



road ahead

4th Issue 2015
www.roadaheadonline.co.za

Transport
on the move



OEM watch

Setting up
for success

**Transport
security**
Highway soft spots
costing billions



For all your fleet finance, management and maintenance, we'll be there.

We don't just finance corporate and public sector fleets, we provide tailored and innovative solutions with advice and assistance on everything from vehicle selection to disposal and relation administration. So leave the paperwork to us, and the running of your business to you.

[Search Absa Business Banking](#)



Voted best SME Bank South Africa 2015
Capital Finance International Awards 2015

Make headway. **Prosper.**

Member of



We're committed to giving you the highest standard in fleet management services

Absa Vehicle and Asset Finance (AVAF) provides mobility solutions to a diverse range of clients. Driven by the desire to increase our clients' ease of business, we aim to provide tailor-made and effective solutions to their everyday fleet business needs. By doing so, they can focus on their core business, while we manage the difficult tasks linked to fleet management.

Amongst our comprehensive range of products and services are the Absa Fleet Card and Absa Vehicle Management solutions.

Absa Fleet Card

The Absa Fleet Card has been specifically designed to customise the right solution to help you run your fleet more effectively by providing accurate and convenient card and tag-based fuel, oil, toll, repair and maintenance management services.

We understand that a key concern for vehicle fleet owners is fraud, which manifests in many ways. For example, the fleet card may be used to fuel non-fleet vehicles or containers, pay for alternative purchases by falsely listing them as oil and not fuel, or other ancillary purchases. And then there's card cloning and skimming. Fleet card fraud is on the increase and, according to the CEO of South African Banking Risk Information Centre, Kalyani Pillay, "Fleet card fraud contributed 2% of the overall industry card fraud losses in 2014. While this seems low, the increase year on year (2013/2014) of 42%, is worrying. The use of lost and/or stolen fleet cards decreased by 9% but counterfeit card fraud remained high and contributed 92% of overall fleet card fraud losses last year."

"Absa takes fleet card fraud seriously," says Wessel Steffens, AVAF Managing Executive. Which is why, on 10 July 2015, Absa launched an innovative solution aimed at preventing fleet card fraud by implementing the following limits:

- Daily limits on the fleet cards
- Daily limits on the client's account
- The activation of tank capacity limits in line with the manufacturing specifications of the vehicle

"Activating tank capacity limits ensures that the client will not be charged for more fuel than permitted. This process will assist in combatting fraud through cloned or skimmed cards. When a cloned or skimmed card is used, the transaction will be declined because the tank capacity has been exceeded," says Steffens. "A secondary stop measure is the introduction of daily exceptions reports, which we deliver to clients to notify them of anomalies on their fleet fuel cards."

These reports can be modified to include all exceptions or only the client's preferences. Examples of such exceptions include: exceeding the tank capacity limit, transactions in excess of client-nominated amounts or the billing of rounded amounts.

To benefit from our new fleet card fraud prevention service and other Absa Fleet Card services, call 0861 227 232 or email: fleetman@absa.co.za

Absa Vehicle Management Solutions

Absa Vehicle Management Solutions (AVMS) funds vehicles and may even underwrite certain risk propositions associated with fleet ownership, such as residual values and maintenance risks. The benefits of acquiring a vehicle through an AVMS lease are extensive, from being cost-effective to eliminating the administrative burden of running a substantial fleet, and affording clients the opportunity to concentrate on their core business activities.

One of our products that enables clients to maintain this focus is the Fines and Licences Management Solution; designed to help businesses manage the payment of licencing fees and traffic fines. In line with this, we have established a South African banking first electronic interface with 25 municipal districts across the country, which allows us to track outstanding fines and licence fees and notify the relevant client.

"We send these fine notifications directly to the company so they can see which driver is responsible for the fine and track driver behaviour. This service also helps us protect the client's proxy with regard to the AARTO legislation, which could harm a business owing to the points system," says Steffens.

In the near future, Absa will extend this service and use the electronic interface to pay outstanding amounts directly to the municipalities on behalf of our clients. Steffens reiterates, "We believe in helping our clients stick to their core business by managing some of the aggravating and stressful aspects that come with doing so. That is what's behind our drive to continuously develop these types of solutions. We are truly helping them prosper by delivering value-added services."

In addition, AVMS also offers:

- Full Maintenance Leases
- Operating Rentals with Managed Maintenance
- Maintenance Plans and Managed Maintenance services

For more information contact us on 0861 600 800



road ahead

4th Issue 2015
www.roadaheadonline.co.za

Transport on the move

On the Cover



The Team



editor: gregory simpson
art director: brent meder
design & layout: sheeth hanief
advertising executive: linda smith (project manager)
bayanda sikiti, albin ballin

subscriptions: lee-ann lawrence
e-mail: leeann@capemedia.co.za
fax: +27 (0) 86 538 6761
local ZAR 115.00
international ZAR 313.00

distribution manager: edward macdonald
circulation manager: abby smith (manager),
lee-ann lawrence

client liaison: linda tom, eunice visagie
office manager: tracy mills
human resources: allison van der sandt (manager),
lesley-rae sonnenberg

accounts department: chevonne ismail (accountant),
brigitte eberbach

debtors department: nadeema abdullah,
kaptuya nkongolo, reza ismail

repro & printing: FA print
managing director: robert arndse
financial director: andrew brading
sales director: david itzkin

www.roadaheadonline.co.za

cape media house,
28 main road, rondebosch, 7700
(entrance c/o main and devonshire hill road), cape town
tel: +27 21 681 7000; fax: +27 21 685 4448
info@capemedia.co.za [http:// www.capemedia.co.za](http://www.capemedia.co.za)



The Chartered Institute of
Logistics & Transport
South Africa



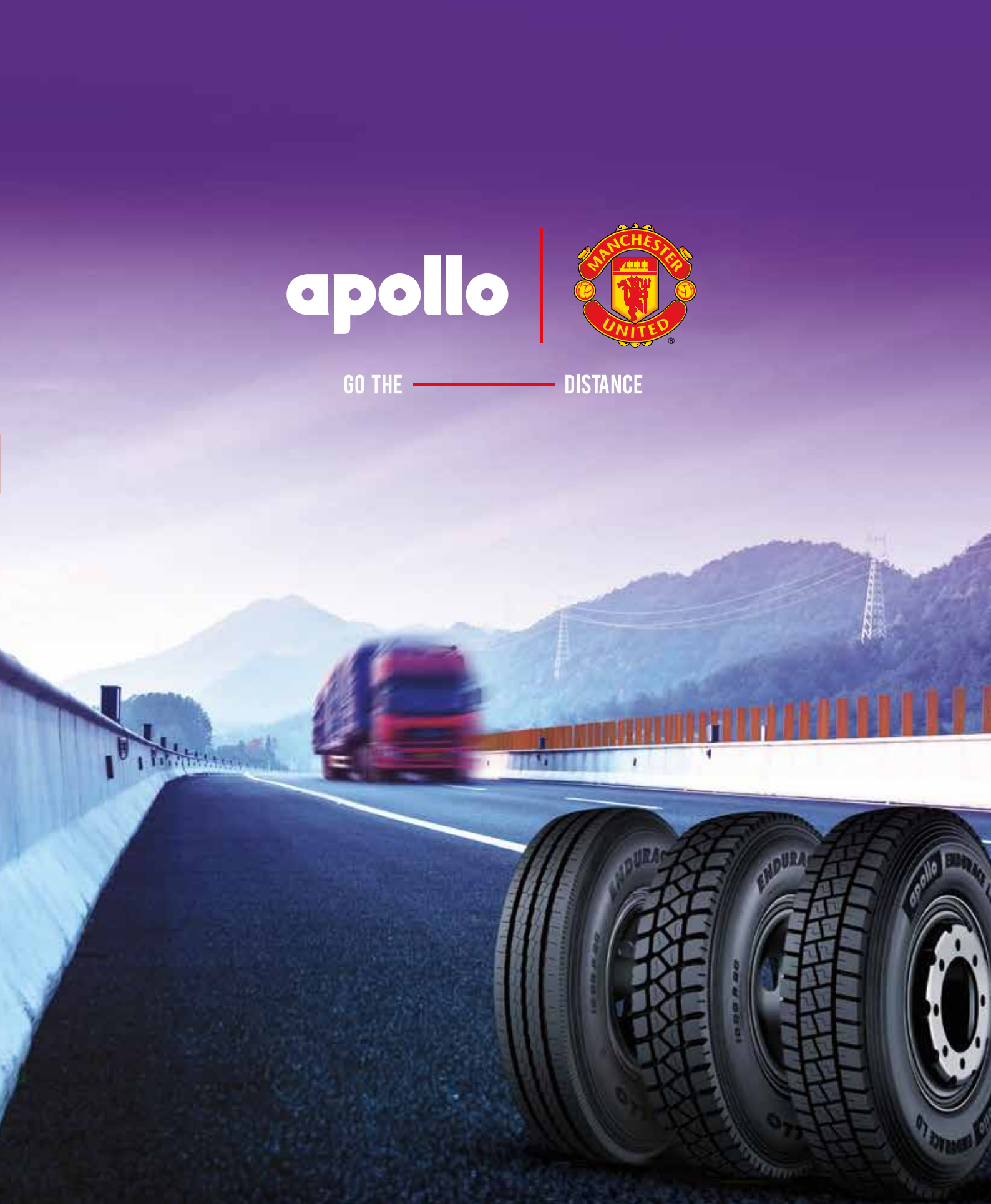
All rights reserved. No portion of this book may be reproduced without written consent of the copyright owner. The opinions expressed are not to be considered those of either ROAD AHEAD or the publisher, neither of whom accept liability of any nature arising out of, or in connection with the contents of this magazine.

apollo



GO THE

 DISTANCE





road ahead

4th Issue 2015
www.roadaheadonline.co.za

Transport on the move



Contents

14 SA's hijacking frontline

As we specialise in our fields of experience, they too specialise in theft and hijackings.

18 Becky Zimmerman: Always got your back

It is tough enough being the person who is deployed to repo a truck from an often dangerous situation, but imagine being married to a bounty hunter.

22 Hijacking recovery agents – are they involved?

To the common public, risk is nothing more than something you should be thinking about; but never do.

30 In it for the long haul

CNH Industrial are a powerhouse in the global logistics, agricultural and construction equipment sectors.

34 All about air

For the 2015 Dakar, Toyota elected to move to the new Powercore range of Donaldson filtration products.

39 Sharing the roads in harmony

The wheels of the economy are oiled by the road transport sector and as the Road Freight Association so aptly quotes: "Without trucks SA stops".

43 SA universities dominate Africa rankings

South African universities dominated a pilot list that ranked 30 of Africa's top institutions.

44 Fuel for Africa

It is funny to think that we pay so much for fuels to power an internal combustion engine yet we sit with an abundance of fuel sources everywhere.

46 New Euro 5 flagship makes African debut

A long-haul truck-tractors ability to safely ascend and descend steep gradients at optimum speeds is a primary purchasing criterion.

48 Heavy commercials – the only bright spot

The growth in the heavy commercial vehicle segment was the only bright spot in the performance of the South African truck market.

51 Navigating fluctuating markets

The year-to-date (YTD) Isuzu trucks volume has increased by 20% in the same period for 2014, while the truck market has declined by 5%.

56 Trans-Africa highway: Pipe dream or near reality?

Transport infrastructure matters. It costs an African farmer about \$2 a ton per kilometre to move produce to market.

SHOW ME THE MONEY TRUCK



It's all about the Money Truck at Volvo Trucks South Africa as 100 customers stand a chance to be entered into a lucky draw where 1 extremely lucky customer wins back the value of their newly purchased Volvo FH.

Here's the opportunity of a lifetime. Win the value of your Volvo FH. This exceptional offer is only valid for Volvo FH models.

So, how do you enter? It's quite simple... every Volvo Truck purchase deal concluded and delivered between now and Monday, 30 November 2015 will see 100 lucky customers, chosen at random, entered into a lucky draw.

The 100 lucky customers will attend an event in Johannesburg on 10 December where the draw will take place and the lucky winner drawn at this event will win back the value of the truck. For all Volvo Truck deals and competition enquiries, please contact your nearest Volvo Trucks sales representative.

We thank you for your interest in Volvo Trucks and trust that your next Volvo FH purchase will deliver with it your winning entry.

VOLVO TRUCKS

Volvo Trucks. Driving Progress

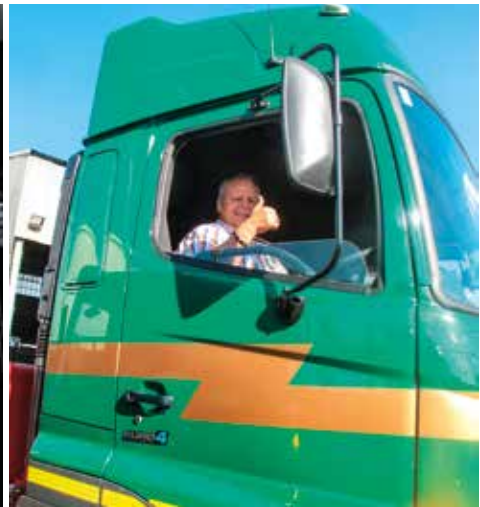




road ahead

4th Issue 2015
www.roadaheadonline.co.za

Transport on the move



Contents

62 When the American dream turns into a nightmare

Trucking is one of the biggest businesses in the USA and because of the wonderful system they have, it is also very safe.

66 Model trucker Deb Drew calls it quits

Outback trucker, Deb Drew, is giving up the big steering wheel when she moves back home to Taranaki this year.

70 Hot hatch shootout

We pit the brand new VW Golf GTI performance pack up against the stylish Mini Cooper Paceman S and the brand new Ford Focus ST3.

75 Turning point for South Africa's energy future

In the face of rising energy costs and energy constraints it is imperative that we all pull together to reduce our energy consumption.

78 Best Practice: Controlled distribution essentials

Inadequate control of distribution routes from the manufacturing site to the final customer is a problem in any industry.

82 Milestone for mega New River Valley Plant

The electric power used by Volvo's New River Valley (NRV) assembly plant in Dublin, Virginia, is now carbon neutral.

86 Quality fuels provide optimum engine life

Now more than ever before, fleet managers need to be sure they are choosing quality fuels to maximise efficiency and minimise costs.

88 Taking the guesswork out of engine reliability

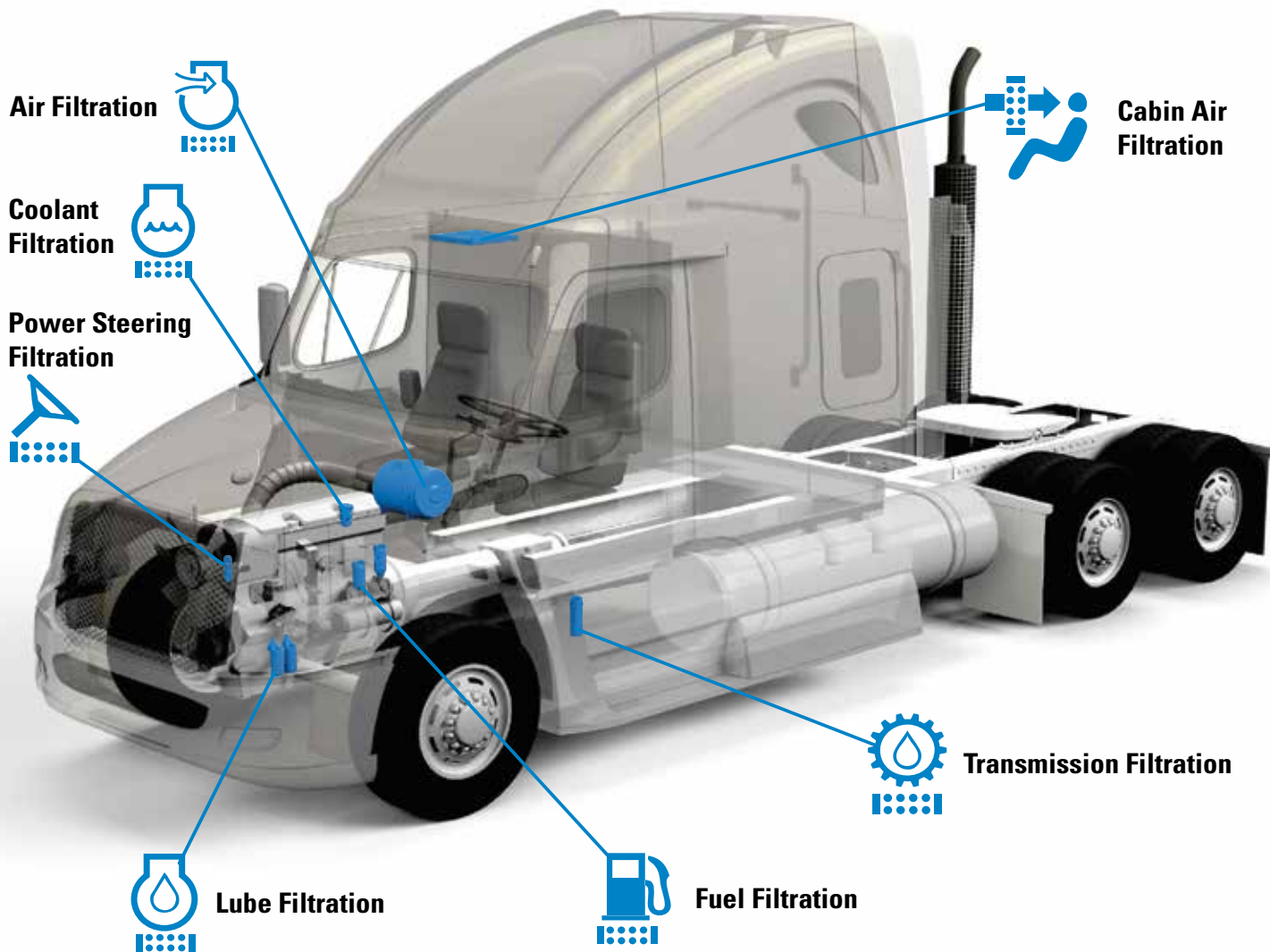
Oil is the life blood of any mechanical system and as such has many functions to perform.

95 Vice president delivers truck personally

VP Ernie Trautmann recently obtained his code 14 truck driving licence, personally delivered a 6x4 Hino 700-Series 2848.



The history continues...



For 50 years, Donaldson has provided filtration solutions across Africa in some of the harshest conditions. Our leading edge lube, fuel, coolant and hydraulic filter ranges have delivered competitive coverage, superior service and reduced downtime for engines and trucks. Whether it be on-road, off-road, dust and fume control or service parts.

For the next 50 years and beyond, Donaldson will continue to provide innovative filtration technology to support the demanding requirements across the African continent.



0860FILTER
www.donaldson.co.za



Contributors



Kathy Bell Bell is employed as a transport industry specialist at Standard Bank and is an active member of the RTMS Steerco and a SABOA council member.

Tony Dobson has been involved with private security and vehicle tracking for many years and understands the need for constant research and development in the vehicle tracking technology sector and adaptation in the recoveries field.



Stan Bezuidenhout is a forensic collision homicide reconstructionist with technical forensic experience at over 7 500 accident scenes locally and abroad. He is currently co-owner of IBF Investigations.

Steven Lara-Lee Lumley was accredited by Honeywell Aerospace last year, enabling her to test and diagnose filters from jet engines manufactured by this US-based organisation. She and two fellow WearCheck diagnosticians now hold this accreditation.



Donald Grant is the Minister of Transport and Public Works in the Western Cape government. He entered politics in June 2005 as a councillor in the Bitou Municipality. Prior to that, he worked in several positions in the private sector and management sector.

Sulaiman Philip is a senior writer across various topics – economic development and industrialisation, culture and sport at Big Media, a communications company that specialises in digital media.





UD TRUCKS

Score with a UD Trust Basic service agreement



Take advantage of this limited time offer now.

The Quon range has one key ambition: To deliver maximum transport efficiency. That is why with the sale of every new Quon, on top of the numerous best-in-class efficiency features and technologies, you now get a UD Trust Basic service agreement, at no extra cost. You are covered for a period of 3 years or 150 000km/3000Hrs, whichever comes first. Quon, moving you forward.

80th Anniversary

Going the Extra Mile

Customer Care and 24-Hour Roadside assistance 0800 008 800

For product queries or to locate your nearest dealer, go to www.udtrucks.co.za

Limited time offer valid from 14 July 2015 until stocks last.

T&C apply, product in photograph is for illustration purposes only and is subject to stock availability.





road ahead

4th Issue 2015
www.roadaheadonline.co.za

Transport on the move

Foreword



Donald Grant

Let me begin by acknowledging the tragic events of earlier this week on 15 September, when a petrol bomb attack on an Intercape bus near Strand claimed the lives of two people, while injuring 34: A reminder of our shared duty to continue to create and maintain a safe environment for commuters who travel daily.

We continue to condemn such acts of violence which undermine the provision of reliable public transport and threaten the safety of commuters. Let me also take this opportunity to extend my sincere gratitude for being afforded the opportunity to be here

Tackling road safety head on

and to address you all today, and to all the speakers before me for their constructive contributions and their messages of support.

The world is currently facing a growing pandemic of road traffic deaths and injuries, and South Africa is no exception. The onus is on all of us to do whatever we can to address this pandemic head-on.

Road injury is now among the leading causes of death globally, with 1.3 million people killed in 2012 alone; a chilling statistic. South Africa ranks third in the world in road deaths with 34 deaths per 100 000 of the population. The Medical Research Council's last Injury Mortality Survey in 2012 put road deaths in South Africa at close to 18 000 annually.

The disastrous effects that road trauma has on the South African economy is yet another major challenge, with the National Department of Transport estimating the cost of road deaths to South Africa at R306 billion, 8% of our GDP, with more set to be lost if this scourge is allowed to continue unabated.

These are not just statistics, but rather an urgent call to action for all South Africans. There are very few things in this country more urgent than curbing road deaths, which continue to affect us all in some way or another. Road deaths are not only senseless and unnecessary, but are largely preventable through the adoption of the necessary life-saving interventions and practices, and by changing behaviours and attitudes towards road safety.

Let me assure you that here in the Western Cape, through our safely home initiative and all of our road safety partners, we are very serious about saving lives on our roads by using our information-driven approach to road safety, and the innovative technology available to us. We have adopted various initiatives to curb the scourge of fatalities on our roads, which have yielded an unprecedented 30% reduction in road deaths since 2009.

Western Cape Minister of Transport and Public Works, Donald Grant

Better health for the heart of your truck.

Mercedes-Benz genuine oil.

Your business relies on your truck being in optimal condition. That's why we've formulated an oil made especially for Mercedes-Benz trucks. The oil improves the truck's functionality and performance while also ensuring less downtime and longer oil-change intervals. So if you want the perfect prescription for your truck's health, speak to your Mercedes-Benz commercial vehicles dealer today.





road ahead

4th Issue 2015
www.roadaheadonline.co.za

Transport on the move

Ed's letter

Cool heads will prevail



Welcome to another edition of South Africa's premier trucking publication. It's been a whirlwind couple of months since the last time we touched base with our loyal readers, with talk of a global recession, on the back of optimism for African development, and trucking has been at the forefront of that.

Stock market ups and downs are nothing new, and are quite natural. Nothing ever happens in a straight line in life, so don't

be alarmed. This is the best time to cash in on stocks that may be slightly cheaper than they were 6 to 12 months ago. Indeed, there is opportunity within the gloom.

The trucking industry has felt the pinch over the last six months, with only the extra heavies and light commercial trucks showing positive balance sheets. Driving to the Garden Route from Cape Town recently I was heartened by the number of brand new extra heavies on the road.

However, both the N1 and N2 need to be made into dual carriageways sooner rather than later. This would improve safety with everybody driving in the same direction, while cutting down on congestion time. It's a big job that would take many years to complete, but if you look overseas in Europe and the States they would not dream of having a single lane national highway.

Fuel has been another talking point of late, with 50% of company's logistics cost being used there. It will be telling for South African company's which way the price goes in the coming months, with instability in the Middle East a cause for concern.

Fracking may be an answer to your energy needs, but this comes with a lot of environmental baggage. The Karoo cannot afford to have its underground water contaminated, which would have dire consequences for locals who get precious little rain water. All the fuel in the world can't replace a finite water source.

On a more positive note, preparations for Road Ahead's flagship transport security conference and exhibition in February next year at Spier, called Critical Mass, is well and truly underway, with some of the finest minds from the greater South African logistics industry already confirmed as speakers.

So here's to a productive and safe remainder of the year, happy trucking.

WELCOME TO THE FUTURE

PREMIUM LONG DISTANCE POWERSTAR V3



The POWERSTAR V3: comfortable cab, easy to operate and service; power and reliability; world class after sales support countrywide; extraordinary value for money.
Welcome to the future!

EVERSTAR
Industries

Tel: +27 (0) 12 940 1780
www.powerstarsa.com

 **POWERSTAR**
trucks built to last



SA's hijacking frontline

It is very difficult to pinpoint a specific area where the most hijackings and thefts occur. Hijackings occur, usually in isolated and well thought out areas. Our criminals aren't dumb; they do this for a living. As we specialise in our fields of experience, they too specialise in theft and hijackings.





They make it their aim and drive to learn everything they can about the vehicles they take and how they operate. There are syndicates out there that will purchase anti-theft devices and learn everything about how they operate and how to circumvent their operational abilities.

In Gauteng there is a well known area of the N3 between Heidelberg and Johannesburg that has been the area of many hijackings. It is located close to Vosloorus and the 1 Stop fuel stop in that area. When the trucks stop at the fuel stop they are often hijacked there and taken elsewhere.

The other trick is putting an obstacle in the slow lane of the highway causing the truck to slow enough for the scumbags to jump onboard. The other areas in Johannesburg: the William

Nicol Drive off-ramp near the N1 from Sandton, the corner of Old Pretoria Road and 1st Avenue in Alexandra, the New Road off-ramp in Midrand and the Christiaan de Wet Road and Wilgerood Road intersection in Roodepoort. However, these are unconfirmed and I always tell clients that they should be mindful of the area they are travelling in.

Typical and unusual cases

The cases I've encountered in the past have all been pretty unusual, no two are alike. From cars being taken hours before they have been reported to recovering the vehicles within 20 minutes of the vehicle being reported.

I remember one of my clients calling me saying that a truck had been hijacked at around 19h00 and that I shouldn't worry too much as it is probably gone by now. The truck was taken at the notorious



a vehicle was hijacked in the CBD and taken with the driver and a two year old. The information we received was that the driver and the two year old had been locked in the boot of the car. We followed the investigation and search teams scrambling all over JHB looking for the vehicle. We managed to get the cellphone number of the driver and dialled the number. He answered and was very confused and dazed.

We managed to get a location of where he was by getting him to describe the area he was in. It took us 10 minutes to do what search teams had taken four hours to do. We recovered the car, the driver and the two year old and reunited the child with her mother.

Best way to defuse situations

The best way to defuse a situation is to not get into it in the first place. However, if you find yourself in a situation that is volatile, the best is to back away and rethink the situation. Going in guns blazing isn't always the best way to do things, but is sometime needed. To date, I can thank God that I haven't been in a situation that has gotten out of hand. I tend to communicate on a level that is non-threatening and can defuse the worst of situations.

Clients

We have a variety of business' that use us. Mostly vehicle tracking companies, but we do have the odd trucking company that calls us when their tracking provider fails to deliver. We also recover and repossess for companies that have loaned vehicles or rental vehicles that haven't been returned.

Technology

Technology is a big part of my business. We use the latest GPS tracking devices in most of our vehicles nowadays and getting pinpoint location details is easy, should the provider have his refresh settings or polling settings set to a shorter time interval.

For example, some providers poll at between 45 minutes and an hour. This is shocking as it doesn't take long for a thief to get a good head start on you in 45 minutes, and if the vehicle is moving, it can make it very difficult to get to where the vehicle is when you are always 45 minutes behind the eight ball. Some companies ensure that their units repeat on 30 second intervals. This gives us a real time tracking capability and makes it easy for us to predict where the vehicle is going.

Dangers

Well I can definitely say that each job has it unforeseen dangers. Each hijacking that I attend to is always treated seriously as the suspects on scene could be armed and most probably are. If the vehicle is taken by force then it will be defended by the same means. Repossessions are also met with the same resistance from time to time. That is why I always insist that my agents are armed and have a bulletproof vest on with each job. I do not and never want to have to call an agents' family member to inform them that their loved one has passed away due to carelessness.

Tony Dobson

N3 / Vosloorus hotspot and had last repeated on a highway close to Alberton. The client said that the tracking unit had most probably been taken out and the chance of recovery was minimal.

I left my base and headed to the last known location determined to retrieve the truck, thinking that the driver had by now been dropped off along the highway. This wasn't true as the client informed me en route that the driver had been taken with the truck. As I neared the last known location, I felt that if the unit was pulled out and the truck was gone I would have to focus on getting the driver back safely.

I did manage to locate the truck about 200 meters from the last known location on the side of the road. The driver was with the truck and thankfully the load was also intact. The hijacker did manage to not only remove the unit, but also damaged the fuel management unit causing the truck to lose fuel and stop.

Our best recovery, which is imprinted into my memory, was when



Becky Zimmerman

Always got your back

It is tough enough being the person who is deployed to repo a truck from an often dangerous situation, but imagine being married to a bounty hunter and not knowing what the next turn may mean for your family.

One such person is Becky Zimmerman, wife of Big Rig Bounty Hunters star Shawn Zimmerman who shot to fame on the History Channel. But she is no silent partner, often helping out with social media background checks and general help at odd hours of the morning, while still holding down a day job running a storage facility in Ohio and raising four kids.

To gain a better insight into the life of a truck driver/repo artist who spends many days away on the road, we caught up with Becky recently for more of the inside scoop on her long time husband Shawn Zimmerman, who is also going to be the star of our Critical Mass conference next year in February at Spier.

When did you and Shawn meet?

Shawn and I were high school sweethearts. We got together in high school and got married at 17 and we have four children together and a grandson so we've been together for a long time.

What sort of changes have you seen in Shawn through the years—being the top bounty hunter now from a bit of a chequered past in the earlier days?

Shawn's always had the repo in him even from a young age, he has always been one of those guys who were looking for that adrenalin rush and the repo business definitely gives that to him so I'm thankful for that.

And as a wife, do you ever get nervous with him going on some of these calls?

Absolutely, extremely nervous, there's times that he'll go out and I try and get in touch with him and I don't hear anything back from him and it could be hours, you don't know what's going on if it's a very dangerous job for him.

Your first impressions when he first went out on a job and now as you've got more experienced—are you able to deal with it better?

Absolutely, when he first started repo'ing I was not into it, I was worried, I was scared, I didn't want him to leave but over the years the whole family kind of gets involved in it at times. A job like that has to include the family, you all have to be part of it or it's just not going to work.

So are you alluding to—when I spoke to Shawn he said your three boys are also helping him out sometimes so you've got the husband and the boys, that must be a real melting pot there?

Shawn can hold his own pretty well but you know my boys are my boys and I always worry about all of them, Shawn included but I know when they're out with him they're safe.

And the long hours, what advice do you give to other wives of truck drivers on how to deal with the long time away from your man?

You have to have some tough skin and you have to be willing to be by yourself a little bit, there's weeks he's gone sometimes, you get phone calls in the middle of the night and they're needing help one way or the other so you have to have trust in them that they know what they're doing when they go out there.

It sounds like you're a phone call away when it gets really sticky?

Absolutely, I get calls in the middle of the night sometimes when he's having problems locating someone and I'm a real good social media hound, I've got four grown kids remember so I know how to deal with the research.



"I get calls in the middle of the night sometimes when he's having problems locating someone and I'm a real good social media hound"



What's the best part of being married to a bounty hunter?
Well, I don't ever have to worry about my cars being repo'ed.

And the American culture, the big consumer culture—you must obviously see a lot of repos going on these days?

There are always a lot of repos; that business will never go away, there's always notes that need to be paid and not being paid.

You run a storage facility yourself, how much stuff do people hoard and what's the funniest thing that you've found?

Honestly the oddest thing that we have found was a couple urns with ashes in them. A lot of them that do go up for repo, they're full of junk. I believe its other trash that they just didn't want to deal with.

How are you reacting to the fame, has it changed family dynamics and Shawn himself?

Well it hasn't changed the boys or anything and that is a fact, they are who they are—what you see on the television is what you get in real life with Shawn and Vince.

And you've seen that relationship growing over the years with Shawn and Vince, what's it like behind the scenes with those two?

I have known Vincent since I was probably fifteen years old when Shawn and I got together because they've been inseparable since they were very, very young, I want to say like five, they've been best friends and they still are. He is like a brother or sometimes I feel like I'm a second wife, you know, I have to spoil him and lecture him just like I do Shawn sometimes, but that's what we are, we're a big family and we've got each other's back all around.

Would you do everything the way you've done it, if you could do it all over again?

You learn as you go and if you don't make any mistakes you're not going to learn anything so they've done it about the best I would know. I wouldn't change a thing.

What were your impressions of the other people on the TV show, there were a few kooky characters?

I have not had personal interactions with them but there are a few that you know Shawn and Vince may not have seen quite eye to eye with. Shawn and Vince don't have a filter so like I said, what you see is what you get with those two.

And your impressions of Africa, South Africa? We're hoping to get Shawn and Vince over here for the big conference in February.

I'm excited for them; I'm hoping to tag along, too. I've never been out of the country so it would be fun.

I am sure with your exchange rate it's going to be fun.

Gregory Simpson

ONE MAN kann

ONE MAN ONE TRUCK ONE EPIC JOURNEY

Riaan Manser and his co-driver, Nduna Chari are taking on everything Africa can throw at them in MAN's TGX Euro 5 truck. From the military borders of Mozambique and the dangerous cliff descents in Malawi to the wildlife of Zambia and the deserts of Namibia as well as routine roadblocks and nightmarish border crossings thrown in for good measure, they're seeing it all. It doesn't stop there. Riaan and Nduna have also picked up a load of mosquito nets in Maputo, which they'll be dropping off at prolific malaria areas along the route. This is Africa and anything can happen. So, buckle up – the adventure is far from over.

13 234 KM | 9 COUNTRIES | 11 BORDER CROSSINGS

NEW EPISODES EVERY TUESDAY

 [YOUTUBE.COM/MANTRUCKSANDBUSES](https://www.youtube.com/mantrucksandbuses)

 FIND MAN TRUCK & BUS SOUTH AFRICA ON FACEBOOK

 @MANTRUCKBUSSA #OneMANkann

EPISODES RUN UNTIL NOV 3RD



Our proud partners:

AMAROK



MAN kann.

100
100 Years
MAN Truck and Bus





Hijacking recovery agents —are they involved?

When you say the word 'risk' many people would be forgiven to merely think 'danger' in the general sense. To the common public, risk is nothing more than something you should be thinking about; but never do.

It's a bit like contraception; everyone knows about it, most people know when and where it should be applied but too many people are enjoying the benefits of its absence to care—that feeling of 'freedom' with no worries. Oh, they're quick to change their attitude after their little bubbles of bliss have been burst. But they hammer on—pardon the pun—in any event until that one day, when their 'luck' changes to 'bad luck'.

When you speak to a transporter, especially those operating trucks on South African roads, it's a completely different story. Ask them what 'risk' means and they'll ask you how much time you have. There are so many risks for transporters these days; you might be forgiven for asking why they're in this industry in the first place!

If you truly consider the transport industry as a living, breathing, evolving entity, you will quickly realise that 'staying healthy' is as complex as maintaining actual good health. There are the

obvious risks—collisions, mechanical failure, theft, strike action, social unrest, abuse, theft, etc. But, what about hijackings? Yes! Everyone knows about that!

The problem with hijacking has become so terrible that practically every single transporter has been exposed to it at some stage, in the last five years. And—just for the record—if you've dodged the bullet thus far, consider yourself lucky. Statistics show that hijackings are at an all-time high, that hijackers have become more organised, more equipped, more skilled and more brazen and it's really just a matter of time.

See—when criminals were nothing more than "poor, homeless people who are only trying to put food on the table" everything was still manageable. The police had skills they did not; police were armed while they were seldom; and police had a national communications network while criminals had to shout at each other; police had vehicles and many criminals travelled on foot and most criminal encounters involved knives or garden tools.



These days, criminals are trained, experienced, equipped, mobile and in constant communication with their cohorts. They understand police procedures, they have cell phone jammers, they use high-end fast and powerful cars, they coordinate in groups, they have national communication networks and they use some of the latest technologies available for planning, coordination and execution. They plan properly, they coordinate properly, they execute hijackings or heists with military accuracy and they are fearless.

When you look at some of the recent social media posts and the videos that are making the rounds, specifically showing hijackings and cash-in-transit heists, you quickly realise that these are not crimes of mere opportunity. The kind of personal commitment, psychological preparation and courage it takes to actually approach and engage a cash-in-transit vehicle or a even a police vehicle, knowing full well that your parry is heavily armed, trained and experienced, in a highly unpredictable confrontation and with no control over the environment, is nearly inhuman. But these guys do it.

They can plan, prepare and execute in groups as small as two or three or as large as around twenty. The opportunities are endless for armed encounter with a committed enemy. Every day. Any transporter knows this, every transporter fears this, every transporter tries to prepare for this and every transporter tries to minimise this risk as far as they can.

But what can we do? Well—if you're like most transporters, you listen to and take advice from 'those in the know'. We all know that you must, at the very least, install a 'tracking system'. You would be forgiven for believing that the biggest names are the best in the business. And you'd be right, if by 'business' you actually meant 'business'. See—when it comes to tracking, there are a number of issues to consider, the first of which is credibility. Again, you'd be excused for believing that a brand everyone knows must be the most credible—but you might very well be wrong.

Corruption is one of the biggest problems faced by tracking companies today. They are constantly trying to verify that their control room operators or agents are not involved in or coerced by syndicates. Truck hijackings are a big-money-business and competition is fierce. The benefits are perceived to far outweigh the risk and the tracking companies know this. They try their best to manage it.

But, like any other business with a large staff contingent, staff will cycle. People will resign, retire and move on and new recruits will be placed almost daily. If you offer a national footprint, you need installers—many installers. That function is often outsourced by smaller operations and there exists the constant fear that somewhere, sometime, someone will release sensitive information about the operation, the people, the technology, the installation position or the client's movements. It's a risk we face daily. And it is happening already. Today.

So when your vehicle is hijacked, a lot happens behind the scenes. Typically, your driver will be dropped off in some remote location, unless he is not that lucky. He will eventually get loose and find help. By then, your vehicle has moved hundreds of kilometres. You will inform your tracking company. They will recover it. Well... Not really. You see—tracking companies do not personally employ thousands of people all over the country, just sitting waiting for hijacked vehicles to come their way. Most use sub-contracted recovery agents.

Enter the heroes, here to save the day—hijacking recovery agents. We're talking about the boots-on-the-ground, armed recovery officer that you will never actually meet—the guy who actually touches criminals—the 'Rambo' and the private security outfits that do the brunt of the work. Sure, there are helicopters and branded vehicles driving around with aerials on the roof and the police sometimes or even often get involved in recoveries—but we're talking about those guys that operate for days without sleep. The guys whose pants are faded, whose breath smells of cigarettes, coffee and maybe even something stronger; the guys who prefer not to be known—the Private Military Contractors of hijacking recoveries.

When you actually meet them and walk among them, you will realise that these are not rocket scientists or accountants. They

STOP ILLICIT TRADE AND COUNTERFEITS

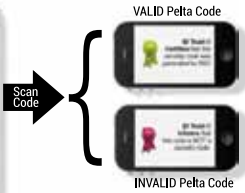
Item level traceability using unique 2D Pelta™ codes on documents or commodities, which are easily authenticated using standard smart phones.

INCREASE

- Probability of locating stolen items
- Conviction rate of criminals caught with proof of possession

REDUCE

- Illicit trade of products
- Trading in Counterfeit goods
- Hijacking/Theft of goods for distribution



Use Pelta™ Technology for :

- Tax stamps on tobacco products, alcohol, pharmaceuticals, cosmetics, assets and more
 - Fighting organised crime and locating stolen, diverted and/or fake goods
 - Complete traceability from manufacturer to consumer in the supply chain
- Loyalty and reward schemes as well as consumer feedback and demographics

Secure Authentication Technology
info@pagemarkafrica.com | www.pagemarkafrica.com



PAGEMARK
AFRICA

Pelta™ codes use existing 2D Data Matrix GS1 or QR barcode (ISO/IEC 18004) specifications, so manufacturers or packaging specialists can easily migrate to Pelta™ codes with little to no change in their physical coding/printing systems.

R500 OFF YOUR NEXT COF TEST



The vehicles shown are only available in white.

10017993.JB/FCB.JH/B/E

Are you taking your Hino for a COF test in September, October or November? If so, bring your truck for a quote on your repairs and we will gladly refund you with R500.



Visit www.hino.co.za or your nearest dealer.



HINO
A Toyota Group Company

THE ROAD AHEAD



thrive on the rush, they seek out confrontation, they live, eat, sleep and breathe armed conflict, they sleep with one eye open and their guns are shiny with wear.

While you are sleeping or stressing about your vehicle, they rush right into danger. They go into 'sub-culture-mode', they speak their own language, they tap into near-federal private networks, groups and social platforms, they cover hundreds of kilometres in one night and they see their families so seldom their own dogs bark at them, their kids call them 'uncle' and their wives feel like they're having affairs when they sleep over occasionally. They are the real unsung heroes of hijacking recoveries.

Or are they?

When all is said and done—these guys are not your typical choir boys. Well—most anyway. Your typical recovery agent lives hard, plays hard and talks straight. They take no crap from nobody, they live by a code, they belong to a 'brotherhood' and they love it. This makes them who they are. Around the fire, they don't talk

politics or stock trends. No. It's all war. They talk guns, calibres and confrontations. They compare battle scars, brag about their armed encounters and demonstrate their experience, skill and ability by telling stories that you would probably not ever believe if you weren't actually there.

But the individual doesn't earn the greatest salary either. Most of the time, as in many other industries, the people working the hardest, sleeping the least and taking the greatest risk are getting the least money. While they might think, act and perform like the predators at the top of the food chain, they are often right at the bottom of the food chain when it comes to cash. And where cash is king, personal motivations become very strong forces and opportunities for corruption increase tenfold.

And therein lies the problem. Where men form gangs, clans or groups band together, see a common enemy and fight the same war, the lines between 'them' and 'us' can start blurring. Before you know it, those 'war stories' can evolve, or decline—depending how you look at it—into suggestions and proposals. It starts as a joke. All someone needs to say is: "Jissie ouens; these criminals are darem maar stupid, hey? Imagine if we had to hijack a truck! They'd never catch us..." What comes next is a function only of the integrity of the group and the people involved...

At one stage some time ago, there was a terrible trend with a certain brand of vehicles being targeted for theft and hijackings. As many as fifteen of one specific make and model/type were



stolen or hijacked in one night. A long-standing police crime intelligence colleague of mine expressed dissatisfaction and dismay with the success of their efforts and asked what 'we' could do about.

I suggested a special operation and offered to spend a couple of days in his area, assisting with the planning and execution of a strategy that would surely result in some success. Immediately, other friends from the industry hopped onto the strand and offered to assist, should I be running such an operation and... BAM! I was kicked off the group by the Administrator. I wondered why, but more about that later...

At another stage, also on a WhatsApp group, I re-posted a success achieved by the SAPS, where 13 members of the police were caught in a sting operation and linked to robbery, hijackings and other crimes, and... BAM! I was kicked off another group.

Interestingly, a trend developed: Every time I became too involved in the planning on groups or suggested workable strategies, I would get criticised or kicked off. This often involving a small group of 'recovery guys'. So I started to analyse the trend, went back on old messages and read them carefully. What I picked up was rather interesting, to say the least!

For starters, I noticed that some tracking companies never posted anything but were on multiple groups. One wonders why you would be aware of a hijacking or theft and simply not post so that everyone can look out for the vehicle immediately. Oh, sure—they will tell you it is "to prevent the criminal from knowing that he is being hunted". Really? So—while hijacking a truck, having to deal with the driver, communicating permanently with look-outs and rushing for the border, the criminals have time to scan ALL WhatsApp groups to see if they are wanted?

They KNOW THEY ARE WANTED—THEY JUST STOLE/HIJACKED A VEHICLE for Pete's sake!

Then you have the other side of the same coin, my research revealed. After a car or truck is hijacked and put out, multiple recovery agents are obviously deployed, as sub-contractors are mobilised in different areas. After two off days, someone might send an update or a comment, in reference to the original theft or hijacking, asking for additional information, updates, etc. Then someone else will simply reply with 'recovered'. Nothing more. No location, date, time, circumstances, details about arrests or anything. So—how do we know that is not the criminals just trying to mislead?

As if this is not bad enough, I detected another trend: some tracking companies will become aware of a hijacking or theft and say nothing until about 24 hours after. You are left with the impression that they are first trying to recover the vehicle themselves and—only if they fail—will they 'let others also look'. This trend, if ever proven, might be driven more by profit motivations than criminal intent, but has the same net effect: recoveries are slower or vehicles are lost forever.

But then I have a working theory to share: what if some of the recovery agents are actually involved in hijackings, but target only the vehicles of their competitors? What if they become aware of hijackings and say and do nothing, in their area, until the vehicles have passed through and then only act as if they are ready and able to offer recoveries?

When there was a house robbery in Hartbeespoort some time ago, the criminals asked the house owner if he had tracking on his vehicle. He obviously said he did not, hoping it would be enough. But no! Not that easy! The criminal hopped on the



phone, walked out and had a conversation and came back... “Don’t you lie to me! You are with X!” It took him minutes to find out who the vehicle was registered with! It was taken and never recovered, in spite of this!

Then there is another concerning trend: many recovery agents actually recover vehicles—often ‘without stock’ worth millions. They then hand the vehicles over to the police and leave. They have no records of when and how they got the call, of when and where they made first contact, of where they were when the report was received, how far away they were, how long it took them to get to the area or how it was recovered. They almost never asked to submit statements to the SAPS; they produce ‘activation reports’ that are so scarce with information that it may as well be a thumb-suck.

In one instance, a tracking company became aware of a hijacking and a vehicle was recovered some hours later. I was asked to help prepare a detailed narrative of how it unfolded. By the time I had done the basic ground-work, I had so many names, phone numbers and references, tracking companies, police jurisdictions and even community police forum members involved, it was practically impossible to actually know how it happened that the truck and trailers were recovered.

The recovery involved a shooting incident and the truck was riddled with bullet holes, but no suspects were arrested. The story evolved from “recovery agents found the truck and the hijackers reversed and came straight at them, so they shot at them” to “the police shot at the hijackers—we don’t really know what happened” in one day!

Deep

So what can be done? And—as long as vehicles are recovered, who cares what happens behind the scenes, right? Well—in an industry that seems to be infiltrated by possible corruption, criminality, self-serving motives, glory-hounds and even unskilled citizens—a massive disaster is looming. And I would argue that it is the responsibility of commercial transporters to start pushing their tracking and recovery companies for quality and integrity.

A good example of what you should expect of a tracking and/or recovery company comes in the form of a One Stop Group, based in northern Johannesburg and run by Tony Dobson. “When a client loses an asset, they are obviously trying to get it back as quickly as possible, with minimal or no loss or damage and without any injury to staff. That’s understandable but that is not where our task or function stops.

“There is more to it. If our recovery efforts, our procedures, our approach, contact with suspects, handling of suspects and arrests are not conducted professionally, in compliance with the Criminal Procedures Act and supported by the appropriate evidence, those very criminals we chase after can walk on a technicality.”

Instead of rushing off and chasing after criminals half-cocked, rushing into the darkness, gun-in-hand and then rather than leaving as soon as the action is over, One Stop is spending a lot of time, effort and money on the collection of evidence all the way through the recovery process. They use a closed, private





WhatsApp group as a time-sensitive running diary of events. Their members are not allowed to use cell phones during the tactical contact stages of a recovery—they must focus on the task at hand and update only when it is safe to do so. They use in-car video cameras and record and retain the total deployment for each vehicle from the first report through the recovery and hand-over to the SAPS for every recovery they are involved in. They immediately produce a report, with the total timeline, all relevant phone numbers, all photographs and all locations, after each recovery.

Tony adds: “When you are deployed on a recovery, there is a risk to property and lives at every stage of the operation. For this reason, nothing can be left to chance. While our industry is typically known for being rife with—let’s just say over-zealous operators—we pride ourselves on our ability to transcend beyond the scope of mere contact. We prefer to become a vital link in the total crime management process and to ensure that everything we do is recorded and documented in a time- and space-sensitive format for later reference, right into court and through conviction.”

Look back at your last recovery—if you have been unfortunate enough to have experienced one—and see if your recovery agent checked all the boxes Tony believes should be checked, in every recovery operation. He says: “If your recovery agent falls short on just one leg of the recovery operation, the total case could be lost and criminals put back on the streets—wiser than before. I think a water-tight recovery should include the following aspects

in order for it to effectively contribute to the reduction in crime rather than being nothing more than a crisis management effort.

“Only if you have all this information at hand, can you be assured that the efforts of your recovery agent are contributing to the fight against crime and not just to the temporary interference in criminal efforts. Arrests are not successes—convictions are. We strive to contribute to those and not to war-stories alone.”

I am not suggesting that every tracking company is bad, that all operators are corrupt or rambos or that you should make any changes. I am merely suggesting that you ensure that your recovery agent is really and truly looking after your interests, makes full use of all resources at their disposal as quickly as possible and that they should place your interests ahead of their own. If you can achieve this and only if everyone truly works together and shares a common agenda, will we ever stand a chance of winning this war.

For commercial operators who want to be on Stan Bezuidenhout’s Truck Accidents/Hijackings Group on WhatsApp, please consider the following rules before sending your company name, phone number and your position to him via e-mail to stansb@ibfsa.com.

Anyone not adhering to this group or ‘rising’ the group only for their own benefit but who are unable, unwilling or unauthorised to contribute if or as necessary will be removed to make space for active members.

Stan Bezuidenhout

Future-proofing our clients supply chains



At Barloworld Logistics, we go to great lengths to design, implement, operate and manage smart supply chain solutions.

Smart stands for sustainable, measurable, adaptable, resourceful and transformational solutions.



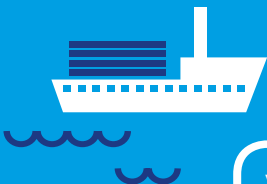
Simply put, ethical, economical and environmentally friendly solutions. Solutions that reduce costs, increase efficiencies and improve carbon footprints.



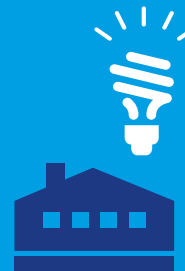
With innovative software and cutting edge technology we're able to track, monitor and measure the impact on the environment at every turn.



Our culture of operational excellence enables us to find new ways to minimise waste while maximising productivity, profitability and performance.



While world-class corporate governance and global best practices ensure we create a sustainable future for our clients' businesses as well as our own.



A B

To see how our smart supply chain solutions can improve your triple bottom line, call Mike Fanucchi 011 445 1600.



YSE
a Exchange
sa Italiana
Exchange Group
Powertrain
FPT

IVECO
IVECO
ASTRA
IVECO
BUS



MAGIRUS



IVECO



In it for the long haul

CNH Industrial—who own Fiat, Iveco and New Holland—to name a few are powerhouses in the global logistics, agricultural and construction equipment sectors, signalled their intent in South Africa with the building of a new manufacturing plant outside Pretoria for Iveco recently.

At the forefront of their success and vision is the astute leadership of Mario Gasparri, CNH Industrial vice president for Southern Africa. Prior to his appointment, he was the brand president of CNH Industrial Construction Equipment, a post he held from April 2012. Gasparri obtained a degree in Agricultural Sciences from the University of Pisa, Italy, after which he joined the Fiat Group, in Italy, in 1988.

His tenure at Fiat—and later at CNH Industrial—provided him with diverse experience spanning the construction, agricultural and vehicle sectors of various markets in Asia, Africa, the Middle East and CIS countries.

In 2007 he was appointed managing director for New Holland, an agricultural machinery brand of CNH Industrial, for India and the Asia Pacific markets. In 2009 he became vice president for Agricultural Equipment Commercial Operations for CNH International

Gasparri has been in South Africa for nearly a year now, and shares his impressions so far and the key opportunities and challenges going forward for the Iveco brand, which is of particular interest for Road Ahead magazine readers.

“Yes it is about a year, I would say that I found in the months that I spent here, maybe not everything was as I was expecting when I first took up this position. Especially on the challenges side, from an industry and economy point of view we are a little bit disappointed as we had an expectation that the economy would be much stronger, and consequently that the truck industry would have been following the same. Obviously the economy, we know where we are with the

looming recession so the impact on business confidence and the impact on the various transport industries, as well. We see in the market there has been quite a negative sentiment since January this year, and it doesn't get better.”

The South African truck market is still under immense pressure, with half-year sales figures released by the National Association of Automobile Manufacturers of South Africa (NAAMSA), Associated Motor Holdings (AMH) and Amalgamated Automobile Distributors (AAD), showing an overall 5% decline in sales when compared to the first six months of 2014.

Gasparri continues: “We also saw the latest results were really negative, we are now expecting something around a 10% decline in the truck market, so that is a disappointment. On the other hand, it has been a year of transition, moving from trucks that were imported and a small organisation that was really geared up for distribution, to the creation of a new business model with product coming from the plant, the possibility to do customisation, an organisation to be rebuilt or partly built from scratch—let's say, everything in the plant and all the associated functions, from quality to engineering, to some revamping of the organisation. Today we have a bigger responsibility with a huge investment so we had to really work in a completely different manner with much more focus and be much closer to the customers than we used to,” he says.

Heavy Commercial Vehicles (HCV) is the only segment that logged year-on-year growth over the first six months of 2015, increasing sales by 5.5% to 2 628 units. Therefore, it is not all doom and gloom for South Africa, with the rand showing signs of straightening, and better than expected manufacturing and mining results recently, let's not get too carried away with negativity. Gasparri is not either.



“The potential of this region is still huge, the fact that there are some difficulties in the economy, whether it’s because of the global economy, internal issues in the South African market, in the government and so on, it doesn’t mean that one has to look with a negative eye at the future. The future here is all very well when you see the type of resources and the demographics of the region. If you are a global player you have to be in this part of the world so we are not going to be frustrated or impacted in our endeavour, we will continue and we believe that what we have done is something that is in the right direction.”

Iveco is the panel van king in Europe, with small businesses often choosing panel vans over bakkies. The weather does play a part in the decision, but Gasparri has definitely seen a pickup in demand for the underplayed segment in South Africa, often dominated by pickups.

“We see it as a growing segment, there already is a very sizeable market and we believe that it will continue to grow. For us this is, of course, a very important segment, we are already a leader in that category. The new Iveco Daily is the international van of the year, so we know that we have a winning product that will continue to increase our presence and strength in this segment,” he insists.

New plant

The good news for the South African industry is that Iveco is here to stay. After mumbblings of pulling out of the country five years ago, to now opening up a new assembly/manufacturing plant in Rosslyn,

South Africa, the future is indeed looking bright. Iveco is certainly making strong strides in customer service, focusing on customer needs and delivering excellence.

CNH Industrial invested R800 million in a commercial vehicles assembly plant which will build Iveco’s heavy capacity trucks for the local market, and also for other right-hand drive markets.

Gasparri provides some insight on the new state-of-the-art facility. “The plant is definitely something that was overdue. We were certainly not the first to come here, we were probably the last, and for us it has an impact in various ways. We see from customer feedback that it gives a completely different message to the market, when the manufacturer is putting down an investment like that - it means that there’s a confidence in the company. Should you not be in this kind of position then there is always, at the back of the mind of customers for instance, that you are in a temporary set-up and you could just turn around and move away. So it is a statement to say we are here to stay forever, and with a completely different type of commitment.”

He continues: “It also means a lot to create our first and significant hub in Africa because although we have some smaller assemblies in some countries, like in Ethiopia or in Libya, now we can forget for the moment, but we never really had a real manufacturing side. We can now delve into bus manufacturing in SA, creating the right products for this type of market. So the opening of this plant here also means we will start to play for the first time in the new industry.”



Combating crime

Besides some of the economic challenges that face South African logistics companies, crime on the N3 is getting out of hand with a number of hijackings. Security is vital for logistics companies, what are some of the safety and security features that the latest Iveco trucks utilise?

“There are more security issues here than probably we have in other countries so that is one of the areas where there is vast technology here in South Africa—more than in other places. There is a lot to learn here, more to learn here than in Europe, so we are working with some of the companies here in South Africa. The level of technology here is quite high and so I am sure that in collaboration with some of the local providers we will learn a lot, not just for the South African, for Iveco South Africa, but also for our European based engineers.”

The Dakar Rally has been a big shining success for Iveco trucks, showing off their bulletproof build quality. The Iveco team narrowly missed out on gold during the last two events, but have provided stern competition for the mighty Kamaz team from Mother Russia. The event means a lot for Iveco and CNH Industrial as a whole, giving them an opportunity to show off their trucks on the world stage.

“This is a part of the Fiat philosophy because Fiat is still family of CNH Industrial, and has always participated somehow in motor sport, obviously with Ferrari and also with Iveco who

we sponsored in Europe with the Motor GP for a number of years and we will be back again in the future. So it's part of our tradition to be associated with motorsport events. It's because of our passion for a challenge and a passion for technology and the sort of lifestyle that you have when you are in the company. So it's part of a pride if you want to be associated with this brand.”

Self-drive

Self drive trucks are the latest development coming out of the USA and Europe, with tests on trucks in Nevada already been performed on public roads. Is it only a matter of time before we see these trucks in South Africa? I could see them working on the major highways of South Africa, but as soon as you go onto some of the B-roads, the technology may start to struggle.

Gasparri is more ‘wait and see’ in his outlook: “To me if it becomes a reality in Europe or in the States it is supposed to become a reality in South Africa also. I don't know how close we are to making this a proper real type of utilisation of the vehicles but if we ever start to take off on something like that I don't think it will be too long before it is also in South Africa. It would depend on what the mission was but the challenges for me are almost the same—whether you are in a European country or here in South Africa,” concludes the charismatic leader at CNH Industrial.

Gregory Simpson





All about air

For the 2015 Dakar, Toyota elected to move to the new Powercore range of Donaldson filtration products, mainly due to space limitations, which did not allow the use of a more traditional cyclonic filtration system. As a result the team relied completely on the new filter alone, and achieved better-than-expected results throughout the race.

But it isn't all about air when it comes to filtration. Toyota Motorsport also uses Donaldson fuel filters in their race vehicles, and where direct fuel injection is used, clean fuel is of the utmost importance. Due to the nature of off-road racing and rallying, the service areas are often dusty places where swapping out fuel filters poses a risk.

Finally the team also uses hydraulic filters supplied by Donaldson, both for the steering system—and in the case of the Dakar Toyota Imperial Hilux, also on the hydraulic jacks that can lift the vehicle for quick tyre changes. For more on Donaldson's success in the Dakar and on the roads of South Africa, we caught up with all action managing director Rob Simpson.

Please tell me about your background and role at Donaldson Filtration?

I was fortunate enough to come up through the ranks of Donaldson and be given the opportunity to learn and develop my business acumen. Through the 18 odd years with Donaldson, I was able to gain excellent insights into the company, its operations, key markets as well as the customers we serve. Today, my role is really custodian of the brand and related growth plans for Africa. This ultimately entails strategy creation and execution across the continent by leveraging our expertise and core competencies across a diverse range of filtration products. The business today covers local manufacturing, distribution, imports and exports which complement the broader business and our diverse commercial capabilities, from small replacement parts to large multi-million Rand turn-key projects. This is ultimately in line with our mission to provide our valued customers with cost effective filtration solutions that improve people's lives, enhance equipment life, and protect the environment.

Donaldson Filtration was part of the 2015 Dakar; please delve into some of your solutions in the hardest of conditions for the vehicles?

For the 2015 Dakar many of the prominent teams from SA elected to move to the new Powercore range of Donaldson filtration



products. This was mainly due to space limitations in conjunction with air flow volumes, which did not allow the use of a more traditional cyclonic filtration system. As a result the Toyota team relied completely on the new filter alone, and achieved better-than-expected results throughout the race. But it isn't all about air when it comes to filtration, as quoted by Toyota Imperial Team Principal Glyn Hall. Toyota Motorsport also uses Donaldson fuel filters in their race vehicles, and where direct fuel injection is used, clean fuel is of the utmost importance. Due to the nature of off-road racing and rallying, the service areas are often dusty places where swapping out fuel filters poses a risk. As such the team relies on



Donaldson to supply filters that are able to last a long time, yet offer enough capacity to filter out any contaminants along the way. Finally the Toyota team also uses hydraulic filters supplied by Donaldson, both for the steering system—and in the case of the Dakar Toyota Imperial Hilux, also on the hydraulic jacks that can lift the vehicle for quick tyre changes.

What are the major developments in industrial air filtration solutions over the last 50 years?

PowerCore filter packs. They deliver better dust filtration by combining Donaldson Torit's proven and patented Ultra-Web®

surface-loading technology with a fluted-media design that allows more media in a small volume. The added benefit about PowerCore is the size of the dust collection unit, compared to conventional baghouse collectors with similar airflow capacity, PowerCore dust collectors are up to 50% smaller. PowerCore filter packs capture both large and small dust particles and tests have shown that PowerCore filter packs provide up to 78% fewer emissions than traditional bags—translating to cleaner plant air and greater product recovery. Just 18 centimeters tall, and less than 3kg, one PowerCore filter pack replaces six traditional eight-foot long fabric filter bags, and no tools are required to replace the PowerCore filter packs.



How does Donaldson Filtration maintain itself as a technology leader?

We see our business as more than just supplying products. It's about finding solutions to problems and asking 'how can we make things better for the customer?'—a sentiment that has driven innovation in the company. Donaldson is always developing next generation products and services to solve complex filtration and contamination control challenges. As today's equipment and technology advances, our vast network of expert scientists, multi-disciplined engineers and state-of-the-art internal resources help us create innovative solutions to anticipate and exceed these evolving requirements. We are a recognised pioneer in nanofibre technology. For over two decades, we have manufactured and tested filter elements using fibres less than a micron in width. In the transportation market, with tightening environmental regulations and improved aerodynamics necessitating decreasing sizes and weights, our R&D efforts have produced smaller, lighter and more efficient filters and filtration systems. Our engineering, technology and operations staff are continually developing innovative solutions to anticipate and exceed evolving requirements. With over 1 600 active patents and industry-leading material and product design, our employees are vital to Donaldson's 100 year history of success.

What are some of the needs for clean fuel for the logistics industry?

The sophistication of today's equipment, such as the increase in injection pressures on diesel engines, requires higher fuel and fluid cleanliness levels than ever before. Donaldson bulk tank filtration systems help save on costly component replacement, prevent unplanned downtime and even prevent a decrease in fuel efficiency due to injector wear. In short, our bulk filtration systems reduce the total cost of equipment ownership.

What are some ways to maintain truck and/or bus engine air intakes better?

Firstly we need to look at the system as a whole, the intake ducting, the air cleaner system, the clean air ducting, the operating conditions, service procedures and systems. Many companies only concentrate on the air filters during servicing; the rubber connections and intake ducting are not checked. In many cases they only replace the rubber connections after they have actually failed and caused dust ingress into the engines. For instance, how often do we open the bonnets of our own personal cars and actually look at the air cleaner connections after it has been serviced? You will be surprised how often the artisans forget to tighten the clamps between the air cleaner and the engine intake during servicing. The quality of the air filter used in the air filter system is of the utmost importance when one is expecting

good engine life, even more so is the service practices that are utilised, cleaning of air filters by compressed air or knocking out are bad practices and eventually reduce the filter life by up to 20% which will ultimately shorten engine life as well. Replacing air filters by restriction is the only true and accurate way to measure filter life and prevent over servicing.

Ways to make air quality better in tough and/or dusty working conditions?

Equipment working in tough dusty conditions need well designed pre-cleaning systems suitable for the type of environment that will assist the air cleaning system to achieve optimum service and engine life. The filters that are used in these conditions should ideally have a higher than standard initial efficiency, better dirt holding capacity and should not be tampered with unnecessarily as every time the filters are removed or replaced the chances for dust ingress are greater. In many cases the machines are serviced on site in the harsh conditions, which does not do the engine life any favours.

Energy saving solutions for companies to employ?

Our Torit® PowerCore® range of dust collectors are the perfect solution for any company looking to save on energy costs. There are two main contributors to the cost of running a dust collections system: installed power of the Fan system and compressed air. Due to the lower pressure drop over the PowerCore media, less power is required by the fan extraction system, and PowerCore technology uses an optimised pulse cleaning system, which delivers effective cleaning, while using less compressed air. As a result, Torit® PowerCore® CPV collectors require up to 40% less power to operate compared to traditional bag-style collectors. The resulting energy savings alone may actually pay for the integrated system over the life of the equipment.

Gregory Simpson



Rob Simpson



FACULTY OF MANAGEMENT – Developing Future-fit Leadership

TRANSPORT AND SUPPLY CHAIN MANAGEMENT

On track to your skills destination

with a variety of specialized training programmes in Transport and Supply Chain Management, these enable industry role players to reach their full potential.

BCom Degree Programme

- Transport and Logistics Management

National Diploma Programmes

- Logistics
- Transportation Management

Postgraduate Programmes

- Transport and Logistics Management (including the Course Work MCom specialising in Supply Chain Management)

Continuing Education Programmes

- Diploma in Road Transport Management (Freight or Passenger)
- Diploma in Transportation Management
- Diploma in Logistics Management
- Transport and Supply Chain Management Bridging Programme

These qualifications offer

- Industry related focus areas
- Enhanced professionalism
- Flexible study options

Enquiries

Department of Transport and Supply Chain Management
Auckland Park Kingsway Campus (cnr Kingsway & University Road)
University of Johannesburg

Telephone: 011 559 4979 / 3461

Fax: 011 559 2029

Email: rramsaroop@uj.ac.za

www.uj.ac.za/transport



RETHINK. REINVENT.



UNIVERSITY
OF
JOHANNESBURG



WHEN EXCELLENCE IS NOT AN OPTION - CHOOSE SHELL QUALITY FUELS

At Shell, we invest US\$ 1 billion in technology every year. This dedication to quality and innovation is evident in our wide range of superior fuels; each designed to meet specific fuel requirements.

Because we understand how important excellence is to your business, Shell Card offers you a secure, convenient and reliable payment mechanism that gives your business access to a range of fuels that offer more; improved engine efficiency, greater performance and protection against rust and corrosion.

Our Fuels Portfolio:

- Shell Unleaded Extra
- Shell V-Power Nitro+ Unleaded 95
- Shell Diesel Extra
- Shell V-Power Nitro+ Diesel 50ppm

For more information, visit the Shell Card webpage at <http://www.shell.com/zaf/shell-fuel-card>.



**SHELL CARD.
YOUR PARTNER ON THE ROAD.**



Sharing the roads in harmony

The reliance on road-based transport is at an all time high—moving people and goods/equipment/freight by road can be observed while driving on the highways and biways across the breadth and width of SA. The wheels of the economy are oiled by the road transport sector and as the Road Freight Association so aptly quotes: “Without trucks SA stops”.

However, all is not smooth driving on our roads, the high crash rate and related mortality statistics reflect a culture of non-compliance by some road users. Crashes relate in many instances to driving while under the influence of alcohol and being fatigued.

Sadly 80% of crashes may be linked to human error and may be preventable. The Road Traffic Management Corporation (RTMC) refers to more than 15 000 lives being lost annually due to road crashes. The cost of these crashes to the economy is estimated to be R300 billion.

A report being tabled in parliament alludes to the fact that more motor vehicles, pedestrians and cyclists than trucks are involved in road traffic incidents which includes young men between the ages of 25- 35. Inebriation and the exuberance and inexperience of youth seem to play a significant role in the causal aspects of these incidents.

De-regulation in the road transport industry in the late 80's, early 90's set the scene for the exponential growth in the transportation of freight by road. It is estimated that 88% of all goods are transported by this modality.

The sub-prime crisis in 2008/2009 saw road freight reduce somewhat, fleets of trucks were standing idle as volumes and revenues dropped virtually overnight by as much as 50%. Many operators felt the brunt of overtraded conditions and in many instances transport rates were 'forced' downwards due to an over-supply of operators desperate to service debt, pay wages, etc. Some operators were not prepared to drop their margins and opted to park trucks and not run the risk of sustainability being

compromised as transport rates barely covered operating expenses such as maintenance, tyres, driver training, wellness programmes, insurance, finance etc.

In essence running for revenue was at the expense of running for profit, not providing adequately for operating costs such as preventative maintenance/driver training/wellness programmes, marginal transport rates were accepted, which at best kept the wheels turning but at worst were not profitable. The industry felt the brunt of overtraded conditions with contract providers spoilt for choice and leveraging the supply-demand curve which resulted in certain routes offering the lowest transport rates in a decade.

The industry slowly recovered from this crisis and gradually commenced with truck/trailer replacement programmes adding new vehicles and in some instances growing their fleet on the back of new contracts to transport commodities for export markets.

The export market for dry bulk commodities saw a large number of new side-tipper link applications being commissioned especially in Mpumalanga and the Northern Cape in 2012/2013. The sudden end of the commodity super cycle in late 2014 caught many off guard with road transport contracts being suspended and even terminated, which left hundreds of trucks standing idle.

Operators providing road transportation services on the back of dry bulk commodity contracts for magnetite, iron-ore, manganese etc. have felt the pressure of drastically scaled-back volumes. The deep dive in commodity prices is exacerbated by stock-piling of finished/beneficiated products and the lowest growth rate in decades in China. This scenario is not about to improve any time soon and an uptick in demand for road transportation of dry bulk mining commodities is not expected for at least a few years.



**Consignor/consignees NRTA - 22n Amendment -
Gazette nr.38142 published 31 October 2014**

The introduction of the consignor/consignee provisions (Regulations 330 A-D) which became effective in February 2015 may be one of the most positive amendments yet for the road transport industry. The often quoted refrain of “we don’t operate on a contract” may be the very Achillesheel of the industry. The equitable share of responsibility for loading trucks/trailers to maximise payload within the ambit of legislation is prescribed for consignors, consignees and operators.

Consignors dispatching more than 500 tons of goods is a legislated role player, the obligation to provide written proof of the vehicles’ legal load (mass and axles) prior to leaving the depot or loading is now defined and a Goods Declaration as per Regulation 330 C is required to be kept in the cab for inspection by the relevant authorities. Operators should negotiate transport rates on the back of a written agreement with the party whose goods they are transporting on their trucks/trailers.

This legislation applies to both consignors and consignees therefore for simplicity, both the ‘seller’ and ‘buyer’ of goods/equipment has clearly defined obligations. Overloading fines may be up to R120 000 and/or a prison sentence in the event of a conviction.

Road transport management system

The principle of concluding a written agreement forms the basis of a clear and unambiguous contract. It may even promote competitive negotiation based on a minimum benchmark for



sustainable transport rates. It is conceivable that a minimum transport rate per ton per kilometre is set for a combination unit comprising a tautliner application transporting a legal load from Cape town to Johannesburg @ R15.00 per kilometre and if a lower rate is negotiated a compelling case must be made to prove that this rate covers maintenance, depreciation, insurance, tyres, wages, depot costs, administrative costs, etc.

The base case for sustainable rates per kilometre is not to encourage collusive practices but to promote transport rates that encourage the industry to spend money on preventative maintenance programmes, driver training and fair wages on legally loaded vehicles. The adoption of best practice standards such as RTMS - SANS 1395 (road transport management system) to promote self-regulation will level out the playing field and provide comfort to consignors/consignees that their legally imposed obligations have been adequately incorporated in a systematic compliant process.

The RTMS standards may be adopted by operators, consignors and consignees to prove to their stakeholders, which includes other road users, that self-regulation defines their intention to prevent overloading, reduce road wear by reducing overloading and supports formal driver training programmes to reduce the likelihood of crashes and which informs on their commitment to 'fair trade' practices.

The days of shrugging 'shoulders of indifference' or 'it is not my problem' are numbered, new regulations driving responsible transportation by role-players and stakeholders will hopefully

inculcate a culture of embracing best practice. It will define the road transportation industry not by the number of overloaded vehicles or the number of traffic congestion incidents when a media outlet reports on yet another 'truck which has lost its load' at the Gillyooly's interchange but by safer drivers, safer trucks, safer loads and safer roads.

The Fields Hill and N12 tragedies led to the loss of lives and resulted in hardship for surviving family members, however, it also led to a loss of credibility for the road transportation industry. These two operators may symbolise the perception of trucking in SA. In both instances, based on media reports, poor maintenance of the trucks/trailers and poorly trained or non-compliant drivers may have played a role in the causal outcome of the tragedy.

Credible self-regulation has been achieved by more than 161 operators representing 8 550 trucks and buses providing a platform for the industry to visibly demonstrate their adoption of standards. Operators are striving towards taking responsibility for roadworthy trucks and trailers, buses on the roads by selecting, training and the constant monitoring and/or coaching of drivers and commissioning legally loaded vehicles on the roads.

Sharing the roads in harmony is feasible but requires the willful adoption of best practice and the relentless pursuit of compliant and legally loaded vehicles in roadworthy condition, with skilled and well-trained healthy drivers by all role players and stakeholders.

Kathy Bell



Envirosure Underwriting Managers

Envirosure Underwriting Managers is a niche underwriting agency specializing in insuring transporters, garage stations or commercial sites against hazardous spills.

Our policy covers Environmental clean-up, which includes contamination and rehabilitation from a hazardous spill and liability arising from an incident.

Our Territorial limits are: South of the Equator.

Objective: For clients to place hazardous risks with Envirosure at a competitive premium for the underwriting risk and commodity carried or stored.

Unique Benefit: Envirosure has a 24 hour toll free call centre called Hazcall24, with qualified operators who will immediately mobilize our preferred response units to the incident scene. Our toll free number is 0860 44 44 11

HAZCALL 24 INCIDENT MANAGEMENT INSURANCE & CONTACT CENTRE

Spill Tech carry our national and cross border contract for all Envirosure's clean-ups. They have been recognized to deliver a prompt and professional service to our clients. They have over 22 branches nationally which are all Sasol, BP and Shell accredited. Their Gauteng office carries their ISO 9001, ISO 14001 and 18001 accreditations.

Our Additional Value added products Are:

Excess Solution – It buys the RSA excess to Nil and the cross border excess to R50 000. It also includes all load transfers, minor spills as in drips and leaks.

Side Tank Cover – It gives the client R 80 000 clean up cover including disposal of waste and rehabbing the environment and road surfaces.

Premises Risk – This over includes the clean-up cost from insured vehicles on, in or under property owned by the Insured or in the Insured's care, custody or control. An excess solution is available and so is a higher indemnity limit.

Above and Underground tanks - Static Risk. This cover is available for sudden and unforeseen incidents.

Compliance Assist– This allows the transporter to contact compliance assist on a 24/7 number making sure his trucks and drivers are compliant at all times.

Furthermore we offer the transporter a reminder of when the driver's license and "D" permit needs renewing.

The compliance assist product also includes a free spill kit for the client's depots or yards and replacement absorbents for the kit annually, with basis spill response training annually and compliance training sessions annually.

To date we have paid over 350 spillages totaling R 87 000 000 over our seven years of trading.

Our Insurer is Compass and our Re- Insurer Hannover-Re
Envirosure is an Authorised Financial Service Provider FSP 38594



For more information contact Sjanine Tanner, the Managing Director on 031 2054918 or sjanine@envirosure.co.za

SA universities dominate Africa rankings



South African universities dominated a pilot list that ranked 30 of Africa's top institutions. A total of 11 South African universities made the Times Higher Education (THE) Africa University Ranking.

It was unveiled at the THEs African Universities Summit held at the University of Johannesburg (UJ) on 30 and 31 July. In the top 10 alone, six South African establishments are named, with the University of Cape Town and Wits University placed first and second respectively

The results did not come as a surprise as South Africa dominates an initial snapshot list of African universities in THEs World University Rankings published earlier in the year. The list also reflected the healthy state of education in Egypt, with six institutions from the North African country making the cut. However, two of its more popular institutions, Cairo University and Al-Azhar University, were not featured.

Some unexpected or lesser-known institutions also made it onto the list, such as the Universite Cadi Ayyad (10), Port Harcourt (6), the Universite de Sfax in Tunisia (28), Universite Hassan II (15) and several other institutions from Egypt, namely: Suez Canal University (14), South Valley University and Minia University (30). Rankings were determined by the methodology used for the current world university ranking. It takes into consideration 13 factors including learning environment, research and citations.

The rankings editor Phil Batty told the Mail & Guardian Africa that even though they had spent the last five years modifying and

refining a methodology that would be better suited to an African, as opposed to a global ranking, “there’s still a long way to go”. What THE had created was “a snapshot of research strength”.

This was due to a lack of extensive data, he said. This was “the very start of the story. [Because] world rankings are driven by research, innovation and tech development, we need to work with African universities on [indicators such as] their teaching and graduate success ... The rankings we’re publishing are actually very much the starting point. We want to use this conference to convince universities to start collecting and sharing data more consistently”.

UJ played a critical role in the creation of the Africa ranking. Professor Ihron Rensburg, UJ’s vice-chancellor and principal, told Mail & Guardian Africa that the university conceptualised the idea and “asked [THE] to do it jointly—[bringing] together our driving ambition and creating a forum for African universities to debate and dialogue”.

THE’s ranking follows another list that regarded South African universities highly. The Quacquarelli Symonds University Rankings were released on 8 July. It placed eight of South Africa’s universities in the top 100 universities in BRICS, with the highest placed institutions being UCT (14) Wits (28), Stellenbosch (34) and Pretoria (49).

Staff reporter



Fuel for Africa

It is funny to think that we pay so much for fuels to power an internal combustion engine yet we sit with an abundance of fuel sources everywhere, which a lot of the time we consider as waste material.

The biggest trick the world has played on us all is that we think that fuel is a scarce resource. Based on the current technology that is available now, meaning no future tech, we have fuel for Africa. If you are not aware of the fuel sources consider this as your introduction to Biofuels for Internal Combustion Engines 101. The term biofuels means liquid combustibles derived from biomass.

Biofuels are split up into three different categories of biofuels: first generation biofuels, second generation biofuels and third generation biofuels. The classifications are based on the methodologies and processes required to extract the fuels from biomass. Here is a list of different types of fuels that can be used to fire an internal combustion engine:

- Bio alcohols

- Biodiesel
- Vegetable oils
- Biogas
- Syngas
- Bio-ethers
- Green diesel
- Cellulosic ethanol
- Solid fuels
- Bio-hydrogen
- Dimethyl furan
- Fischer-tropsch biodiesel

Believe it or not all the above fuels can be put into internal combustion engines without too much fuss. The fuels can be used as stand-alone fuels or additives and enriching agents, making



current fuels burn cleaner or replacing them all together with renewable and sustainable fuels. The key thing is that fuel is all around us and based on our access to feedstock and our application we would be able to produce the required fuels with technology that is available today. I will go into more detail about the different biofuels and their impact in future articles.

I want to focus on, and take some time to explore, one of these fuels because they are relatively easy to implement and from an African and South African perspective could place us in a position of being more fuel independent and enable us to export fuels to the world while creating massive rural employment. This type of socio-economic benefit is crucial in South Africa right now as our urban centres are not coping with the influx of people looking for basic services and employment.

Biogas (Bio-methane)

Biogas or 'poo power' as I like to call it is a huge resource that can be used in South Africa and is not being used in South Africa by municipalities. As more people in our population receive flush toilets it is one feedstock that is going to be in abundance and one that needs to be dealt with.

In Scandinavia it is common practise for municipal vehicles to run on biogas that is produced either at the waste water treatment plants, agricultural residues or from landfills. If we were able to set up material recovery facilities in Johannesburg

and separate the recyclables—paper, organic waste and non-recyclables into different batches we would be able to process each waste stream accordingly.

The organic waste would be sent to an anaerobic digestion plant where bio-methane/biogas is produced and that can be piped back to a central gantry where taxi's, buses, garbage trucks and other municipal vehicles could fill up on biogas making use of waste that is being thrown away. This can be done today. I keep stressing the point about applicability as sometimes when we talk green it is always seems as though we are talking about something on the horizon and never something that is here and present.

Here is another example; you have agricultural business where you are producing loads of different forms of effluent, like a dairy. Great! Bang all of the organics in an anaerobic digester to produce bio-methane, and you are not solely reliant on diesel on your farm. Furthermore, depending on the amount of biofuel you can produce you would be in a position to sell that fuel to other people in the area.

Why do we keep importing so many petroleum products from all corners of the earth when we can be more self-reliant and produce more of our own fuels from our waste? There is a South African multinational that can assist with converting organically derived syngas to liquefied petroleum products. Let us grow our fuels and put people to work. We have an entire region of highly fertile land, with the right climatic conditions to grow almost anything.

If we look at the former Transkei region, which is extremely fertile with ideal climatic conditions, one could look at planting sustainable, applicable, suitable plants there and whatever the residues are left over they can be used for the generations of fuels. The bottom line is to get people to work. Let us push the envelope of rural development to develop a better, cleaner, more inclusive transport network. If the vehicle owners demand cleaner drivetrains, they will come and they will have a lower total cost of ownership.

This whole green, carbon neutral economy is not about just for profit, it is also about re-addressing the social imbalances and getting the entire world into a sustainable balance. There is one thing I know we can do in South Africa—farm. We can grow stuff. We did it for centuries, with no technology, fertilisers and no irrigation schemes. We have everything now, right now, to grow fuels, food, business and prosperity. We all want the same thing.

Akona Maqashalala.





New Euro 5 flagship makes African debut



Having notched up a string of fuel efficiency benchmarks since its release in Europe in 2008, the Euro 5 MAN TGX 26.540 6x4 BLS (XLX) EfficientLine truck-tractor made its official debut in Southern Africa at a launch ceremony at MAN Truck & Bus SA's Pinetown assembly plant recently.

Considering Southern Africa's mountainous topography, a long-haul truck-tractors ability to safely ascend and descend steep gradients at optimum speeds is a primary purchasing criterion for long-haul operators and the TGX 26.540 boasts a host of driveline technologies that enable benchmark average speeds.

"Equipped with leading-edge driveline and cab technologies, the MAN TGX 26.540 EfficientLine will bring proven economy, productivity and safety enhancements to the long-haul truck transport industry operating across sub-equatorial Africa," says Geoff du Plessis, managing director, MAN Truck & Bus (SA).

More torque, greater economy

"Powered by the legendary MAN D26 common-rail diesel engine, the 540hp/2500Nm TGX 26.540 gives long-haul operators an additional 60hp over MAN's SA long-haul stalwart, the TGS 26.480 6x4 BLS (LX). With an extra 200Nm of torque and a Euro 5 emissions rating, the TGX 26.540 BLS uses selective catalytic reduction (SCR) technology and AdBlue® to lower carbon as well as other toxic emissions, making it a bona fide next-generation long-haul truck-tractor, designed to meet the ever-more stringent demands of the local market," explains du Plessis.

"Initial testing of the TGX 26.540 BLS in South Africa by MAN ProfiDrive has shown comparable fuel efficiency to current TGS

long-haul truck-tractors. An encouraging two-litre per 100km diesel saving compared to other local truck models was achieved and, thanks to the TGX's extra power and torque, shorter trip times and therefore, greater productivity were achieved," adds du Plessis.

Coupled to the D26 powerplant is a 12-speed MAN TipMatic automated manual transmission that effectively keeps engine speed at optimum rpm (in the 'green band') without the driver having to manually change gears. The aerodynamic design of the TGX EfficientLine cab (fitted with drag-reducing aerokits), plus a low power-consumption electronically managed compressor (APM) and an energy-efficient EcoLife alternator, bring additional automated fuel savings to the vehicle.

Enhanced safety

"The TGX braking system is the latest incarnation of MAN's BrakeMatic technology, which includes a hydrodynamic PriTarder that combines an electronically controlled engine valve brake (EVBeC) with a Voith Aquatarder. This combination of braking technologies produces an extra 110kW of braking power over the TGS 26.480 and, by blending and re-blending the EVBeC with the service brakes, delivers more braking capacity and better engine cooling across a wider speed range. The MAN PriTarder® is particularly effective at slower speeds, making hill descents safe at 60km/h under a full load," adds du Plessis.

Additional standard safety features include a Lane Guard System (LGS), Adaptive Cruise Control (ACC) and an emergency stopping signal (ESS), along with EBS, ASR and ESP.

Enhanced ergonomics

Despite the many technology-enabled efficiency tools in the new MAN flagship, the TGX pays equal attention to the comfort, efficiency and safety of the driver. "The TGX is equipped with the roomiest cab ever released in Southern Africa, the XLX, which boasts an extra 200mm of width and full standing height. It is a true long-haul home-from-home, with extra-wide double bunks and all the latest comfort features, from air-conditioning to a hi-tech media system with Bluetooth functionality," adds Dave van Graan, head of Truck Sales at MAN Truck & Bus (SA).

The TGX in-cab tech array also includes an axle-load display (aka on-board weighing system) for both truck and trailer and features MAN TeleMatics (a fully-fledged fleet management system) with touchscreen navigation capability. Driver training is undertaken by MAN's proprietary ProfiDrive programme that includes modules from 'basics' to advanced and specialised applications.

"The long-haul truck transport industry in Southern Africa is the primary logistics service provider in the region and a central player in its economic development. Keeping truck transport sustainable and cost competitive is therefore of primary importance to the region's development.

"Euro 5 SCR technology lowers fuel consumption and thus, limits carbon emissions. Advanced driveline technologies powered by the 540hp/2500Nm engine enable better average speeds with fewer gear changes and service brake applications, all leading to lower

maintenance costs and vehicle downtime. The TGX definitely 'checks all the boxes' on the long-haul operator's wish list and we at MAN Truck & Bus SA are confident it will set the new benchmark in this sector of the trucking industry," concludes van Graan.

Taking it to Africa

To prove the outstanding long-haul capability of the MAN TGX 26.540 EfficientLine, MAN will undertake a 14 500km road trip across 10 Southern African countries over 52 days, commencing at the Pinetown launch. Piloting the TGX in the One MAN Kann odyssey will be celebrity adventurer and explorer, Riaan Manser (trained by ProfiDrive), and a professional MAN long-haul driver, Nduna Chari, one of MANLINE's best long-haul drivers.

The journey will take the TGX to MAN's dealerships and partner fuel suppliers across the region and, using MAN TeleMatics, will be constantly monitored for benchmarking purposes. The truck will be used as a link across sub-Saharan Africa to transport necessary malaria preventative equipment, such as mosquito nets and other malaria prophylactics. This initiative is in partnership with Roll Back Malaria.

Regular video episodes will show every Tuesday and also be posted on the One MAN Kann Facebook page for public participation, while rolling coverage will be posted on Twitter. Partnering MAN Truck & Bus (SA) on this journey are Castrol Vecton, VW Commercial Vehicles, who supplied the Amarok support vehicles, and Henred Fruehauf/SA Truck Bodies who provided the trailer.

Staff reporter





Heavy commercials —the only bright spot

The growth in the heavy commercial vehicle segment was the only bright spot in the performance of the South African truck market during the first half of the year.

Sales in this segment have grown 4.4% so far this year to 3 045 units, with UD Trucks once again claiming the top spot with a 27% market share.

According to the July sales results released by the National Association of Automobile Manufacturers of South Africa (Naamsa), Associated Motor Holdings (AMH) and Amalgamated Automobile Distributors (AAD), the SA commercial vehicle market recorded a 4.7% decline in sales year-to-date, totalling 16 938 units.

The bus segment reported a second successive month of decline on the back of a year and a half period of consecutive growth due to the implementation of various Bus Rapid Transport (BRT) projects. Sales were 5.6% down on a year-to-date basis, bringing 2015's total to 640 units so far.

Although both extra heavy commercial vehicles (EHCVs) and medium commercial vehicles (MCVs) showed some improvements on June's sales performance, both are still lagging behind in year-on-year sales.

EHCV sales have declined by 7.1% when compared to the same period from 2014, to 7 505 units. Sales in the MCV segment were 5.8% down on a year-to-date basis to 5 748 units.

"The market remains under immense pressure," said Rory Schulz, managing director of UD Trucks Southern Africa. "On the positive side, there are some visible signs of stabilisation with a slight improvement in the month-on-month rate of decline."

Schulz said that the outlook for the remainder of the year remains rather negative as factors, such as a low business confidence and slow economic growth, within South Africa are continuing to put a damper on commercial vehicle sales.

"Despite the challenging sales climate, we remain committed to the success of our customers' businesses. Our dealers across the southern and eastern Africa region are continuing to provide fleet owners with quality aftermarket support in order to get the best lifecycle costs for every UD truck on the road, as we know every rand counts," concluded Schulz.

Sam Sithole



NEW SANAS RTMS ACCREDITATION SYSTEM



Despite concerted and ongoing efforts by South Africa's road and traffic authorities, the sharp increase in heavy vehicle traffic and the effects of overloading continue to be a major problem on South African roads.

In order to address this, industry is coming on board to self-regulate and support the efforts of government. South African National Accreditation System (SANAS) supported by Road Transport Management System (RTMS) National Steering Committee have devised a new accreditation programme for the certification of consignee, consignor and operator in accordance to the South African National Standards SANS 1395 family of standard. The SANAS Technical Requirements address the scope of accreditation and the minimum qualification and experience required by operators.

Road Management

Overloading of cargo vehicles result in the premature deterioration of the country's roads. Overloading, compounded by inadequate vehicle maintenance, high levels of driver fatigue and poor driver health-care programmes, contribute significantly to South Africa's poor road safety record.

The RTMS has already shown outstanding results since its implementation. As a voluntary programme, the RTMS promotes improved road safety in the road transport industry and looks to achieve significant results in:

- Reduction and minimisation of overloading
- Road damage prevention in order to preserve South Africa's infrastructure
- Enhancing the safety of heavy vehicles on South African roads
- Prioritising truck drivers' health through driver wellness initiatives
- Reducing traffic violations (e.g. reducing speeding incidents)
- Improving efficiencies in various industry supply chains
- Actively promoting skills development within the transport sector
- Allowing businesses to measure performance and take the necessary responsibility for their impact on public road networks.



RTMS Compliance

Implementation of this SANS 1395 family of standards will play a critical role in South Africa's economic growth and competitiveness by ensuring efficient road freight transport between the country's major centres and addressing issue of both road safety and road infrastructure.

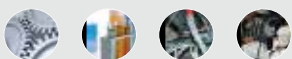
It is imperative that RTMS is implemented in a sustainable manner so as to achieve the objectives of improved road safety by reducing road accidents, optimising payload efficiencies, maintaining roadworthy vehicles, and improving driver wellness and training. Therefore, each organisation, consignor/consignee or operator that implements SANS 1395 will be required to develop appropriate processes, systems and measurement methods in order to demonstrate compliance to this standard.

The standard does not prescribe the specific method(s) to demonstrate compliance, since it is envisaged that each organisation will develop unique and customised processes to demonstrate compliance. However, it is important that the method used shall be able to reliably and accurately demonstrate compliance to the specified SANS 1395 requirements.

About SANAS

SANAS is as South Africa's sole accreditation body, tasked with ensuring reliable and transparent methods of ensuring the technical competence of certification bodies. SANAS is recognised internationally by the International Laboratory Accreditation Cooperation and International Accreditation Forum.

The SANAS accredited certification bodies will certify organisations based on how well they fulfil the requirements stated in the SANS 1395. Once an organisation is certified by an accredited certification body they must apply to the RTMS Scheme owner for the utilisation of the RTMS logo, based on the fulfilment of the RTMS Scheme rules. The certification will be based on tangible evidence of RTMS implementation.





one|stop

One Stop was born out of the need to provide a "One Stop Solution" to our clients.

Our clients know to call us for all their needs instead of making the many calls that they would have to to get anything done.

Our tracking and recovery solutions are individually tailored to each clients specific needs and no 2 clients have the same package and service.

With the introduction of our "Airborne Law enforcement division" we are proud to boast that we now have quicker response times and easier recoveries.

Tony Dobson

082 843 0323

tony@one-stop-group.co.za

www.one-stop-group.co.za

Navigating fluctuating markets

Some of the uncertainty around the African and global economies has slowed truck sales in recent months, but companies like Isuzu South Africa have recently been bucking the trend with better than expected light commercial results, making up for deficits in other areas.

The year-to-date (YTD) Isuzu trucks volume has increased by 20% in the same period for 2014, while the truck market has declined by 5%. Their full-year share in 2014 was 12.9%, and this has increased to 13.3%, giving the Japanese manufacturer some optimism for the coming months.

The truck industry expected 2015 to be a year of many positives with lower fuel prices, while operating costs have been a great concern, including e-tolls, utilities and a variety of associated costs. The big question is how will the economy fair with these variables?

The overall truck market has lost ground, resulting in a -5% growth YTD. The medium commercial and extra heavy commercial markets have declined by 7.5% and 7.3% respectively, while the heavy commercial segment has grown 5.5% so far to date, with the bus market flat lining at this point in time.

Craig Uren, chief operations officer of Isuzu Trucks South Africa, leads the staff complement of fifty people, responsible for all truck marketing, sales, service, product development and engineering support. A big job for such a small team, you might say.

During the course of quarter three, Isuzu Truck SA is aiming to achieve a milestone of 30 000 units produced at the Port Elizabeth plant since 2007. The first two quarter volumes and results for Isuzu Trucks South Africa have notably been painting a good picture, according to some analysts.

Road Ahead editor Gregory Simpson caught up with the knowledgeable Uren recently for more on the company's plans for 2016.

Looking at growth into Africa, how many units ideally would you like to be doing in two years time?

The SADC countries get all their fuel from us and a lot of our customers are running into those routes and those territories, quite significantly now—and it's grown quite a lot over the last



two years. Our volume into those territories believe it or not this year versus the average of the last three has quadrupled, and a lot of that is part of the solution we've offered here. They're rolling out in Zimbabwe in Zambia, and in Mozambique through local companies, so the market growth has been pushed into solutions they're offering in those territories. The sub-Saharan



territory, together with ours, is not a one-size-fits-all, you actually have to draw the line, and you've got left hand drive in the West and the right hand drive in the East, but similar technology, so you've got that dynamic. At the beginning of the year we set up the company, and it's also based in Johannesburg, called Isuzu Motors Sub-Saharan Africa and we're busy staffing that and developing the strategy for the sub-Saharan territory. They focus on what's required, and there are a lot of benefits because there are big corporates of ours that run in those territories, and say they don't want the same four tonner, or eight tonner solution in those territories, and that's where the bodies come in—the chassis might vary from a technology point of view, but the solution is the same. That's driven by needs, the West took a bit of a hit this year because of the oil, so that's on pause; the Kenyan side of the business is racing, it's phenomenal, it's probably going to outsell us this year, believe it or not.

What do you put the success of the light commercial market down to?

If you look at our particular sales successes on the N-series, about 70% of the products we sell are all AMT which has no clutch and is simple to drive, very difficult to mess up the truck and miss a gear. This allows the driver to focus on the road; things like damages and maintenance get reduced dramatically because it's just taking away a lot of the driver variables that create problems. On the F-series we are running at about 50% so some of the customers actually use that technology in a strange way, they view it as their risk manager, it takes away their risks. And that's helped us tremendously. We've got to the point where we have reached the water level of where the demand is because more sophisticated customers who run long distance don't need the technology, they still can run conventionally and we've got to the point where we understand where we are with that. We'd love to use that technology further north but you need to be at a certain Euro standard before you can put that technology in. Today it's still a very mechanical type vehicle up north and in most of the market. We've done some numbers in the same territory in Africa

and although we sold 25 000 new Isuzu trucks, there were close on 300 000 used trucks sold into that same market.

Speaking of growth, the motor industry is now the biggest industry in South Africa, what do you put that down to?

Over time, and we probably had it written in the newspapers and media many times, the location of South Africa to the rest of the world logistically is quite immense and those logistical costs of getting things here and getting things away from here are quite a big inhibitor so it's driven the need, particularly in our business, to be able to do a lot for ourselves and to make it work. We as an industry across the board, not just automotive but in many fields are still quite industrious and an ingenious country with a lot of flair, skills and entrepreneurs.

Your assembly plant in Port Elizabeth is very efficient, what have been the keys to driving that process of streamlining?

A fresh pair of eyes, new ideas, the Kaizen philosophy—it might be a cliché but it works—things like layout, process, simple things in the factory—we've increased our factory run rate from 13 units a day to 20 units a day, not that it's a great advert for employment but we've done it with the same labour force and the same productivity efficiency. All that comes through and we can probably leverage it more. Things like on a production line walk about, it's amazing how much you can cut down by the amount of time that people walk around, you put everything at hand close enough to do the job. I walked into our plant four years ago and stood in one corner and looked across and couldn't see the other corner, just clutter. Now you walk in there you don't see anything other than people doing what they should be doing, it looks organised, it runs organised, it just not rocket science, it's simple—you've heard me say it many times—practicality, common sense, logic and just do it right. And, of course, at the same time you achieve huge quality benefits out of that, nothing is done incorrectly or the wrong way around. Because to assemble a truck is not nothing, it might seem like a simple thing to do, but the skills required on that production line are quite a lot more than a general car assembly line because



MZANSIFLEET[®]

(Fleet management package)

We got you!



- See exactly where your vehicles are ✓
- Detailed speed, driving and positioning ✓
- Real-time and historic data ✓
- Receive SMS & email alerts ✓
- Panic Button alert system ✓
- Geo-fencing alerts and response ✓
- Communicate with your vehicles ✓
- Monitor your vehicles cross-border in Real Time ✓
- Monitor Vehicle and Driver behaviour ✓
- Prompt vehicle Response and Recovery ✓



NATANYA COERTZEN

For more information

M +27 83 999 6294

E natanyac@mzansitracker.co.za

T +27 012 661 0147

E sales@mzansitracker.co.za

Eco Court Office Park
340 Witch Hazel Avenue, Mezzanine Floor Suite A
Highveld Centurion, 0157



MZANSITRACKER

real time. fleet management.



Sikaflex® -552 AT

HIGH PERFORMANCE ELASTIC GAP-FILING
1-COMPONENT HYBRID ASSEMBLY ADHESIVE
FOR VEHICLE AND TRUCK BODIES

Solvent and Isocyanate free • Advanced hybrid technology •
Good adhesion to a wide variety of substrates without primer
Impact and shock proof • Capable of withstanding high dynamic
stresses • High green strength • Fast curing • Ageing and
weathering resistant • Non-corrosive Silicone and PVC free •
Used in conjunction with Sika® Aktivator- 205

www.sika.co.za

Head Office: +27 (0)31 792 6500

BUILDING TRUST



they are doing three or four functions and a truck line is doing 30 or 40 functions. The worker has got to remember many different products, so it takes a lot more common sense and aptitude than normal.

How far away are we from self-drive trucks in Africa?

In first world countries if you drive a vehicle on a road in Europe your infrastructure lends itself to that. Here we haven't got the infrastructure that lends itself to that. I don't think we can afford the technology at the end of the day to actually make it productive in this market place to achieve that, we've got to balance all these things. We are driving too many things that are in isolation and not looking at the bigger picture—what drives the economy in the bigger picture, other than in isolation. Communication, collaboration, talking between the private sector and the public sector is important—governmental institutions talking to each other all drives getting the solution to be practical and simple.

And full mechanisation would that ever be an option?

I don't think on trucks, for what we're doing here is catering for what the government wanted some time back—to give the most productive solution on a product to the industry. You need to assemble it here, then you save on the large logistical shipping costs, so there is a benefit, and the industry does very well in making sure it provides the value add to make it. Further than that very difficult to get any, if I had to go and place an order with a supplier for 4 000 'somethings' it's not a viable business option for him in this country, even if you gross all the other manufacturers together with the same 'somethings', it's still only going to be 20 or 30 000 of them. Whereas in the bigger scheme of manufacturing around the world they would be talking about hundreds of thousands of 'something', or for a million of 'somethings' which makes sense. So from a truck industry perspective we've got as an industry in general as close as we can to the best solution for this part of the world between local value add, labour, production etcetera, etcetera at a factory point of view.

Gregory Simpson



- Supply & Install– Digitally printed vinyls with a Protective over-laminate film
- Supply & Install – Digitally printed PVC with a protective UV liquid varnish, and stretched onto aluminum tensioning frame system.
- Fleet Branding Management Program – Damage reports & proposed repairs.
- De-branding of Fleets.
- Warranty on prints supplied and workmanship - certified installation teams.
- National Campaigns executed with ease.
- Free Consultation – Fleet branding solutions & latest products.

+27 (0)11 238 7984

info@dnaservices.co.za

http://www.dnaservices.co.za



**Spring Technology
at its Best**

**Africa's Largest Variety Manufacturer of
Multi Leaf Springs, Coils And Parabolic Springs
We also carry a comprehensive range of components**

~BMC~BPW~DAF~ERF~FORD
~FRIGHTLINER~GMW~HUMMER
~HYUNDAI~ISUZU~IVECO~KIA
~LAND ROVER~MACK~MAHINDRA
~MAN~MERCEDES~MITSUBISHI
~NISSAN~RENAULT~SAMAG
~SCANIA~SUZUKI~TATA
~TOYOTA~WESTERN STAR
~AND MANY MORE



52/56 Faraday Street // Village Main // JHB // South Africa
Tel: +27 11 334 0646/1800 // Fax: +27 11 334 4545/1801
sales@goldenspring.co.za // www.goldenspring.co.za



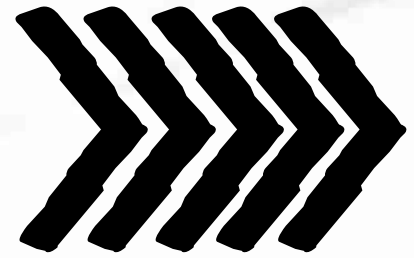
TRANS-AFRICA

Pipe dream or

Transport infrastructure matters. It costs an African farmer about \$2 a ton per kilometre to move produce to market. This cost—it's about half that in North and South America—has restricted farming to within six hours of a major city.

HIGHWAY

near reality?



According to the World Bank, just 34% of Africa's rural population lives within two kilometres of an all-season road. This lack of access to infrastructure has restricted trade between African countries to just 12% of total trade; in comparison, trade between neighbours in North America—Mexico, the US and Canada—accounts for 40% of all their trade.

The African Union's Intergovernmental Agreement on the Trans-African highway network sets minimum standards for development and maintenance of 57 233 kilometres of road that make up the Trans-Africa highway today. Designed to connect capitals to centres of production, and connect Africa, it is hoped a well-maintained and fully-realised highway will integrate economies and improve social cohesion between African communities.

The Trans-Africa highway was meant to increase trade through built and maintained infrastructure and more harmonious customs procedures. A fully developed, continent-wide road system would aid African food security and lower the cost of feeding a family. Without it, in Africa it costs between 50% and 175% more to transport goods from the site of production than anywhere else in the world.

As African economic growth—and the resulting improvements in living standards—has outstripped developed countries, the shortage of infrastructure threatens to put a brake on development. As originally imagined, the Trans-Africa highway was an impressive web of freeways that would link ports to cities and the hinterlands. It would carry billions of dollars of goods to markets and build self-sufficient continental economies.

But Africa's road network lags behind the global average of 7.6 kilometres per 1 000 people. It is anticipated that the harmonisation agreement and other programmes—such as



the Programme for Infrastructure Development in Africa (Pida) run by agencies like New Partnership for Africa's Development (Nepad) – will help increase the density from the present 3.6 kilometres per 1 000 people.

When foreign companies calculate the price of doing business on the continent, they look at figures such as the cost of transportation, and decide to go somewhere else. And transport delays caused by infrastructure limitations cut productivity in Africa by as much as 40%.

Improved roads in north and West Africa, and large-scale road building programmes in the Southern African Development Community and East African Community have gone a long way towards connecting and integrating Africa. The largest challenge remains in central Africa, where difficult geography and a lack of road infrastructure have made improvements challenging.

Africa has come to realise that viable transport infrastructure is connected to the economic, technological and social renaissance of Africa. As Nepad's Adama Deen explained, "every country and every region has had its own master plan and priorities, now we can all come together as Africa to have one priority for the continent. By 2030, we will have developed a completely holistic African infrastructure system. If we fail, integration in Africa is impossible".

Africa's economy is evolving but agriculture, mining and tourism remain the mainstays and they are all dependent on crumbling roads. Economist Jeffrey Sachs has argued that developmental aid to Africa would be better spent on building highways suited to carrying truck cargo than on almost anything else.

In 1969, the Japanese government began building a four-lane highway to link Mombasa in Kenya to Lagos, Nigeria. At 7 080 kilometres, it was longer than the cross-continental highway linking Boston on the American Atlantic coast to Seattle on the Pacific, and would increase trade among six African nations.

But after Idi Amin took control of Uganda and threatened his neighbours, Kenya closed its end of the highway. Today, the east-west Trans-Africa highway turns into a muddy footpath in the jungles of eastern Congo. "No one would ever have 100 million people in the rich world along a broken down, two-lane, undivided road as we do here," Sachs says.

Dreamed up more than 40 years ago by a UN committee and still being developed by the United Nations Economic Commission for Africa (Uneca), the African Development Bank and the African Union, the Trans-Africa highway is a network of envisioned highways linking Africa from north to south and east to west. As Africa threw off the shackles of colonialism, Uneca's ambitious plan was to link Tripoli to Windhoek, Lobito in Angola to Beira in Mozambique. Another planned highway would link Khartoum to Gaborone. None of Uneca's original plans included routes into South Africa, at the time a pariah state.

Like Cecil John Rhodes' colonial dream of a path of red from Cape Town to Cairo, the Trans-Africa highway network would make it easier to cover the vastness of Africa, and open the continent to internal and international trade. Spread across nine highways, it is an arterial network of tar, steel and ferries that, if ever completed, will comprise more than 56 000 kilometres of



maintained corridors that will allow African farmers and miners to get their product to markets or to ports.

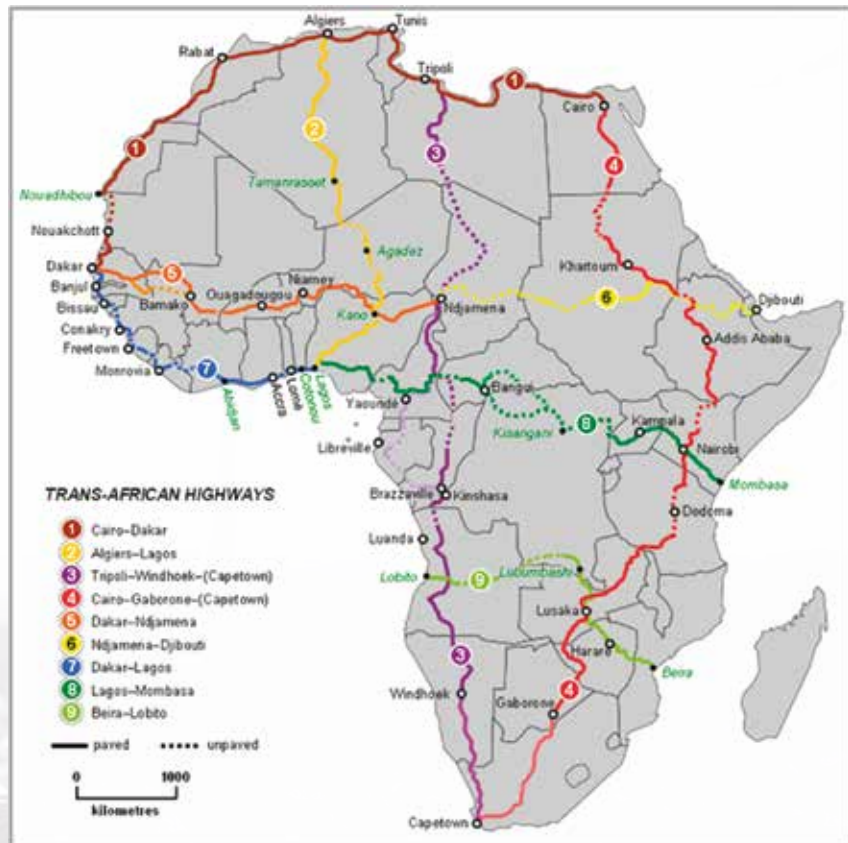
For the dreamers who imagined it and the Africans building it, the highway is designed to alleviate the poverty affecting large parts of the continent. By linking every African country it was hoped that the continent will become an integrated bloc, but four decades later that aim remains unfulfilled and construction on large sections has stalled. As it stands, there are 10 400 kilometres of rail and 7 000 kilometres of the road corridor missing, and it will cost \$32-billion to complete these links.

The International Committee of the Red Cross's distribution hub for eastern Africa is just off the Mombasa highway in Nairobi. It costs the aid organisation \$2.88 per 1.6 kilometres to ship aid to the most desperately in-need communities. "The roads are in a desperate state and they are not getting any better," explains Bent Korsgaard, Red Cross logistics director for the region.

African governments have had to balance the use of scarce resources between immediate needs and the maintenance of infrastructure. Roads have fallen down the list of priorities. Yet in the last decade, African governments, the African Union and the African Development Bank have changed their view. Roads – and other linked transport infrastructure – have become a priority. Infrastructure projects are now seen as the best way to improve Africa's trade with itself and the rest of the world.

Around 40% of Africa's population lives within two kilometres of a tarred, all-weather road; doubling that access would cost about \$32-billion. But spending the money would improve economies and improve food security for Africa's one billion people. Some governments have begun to prioritise rural road investment based on the agricultural value of land. Instead of investing immediately in building the 1.5 million kilometres of highway needed, an immediate improvement in prospects can be gained by building a network of 600 000 kilometres in rural agricultural areas.

Since its inception in 2001, the Association of Southern African Roads Agencies (Asanra) has been responsible for planning, maintaining and developing road networks in the Southern African





Development Community. Group programme officer Snowden M'madi explains: "Road transport is an important ingredient for economic growth, and this will be achieved in Africa through the Trans-Africa highway."

For South Africans, especially residents of Gauteng, there is a stretch of the highway that has become a burr in their shoe. Ultimately, it will be a part of a 560km long stretch of the Trans-Africa highway, but for now the tolled road between Johannesburg and Pretoria has become a source of friction between motorists – who feel they are overpaying for the road – and the South African National Roads Agency (Sanral), which views it as a vital economic artery.

It is one of 18 integrated projects – to improve infrastructure and water delivery – identified by the national government that is hoped will change the economic landscape of not just Gauteng but the whole country. Improved service delivery is also a major benefit that improved transport links will bring to South Africans.

East-west routes:

- *Trans-African highway 1 (TAH 1), Cairo-Dakar highway, 8 636 km* (5 366 mi): a mainly coastal route along the Mediterranean coast of north Africa, continuing down the Atlantic coast of north-west Africa; substantially complete, although the border between Algeria and Morocco is closed. TAH 1 joins with TAH 7 to form an additional north-south route around the western extremity of the continent.
- *Trans-African highway 5 (TAH 5), Dakar-Ndjamena highway, 4 496 km*: also known as the *Trans-Sahelian highway*, linking West African countries of the Sahel: about 80% complete.
- *Trans-African highway 6 (TAH 6), Ndjamena-Djibouti highway, 4 219 km*: contiguous with TAH 5, continuing through the eastern Sahelian region to the Indian Ocean port of Djibouti. The approximate route of TAH 5 and TAH 6 was originally proposed in the early 20th century as an aim of the French Empire.
- *Trans-African highway 7 (TAH 7), Dakar-Lagos highway, 4 010 km*: also known as the *Trans-West African coastal road*: about 80% complete. This highway joins with TAH 1 to form an additional north-south route around the western extremity of the continent.
- *Trans-African highway 8 (TAH 8), Lagos-Mombasa highway, 6 259 km*: which is contiguous with TAH 7 and forms with it a 10 269-km east-west crossing of the continent. The Lagos-Mombasa highway's eastern half is complete through Kenya and Uganda, where locally it is known as the Trans-Africa highway (the only place where the name is in common use). Its western extremity in Nigeria, Cameroon and the Central African Republic is mostly complete but a long missing link across DR Congo currently prevents any practical use through the middle section.
- *Trans-African highway 9 (TAH 9), Beira-Lobito highway, 3 523 km*: substantially complete except in the eastern half but the western half through Angola and south-central DR Congo requires reconstruction.

Sanral's Nazir Ali pointed out at a CSIR conference as far back as 2012 that the government saw it as important to maintain and improve road infrastructure to unlock the economic power lying dormant in South Africa. "There is no country in the world where [the] government is not involved in any developmental activities. Allowing these assets to deteriorate would be a cost to our economy, as well as cost us as individuals."

Sulaiman Philip



North-south routes:

- *Trans-African highway 2 (TAH 2), Algiers-Lagos highway, 4 504 km*: also known as the *Trans-Sahara highway*: substantially complete, only 200 km of desert track remains to be paved, but border and security controls restrict usage.
- *Trans-African highway 3 (TAH 3), Tripoli-Windhoek-(Cape Town) highway, 10 808 km*: this route has the most missing links and requires the most new construction, as only national paved roads in Libya, Cameroon, Angola, Namibia and South Africa can be used to any extent. South Africa was not originally included, as the highway was first planned in the apartheid era, but it is now recognised that it will continue to Cape Town.
- *Trans-African highway (TAH 4), Cairo-Gaborone-(Pretoria/Cape Town) highway, 10 228 km*: the completion of the stretch of highway from Dongola to Wadi Halfa in northern Sudan and the road from the Galabat border crossing in North-Western Ethiopia leaves only two stretches unpaved: between Isiolo and Moyale in northern Kenya (dubbed 'the road to hell' by overland travellers) and the gravel section through Dodoma in central Tanzania. Crossing the Egypt-Sudan border by road has been prohibited for a number of years; a vehicle ferry on Lake Nasser is used instead. As with TAH 3, South Africa was not originally included as the idea was first proposed in the apartheid era, but it is now recognised that it would continue to Pretoria and Cape Town. Except for passing through Ethiopia, the route roughly coincides with proposals for the Cape to Cairo road in the early 20th century British Empire.



When you dump used motor oil into drains, or dispose of it unsafely, you're not only threatening the environment, you're threatening your well-being too. Used oil is a hazardous waste that can contaminate drinking water. Always use ROSE approved collectors and recyclers to dispose of your used oil.

For more information call the ROSE Foundation on 021 448 7492.
Email: usedoil@iafrica.com or visit: www.rosefoundation.org.za



RECYCLING OIL SAVES THE ENVIRONMENT

Funded by:





When the American dream turns into a nightmare

I left during the month of March 2005, to work as a 'trucker' in the USA. I worked there for three years and left in March 2008 for Ireland, also working there as a 'trucker' for six months, went back to South Africa and returned to the USA in August 2009 before my life would change forever.

I loved doing trucking in the USA for several reasons. First of all, the road system is really the best in the world for truckers. The dual carriageway throughout America makes the road very safe. It prevents head on collisions. It is something we as South Africans can learn from America. It would prevent many fatal accidents should we have dual carriageways throughout South Africa.

Secondly, the 'truck stops' throughout America rank tops – in the time that I worked there, I never heard of or experienced any hijacking while on the road. Trucking is also very safe due to the 'trucking inspection' and 'checking points' at all the different border points in America.

These include 'log books' being checked by traffic officials to see that drivers are not exceeding their 11-hour work shift. That also prevents accidents, as one seldom finds a driver who is



exhausted behind the wheel of a truck. A thorough inspection includes the weight of the truck and inspecting the vehicle to see if it is roadworthy.

Trucking is one of the biggest businesses in the USA and because of the wonderful system they have, it is also very safe. When there is a snow storm or road conditions are very bad due to the weather, roads are closed and truckers are forced to stay off the road until weather conditions improve and roads are cleared, which also contributes to the safety aspect.

December 2009 in the state of New York, on my way back from the store, I crossed the road, trying to get into my truck and was struck by a speeding truck – it knocked me up against my parked vehicle. I was hospitalised in Valhalla, Westminister in New York. I had nine operations ... two on my nose and the rest on my face, as I had broken cheek bones as well. On my broken hand I had two operations and five operations on my left leg that was broken in a few places and totally fractured. A month later, I was transferred to Colby Kansas and received further treatment from therapists, etc, as I could not walk. My wife had to leave her job at the time to attend to me in the USA. My visa was due to expire at the end of September 2010 and I was advised by my two attorneys – the Workman's Compensation attorney, my insurance attorney as well as my immigration attorney to leave the USA as I stood a chance of losing everything if I did not leave the country as they might not renew my visa. I was coerced into settling for 300 000 USD, 100 000 went to my lawyers and 200 000 is what

I received and from that I had to pay for the last operation on my leg in South Africa.

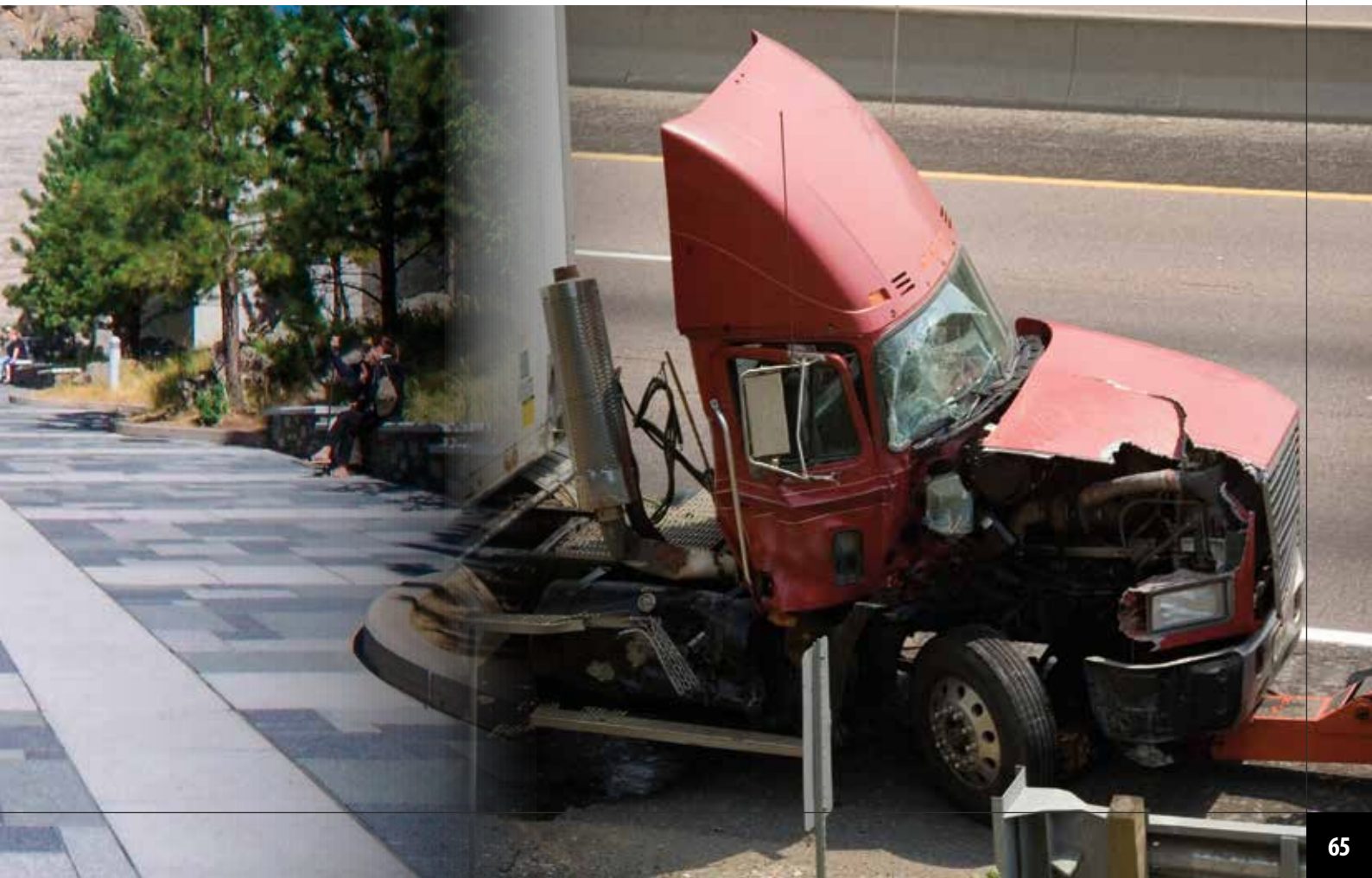
I needed one more operation on my leg and was assured that my leg would be fine after one operation, which I could have in South Africa. I agreed to take the settlement under those circumstances.

Upon returning to South Africa, I underwent another nine operations on my leg instead of only one, and almost lost my leg and my kidneys in the process, as I am a diabetic. Doctors in South Africa informed me that they could not guarantee my leg would be alright and I still stood a chance of losing it.

I spent another year in hospital in South Africa. I lost my house in the process. The money that they paid me I had to use for my expenses. I feel that I have not been compensated for the accident in the USA. I still stand a chance of losing my leg. I cannot take out life insurance due to my defects. So, yes, the USA was nice, I enjoyed the trucking but due to the accident in the USA my financial future seems very bleak.

Currently, I am driving a small tipper truck in South Africa. It is a part time job, as it is very difficult at my age to find anything because of the high unemployment rate. I just feel that if I had not been hospitalised here in South Africa and had not gone through that trauma, I would have been able to start a lucrative business with the money I received. But I have not been compensated for that whole year, as I had to spend the money to make ends meet.

Theodore Keith Potts



Imperial's vehicle selection model identifies the ideal "Horses for courses"

Reflecting its commitment to providing every client with the optimal logistics solution, Imperial Logistics has invested R1.6 million and devoted 12 months to a vehicle testing project that has generated an unrivalled vehicle selection model.

It is enabling the group to identify the ideal vehicle for different long distance routes in South Africa and offer clients improved service and cost savings.

Francois Ehlers, technical executive at Imperial, explains that the year-long project focused on premium brand 6 x 4 tractor trailers, with primarily European units evaluated. "A total of 10 different vehicles were tested, and these represented the latest technology and specifications from the different manufacturers," he expands. "Our aim was to ensure that Imperial clients can expect the right 'tool' for the task – in this case the vehicle that delivers the best performance and fuel economy on a particular route, thereby driving our clients' competitiveness."

Imperial's test drives were carried out on five different routes: Johannesburg to Cape Town, Cape Town to Port Elizabeth, Port Elizabeth to East London, East London to Durban and Durban to Johannesburg. Ehlers notes that a detailed schedule was followed by the test drivers, in order to minimise variables. "Driving time was not a factor, since our selection of vehicles tested was based on certain horse power and torque capabilities. We set an 80km/h speed limit on the test. For every route tested, our drivers left the starting point at the same time, to remove variables like the effect of air temperature on fuel consumption."

The issues of load distribution and variable payloads were also removed from the testing process, since every trip was undertaken with the same, full dead load. "We did not use payloads, and sought to not touch the load during the test, to ensure that it was identical for every vehicle tested," he stresses, and adds that since customer loads were not transported during the testing, this was an exercise that did not generate revenue for Imperial.

Outlining the testing process, Ehlers says that every vehicle was driven on the five routes twice, by two different drivers, following the same detailed schedule, with specified times and points for stops. "This ensured that a very thorough set of results could be generated." Some of the tests were undertaken utilising "aerokits" on the vehicles, to assess the impact of wind resistance on fuel consumption.

Imperial's ultimate goal was to develop a cost of ownership model for each different vehicle over five years, which factored



in its fuel consumption on the different routes. A cradle to grave approach was followed, and, in addition to fuel economy, further considerations were the vehicle's original purchase price, maintenance costs, vehicle warranty and trade-back agreement.

Along with the standard vehicle maintenance costs, Imperial's team also considered the impact on the cost of ownership of spare parts that would not be covered by a maintenance contract. Ehlers elaborates: "If the vehicle is in an accident or a mirror or door is bumped, costs would be incurred for these parts, so we priced out a 'parts basket' for each vehicle, and factored this into our model, too."

He notes, however, that the testing was not entirely focused on Rand and cents, and says that in addition to measurable factors like fuel consumption, purchase prices and spare parts, this exercise also included drivers' feedback and scorecards. "Driver fatigue will impact how many kilometres can be travelled, and this is affected by subjective factors like cab comfort, in-cab



features like air conditioning and the radio, even the bed size.”

To gauge how each vehicle delivered in these areas, the test drivers completed detailed scorecards, rating elements like the seat comfort and operation; cab suspension; interior space; rear view mirrors; storage areas; bed comfort; air conditioner efficiency; quality of the radio; and driver’s view. Other important features that the drivers assessed, Ehlers states, were the ease of access for inspections like oil and brake fluid.

“If a driver needs to check fluid levels, we wanted to establish whether he can do so easily, or whether this is an onerous process. Whether state-of-the-art features like lane assist and proximity control were standard was also considered,” he adds.

Ehlers reveals that at the end of the exercise, all of the premium brands assessed performed equally well in terms of the drivers’ scorecards. “Our aim was to see if there were any driver perception issues that really stood out, but, ultimately, all the units tested received similar high ratings from the drivers.

“It finally came down to the measurable factors,” he states. “In terms of fuel efficiency, we discovered that each of the test vehicles clearly performed differently on the different routes. Some were more fuel efficient than others at altitude, and likewise, some outperformed others at sea level. There are clearly different trucks for different operations and different routes. There is no one size fits all, but rather, horses for courses,” he quips.

Imperial’s vehicle selection model has enabled the group to identify a limited number of premium brands that are best suited for each route, and focus on adding these to its substantial fleet of more than 5 300 vehicles. “We are able to make fully informed purchasing decisions, depending on the region and route, and negotiate the best rates with vehicle manufacturers.

The information we have gleaned is helping us to improve our clients’ competitiveness by optimising our transport service, efficiency and costs,” he concludes.



Model trucker Deb Drew calls it quits

Outback trucker, Deb Drew, is giving up the big steering wheel when she moves back home to Taranaki this year, after starring in the Australian documentary *Outback Truckers* three years ago.

The qualified nurse, and runway model in her earlier years, moved to Melbourne about five years ago, and began working as an interstate trucker for 1800, Drivers.

"It has been repeated two or three times every year since," she said. "Because it repeated so many times in Australia anywhere I go, any roadhouse I pull into, I'm recognised. I guess because there's not that many solo women drivers."

"Your office window, the outlook is ever-changing. It's pretty amazing," she said. "I get paid to drive and go and sightseeing. I've been all over." As part of her job she regularly drives through the Nullarbor Plains. "I figured that it would just be orange dust. Oh boy. Rain, green, unbelievable. It's quite extraordinary."

There's a stretch commonly called the 90 Mile Straight. It's 1 675 kilometres of dead straight road and some of it's quite narrow. "We pass with maybe six inches between our mirrors."

Drew said truck driving was classed as one of the most dangerous occupations in Australia and more than 300 drivers were killed each year. She once broke down in the middle of nowhere and there was a 24 hour wait for a mechanic. "When it's 45 degrees on the side of the road, it's not a huge amount of fun."

Drew got her first taste of truck driving while working in the New Zealand army 35 years ago. A friend suggested driving road trains in Australia. "It seemed like a good idea at the time and I do like driving."

In Australia, truck drivers can only legally drive for five hours and 15 minutes before needing a short break, and within 24

hours they can only drive for 12. "Because of the type of roads I'm on in Australia, they're so long and straight, I can do 1 100 kilometres in that time."

Under her licence she can pull trailers weighing up to 62.5 tonnes. "By the end of a week you can start to feel like you've got jet lag, just a general sort of fatigue. Your sleep pattern is all over the show because I drive day and night. It's not for the faint hearted."

She learnt the hard way to let her co-driver know when she jumps out of the cab. She was sleeping in the rig bunk when the other driver stopped in the middle of nowhere to go to the bathroom. "I decided that I'd jump out the passenger door to go as well because that's what you have to do in the desert. There ain't no flush toilets out there."

So in her boots, boxers and a singlet she jumped out and did her business. "I thought he was just playing a joke and as he got further away I started running and waving and shouting. It was only when he went around a corner and the door swung open slightly that he realised what was going on and stopped. I just kept running because there was a truck coming behind me lighting me up in my undies. It was terrible," she laughs.

Season four of *Outback Truckers* is currently being planned so if you know any entertaining big rig drivers in Australia get hold of the producers.

Yvette Batten





IMPROVE FLEET EFFICIENCY TOGETHER.

Vehicle tracking . Fleet optimization . Work force management . Green and safe . Business intergaration

The OptiDrive 360 Continuously improves your fleet's performance by actively managing driver behaviour

OptiDrive 360 is our complete approach to help drivers adapt a responsible driving style. It provides valuable insights to both the fleet manager and the driver – delivering direct feedback to drivers before, during and after their trip. Responsible driving helps you to lower fuel, maintenance, reducing the total costs of vehicle ownership.

OptiDrive 360 actively provides real-time feedback and advice to improve driving performance. Fleet managers and drivers get tailored driving insights on up to **8 OptiDrive performance indicators**:

SPEEDING

Information about what the speed limit is, and if drivers are driving within the limits

DRIVING EVENTS

Reports on harsh steering and sudden braking

IDLING

Information on idling time and associated fuel waste

FUEL

Real-time and average fuel consumption

CONSTANT SPEED

Reports on speed fluctuations in driving performance

COASTING*

Drivers can be advised to release the accelerator when approaching a coasting zone

GREEN SPEED

Get an advised speed, based on fuel efficiency and the speed limit

GEAR SHIFT

Advice on how appropriate gear changing can optimise vehicle efficiency



Benefits of OptiDrive 360:

CUT COSTS

Reduces fuel, maintenance and insurance costs, lowering the total vehicle ownership costs.

INCREASE YOUR SUSTAINABILITY

Prove your environmental responsibility by demonstrating your effort to reduce fuel consumption and CO2 emissions.

INCREASE DRIVER SAFETY

Real-time feedback and advice on safer driving results in fewer accidents and maintenance downtime.

BE MORE RELAXED

With a better driving style drivers will arrive at the customer relaxed and ready to work.

for further information, please visit <http://business.tomtom.com/>
Follow us on Twitter @ tomtom business
Call +27 861 866 866
or E-mail sales-za.business@tomtom.com
to arrange a free demonstration of WEBFLEET®.







HOT HATCH SHOOTOUT

In this month's edition of Road Ahead motoring its all action, as we pit the brand new VW Golf GTI performance pack up against the stylish Mini Cooper Paceman S and the brand new Ford Focus ST3, in a traditional hot-hatch three-way.



The first thing you notice when driving the new GTI is the sheer power. You have to work hard to stop it from wheel spinning all the way up to fourth gear. It really does have that kind of power, from its finely tuned two-litre turbo charged engine, that puts out 170kw, giving you ample opportunity to hit 250km/h on your favourite race track, that is. You don't want to be caught by Officer Swift doing those sorts of speeds on the road. That usually only ends up in tears.

Being only a front wheel drive, with Golf R power, the car does feel a touch overpowered at times, and it really does take a good day or two to get the accelerator control right. It is no wonder the front tyres were shot by the time I got the car for a week. Rumour has it there is a trigger happy journalist out there who gets the cars before me and who does not mind giving it horns. Oh to be young again.

The GTI will bring the boy racer out in you, no doubt. It even has a track timer for your next trip to Kyalami, and the big 19" Pirelli tyres make up for the front wheel drive configuration at higher speeds. Speaking of speed, I was able to get her up to 220km/h on a one km straight piece of the track and the vehicle was still accelerating with ease. Without the engine limiter, you'd get closer to 275km/h with this puppy.

The interior of the GTI feels like you're in an Audi A4 sport, to be honest. The GTI is no longer the people's race car; it's pushing R500k, and with those extras you climb into Golf R territory, which has the all important AWD system.

The GTI has more German refinement than ever. The sunroof is top class, and great for summer evening drives at the coast. The bucket seats are good enough for any racetrack and keep you locked into position on fast corners.

Mini Paceman S

After all of that frivolity, I stepped straight into the 1.6 litre turbo Mini Paceman S, which to be honest felt heavy and underpowered after driving the racy GTI. The body of the Paceman feels very solidly built, with no expense spared on safety, which compromises on sheer performance; a fact most drivers will accept.

However, the hard plastics on the dash did not have the same soft quality feel as last year's model, which is very surprising for such a marquee luxury brand. The round centre speedo seemed bigger than

the 2014 model, and less subtle. Although, the aircraft style buttons never fail to impress.

Another peculiar thing was that the car has a John Cooper Works paint job, seats with badges, and an 'S' badge on the front end, and is only a front wheel drive. So you've got something that looks like the all-wheel-drive JCW model, but under the skin is only a Paceman S.

This reminds me of the sort of person who buys an M3 badge and promptly puts it on his 320i and thinks nobody will notice. Either the car is a Paceman S or a JCW; please make up your mind Mini. And speaking of Mini, the Paceman is no Mini, and is a two-door crossover SUV in reality. Having two doors won't be an issue if you are single, but with kids it is not advisable.

Ok, I've got my gripes out of the way. The Paceman S does turn a lot of heads, easily the most of any car I've driven this year. While it can't keep up with the GTI for performance, it does have more than enough for the average driver and handles nicely under less stressful conditions.

The sunroof is massive and gives you the feeling of driving a soft top, without having to actually buy one. The Mini Cooper S Paceman automatic costs R417 900, but there are a great many options to choose from. Our test car had more than R100 000 worth of extras. Now for 500k you can buy the AWD JCW's version, which is a better car and does what it says on the packet.

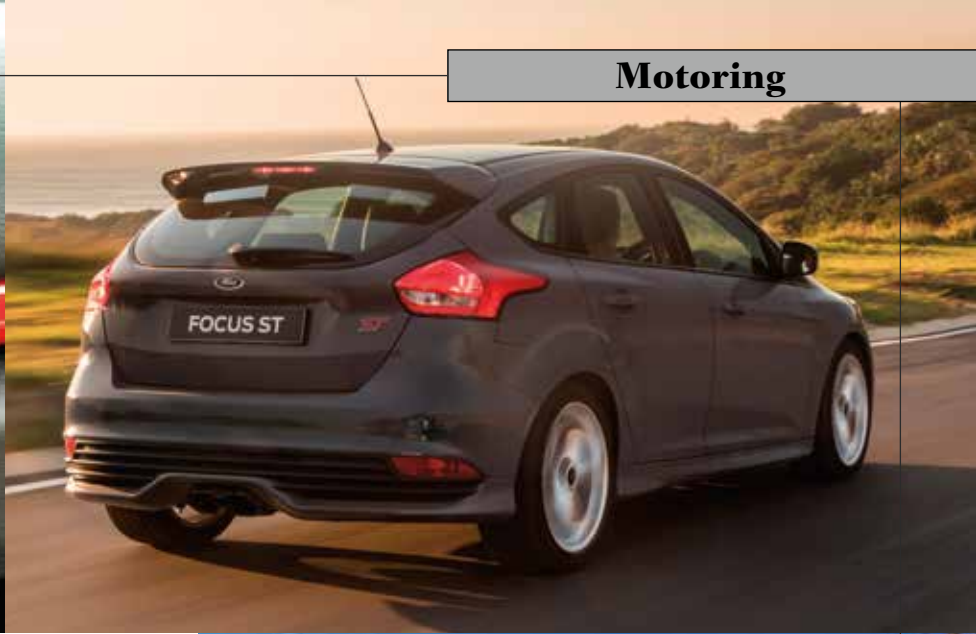
All Minis are backed by a two-year, unlimited km warranty and the Paceman comes with a three-year or 75 000 km maintenance plan. After such time expect to pay BMW servicing prices, similar to the GTI.

Focus ST

Then, enter the new Ford Focus ST3, which has shed its 2.5 litre turbo for a more environmentally 2.0 litre turbo that thankfully pushes out the same amount of power. And power is the first thing that comes to mind when driving this beast, in beast's clothing.

There is nothing subtle about the new ST, with a sinister growling engine noise that gobbles up most cars without the need for a single punch thrown. In terms of performance, the GTI and the Focus are very evenly matched, with the Ford edging the power stakes by five KWs.

Behind the wheel there is very little to choose between the cars, both with very low profile tyres for maximum grip, both have



bucket seats made for somebody that is not 100kg like me. They do, however, do their job amply, while the Paceman's seats are more family sedan in nature than racing companion. The centre console on the ST is a little in your face, but won't bother the younger set that is likely to pick one up.

It is refreshing to see a manual gearbox in the Focus, within easy reach, giving you the feeling of really driving the car, which feels more planted in sports mode strangely enough. The 'flappy' paddle gearbox in the other cars just doesn't quite do it for me, and it is more difficult to change gear while cornering. The sheer power of the ST must be to blame for some of the negative comments about its ferocious handling, which does take a little while to get used to. But once you have mastered it, it will give you hours of enjoyment on a mountain pass near you.

The sheer sound of the ST is a tipping point for me, and sounds more unrefined and manly than the other two. The Focus has a great modern look that makes it stand out from regular city slickers. The GTI is so popular, that chances are you're going to be wearing the same dress as somebody else at the party. In the ST, you rock the party. In the Mini you organise the party.

In truth all the cars service different segments. The GTI performance pack is for a wheel-heeled petrol head looking for fun around every corner, in a car that you can take the kids to school in. The Paceman S, with the fancy paint job is most likely aimed at the female market place and metro sexual urban males. The Focus ST is for hooligans with cash on the hip and who like keeping their neighbours up at night.

In terms of works of art, the Paceman edges it for me, with more wow factor. The wow factor in the GTI comes from the pulsating acceleration (0-100km/h in 6.4 seconds), with the Focus a mere 0.1 seconds adrift.

All three cars are very closely priced to their top of the range AWD siblings; the standard model costs the same as the full house version of the GTI and Paceman S respectively. The same can be said for the much anticipated Focus RS AWD that is set to hit our shores next year. Just the sheer fact that they're all AWD versions is tempting, but if you can only afford a FWD version or don't have to corner at a million miles an hour, any of the three hot-hatches are more than capable of exciting you in style.

Gregory Simpson



50 YEARS OF TIMEOUS DELIVERIES

Breakdowns in the transport industry are inevitable; it's having the right tools to make repairs quickly which makes all the difference. Half a century ago we began making quality hot forged hand tools. We will continue to manufacture tools of an exceptional quality to keep your fleet on the road. Gedore, tools with a lifetime guarantee.

50 YEARS
EST. 1965
GUARANTEED FOR LIFE



TOOLS FOR LIFE | TRANSPORT

Gedore manufactures and distributes hand tools suited to a variety of industries throughout the African continent. We offer a lifetime guarantee and dedicated after sales service for all of our products.

CALL: 0861-GEDORE | **FAX:** 011 608 2953
EMAIL: sales@gedore.co.za



GEDORE-BEITLING



FOLLOW US ON FACEBOOK

Visit our website for a FREE copy of our catalogue | www.gedore.co.za

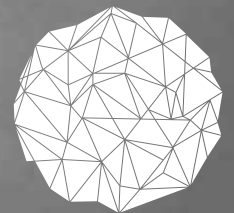


Think faster, communicate clearly and solve complex problems

VI VIAGO
International

Black Belt in Thinking

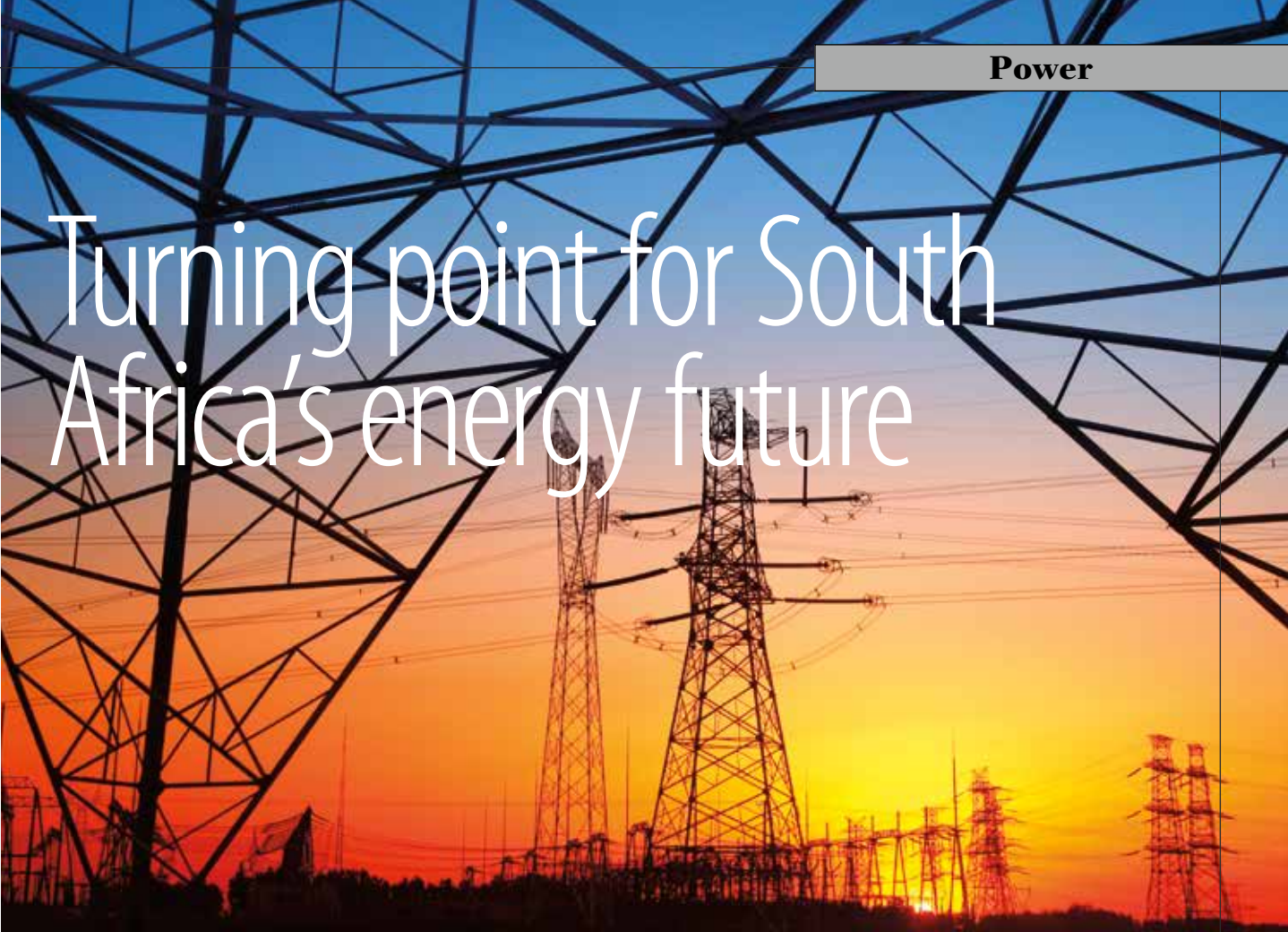
8 day Bootcamp



COMPUCLEARING
ONE PARTNER

+27 11 012 8787
events@compuclearing.za.com
www.compuclearing.za.com/Events

October 2015 already Fully Booked
Enquire now for 2016



Turning point for South Africa's energy future

Similar to the global oil crisis of 1973 which drove game-changing and long-lasting international programmes aimed at transitions in energy efficiency and renewable energy, 2015 should be the year in which all South Africans demonstrate their individual and joint efforts to change behaviour and management of a resource which is pivotal to the economy.

In the face of rising energy costs and energy constraints, in addition to tough economic times, it is imperative that we all pull together to reduce our energy consumption and look at ways of shifting towards a sustainable, low-carbon economy that decreases our dependence on fossil fuels .

We should use the challenges we are facing as the impetus to drive the necessary change, in a similar vein to how several nations reacted after the global oil crisis in 1973. The International Handbook of Energy Security, written by Hugh Dyer and Maria Julia Trombetta and published in 2013, discusses how the crisis affected the global outlook on energy supply.

“The use of petroleum as a political ‘weapon’ during what came to be known as ‘the first oil crisis’ was a turning point in governments’ energy security planning and the objectives of

energy security...” the book states.

In the wake of the crisis, many international governments, mostly in the US and Europe, developed projects and programmes aimed at promoting domestic energy independence. According to a Time article published in October 2013, the effects of such programmes are still felt today: “Thanks in part to new drilling technologies and far better energy efficiency — both inspired by the after-effects of the 1973 crisis — the U.S. is an energy superpower today”.

Encouragingly, we continue to see government improve regulations around energy management and data collection and look forward to the introduction of a formal energy efficiency strategy in the near future. These are necessary measures to help the country chart its energy trajectory in the long term while enabling companies to plan the sustainability of their own businesses and investment decisions for their future.



The NBI's energy programme, in existence since the initial signing of the Energy Efficiency Accord between leading businesses and government in 2005, has been leading the charge with government for the last ten years. Now known as the Energy Efficiency Leadership Network (EELN), it was established as a body to proactively assist a number of progressive South African companies in implementing the key pillars of the National Energy Efficiency Strategy in partnership with government.

The NBI continues to play a management and secretariat role for the EELN and is supported by the Energy Efficiency Advisory Committee, which informs the strategy of the EELN's activities and approaches to thematic areas relevant to energy efficiency.

The work of the EELN has recently been given special recognition by the World Business Council for Sustainable Development (WBCSD) to include as a proposed energy solution for business that the WBCSD will promote among all their global networks. This model of collective action and collaboration should be extended more broadly in the country across sizes of business and sectors.

The private sector has a major role to play in shifting the market to cleaner and more efficient and integrated energy solutions. Given the current energy constraints, it would be both useful and profitable for manufacturers to come up with more energy efficient appliances and equipment on an ongoing basis.

Suppliers and logistics companies should also look to less-energy intensive modes of transporting products.

At the same time there is scope for the financial services sector to keep reviewing its role in supporting energy transitions by expanding its range of products and services to enable the energy transition while ensuring business continuity for the sake of their own investments.

Of course, there also remains a need for manufacturers of renewable energies to create reliable and cost-effective products which provide alternative sources of electricity for our country. Importantly, there also needs to be a shift in perception in South Africa about how we commute: we need to utilise public transport and design areas which combine residential and commercial spatial zones in order to minimise the need to travel long distances on a daily basis.

There are already examples of innovative ways in which companies are encouraging employees to carpool or utilise public transport, such as monetary incentives in exchange for giving up personal parking spots.

By moving toward a low-carbon economy, not only are we increasing our energy independence, we are also helping to create a whole new sector with job opportunities, which in turn benefits the economy as a whole.

Valerie Geen



Reliability, power and performance products.

FOR FLEETS



NEW Wynn's DIESEL ADDITIVE Range

- REDUCE EXHAUST SMOKE EMISSIONS
- IMPROVE FUEL ECONOMY
- RESTORE INJECTOR SPRAY PATTERN
- REMOVE CARBON AND SOOT FROM DPF AND TURBO
- IMPROVE LUBRICITY OF LOW SULPHUR DIESEL
- REMOVE WATER FROM FUEL





Best Practice:

Controlled distribution essentials

Inadequate control of distribution routes from the manufacturing site to the final customer is a problem in any industry. In the pharmaceutical sector, however, the consequences extend way beyond the flawed supply chain.



The health and safety of patients depends on product quality and integrity in this industry, and weak links in the pharmaceutical supply chain can cost lives.

In partnership with client AstraZeneca, a multinational pharmaceutical company, Imperial Health Sciences embarked on a project to drive best practice process controlled distribution in the organisation's supply chain.

Imperial Health Sciences managing director Dr Iain Barton outlines the aim of the initiative: "Inadequate control of

distribution routes in the pharmaceutical industry increases the risk of product quality being compromised by temperature excursions, as well as the risk of loss through theft or damage, substitution with counterfeits and delays. The elimination or reduction of these risks in the supply chain is achieved by employing effective distribution process controls, with delivery routes that are mapped, risk managed and robust," he explains.

Together, Imperial Health Sciences and AstraZeneca undertook a comprehensive route risk assessment exercise that included route mapping and temperature monitoring.

Temperature data was collected using 'I-Button' temperature loggers that were set up to record in three-minute intervals. These loggers were securely placed inside the shipper containing product, to mimic the conditions that the product would be exposed to, as well as affixed to the outside of the shipper so that the temperature of the transportation chamber was logged. On return of the study box, the temperature loggers were retrieved and the temperature data was downloaded.

All vehicles used in the study were dedicated, closed body vehicles used routinely for the transportation of pharmaceutical products. Both 1,4 and 8-ton vehicles were used and combined with a closed fibreglass hard body vehicles or double-sheet corrugated iron closed bodies.

The study parcels were tracked using a parcel track and trace system, which provided timestamps for when the parcel was handed over at point of dispatch, loaded into containers, cross docked, dispatched to destination and finally received at the end-point destination.

Findings and lessons learnt

A total of 74 data sets across all routes and seasons—spring, summer, autumn and winter—were collected and analysed by Imperial Health Sciences and AstraZeneca.

The study revealed that the operational cut-off times for the delivery of goods to the cross dock facilities were acceptable, with the bulk of the delivery transit time happening through the night or in the morning, when ambient temperatures are cooler. Barton elaborates on this finding: "The majority of higher temperature recordings occurred in the 'last mile' distribution between the final regional distribution hub and the destination point. This time also coincides with the warmest part of the day, and resulted in the

high-risk assessment at delivery points in Springbok and Tzaneen."

He reveals that AstraZeneca's highest risk route was found to be the Centurion local route. "This is due to the dispatch of goods taking place in the middle of the morning and the delivery vehicle remaining on the delivery routes during the hottest part of the day—between 11h00 and 16h00."

Risks are mitigated

While the undertaking provided AstraZeneca with the assurance that product integrity on its routes is not threatened by temperature excursions, damages caused by handling or by security threats, it also revealed high-risk routes where improvements could be made.

"Where necessary, we have agreed on additional actions to lower the risk on some routes and implement extra controls," says Barton. These include investigating the viability of temperature controlled vehicles versus the use of insulated vehicles, and how these compare to regular closed body vehicles. Consideration is also being given to the use of temperature monitors where the risk is unacceptably high, and to the use of thermal blankets on consignments.

Barton says that as a result of this exercise, client AstraZeneca has gained a thorough understanding of the risks on each distribution stage, and wherever possible, risks have now been mitigated. Where routes were found to be lacking, an alternative was found.

"Protecting patients is an absolute obligation of the pharmaceutical industry, and, as a leader in healthcare supply chain management in Africa, it is critical in Imperial Health Sciences' business, too," he concludes.

Case study



NBCRFLI SERVICES



The National Bargaining Council for the Road Freight and Logistics Industry (NBCRFLI) provides an effective service to road freight and logistics industry stakeholders, thereby contributing to labour peace. We achieve this through our various service offerings which are accessible via our 18 offices countrywide to all our employer and employee members.

Funds Administration

Effectively and efficiently processes all annual leave, sick leave and 13th cheque funds.

Disputes Management

Resolves disputes over which the Council has jurisdiction.

Enforcement

The NBCRFLI administers the Industry's Collective Agreements. In addition, designated agents ensure compliance and enforcement of the Collective Agreements within the Road Freight and Logistics Industry through conducting proactive and on-going educational inspections, investigating complaints or by any other means that the Council may adopt.

Exemptions

An Independent Exemptions Body hears applications for exemptions in relation to the Council's Collective Agreements and an Independent Appeals Body hears any appeals against the decisions of the Independent Exemptions Body. Provision for independent bodies to hear exemptions and appeals applications within 30 days of receipt of valid applications, which now forms part of the amendments to the Labour Relations Act, which came into effect on 1 January 2015, has already been a long standing practice by the NBCRFLI.

Trucking Wellness

Provides Road Freight and Logistics Industry employees, sex workers and the community at large with education, counselling and testing for HIV/AIDS and related diseases via our Roadside Wellness Clinics and Mobile Wellness Centres. Those who fall within the Council's registered scope also receive primary healthcare and ARV treatment, where necessary.

Wellness Fund Health Plan

Entitles Eligible Principal Members, together with two eligible spouses (or common law wives), to various healthcare benefits. Access the website for details of these benefits.

Matters of Mutual Interest

Further to the services that we provide, the following matters of mutual interest that are stipulated in the Main Collective Agreement are an improved version against those in the Basic Conditions of Employment Act:

- Provision of sick bonus
- Provision of 13th cheque
- Leave
- Prescribed minimum wages
- Provision of minimum payments of allowances such as night work, subsistence and Hazchem
- Paid maternity benefits (under certain conditions)
- Compulsory provident/pension fund membership of any registered fund

These matters of mutual interest govern the conditions of employment within the Road Freight and Logistics Industry, thereby promoting labour stability within the Industry.

Contact us for further information about our service offerings and matters of mutual interest, visit our website www.nbcrfli.org.za or contact one of our regional offices.

Registered Office 31 De Korte Street, Braamfontein, Johannesburg, 2017

Private Bag X69, Braamfontein, 2017 **Tel** 011 703 7000 **Fax** 011 403 1555/1726 **Website** www.nbcrfli.org.za



YEAR-END PAYOUTS PROCESS

The Council supports Industry members through a number of value-add service offerings, including managing the Industry's annual, sick leave and holiday bonus funds. Through our Funds Administration department, we effectively and efficiently process all funds on behalf of our members.

The **NBCRFLI** 2015 year-end payouts are currently underway. For the payouts to be processed efficiently and timeously, we require certain information from our employer members.

UPDATED BANK ACCOUNT DETAILS

It has become a year-on-year challenge that many employee banking details – particularly those of foreign nationals – are not updated, resulting in late or no payments and frustrated employees. In order for payouts to be accurate and timeous, it is imperative that the correct bank account details are provided to the Council. In particular, it is imperative that your foreign employees ensure their banking details, held at various financial institutions, are updated and comply with FICA regulations. It is also important to note that the **NBCRFLI** will only make payments into accounts held at the following banks: Standard Bank; First National Bank; Nedbank; Mercantile Bank; Capitec Bank; South African Post Bank and ABSA Bank.

The request for updated bank account details was communicated in July and August via circulars and our website. The closing date for submitting correct bank account details was 30 August 2015.

In an effort to keep employees satisfied and to ensure the industry runs smoothly, we strongly urge all employer administrators and payroll staff to update changed bank account details on a monthly basis via the online e-Business Solution on www.nbcrfionline.org.za. When updating foreign employees banking details, the following documentation must be emailed to your regional funds administration office:

- Copy of the employee's valid passport.
- Letter (no older than 6 months) from the bank confirming account holder details (member surname, initials, passport number, account number, branch code) and bank stamp.

CHANGES TO HOLIDAY BONUS APPLICATION PROCESS

It is mandatory for employers to submit an Expected Pay Date on behalf of employees by 06 November 2015 through the e-Business online solution www.nbcrfionline.org.za. Should an Expected Pay Date not be received by 06 November 2015, an automatic Expected Pay Date will be selected based on the employers previous year's holiday bonus application submitted.

NOTE:

- Employers will not complete a Holiday Bonus 13th Cheque application. Payments will rather be made to all employees listed on October (10/2015) monthly return, provided that the employer has submitted valid banking details for all employees.
- No payments will be made until the OCTOBER 2015 monthly returns have been received and processed by the Council.
- The 13th cheque (Holiday Pay Bonus) will be paid directly to the employees.

Once the October 2015 monthly returns have been received and processed by the Council, a notification will be sent to employers to query/confirm calculations online, within 72 hours. If no feedback is received from the employer within 72 hours after the notification has been sent, calculations will automatically be confirmed and processed for payment only where verified banking details have been received for employees.

Individual payments will only be released on the Expected Pay Date selected per the employer's instruction or based on last year's instruction if a 2015 instruction was not received. Once the Expected Pay Date is submitted no changes will be allowed.

Should you require any assistance please do not hesitate to contact your e-Business regional helpdesk or your designated agent.

NOTE:

Employers and employees need to be mindful that banking details completed on the E-Business online system will be used for payment. The NBCRFLI will not be held responsible for incorrect/non-payment where banking details are changed once payment calculations have been finalised. Banking details loaded after calculation of applications will not be utilised for year-end payouts.



Milestone for mega New River Valley Plant

The electric power used by Volvo's New River Valley (NRV) assembly plant in Dublin, Virginia, is now carbon neutral. As of November, 100% of the plant's electricity is generated by methane gas produced at 13 landfills in the region.



The fossil fuels previously used to generate the NRV plant's electricity in 2013 produced 40 408 tons of carbon dioxide (CO₂) emissions. Volvo's electricity provider now uses landfill gas to produce power for the plant that otherwise would have required fossil fuels to produce.

"We are proud that Volvo's commitment to sustainability goes beyond producing fuel-efficient trucks," said Göran Nyberg, president, Volvo Trucks North American sales and marketing. "Our customers can be assured that we strive for energy efficiency every step of the way."

"I want to congratulate the entire NRV team for their contributions to our core values of quality, safety and environmental care and their work toward creating a better future for our shareholders, our customers and our people," said Franky Marchand, vice president and general manager of the NRV plant.

"Today, our electricity is produced without any additional CO₂, contributing to an improved environment for our community. The trash of the past is the methane gas that fuels our plant today." Carbon neutral electricity is just the latest milestone in the NRV plant's commitment to sustainability. Plant management and employees have worked together to



identify and implement various initiatives to reduce the plant's CO2 footprint through energy efficiency.

Some notable results of those efforts include capturing solar heat absorbed on an exterior wall of the plant to provide heating and removing the lighting from vending machines throughout the plant. These initiatives resulted in a reduction of energy intensity by 30%.

The NRV plants energy conservation efforts have been recognised with certification under both ISO 50001 standards and the U.S. Department of Energy's Superior Energy Platinum (SEP) program – the top international and U.S. certifications for driving continuous improvements in energy efficiency.

Volvo Trucks North America's operations and products are guided by the company's three core values: Quality, Safety and Environmental Care. The Volvo VNM, VNL, VNX, VHD and VAH trucks are assembled in the United States at the New River Valley Plant in Dublin, Virginia, while Volvo engines for North America are assembled in Hagerstown, Maryland. The New River Valley Plant is certified to ISO50001 energy standards. Both plants are certified to ISO14001 environmental and ISO9001 quality standards.

Unplanned standstills

The number of unplanned truck standstills can be cut by 80%. In the long term, the aim is that unplanned standstills should entirely disappear. One key explanation for this expected trend is online connectivity in trucks, a development that creates entirely new scope for working with preventive maintenance.

WABCO

EBS Generation 4 delivers additional innovations for Trailers:

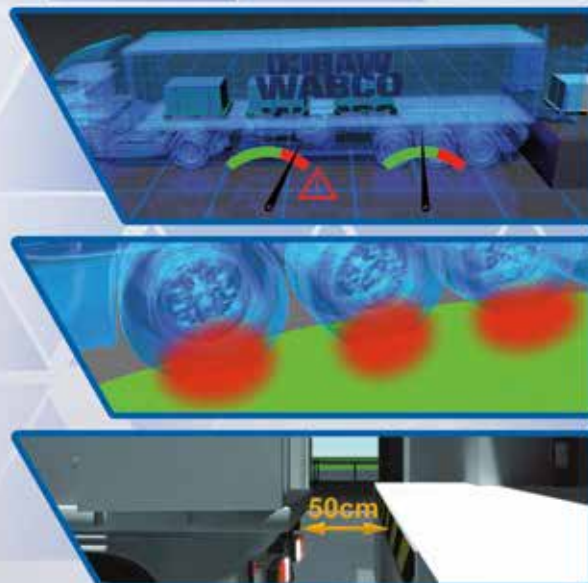
- **Electronic Park Brake Function.**
- **Trailer Length Indication Feature.**
- **External Overload Warning Lamp.**

All the existing functions are still available as options:

- **OptiTurn™** - Small Turning Radius assistance.
- **TailGUARD™** - Optional Park Distance Control feature.
- **Drawbar ECAS** - Electronic Air Suspension functionality.
- **Multivoltage** - Optional 8-36Volt ECU Option.
- **Immobiliser** - Optional feature for disabling an EBS trailer.
- **ODR Tracking** - Operational Data Recorder.

With these features, many of which are unique to WABCO systems, our EBS is leading the way in trailer vehicle control systems.

Visit our website for the full list and contact details of our Distribution Network



EBS Generation 4, the latest in WABCO Trailer Technology



Main Branch: 011 450 2052 • Pinetown Branch: 031 701 6351 • Cape Town Branch: 021 552 1231

www.wabco.co.za





An unplanned standstill is one of the most problematic issues that can affect a haulage firm. Apart from the inconvenience for the driver, it creates extra costs for repairs, lost transport revenue and, in the worst-case scenario, damage to customer reputation.

“Since the transport industry already operates with very small margins, an unplanned standstill hits haulage firms hard. We therefore have to be better at understanding why unplanned stops take place and help both customers and drivers increase their productivity and thus also their profitability,” says Hayder Wokil, director quality and uptime, Volvo Trucks.

In order to increase knowhow about how to help haulage firms boost their productivity, Volvo Trucks conducted a comprehensive survey based on real-life user data from 3500 Volvo trucks gathered over a five-year period. With this authentic statistical basis the company then conducted advanced simulations and generated a variety of possible service situations to analyse how, why and when trucks suffer unplanned standstills. The aim was to find out how unplanned stops can be avoided.

“The study clearly showed that by being able to monitor the truck’s usage and the current status of the vehicle’s various key components, it is possible to plan maintenance better. We reckon we can reduce the number of unplanned standstills by 80% if the truck is serviced in time and in response to actual needs,” explains Hayder Wokil.

One important prerequisite for reducing the number of unplanned standstills is to be able to predict maintenance needs and to tailor servicing for each individual truck. This is possible since today’s trucks can be connected online to the workshop.

“For instance, a service technician can remotely monitor exactly how the truck is being used in real time, schedule maintenance well in advance before something breaks down, or order spare parts in advance. What’s more, a scheduled service can also be postponed if the workshop technician can see that the truck’s various components are subject to less wear than expected, thus saving time for both the haulage firm and the driver,” relates Hayder Wokil.



Although Volvo Trucks has made considerable progress in this area, Hayder Wokil feels that the development of a preventive service is still in its infancy. “We see considerable potential in this area. Connected vehicles are the route to zero unplanned standstills in the future,” says Hayder Wokil.

Dare devils

Meanwhile, in the third episode of ‘Reality Road’, a truck is driven on two wheels at a test track outside Berlin. The stunt was performed when filming a scene for the music video with the artist Mapei, recorded during the series.

“Driving on two wheels requires enormous precision. The vehicle has to lean 45 degrees, if it leans less it will drop back down onto all four wheels. For the driver it’s vital to keep the truck at precisely the right angle,” explains Peter Pedrero, stunt coordinator.

The preparations were rigorous: the ramp was 12.5 metres long, 140 cm high and inclined at precisely 30 degrees to put the truck at the required angle of 45 degrees. Behind the wheel was stunt driver Walter Melis, one of the world’s foremost experts at driving on two wheels.

“Driving on two wheels in a truck is one of the most difficult things you can do. I have to be totally concentrated when driving since I’m actually balancing the truck with my own weight—I drive literally by the seat of my pants,” says Walter Melis.

Avery Vise





Declared Cargo Express cc

Import • Export

Customs • Clearing

Airfreight • Warehousing

Transport • Courier

Distributors • Removals • Transport



Tel: 018 642 3359 • 018 642 2216 • 018 642 2276 • Cell: 072 1981 201

Fax: 08 66 22 63 77 • E-mail: pre-clear@declaredcargo.co.za



Quality fuels provide optimum engine life

With the volatile fuel prices and the growing costs of engine maintenance and fleet operations, fleet managers are faced with the challenge of finding new ways to spend less. Now more than ever before, fleet managers need to be sure they are choosing quality fuels to maximise efficiency and minimise costs.

Shell commissioned an independent study called ‘Fuel Matters’—speaking with 100 South African fleet managers about important industry issues. The study found that 80% of respondents think that more effective fuel management could reduce their fuel spend by 5% or more. Respondents also believe that the brand of fuel and lubricant used in vehicles could potentially impact fuel consumption.

“Nowadays, the role of a fleet operator has become more important—and much more complex. Not only are they required to manage day-to-day fleet operations, they also have to determine new fuel and vehicle solutions, and find ways to minimise fuel consumption,” said Sagar Sen, marketing manager, Fuel Card, South Africa.

A key component in efficient fuel consumption is picking the right fuel for your vehicle. Good fuels burn more efficiently, keep your engine cleaner and free of deposits; thereby optimising performance and requiring less maintenance. With this in mind, Shell has designed a fuel range that is able to provide optimum engine life, performance and fuel efficiency. The Shell Diesel Extra and Shell V-Power Nitro + are Shell’s range of quality unleaded and diesel fuels that clean and protect your engine from corrosion, resulting in less costs on engine maintenance. The different fuels offer a range of benefits to your vehicles engine.

Shell Diesel Extra

Shell Diesel Extra is specially formulated to help deliver fuel savings over the lifetime of your vehicle. It is designed for extra kilometres at no extra cost. It uses advanced Shell fuel technology and specifically developed unique additives to help improve engine efficiencies by preventing deposit build-up in injector nozzles.

Shell V-Power Nitro + diesel

The new and improved diesel formulation contains a more powerful detergent for fast and more effective clean-up of

diesel fuel injection systems. It is also formulated to help restore and maintain engine power through active engine protection. Anti-rust functionality helps prevent corrosion of precision-engineered fuel injection systems. SVPN+ Diesel contains a new, more powerful detergent technology for faster and more effective clean-up of diesel fuel injection systems.

Shell V-Power Nitro +

Shell V-Power Nitro+ is Shell’s latest generation of unleaded and diesel performance fuels. Developed with Scuderia Ferrari, this new formulation is designed to instantly get to work in your engine on deposits which can reduce performance. Also included is the friction modifier designed to reduce friction in critical engine areas, helping to deliver more power to the wheels.

Shell quality fuels were designed with the fleet manager in mind and great results are guaranteed. Products are available at your nearest Shell service station.

Media release





E.M.ROGERS LTD

E.M.ROGERS LTD was founded in 1945 as a UK Based Road Transport company. Over the last 65 years the business has grown to cover European transport and also become one of the UK's biggest independent truck exporters.

Our 2 road transport companies run a combined 75 trucks and 170 trailers with offices in Holland and the UK.

Our trucksales business exports 700 trucks a year to Markets all over the Globe. Our main business is in East Africa with strong markets in Tanzania and Zambia. Through our extensive UK and European transport network we are able to source all makes, models and ages of trucks direct from the user.



We are still a family owned business and still operate the same values that started the company 65 years ago, Hardwork and Outstanding service. We understand what's needed from your vehicle suppliers.

Shaun Boyson

Trucksales website
www.emrogers.com

trucksales@emrogers.co.uk

Shaun Boyson

Sales Manager
Mobile+44(0)7515328086
Office: +44(0)1604593440
Email: shaun.boyson@emrogers.co.uk

John Rogers

Director
Mobile+44(0)7885877324
Office: +44(0)1604593440
Email: jr@emrogers.co.uk

EM.Rogers LTD

Ryehill Close
Lodge Farm Industrial Estate
Duston, Northampton
England
Nn5 7ua

Transport Companies

www.emrogerstransport.com/
www.kentvale.co.uk/





Taking the guesswork out of engine reliability

Oil is the life blood of any mechanical system and as such has many functions to perform. These functions can be categorised into four fundamental groups: reduction of wear, removal of contaminants, removal of heat and acting as a structural material. All these functions are negatively impacted if the oil physically or chemically degrades.


Gas engine oils need to withstand the various levels of oil degradation caused by the gas fuel combustion process. This is even more important in applications where fuel quality can vary significantly over time, such as gas engines running on biogas.

Due to these variations in fuel quality, it is vitally important that oil samples be taken regularly to assess the oil's condition, rate of deterioration and ultimately determine the optimal oil drain intervals. The most widely used and OEM-requested laboratory techniques for detecting oil degradation will be discussed below.

Kinematic viscosity (KV) is defined as a fluid's resistance to flow under gravity, at a specified temperature and this in turn determines the thickness of the oil film that prevents contact between metal surfaces. KV is measured in centistokes (cSt) and is typically reported at 40°C (KV40) and 100°C (KV100) for gas engine oil analysis.

All the functions that an oil has to perform, as listed at the beginning of this technical bulletin, are negatively impacted if the viscosity of the oil falls outside of the intended viscosity range, i.e. too high or too low. If the viscosity is not correct for the load, the oil film cannot be adequately established at the friction point. Heat and contamination are not carried away at the proper rates, and the oil cannot sufficiently protect the component. A lubricant with the improper viscosity will lead to overheating, accelerated wear, and ultimately failure of the component. It is





for this reason that viscosity is considered the most important physical property of a lubricant.

The viscosity readings obtained are compared with the viscosity specifications of the new oil as defined by the lubricant manufacturer. Trending of viscosity data is important as deviations from the norm may indicate base oil degradation, additive depletion or the use of an incorrect lubricant.

When the oil's viscosity increases, it is usually due to the presence of insoluble polymerisation products formed as a result of oxidation or nitration, high operating temperatures, the presence of water, the presence of other oxidation catalysts or the addition of an incorrect lubricant.

Decreases in oil viscosity are attributed to degradation of the viscosity index improver (VII) additive in multigrade oils or due to the use of an incorrect lubricant during refilling and topping-up procedures. As gas engines burn gaseous fuel there is no risk of a reduced viscosity as a result of fuel dilution. This, of course, does not apply in dual fuel application where both gas and diesel can be utilised as a fuel source.

Viscosity Index

The viscosity index (VI) characterises the effect of temperature on oil's viscosity and is of particular importance in applications where operating temperatures vary significantly. The VI can change when the lubricant degrades (chemically 'breaks down') or degradation by-products accumulate. The kinematic viscosities at 40°C and 100°C are used to calculate the viscosity index. In layman's terms, the higher the viscosity index value, the less the viscosity changes with a change in temperature.

Fourier transform infrared spectroscopy [D1] (FTIR) analysis is a technique used to detect base oil degradation. Oxidation and nitration are modes of oil degradation measured by FTIR.

FTIR produces an infrared (IR) spectrum that is often referred to as the 'fingerprint' of the oil as it contains specific features of the chemical composition of the oil. The IR spectrum can be used to identify types of additives, trend oxidation and nitration by-products that could form as a result of high operating temperatures and thermal degradation. The FTIR can also be utilised as a screening test for glycol, fuel and water contamination.

The technique is based on the principle that infrared 'light' is absorbed in very specific ways by different structures in organic molecules. Consequently, the FTIR is capable of detecting and identifying specific molecular structures even in a complex mixture like used engine oil.

Oxidation

Oxidation is the reaction of oxygen with the hydrocarbon molecules in the engine oil. The rate of oxidation increases exponentially as temperature rises and with the presence of metallic contaminants. An increase of 10 degrees Celsius in the temperature of the oil effectively doubles the rate of oxidation. Iron and copper containing alloys in the engine act as catalysts for oxidation. Oxidation is typically the main contributor to sludge and varnish formation in gas engine oils.



Oxidation by-products form lacquer deposits, corrode metal parts and thicken the oil beyond its ability to lubricate efficiently. Most lubricants contain additives that inhibit the oxidation process but these additives are sacrificial in nature.

Nitration is a form of oil degradation that occurs when the oil reacts with gaseous nitrogen oxides (NO_x) created during the combustion process in gas engines.

Nitration products, formed during combustion, are introduced into the oil via blow-by gases which leak past the compression rings and into the oil reservoir. These products, which are more commonly found in natural gas engine oils, are highly acidic, create deposits and also accelerate oil oxidation.

As a result, natural gas engine oils are designed to withstand various levels of oil degradation caused by the gas fuel combustion process, which results in the accumulation of nitrogen oxides. Since the rate of formation of NO_x increases exponentially with temperature, gas engines can generate NO_x concentrations high enough to cause severe nitration of the engine oil.

The rate of nitrogen oxides formed during combustion is also influenced by ambient air temperatures, spark timing, air-to-fuel ratio, engine load and oil temperature to name a few.

If the oil is exposed to severe nitration conditions, the nitration products formed in the oil will cause the viscosity, acidity and insolubles to increase. This includes varnish in hot areas of the engine, and sludge in cooler areas of the engine which may lead to ring sticking and filter plugging, respectively.

The usefulness of FTIR in determining oxidation is dependent on the base oil used to formulate the lubricant. Synthetic lubricants often contain ester compounds which have a significant peak in the infrared spectra area where the oxidation level for mineral oils is measured.

For this reason it is important to not view FTIR results in isolation but instead to trend these results and view them in conjunction with other oil related parameters like viscosity, TAN (Total Acid Number), TBN (Total Base Number) and ipH (Initial pH). Evaluating these parameters holistically will yield a more accurate assessment of the oil's condition and ability to withstand further degradation.

Total Base Number

One of the many functions engine oil has to perform is to ensure appropriate corrosion protection for the engine's components. This is accomplished by blending alkaline additives into the oil which neutralise acids that are formed during the combustion process. These alkaline additives, like all additives, are sacrificial in nature which means that as a result of this neutralisation reaction, the alkaline additives in the oil are being consumed.

The total base number (TBN) is a measure of the oil's alkaline reserve and a decrease in the TBN would be an indication of additive depletion; in other words TBN measures the oil's ability to counteract acids.

The oil in an engine running on landfill gas is often more stressed than the same oil in an engine burning natural gas. The additional stress is caused by trace contaminants in the gas. Biogas, which includes landfill gas and sewage gas, contains

corrosive hydrogen sulphide, which places more stress on the oil in terms of its ability to neutralise acids.

Hydrogen fluoride and hydrogen chloride are also typically found in landfill gas. After combustion and in the presence of water, these compounds can form sulphuric acid, hydrofluoric acid or hydrochloric acid, all of which are highly corrosive to engine components such as liners, piston rings, piston ring grooves and bearings. It is for this reason that monitoring the TBN is particularly important in biogas applications.

The TBN is also an essential element in establishing the optimal oil drain intervals since it indicates whether the additives are still capable of providing sufficient engine protection. Most gas engine manufacturers require the oil to be drained when its TBN reaches one-half or one-third its original value.

The American Society for Testing and Materials (ASTM) defines two methods for determining the TBN of oil and it would be prudent to note that while these two test methods are, in essence, designed to measure the same thing they do not necessarily yield the same results.

ASTM D2896 requires the use of a very strong acid (perchloric acid) for the test procedure. Perchloric acid will react with the TBN additives as well as weak bases and wear metals. It is for this reason that it is more commonly used for new oils. When ASTM D2896 is used to assess the TBN of used oil, the wear metals and weak bases present in the oil will elevate the reading, resulting in an overestimation of the TBN.

As a result of this, many commercial oil analysis laboratories in accordance with the ASTM use ASTM D4739 to determine the TBN of used engine oils. In this method hydrochloric acid is used to neutralise the base components present in the oil, resulting in a more realistic assessment of the oil.

Total Acid Number

The total acid number (TAN) is a quantitative measure of acidic compounds in the oil that are generated as a consequence of oxidation and the formation of acidic degradation by-products as a result of burning natural and landfill gas.

The TAN is a measure of weak and strong, organic and inorganic acids within the oil.

What should be noted, however, is that even unused engine oil will yield a TAN value when tested as a result of the inherent acidic properties that certain engine oil additives contain. As a result of this the concentration of acids is best represented by the difference between the TAN of the used oil and that of the fresh oil.

The TAN of the new oil will vary based on the base oil and additive package. As the TAN value of the oil increases, viscosity rises and the lubricating potential of the oil is compromised, ultimately leading to increased wear.

Very much like the TBN, TAN is also used as an indicator of oil serviceability. TAN is often used to establish optimum oil drain intervals for many types of industrial oils, particularly those used in gas engines, as an increased TAN is viewed as an indicator of nitration, oxidation and contamination.





New kid on the block

TAN provides an indication of acid concentration, but not acid strength. As such, it cannot always be relied upon to provide a reliable indication of the corrosion potential of oil.

To overcome this drawback, a new internationally applicable standard for determining the ipH of oil was adopted in June 2014 by the ASTM. This new method is believed to provide an absolute measurement of the corrosive potential of used oil and subsequent over-base additives depletion.

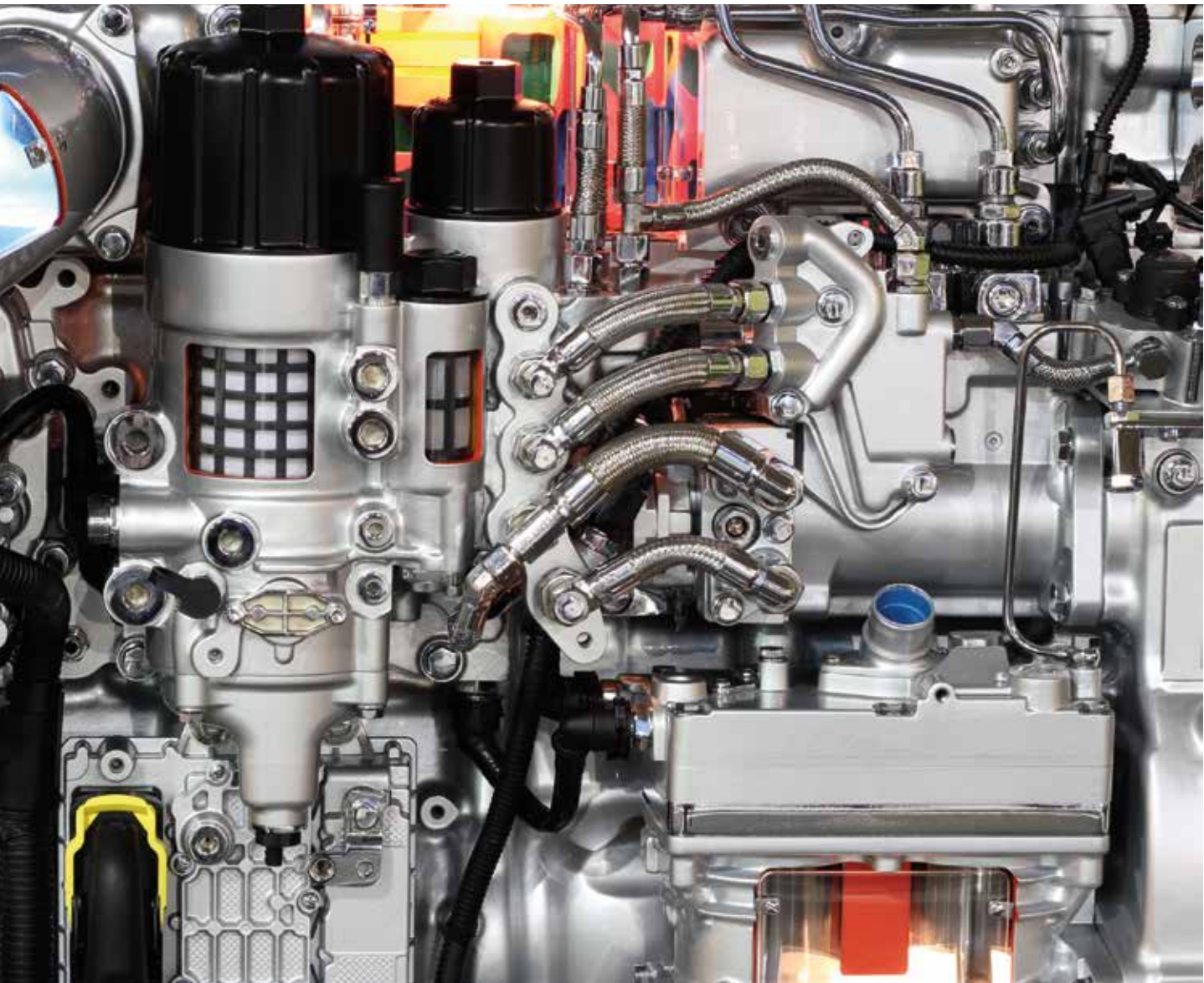
The ipH value is considered an important parameter along with the TAN and TBN value, particularly for the evaluation of engine oils in biogas and landfill gas applications as it represents the strong acids in the oil which directly cause corrosion of engine components.

While TAN and TBN provide information on the overall content of acidic or alkaline compounds respectively, the ipH

value allows the acidity to be qualitatively assessed. This method can even be used to detect minor quantities of strong corrosive acids in oil, even if the TAN has not yet increased significantly.

A change in TBN, TAN or ipH is usually a lagging indicator of oxidation. Despite the validity of all of these measurements, the fact remains that they all reveal damage to the base oil after it has occurred. A preferable scenario would be to evaluate the oil's ability to resist further oxidation by measuring the anti-oxidant additive reserves, in essence, its remaining useful life.

Oil oxidation is a series of chemical reactions both initiated and propagated by reactive chemicals (free-radicals) within the oil. As the oil degrades, a sequence of events occurs, each of which can be measured with oil analysis. At first, the anti-oxidant additive package depletes and then the base oil oxidises. The anti-oxidant additive is sacrificial – it is there to protect the base oil from oxidation. The most common antioxidant additives found in gas



engine oils are phenolic inhibitors, aromatic amines and metal containing additives like zinc-dialkyl-dithiophosphate.

RULER is a proactive technique used for measuring anti-oxidant depletion rates and calculating the remaining useful life of the oil. Working in the proactive domain, maintenance staff can perform a partial drain and fill or top-treat the oil to replenish the anti-oxidant concentration to avoid base oil degradation.

Likewise, for planning and scheduling purposes, RULER monitoring provides management with a significant forewarning of impending oil failure (assuming no intervention affects the chemistry of the oil), which allows the possibility of such a failure to be handled in a way that cost and impact on the organisation are minimised. It is for this reason that RULER analysis is ideally suited to monitoring gas engine oil degradation caused by exposure to elevated temperatures and

oxidation. The rate of anti-oxidant depletion versus time (anti-oxidant depletion trend) can be monitored and used to predict the right oil change intervals.

The successful utilisation of gas engines for power generation will be dependent on several factors, some of which can be controlled, and some of which cannot. The type and quality of maintenance practices employed by gas engine manufacturers or operators is a factor that can be controlled and condition monitoring techniques, like oil analysis, can facilitate the effective maintenance of gas engines and ultimately support the utilisation of this emerging form of power generation not only in South Africa but in the world.

The truth is that CH₄ can be worth so much more, and when managed properly, it does not have to cost the earth.

Steven Lara-Lee Lumley



Driving the well-being of the industry.

An Initiative of the



The **Trucking Wellness** Programme was launched in 1999 by the National Bargaining Council for the Road Freight and Logistics Industry (NBCRFLI) to create HIV&AIDS and STI awareness among long distance truck drivers and sex workers. The Programme runs a fleet of mobile wellness centres as well as 22 roadside wellness nationally in collaboration with industry partners, local government as well as relevant health departments.

Trucking Wellness is primarily funded by the NBCRFLI, with support from Mercedes-Benz South Africa, Imperial Logistics, Reef Tankers and the N3 Toll Concession.

COLLABORATION

The **Trucking Wellness** Programme's success is hinged on its complete buy in and integration from industry stakeholders. It is this collaboration of private and public partnerships that solidifies its success, making it sustainable in the long term.

PROGRAMME GOAL

The goal of the **Trucking Wellness** Programme is to reduce the number of new HIV infections and the impact of HIV&AIDS on individuals, families and communities in the road freight industry.

PURPOSE

The Project aims to implement an integrated HIV&AIDS response in the road freight industry and the communities affected and infected in South Africa. Enabling people to access appropriate and effective interventions to limit new infections and diminish the impact of the epidemic; resulting in reduced HIV prevalence and the effects it has on South Africans.

In managing the above mentioned programme it also allows industry role players to focus on their core business, assuring beneficiaries receive the highest quality treatment, education and training, and an effective and sustainable long term programme which is managed, maintained and advocated by a dedicated and experienced project team to form the basis for the industry ART programme.

HEALTHCARE SERVICE

The **Trucking Wellness** Programme over the last several years has gone from strength to strength, building on the previous successes, however, it is felt that more should be done not only to manage the impacts of HIV&AIDS within the industry but also to address the behaviour of those engaged in the road freight industry.

Up until now, a large amount of focus has been on sexual health education and counselling, addressing the direct consequences of driver behaviour. We believe that driver wellness is holistic and encompasses body, mind and soul and through a broader approach can improve the quality of life and thus minimizing the impacts of HIV&AIDS.

Trucking Wellness is realistic about the challenges facing behavioural change but is fully convinced that, through broader driver stimulation, it can improve the quality of driver life as well as their sexual behaviour whilst on the road.

METHODOLOGY

Trucking Wellness has 22 sites nationally within South Africa. These sites are well positioned within trucking routes and provide wonderful opportunities to launch additional value added services. The notion is to translate wellness centres into mini driver community centres that through the day evoke thought, consideration and self reflection. We envisage spaces that address sexual health whilst adding personal value to the driver.

PROJECT BENEFICIARIES

The direct project beneficiaries will be the employees and employers of the road freight industry, commercial sex workers and communities in "Hot Spots" in transport corridors in South Africa. The communities will also benefit through training, updated information and networking with all the relevant government officials, NGO's and peer educators. Focus will also be made on men's rights, especially considering the nature of the trucking industry and the fact that most drivers are male.



Vice president delivers truck personally

Ernie Trautmann, the vice president of Hino SA, who recently obtained his code 14 truck driving licence, personally delivered a 6x4 Hino 700-Series 2848, the latest addition to the fleet of Transvaal Heavy Transport (THT), to the company's head office in Alrode.

Trautmann is now actively encouraging his colleagues to follow his example and obtain a heavy duty licence. THT, which has a total fleet of 65 bakkies, freight carriers and truck-tractors as well as more than 100 trailers, is a long-standing Hino customer, having bought the first Hino, a Super Dolphin, in 1986. There are currently 40 Hino trucks in the THT fleet, with the latest additions being two 6x4 700-Series 2848 truck-tractors supplied by Hino East Rand and finished in the company's distinctive green and red colour scheme.

The company fleet includes the full range of Hino trucks, being six Hino 300-Series/Toyota Dynas, eight 500-Series, 20 700-Series and six Super Dophins. In addition there are 10 Toyota Hilux bakkies and eight Toyota Avanza panelvans.

THT is one of the longest running privately-owned transport fleets in South Africa, having been established by GHJ Swanepoel in 1961 and registered as a company in 1967. Sampie Swanepoel, the son of the founder and present CEO, joined his father's business in 1986 and has continued on the very successful path walked by his father from those early days.

THT employs about 160 people, with 60 of them being drivers and another 60 being driver assistants as the policy at the company is to allocate a driver to each specific truck so that he knows he is responsible for it in all aspects of its usage, from servicing to appearance. The older and more experienced drivers get the latest trucks. All the vehicles in the THT fleet are fitted with C-Track tracking and telematics systems for real-time monitoring which is proving an advantage for the operations team.

The company specialises in abnormal loads with a wide variety of trailers that can move loads of up to 100 tons. Most of the THT customers are in the mining and construction industries but over the years THT, with its versatile fleet, has undertaken transport contracts for companies and organisations in most sectors of the local economy.



THT operates not only in South Africa, but also in Namibia, Botswana, Zimbabwe, Zambia and Mozambique with some contracts lasting several months, such as one in Jeffrey's Bay where THT was responsible for transporting all the huge components for erecting a big wind farm.

Managing director Sampie Swanepoel says that in view of the comparatively short distances travelled each day by his trucks he keeps them for between 10-15 years or one million kilometres, so durability and reliability over a long period are critical and this is one of the main reasons he is so loyal to Hino.

"The relationship between Hino and Sampie Swanepoel is very special and includes on-going, two-way feedback on the products he operates," explained Ernie Trautmann. "We take particular note of any criticism coming from THT and, if necessary, feed it all the way back to Hino Motors in Japan to ensure we have even better products in the future."

Staff reporter

Critical mass—Hunting for logistics solutions in challenging times

It has never been more critical to maintain the transport supply chains of Sub-Saharan Africa, with cargo and goods—which amount to mass—being of primary importance to the sustainable growth of Southern Africa's critical economies. With crime, spiking operational costs and tax on the rise, are you fully protected and up-to-date with developments?

Delegates can expect special guest appearances from the stars of Big Rig Bounty Hunters on History Channel, Shawn Zimmerman and Vince Jones, all the way from Ohio, USA. They will be discussing what has made them the premier truck retrieval operators in North America, while passing on knowledge to the South African market during their visit and vice versa.

The likable Americans will be joined by some of the finest minds and leaders from Southern African trucking, telematics, forensics, OEM manufacturing/assembly, fuel and supply chain risk management, which will take centre stage at this two day event at the splendid Spier Wine Farm in Stellenbosch on February 10 and 11.

Speakers and delegates will come together to discuss the rise of hijacking, truck recovery, tracking technology, OEM development in Southern Africa, road infrastructure, cost hikes, cross-border development, fuel and systems management.

The event will include an exhibition showcasing the companies that matter in the industry, and is set to be a regular date on the trucking and logistics calendar. Delegates can also expect live demonstrations from some of the experts to add a dramatic, practical element to the event, which will include hijacking, apprehension, rescue, surveillance, tracking, forensics, helicopter demonstration and corporate identity fraud.

Expect to see all the main players from the wide world of vehicle tracking through to the top OEM brass from Southern Africa's proud manufacturing base and government, as 400 knowledgeable delegates are expected to descend on the Mother City.



Why the name Critical Mass?

It has never been more critical to maintain the transport supply chains of Sub-Saharan Africa, with cargo and goods - which amount to mass—being of primary importance to the sustainable growth of Southern Africa's critical economies, with crime, spiking operational costs and tax on the rise are you fully protected and up-to-date with developments?

Confirmed speakers include:

- Shawn Zimmerman and Vince Jones, USA's top truck bounty hunters
- Stan Bezuidenhout, South Africa's premier Forensic Collision Homicide Reconstructionist
- Anthony Dobson, Owner and Director of Operations of One-Stop-Group, SA's own recovery agent
- Tony Sibanda, Director at Emcom Wireless
- Craig Lovell, National Operations Director SA of Intelligent Telematics
- Gerhard van Zyl, Operations Director of Professional Risk and Asset Management
- Nachi Mendelow, GM of Global Business Development at CompuClearing
- Kyle Parker, Tracking expert and owner of Traceability Solutions
- Kathy Bell, Specialist in transport solutions at Standard Bank
- Anton Cornelissen, Head: Heavy Haulage at Santam
- Kobus van Zyl, Executive Director of Daimler Trucks and Buses, South Africa
- Professor John Evans, Diagnostics Manager at WearCheck
- Blayne Oliver, Business Development Manager at Green Diesel

CRITICAL MASS

Hunting for logistics solutions
in challenging times



KEY FACTS:

WHERE

Spier Wine Farm,
Stellenbosch, South Africa

WHEN

10 -11 February 2016

CONTACT

Linda Smith on 021 681 7000
or linda.smith@capemedia.co.za



JOE PUBLIC IGNITE MBSA2719/CON

Add increased uptime to the mix.

And decrease your total cost of ownership.

Uptime is being on-site, on time, all the time. It's what separates you from your competitor. That's why our trucks are designed for seamless body mounting – to get your body fitted faster, so you're on-site quicker.

And once it's there, our CharterWay® service and maintenance options, FleetBoard® driver and vehicle management system, and durable GenuineParts will keep it there for longer, so you spend less on maintenance.

Call **0800 133 355** or visit www.mercedes-benz.co.za/trucks for more information.

Mercedes-Benz

Trucks you can trust.

