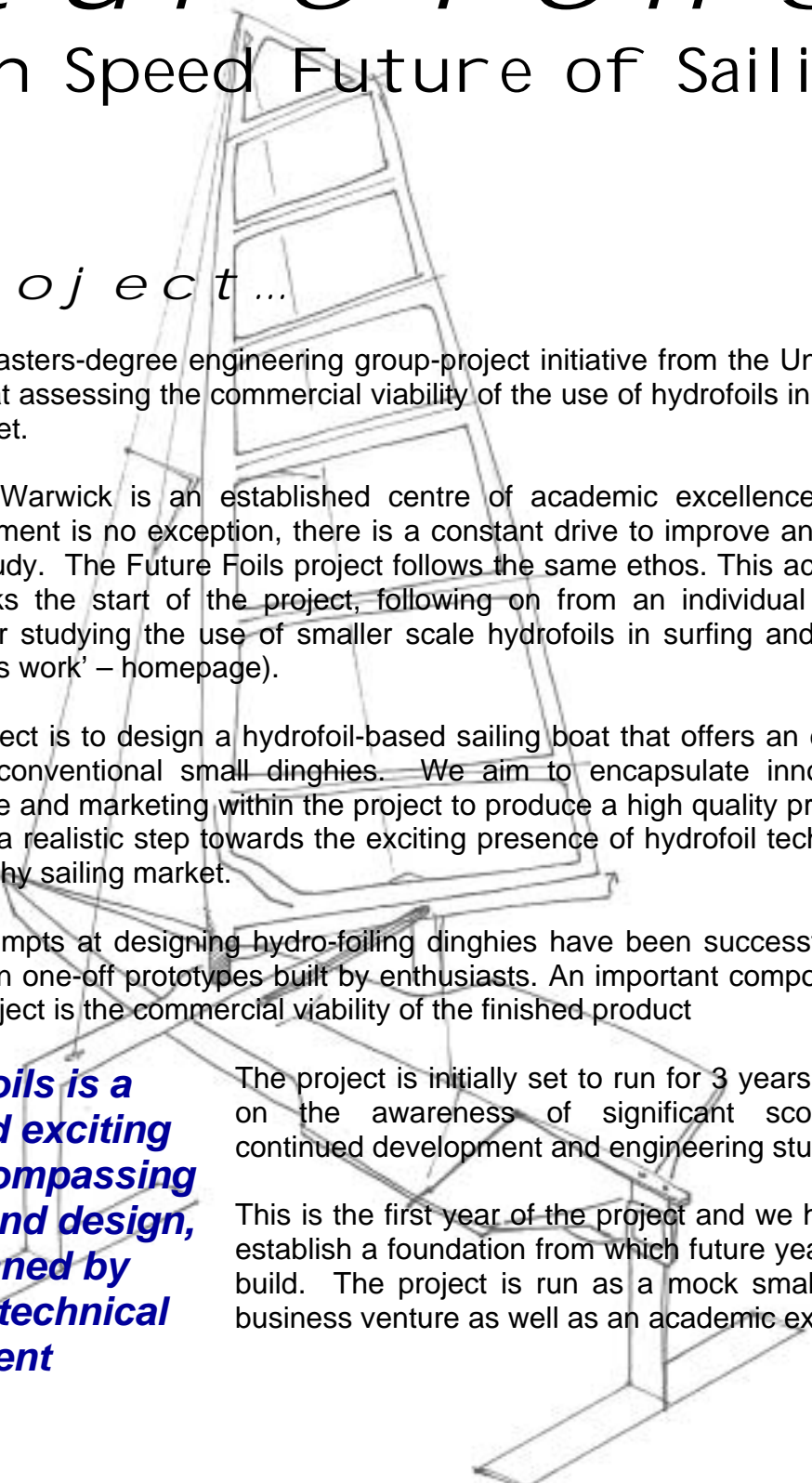


# *Future Foils*

## The High Speed Future of Sailing



### *The Project ...*

Future Foils is a masters-degree engineering group-project initiative from the University of Warwick aimed at assessing the commercial viability of the use of hydrofoils in the UK dinghy sailing market.

The University of Warwick is an established centre of academic excellence. The Engineering department is no exception, there is a constant drive to improve and excel in all faculties of study. The Future Foils project follows the same ethos. This academic year, 2003/4, marks the start of the project, following on from an individual project completed last year studying the use of smaller scale hydrofoils in surfing and water-skiing (see 'previous work' – homepage).

The aim of the project is to design a hydrofoil-based sailing boat that offers an exciting alternative to the conventional small dinghies. We aim to encapsulate innovation, design, manufacture and marketing within the project to produce a high quality prototype dinghy that makes a realistic step towards the exciting presence of hydrofoil technology in the common dinghy sailing market.

While previous attempts at designing hydro-foiling dinghies have been successful they have generally been one-off prototypes built by enthusiasts. An important component of the Future Foils project is the commercial viability of the finished product

***Future Foils is a diverse and exciting project, encompassing innovation and design, underpinned by prominent technical content***

The project is initially set to run for 3 years, based on the awareness of significant scope for continued development and engineering study.

This is the first year of the project and we hope to establish a foundation from which future years can build. The project is run as a mock small scale business venture as well as an academic exercise.

# How you can benefit...

## Advertising and media coverage

**Web presence** - As a contributor to the project, we aim to offer you publicity on our website, the address of which has been widely distributed to sailing groups over the past year and will soon have a link on the extensively used university homepage. Links to the sponsor's site will also be hosted if requested.

**Logo display** on our prototype will also be available, enabling sponsor publicity during test sessions at *Draycote Water* sailing club and in October at the country's premier speed sailing innovation event *Speed Weeks*. Further events such as those listed below will be considered in the coming years.

- Southampton boat show October 2004
- Speed weeks October 2004
- London Boat show January 2005
- NEC boat and outdoor show February 2005

**Test results** and a copy of the final portfolio report will also be available to contributors, although it must be made clear that intellectual property remains the right of the University of Warwick. The onboard data-logging unit will supply details of flying height, speed, direction (both for the wind conditions and boat) and stress / strain data from strain gauges in the foils, hull and hard points.

## Recruitment opportunities

The Engineering department is renowned for producing high calibre students, and any association your company can have within the faculty will provide new potential recruitment avenues with students who may not have considered a future with your company.

All the members of the Future Foils Team will be actively seeking employment at the end of the project as they are all in their fourth and final year at the University of Warwick. Many are keen to find jobs in the marine sector, but others have their sights set on management, finance, or consultancy. The project setup hopes to encourage the development of many desirable soft skills including leadership, organisation, communication, and teamwork.

## Involvement with an outstanding University

Warwick University has a world-renowned reputation, and is considered one of the top 5 universities in the country.

We hope that you can benefit from the association with our University, as well as being able to take pride in the fact that you have contributed directly to the success of Future Foils. The project offers the chance to not only develop a fantastic new innovation, but also see your product tested in greater engineering depth.

## *W h a t W e N e e d ...*

### **Sailing Equipment**

The project focuses on the design of the hydrofoils, their control system and the method of attaching them to the hull. Design and manufacture of the rigging and sail is beyond the scope of the project for this year and we therefore intend to use an existing design that we can attach to our boat.

This is currently one of the most critical components of the project so far and although we do have access to a few second hand rigs. Ideally we would like to try a number of different setups over the future of the project. New, end-of-line products, last years stock, and even second hand components that you might be able to provide would be very gratefully received.

### **Materials**

The construction of the hull, foils and nearly all components will be done by the team members in the University's Advanced Technology Centre ([www.eng.warwick.ac.uk/atc/](http://www.eng.warwick.ac.uk/atc/)). With the many hours of lab work behind us, and experience of the ATC'S technicians on hand we will continue to work innovatively with composite materials. Our innovative GRP + Polypropylene honeycomb core hull construction is light and low-cost and most importantly, entirely new to the market!

We hope to build the foil structures and hard points for the craft from pre-pregated carbon fibre using a rapid and accurate drawing to mould production method developed by the team.

### **Team Kit**

When attending events and during testing we feel that a professional and serious image would greatly enhance the reception of our work. This could be anything from simple logo printed T-shirts upwards. We hope that these kits will:

- Help to raise the profile of the project
- Give the team a more professional image
- Identify the members of the team when appearing in public

## Replies to our questionnaire

Our market research includes a questionnaire, which can be found here on the website. As the project is seriously interested in the market prospects for our project, we are trying to build a database of basic information from people involved in the market, from the sailing general public up to the professional sailing, manufacture and design level.

Responses would be very gratefully received, so perhaps as a final thought, you might be so kind as to e-mail the link round to members of staff in your organisation, friends, sailors etc.

We very much hope that you have enjoyed reading this brochure and are willing to give some help to the Future Foils team. If you feel that your company can help the team in any way, large or small, financially or otherwise, or if you're just interested, please contact us.

## *C o n t a c t u s . . .*

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# *F u t u r e F o i l s*

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