ERA-Riley

One of the best-known pre-Second World War drivers of Rileys was Percy Maclure. In the mid-1930s he successfully campaigned with an Ulster TT Sprite that was continually developed during his ownership. Depending on the event, the specification of the car could be altered so that it would fit into the most appropriate class. Thus a range of engines from a 1-litre four-cylinder to a six of nearly twice the size could be interchanged. After the end of the 1937 season Maclure obtained an ex-works chassis complete with André Girling independent front suspension, as raced by Rileys the previous year, and set about

building his own very special Riley racer.

He used this chassis, together with parts from his previous racing car, to produce his Maclure-Riley. At first the bodywork had the tail from the TT-type Sprite, and a Riley radiator was retained at the front. Again a certain amount of engine interchangeability was envisaged but only six-cylinder units were employed, at various capacities between

The ERA-Riley as it is today, a combination of Maclure-Riley chassis, 2-litre ERA engine and bodywork just as when raced by Geoff Richardson in the late 1940s.



1484 cc and 1986 cc, all running in a multicarburettor format. The brakes were converted from mechanical Girling items to twin leading shoe Lockheed hydraulics. Rather than go for a preselector gearbox and independent rear suspension, the normal racing Riley gearbox was retained, together with the torque tube and rigid rear axle with semi-elliptical springing.

The car ran throughout the 1938 season in this form at many venues, including Shelsley Walsh, the Grand Prix at Donington, and the International Trophy race at Brooklands, where it scored a famous victory on the simulated roadracing circuit.

Before the 1939 season, Maclure bought the White Riley, the well-known ex-Raymond Mays machine from which the ERA (English Racing Automobiles) car was developed. After one race in its new ownership the 1.5-litre supercharged engine was removed and installed in Maclure's own Riley. At the same time the TT-style bodywork was replaced by a works offset singleseater body, with head fairing and long tail, which Maclure had obtained from the factory a couple of seasons earlier. In this guise the car was now capable of competing on equal terms with the ERAs and put in some impressive performances at Crystal Palace and Brooklands, ultimately getting round the latter's Outer Circuit at close on 130 mph.

Although the Maclure-Riley survived the war, its originator regrettably did not, for he died at the very early age of 37. By 1946 the car had become part of the Reg Parnell stable and was briefly raced by Joe Ashmore, before going to the Blakes of Liverpool team run by the Reece family. For the 1947 season it was driven extensively by Sheila Darbishire in sprints, hillclimbs and in the British Empire Trophy race in the Isle of Man. Mechanically the car was still much as put together by Maclure, but the rear of the bodywork had reverted to something not unlike its 1938 format with the TT-style tail, while the front elevation now had a more modern aspect with a rounded nose cowling replacing the Riley grille. At the end of a hectic season it was sold to Geoff Richardson, Blakes taking his Type 51A Bugatti in part exchange.

The following year's outings included the International Road Race in Jersey, as well as events at Goodwood and Silverstone. The season served to highlight the problems of using a virtually standard gearbox and axle with a blown ERA engine; the transmission simply could not handle the power, and this caused Richardson's retirement from the first British Grand Prix at Silverstone while holding ninth place.

During the winter of 1948-9, Richardson rebuilt the Riley, keeping the 1.5-litre engine and

the ifs, but replacing the chassis with a special one-off frame designed jointly by himself and Rubery Owen, who built it. The Riley semielliptic springs and rear axle were abandoned in favour of irs, by swing axles, of Richardson's design, which incorporated an ERA differential housing containing a ZF self-locking differential. A new single-seater body by Richard Mead of Warwickshire was fitted, and the finished vehicle, known as the RRA (for Richardson Racing Automobile), was ready by spring of the following year. The chassis of the Maclure-Riley, complete with rear axle, some body panels and an unblown 2-litre engine, was sold off to be built into another car, but in fact remained dismantled for the next two or three decades.

From 1949 to 1955 Richardson continued to develop the RRA, with the engine first enlarged to 1750 cc, then to the full 2 litres. In its final form, this unit produced 245 bhp at 6000 rpm when blown at 18 psi from a Godfrey Roots supercharger driven at engine speed. At the time it was considered to be second in power output only to the ERA engine in the ex-Mays ERA R4D.

In 1955 the RRA was disposed of to make way for the next Richardson Racing Automobile project. The powerful supercharged engine went to J T Stewart, who installed it in the ex-Bob Gerard ERA R14B, owned these days by Donald Day. The rest of the car ultimately came into the hands of Keith Knight, who put in a 2-litre HWM Alta engine and raced the car with some success in historic meetings in the 1960s. More recently he has acquired the ifs Riley chassis, and has built this up to the same specification as the ERA-Riley that Richardson first used in Jersey in 1948, with the exception that the engine is now of 2 litres capacity. The car was completed in 1984 and has run in Vintage Sports Car Club events in the late 1980s, although it has yet to find its form. To prove that history does indeed repeat itself, the ERA-Riley stripped the pinion in the rear axle at a VSCC meeting in 1986: precisely the same mechanical malady that put Geoff Richardson out of the British GP nearly 40 years earlier.

Richardson's later projects are also worth a few lines. Having disposed of the original RRA in 1955, he set about building the RRA-Jaguar. This was based on the ex-Reg Parnell single-seater Aston Martin, which had a 2.6-litre engine reputedly producing 190 bhp. When on delivery this was found to be nearer 150 bhp, it was replaced by a special 2.4-litre Jaguar XK unit, modified to give 205 bhp. At the same time the rear chassis was converted to incorporate Girling coil spring units in place of the Aston Martin cross torsion bar system, and disc brakes were fitted all round. On its first time out, the new car

came third in a Formule Libre event at Snetterton. However, when the Connaught concern had its closing down sale, Richardson bought the B5 and raced this for a couple of seasons. The RRA-Jaguar was converted into a roadgoing twoseater with bodywork similar to the contemporary Aston Martin DB3S. Ultimately the Jaguar engine was enlarged to 3.2-litres in which form it gave 280 bhp at 7000 rpm.

The third and last RRA was a Cooper F1 chassis, bought new in 1959 and fitted with a Connaught-Alta engine in preference to the much-favoured Coventry Climax unit, which was "unaffordable" at £2500. It was sold at the end of the 1960 season and subsequently re-engined with a Buick 3.5-litre V8 motor.

ERA-Riley

Technical Specification Data

Date of origin: 1936

ENGINE

Type: ERA

Capacity: 1998 cc

No of cylinders: 6 Valve operation: ohv

Estimated power output: 225 bhp

Carburation: SU

GEARBOX

Type: Riley

No of ratios: 4

CHASSIS

Type: Riley

FRONT AXLE

Type: Riley

Suspension: 2 x Coil springs

REAR AXLE

Type: Riley

Suspension: 2 x Semi-elliptics

BRAKES

Type: Drums all round

Actuation: Hydraulic

WHEELS

Size: 16 in

Tyre Size: 550 x 16 (front)

650 x 16 (rear)

OVERALL DIMENSIONS

Length: 153 in

Wheelbase: 97.5 in

Track: 54 in (front & rear)