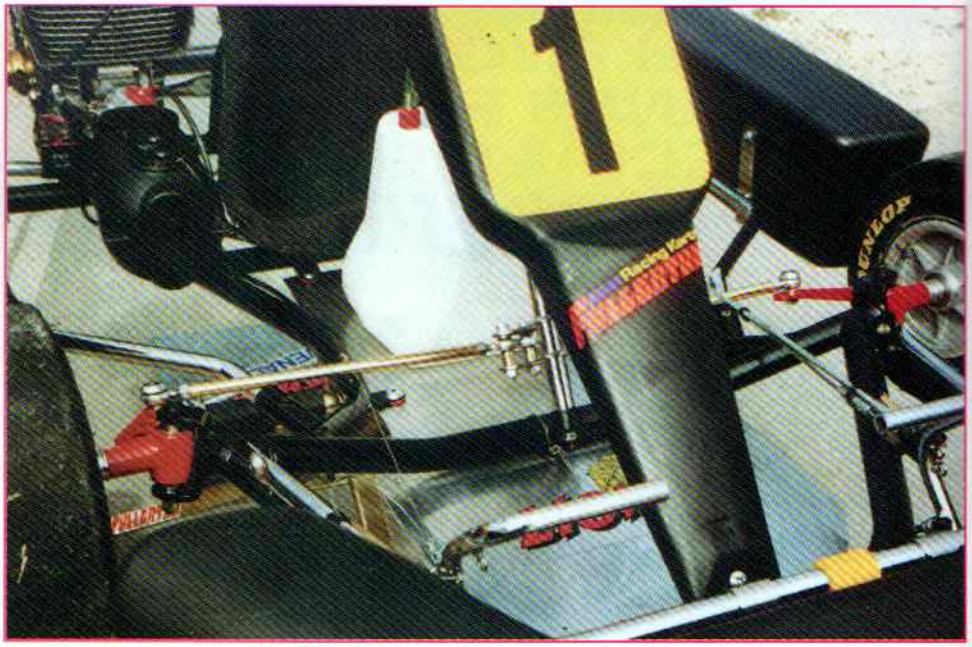
TRACK TEST

Fullerton Lion & Puma

Salbris must certainly be one of the top circuits in the world. To be invited to test Terry Fullerton's latest CIK homologated karts at this superb venue was not a difficult decision to take. Salbris has already hosted a round of this year's European Championships for Formula A and Super A and is the venue for the World Championships in September for the same categories. The circuit measures 1500 metres and is an excellent blend of fast and testing corners. Lap times are just over a minute, with a few super fast drivers dipping into the 59 second bracket.

Terry presented two of his latest homologation Big Cats for the test - the Lion and the Puma. Also homologated is the Tiger which remains as tested last year (July '96 Karting magazine) and therefore there was little point in asking to try it again. The Tiger is well established across a range of classes, from 100C in Great Britain, using hard compound tyres, to its excellent record in Formula A last season in Europe with Anthony Davidson. The Tiger's new cousin is the Lion. Already very popular with the Fullerton Team drivers, the Lion shares much of the same design and components as the Tiger, but with a cross member between the stub axle yokes.

The Lion for the test was fitted with a J.A.G. prepared Rotax Reed as used by James Hanson at last year's I.C.A. European Championship in Poland. The tyres were Dunlop R8s which is a current CIK Formula A compound.



The Lion has a front cross member between the stub axle yokes

First impressions on driving the kart was of the amazing grip. This was my first time, for a long time, on international tyres. The braking distances are incredibly short and the speed you should carry into the corner defies belief! The Lion proved to be very docile and predictable and was easy to control whilst bringing the tyres up to temperature. The warm up laps are, in my view, almost as important as the race itself. Many a time there are incidents on the rolling laps which preclude potential winners from ever taking the start. The Lion steers impeccably even on cold tyres, with controllable oversteer until the tyres warm. The steering was slightly heavier than usual but I am sure that this was on account of the tyres. The heaviness all but disappeared as soon as the tyres were up to temperature and the kart up to speed. The kart then proved to be very neutral. The kart is homologated both with and without the rear torsion bar and for this first test we had the bar in. For the second outing a third seat stay was added, or to be more specific a second extra seat stay on the left. Although the lap times were not greatly improved they were more consistent and the kart seemed more stable and less twitchy in the flat out sweeping curves of Salbris. For our final test on the Lion we left the set-up exactly the same but removed the rear tension bar. The kart was looser at the back than before until the tyres warmed up but then became very easy to drive and returned the best lap times of the day. I believe that the set-up was more or less perfect in this form and that front tyre wear was minimised. After a total of 45 laps the tyres were in very good condition and showed every chance of going the distance. This is of course very important in racing where the number of tyres allowed is very restricted. This kart should be a front runner in the CIK classes, especially ICA, where the the European Championship is more like a marathon! Having concluded our tests on the Lion, the engine and tyres were changed over onto the Puma.

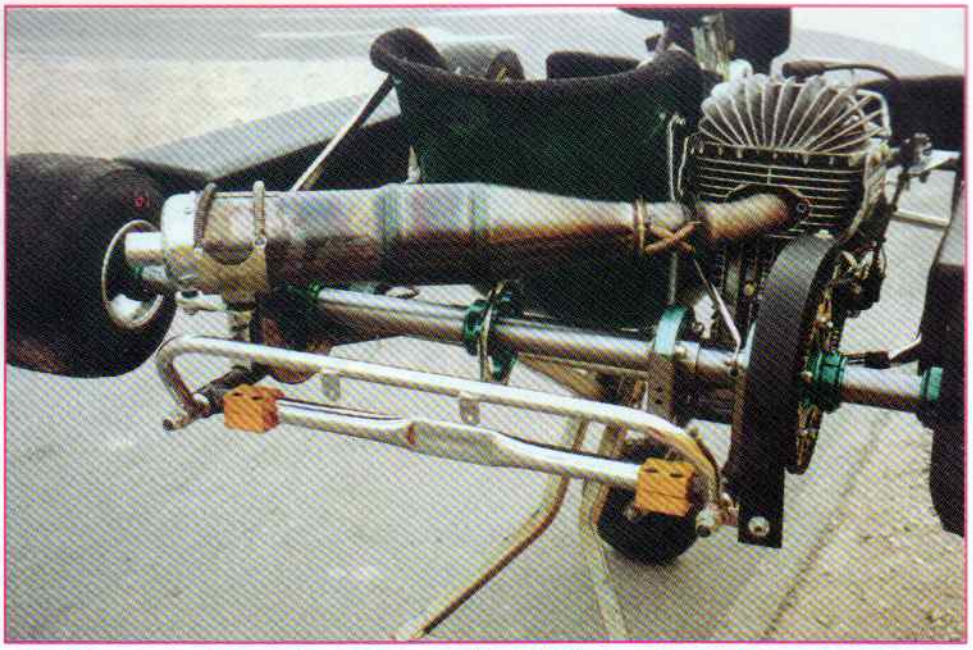
Puma front end design

The Puma's design is similar to the first of the current generation of Fullerton karts. It shares many of the design features of the previous homologation chassis, but has had detail changes and is now built to accommodate left hand drive engines. The most obvious difference is the cross member behind the seat which is parallel to the axle. This brings the bar right forward on the engine side and as a result the Puma uses a rear torsion bar all the time. The chassis shares the same design at the front as previous models with the parallel waist rails

following through to the front rail. This design always gives the impression that the kart is long and thin but it is in fact only 1cm longer than the classic 104cm wheelbase at 105cm. Having driven various Fullerton karts based on this design, the first surprise is the lightness of the steering. The kart steers very well and the steering needs only very slight movement. If the driver is too aggressive with his hand movements the result is complaints of oversteer. As such the chassis has no inherent faults, it is easy to set up and can run with reduced castor angle to help the front tyres and make the steering slightly less directional. However I think it is a kart which you have to learn to drive.

The Puma which I was to drive was the kart in its latest form with a slight change to material specification from last year's pre-homologation model. The kart, as expected, steered very easily straight out of the pits on stone cold tyres which had already done 45 laps. The kart was predictably 'taily' for nearly two laps until the tyres warmed up. It then became very neutral with a good confidence boosting feel through the flat out right hand sweep in front of the clubhouse. If there is a criticism here, the Puma was slightly less stable under braking than the Lion but it was very free running out of the slower corners. The Puma may be a little more of a balancing act than the Lion, but given the right conditions probably as fast. It is hard to say which kart would be kinder to the tyres. After two 10 minute sessions on the Puma the tyres were still in good shape. However the lap times never quite equalled those of the Lion. Chassis apart there are a variety of variables which could have contributed to this difference, the tyres, the engine, the circuit, not to mention the heavily out of condition driver! However it has to be said that both karts performed extremely well and there are certain to be circuits and conditions which will favour one or the other. If I had to make the difficult decision on that day at Salbris I think it would have to be the Lion with perhaps, on reflection, a test with less castor (which we did not try), my only slight complaint being the heavy steering. Perhaps the driver just needs to do more press ups, in which case there is nothing whatever wrong with the kart!

George Robinson



The Puma can accommodate right or left hand drive engines and uses a rear torsion bar at all times

SPECIFICATIONS

FULLERTON LION	FULLERTON PUMA
Homologated for JICA, ICA. + 125cc I.C.C. version.	Homologated for ICA.
Chassis: Ø30 chrome moly.	Chassis: Ø30-32 chrome moly.
Wheelbase: 104cm.	Wheelbase: 105cm
Axle: Ø40mm in 3 bearings.	Axle: Ø40mm in 3 bearings.

Standard equipment on both karts

Hydraulic single pot brake with aircraft spec. hose, long rear alloy hubs, mono alloy rims, Ackerman steering, G.R.P seat, 8 litre quick release tank, full CIK bodywork.
Both karts are homologated with or without the removable rear torsion bar which is included in standard equipment. Both karts accept left or right hand drive engines.

Danish Championships

ICA & JUNIOR ICA

The first two Danish championships were held at the end of May at the Vojens Track, the same track that has just hosted the CIK Viking Trophy. ICA and Junior ICA are always run over the same weekend.

The ICA Championship was rather exciting - could anybody beat the massive effort from the Danish Tony Kart Team with drivers such as Jesper Carlsen, Martin Jensen, Morten Pagh, Rene Hoff and Mike Mathiesen? Carlsen (Tony/Vortex) was fastest in the time trials, but with a 4 sec. noise penalty went to the back of the grid. On the front row were Jensen (Tony/Rotax) and Simonsen (Gillard/ATK) and it was the same situation after the qualifying heats. By this time Carlsen was up to 7th place.

The four finals were a battle between Jensen, Simonsen and Pagh, but Jensen lost his chance of the championship by a disqualification in the 3rd heat, because he had taken a short cut. Simonsen went out in the last final with brake problems, the brake pedal fell off, so he watched Pagh taking the win. Simonsen and Pagh ended up with the same number of points and so the decision was made on the strength of the qualifying heat. Here Simonsen was one place better than Pagh so he took the honours. Dennis Wounlund (PCR/PCR) scored a well deserved 3rd place ahead of Dino factory driver Ronnie Bremer.

The Junior ICA Championship saw a battle between defending champion Soren Petersen (Haase/Titan) and Kasper Jensen (Tony/Vortex), each winning heats, but Jensen went out in the 3rd final and won the last one. So the situation was the same as in ICA. Petersen and Jensen were equal but Petersen had won the qualifying heat and once again became Danish Champion. Jensen was 2nd and young Brian Hansen (Birel/PCR) had a good drive to 3rd place.

Report: Niels Kiilerich

RESULTS

1997 ICA Danish Championship: 1 Allen Simonsen (Gillard/ATK), 2 Morten Pagh (Tony/Vortex), 3 Dennis Wounlund (PCR/PCR), 4 Ronnie Bremer (Dino/Dino), 5 Mike Mathiesen (Tony/Vortex).

1997 Junior ICA Danish Championship: 1 Soren Petersen (Haase/Titan), 2 Kasper Jensen (Tony/Vortex), 3 Brian Hansen (Birel/PCR), 4 Brian Siering (PCR/PCR), 5 Christian Hansen (CRG/CRG).