

Born and raised on a farm in the heart of Suffolk's Constable country, Ralph Firman, 49, serviced villagers' road cars and rebuilt engines and gearboxes in his mid-teens, before taking a garage job in Ipswich, which paid the princely sum of 30 shillings (£1.50) a week.

Having served his apprenticeship, he was introduced to motor racing by his brother-in-law, Jim Russell, who owned the famous racing drivers' school at Snetterton, from which he ran his own thriving racing team. 'He asked me if I wanted a job,' recalls Ralph. 'I don't know now whether to thank him or not!'

Ralph started working on the school cars in 1965, left to gain experience with a couple of teams, then returned to JRRDS to be chief mechanic on Emerson Fittipaldi's Formula 3 car in 1969.

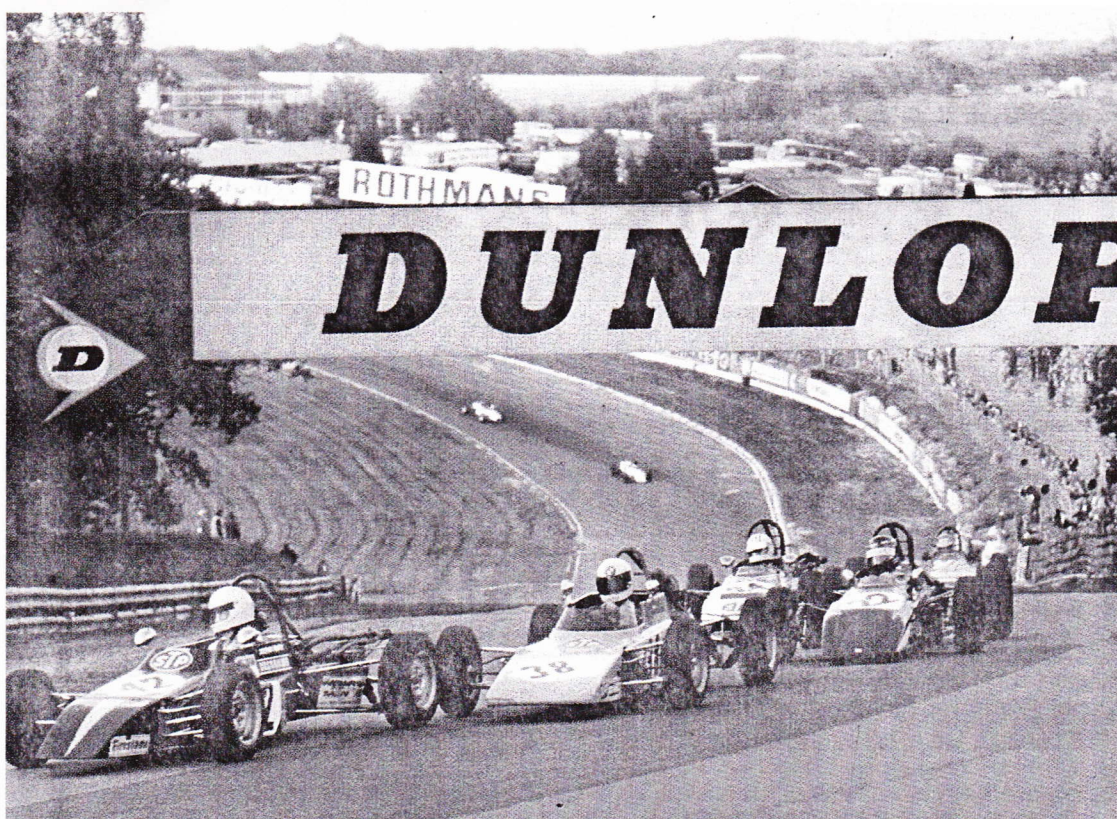
Russell had strong links with the local Lotus marque, with which it had been in at the birth of the Formula Ford category in 1968. Through it, Firman met David Baldwin, who has essentially designed every Van Diemen manufactured to date.

Van Diemen grew out of Ralph Firman Racing Preparations, a business which Ralph started in 1970. It ran F3 cars for customers like the late Carlos Pace, Barrie Maskell (who has been Classic F3 champion in similar machines for the past two seasons), and Ronnie Rossi out of a small workshop in East Harling, within earshot of Snetterton circuit.

The raceprep shop quickly earned a very good reputation for its work, particularly with Lotuses, and soon people were bringing 59 and 69 chassis from all corners of Europe to receive the Firman treatment. Afterwards, they would pay for the privilege of going testing with him.

When Lotus stopped producing customer racing cars in 1971 (several key personnel going on to form GRD), Ralph became perhaps the most knowledgeable person for a wider number of owners to turn to for mechanical work and specialist advice on their cars. They kept him busy.

The change of direction at Lotus left a niche in the burgeoning Formula Ford 1600 market though, one which Firman decided he could develop. With assistance from Ross Ambrose, who had used the team's facilities to run his F3 car in 1972 – and the injection of £350 apiece – and Ralph's existing equipment, such as it was, the Van Diemen marque was born.



Donald Macleod won the MCD title and the Festival for Van Diemen in its first year. Here he chases Stephen South's Ray at Brands Hatch

Van Diemen's land

Ralph Firman's Van Diemen concern is 20 years old this month. How did it develop from a one-man-band into the world's largest producer of racing cars?

Founded by British mechanic Ralph Firman and Tasmanian racing driver Ross Ambrose on March 12, 1973 – coincidentally, Ralph's 29th birthday, – Van Diemen International Racing Services Limited has been the world's largest volume producer of racing cars for more than a decade.

The marque took its name from Van Diemen's Land, the old Dutch name for the island of Tasmania, off the South Eastern tip of Australia. Although the partnership lasted but months, the distinctive name endured.

By far the most successful chassis manufacturer in the 25-year history of Formula Ford, the company is revered for its integrity and engineering excellence wherever cars are raced.

Formula Ford 1600 made Van Diemen great and, despite the fact that it is now in its second year of an entirely self-funded F3 project, spaceframe cars will continue to be its bread and butter.

Almost 2000 chassis for mainstream international formulae – FF1600, FF2000 and Formula Renault, plus Formula Vauxhall Junior – have now left Van Diemen's impressive and ever-

expanding 18,000sq ft factory complex at Snetterton, Norfolk.

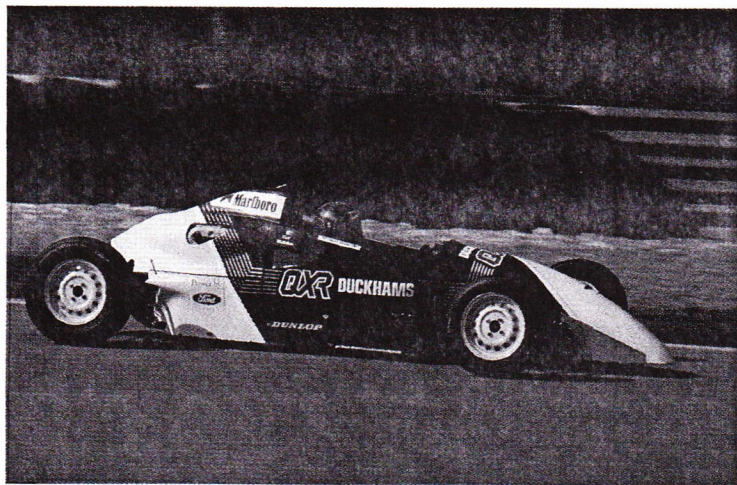
Add to this figure scores of Formula Firsts, Formula Forwards, Multisports cars and more than 100 one-make derivatives for overseas markets (see panel), and the versatility of the concern and its employees becomes apparent.

Having rolled its first chassis out of the old 1000sq ft Ralph Firman Racing Preparations workshop in East Harling in early 1973, Van Diemen passed the 1000 car milestone in '85, and reached the

2000 mark last year. With interest set to boom in new markets, and on every major continent, the tally could top 3000 well before the turn of the century!

The empirical success story grew out of Firman's determination to be more than just another racing mechanic, reliant totally on earning a living out of providing a good service to drivers, yet often experiencing difficulty in getting paid.

'There wasn't a lot of sponsorship around then, and I ▶



Kurt Mollekens testing the latest Zeta-powered RF93 at Brands Hatch earlier this month

‘I couldn’t see where I could make a profit, year in, year out, unless I changed my approach,’ says Ralph. ‘I figured that the only way I was going to be in this business long-term was to become a manufacturer. Physically design something, build it and sell it.’

‘Formula Ford was obviously very buoyant, and the lowest single-seater class that drivers could go into, and the most reasonable in terms of development costs for a new manufacturer. Incredibly, once I had made the decision to build a car, I really thought nothing of it. It was just like that was it...’

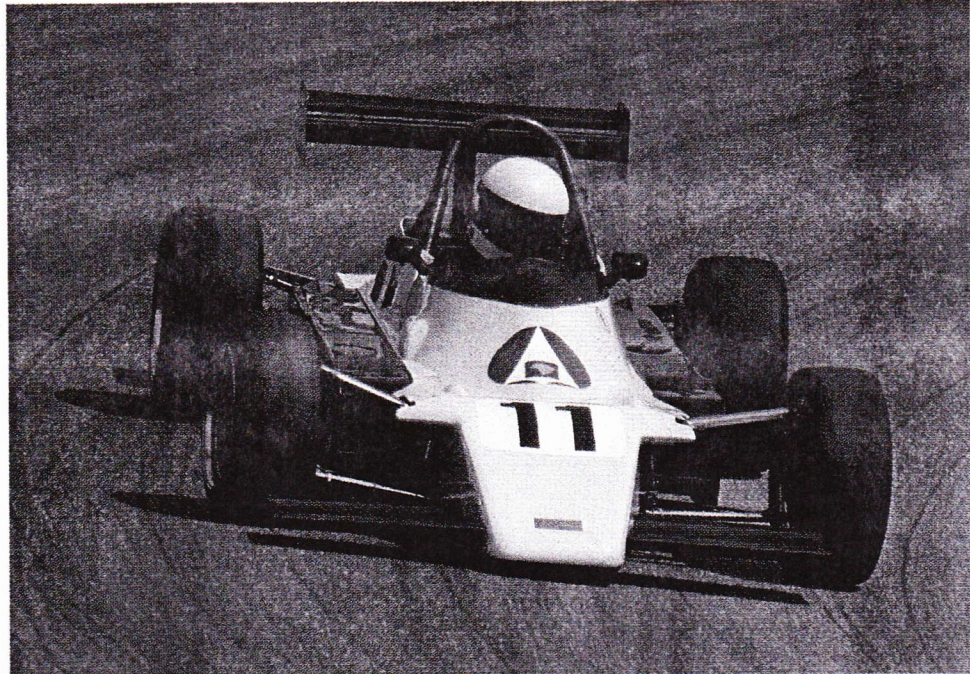
‘I got straight on to the people at Arch Motors who were very good about building a chassis that was fairly reminiscent of the Lotus 69. They made the first FA73 frame, and I turned up most of the bits on an old belt-driven lathe – which I still have. Arch Motors was great to us, and really helped to get Van Diemen going.’

With business partner Ambrose back home in Tasmania, Firman concentrated on putting the prototype FA73 together, regardless of the fact that he did not yet have a customer for it. The project gathered momentum when a Canadian, David McCalum, turned up out of the blue wanting to buy the first car – and to be run in it by the works!

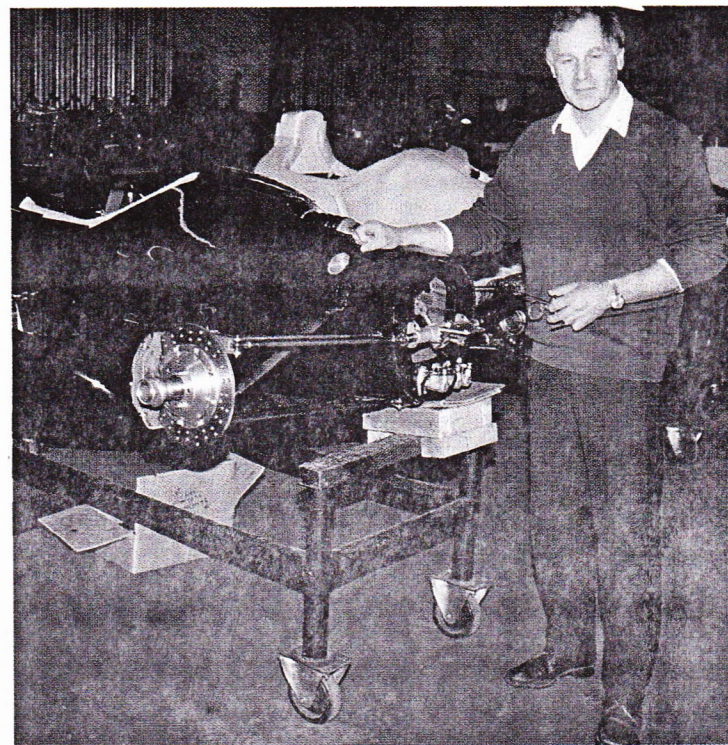
‘I quoted him £6000 for the deal,’ sighs Ralph, and he went back home to persuade his grandmother – who was trustee of his late parents’ estate – to release the funds. I didn’t raise my hopes.

‘My wife Angie and I were living in a flat in Attleborough at the time, and we both vividly recall a telephone call one midnight. It was David, from a ‘phone box in Toronto, to say that he had the money and was coming over for the season. I remember dancing round the bed with joy.’

‘David effectively financed Van Diemen, because he paid up front. He had a damn good deal, with lots of testing, and was actually a pretty useful driver. If it was good for him it was terrific for us, because it gave the company some cash flow.’



Ayrton Senna da Silva dominated British FF1600 with Van Diemen in 1981, and went on to win the British and European FF2000 titles the following year in Rushen Green Racing's RF82, pictured at Zandvoort



Van Diemen's designer Dave Baldwin with the company's first RF93 Formula 3 chassis

Then we got Don Macleod involved and the results started to come. He won the BOC Championship and the Formula Ford Festival, which really put Van Diemen on the map.’

The partnership with Ambrose had crumbled by this time. ‘Looking back on it, it was never going to work,’ says Ralph. ‘It was nobody’s fault.’

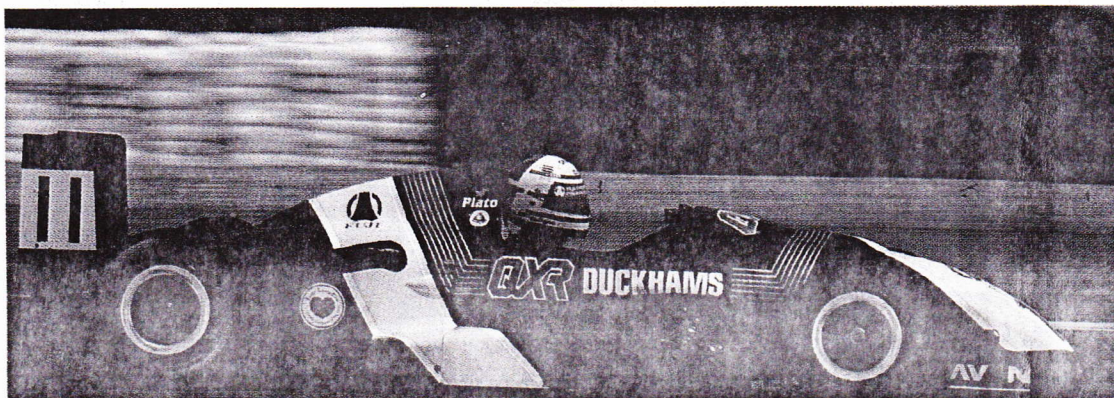
‘The reason we did it in the first place was because Ross had designed a hot pressure washing machine – the sort of thing you now see on garage forecourts with all the foam. He was a very clever engineer and, to give him his dues, he got it working way ahead of its time. For some reason though, 20 years ago, it was not accepted for washing cars at service stations.’

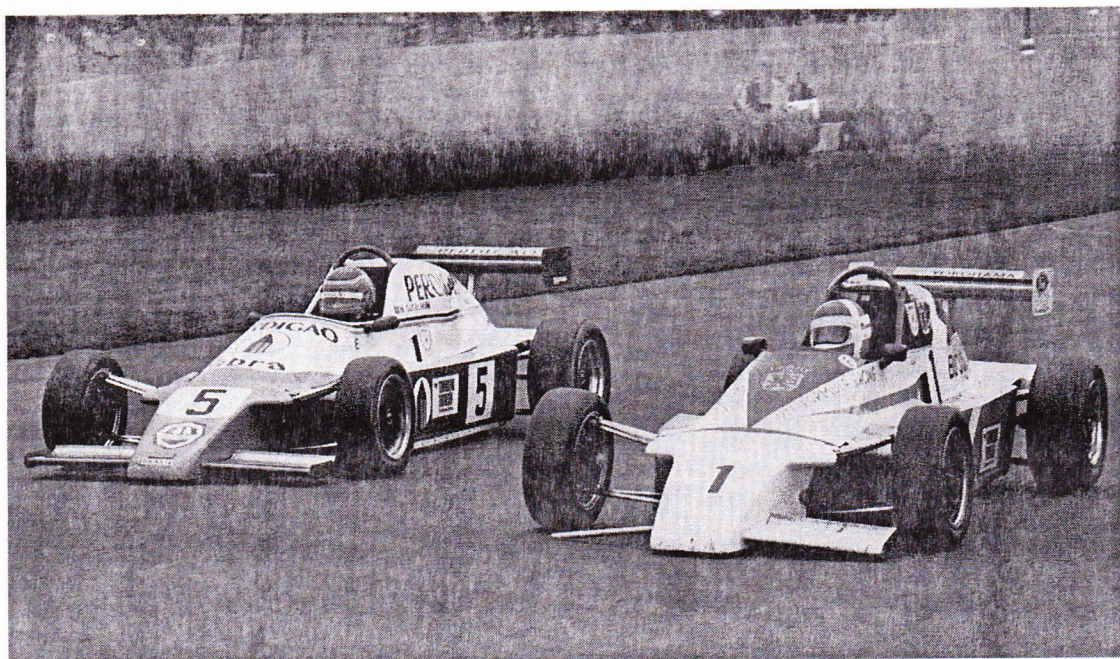
Ironically, the concept did take off in the late '70s, in steam cleaners for industrial use. ‘The initial idea had been for us to produce racing cars alongside hot washing machines, thus ensuring a continuous year-round income.’

‘The failure of industry to see the potential in the washers meant that a good manufacturing opportunity was wasted. Ross lost heart and, after three months, took his machine and his initial investment and went home for good.’

Having achieved tremendous success with half a dozen cars in his first year as a manufacturer, Ralph boldly decided to lay down 50 lightly revised chassis for 1974, when his own initials replaced those of Firman/Ambrose as the prefix for each model year.

Everything was ordered, but Angie Firman had to hastily delay the production schedules by a month when the fuel crisis blew up. Mercifully, it turned out to be a





European FF2000 champion Cor Euser's battered RF83 does battle with Mauricio Gugelmin's works chassis at Donington Park in 1983

an impatient and eager clientele.

Although there were changes of bodywork and suspension geometry for 1975 and '76 (when Japanese designer Moto Moriwake revised the pick-up points), the Lotus-derived chassis remained a constant for the first four years.

The relative failure of the narrow-track RF75 led to very few orders for the RF76, which even works-supported driver Derek Daly abandoned in favour of Hawke's super DL15, with its rocker-operated front suspension.

Firman's insistence on a multi-year chassis concept as a major criterion within Dave Baldwin's design brief continues to inspire customers this day. Only the curious but very stiff RF84 'Pterodactyl' broke with tradition.

Following two fallow years with the RF75 and RF76 – the basis of which was, of course, very long in the tooth – Firman urgently needed a brand new car to counter Royale's radical Rory Byrne-designed RP24 and Leslie Drysdale's less sophisticated but highly effective Crossle 32Fs in 1977. Baldwin came up trumps with the very sleek, yet superbly straightforward, RF77.

'Dave was working for the Fittipaldi F1 team at the time, and I approached him to do the car. I have always loved his designs, and could see no other way round the problem. I also wrote to John Barnard, who was with Parnelli, and had a very nice letter back, saying that he was sorry, but due to other commitments, he would not have the time to help us...

'Anyway, I went to see David, and thrashed out the deal. He came up with the car which was a really nice piece of kit. It worked well from the start, and by its second (RF78) year was a superior car to those of our competitors.'

Francisco 'Chico' Serra – the first of many hungry Brazilians to

The dedication of its staff has turned Van Diemen from a cottage industry into a market leader with a £3m turnover

hone his talents with Ralph Firman's works team en route with F1 – and the much underrated Irishman Michael Roe duly put the cars in the Festival's winner's circle at Brands Hatch in both years.

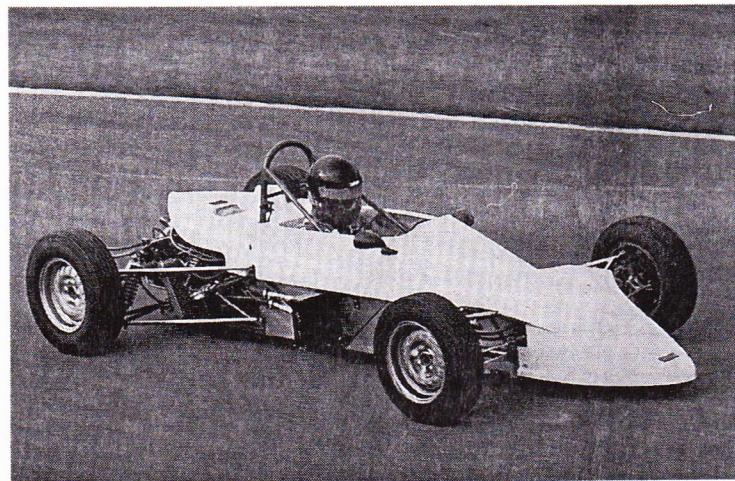
The side-radiated RF77/78 concept started a new family of Van Diemens, its chassis forming the basis of the ultra-successful and user-friendly RF79/80 models,

which are still regarded as classics today. Roberto Moreno dominated the Festival in an RF80.

Formula Ford development moved on to a new plane in 1981, when Baldwin joined Van Diemen on a full-time basis. The brand new RF81, with its inboard front suspension, wiped the board. Its development path was hardly hindered by a certain Ayrton Senna da Silva who emerged as the year's most successful driver in a works car, and remains the greatest talent ever seen in the category.

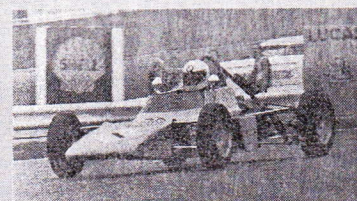
A narrow-track all-inboard evolution of the line followed, and won the British title with Mauricio Gugelmin, but the Lola T640E was nimbler and more manoeuvrable in traffic. The 2-litre version worked brilliantly on slicks, however, and was unbeatable – at least with Senna on board.

'We had previously built an experimental all-inboard version of the RF79/80 car,' remembers Ralph. 'It was so secret that it was prepared completely in the garage at home by Mickey Galter. Moreno tested it but, mysteriously, it was half a second off the pace ▶

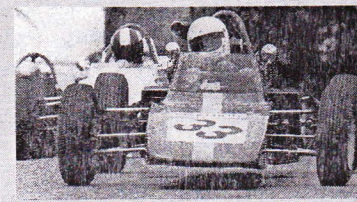


The works team is always testing. Here Terry Gray tries development parts on a RF79 FF1600

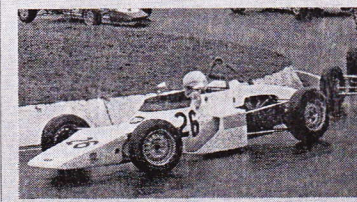
FA73-RF77 FF1600s



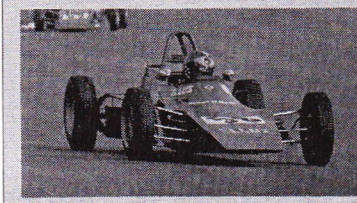
FA73: First car basically improved version of Dave Baldwin's discontinued Lotus 69FF concept. Chassis very similar, some parts interchangeable. Donald Macleod (pictured) won MCD/BOC Championship and Formula Ford Festival in works car.



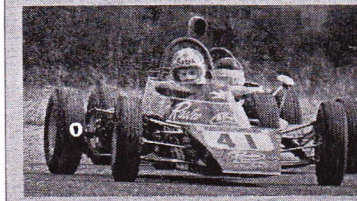
RF74: Lightly modified version of FA73, same chassis, still using distinctive flat-nosed bodywork. Deeper radiator cowl. This is Mike Young at Oulton Park. First Van Diemen to be made in large numbers. Production 50 cars.



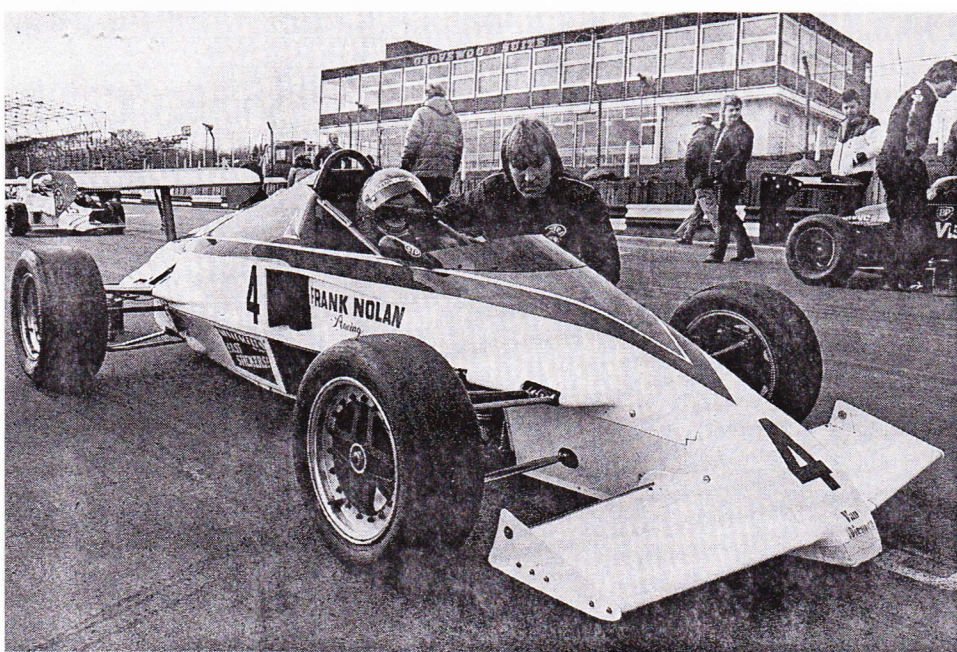
RF75: Same spaceframe as predecessor, but narrower-track suspension. Revised aerodynamics, sleeker body with extended nose and matching engine cover. Larger radiator air intakes. No match for Royale's RP21 or Hawke DL15.



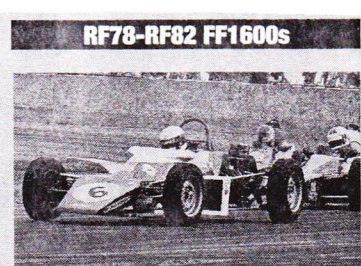
RF76: Still on original chassis, now showing its age. Retained narrow-track suspension, pick-up points revised by Moto Moriwake. Shorter engine cover, radiators repositioned in front of rear suspension. Uncompetitive, poor sales.



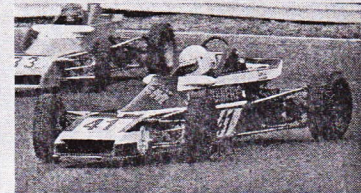
RF77: Brand new chassis by Dave Baldwin. Beautifully simple design, distinctive styling, fashionable mid-mounted radiators. Put Van Diemen back on the map. Chico Serra (pictured) won MCD Championship and FF Festival.



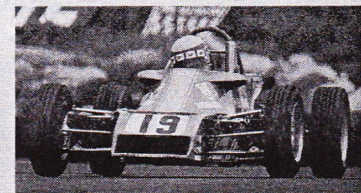
Overseen by works engineer Mickey Galter, Martin Donnelly prepares to take on the Reynards at Brands in the slimline Van Diemen RF84 FF2000 chassis



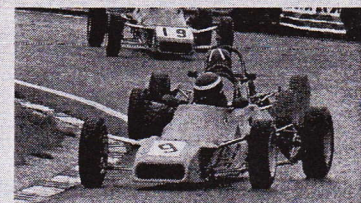
RF78: Essentially identical to 1977 car. Subtle modifications to suspension. John Village (pictured) won EFDA Euroseries in his example. Michael Roe took FF Festival honours with works car, against tough opposition from Royale's RP24.



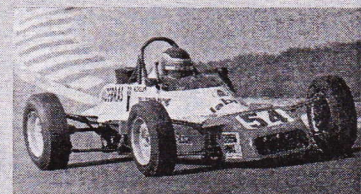
RF79: Evolution of RF77/RF78 theme, with radiator moved to the front by consultant Mike Pilbeam. Engine covers initially featured lip housing oil cooler. Excellent handling. Here, Jonathan Palmer flings his car sideways at Brands Hatch.



RF80: Development of RF79. Flat engine cover. Great drivers' car. Tommy Byrne and Roberto Moreno (pictured) claimed British and MCD titles, Moreno the Festival. Classic Van Diemen, still the car to beat in today's 1974-'80 class.



RF81: Based on existing theme, but with totally new and stiffened front chassis to take rocker-operated inboard suspension. Longer wheelbase, good handling. Ayrton Senna da Silva won the British title, Byrne the Festival. John Pratt is pictured.



RF82: Next development received inboard rear suspension to match front. Chassis stiffer again, but noticeably twitchy, particularly in narrow-track guise. Mauricio Gugelmin (pictured) won British series, but Julian Bailey's Lola T640E was a quicker.

◀ whatever we did to it. It was so frustrating that we ended up putting a hacksaw through it.'

A further development of the theme — the high-tailed RF83 'VanWall' was outpaced by both Lola's offering and the ultra-forgiving Reynard 83FF, with its remarkable traction. Once again, Van Diemen needed a fresh start.

Baldwin came up with the extremely narrow RF84 which,

despite taking the British title with Dave Coyne, never fulfilled its potential in FF1600 form. 'It was quite an original design, with pull-rod front suspension and the front wheels well back,' says Firman. 'It was hard done by in many ways, for there was certainly plenty of development in it. It ended up being quite a decent FF2000 car.'

Firman pulled the plug on it early though, having seen David

Bruns' stunning Swift DB-1 decimate a quality field on its debut in the SCCA's run-offs the previous October. This was the car which, somewhat controversially (for its spaceframe no longer extended back to the gearbox) rewrote the Formula Ford regulations. Everything else was rendered obsolete overnight.

The American-built Swift's revolutionary feature was its ▶

One make formulae are a speciality

Although Van Diemen's greatest successes have come in the Ford formulae, FF1600 and FF2000, it has also developed a wide range of 'spec car' chassis to commissions from all over the world.

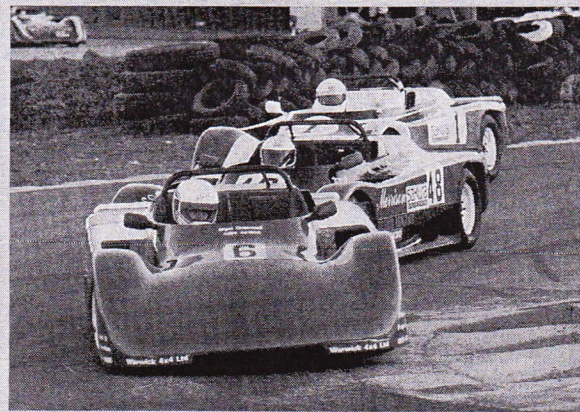
In Britain alone, the company has built BHL's Formula First (with transverse Ford Fiesta engine), Formula Forward (with 2-litre DOHC Ford engine) and Multisports (a wide-bodied FFirst) machines, of which 158, 30 and 36 examples have been manufactured respectively.

The wingless derivative of the Forward-type chassis was also chosen for Formula Vauxhall Junior, which started in 1991. Almost 50 of the 1.6-litre Vauxhall Nova-engined cars have now been built.

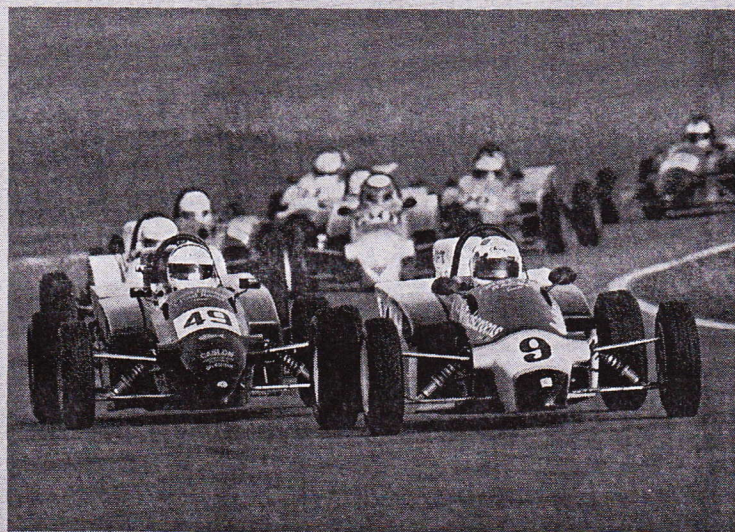
An uprated version of the Forward/FVJ tub formed the basis of Formula Mirage (powered by a 160bhp Mitsubishi engine) in Japan — which took 40 cars — while 20 flat-four Subaru-powered Multisports-based cars were supplied to Finland for Subaru Sport, backed by ex-World Champion Keke Rosberg.

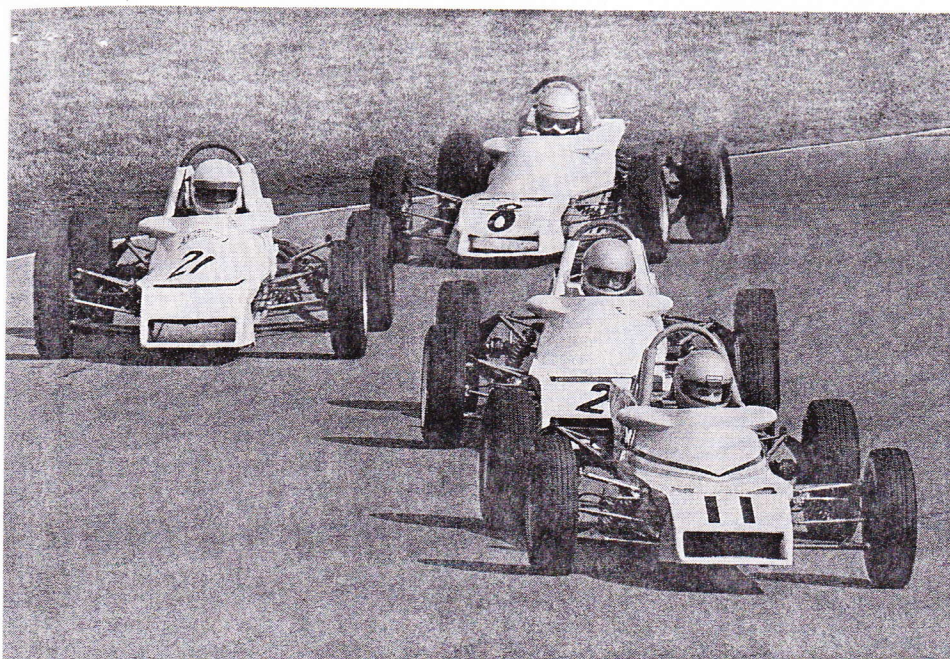
Currently, the team is producing 25 Scholar/Ford-powered FF2000 chassis for a new slicks and wings category in Venezuela. The cars have been ordered by agent/series promoter Carlos Gonzales.

With full computer-aided design and development facilities 'in house', a vast parts bin from which to draw and endless enthusiasm for fresh challenges, Van Diemen is ideally placed to react quickly to similar commissions in the future.



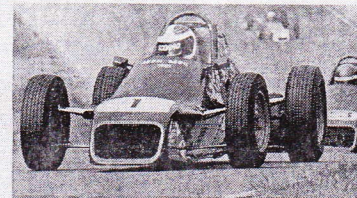
Van Diemen was commissioned to build a family of entry-level 'spec cars' for Brands Hatch Leisure. Multisports (left) has never really caught on, but Formula First (below) has been a great success



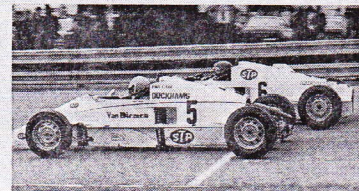


The classic RF79/80 series of cars is still as competitive as ever in 1974-'80 and Formula E FF1600, which are low-cost categories designed for the clubman

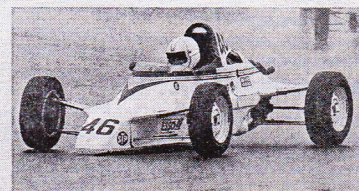
RF83-RF87 FF1600s



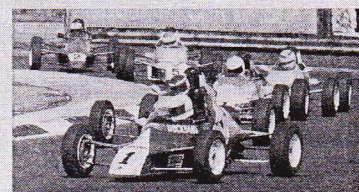
RF83: End of the road for faithful chassis. Curious high engine cover earned it 'VanWall' nickname. Narrow track meant quick on its own but poor in traffic. Car thrashed by Reynard and Lola. Even Maurizio Sandro Sala (pictured) defected.



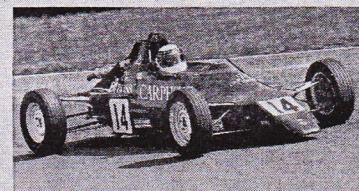
RF84: One on its own, super-stiff slimline car with swept-back pullrod-operated front suspension and rocker rear end. Dubbed 'Pterodactyl', it was not well liked. Mark Peters and British champion Dave Coyne are seen dicing at Oulton Park.



RF85: Dave Baldwin's classic response to the American Swift. Superbly styled car with cast engine/gearbox module and front spring/dampers hung from dash stay. Terrific handling. BRDC champion Mark Blundell is pictured at Silverstone.



RF86: Regarded by works as perhaps the best ever FF1600 Van Diemen. Subtly developed version of previous car. Jason Elliott (pictured) won British and BRDC titles, Paul Warwick both Junior crowns and Roland Ratzenberger the Festival.



RF87: Further evolution of the theme, with push-rod operated front suspension in place of rockers. Eddie Irvine won British and BRDC series, and the Festival, in dominant year. Car also introduced Jackie Stewart's son Paul (pictured) to racing.

distinctive cast bellhousing module, which not only stiffened the engine/gearbox assembly but also contained the dry sump oil tank. Only Van Diemen had the resources to follow suit.

By April or May, David was stuck into yet another new car. He had seen the Swift and responded admirably to it. The RF85 was beautifully simple, easy to

maintain, and was by far our stiffest and strongest FF1600 to date. It was a classic, the concept of which served us well for five seasons.'

The 1990s required Baldwin to take the basic idea one step further. The innovative minimalist RF90 'Stealth Bomber' was again the class of the field, its chassis developing phenomenal traction. The startling looking car also

rekindled the market for Van Diemen in the USA, where FF1600 has always run on slick tyres.

Minor developments maintained the advantage for 1991, but the RF92 version, broke new ground with its monoshock front suspension. It was roundly beaten in Britain's prestigious Open Championship by the home-built Swift, which ironically bore ▶

Boom time for Formula Renault

When Renault UK announced plans to bring a brand new Formula Renault category to Great Britain for the 1989 season, Van Diemen and rival Reynard had prototypes up and running – and on show in France – by the summer of '88.

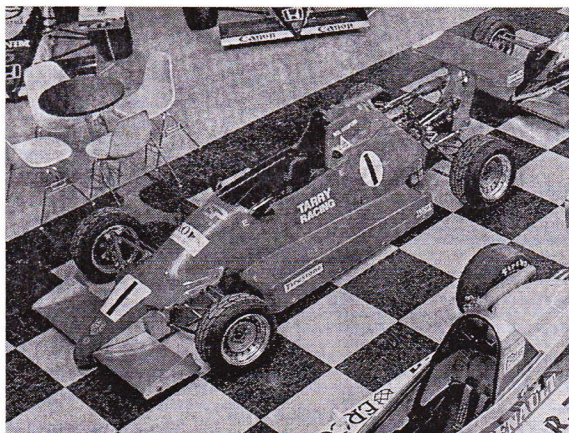
The difficulties in engineering the package were numerous, for not only did the regulations require the use of a wet-sump Renault 21 engine, but they also demanded the use of the road car's gearbox, rather than a more conventional Hewland-type racing transaxle.

Baldwin and company combined these elements with as much of the proven FF1600/FF2000 spaceframe as they could, and designed the suspension to work with Firestone crossply racing tyres. Later, and not before time, Britain fell in line with Europe in adopting Michelin radials.

Neil Riddiford won the first UK title against a slim field, but the formula grew with strong promotion. Bobby Verdon-Roe added a second championship two years later. While the British market has never been particularly strong for Van Diemen, it has always enjoyed healthy sales and success in continental Europe.

This year – ironically the last to the current regulations – has seen massive interest in the cars, particularly from Spain, where agent Fadsport has taken seven chassis. A record production run of 22 RF93-Renaults is now 'in build'.

Next season, Formula Renault is set to be reborn with a new engine and racing transmission. Van Diemen will be ready.



Van Diemen was in at the start of Formula Renault UK with Tarry Racing's RF89 (left), which carried Neil Riddiford to the inaugural title. It also won the 1991 crown through Bobby Verdon-Roe (below) and his Fortec Motorsportrun RF91

