat to safe railway operations.

This Prohibition takes immediate effect and will remain in force.

Failure to comply with this Prohibition Directive will result in Section 45 of Act 16 of 2002 as amended (National Railway Safety Regulator Act) being invoked.

Yours sincerely,

Maryna du Plessis

GENERAL MANAGER : OPERATIONS


7). WINTER SUNRISE PHOTO SHOOT – 13 JULY 2013:

We will be hosting our now-traditional Mid-Winter Morning Photo Shoot on Sat, 13th July. It is timed to take advantage of the abundant, dramatic steam effects that one gets to see on the icy cold mornings, as well as usually having several locomotives available. (They would have been made ready for the following Open Day anyway.)

Please note that this event is NOT a part of the Depot Open Day when we open up to the public. (That event will be two weeks later, on Sat, 27th July).


All enquires for this event must go to photo@reefsteamers.com and NOT to marketing@reefsteamers.com.

Below is Aidan McCarthy's brochure. Feel free to reproduce and distribute it.



Winter Photographic Session

Reefsteamers open day 13th July 2013



Reefsteamers will be holding a winter photographic session on the 13th July 2013. Various locomotives will be in steam for the event, photographers will have the opportunity to photograph locomotives moving around Reefsteamers Germiston depot and in several authentic static positions around the depot in the early morning light.

All funds from this event will be used by Reefsteamers, a volunteer organization to continue maintaining South Africa's railway heritage.

Location: Reefsteamers depot Germiston. (See Reefsteamers website www.reefsteamers.com for directions)

Date: Saturday 13 July 2013

Start time: 06:15 am

Cost: R 600.00 per photographer

Attendance is limited to 30 photographers

Bookings and inquiries email : photo@reefsteamers.com



8). WORKSHOP TASKS FOR THIS SATURDAY – 18 MAY:

As always, there is much work to be done for those willing to pitch in and get involved. The locomotive fitters have plenty of work to do on both the 12AR to get her going for the next train, and for the 15F to get her ready for her hydraulic boiler test. So the usual 15M workshop boys have plenty on their hands, especially as we want to 'lift' two coaches as well.

So once again, we are appealing for more people to get involved, especially with the coach interior related work. There is LOTS of non-technical and non-engineering type work that needs to be done within the Bar Coach and the Sleeper Train. If you can handle a battery powered drill, or a scraper, or even a dust pan and brush, we can use you.

Working on the Class 12AR No.1535 'Susan':

- Finish off the booked repairs as reported by crews. Each Reefsteamer Locomotive has her own log book where running faults are reported.
- Fit new gaskets to the waist flanges on both of the steam delivery pipes within the smokebox.
- Put the boiler, regulator and superheater circuit under pressure to test for and eliminate any more leaky surprises. (With valves set at mid-gear, cylinder cocks open and the motion blocked.)

Working on 15F No.3046 'Janine':

- Prepare for boiler hydraulic testing now that No.3046 has passed her visual inspections by OSG.
- General repairs and improvements as required on the locomotive.
- Complete machining new valve gear bushes from Vesconite, and fitting them. (RHS Motion.)
- Greasing work as required on the locomotive's Bissell truck as well as the tender bogies.

Sleeper Coach Upgrades.

- A long list of work is required on the Sleeper Coaches. Most of it is non-technical.
- VOLUNTEERS NEEDED TO COMPLETE THIS PROJECT. Philipp Maurer had done most of the stripping, as well as purchasing the hardware.
- R60 000 of material has been purchased and is waiting to be fitted. There should be no 'hanging around' waiting for material or supplies.
- Two coaches need to be lifted by jacks and their bogies and bolster gear checked, lubricated and serviced.
- The rubbish needs to be cleared away and the unused bunks properly stored.

Bar Coach Kitchenette:

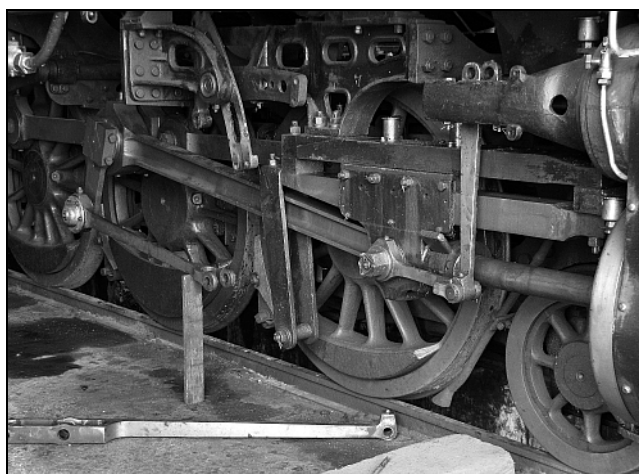
- Stripping and preparation of the Bar Coach's store room to start the conversion process to a kitchenette.

S&B Power Van:

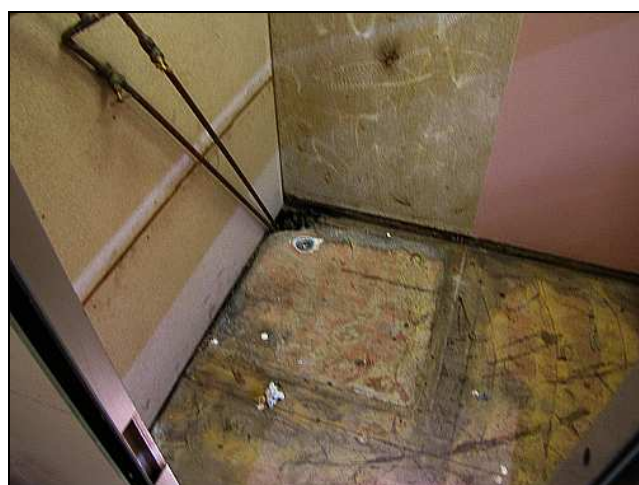
- If time permits, we need to inspect one of the wheels on the Power Van with a view to possibly replacing an axle.



Class 12AR No.1535 'Susan.'



Partially dismantled valve gear on 15F 3046 'Janine.'



A stripped bathroom in a Silver Class Sleeper Coach.

9). WORKSHOP PROJECTS FROM SAT, 11 MAY:**W01 – Showing and Blowing.**

Some more steam-emitting faults found within the 12AR's smokebox on Saturday, 11th May, included steam leaks at the steam delivery pipes on BOTH sides. You can see the characteristic marks on the smokebox barrel where the steam jets literally blasted the soot away. However, the welded-together pipes are doing quite well!

It also explains the blowing sound that people were hearing from the outside. (The element leaks were just pinholes.)

This side was just a bit loose. The gasket had actually failed on the other side. We'll put those bolts down for more regular checks as the 12AR is on a strict smoke-box cleaning schedule anyway, to extend the life of the known-worn front tube plate. Once they settle into service, those bolts rarely work loose – it's just that we have new gaskets still compressing and the threads were 'copper-slipped.'

**W02 – Drenching before Wrenching.**

The Susie-heaters are known to be tired in general, especially those in the top row. (Which usually corrode first anyway, because of the inevitable water retention in their sink trap-like riser shape.) And the 'toppers' are the ones for which we lack spares. ☹ The second pinhole leak that was found was right behind the petticoat and in the top row.

The fellows managed to get the lower three elements out but the Superheater Header's tee-bolt on the top unit would not budge. It necessitated some gas torch and cold soak treatment. You can see the steam behind the water trail.

Dawie and Michael were going to try and weld the element up in the limited space behind the flared petticoat. But Engineering Director Shaun Ackerman imposed his 'anti-sukkelaar' policy and the fellows unbolted and removed the petticoat too.

**W03 – Inward Focus.**

A silly mistake that had been made when recommissioning 12AR No.1535 'Susan' was that all three cylinder drain cocks on the left side were all mounted 180 degrees out of alignment.. The circular outlet ports for the condensate were jetting INWARDS against the front bogie's frames!

Oh, the humanity! The right side cocks were installed OK.

You can clearly see the circular outlet port in the front cylinder cock that had just been re-installed by Johann Breydenbach. The cock-bodies can only be fitted in one of two orientations because of the rectangular slot of the cam rod, but it is easy to forget where the outlet port is pointing.

**W04 – Busy with Bushings.**

Class 15F No.3046 'Janine' has been fitted with some new Vesconite bushes on the left side. The new bushes are at the leading ends of the union link and of the radius rod. (Lower and upper left of pic respectively.) The third bush is between the slotted expansion link and the eccentric rod.

The new bushes were machined to suit by James Thomson during the week and refitted by Jeandre and Gordon. As the job was fairly quick, they have decided to replace some of the more marginal bushes on the right hand side as well.

Although we grease the Vesconite bushes as per usual, they are self-lubricating and tolerant of running dry.

**W05 – Ready for the Doc.**

15F No.3046 all stripped and ready for a visual inspection of the boiler by OSG. (Since passed.) This was Gordon and Jeandre's first strip-down and washout all on their own, although advice was never more than a phone call away. We don't expect issues with this horse-boiler.

This boiler washout included special attention with high pressure sprays onto the crown sheet and down into the water spaces on the sides of the firebox.

The flare probe was put into use too – basically a long, rod version of a paraffin flare lamp. It is slim enough to be inserted through the washout plugs in its lit state. It also provides a back light to be checked against when looking for the silhouette of remaining sludge and scale though the opposite wash-out port. It is also used in this way along the entire lower length of the boiler shell.

**W06 – Scuttled, but in a good way!**

The coal handling wagon has had the bent scuttle plate straightened and welded back into place. The welds need to be painted for weatherproofing and then the machine is ready to go. The scuttle plate recently got bent when we used the coal grab to relocate the heavy ex-SANRASM tube swager. The repair job is at the corner diagonally opposite to this one!

The previously damaged grab's clamshell was also stripped and patched, and it received a service at the same time.

We want to use this track to start pulling sleeper coaches in. It is partially to keep them out of the weather, sort of (Because of the holed roof), but also to give the coach volunteers some company, instead of them working away all alone in the cavernous carriage sheds.

**W07 – Hunslet.**

'Andrew' the Hunslet has had his fuel filter service and is back in operation. He still needs to have the alternator replaced. But it isn't as simple as it is on a car as the alternator is actually halfway along the engine block and is driven via a shaft and a flexible coupling rather than a Vee-belt. The alternator itself is sort of an antique, being a higher current version of the classic Lucas ACR type.

This 1951-built shunter isn't looking too shabby these days! Oom Attie has been doing the painting work.

**W08 – Red Flag Engine Cover.**

Somewhere on the premises are two original engine covers for the Hunslet Taylor Diesel. They were 'put away for safety' and the location forgotten, although it is most likely they are stashed in the 'Millsite' store somewhere. The covers were initially removed to provide access to the starting battery and the fuel shut off valve. Later they were left off the front end to assist with cooling.

The locomotive has been running since the gearbox rebuild with two new covers in bare-metal finish in corrosion resistant steel plate. They have since been primed ready for painting.

**W09 – Wheel Lathe Monkey Puzzle.**

Some exploratory work has started in terms of reassembling the wheel lathe's two gearboxes to test them, for clearance, free running and easy gear changing – turning them over by hand. This is the input gearbox. Pictured to the right is sweet, innocent John Gundry who initially came to enquire about model-related exhibits for the coming Depot Open Day, and ended up getting roped in. He enjoyed himself!

The person who dismantled the gearboxes is no longer with us, and naturally, he did not take any notes ... so this all has to be figured out from scratch! Classic!

Once the gearboxes are tested, they will be dismantled again and the new gears sent for hardening.

**W10 – Presents for good little coaches.**

Santa Maurer has been in town. This bakkie is full of hardware and supplies for the sleeper coach refurbishment project. The big boxes visible are moulded plastic bases for corner showers. Hidden behind those bulky but light boxes are boxes of wooden laminate 'planks', bundles of extruded aluminium trim, three glass shower door/enclose kits, a roll of foam insulation and some plumbing hardware.

Philipp Maurer has put R60 000 of his own money into the coach project, to be repaid interest-free from the proceeds of the planned November Steam Tour. This load is but one of several that have been loaded into those coaches!

This bakkie was able to do a three point turn over a set of railway points and it only grounded out once!

**W11 - A Gold Class Mess.**

All three of the gold class compartments have had their intrusive L-shaped cupboards removed – restoring a flat wall and allowing access to the useful overhead storage. The beds will rotate 90 degrees. With the flatter walls, we can fit more furniture in. We'll put some wall hooks up too.

The silver class compartments have all had their horrible L-shaped bunk beds removed and are being restored to a single sided one-up-one down arrangement traversing the coach. The top bunks have all been removed. The middle bunks will be located higher and will be bolted into place – relying on the mattress as a seat back during the day. (Our coach mattresses were custom-made with a tapered profile anyway.) The released floor space will allow for a small bench or chairs alongside the windows for easy viewing of the trackside scenery – something that was spoiled by the now-removed lower bunks.

**W12 – Bath mats are optional.**

Most of the bathrooms have had their vinyl sheet floors stripped and the toilets removed. The floors are to be re-laid with warmer adhesive wood laminate planks. This particular sink is to be lowered to fit a porcelain pedestal.

This is a center compartment so the curved corner shower will remain. New corner showers are to be fitted to the Silver Class coaches, with the walls backed up with tiles and using decent quality taps and heads.

The Gold Class showers were crammed into the old linen and service cupboard spaces. The cupboards and the electrical chambers in the corners are to be removed and opened up so those compartments (Gold A and C) can have proper showers installed. The doors are also being worked on ensure that they open fully – but many will be modified as their handles block the door's movement.

**W13 – Sump'in is in the Sump.**

Not the most exciting steam train picture I've ever taken!

A long standing blocked sewer line problem has been cleared up with some heavy-duty rodding, and some digging to clear out long-overgrown manholes. 'Black Water' was starting to back-up within the Transnet Diesel Depot, whose drain lines cross our land.

The contractor kindly rodded out the branch drain lines from our Depot, even though it wasn't in his main scope of work. His equipment didn't reach all the way. We still need to get a plumber out to clear out manholes and branch lines back into the main sewer line. But at least the job should now be feasible without digging up all the drains!

We currently siphon the 15M shop drains into the wheel drop pits and pump it to the main drain via the sump pump.

**W14 – Sunspots and Coal Dust.**

Locomotive Tenders that are out of use should have their left-over coal removed, particularly if the coal gets wet. The coal contains sulphur, the water-leached compounds of which form an acid and corrode the steel work.

We had a number of unused tenders with coal several years old. We have been exchanging the lumps of old coal to some local ladies in return for weed-pulling work on our tracks. They have been breaking their coal down and reselling it for a profit in the local squatter camps.

This is the almost empty tender of 15F 3016 'Gerda'. The white spots are the sunspots from the hail holes in the roof. And where the sun can come in, so does the rain. The final cleaning will be done by one of our casuals and we have a lady willing to do weeding for the small chunks and kibble.



This Reefsteamers Waybill Newsletter was compiled by Mr. Lee D. Gates on behalf of Reefsteamers Association NPC. For observations, corrections and suggestions – email me at documenter@reefsteamers.com

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MOTIVATION : The Reefsteamers Depot Reports, Waybills and Photo Essays are created on an unpaid volunteer basis in my leisure time, for the love of steam.

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Owners of locomotive(s), rolling stock, equipment and machinery will be given material for reports and photographs by me upon request and not necessarily through a Depot Report or a Photo Essay.

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