Winning *formula*

Attention to detail is a quality that all good fleet engineers nurture, but McLaren Honda Formula One takes it to the limit – as transport manager Martin Boyes explained. Ian Norwell reports

The term 'time-critical' applies to almost anything moving on the back of a truck these days. The label 'perishable' adds a piquant flavour, but 'JIT' (just in time), used as often as it is, is almost a debased coinage. However, in the world of F1, non-arrival at a race track is simply not an option.

So, as McLaren Honda Formula One transport manager Martin Boyes told delegates: "Getting two cars on to the grid every time is our sole focus." And that's for 19 races in this year's calendar, including 11 fly-away events across the globe.

Boyes has been at McLaren for 15 of the team's 52 years, so he's well versed on what it takes to run a transport operation that uses 24 trucks to deliver 740 tonnes of equipment. Overseas fly-aways involve 34 tonnes of freight shipped by air, and an additional 20 tonnes by sea.

For the record, McLaren is not just an F1 team. Its technology centre in Woking is also responsible for a range of projects, including the McLaren road car – a race-ready version of which (McLaren F1GTR) took the laurels at the Le Mans 24hr this year. And anyone who has visited the Woking centre will confirm that it is a cross between a vast laboratory and a hospital – although far cleaner.

That said, carrying an iconic motor racing name, McLaren has amassed 182 grand prix wins, 155 pole positions, and 12 F1 driver's championships. Its back catalogue of drivers features a dozen world champions, including Senna, Prost, Hunt, Lauda and Hamilton. Boyes accurately described the operation as "a collision of sport, technology and entertainment".

What's special in terms of transport? In the abnormal loads industry, it is often said that the trailer drives the tractor specification. At the least, it is usually a bespoke affair, and that's certainly the case in F1. McLaren's fleet of 24 Mercedes-Benz Actros tractor units marks an association that has been going since 1995, and, although reasonably straightforward in specification, they are well loaded with safety and technology options.

FACT

24 combinations deliver 740 tonnes of equipment to each of McLaren Honda Formula One's race events

"Mercedes-Benz was the first truck maker to bring its Euro 6 offering to the market," recalled Boyes. "So we took the decision to go for early adoption, well ahead of deadline – and that rewarded us with a 6% improvement on fuel economy." As for the figures, from 2012, when the fleet was entirely Euro 5, the

"Early adoption of Euro 6 rewarded us with a 6% improvement in fuel economy"
Martin Boyes

fleet average was 8.6 mpg and average CO_2 emissions of 871kg. Now, with Euro 6 tractors throughout, current consumption is 9.4 mpg with CO_2 down to 789kg.

SOPHISTICATED TRAILERS

McLaren's trailers, meanwhile, are among the most sophisticated and complex in service. Constructed on a 13.6 metre base platform, each is in concept rather like the F1 cars it supports. "They will never be finished," said Boyes, explaining that each is effectively a prototype under constant evolution and development.

These are impressive beasts. Not only are the trailers responsible for transporting everything required for each race, but also each has been individually designed to morph into McLaren's palatial three-storey hospitality and entertainment suite – a 5.6 metre high structure, almost three times a standard trailer's width – as well as the paddock offices, race control centre and pit garage.

FACT
McLaren's palatial three-storey hospitality and entertainment suite – a 5.6 metre high structure, almost three times a standard trailer's width – evolves from the trailers that carry it to each of the race meetings

"They are all bespoke, and usually about two years in development," stated Boyes. And he added: "As well as fulfilling technical functions, they are also the showcase for our brand, which is also why we even use the same paint as the McLaren road car."

What about operations? Although the transport fleet only covered 276,000 miles in 2014, it was being chased by time pressures all the while. Immediately after arrival at each circuit, a crew of 15–20 technicians sets about the garage build, installation of the core electrical systems, and wiring the internet and communications infrastructure. In parallel, McLaren's in-house gourmet catering company Absolute Taste also begins building up the massive McLaren paddock hospitality unit, and catering for everybody from technicians to visiting royalty.

Back-to-back races, with no weekend break between, are a transport manager's nightmare. "Essentially, we need to be at the next circuit before the current race has finished," explained Boyes. "A move from Valencia to Spa means moving 1,600km in a non-stop operation using 66 drivers to keep the vehicles on the move." Breakdowns and accidents in these circumstances cannot be countenanced.

"The 2016 season has three back-to-back races scheduled," Boyes told the conference, indicating that McLaren has developed smart solutions. For example, when time is so short, race cars are often de-constructed and shipped home in Sprinter vans, with only less time-critical freight coming home by truck.

Making such logistics run smoothly is all about key performance indicators. Indeed, McLaren's obsession with measurement and reporting extends beyond the 10mm tolerance applied when parking trailers in the paddock to include monitoring fleet drivers on the road. Since safety and time pressures don't always complement one another, that's all about telematics. And, given the Mercedes-Benz connection, it's no surprise that Boyes and his team of truck drivers (he's on the fleet list, too) are long-time users of Mercedes' FleetBoard telematics.

FACT
Current fuel consumption on Euro 6 tractors: 9.4 mpg versus 8.6 mpg at Euro 5

"We have an annual driver performance challenge throughout the McLaren Honda transport fleet from May to October," explained Boyes. "It brings a healthy level of competition to the serious subjects of safety and economy." Throttle pedal movement, engine operation, idling, consumption, coasting (EcoRoll) and deceleration rate are all monitored.

Why? Because, for example, subtle use of the throttle pedal can prompt upshifts or, in appropriate terrain, EcoRoll deployment, both of which improve fuel economy. That can prove addictive, but McLaren's good drivers are using it to make savings – with a prize for the best performer at the end of the season adding to the allure.

Formula One is known for an attention to detail that borders on OCD (obsessive compulsive disorder). It needs such an approach to compete at this level. Regular fleet engineers can take the odd leaf out of this book though. A telematics system such as FleetBoard will work just as well for you as it does for McLaren. The F1 team doesn't get a special version. ■