



## Race Day Special..... It's sooner than you think!

This year sees Engineering your Future with the fullest calendar of events ever! We are delighted to inform all our partners and participants that we have five events at different locations around the country.

Increasingly we are finding a crossover of schools who participate in one or more of our activities spreading the concentration more evenly between initiatives with wheels—Formula Schools and those that float, Schools Marine.

The other major factor that has increased participation is the greater flexibility of our latest scheme - Formula Sun. Here we are finding several new categories of participation: Primary and Middle schools taking up the challenge, subject areas other than Science and Technology. Using the scheme particularly to focus on renewable energy, schools and colleges using the scheme as a link project with other establishments or a special marketing spin on an open day or evening. As we say of Formula Sun in our information: **'The main thing is flexibility, but wherever the scheme finds a home in your establishment you will find tailor made resources to support students and teachers in planning and mapping activities'**.

So now that the lighter evenings are with us there is no excuse for not getting out there and testing and developing your entries for whatever focus suits you, as your event is not far away!

### Issue 003-April 2010

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*Nottingham High School*

### Events calendar

Date	Event	Location	Postcode
June 08 <sup>th</sup>	Formula Schools Race Day	Silverstone Circuit Northamptonshire	NN12 8TN
June 21 <sup>st</sup>	Schools Marine North West	Plas Menai Watersports Centre Gwynedd	LL55 1UE
June 24 <sup>th</sup>	Schools Marine South East	Bluewater Kent	DA9 9ST
July 12 <sup>th</sup> – 14th	Big Lakes Day	Wimbleball Lake Somerset	TA229NU
July 15 <sup>th</sup>	Schools Marine South West		

### Web-site News

It has not gone un-noticed that we have been unable to update our web-sites for some while now. It now seems that after many years of good service from our web design company that they are unable to continue due to other commitments. We were hoping that this would not be the case as it leaves us with little option but to start from scratch; for three websites! Quite an undertaking when you have schemes to run as well, but Charlotte is now hard at work after her day job building a new engineeringyourfuture (EYF) site which will house all your old favourites in one place, Schools Marine, Formula Schools, as well as the generic information about EYF. We will let you know when this takes place, but in the meantime there is still a lot of valuable technical information on the old sites, it is mainly the news and Race Day information that is in newsletters for the time being.



# ENGINEERING YOUR FUTURE

Contact: [info@engineeringyourfuture.com](mailto:info@engineeringyourfuture.com)



**One Vision....Several Initiatives**

## Formula Schools Pre-judging for 2010



This year there are changes to pre-judging and the Race Day.

### Pre –Judging

Previously we have put considerable effort into organising events spread across the country only to find that few schools can make it, preferring instead to have a judge look at cars on Race Day itself or doing a postal marking with moderation on Race Day.

We have also found that with the increasing use of Formula Schools as a curriculum project, the competition element tends not to be so important and for some they are happy just to have the opportunity to come to Silverstone to race cars.

There is nothing wrong with any of the approaches and we are now offering greater flexibility to give schools the chance to select the method that suits them best:

For schools that are new to the scheme this will not cause any operational differences, but for those that are used to going along to an event prior to Race Day to have their Engineering marks awarded, there will be four scheduled events. We are putting these on subject to demand, so that if you value the opportunity to attend a pre-judging event there will be one available in appropriate geographical locations. The final selection of the host venues will be decided by uptake so it is critical that you let us know by **April 29th** such that we can confirm venues. All events will run immediately after school, approximately from 3.00pm— 5.00pm and during the fortnight May 10th — May 21st. Provisional locations are:

**South: Oxford and Dartford**

**North: Nottingham and Dumfries**

**Postal Marking** For this we send a judging pack to your school so that you can hold your own internal event, perhaps involving partner schools and supporters. Schools use the marking guide and then send this in with supporting photographs, we will then moderate these marks on Race Day with our judging team.

**Race Day Only Marking** This is the system with the least time available to schools and should only be selected if you are happy with telling us all about your entry in no more than 10 minutes. Schools that are using the scheme primarily for other priorities such as curriculum delivery, Young Engineers clubs etc take this route where the primary rigour of assessment is done through other channels.

## Formula Schools Race Day Silverstone

We sent the date for the Race Day (June 8th) out with the last newsletter in January, but it was added as a stop press flyer. From enquiries to us it seems several schools have not acted on this!

We are still getting a trickle of schools contacting us saying when can they sign up, when is Race Day and yes they'll be there etc etc.

Schools and exhibitors, please help us to help you by letting us know if you are planning on coming to Race Day... **NOW!** Silverstone has its busiest season on record with bike as well as car action, and to get a date in June we had to agree to build all our own pit lane structures. We must know the area we need well before the event as the almost limitless supply we have been used to in the past is not available!

### Race Format

After the big success of last year where we used crystal-less radio, combined with optical track timing without transponders, we are able to run larger numbers of cars in both the Heats and Finals. So for electric Building Bridges and I.C there will be two rounds of heats and one 20 minute final session with no enforced 5 minute pit stop!

This should make for more exciting racing with the opportunity for refuelling stops etc when they suit you. There will also be the importance of keeping your car in good shape for the duration of the final as repairs will be allowed during the race, but no swapping of cars, making it a level playing field for all entrants no matter how many cars you bring. Qualifying heats can use different cars, so schools can race up-to three different cars per entry.



## Schools Marine & Formula Sun Race Day Events

FORMULASUN

Delivered in partnership with overall sponsors The British Marine Federation and Lloyd's Register Educational Trust, the format of these Race Days remains pretty much the same but with more events and new venues!

We have sent invitations to primary schools local to the event venues to come along and get involved. We are offering them the opportunity to assemble and run a solar powered boat and see what schools do as part of the scheme, so if you know a Primary school that you would like to invite, please let us know. It is free of charge and we are offering them the time slot of 11.00am—2.00pm to take part, where we will be requesting volunteers from experienced schools to help get pupils building and testing a kit boat that we will have for them to use.



### Schools Marine Race Day Venues

#### Plas Menai - June 21st

Plas Menai enjoys a magnificent location on the Menai Strait, overlooking Anglesey in North Wales. The waters of the Strait are ideal for sailing, windsurfing, canoeing and powerboating. With easy access to the open sea and superb coastal scenery. Plas Menai is also close to Snowdonia National Park which provides canoeists and mountaineers with access to mountains, crags, rivers and lakes.

Not only will Schools Marine be running its Race Day, but schools that have been part of the North Wales Watersports Classe de Mer programme which has encouraged learning in a Maritime context will be there, showing what they have done within this scheme. The concentration of the Schools Marine Challenge is all on the Formula Sun project and early signs show Holyhead School are very competitive So, with plenty of time to devise a strategy to be the best and fastest boat you have been warned!

#### Bluewater — June 24th

Europe's largest and most innovative retail and leisure destination opened on March 16, 1999.

Bluewater's striking architecture and innovative retail design sets it apart from other shopping destinations. Situated in a stunning location among towering 50 metre high cliffs, Bluewater is surrounded by a tranquil landscape of lakes, parkland and trees.

Schools from as far away as Southampton and Oxfordshire will be racing all classes of boats here, again though the concentration will be on the Formula Sun class. Watch out for our new power source to be revealed which should make for exciting electric boats in the future!



#### Wimbleball Lake—12th to 15th July.

Here we have our biggest extravaganza of the summer, a three day event working with a selection of local partners: South West Lakes Trust, Exmoor National Park Authority, Field Studies Council at Nettlecombe Court, and Somerset Wildlife Trust.

Wimbleball Lake in Exmoor National Park offer first class facilities both on and off the water for the '**Big Lake Week**' Schools Marine will be doing Formula Sun work with hundreds of pupils over the three days culminating in the Regional Schools Marine final on Thursday 15th July. As this is our most recent area to develop, please let us know if there are any schools you would like to invite to any of the days.

## Building Bridges

We have just received some great news with regard to schools that have been asking if the partnership project can continue. The answer is an overwhelming YES! Although it is a little late for some schools to form new partnerships, we will do all we can to help. We do have to restrict this to the Formula Schools Project as this is where the funding is directed, however even with only two months to Race Day the electric class is very approachable and provides an excellent team working context.

Please contact us if you are part of the Independent State School Partnership programme or you would just like to find out more about it.



## Around the regions

### Danesfield School Somerset



One of the most recent schools to join Formula Sun has a different and interesting way in which they are approaching the project, not only as a collaborative exercise with West Somerset Community College but also interdepartmental within the school. The project is being led by the Geography department using the focus of renewable energies within transport technologies, whilst the design aspects are covered with CAD at the College and manufacturing in the school's Technology department.



### Nottingham High School & Arno Vale School Building Bridges partnership

We have been sent a superb article written by Simon Crowther of Nottingham High School, which is too long to appear in full, but will be available when the web-site goes live, in the meantime here is an excerpt:

*'Earlier this year our task was to design, create, manufacture and race a radio-controlled car at Silverstone. I hasten to add, the cars were models and so was the race track, but what a prestigious venue! When the CCF were out on Field Days, we were lucky to have a car design expert visit us and demonstrate the tricks of the trade. He had even worked on designing the Range Rover Sport! As if the challenge wasn't hard enough, part of our commitment was to help Arno Vale School to build a car, using the parts which we had designed using cad-cam. This allowed us to get our student teacher Miss Johnson to laser-cut the parts, ensuring they were millimetre perfect ... I am sure she won't mind me mentioning, that in the process she set the University's cutter on fire three times! Our car had to undergo pre-judging which was the first stage of the event which was held at Kirk Hallam School. It involved exhibiting our car alongside those of other schools from the East Midlands Region. A Formula Schools' Affiliated Judge inspected our car and we gave a presentation on its manufacture. We were apprehensive about Silverstone because of the fierce competition experienced in the event in previous years. We gained extra points for our design and manufacture when the judges looked at the improvements we had made to the car since pre-judging. On the track, our car blitzed the qualifying round.....'*

## Kits Ordering

### Radio Gear



Remember remember ..... on Race Day only crystal-less radio is allowed as it made for **NO** frequency problems at any of our race days last year, so we are sticking with it!

There are several options:

A complete set at the same price as last year.  
Receivers-only so that you can have several vehicles ready to go on Race Day  
Transmitter/Receiver set-only and use some of those servos you have accumulated over the years!  
For radio gear go directly to Howes Models and receive a discount on their already incredible prices.  
To order or find out more call 01865 848000 (Main Contact: Martin Castle or Nick) or visit [www.howesmodels.co.uk](http://www.howesmodels.co.uk)



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