



Formula Ford 1600

INFORMATION KIT

We have pleasure in enclosing our general information pack, which includes information about Formula Ford 1600, the history of Formula Ford in Australia, current racing calendars and estimates of competition costs.

Formula Ford 1600 racing in Australia is regulated by the competitors, through their Association, which operates under the control of the Confederation of Australian MotorSport.

The engine and chassis regulations are published in the CAMS Manual of Motorsport, available from CAMS or for download from the Web Site. Amendments are made, when required, with the approval of CAMS.

The Marketplace Section of the Web Site carries advertisements for chassis, engines and spare parts and is a good place to begin your search for a competitive car.

Should you require any further information please do not hesitate to contact the Association.

Formula Ford
Association Inc.

ABN 42 015 166 048 ARBN A 0025592Y

PO Box 3054
Murrumbena Vic 3163

Inquiries:
P (03) 9568 8293
F (03) 9569 1376
E info@formulaford1600.com.au

Web Site
www.formulaford1600.com.au

The first thing you'll need is a **CAMS** Racing Licence



Formula Ford ... Formula One's proving ground

Motor racing in Australia is conducted under the control of the Confederation of Australian Motor Sport (CAMS). The National Competition Rules include arrangements for the organisation and conduct of race meetings, technical regulations for vehicles and the safety of competitors, spectators and officials.

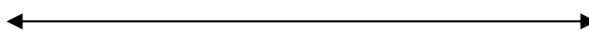
All competitors must have a Competition (Racing) Licence, issued by CAMS. The minimum age for issue of a CAMS Licence is 16.

You must be a member of a CAMS-affiliated Car Club and you must be a member of the Formula Ford Association if you wish to compete in Formula Ford races. The Association is a CAMS-affiliated Car Club, entitling you to obtain a CAMS licence.

Competitors are required to pass a medical test, complete an observed drive under circuit conditions and attend a lecture which covers on-track rules, such as the meaning of flag and light signals and various racing techniques. You will also need to work on a flag point at a race meeting.

There are various ways to obtain your licence. A number of Racing Schools are authorised, by CAMS, to conduct the various tests. There are also opportunities for prospective competitors to complete the tests at various circuits around the country.

For further information www.cams.com.au



Since its inception in 1967 Formula Ford has become an important international racing category for the development of young talent.

The links with this country go back to the original series in the UK, the 1968 Guards Championship, which was won in outstanding fashion by young Australian driver, Tim Schenken. Schenken was the first of many driving super stars to cut his teeth in the competitive category en route to Formula One.

The first Australian Formula Ford race was held at Sandown raceway in 1969 and was won by Richard Knight in an Elfin 600, a precursor to his 1970 victory in the inaugural Australian Formula Ford series.

Since those early days many of the world's top drivers have come through the ranks of Formula Ford to score major international successes, including World Champions such as Ayrton Senna and Michael Schumacher. Mark Webber, Australia's current Formula One representative, began his career in Australian Formula Ford.

The V8 Supercar fields are full of drivers who began their top level career in Formula Ford, including Garth Tander, Craig Lowndes, Rick and Todd Kelly and Jamie Whincup.

More than ever the formative skills learnt in Formula Ford 1600 and Formula Ford level prepare emerging young drivers for successful careers, both locally and internationally.

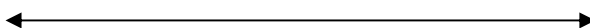
Formula Ford 1600

At the track with Formula Ford 1600

From the beginning of Formula Ford competition in 1969, the category used the Kent (Ford Cortina) engine. In 2006 the Kent was replaced with the Ford Fiesta engine for national competition.

State and Historic competitions around the country continue to race with the trusty Kent, as part of a separate category—Formula Ford 1600.

The Formula Ford Association organises Formula Ford 1600 competition and provides advice and input to the various CAMS Offices and promoters on the arrangements for State Championships. The role of the Association in assisting with Historic competition is growing, with most State Championships offering classes for those with older cars, providing additional competition opportunities.



Formula Ford 1600 attracts a variety of participants—those who wish to prepare and race their own cars, older drivers who are perhaps returning to racing and young drivers who have the chance to develop their racing skills before moving on to further their careers. State competition offers an ideal “learning” year for many who are aiming at a top level motor racing career and also provides valuable experience for race engineers.

Many Formula Ford 1600 competitors progress from karts, where they have been supported by family and friends and they can continue with these arrangements. Others may have someone with race experience to assist with car setup and engine maintenance. The Formula Ford 1600 Web Site includes advertisements for cars, trailers and engines, with something to suit most budgets.

There are also opportunities to link up with one of the professional teams, which offer different arrangements, from a fully prepared car with a dedicated race engineer to part deals in which the driver does some of the setup work or, perhaps, the team prepares the car and the driver provides assistance at the track.

Lease deals are available from most teams, at varying costs, depending on the amount of work required. Deals are offered for single race meetings or a full season. Costs generally don't include accommodation or travelling, although some teams do include some test days in their packages. Most deals will include the cost of tyres and consumables although accident damage and repairs will be at the competitor's expense.

If you are interested in obtaining more information about the various team arrangements you should contact one of the following:

Anglo Australian Motorsport—Spirit	02 9838 7979
bf Racing—Van Diemen & Mygale	07 3807 0527
Borland Racing—Spectrum	03 9580 5236
Fastlane Racing Drivers School—Van Diemen	08 9306 9366
G-Force Motorsport—Mygale	03 9532 5677

What is a Formula Ford 1600?

Formula Ford 1600 cars must comply with stringent rules that are designed to reduce costs for newcomers to the sport and to allow every driver to compete on his or her own merits.

All chassis are a tubular space frame design, maintaining high levels of driver safety. Aerodynamic aids, such as wings and spoilers, are banned.

A number of manufacturers, both local and international, build the basic body and chassis, the most common being the UK-built Van Diemen, the French Mygale, Australia's Spectrum and, more recently, the UK Spirit.

Each car is powered by a the Ford 1600cc "Kent" four-cylinder engine. Tuned to develop more than 100 horsepower, Formula Ford 1600 cars reach speeds in excess of 250 kmh without the aid of fuel injection or major modification.

The key to the category's long term success is the uniquely level playing field of the equipment and chassis, allowing differences in skill to determine drivers' positions on the track. The relative parity between the vehicles also helps guarantee the category's reputation for some of the most exciting and nail-bitingly close racing to be seen on any Australian circuit.



Key elements of a Formula Ford 1600

The Chassis - Of tubular space frame construction confined to maximum dimension. Exotic materials are prohibited. Constructors aim to maximise torsional rigidity and minimise weight while maintaining the highest levels of driver safety.

The Tyres - A grooved racing tyre is chosen for optimum grip under all weather conditions. The type/brand and compound are specified, ensuring an economical wear rate.

The Engine - The normally aspirated Ford 1600cc "Kent", four cylinder engine, with crossflow head, is tuned to provide just over 100bhp. All components and measurements are specified.

The Suspension - Full racing car suspension designs are required to ensure maximum tyre grip at various cornering speeds. Chassis balance is adjustable, controlled by damper, spring and anti-roll bar combinations.

The Gearbox - Limited to 4 forward gears. Ratios can be changed to suit various circuits and conditions.

The Brakes - Four wheel disc brakes have independent front and rear activation. Front/rear bias is adjustable.

Safety Features - Include chassis requirements, roll over hoop, foot protection and material specifications. Drivers' harness and fire extinguisher etc, must comply with CAMS requirements.

Aerodynamic Devices - Are not allowed. Down force is limited to the combination of chassis design/set-up and tyre grip, together with the natural forces of gravity.

How much does it Cost?

There are a number of options open to potential Formula Ford 1600 competitors. The one you choose will depend on the level of your technical skill, your budget and the type of race meetings you plan to enter. Obviously, it will cost more to race in an interstate meeting than in a State meeting at a circuit close to your home.

NEW CARS

Most of the cars currently raced in Australia are built in England. Van Diemen has been the most successful, but in recent years this domination has been challenged by the French-built Mygale. There are two Australian manufacturers, the Spectrum built in Melbourne and, more recently, the Listec from Sydney.

A new rolling chassis, including gearbox and alloy wheels, will cost between \$50,000 and \$80,000, tax and freight paid. You will need to buy an engine, gear ratios and a trailer to transport the car.

All chassis importers and manufacturers provide technical assistance, support and information at major race meetings. You should contact them for full details of the costs and service available.

Listec	(02) 9973 2486
Mygale	(03) 9532 5677
Spectrum	(03) 9580 5236
Spirit	(02) 9838 7979

SECOND HAND CARS

The best time to buy a second hand car is at the end of the season, from competitors who are moving into another class of racing or updating for the next year. Cars are advertised in the motorsport press and the Formula Ford Association publishes a list of available vehicles.

The cost of a second hand rolling chassis (without engine) varies considerably, from approx. \$7,500 for an older model to around \$40,000 for a recent car.

ENGINES

You can build your own engine, from new or second hand components, available from Ford dealers or wrecking yards. The engine regulations are tightly controlled and your engine must comply. If you do all the work an engine will cost around \$6,000.

Many competitors choose to buy or lease engines from experienced engine builders, most of whom provide technical support at major meetings. You can expect to pay approximately \$10,000 to \$11,000, with second hand engines available for \$6,500 to \$7,000. Most competitors choose to have their engines rebuilt every three to four meetings, costing between \$1,500 to \$2,300, depending on the work required.

Cattai Industries	02) 4572 8889
Fastlane Racing School	(08) 9306 9366
Graham Ritter Engines	(03) 9870 6233
Larner Engines	(03) 9439 8986
Speedtech	(07) 5594 0233



TYRES

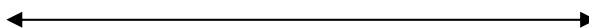
Formula Ford 1600 competes on a treaded cross-ply tyre - the Avon ACB10, available from Avon motorsport outlets nationally for around \$1,380 per set. Many competitors find that one set of tyres will last for three or four meetings. Most State Championship rules include restrictions on the number of tyres permitted for each meeting,

OTHER COSTS

These include entry fees (\$175 to \$350), racing fuel (approx. \$75 per meeting), brake pads, oil and other consumables, trailer (variable, depending on the type of trailer) and fuel for your tow car. Accommodation, food and other travel costs, if you compete interstate, will vary, depending on your choices. Obviously it is cheaper to camp and cook your meals on a barbecue than to stay in a five-star hotel!

You'd also be wise to allocate some funds for the repair of accident damage to suspension parts - replacement of complete corner components could add up to \$3,000 - \$4,000. Obviously it's best not to sustain damage - but you need to be aware that it could happen!

The teams offer various packages which include many of the costs. You should contact them for more information.



In the beginning

The first-ever Formula Ford race in Australia was held at Sandown in November 1969, and was won by Richard Knight driving a Bib Stillwell owned Elfin 600. The race, described as a demonstration, attracted nine cars, and was the successful prelude to a full season in 1970.

Results of inaugural Formula Ford race

1.	Richard Knight	Elfin 600
2.	Murray Coombs	Lynx
3.	Bob Minogue	Aztec
4.	Brian Andrews	Andrew
5.	Graeme North	Wren
6.	Brian Beasy	Beasy
7.	Werner Bekker	Lotus 22
8.	Geoff. Hood	Wren

AUSTRALIAN "DRIVER TO EUROPE" SERIES

1970	Richard Knight	* Elfin 600
1971	Larry Perkins	* Elfin 600
1972	Bob Skelton	* Bowin P4A
1973	John Leffler	* Bowin P6F
1974	Terry Perkins	* Elfin 620B
1975	Paul Bernasconi	* Mawer
1976	Richard Carter	* Birrana F73
1977	John Smith	* Bowin P4A
1978	John Wright	* Bowin P4A
1979	Russell Norden	* Mawer
1980	Stephen Brook	Lola
1981	Phillip Revell	Lola T440
1982	Jeff Summers	* Elfin 620B

* Denotes Australian-built and designed chassis

Australian Formula Ford FACTS at a glance

1983	Bruce Connolly	* Galloway
1984	Ron Barnacle	Royale RP31
1985	Tomas Mezera	Reynard
1986	Warwick Rooklyn	* Elwyn
1987	Peter Verheyen	Van Diemen RF86
1988	David Roberts	Van Diemen RF87
1989	Mark Larkham	Van Diemen RF89
1990	Russell Ingall	Van Diemen RF90
1991	Troy Dunstan	Van Diemen RF91
1992	Cameron McConville	Van Diemen RF92

AUSTRALIAN FORMULA FORD CHAMPIONSHIP

	1993	Craig Lowndes	Van Diemen RF93
	1994	Steven Richards	Van Diemen RF94
	1995	Jason Bright	Van Diemen RF95
	1996	David Besnard	Van Diemen RF96
	1997	Garth Tander	Van Diemen RF95
	1998	Adam Macrow	* Spectrum 06
	1999	Greg. Ritter	Mygale SJ98
* Denotes Australian-built and designed chassis	2000	Luke Youlden	Mygale SJ2000
	2001	Will Davison	Van Diemen RF01
	2002	Jamie Whincup	Van Diemen RF01
	2003	Neil McFadyen	Van Diemen RF94 "Stealth"
	2004	David Reynolds	Van Diemen RF04
	2005	Daniel Elliott	Van Diemen RF05
	2006	John Martin **	* Spectrum 011
** Formula Ford 1600 graduate	2007	Tim Blanchard **	Mygale SJ07
	2008	Paul Laskazeski **	* Spectrum 011b

AUSTRALIAN CHASSIS CONSTRUCTORS

Aztec

Built by Allan Ould and raced by Bob Minogue in the inaugural Formula Ford race in 1969. A consistent front-running car behind the all-conquering Elfin of Richard Knight.

Beasy

Built and raced by Brian Beasy in 1969. A second car was built in 1971 and, although it never featured strongly on the tracks, it became a very successful hillclimb Formula Ford car.

Birrana

Birrana was founded in 1971 by Malcolm Ramsay and Tony Alcock and its first car was a Formula Ford. The Adelaide-based constructor later produced cars for Australian F1 and Formula Atlantic. Regrettably, designer Alcock was one of those killed in Graham Hill's 1975 plane crash in England, and Birrana's doors closed shortly after the accident.

Bowin

A former employee with Team Lotus and Lotus Components, John Joyce returned home to Sydney in 1968 and set up as a race car constructor. The 69-71 P4/P4A Formula Ford was an extremely light spaceframe version of his 68 P3 F2 car, while the improved P6 debuted in 1972. Malcolm Oastler was one of the best known Bowin Formula Ford owners.

Elfin

Cliff Cooper and his son Garrie founded Elfin in Adelaide in 1958. They first built a sports racer and then a Lotus 18-based Formula Junior.

The first monocoque Elfin appeared in 1967 and the first Formula Ford shortly afterwards. The sturdy spaceframe 68 Elfin 600 was used in several different modes, as a Formula Ford, a F2 and even as a F5000. The 600B Elfin Formula Ford won the 1970 and 1971 'Driver to Europe' Series, courtesy of Richard Knight and Larry Perkins. Perkins took the same car to third place in the 1972 Formula Ford Festival in the UK.

Elwyn

Built by Elwyn Bickley in 1977 in Goulburn, NSW. The first car was driven by Wally Storey and further cars were produced up until 1983. Its biggest success came in 1986 when Warwick Rooklyn drove the marque to victory in the Motorcraft 'Driver to Europe' series.

Galloway

One-off car built by Harry Galloway in which Bruce Connolly won the 1983 'Driver to Europe' Series.

Listec

Although up to three cars were produced the Listec proved to be an unsuccessful Australian copy of the Van Diemen RF86. The marque has recently been re-born, with a current model Listec competing in the 2007 NSW Championship.

Mawer

Another one-off, built by Dave Mawer in Sydney in 1975, with assistance from fellow Formula Ford constructors, Harry Galloway and Elwyn Bickley. Driven to victory in the 1975 'Driver to Europe' series by Paul Bernasconi and again in 1979 by Russell Norden.

Spectrum

Designed and built by Michael Borland, the first Spectrum appeared in 1987, with regular model updates and more than seventy five have since been built. Adam Macrow posted the first national title for the marque, in 1998 and John Martin repeated the feat in 2006.

Wren

The first Australian-built Formula Ford, beating the Elfin's debut by a matter of weeks. Up to nine cars were manufactured and an updated model appeared in the late 1970s. The car was very competitive in Victoria, but never won a title, although engine specialist Peter Larnar drove a Wren to victory in a round of the series at Calder in 1973 beating Terry Perkins and Geoffrey Brabham in the process.

Formula Ford 1600 2009 Race Calendars

NSW STATE CHAMPIONSHIP

Round 1	March 21/22	Eastern Creek
Round 2	April 18/19	Wakefield Park
Round 3	May 30/31	Oran Park GP
Round 4	July 4/5	Eastern Creek
Round 5	September 12/13	Wakefield Park
Round 6	Oct. 31/Nov. 1	Oran Park

QLD STATE SERIES

Includes CAMS State Championship

Round 1	March 7/8	Morgan Park *
Round 2	April 25/26	Morgan Park *
Round 3	May 16/17	QLD Raceway
Round 4	July 4/5	Lakeside Park
Round 5	August 29/30	Morgan Park *
Round 6	September 5/6	QLD Raceway
Round 7	October 3/4	QLD Raceway
Round 8	November 7/8	Morgan Park *

* QLD State Championship

SA STATE CHAMPIONSHIP

All rounds at Mallala

Round 1	February 28
Round 2	May 2/3
Round 3	September 12/13
Round 4	November 14

VICTORIAN STATE CHAMPIONSHIP

Round 1	April 25/26	Phillip Island
Round 2	May 23/24	Sandown
Round 3	July 18/19	Sandown
Round 4	September 26/27	Phillip Island

WASCC FORMULA FORD CHAMPIONSHIP

All rounds at Barbagallo

Round 1	February 21
Round 2	April 19
Round 3	May 17
Round 4	June 14
Round 5	August 15/16
Round 6	September 19/20
Round 7	October 18

TBC November 8—Collie Motorplex Non-championship