

# NZRC first to go unleaded

**C**ompetitors in the Vantage Aluminium New Zealand Rally Championship will be the first required to use commercially available pump fuels and next season an unleaded 98 octane control fuel will be supplied to all MotorSport New Zealand Championship race classes, with the exception of the Toyota Racing Series.

“Motorsport New Zealand decided to introduce unleaded fuels for health and environmental reasons, initially at the higher-profile championship events, in order to initiate the sport’s move to commercially available fuels. Many other overseas motor sport authorities have already eliminated leaded fuel,” says technical manager Julian Leach.

The directive from MotorSport NZ is to move away from the use of leaded fuels to pump fuels by 2010.

“This season’s rally championship competitors will have the option to use any unleaded forecourt pump fuel, which includes 98 octane and E10 blends (such as ‘Force 10’ currently marketed by Gull), although the latter is currently only available at a few outlets in Auckland and Tauranga,” he says.

The MotorSport Company has already signed a supply contract with BP (NZ) Ltd, which will provide specially

coloured Ultimate 98 octane fuel at all the national race championship rounds. TRS will continue to use an E85 fuel being an 85% ethanol blend as introduced by the class last season.

A testing programme was carried out recently by David Loughlin and Randall Edgell to compare the relative performance differences between four fuels; leaded AVGAS, unleaded 98, unleaded E10 pump fuel and unleaded ELF WRF. To ensure fair comparison across the principal competitive marques within the rally championship, a Mitsubishi Evo IX and a Subaru WRX STi were used in the testing of the four fuels using rolling road dynos.

“We needed to reassure ourselves about the biofuel proposed in the ‘Biofuel Bill’ now expected to be introduced by Parliament mid year. It requires all fuel companies to have a biofuel blend available on the forecourt, although at this stage the legislation doesn’t appear to specify whether the biofuel is petrol or diesel,” Julian said.

“As expected, the testing showed variation across the fuels but with some unexpected results. The E10 blend showed power and torque potential equal to or greater than the other three fuels tested. The specialist race fuel and



avgas had very similar results, while 98 octane pump fuel had slightly lower peak output.

“We are satisfied there will be limited loss of performance switching to pump fuel. Currently E10 is only available at selected Gull stations in the upper North Island but we anticipate that the fuel will be more widely available by mid-year if people want to use it.”

Independent reports from rally car testing suggest that ethanol blend fuel consumption is up to 18% higher than AVGAS or 98 octane petrol. Competitors will need to undertake appropriate testing and carry sufficient fuel to ensure they do not run out mid competition.

## History in the making

**I**n what was New Zealand’s biggest-ever motoring event, a total of 408 cars lined up to compete in the Tasman Grand Prix at Pukekohe Park Raceway in January.

Over three days of glorious sunshine, 18,000 spectators attended the unique historic meeting. It was historic in every sense as memories of yesteryear came flooding back with a line-up of 23 Formula 5000s, 39 Formula Juniors and another 27 historic racing cars hitting the grid.

With more than 22 international cars from Denmark, Australia, America and the UK, strongly supported by the New Zealand FJ association, the racing was close and exciting.

The front-runners were the later rear-engined cars but there were equally impressive battles further down the field between the older front-engined Italian and English racers.

With speeds reaching 210km/h plus towards the end of the back straight, Pukekohe maintained its reputation as a high-speed, high-rev circuit. Some casualties had dropped valves and broken pistons to show for their efforts, as engine rebuilds become the order of the day in a hectic pit area.

The NZ FJ events, sponsored by DHL Global Logistics, were the first in a worldwide series that visits Phillip Island, Australia; Monza, Italy; Brands Hatch, England; Laguna Seca, Monterey, US; and culminates in Killarney, Ireland.

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