

RESCUE ME

Stationary for most of their working lives, then suddenly driven hard for a quarter of an hour, fire engines' operational duty tends toward extremes. Steve Banner investigates how they are kept ready for action

The eighth largest county in England by area, mostly flat, mainly rural, yet home to the giant container port of Felixstowe, Suffolk presents something of a challenge to anybody attempting to organise the maintenance of its fire appliances.

Ipswich-based Suffolk Fire and Rescue Service runs 47, including a pair of aerial platforms, spread across 35 stations. Only four of those stations are manned full-time, round the clock.

"We rely primarily on two mobile technicians in a very well-equipped van who go out to the vehicles to carry out safety inspections and undertake any maintenance and repairs that are required," says fleet and equipment manager Neil Elmy. "They visit the busy stations every 12 weeks and the less-busy every 16 weeks."

Their starting point is the DVSA's Heavy Goods Vehicle Inspection Manual, but they add their own interpretations to take into account the particular requirements of fire engines.

"Remember that fire brigades are not obliged to hold O licences or carry out

six-week statutory inspections," Elmy points out.

Fire crews perform regular walk-around checks themselves, and report any defects. Each appliance is driven to the service's central workshop annually for a thorough overhaul.

If fault codes come up that cannot be cleared, then the local dealer is asked to help. "Otherwise, we try to do everything in-house. In an emergency, our drivers often have to corner on the door handles, so we pay especially close attention to the tyres - we tend to change them once they've reached a tread depth of 3mm, maybe a bit more - and to the brakes," he adds.

Suffolk primarily favours 12- to 15-tonne Volvos - "only OE replacement parts are fitted," stresses Elmy - but runs other makes. They include three 14-tonne Mercedes-Benz Unimogs acquired last spring and bodied by John Dennis Coachbuilders.

Most of Suffolk's appliances are eight to ten years old. "The oldest we've got is 16 years old and our target life is 15 years," he says.

So how does he keep track

of what's happening so far as maintenance is concerned? "I use a wall chart and a spreadsheet," he replies. He concedes that it might seem old-fashioned, but adds that he has yet to find a fleet maintenance software programme that can encompass everything fitted to a fire appliance. "As well as the vehicle itself, you are talking about items such as ladders - they have to be tested once a year - and cutting gear."

HARD-TO-FIND SOFTWARE

According to Rory Coulter, head of logistics at Surrey Fire and Rescue Service, a fleet of fire appliances can involve 18,000 different pieces of equipment. He agrees that it is difficult to find a program that precisely matches a fire brigade fleet's needs. "All you can do is start with something that doesn't really have what you've got and try to develop it," he observes.

With 26 fire stations and its headquarters and central workshop in Reigate, Surrey Fire and Rescue Service's



approach to maintaining its 40-plus appliance fleet is similar to Suffolk's. "We have a ten-week inspection regime, though," Coulter clarifies. Its fleet roster includes a 42m aerial platform, one of the tallest in the country.

Surrey, too, employs a mobile maintenance team, says Coulter, and operates a rota to provide out-of-hours cover. It also has arrangements in place so that any problems that arise while an appliance is attending an incident are dealt with promptly.

Maintenance costs money, of course, and the public sector remains hemmed in by austerity. Surrey is exploring ways in which it can cooperate with both East Sussex Fire and Rescue and West Sussex Fire and Rescue so far as service and repair arrangements are concerned. "We want to drive down costs," Coulter states.

Surrey runs over 30 Scania's, including a recently acquired training vehicle based on a P320 DB4x2 18-tonner which can also be deployed as an incident support unit. "We've got the necessary Scania diagnostics equipment, and we've got technicians who are trained to use it," he says. "So far as maintenance is concerned, we usually only use the dealer if warranty work is involved."

SUPPORT OPTIONS

All of the key suppliers to UK county fire brigades, including Rosenbauer - recent winner of an order for 15 12-tonne Compact Line appliances from Cornwall Fire and Rescue - as well as Angloco, Terberg DTS and Carmichael, can deliver aftersales support packages.

UK municipal brigades tend not to rely too heavily on them, however. They take advantage of well-equipped workshops that often look after other public sector vehicles, including everything from police cars to gritters, in order to contain costs, says Simon Pitt, business development manager at Carmichael Support Services in Worcester.

By contrast, overseas customers may require back-up packages that can last anywhere from several years to the life of the vehicle. "That can involve setting up a local engineering base and training local people," he says. Carmichael supplies vehicles, including airport crash tenders, to locations as far afield as the Seychelles and Trinidad.

"The UK municipal brigades tend to rely on their own staff for regular maintenance," says Alan Walmsley, group service manager at Emergency

One. If additional back-up is required, however, or a complex repair has to be undertaken, then the Cumnock, Ayrshire fire appliance builder has a team of mobile engineers that operates nationwide. Emergency One has particular expertise in an area where some brigades may require extra help: looking after turntable ladders, aerial platforms and combined aerial rescue pumps. It also offers an accident damage repair service.

Coulter at Surrey says that it is unlikely that a brigade workshop would ever dismantle an engine or a gearbox. "If we ever had an engine failure then we'd get an exchange engine in," he observes.

"The Allison transmissions we use are bulletproof anyway," he adds. "We rarely have a problem with them." Fully-automatic Allison units are used by fire fleets and are offered in Volvo FLs and FEs, for example, as an alternative to Volvo's I-Shift automated box.

Concludes Pitt: "The trucks that appliances are based on are designed to be good for one million miles, but often won't do a tenth of that during their life as fire and rescue vehicles." **TE**

