

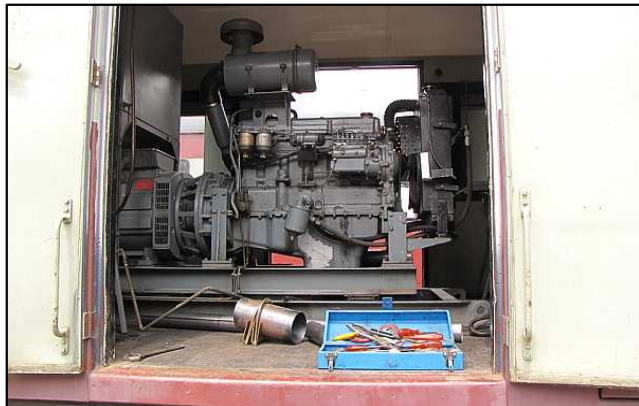
13). WORKING ON COACHES:



P163 - We are quite proud of our two sets of main line coaches although we are always battling to catch up with their endless maintenance needs. Although they are not as glamorous as the locomotives that pull them, they are actually the true revenue earners for Reefsteamers.



P164 - Coach bogies also need to be inspected and serviced at regular intervals – and this is usually done in the 15M shop or surrounds. This one has been rolled out to have the coil springs uprated as the caboose was riding tilted with the weight of a newly installed generator set inside.



P165 - The two sets of Reefsteamers coaches each have purpose-fitted vans with generators on board for the lights, water pumps and other amenities, which means we need to look after those diesel engines as well. This is the smaller Ford Industries-powered generator for the day-sitter train, fitted into a works caboose.



P166 - Reefsteamers' coaches have all been converted from the complicated DC axle generator-and-battery setup, requiring inverters, to using a standardized 3-Phase system using modern 220V fittings. This also means that our coaches can be easily powered by standard electrical power at trackside and by generators.



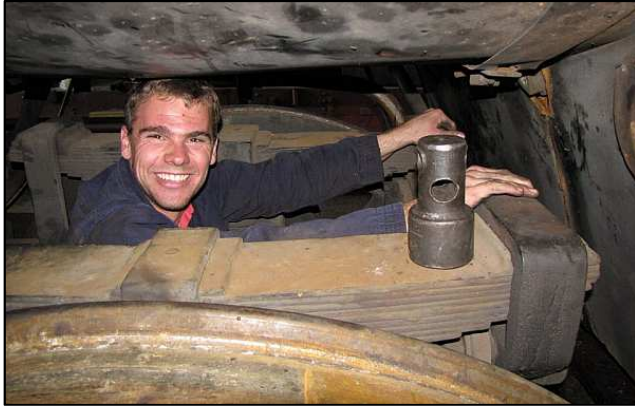
P167 - Because of the sheer size of a railway coach, projects such as floor repairs and painting require the efforts of a full team to make any progress.



P168 - The train set has a few communal coaches such as the lounge car with bar (Pictured) and several dining coaches. These receive a lot of wear and need constant maintenance to keep up a good standard.



**14). TRAINING AND SKILLS PRESERVATION:**



P169 - One of the subtle losses with the passing away of steam traction are the skills of both driving the locomotives and repairing them. Pictured is one of a very rare breed, a 21<sup>st</sup> century young man (Jeandre Gordon) who works full time on steam locomotives and is rapidly gaining skills and experience both on the rails and within the workshop.



P170 - Steam Preservation is often seen as the prerogative of old men. But that is dangerous as when the oldies inevitably and sadly pass on, their skills will pass on too. Reefsteamers has a strong showing of young people who are eagerly learning from the old boys, and several old boys that are enthusiastic about teaching and sharing.



P171 - Reefsteamers is fighting a slow race against time as our steam-era railway men are reaching retirement age and one has already passed away. Due to problems with his back, driver Frans van Dyk decided to retire himself from service and he drove for the last time on 16 Dec. 2011.



P172 - Reefsteamers is fortunate enough to have younger fireman and drivers available to pass on their skills to the latest generation of steam enthusiasts. Driver Shaun Ackerman has some tea at the grate shaker while his appy gets busy with raking the fire clean after a long day's run.



P173 - We need to preserve and pass on the skills as well as preserving the equipment. Some of our members have innate mechanical abilities but started with little knowledge of the locomotives, while other members work mainly with the passengers. This coach crew member is being shown where the fusible plugs are and what they do.



P174 - Most of our trains run with a 'third man' on the footplate who assists the fireman and gains experience in firing. In the early days of his training, Simon Bennett is seen being taught how to fire to the right corner via the awkwardly inset 15F firebox door.





P175 - A valuable and yet hard-to-quantify skill is the ability to figure things out and make a plan with worn, incomplete and often undocumented machinery. These fellows are test-assembling a gearbox for the locomotive wheel lathe project. The talented gentleman on the right passed away suddenly less than two weeks later.



P176 - We hold training sessions at intervals. Here a keen young man is having the drafting arrangements of a self-cleaning smokebox explained to him. He can now commission and decommission a locomotive on his own.



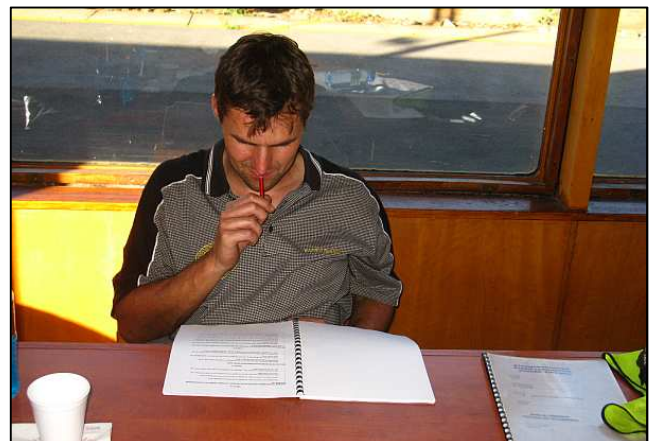
P177 - Although we are volunteers, the engine and coach crews have to take regular exams and refresher courses to maintain safe working standards. Here, the Reefsteamers Chairman is assessing Coach Controller examination papers in his capacity as a certified Train Manager.



P178 - Here is a training session under way in the formal club house. The gentleman conducting the course is a qualified Train Manager – a position which is certified by the Rail Safety Regulator.



P179 - The coach staff receive training on the techniques of fighting brush fires as these may be started by a steam locomotive in Gauteng's dry winter season. The auxiliary tanker has a firefighting pump and hose set. The train is also required to travel with a qualified medic on board.



P180 - The firemen have to do their practical assessments AND a writtwe exam, and they often fear the pencil more than the shovel! Locomotive crews are recertified every two years. Fireman Dawie Viljoen is seen wrestling with an exam paper on a homebound train from the Ficksburg Cherry Festival. He had just successfully completed his practical assessment on the undulating outbound trip.



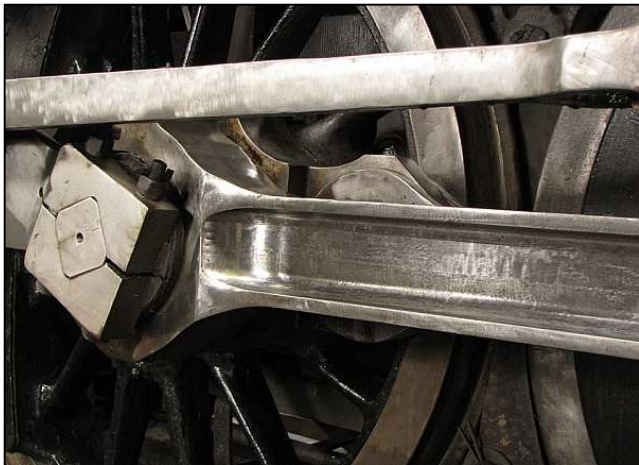
15). OPERATING LOCOMOTIVES:



P181 - We tend to restrict the locomotive operations to the running shed, but we do fire up locomotives in the 15M workshops occasionally. This is the relatively simple old-fashioned boiler backhead of the Class 12AR No.1535.



P182 - It takes about six hours to get a typical large SAR locomotive into steam. As we like to do checks and tests when the locomotive is in steam, the fire is usually lit up in the morning on the day BEFORE the train actually runs.



P183 - But sometimes time and energy can be found to do something a little extra ... like lovingly polishing the sturdy rods that drive the mighty wheels. This is a task that can take more than half a day with a powered wire brush tool.



P184 - Most of our trips need us to depart westbound from where we came, so the locomotives are usually parked and steamed up facing the wrong direction, like the 25NC 3472 is here. Thus, the turning balloon track has to be used.



P185 - Sometimes a fault is found after an engine has been lit up and urgent running repairs have to be made. This is why we light the locos the day before as some faults can only be discerned once the loco is hot and her components pressurized. Here, a pair of lubricator lines are being swapped over to get oil through to the cylinders.

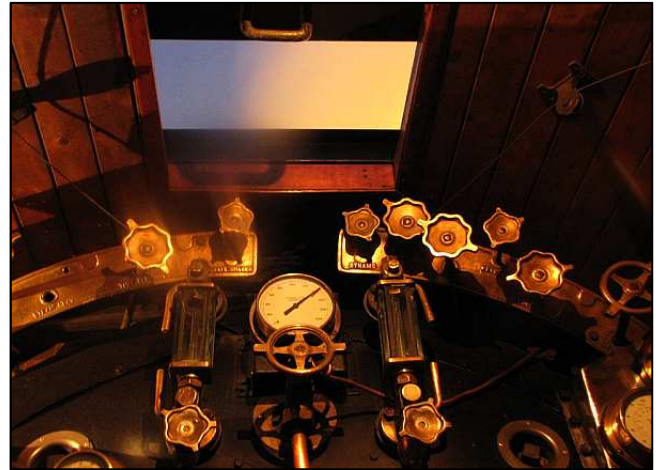


P186 - The loco minder stays on duty overnight (12 hour shift at Reefsteamers) and looks after his big 'baby'. The idea is to let the locomotive drowse with a slow fire all night and keep some steam in the boiler – and wake her up in the morning. But he mustn't fire the engine so much as to cause the safety valves to lift.





P187 - A typical train trip requires that the locomotive crew and coach crews report for duty at or before sunrise! It is sometimes a bit of a shock for the solitary loco-minder after a long, quiet night to suddenly have the shed and adjoining yard full of noisy people in high-vis vests and sometimes even photographers firing flashes into the cab!



P188 - This is the upper backhead of a certain 'little' engine who is all steamed up and ready to go! The steam pressure usually falls several hundred kPa when the fire is raked out and a new fire lit up on the coals of the old. Although loco minding is a 'junior job', an incompetent or negligent loco minder can delay the train's departure.



P189 - While the fireman cleans and rebuilds the fire, the driver will go around the locomotive with a can of oil to refill all the oil cellars, and to lubricate the moving parts. Here, Senior Driver Chris Saayman is filling up the oil cellar on a Bissell truck's radial slide.



P190 - Even if the loco is cleaned overnight, she will often get dirtied again during the morning fire cleaning. It isn't unusual to see one or two people doing a last minute clean up before the locomotive trundles off from the ash pits.



P191 - We use the western yard to assemble and couple up to the train. Before the train can depart, the auxiliary water tanker needs to be connected and the vacuum brakes need to undergo witnessed testing by the Train Safety Officer.



P192 - By the time the locomotive receives the green light to proceed on her journey, the effort invested to get her to this stage has already been in progress for 24 hours. In railway days, they were kept constantly hot and in steam for a week or more in between boiler washouts..



16). HOW WE EARN OUR REVENUE:



P193 - We get no subsidies from government or railways and have to operate Reefsteamers like a self-supporting business. Our main source of income are the day-trips, usually through to Magaliesburg Village. In the peak summer season, we usually run trains every second week and on public holidays.



P194 - We also run out-and-back style lunch trains and beer tasting trains, which are usually short trips of about 4 hours. Although the catering requires more organization, these trains are usually quite well patronned.



P195 - Traditionally we run at least one long distance trip a year. They are lots of fun but involve much preparation and logistics work, often with two locomotives in use. Pictured is the 2008 Cherry Festival train undergoing a service stop en-route to Ficksburg in the Eastern Orange Free State.



P196 - We used to run steam tours to the OFS. These can be quite stressful even though they are quite an adventure for crews and passengers alike. The pictured Drakensberg Explorer last ran in 2007 and was the last long distance tour to run until the November 2013 Reefreestate Explorer.



P197 - New Year's Day 2010 – We ran the first of our New Year Trains behind steam to Magaliesburg. Since then we have been to Port Shepstone twice for New Year, albeit without steam locomotives.



P198 - We also run conventional passenger trains with special themes such as 'Heritage Day', 'Valentine's Day' and others. Pictured here is a scene in the bar coach of a Country Music Special. Yeehaw!





P199 - Once a year, we rent our coaches out for use with the annual Rotary Witbank Marathon, which includes the traditional Great Train Race where the train runs alongside the marathon runners. Since 2007, the train race coaches are not hauled by electric traction and not steam.



P200 - Reefsteamers is fortunate to have two full sets of coaches to operate, one set as a sleeper train and one set as day sitters for the regular short haul trips. These are also the only two UCW steel mainline coach sets to still be running in original SAR colours in South Africa.



P201 - We've had some good fun at the Depot too! This is a behind-the camera shot of Kurt Darren and Snotkop, and a troupe of dancing girls, performing for a lively 'Stoom Trein'-themed music video. See [http://www.youtube.com/watch?v=x\\_uV5A877q4](http://www.youtube.com/watch?v=x_uV5A877q4)



P202 - The depot itself earns money through offering posed positions and special run-bys for professional photographers and railway enthusiast tour groups. Here, the Class 12AR is just finishing a goods train run-past an international Cooke's Rail Tours group in May 2010.



P203 - The depot is also growing in popularity with amateur photo-clubs and we often have small paying groups taking pictures in and around the depot, sometime for leisure, sometimes for training and sometimes as an industrial-themed photo challenge project.



P204 - Once a year, we offer a mid-winter photo shoot as winter is the favourite time for steam photography. The cold air condenses the steam to make dramatic steam clouds like these! This is the world's last surviving Class 12AR locomotive making a midwinter departure in 2013.





P205 - It is not too unusual to see a bride at the depot! Reefsteamers is a popular venue for trash-the-dress sessions and for fashion model shoots. Arty people often find the industrial textures and scenes appealing as backgrounds, portraits and macro shoots.



P206 - We occasionally run overnights and weekend trips away and intend to do more of these with our newly refurbished sleeper train. This peaceful moonlit scene was quite far away from home, with a train load of sleeping passengers at Ficksburg Station – 2010.



P207 - We occasionally open our depot to the public, which requires a lot of manpower in terms of marshals and safety officials. This was an Easter-Themed day-trip when kids would be shown around the depot and later 'earn' Easter Eggs on the train by answering questions about the trains.



P208 - We have a paying tenant on the property. These are some of the unique coaches operated by the Shongololo Express tour train company. They store and maintain their set of tour coaches here inbetween going on long-distance and cross-border tours every few weeks.



P209 - As the Shongololo Express do not have any locomotives of their own, they pay us to do their shunting as well as taking their coaches out to the Transnet yards for pick-up for their long-distance tours behind modern traction.



P210 - We love demonstrating our locomotives to children. (of all ages). Here, the Depot Patriarch, Oom Attie de Necker, is explaining the cab pressure gauge to some kids on a private school outing.





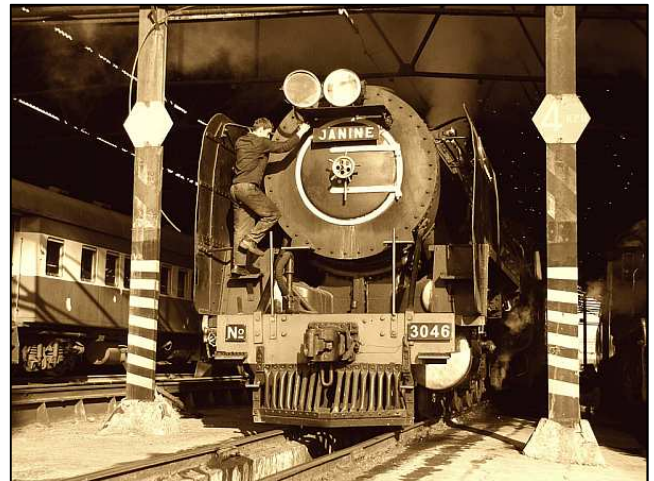
P211 - A part of the popularity of the photo-type business is the freedom that people have to be creative with their angles and views. They have the freedom to move around and enjoy the advantages of a large location which is still relatively safe. You couldn't do this in an active depot!



P212 - We usually have a Depot Open Day in the middle of the year, where we call in all our members and show off our depot to the public. We also provide opportunities for associates in the model industry, breweries, model steam clubs, vintage cars, flea market stalls and others.



P213 - The Open Days and the more formal photos shoots are where we just can't resist showing off a bit. But few people would appreciate the amount of sacrifice, dedication and hard work that took place before this smoky scene could be enjoyed by everyone.



P214 - But now that you've read this photo essay, perhaps you now have an idea of the multi-faceted operation that Reefsteamers actually is, and at how many skills and talents are involved.



P215 - The Germiston Steam Depot was originally founded circa 1895. Nearly 120 years later and a changed country later, the core of the old steam depot has survived as a functioning concern. It is truly a remarkable achievement!



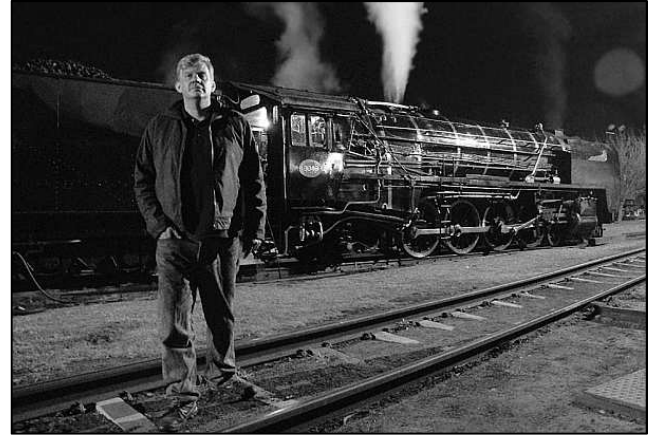
P216 - Each one of these steam locomotives that have survived in a functional state right through to the 21<sup>st</sup> Century is quite simply a miracle on wheels.



17). THE VISION FOR REEFSTEAMERS:



P217 - We preserve steam so that those who remembered it from its heyday can experience it once again, and relive their own personal memories. We have actually had retired railway men sobbing in the coaches when experiencing a real steam train again and a lifetime of poignant memories have been awoken.



P218 - We preserve steam so that those who never experienced its tactile reality can have a chance to master the great machines and the elemental forces that drive them. The loco-minder pictured here spends most of his time operating computers, documenting and testing software for a living – but he is happily going back in time.



P219 - Class 15F No.3040 parked in the background was Driver Louis Le Roux's allocated engine. His grandson is still involved with the steam locomotives of Germiston. Another form of preservation...



P220 - Here is the grandson previously mentioned. We have young people who have steam in the blood, and we keep the locomotives alive for them, so they can experience and learn. (Having much fun in the process.)



P221 - We are still training drivers and fireman – the gentleman on the right being our most recently qualified driver. (He is a 'private driver' – never having actually worked for the railways.) Thus, we preserve the specialist skills required to operate the machines, as well as preserving the machines themselves.



P222 - But mainly ... it is for the kids, as many of them never get to experience a proper train, much less get to see and experience a real live steam engine chugging up front.





P223 - Against all odds and obstacles so far, the old steam depot is still alive and we wish to keep it this way!

In between the endless mechanical and logistic tasks, we are trying to make the depot a pleasant place to be. Not only is this an aesthetic issue, but also a safety issue such as covering up open pits, and erecting barriers.

The depot, which was laid out before health and safety was a primary concern, needs to be made safe and attractive for members of the public.



P224 - We enjoy sharing our depot with the people of South Africa. These mid-winter open days are always popular and show just how many people are interested in seeing working steam engines and trains in their natural environment. We dream of building a steam museum at this spot to attract people to the depot all year around. SANRASM plans to assist in this matter.

A functioning steam museum here would provide opportunities for employment, not only for the museum staff, but providing enough work to employ some more technical and support staff on a full-time basis.



P225 - The early years of steam preservation were characterised by a number of long distance steam train tours, such as the Union Limited. Although quite popular, they were not economically viable and were soon unable to keep running once the railways withdrew technical support. That withdrawal is also why many officially preserved and running steam locomotives ended up out of use, going derelict and eventually going for scrap – the volunteers and associations of the time had insufficient skills or money available to repair them.

Reefsteamers have the workshops, the equipment and the human skills available to consistently support our own steam tours and operations. As the railway steam support infrastructure no longer exists, it is quite a logistic challenge to organize a long distance steam tour. Often a dedicated coal, water and engineering service train has to be provided (with crew), just like the one shown far away from home in the OFS.



P226 - In partnership with SAR Steam Tours, which is a European non-profit organization operated by some of our most dedicated members, Reefsteamers has officially started running long distance tours again. South Africa was once famous for those tours and international interest is keen in seeing them resurrected in the 21st century.

Due to the costs involved, these are primarily marketed to internationals, but it also means they bring in valuable foreign revenue. With sufficient revenue, the tickets costs for local people could be subsidized or sponsored.

To this end we are constantly refurbishing the sleeper train coach set to higher standards and to increase our passenger capacity. We have just done major upgrades to four coaches so far, as well as improving the dining and lounge coaches. The tours have also provided revenue earning work for local people in catering, cleaning, handyman work, logistics and security. Eventually we hope to employ permanent crews to service and staff the locomotives and/or trains while on tour.



18). STEAM – THE TWILIGHT YEARS:



P227 - South African Steam will never be dominant again, but Reefsteamers is striving to keep the engines going even as steam's day has come to an end. It is hoped to establish a steam museum on-site and for the workshops become a national center for steam repairs and restoration.



P228 - As we come to the end of this photo essay, you might be feeling inspired to get involved. We always need volunteers for the workshops, train crews, logistics, coach crews, marketing and admin staff. Any help you can offer would be greatly appreciated.



P229 - Even if you cannot get directly involved with our efforts, spread the word about our trains, tours, special events and depot photography. Just helping us to keep our venues and trains full is of great assistance.



P230 - For any further queries about membership, email [membership@reefsteamers.com](mailto:membership@reefsteamers.com) or visit our website [www.reefsteamers.com](http://www.reefsteamers.com).



P231 - Reefsteamers also has a lively Facebook community where photos like these are uploaded. [www.facebook.com/groups/reefsteamers/](http://www.facebook.com/groups/reefsteamers/) We also have a regular Depot Report to which people can subscribe for free for updates and photos.



P232 - Reefsteamers also has 'The Bird.' Follow our Tweets at #Reefsteamers





P233 - Our depot is also open for visits usually seven days a week – email through to [marketing@reefsteamers.com](mailto:marketing@reefsteamers.com) to make arrangements to be escorted onto the site.



P234 - We trust that you have enjoyed this simple presentation.



This Depot Report was compiled by Mr. Lee D. Gates on behalf of Reefsteamers Association NPC.  
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