

Companies and Drivers Benefit from SAFED for HGVs

A Selection of Case Studies

Case Studies



**SAFE AND FUEL
EFFICIENT DRIVING**

Foreword

The Safe and Fuel Efficient Driving (SAFED) guide was first published in May 2003. It is aimed at improving the safe and fuel efficient driving techniques of Heavy Goods Vehicle (HGV) drivers.

The SAFED training programme has been developed specifically to enable both vehicle operators and training providers to implement driver training and development for existing HGV drivers within the road freight industry.

Since its introduction, thousands of drivers have been through the one-day training course, and hundreds of driver trainers have completed the SAFED Instructor's Course. Widespread benefits have been reported following the completion of training. This Guide contains a selection of case studies from various haulage operations, as well as one from a driver agency, showing what others have achieved by seizing the chance of SAFED training. In addition, there is guidance on how to sustain any benefits achieved, and pointers to further information.

Funded Training

SAFED training for drivers and for training instructors is available on a funded basis in England in the aggregates and van sectors. The training is sponsored by the Department for Transport (DfT) until March 2007. To experience the benefits of SAFED training on a funded basis sign up as soon as possible by contacting one of the following organisations who are appointed to manage each specific scheme.

SAFED in the Aggregates Sector

Website: www.safedaggregates.org.uk
Email: info@safedaggregates.org.uk
Freephone: 0800 783 7434

SAFED in the Van Sector

Website: www.safed.org.uk and click on the SAFED for Vans logo
Email: vans@safed.org.uk
Hotline: 0870 190 8440

SAFED on a Commercial Basis

If you wish to subscribe to SAFED training and funding is not available, then training can be provided on a commercial basis by trained instructors principally based throughout England. To locate a commercial instructor, visit www.safed.org.uk

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1 Introduction

The Safe and Fuel Efficient Driving (SAFED) guide was first published in May 2003. It is aimed at improving the safe and fuel efficient driving techniques of Heavy Goods Vehicle (HGV) drivers. The guide was developed for Freight Best Practice by a steering group of industry experts.

The SAFED training programme was developed specifically to enable both vehicle operators and training providers to implement driver training and development for existing HGV drivers within the road freight industry. The Department for Transport sponsored the programme and during the funded stage, a number of commercial training providers assisted in delivering the SAFED programme nationwide. Check with your local training provider to see if they now offer SAFED training courses.

Driver training consists of a full day training course, which includes practical assessments and theory papers based around the following themes:

- ➡ Accident prevention and reduction
- ➡ Fuel Efficient Driving

This guide describes the experiences of a selection of companies and drivers operating a variety of vehicle types: box vehicles, curtain-sided vehicles, flat beds, tankers and tippers. One example features a driver agency. The positive messages conveyed from these case studies should stimulate others to take advantage of the SAFED training programme and achieve similar benefits within their companies. In today's competitive world, no company can afford to pass up the chance to cut fuel costs, reduce maintenance costs and improve safety performance.

Completing the training and seeing the initial benefits are, however, only part of the story. Companies need to take further action if they are to sustain the early savings and, indeed, surpass them. This guide also contains guidance on ways to sustain the benefits achieved under SAFED in the longer term.

Advice for those looking to take advantage of the SAFED training programme is also given.

2 Case Studies on Box Vehicles

- 2.1 PS Transport Ltd
- 2.2 Lane Group plc
- 2.3 Exel
- 2.4 Turners (Soham) Ltd



2.1 PS Transport Ltd

Benefits highlighted:

- ➡ Very positive feedback from drivers
- ➡ Reduced driver stress
- ➡ Safer driving generally

The Company

Grimsby-based PS Transport Ltd is a family-owned haulier that works primarily for local food-processing firms, carrying a range of temperature-controlled foodstuffs and items used in the manufacturing process. It also transports a large quantity of timber products. The company's six-truck fleet comprises five three-axle tractive units (four Scania and a Volvo FL10) running at 44 or 41 tonnes gross combined weight (gcw) with refrigerated-box and curtain-sided semi-trailers, and one 14-tonne gross vehicle weight (gvw) Volvo FL6 two-axle rigid complete with refrigerated box body. Six full-time drivers and one part-time driver are supplemented during busy periods by agency drivers, and occasionally even by Director Richard Ellis.

Using SAFED

"I first read about the SAFED scheme in the Freight Future newsletter," says Mr Ellis. "We have had driver training in the past, both from truck manufacturers and, in 2002, from an independent company providing defensive-driving training courses. I had been thinking about updating this training anyway and the SAFED scheme seemed like a good way of doing so. The absence of any direct cost was seen as a bonus," he adds. Initially, four PS Transport drivers went through the SAFED course, with three more set to follow. Mr Ellis has also booked himself a day's training.

PS Transport currently spends around £110,000 per year on diesel fuel. Mr Ellis is in no doubt that SAFED driver training will help to keep the cost down, but he admits to being unable to quantify the savings precisely at present. "The difficulty we have is that the work pattern of our trucks changes dramatically from one day to the next," he explains. "One day a

truck could be carrying a payload of 20 tonnes, the next day it could be as little as 10 tonnes. Pulling a trailer loaded with pallets, a tractor might average 7.5 or 8 mpg. Coupled to a fridge box (with far better aerodynamic efficiency), the average could jump to 9 mpg. At the other extreme, some of the local shunting work we do can drag fuel economy down to as little as 5 mpg."

Despite having no precise figures, Mr Ellis is convinced that SAFED training is already delivering significant benefits to his company. He has received very positive feedback from drivers who were initially sceptical, and highlights one driver who, in direct response to what he learned on the SAFED course, now sets his truck's cruise control at 50 mph instead of 55 mph. Mr Ellis is convinced that responses like this are improving fuel efficiency and also lowering driver stress, leading to safer driving generally.

"Responses like this are improving fuel efficiency and also lowering driver stress, leading to safer driving generally."

Richard Ellis, PS Transport Ltd

View from a Driver's Perspective

Ken Marrows, now 58, has been driving trucks since he was 22. As Transport Supervisor at PS Transport, he is out on the road less often than in the past, stepping in to cover urgent deliveries and driver absences. This makes him an exception to the normal PS Transport rule of 'one-driver-one-truck'. "I drive anything and everything," says Mr Marrows. "I admit that I was very sceptical about the SAFED training before I went through it. But when we got to the course it was not what I expected – it was very good! Our drivers have a wide range of experience, but they all seem to agree that the course was worthwhile. The advice on starting off in a higher gear and then skipping gears was particularly useful. I've applied the same principle to three different vehicles since the course, and it works once you know the truck's capabilities. I guess every driver gets into bad habits. The SAFED course makes you aware of them, and makes you think about your driving style."

2.2 Lane Group plc

Benefits highlighted:

- ➔ At least 4% improvement in fuel consumption
- ➔ Demonstrating environmental minimisation impact to customers
- ➔ Customer support for SAFED training proposals
- ➔ Drivers more relaxed
- ➔ Very useful defensive driving element

The Company

Lane Group plc is a Bristol-based logistics group that prides itself on being able to provide innovative warehousing and distribution operations, tailored to the requirements of contract customers such as The Body Shop International and Magnet. The group includes an agency personnel division called PL Workforce, and its own training division called Training Force, which supplies various approved logistics and distribution training programmes, including driver training.

One of Lane Group's contract customers is Raflatac, a leading supplier of paper-based and synthetic self-adhesive labelstock. Lane Group operates 19 trucks on the Raflatac contract in the UK, based at one site in Scotland and three in England (Scarborough, Rugby and Bristol), delivering labelstock to printers throughout the UK. The Raflatac fleet comprises 44-tonne gcw articulated trucks, 18-tonne gcw rigid trucks, and six 34-tonne drawbars, all fitted with tail-lift-equipped curtain-sided bodies. Maintenance and repair of the Lane Group/Raflatac trucks is contracted out to DAF and Volvo dealers.

Using SAFED

Scarborough-based Craig England is the Lane Group contract manager responsible for the Raflatac contract. He explains that ideas involving SAFED driver training first began to gel in October 2003, at about the same time that a batch of new trucks was delivered. "Like Lane Group, Raflatac is sensitive to environmental issues," says Mr England. "Last October, we were

taking delivery of eight new trucks powered by the latest, low-emission Euro-3 engines (four DAF CF85 tractive units and four DAF CF85 18-tonne gcw rigid trucks). On top of adopting new technology, we wondered what else we could do to minimise the environmental impact of the operation and to improve operational efficiency at the same time."

Raflatac management also shares Lane Group's enthusiasm for the training and professional development of employees, and so it was immediately receptive to the SAFED training proposals. It was decided that the Scarborough site would be used as a case study. Mr England reports that 15 drivers so far have undergone one-day SAFED training. Fuel consumption was monitored closely for the four weeks before training started in January 2004, with one instructor to two drivers, and for the four weeks afterwards. "Our data shows a fuel consumption improvement of at least 4% across the board, following the training," says Mr England, pointing out that this came during a period of exceptionally severe winter weather in North Yorkshire. He is very pleased with the results of the SAFED training and is looking forward to a follow-up instructor's visit, to ensure that the fuel economy and safer driving benefits are maintained.

View from a Driver's Perspective

Malcolm Wood is one of the Scarborough-based Lane Group drivers who went through the one-day SAFED course in January 2004. After more than 25 years as a truck driver, Mr Wood has huge experience of the job, but he has no hesitation in praising his SAFED training course. "It was very good," says Mr Wood. "I used to drive in the old-fashioned way, but now I drive in a more relaxed manner, tending to use higher gears. After watching a training video, we went out on a trip of about 21 kilometres in a fully-laden 44-tonne gcw articulated truck (a DAF CF85 with a 16-speed ZF synchromesh gearbox). On the first trip, I was driving in my normal way; the second trip, I was following the instructor's advice on gear changing. My number of gear changes halved! I also found the defensive driving element of the course very useful, even though I've had defensive-driver training before," he adds.

2.3 Exel

Benefits highlighted:

- ➡ Fuel savings of up to 5%
- ➡ Enhanced safe-driving techniques
- ➡ Very positive feedback from drivers
- ➡ Reduced driver fatigue
- ➡ In-house training ability, to continue training throughout the company

The Company

Exel is the global leader in supply chain management, with some 109,000 employees in more than 120 countries. In the UK, the company's contract with a large high-street retailer involves the operation of National Distribution Centres (NDCs) in Daventry, Northamptonshire, Lutterworth, Leicestershire, and six Support Distribution Centres (SDCs) in Coventry, Radlett, Bristol, Normanton, East Kilbride and Belfast. The fleet of trucks based at Daventry comprises: 36 two-axle rigid vehicles (mainly Volvo FM7s); 12 drawbar trailers; 74 demountable bodies; 20 tractive units; and 105 box-van semi-trailers, most with tail-lifts, including four double-decker units used for trunking products to Scotland and Ireland. The rigid trucks on this contract typically average 77,000 miles per year, with the articulated vehicles averaging 95,000 miles per year. Repair and maintenance are contracted out.

Using SAFED

Arthur McLelland is Exel's Head of Transport for the large contract at Daventry. "We seized the opportunity to complete the SAFED training because we realised how well it would complement our in-house driver training," says Mr McLelland. "We see enhanced safe-driving techniques, like those taught in the SAFED scheme, as a major benefit because they make drivers more aware of what is going on around them and encourage them to have more sympathy for their vehicle and its controls. Our before-and-after fuel consumption records also show that the training resulted in fuel savings of up to 5% from the 45 drivers based at Daventry," he adds.

Exel's in-house driver trainer at Daventry is now trained as a SAFED instructor, which will allow the training to be rolled out to outbase depots over the coming months. Mr McLelland mentions that feedback from drivers has been generally very positive, with improved awareness of hazards, better use of vehicle controls, and a more relaxed way of driving highlighted by many. The company is taking steps to ensure that it continues to benefit from SAFED training, for example, by appointing a Fuel Champion at Daventry.

View from a Driver's Perspective

Paul Lanny has more than a quarter of a century's experience as a professional truck driver. On his usual daily routine as an Exel driver on the high-street retailer's contract, he drives an 18 tonne gvw Volvo FM7 from Daventry to shops in Brent Cross and Watford, before making some collections from suppliers on his way back to Daventry. Mr Lanny describes his day of SAFED training as an eye-opener. Acknowledging that he had slipped into bad driving habits, Mr Lanny praises the course for its clear demonstration of the benefits of driving in a more thoughtful, relaxed way.

"We see enhanced safe-driving techniques, like those taught in the SAFED scheme, as a major benefit because they make drivers more aware of what is going on around them and encourage them to have more sympathy for their vehicle and its controls."

Arthur McLelland, Exel

"You become complacent," says Mr Lanny. "Everybody who has driven for years slips into their own little ways. You would be silly to ignore the information you get from the SAFED course. My gearshift count, for example, was cut by about 50%. And my driving style now is more relaxed, so I am not so tired at the end of the day. When a driver is less tired, he is bound to be more aware of what's going on around him."

2.4 Turners (Soham) Ltd

Benefits highlighted:

- ➔ Potential fuel savings of 5-10%
- ➔ Training highly relevant as refresher course for drivers of modern 44-tonne trucks
- ➔ In-house training ability enables the scheme to form the basis of all future driver training
- ➔ Drivers able to apply SAFED principles to their own cars, thereby saving fuel

The Company

Founded in Cambridgeshire in 1930 by Wallace and Frank Turner, Turners is still family-owned, but has grown to become one of the largest privately-owned road transport operations in the UK. Turners specialises in temperature-controlled distribution and bulk tankers, running around 800 trucks in total, mostly articulated vehicles at 40-44 tonnes gcw. Hargrave International, a high-profile Lincolnshire-based operator with 100 temperature-controlled trucks, has been part of the Turners Group since 1996.

Flexible collection of fresh and frozen produce from local and national suppliers for delivery to large supermarket chains is one area in which the Turners Group takes particular pride in its professionalism. Responsibility for the training and professional development of the firm's 1,000-plus LGV drivers lies with Richard Woolger, Technical Operations Manager.

Using SAFED

Mr Woolger first heard about the SAFED scheme during a presentation under the Fuel Economy Advisors scheme in 2003, and was immediately keen to see how it could be integrated into Turners' established driver-training regime. Now six Turners driver trainers are qualified SAFED instructors. To date, they have put 50 drivers through the one-day course.

"My impressions of the SAFED scheme so far are very favourable," says Mr Woolger. "Managing fuel economy in a fleet this size is like painting the Forth Bridge – a never ending task. But there is no doubt that SAFED

training helps a lot. We are looking at fuel consumption improvements of 5-10%, which promises significant savings when we are talking about an annual fuel bill of around £3 million for the Hargrave International vehicles. Not only that, but fuel economy and safety go hand-in-hand. I'd like to get all our drivers through the course, but the biggest challenge is finding the time to do it. We have to work with the schedulers, of course."

In common with just about every haulier in the land, Turners is finding it increasingly difficult to get hold of youngsters who are interested in truck driving as a career. The average age of Turners drivers is quite high, so many of them were originally trained to drive vehicles that are technically a world away from a modern 44 tonne truck. "The technology now is very different." agrees Mr Woolger. "All our drivers who have been through the course say it has been a useful experience. I think it's a brilliant scheme. We plan to use it as the basis for all our future driver training." he adds.

View from a Driver's Perspective

Steve Hartley is a professional truck driver with 30 years' experience behind him. He has worked for Turners for 12 years, and since the beginning of 2003 has been a Driver Trainer, based at the Turners depot in Castleford, West Yorkshire. "I'm really into SAFED training." says Mr Hartley. "I enjoy doing it and I think the scheme is really working. Most of our trucks here at Castleford are Cummins-powered ERFs, and I use the RoadRelay (on-board fuel-monitoring and data-gathering equipment) system to get an accurate measurement of the effect of SAFED training on fuel economy. Drivers invariably react to the course by saying they just didn't realise before where safety and fuel-efficiency improvements could be made."

Mr Hartley continues, "One of the problems we have is finding ways of keeping drivers interested, but the yellow SAFED jacket certainly acts as a strong incentive in itself. I specialise in training drivers to get the best out of Cummins engines, but the same rules apply to Volvos, Scania's and other trucks. I even apply the same principles when driving my car and I'm definitely getting better fuel economy, by maybe 3 or 4 mpg, as a result."

3 Case Studies on Curtain-Sided Vehicles

- 3.1 Belcher Cammack Transport Ltd
- 3.2 Kenyon Road Haulage Ltd
- 3.3 Page Group
- 3.4 ACR Logistics
- 3.5 Clugston Distribution Services



3.1 Belcher Cammack Transport Ltd

Benefits highlighted:

- ➡ Fuel savings – mpg savings of 2.6%
- ➡ Improved driver awareness of safety issues
- ➡ Elimination of minor accidents/scrapes to date
- ➡ Improved field of vision through retrofitting additional nearside mirrors

The Company

Belcher Cammack Transport Ltd is a family-owned haulier based near Crewe, Cheshire, that specialises in the delivery of locomotive and railway-wagon parts to rail-industry workshops throughout the UK. Vehicles are often loaded on return journeys with major components, such as engines and bogies, for overhaul or repair in Crewe. The company employs 14 drivers and runs 12 articulated and one rigid truck. All of the articulated tractors are 380hp Volvo FH12s, pulling mainly flat-platform semi-trailers, but three curtain-sided trailers are kept for loads such as electrical motors that need additional weather protection.

Using SAFED

Joanne and Paul Cammack, directors of Belcher Cammack, read about the SAFED scheme in late summer 2003 in a magazine. At the time, they were not unduly concerned about fuel economy levels or the number of accidents, but they were aware that there might be room for improvement. “There had been a few minor accidents and no company can afford to pass up the chance to save fuel.” recalls Joanne Cammack. “The SAFED scheme sounded like a good idea. We have nothing to lose, we thought – let’s have a go.”

A SAFED instructor from Senior Driver Training visited Belcher Cammack and provided a day’s training for all drivers in late October and early November 2003.

Belcher Cammack sticks firmly to a ‘one-driver-one-truck’ policy, so its fuel consumption records are

unaffected by vehicle-swapping between drivers. A study of detailed fuel consumption records for seven trucks over several weeks before the training confirmed that the average fuel economy of the fleet was fairly good to start with. However, records from the weeks after the training still showed significant gains, although, unsurprisingly, this varied considerably from driver to driver.

Before driver training, one S-registered Volvo FH12 tractor with almost 150,000 miles on its odometer, used 1,281 gallons of diesel to cover 10,625 miles, averaging 8.3 miles per gallon (mpg). After training, the same driver with the same truck used 1,081 gallons of diesel to cover 9,190 miles, averaging 8.5 mpg which represents a 2.6% improvement in mpg. One exceptionally fuel-efficient driver averaged exactly the same figure (9.3 mpg) before and after training, but the fuel consumption records for most of the other trucks showed improvements of the same order. However, it should be noted that the fuel savings would probably be higher than indicated, because the post-training measurements were made in winter, when fuel consumption would be expected to be higher than in the autumn.

“The SAFED scheme sounded like a good idea. We have nothing to lose, we thought – let’s have a go.”

Joanne Cammack, Belcher Cammack Transport Ltd

View from a Fleet Engineer’s Perspective

Paul Cammack is responsible for the maintenance of the Belcher Cammack fleet. Mr Cammack is as impressed by the improved driver-awareness of safety issues resulting from the SAFED training as he is with the fuel economy gains. “There has been a big increase in seat-belt use.” says Mr Cammack. “What’s more, we haven’t had any minor accidents since the training. Scrapes to the nearside front of trucks used to be a common problem because the trucks often have to be turned around in railway yards where there is little space to manoeuvre.” One thing that came out of the SAFED training was the benefit of an additional mirror on the nearside (standard

equipment now on new Volvo tractors). “We are now retrofitting these mirrors to all our trucks. One of the greatest benefits is that the driver’s field of vision is improved at pelican crossings, where there is always the risk of a pedestrian nipping into the driver’s blind spot on the nearside.” adds Mr Cammack.

“I didn’t realise that a tiny rip in a trailer curtain or low tyre pressure can have a big effect on fuel economy.”

Tony Tomkinson, Belcher Cammack Transport Ltd

View from a Driver’s Perspective

Tony Tomkinson has been driving trucks for a living for 18 years. Two years ago he gained his C+E articulated licence at Belcher Cammack. Mr Tomkinson describes his day of SAFED training as very interesting. “I am particularly impressed with the way the training has made me aware of how seemingly insignificant things can affect fuel economy,” he says. “Our vehicles go into the workshop without fail every four weeks, as Paul (Cammack) is a stickler for proper maintenance. But I didn’t realise that a tiny rip in a trailer curtain or low tyre pressure can have a big effect on fuel economy. I suppose I’d not really thought about it before.” The training also made a big difference to Mr Tomkinson’s approach to gear changing. “On the training day we all had two drives. The first time I drove in my normal way and the instructor counted the number of gear changes. We then watched a video and were given some instruction, including an explanation of how every gear change costs fuel. Using block-shifting on the second run, I halved the number of gear changes. I’m also using cruise-control far more than I used to.” he declares.

Mr Tomkinson’s new driving style has had an impact on his truck’s fuel consumption. Prior to training, he averaged 9 mpg in his FH12 Volvo. After training, the same truck’s fuel consumption rose to 9.2 mpg.

3.2 Kenyon Road Haulage Ltd

Benefits highlighted:

- ➔ Average fuel consumption improvements of around 5%
- ➔ Some fuel consumption improvements into double figures
- ➔ Very experienced drivers still learned a lot from SAFED training

The Company

Kenyon Road Haulage Ltd was set up in 1933 by the grandfather of the current director, Michael Kenyon. Based in Blackburn, Lancashire, the company is now a substantial, medium-sized road haulage and warehousing operation, running 37 trucks. The majority of loads are on pallets in curtain-sided trailers, although Kenyon also runs some tanker semi-trailers, as well. Most of the 24 tractive units in the company's fleet are Mercedes-Benz Actros 1840s and 1843s with EPS electro-pneumatic gearshift systems, but there are also some DAF XF95 tractors with ZF synchromesh range-change gearboxes and a couple of older ERFs with Eaton Twin Splitter gearboxes. All of Kenyon's 18 tonne gvw rigid trucks are DAF 65.210s and 65.240s, while the solitary 23 tonne truck is a Scania and the 7.5 tonne trucks are either DAF or Mercedes-Benz.

Using SAFED

Michael Kenyon's interest in SAFED training was first aroused by a presentation under the Fuel Economy Advisors scheme towards the end of 2003. He decided to take the course himself, along with Kenyon's own driving instructor, and was favourably impressed. Mr Kenyon therefore decided to put all 40 of the company's drivers through SAFED training, as well as the two Kenyon workshop staff who held C+E driving licences.

Kenyon's fuel consumption records from before and after the training sessions provide hard evidence of how SAFED driver training can have an immediate impact on fuel costs. After training, 15 drivers improved their average mpg by around 5%, with three drivers improving their fuel consumption by between 12 and 16%. Mr Kenyon is naturally pleased with these improvements, but is wary of reading too much into them. "We've not yet fully quantified the fuel benefit (of SAFED training)," he says. "The initial improvements

were significant, but they can slip back. For example, two of our ERF ECX tractors were averaging around 9.2 mpg before the training. Both exceeded 10 mpg immediately afterwards, but now fuel consumption has slipped back to the high eights. The drivers of these trucks are really into saving fuel as a result of their training, and they are as keen as anyone to get the average mpg back up," he explains. Despite studying fuel consumption records, it remains a mystery why the figures are down. "I wonder whether drivers might just be trying too hard. You certainly need to be aware of the differences between modern engines and older ones that take less kindly to working at speeds that suit the latest high-torque motors. Having said that, we are planning to introduce a driver bonus scheme based on fuel economy, to keep people motivated," Mr Kenyon concludes.

View from a Driver's Perspective

There can be few people in Britain with more professional truck-driving experience than Douglas Kimberley. This 67-year-old passed his test in Germany in 1956. So could a SAFED instructor teach Mr Kimberley anything he had not already learned in a driving career spanning 48 years? His answer is an unequivocal 'Yes'.

Mr Kimberley currently drives a Mercedes-Benz Actros 1840 tractive unit, pulling a curtain-sided trailer on a regular run between Royston, Cambridgeshire and Blackburn. The load is always sheets of insulating material for processing in Blackburn. The sheets gradually absorb moisture from the atmosphere in their unprocessed state, so Mr Kimberley cannot afford to dawdle on any journey if he wants to keep the customer happy. His weekly fuel consumption figures show some impressive gains following SAFED training, with his typical average mpg rising from the high sevens to the high eights, even heading into the nines once or twice.

"The course was certainly not a waste of time – I learned a lot," says Mr Kimberley. "For one thing, I'm not driving the truck as hard as I did before. We all pick up bad habits. For example, I used to stick to the outside lane of roundabouts too much, and I used to knock the gearbox into neutral as I was approaching traffic lights, wasting fuel. You're never too old to learn," he says.

3.3 Page Group

Benefits highlighted:

- ➡ Fuel savings
- ➡ Gear changes reduced by around one-third on test run through block-shifting
- ➡ Drivers feeling more relaxed at the end of the working day

The Company

The Page family has been running trucks from its West Sussex base at Ford near Arundel since 1946, when brothers Derek and Bob's father established the haulage firm. Today, the Page Group includes a fleet of 36 vehicles. The fleet also specialises in palletised loads for the Palletforce consortium. Ten years ago most of the trucks operated by Page were Volvos, repaired and maintained in the company's own workshop. However, like many haulage firms of a similar size, Page realised that the high overhead cost of its maintenance operation could no longer be justified, and these days the workshop is leased to a commercial vehicle dealer. Most of the trucks in the rich red Page livery are Mercedes-Benz, although there are some Volvo FH and DAF XF95 tractors in the fleet.

"A few years ago, Millers Transport Training became part of the Page Group," recalls Alan Summers, who is Page's Training Manager. "We are lucky that we, as an operational road transport company, have our own driver-training company."

Using SAFED

Mr Summers recalls how his interest in SAFED training was sparked by a weekend visit to Page under the Fuel Economy Advisors scheme in 2003. "I felt the advice offered was useful and good, but aimed mainly at the traffic office," he says. "When we heard about the SAFED scheme, we were keen to have our own drivers go through it; also to be able to offer it to other firms through Millers Transport Training. We started training commercially in February 2004 and we've trained about 60 drivers since then."

With about 20 of Page's own drivers now SAFED-trained, Mr Summers is in no doubt that the company is saving on fuel bills as a result. "I've been on a few defensive-driving courses and they always come up with useful ideas, but this one (SAFED) is the only one that proves on the day of the training how much fuel has been saved. Sometimes even I am surprised. We can get down from 120 gear changes on the first run, to 80 on the second," he says. "However, quantifying our fuel savings is no easy task, as the figures can be affected by so many other variables. For example, at Page, vehicle replacements in the last six months will also have had an impact," he explains.

"It is a good course. It's done me a power of good, showing me how to save fuel and cut down on the number of gear changes."

Pete Squires, Page Group

View from a driver's perspective

In the 18 years that Pete Squires has worked for Page, he has driven a Volvo F10 and three Volvo FH12s, all with synchromesh, manual-shift gearboxes. At present, Mr Squires drives a six month old three-axle Mercedes-Benz Actros 2544 with a Telligent (electro-pneumatic shift) gearbox, pulling mainly curtain-sided semi-trailers and delivering palletised loads to most parts of the UK. He was one of the first Page drivers to go through a one-day SAFED course, training in a Volvo FH12 with a 12-speed synchromesh box. Mr Squires remembers that on his first, untutored run he made around 103 gear changes in an hour. On the second run, over exactly the same route but following advice from the SAFED instructor, the number fell to fewer than 80. "You can apply exactly the same principles to the Mercedes Telligent gearbox, block-shifting up or down by one-and-a-half or two gears," says Mr Squires. "It is a good course. It's done me a power of good, showing me how to save fuel and cut down on the number of gear changes. As an added bonus, I'm now more relaxed at the end of a working day," he enthuses.

3.4 ACR Logistics

Benefits highlighted:

- ➡ Fuel consumption reduced by 12%
- ➡ One driver halving his number of gear changes

The Company

Hays Logistics (now known as ACR Logistics) is one of the UK's largest supply-chain and outsourced logistics contractors, with more than 16,000 employees and operations in 11 European countries, as well as in the UK and the USA. Originally a division of the Guildford, Surrey-based Hays Business Services Group, Hays Logistics has been owned by Platinum Equity of the USA since early 2004. It has recently rebranded as ACR Logistics.

The long list of ACR Logistics customers in sectors such as automotive and industrial, consumer, retail, and technology includes UK household names such as BP, J Sainsbury, Marks & Spencer and Ford.

For around nine years, the company has been operating a nationwide distribution contract for a leading supplier of food ingredients to most major retailers in the UK. ACR Logistics, based at a national distribution centre in Sutton-in-Ashfield, Nottinghamshire, deliver to customers located between Aberdeen in the north and Plymouth in the south west. The contract fleet comprises 19 6x2 twin-steer tractive units plated at 44 tonnes gcw, one 18 tonne gcw two-axle rigid truck, and one 7.5 tonner.

Using SAFED

The 16, 430hp DAF CFs and three 360hp Volvo FM10 tractors used on the food ingredients contract pull straight-frame and step-frame curtain-sided semi-trailers, some of them as high as 4.6m. A typical day's duty-cycle for one of these articulated vehicles will see it starting off at close to the gross weight limit of 44 tonnes, and then making four or five drops. Trailers are usually back-loaded.

Cameron Best, the ACR Logistics driver trainer based at Sutton-in-Ashfield, explains that operations this arduous inevitably take their toll on fuel economy. "The fleet typically consumes as much as 28,000 litres of diesel each week," he says. According to Mr Best, the determination of ACR Logistics contract managers to improve fuel efficiency wherever possible was the key reason for putting all drivers on this particular contract through the SAFED course.

"Fuel consumption is the big thing," he reiterates. "Our target mpg (for the articulated trucks) is eight. On the day of the SAFED training, most of the drivers showed impressive mpg improvements. Everyone is keen to maintain these improvements, so we are now monitoring the figures each week. If a driver shows no improvement, or his average falls significantly, we'll look more closely, and maybe have him in for more training."

"There was a big difference between my first (pre-training) run and the second one. The number of gear changes fell from 100 to around 50, and fuel economy improved by over 12%."

Kevin Garcia, ACR Logistics

View from a Driver's Perspective

Kevin Garcia, a professional truck driver with nine years' experience, drives a DAF CF430 articulated truck for ACR Logistics on the food ingredients contract. The truck's gearbox is a manual-shift, synchromesh ZF Ecosplit with 16 forward gears (a four-speed main box with range-change and splitter). On his day's SAFED training, Mr Garcia was most impressed by what he learned about cutting down on gear shifting and improving fuel economy at the same time. "There was a big difference between my first (pre-training) run and the second one," he recalls. "The number of gear changes fell from 100 to around 50, and fuel economy improved by over 12%. I try to keep up the same driving style in the course of my work now, keeping the engine revs low even though it sometimes seems that the engine is straining a bit. I'd recommend the SAFED course to anyone," he concludes.

3.5 Clugston Distribution Services

Benefits highlighted:

- ➡ Average fuel consumption improvement of 7.3% for 23 drivers
- ➡ One driver trainer improved fuel consumption by 13.5% on the day
- ➡ Useful refresher on safety

The Company

Clugston is a privately-owned, Humberside-based construction and industrial services group, established 60 years ago. One of the group's main subsidiaries is Clugston Distribution Services, based in Scunthorpe, North Lincolnshire, which is sub-divided into four sectors: Storage & Steel Services, Bulk Powder Distribution, Bulk Food Distribution and Vehicle Maintenance Services.

Kevin Davis, Head of the Storage & Steel Services division, explains that although the strong reputation of the business has been built on its handling and distribution of long steel products, such as heavy beams for the construction industry, it also collects and distributes lumber, plant, engineering products and bagged materials. The 50-plus tractive units used for this work are made by DAF and ERF.

Clugston Vehicle Maintenance Services not only maintains and repairs the in-house fleet, but also those of other operators in the North Lincolnshire region. A 12-bay workshop is staffed by 25 technicians and is equipped to offer such services as annual VOSA (Vehicle & Operator Services Agency) tests, fuel injection repairs and calibration, and fabrication and repair of trailers.

Using SAFED

Clugston prides itself on the high quality of service it provides, and all Clugston Distribution activities have ISO 9002 quality-standard certification. Senior management has been quick to recognise that service quality can only be maintained by investing in training.

"It was the potential for improving fuel economy that first attracted us to the SAFED scheme, but we have found still more value in safety improvements. Even minor bumps are expensive." says Mr Davis. "We have our own full-time driver trainer, Arthur Smith. He went on a SAFED course in Leicester and came back full of enthusiasm. He has now set up our own SAFED driver training and 23 drivers have been through it so far. The safety aspect has been a real bonus, pointing out to drivers the bad habits they have got into and thereby helping to reduce the number of minor accidents."

"It was the potential for improving fuel economy that first attracted us to the SAFED scheme, but we have found still more value in safety improvements."

Kevin Davis, Clugston Distribution Services

View from a Driver Trainer's Perspective

Arthur Smith has been a professional truck driver for some 38 years, working for Clugston Distribution for the past ten years. About three years ago he moved into driver training. In November 2003, Mr Smith went on a two-day SAFED driver instructor course. "I thought it was excellent – really good instruction." he enthuses. "Having been on a different driver/assessor course just two or three years ago, I went in with an open mind. But a 13.5% improvement in fuel consumption in just one day is impressive by any standards."

Mr Smith has trained 23 Clugston Distribution drivers under the SAFED scheme so far, all of whom have passed with distinction. He reports that the average on-the-day fuel consumption improvement is 7.33%, but that this spans a wide range, from just 1% up to a very impressive 20%, depending on each driver's starting point in terms of ability and attitude. "The average number of gear changes on the set run following SAFED training has also been cut from 91 to 68." says Mr Smith. "But three quarters of the day is to do with safety and only a quarter to do with fuel economy. Just about everyone agrees that it's good to have a refresher on safety." he concludes.

4 Case Studies on Flat Bed Vehicles

→ 4.1 Winfield Transport (Cannock) Ltd

→ 4.2 AA



4.1 Winfield Transport (Cannock) Ltd

Benefits highlighted:

- ➡ Average fuel savings of 3.2%
- ➡ Projected fuel cost savings of £6,500 per year
- ➡ One driver's gear changes reduced from 109 to 70 over the same route
- ➡ One driver's fuel consumption improved by over 12% in the four weeks after training
- ➡ Driving in a more relaxed way

The Company

Trucks in Winfield colours have been operating from the company's Cannock, Staffordshire base since 1969. Today, there are 20 vehicles in this general-haulage fleet ranging in gross weight from 7.5 tonnes to 38 tonnes, carrying a wide variety of loads mainly for customers in the heavy-engineering and construction sectors.

Most of Winfield's 7.5 tonne trucks are Leyland DAF 45-series chassis-cabs fitted with dropside or curtain-sided trailers. Its 13 tonne gvw trucks are DAF 55 series, again with dropside and curtain-sided bodies, whereas the two 18 tonne gvw two-axle rigid trucks in the fleet are MAN. The Winfield fleet is completed by two 414hp MAN three-axle tractive units, pulling flat and curtain-sided semi-trailers at a gcw of 38 tonnes. All trucks in the fleet are fitted with conventional, manual-shift, synchromesh gearboxes.

"SAFED training could cut the company's annual diesel bill by as much as £6,500."

Warren Winfield, Winfield Transport (Cannock) Ltd

Using SAFED

Warren Winfield, Managing Director of Winfield Transport, has long been convinced of the value of driver training. In 2003, he was approached by a representative from the Government's Fuel Economy Advisors scheme. Mr Winfield quickly recognised that he had nothing to lose and plenty to gain by putting drivers through the SAFED scheme in addition to their

routine training, not least because Winfield was in the running for a National Training Award.

Of the 18 drivers employed by Winfield, 16 have so far undergone SAFED training. Despite a few anomalies in the before-and-after fuel consumption figures (with both 13-tonne trucks oddly failing to show any improvement, for example), Mr Winfield is very pleased with the results. "We have seen an average 3.2% improvement in fuel economy, even before seasonal adjustments have been factored in to the calculations," he says. He estimates that SAFED training could cut the company's annual diesel bill by as much as £6,500. However, he recognises that much depends on maintaining driver interest in fuel efficiency. The company has therefore introduced a bonus scheme linked to mpg performance and appointed a Fuel Champion, as well as providing refresher training courses.

View from a Driver's Perspective

Martin Harley has been a professional truck driver for the past 13 years, starting on rigid vehicles before progressing to artics. Now he drives a V-registered MAN tractor for Winfield Transport, sometimes pulling a flat-bed trailer, sometimes a curtain-sided trailer. Payload ranges from as little as 2 tonnes to as much as 20 tonnes, carrying anything from steel to bricks.

On his one-day SAFED training, Mr Harley was particularly impressed by the instructor's advice on cutting out unnecessary gearshifting with the MAN's eight-speed, range-change synchromesh gearbox. "On the first trip, before training, I made 109 gear changes. By taking the instructor's advice, I was able to cut that number to only 70 over exactly the same route," remembers Mr Harley. His before-and-after fuel consumption figures are even more impressive. The Winfield fuel consumption records show that in the four weeks before SAFED training, Mr Harley's MAN tractor averaged a respectable 7.95 mpg. In the four weeks after training, that average leapt to 8.92 mpg, an improvement of over 12%. "Our company bonus scheme means that with my fuel-economy improvement I am earning an extra £13 per week," says Mr Harley. "Not only that but I am driving in a more relaxed way, although I am more aware than ever of road hazards."

4.2 AA

Benefits highlighted:

- ➔ Fuel savings between 1.9% and 5%
- ➔ Training day fuel consumption improvements as high as 17%
- ➔ Training relevant to modern vehicle technology

The Company

The AA was, until recently, part of the Centrica Group that was formed out of British Gas. It is one of the two biggest roadside repair and recovery organisations in the UK, operating 4,000 vans and 300 recovery vehicles, mainly Renault Midlum and Iveco Daily trucks.

Jonathan York was the Centrica Transport Manager responsible for the AA recovery fleet. Mr York previously managed the 80 LPG tankers run by British Gas's LP Gas Division, where he gained first-hand experience of the value of driver training and development. The AA's recovery vehicles at 7.5, 10 and 12 tonne gvw are exempt from the operator-licensing regulations that apply to most trucks of this weight, but Mr York points out that Centrica runs the recovery fleet as if it were O-licensed. "We are determined to stay ahead of the competition by using industry best practice," he says.

Using SAFED

The annual fuel bill for the AA's fleet of recovery vehicles was in the region of £6 million. Monitoring of individual vehicle fuel consumption over a 12-month period revealed a huge difference between the best and the worst performance. Like Mr York, Centrica's top management was keen to do everything possible to improve fuel efficiency across the fleet, not simply in the interests of cost saving, but also to minimise impact on the environment. Mr York looked carefully at vehicle specification, until he was satisfied it was at its optimum. As he points out, "We can't do a lot with the aerodynamics of a recovery vehicle." Attention then focused on driver training.

When the SAFED scheme started in 2003, Mr York was keen to take advantage of it, but timing was crucial. AA recovery vehicles are double-shifted, often in use 22 hours per day, with winter months being the busiest because of the adverse winter climate and the summer almost as busy with the migration south by motorists.

Eight AA recovery patrol drivers attended a one-day SAFED training course in February 2004. Mr York was favourably impressed with the results. Fuel consumption records for the four weeks before the training and the four weeks afterwards revealed that six of the drivers reduced their fuel consumption by between 1.9% and 5%. On the day, fuel consumption improvements as high as 17% were recorded. "A 9% fuel consumption improvement on just one of our vehicles would cut carbon dioxide emissions to the atmosphere by 4.27 tonnes per year*," Mr York observes. "We're going to put another 16 lead drivers through the SAFED course, which we'll follow up with in-house driver training, and we'll continue to monitor fuel use."

"A 9% fuel consumption improvement on just one of our vehicles would cut carbon dioxide emissions to the atmosphere by 4.27 tonnes per year."

Jonathan York, AA

View from a Driver's Perspective

Steve Fitch has been an AA recovery patrolman for five-and-a-half years, and now drives a 220hp Renault Midlum. In the four weeks following his SAFED course, Mr Fitch's average fuel consumption fell by 5%.

Mr Fitch is particularly impressed with the applicability of his SAFED training to modern vehicles such as his Renault Midlum. "I've been on driver training courses before and the instructors have really not been up-to-date with modern vehicle technology," he recalls. "The SAFED instructor was different. His advice on gear changing was especially helpful. I'm block-shifting a lot now, especially with an unladen vehicle. I think everyone on the course got something out of it. I enjoyed it and would recommend it to anyone," he says.

* This is based on 2.6 tonnes of carbon dioxide produced for every thousand litres of diesel used.

5 Case Studies on Tanker and Tipper Vehicles

- 5.1 DW Weaver Group
- 5.2 Robert Wiseman Dairies
- 5.3 Lewis Tankers Ltd



5.1 DW Weaver Group

Benefits highlighted:

- ➔ Fuel savings
- ➔ Drivers taking better care of vehicles
- ➔ Managers gaining a better insight into a driver's job
- ➔ Less stress for drivers

The Company

David Weaver started his general haulage business over 40 years ago at a farm in Endon, Stoke-on-Trent, Staffordshire, with just one truck. Today, the Endon depot is one of five in the DW Weaver Group, between them operating a substantial fleet of around 150 trucks, both articulated and rigid. In addition to being one of the UK's largest independent milk hauliers, the DW Weaver Group encompasses the AJ Weaver fleet of 15 rigid tipper trucks, six-wheelers and eight-wheelers, used mainly to carry aggregates to farms and other businesses in the vicinity.

To avoid the risk of contamination from other food products, Weaver's tankers carry nothing but milk, milk products and water. Tank capacities range from 25,000 to 29,000 litres. Vehicles and equipment are maintained and repaired in Weaver's own workshops. The firm prides itself on its ability to remain operational around the clock, 365-days-a-year, pointing out that milk has to be collected every day without fail.

Using SAFED

The DW Weaver Group is a member of the Freight Transport Association (FTA), and its AJ Weaver tipper division is a member of the Road Haulage Association (RHA). It was through the RHA that the firm's highly experienced Training Manager, Graham Machin, first heard about SAFED. The more he learned about the scheme, the more interested he became, and he completed a two-day course to become a SAFED instructor. Since then, Mr Machin has SAFED-trained around 30 of Weaver's drivers, and he remains enthusiastic about the scheme, referring to it as 'the best

thing that has ever happened to this industry'. "We employ about 120 drivers and we are hoping to be able to get all of them through the SAFED scheme." he says.

What impresses Mr Machin most about the SAFED training is not simply the scale of the fuel savings that can result from it, but also the knock-on benefits, such as lower vehicle maintenance costs and better communication between drivers and managers. "All our tachograph charts are analysed daily. On some of our tipper work, a truck can typically use about 30 litres of diesel a day. Following SAFED training, some drivers are using between 6 and 8 litres less a day. And it doesn't end there," says Mr Machin. "Drivers are also being educated to take better care of their vehicles, while managers – even those who don't drive trucks – are gaining a better understanding of what a driver's job involves." he adds.

"Following SAFED training, some drivers are using between 6 and 8 litres less a day. And it doesn't end there..."

Graham Machin, DW Weaver Group

View from a Driver's Perspective

John Thomson began his truck-driving career some eight years ago with a 7.5-tonne vehicle. Since then, he has graduated to heavier rigid vehicles and finally to articulated trucks. Mr Thomson now drives one of DW Weaver's 6x2 Foden tractive units, coupled to a tanker semi-trailer which is used to collect milk and deliver it to dairies. The unit's 405hp Cummins M11 engine drives through an eight-speed synchromesh gearbox.

Mr Thomson remembers his SAFED training day with Graham Machin as 'very enlightening', with advice on the use of mirrors, block-shifting gears and keeping a low engine speed to save fuel making the strongest impression on Mr Thomson. "I thought I was a good driver to start with, but now I'm certain that I'm driving better and more safely – and I feel less stressed into the bargain. Gear changing is certainly much smoother with the engine speed below 1,500rpm." he says. "Graham is a good, straight-talking teacher with an encyclopaedic knowledge of the subject." he affirms.

5.2 Robert Wiseman Dairies

Benefits highlighted:

- ➡ Potential safety and fuel benefits
- ➡ Dramatically fewer gear changes after training

The Company

Robert Wiseman sold his South Lanarkshire farmland in 1947 to become a milk distributor in East Kilbride. As the new town grew, so did Robert Wiseman Dairies, graduating from a horse and cart to electric milk floats in the process. In the 1970s, the firm's management recognised that doorstep delivery of milk was in decline, and shifted the company's focus to supplying retailers. That foresight has been rewarded by spectacular growth. Today, there are more than 1,000 commercial vehicles in the Robert Wiseman own-account fleet, mostly articulated and rigid trucks, used to distribute milk throughout the UK. The company now has a 20% share of the UK milk distribution market. It employs over 3,000 people, roughly half of whom are commercial vehicle drivers, and has an annual turnover of around £400 million.

Using SAFED

A comprehensive series of training programmes was well established at Robert Wiseman Dairies even before the SAFED scheme came along. The company employs ten Driving Standards Agency-approved instructors and prides itself on taking learner drivers up to and beyond the DSA test standard. Wiseman offers continuous professional development of drivers, including training in the use of sophisticated milk-tanker loading and unloading equipment, and in minimising the risk of articulated vehicle roll-overs.

Wiseman's Driver Training Manager, George Nicoll, first heard of SAFED in 2003 and was interested enough to put two of the company's instructors through the SAFED instructor's course straight away. So positive was their feedback that the rest of Wiseman's driving instructors were subsequently put through the course, and two are now qualified as senior SAFED instructors. To date, about 40 Wiseman drivers have had a day's SAFED training and, according to Mr Nicoll, many others are 'queuing up to follow suit'. Mr Nicoll is very

complimentary about the scheme. "The organisation of SAFED is fantastic," he says. "All my questions have been answered promptly and without complaint. The feedback from our drivers has been good. What the scheme does is to formalise training, making it that bit more special."

The nature of the work carried out by Wiseman trucks means that average fuel consumption figures are often high, not least because engines are used to drive ancillary equipment, such as pumps, power take-offs and refrigeration units. The potential for saving fuel through driver training is an important consideration for Mr Nicoll and his colleagues, but the potential safety benefits are equally important.

View from a Driver's Perspective

Adam Gibbs is something of a celebrity in the road transport industry. In 2003, at the age of 18, he became the youngest driver in the UK with a C+E vocational licence (for articulated goods vehicles), whereas the normal minimum age limit for a C+E licence is 21. He passed his test first time, just one year after joining the Young Driver Scheme administered by Skills for Logistics. Mr Gibbs has worked for Wiseman since he was 17 and is based at the company's Avonmouth depot near Bristol. About a month after passing his C+E test, Mr Gibbs was amongst a group of Wiseman drivers to undergo the one-day SAFED training. "It was a good course to do," says Mr Gibbs. "I learned a lot from it – lots of little things that tied in with my previous training. All the other drivers on the course had been driving much longer than me – for 15 years or more – and so instruction on things like block-shifting was less familiar to them. Their gear-change count dropped dramatically after training. Mine fell too, but not by so much."

Mr Gibbs' normal work routine involves driving a Volvo FM12 tractor coupled to a refrigerated tri-axle semi-trailer, carrying bottled milk to distribution centres in South Wales. The block-shifting technique he learned on the SAFED course can be used to good effect on the Volvo's eight-speed synchromesh gearbox. "I definitely put the technique into practice most of the time," he reports, "Not only in the truck, but also when I'm driving my car."

5.3 Lewis Tankers Ltd

Benefits highlighted:

- ➡ Initial fuel savings of at least 3%
- ➡ Potential savings of £54,000 per year
- ➡ A useful addition to the new driver induction course
- ➡ Drivers making fuel savings in their own cars

The Company

The head office and main operational base of Lewis Tankers Ltd, part of the Simon Bulk Liquid and Gas Network, is in Hensall near Goole in the East Riding of Yorkshire. The company also has bases in Scotland, at Manchester's Trafford Park, in Leeds, London and South Shields, Tyne and Wear. However, the 85 articulated tanker trucks it operates are as likely to be found collecting loads from UK oil and gas terminals belonging to blue-chip, oil and gas industry customers, such as BP and ExxonMobil.

Most of Lewis Tankers' tractive units are 380 or 420hp Volvo FM12s, all 6x2s. Running alongside them are MAN tractors with similar power ratings, including some of the latest TG-A models and a few Iveco Stralis tractors. The company is keen to make the most of information technology to enhance operational efficiency, and uses Volvo's 'Dynafleet' on-board data-gathering equipment, as well as some of the latest MAN telematics systems. Occasional double-shift work with part of the fleet means that Lewis Tankers at present employs 92 full-time truck drivers. Vehicles are repaired and maintained in the company's own workshops.

Using SAFED

Roy Henderson joined Lewis Tankers in December 2003 as a Driver Trainer after a ten-year stint as an HGV driving instructor, primarily on getting trainees through the statutory test. At Lewis Tankers his brief is more extensive, including a range of 'hands-on' training. Mr Henderson recalls that the subject of SAFED driver training cropped up in his job interview with the operations manager, Barry Lewis. Mr Lewis was already considering how best to take advantage

of the scheme and was encouraged to find that Mr Henderson was familiar with it. It was decided that he would work with the current Driver Trainer, Gary Benn.

"When I was offered the job with Lewis Tankers, Mr Lewis decided its SAFED training would be delivered by me," says Mr Henderson. "It's a multi-purpose scheme, so now we use it in conjunction with our induction course for new and existing drivers. Almost half our fleet are now SAFED trained. We plan to use the same format to train the rest of our drivers," he adds. Even though Mr Henderson left the company in July this year, Gary Benn is hoping to take a SAFED instructor's course early in the new year. One of the significant benefits as a result of the training is before-and-after fuel consumption data showing an average improvement of at least 3%. Mr Benn says "We spend around £1.8 million per year on fuel, we are hoping that SAFED training will save us at least £54,000 per year."

View from a Driver's Perspective

Five years ago Liam Clark was a soldier in the British Army, where he trained for and gained his truck driving licence at the age of 18. Now Mr Clark drives a 380hp Volvo FM12 for Lewis Tankers on sub-contract to Freightliner in Leeds, West Yorkshire. He typically makes two drops a day within a 70-mile radius of the Leeds depot.

Before joining Lewis Tankers, Mr Clark worked for a driver agency where he first went through a SAFED training course, an experience he looks back on as 'a bit nerve-wracking'. All drivers joining Lewis Tankers go through a two-day induction course, part of which involves SAFED training. Mr Clark remembers being much less nervous on this occasion and says that putting into practice the principles he learned – both in his truck and in his own car – has thoroughly convinced him of the value of SAFED training. "You definitely drive differently as a result," he says. "In the truck, the training taught me how easy it is to keep the rev-counter in the green zone, where the engine is at its most fuel-efficient, and the benefits of block-shifting with the Volvo's eight-speed synchromesh gearbox. On top of this, I now drive my car in a more relaxed way. I live some way from work and am noticing savings on my own fuel bills," he adds.

6 Case Study on a Driver Agency

→ 6.1 Fleetmaster



6.1 Fleetmaster

Benefits highlighted:

- ➔ Driver retention enhanced
- ➔ Fuel economy on average improved by 9%
- ➔ Training scheme enhances agency's status with large public limited companies

The Company

Kevin Brooke and John Briggs used to work side-by-side running the driver agency side of a large multinational temporary-staff organisation. In January 2001, however, they both reached the same conclusion: that working for themselves was a challenge they were ready to face. They therefore set up Fleetmaster as an independent driver agency, originally based solely in Batley, West Yorkshire, but now with sites in Leeds, Knottingley and Warrington, Cheshire.

Using SAFED

Kevin Brooke, Managing Director of Fleetmaster, is determined that driver quality will remain one of the firm's core values. Consequently, he jumped at the chance to become involved in SAFED driver training from its early days. "We have about 150 LGV drivers on our books, although the number naturally varies from season to season," explains Mr Brooke. "We also employ three full-time driver trainers and sub-contract training to three others, each of them trained to deliver SAFED courses."

Fleetmaster has now put almost 300 drivers through a one-day SAFED training course, around 60 of whom are on the firm's ever-growing list of agency drivers.

Experience with SAFED

Mr Brooke emphasises that for a business such as Fleetmaster there are definite business benefits to having SAFED training.

"We work for many large public limited companies and we know that having SAFED training is well received by our clients." he says. "SAFED has certainly helped our driver retention. We are now getting drivers coming to us from other agencies because they have heard about our commitment to training. Of course, we can only measure the impact on fuel consumption on the day of training, but our figures show an average improvement of around 9%. I maintain that a good agency driver is equal to a good full-time employee driver, because of the wide variety of tasks they have to tackle. We originally saw SAFED as a means of driver development. We knew the programme was originally due to run for only one year, but I am very pleased to see that it is now going forward."

"We work for many large public limited companies and we know that having SAFED training is well received by our clients."

Kevin Brooke, Fleetmaster

7 Sustaining the Benefits Achieved Under SAFED

As the case studies prove, completing the SAFED training course can help to achieve a wide variety of benefits. Companies report significant fuel savings, a substantial reduction in the number of gear changes, and noticeable improvements in safety performance immediately after the training. However, to get the most from the training, some effort is needed to sustain these benefits in the longer term. This section outlines the approach recommended by SAFED.

7.1 Safety Improvements

Most companies recognise the importance of focusing on safety and have systems in place to investigate incidents or accidents, so that lessons can be learned to prevent a recurrence.

Under the SAFED programme, records have shown, however, a wide variation in the way companies involve their drivers in their safety programmes and carry out performance monitoring.

It is recommended that companies:

- ➡ Consider quarterly forums that give drivers and other operational staff a greater involvement and sense of identity with safety issues
- ➡ Communicate safety statistics to all operational staff. At a minimum, the safety key performance indicators should be displayed around the workplace

7.2 Fuel Efficiency Improvements

To achieve a sustainable improvement in fuel efficiency, companies need to create an environment in which fuel saving is recognised as an on-going and important issue. This will involve the management, monitoring and commitment of all relevant individuals. As fuel costs generally account for around 30% of a company's operating costs, any savings will contribute directly to the overall profitability of the company. This will make it worthwhile allocating appropriate resources to the task of reducing fuel costs.

Once this long-term thinking is in place and an organisation has committed itself to creating an improvement culture, adopting the following practices should bring longer-term savings.

Include and Involve all Relevant Personnel

In almost all cases, the first action needed is to include and involve the operational staff. All relevant personnel, particularly drivers, must feel included in any initiative and should be communicated with at least monthly. Make them fully aware of the company's overall performance, as well as their individual performance, so that they feel part of a team and can see the part they have played in the company's achievement. Remember to acknowledge and celebrate any success with the whole team.

Set Realistic Improvement Targets

Examine current fuel efficiency performance and use it to set realistic improvement targets. A series of 'bite size' improvements that can be achieved fairly easily is better than targeting a massive improvement in one hit.

Work with Data

Collect fuel consumption data, analyse the results (taking into account other factors, such as new vehicles, weather conditions and so on), and take action according to what is found. These three activities are essential if any fuel efficiency programme is to achieve and maintain a substantial improvement and reach the targeted savings.

Collect relevant data

The data must be accurate and timely. Most companies have several sources of relevant data: on-board computers; telematics systems; fuel dispensing equipment; fuel card reports; and driver daily input sheets.

Undertake analysis

Analysis needs to be carried out at a level appropriate to the complexity of the operation.

The driver usually has the greatest impact on fuel efficiency. Unless a vehicle is driven by the same driver for 100% of the time, then analysis needs to

separate driver performance from the performance of the vehicle. Understanding and improving driver performance is one of the keys to achieving lasting fuel efficiency.

A monthly average mpg figure for each vehicle will not suffice, as this will hide all the compensating errors and swings that occur during the course of the month.

Analysis of performance on a daily basis is needed to fully understand the performance of the vehicle and the driver.

Analyse trends

Trend analysis is very important, and should continue month on month, year on year. It is important to know how current performance compares with that of the past, and plays an important role in setting targets.

Look at outside influences

Focus on the figures and get to fully understand what affects them. Fuel consumption will vary according to vehicle, route taken, weather conditions, weight, operating profile and so on. Companies should try to understand why these differences exist and how they affect the consumption figures, before setting targets or planning action.

Take action!

Once a sound and complete analysis routine is established, move into the action phase. Draw up a list of possible actions and cost each one. Look to implement the 'no-cost' and 'low-cost' actions first.

Where significant cost is involved, try to test potential improvement measures before committing to the total cost. It may be possible to try out a measure on one vehicle that analysis has highlighted as having a poor performance before rolling out the idea across the whole fleet. A controlled test is important in assessing the likely benefits an action may bring. Make sure that data collection and analysis are adequate to enable comparison between a test case and the control group.

Look beyond the driver

Although the driver has a major impact on fuel efficiency, there are many non-driver actions that have the potential to improve fuel efficiency. Free Freight Best Practice publications can help in the hunt for

ideas. Some particularly relevant publications include:

- ➔ The Fleet Performance Management Tool, and its accompanying CD-ROM
- ➔ Fuel Saving Tips – your essential pocket guide to saving fuel and money

For details on how to get hold of these and other transport-related publications, please refer to Section 8, 'Moving On'.

Consider an incentive scheme

An incentive scheme for drivers may be worthwhile. The incentive scheme should take in both fuel efficiency and safety performance, but should be there to encourage self-improvement and should not be viewed as threatening. For further information about the subject please see the following Freight Best Practice publications:

- ➔ 'Proactive Driver Performance Management Keeps Fuel Efficiency on Track' – Thorntons plc
- ➔ 'Expert Advice Helps Cut Costs' – Denholm Industrial Services Ltd
- ➔ 'BOC Ltd Fuel Champion Saves Equivalent of 50 Trailer Loads of Carbon Dioxide a year' – BOC Ltd

7.3 Learn from Others

Those new to data collection and analysis may learn from the following examples of data collected from companies that have received SAFED training.

Figure 1 shows the benefits of SAFED training as measured for six drivers. Although there are variations in the mpg achieved by each driver, all record improvements following training.

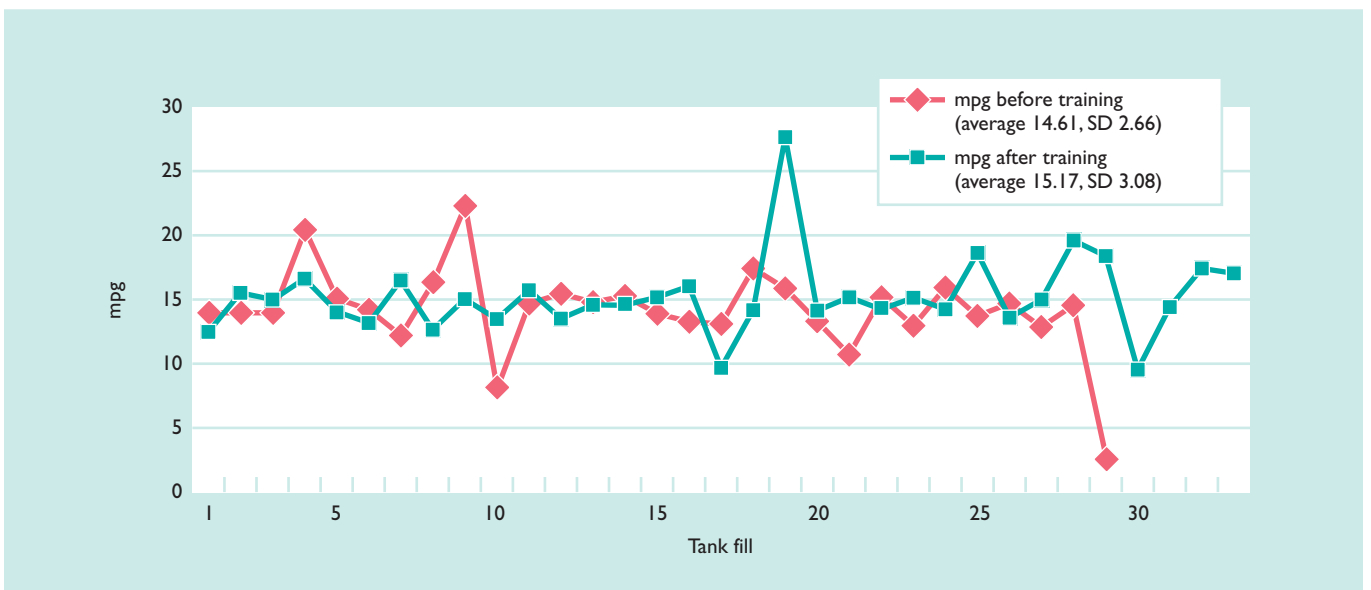
The mpg values in Figure 1 come from average fuel consumption based on a number of odometer and fuel filling readings. For example, the fuel data collected for driver 1 are shown in Figure 2, and show how an average figure hides the compensating errors and swings.

Partial tank filling will play a significant role in the rise and fall of the mpg figures. Collecting and analysing more detailed data allow better understanding of the performance of the vehicle and the driver.

Figure 1 Example fuel saving benefits for six drivers and their vehicles



Figure 2 Data collected for driver 1, showing variability in mpg per tank fill

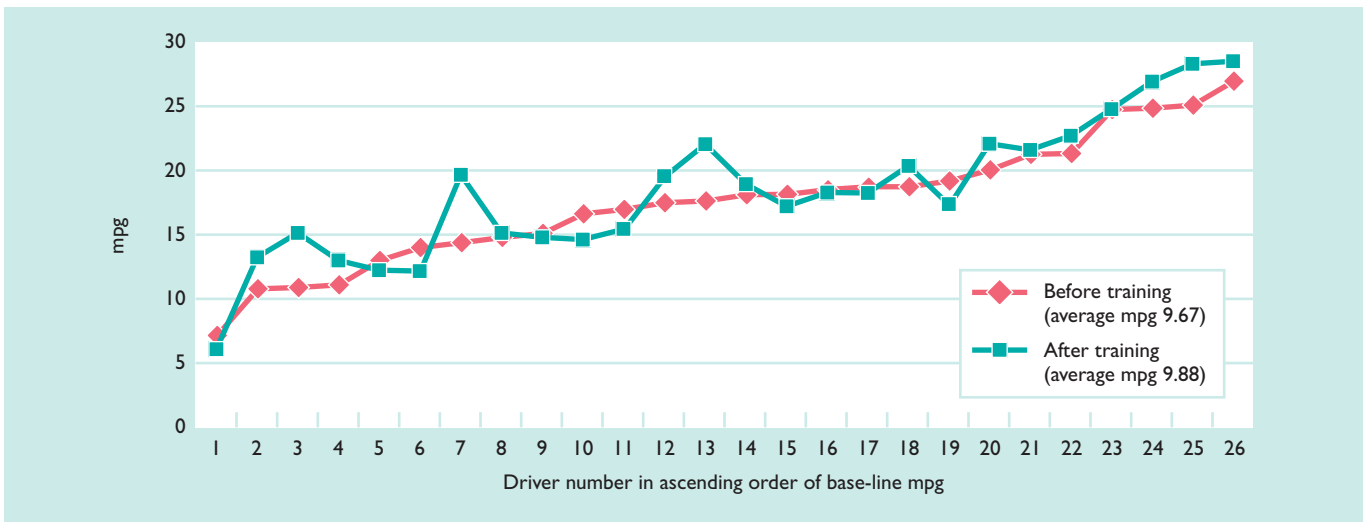


The standard deviation in the apparent mpg provides a useful aid in monitoring performance. Base-line mpg data for 241 vehicles from the same company record wide variations in standard deviation, from as low as 0.69 mpg to values higher than the average mpg. In Figure 2, the standard deviations were 2.66 mpg and 3.08 mpg for before and after SAFED training respectively. High standard deviations need to be investigated, to determine the underlying causes, particularly if company policy is to routinely fill the fuel tank.

There can be a wide variation in fuel consumption between individual drivers and vehicles. In Figure 3 (see overleaf), the base-line data relating to before

SAFED training has been sorted into increasing order of mpg. Different vehicles, different routes, different operating profiles and changes in the weather will all influence the base-line mpg. In Figure 3, the data for after SAFED training show variable benefits with respect to fuel economy, where notable mpg increases in some cases were offset by decreases in others. Overall, there was a net gain of 0.21 mpg for this set of data which indicates there is potential for further gains by focusing on the underlying reasons for those data sets that are disappointing.

Figure 3 Variation in average mpg for individual drivers and vehicles



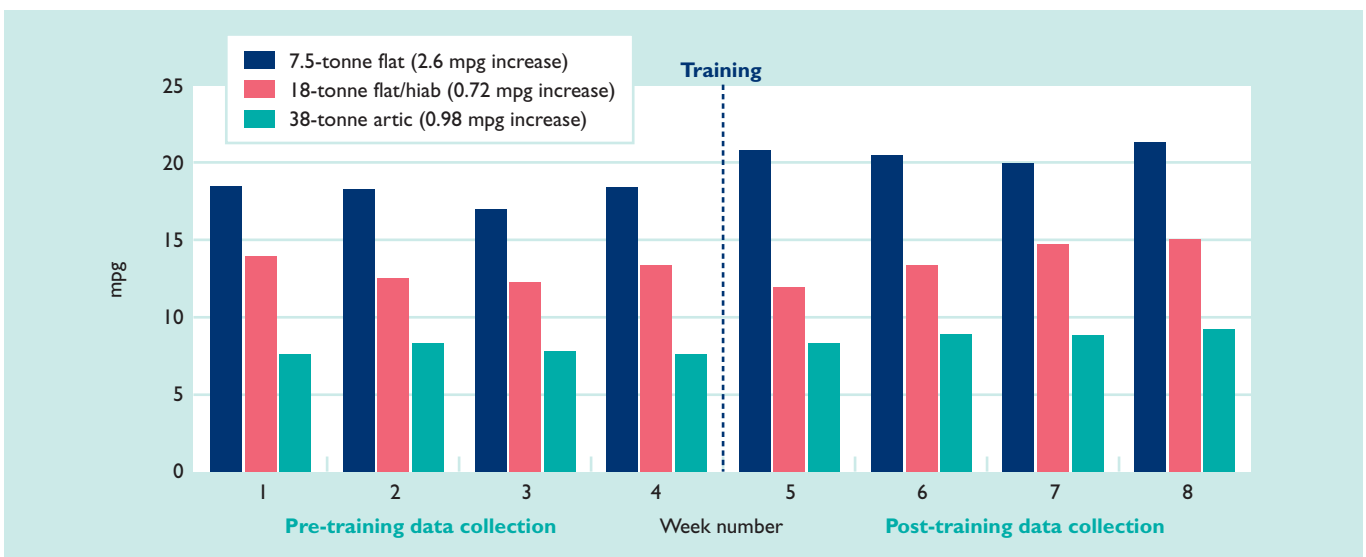
Many companies operate a range of vehicle types and sizes. Figure 4 shows selected data for three vehicle weights, each of which achieved average mpg improvements after SAFED training. The base-line data were collected in a four-week period towards the end of 2003. After a gap of eight weeks, during which drivers received SAFED training, data were collected over a further four-week period (Weeks 5 to 8 on the graph). The benefits are most obvious for the 7.5 tonne vehicle, where all the post-SAFED training mpg figures were higher than base-line. For the larger vehicles, there are cases where the average mpg 'before' SAFED training was higher than some for 'after' training. In analysing data such as these, a company needs to understand and consider outside factors, for example, weather and operational seasonality.

7.4 Summary

Aim to achieve a total understanding of fuel consumption, what affects it and potential ways to improve current performance. Work to create an improvement culture within the organisation and aim to build a determination to improve self-performance amongst relevant personnel.

Ensure accurate data collection, sound and complete analysis (not just looking at an average mpg), and appropriate implementation of relevant actions. Fully cost any actions before implementation. Get to understand trends and seasonality, and determine vehicle and driver performance independently of each other. Focus from the top of the company downwards: everybody needs to understand the importance of fuel efficiency and what they can do about it, as well as being motivated to take action and improve their individual performance.

Figure 4 Comparative mpg for three vehicle weights before and after SAFED training



8 Moving On

There are many sources of further information that can help you take the next steps towards SAFED training and maximising the resulting benefits.

8.1 SAFED

Funded Training

SAFED training for drivers and for training instructors is available on a funded basis in England in the aggregates and van sectors. The training is sponsored by the Department for Transport until March 2007. To experience the benefits of SAFED training on a funded basis sign up as soon as possible by contacting one of the following organisations who are appointed to manage each specific scheme.

SAFED in the Aggregates Sector

Website: www.safedaggregates.org.uk
Email: info@safedaggregates.org.uk
Freephone: 0800 783 7434

SAFED in the Van Sector

Website: www.safed.org.uk and click on the SAFED for Vans logo
Email: vans@safed.org.uk
Hotline: 0870 190 8440

SAFED on a Commercial Basis

If you wish to subscribe to SAFED training and funding is not available, then training can be provided on a commercial basis by trained instructors principally based throughout England. To locate a commercial instructor, visit www.safed.org.uk

8.2 Freight Best Practice

The Freight Best Practice programme offers authoritative, independent and practical information and advice to help English companies improve the cost-effectiveness and environmental performance of their transport operations. This information is disseminated through publications, DVDs and software, together with seminars, workshops and other events. For more information, please contact:

Freight Best Practice
Hotline: 0845 877 0 877
E-mail: info@freightbestpractice.org.uk
Web site: www.freightbestpractice.org.uk

8.3 Government Information

As well as the Freight Best Practice programme, help is available from other Government sources.

Department for Transport
Great Minster House
76 Marsham Street
London
SW1P 4DR

Tel: 020 7944 8300
Web site: www.dft.gov.uk

8.4 Driver Training and Safety

Health & Safety Executive
Document: 'Reducing at work road traffic incidents'
www.hse.gov.uk/roadsafety/traffic1.pdf
Document: 'Driving at work – managing work-related road safety'
www.hse.gov.uk/pubns/indg382.pdf

Occupational Road Safety Alliance
Tel: 0121 248 2095
E-mail: furtherinfo@orsa.org.uk
Web site: www.orsa.org.uk

The Royal Society for the Prevention of Accidents (RoSPA)
RoSPA House
Edgbaston Park
353 Bristol Road
Edgbaston
Birmingham
B5 7ST

Tel: 0121 248 2000
Fax: 0121 248 2001
E-mail: help@rospa.com
Web site: www.rospa.co.uk/roadsafe.htm

Brake
PO Box 548
Huddersfield
HD1 2XZ

Tel: 01484 559909
Fax: 01484 559983
E-mail: brake@brake.org.uk
Web site: www.brake.org.uk

Freight Best Practice publications, including those listed below, can be obtained **FREE** of charge by calling the **Hotline** on **0845 877 0 877**. Alternatively, they can be downloaded from the website **www.freightbestpractice.org.uk**

Saving Fuel



Fuel Saving Tips

This handy pocket book is ideal for drivers and managers looking for simple ways to reduce fuel consumption.

Operational Efficiency



Make Back-loading Work for You

This guide shows you how to find and choose backloads in order to improve your fleet efficiency.

Developing Skills



SAFED for HGVs: A Guide to Safe and Fuel Efficient Driving for HGVs

This guide outlines the elements of the Safe and Fuel Efficient Driving (SAFED) scheme and explains the content of the one-day SAFED training course.

Performance Management



Fleet Performance Management Tool

This PC-based spreadsheet tool has been designed to help fleet operators improve their operational efficiency using Key Performance Indicators to measure and manage performance. The KPIs include costs, operational, service, compliance and maintenance.

Equipment and Systems



Concise Guide to Computerised Vehicle Routing and Scheduling (CVRS)

This quick guide shows the latest routing and scheduling software products and developments.

Public Sector



Freight Quality Partnership Guide

This guide provides step-by-step guidance on how to set up and run an effective Freight Quality Partnership.

