

# Sails science



# SailMaker by SailScience Ltd

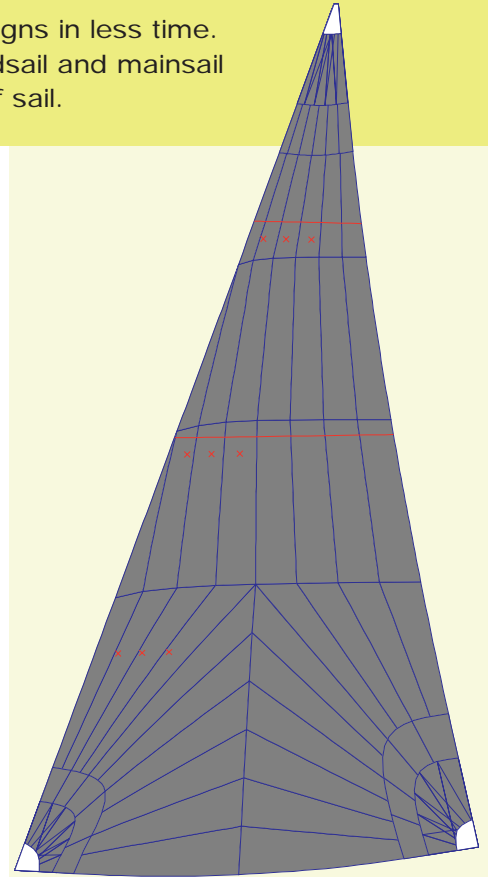
**SailMaker** provides the tools you need to produce top quality sail designs in less time. The **SailMaker** range of programs covers everything from simple headsail and mainsail design to sophisticated mould shapes and panel layouts for any type of sail.

- The practical approach ensures that the user makes savings in design and production time and materials.
- All of this is achieved with the use of an accurate, surface based, three dimensional model and exceptionally easy to use graphical tools.
- Interfacing to most plotters and cutters and also stress analysis, VPP and CAD programs, ensures maximum compatibility.
- Simple scaling and advanced fairing techniques are available to help you make faster sails.

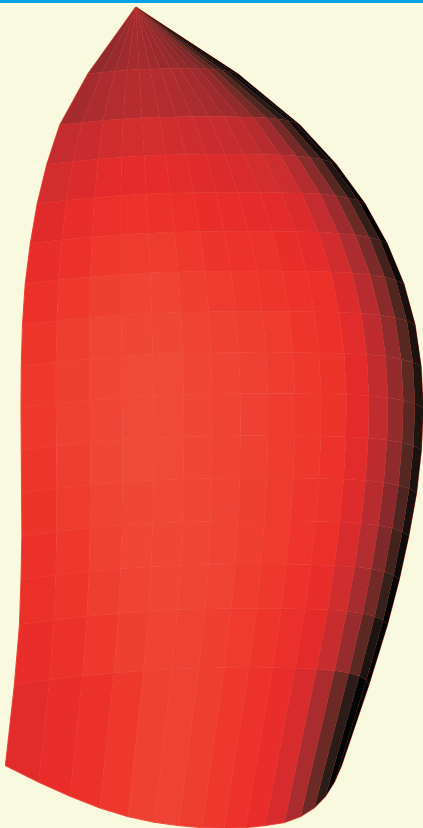
Combining ease of use with the speed of the Macintosh and Windows based computers, SailMaker has brought within reach of every sail loft, the opportunity to benefit from computer aided design and manufacturing techniques without the need for a large capital investment.

Finally, and most importantly, the programming team at SailScience Ltd have, since 1983, worked very closely with existing customers to ensure the software meets their requirements in the most practical and productive fashion.

This intimate liaison has resulted firstly in the most useful and well proven sail design and production software available with over 150 satisfied users worldwide. Secondly it demonstrates the continued interest, development and support available from SailScience.



## SailMaker Features



- Realistic sample designs, practical help and 150 active users worldwide.
- Constant updating and development with user newsletter.
- Integrated 3D sail design, fairing, paneling and printing/plotting of offsets.
- Gaff sails included at no extra cost.
- Incorporating twist and viewing from any angle.
- Chord, contour, net, surface, rendered and panel lines for viewing.
- Unrestricted number of shaping chords, elliptical or aerofoil.
- Simple or sophisticated mould shapes and paneling.
- Input and alteration of shaping by mouse or keyboard, in absolute or % values.
- Automatic metric, imperial and percentage conversions.
- Boat and rig setup with spreaders, tack height and spinnaker pole.
- Girth, area and corner angle calculation.
- Short or full length battens.
- Extensive sail markings of reefs, cunninghams, telltales, draft stripes and windows.
- Backstay feature for high roach mainsails.
- Seam editing of panels.
- Labour and material saving features, auto nesting, fabric wastage, frame rulers.
- Optimised plotter movement routines.
- Extensive compatibility with CAD/CAM industry standards.

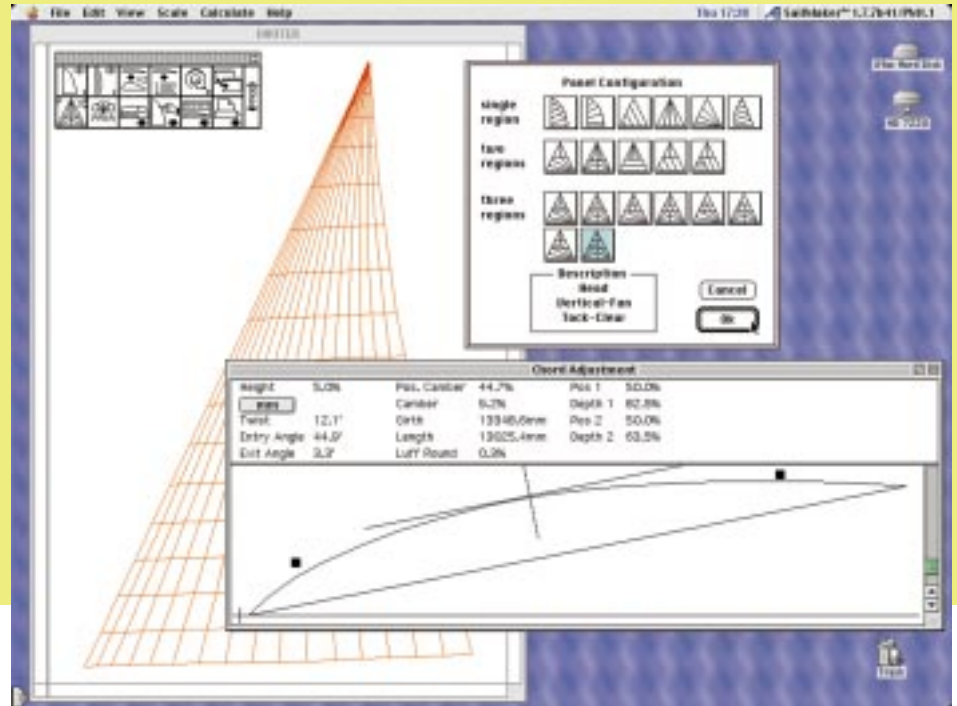
**SailMaker**<sup>™</sup>

# 3D Sail Design

**SailMaker** takes advantage of the Macintosh's superior user environment, allowing a sail designer to become an efficient user in a matter of hours, without requiring any keyboard skills.

Unlike the confusing 'numbers based' systems, SailMaker consistently presents you with your choice of clear, accurate graphical displays to design your sail shapes by use of the mouse. Virtually unlimited numbers of shaping chords and precise digital information is always shown, giving you complete design control. Chords may be elliptical in shape and most importantly they incorporate 'twist'.

Existing successful designs may be rescaled by simply altering the luff,

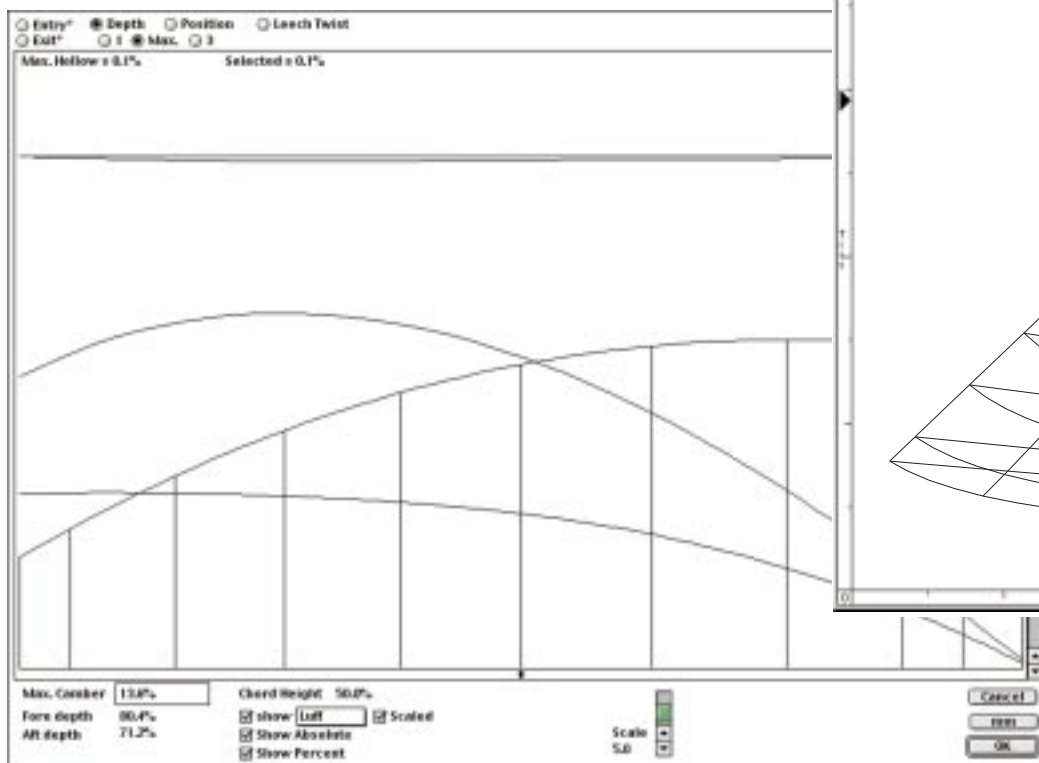


leech and foot or LP dimensions. Then alterations made to edge shaping, battens and production card. Full details may be printed at any time.

Positions of battens, windows and even detailing like telltales and camber stripes may be determined.

SailMaker is supplied with several well proven sample sail designs and full support from SailScience. Once

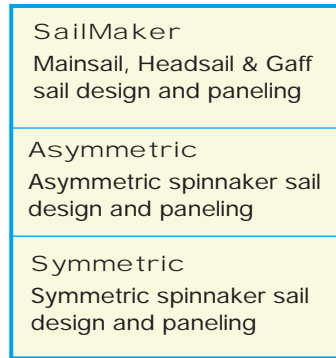
you have achieved the desired mould shape the next phase is panel development. Within SailMaker there are many different standard configurations of panel layout available. You choose material, seam and panel widths as appropriate then SailMaker accurately and swiftly develops the individually shaped 2D panels.



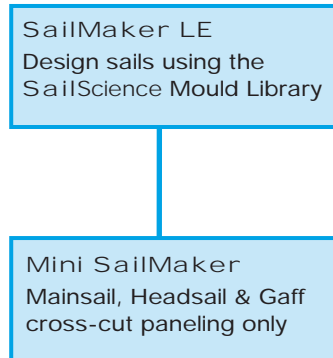
**SailMaker**<sup>TM</sup>

# SailMaker Modules Outline

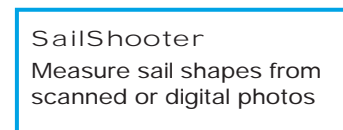
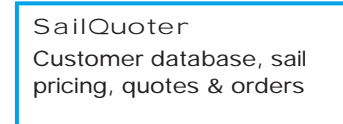
## The Core SailMaker Programs



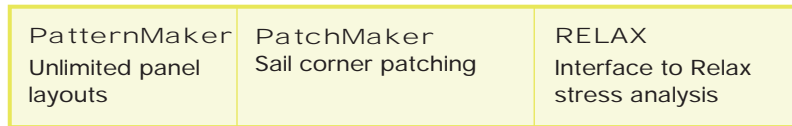
## Alternative Sail Design Programs



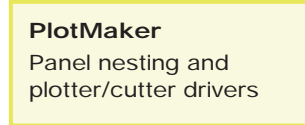
## Other Programs



## Extensions to SailMaker



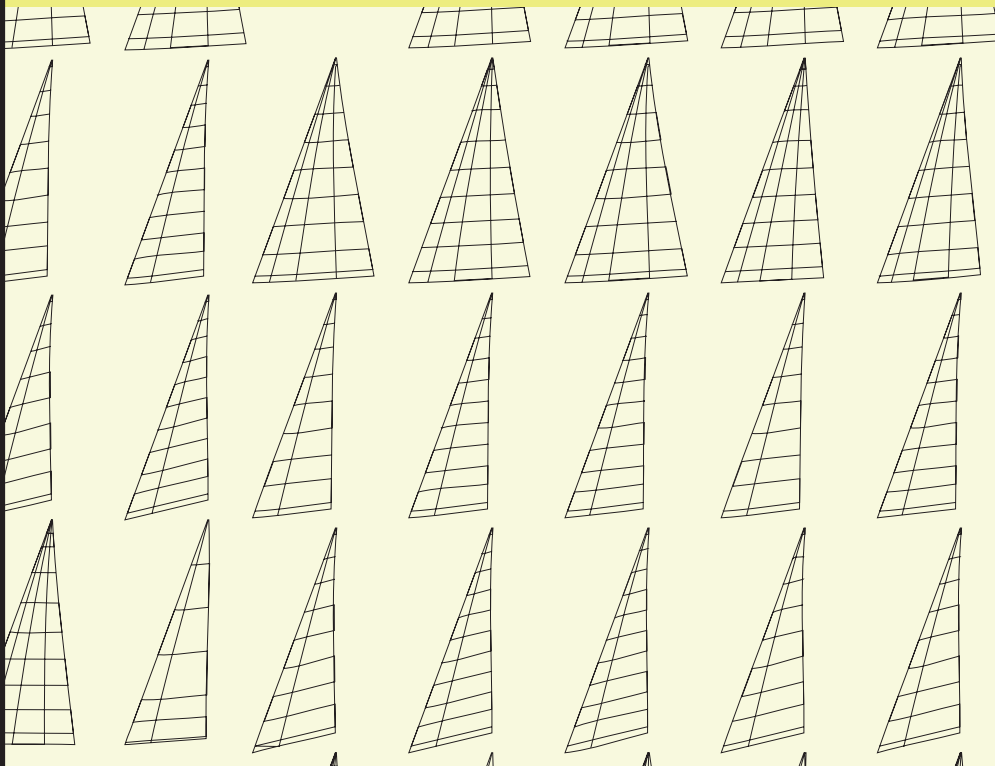
## Nesting & Plotting



# SailMaker

# SailMaker LE

**SailMaker LE** is a version of SailMaker that allows you to design and manufacture sails from a set of standard moulds supplied by SailScience.



The SailScience **Mould Library** is an extensive library of over 120 sail designs, covering mainsail, headsail, gaff, asymmetric, symmetric and dinghy designs.

## SailMaker LE offers

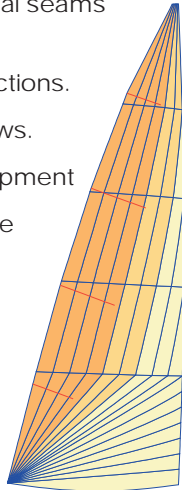
- Access to a world class sail design database. Production proved race and cruise designs.
- Fully complete designs in all respects, ready to make sails. Ideal for giving a new loft a quality advantage.
- No extra cost, SailMaker LE is included free with SailMaker. Pay for designs only as you use them.
- The Mould Library continues to develop and expand under SailScience. New moulds will be issued at regular intervals.

# SailMaker

# PatternMaker

**PatternMaker** allows the development of completely unlimited panel layouts. PatternMaker replaces the standard panel development for SailMaker, Asymmetric and Symmetric.

- Unlimited panel layouts through the use of unrestricted regional seams and unrestricted patterns within the regions.
- Flexible approach to switching between regions and redeveloping regional seams and patterns.
- Zoom and drag functions.
- 3D graphical previews.
- Faster panel development
- Allows you to reduce fabric waste.

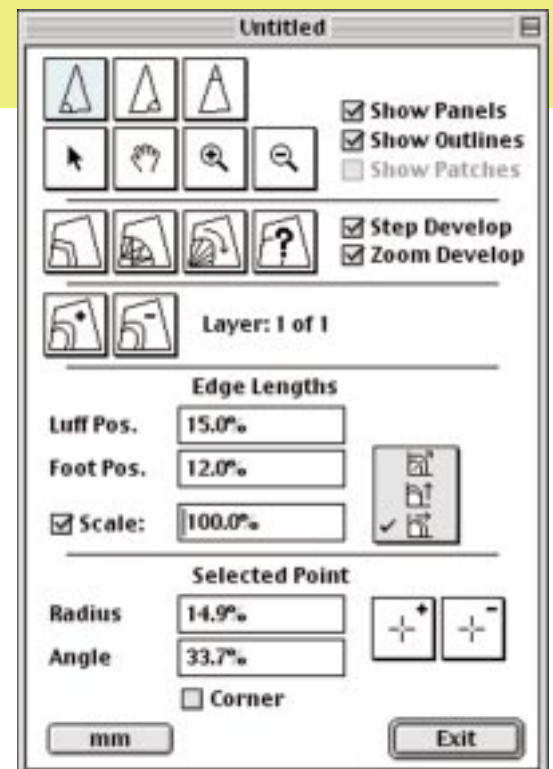
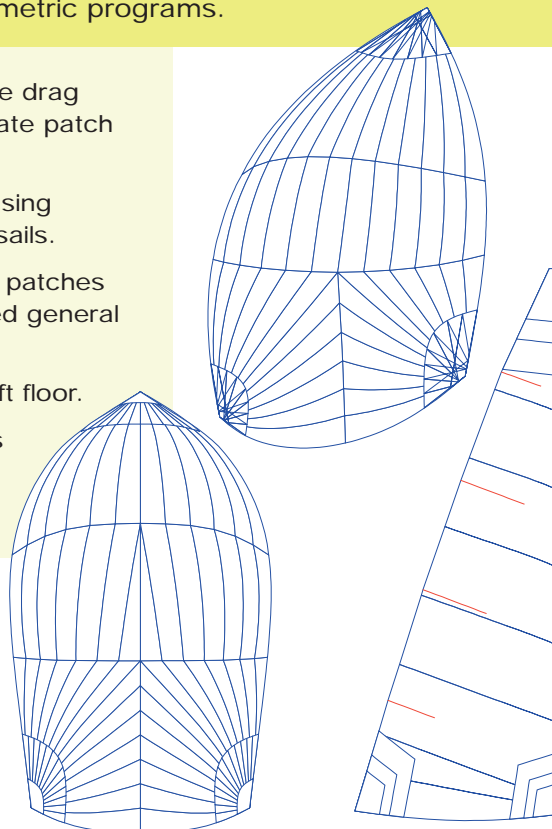


Fujicolor leading the Route du Rhum 1995

# PatchMaker

**PatchMaker** provides corner patching for SailMaker, Asymmetric and Symmetric programs.

- Simple to use, mouse drag control points to create patch shapes.
- Easy scaling and reusing patch files for other sails.
- Block, fan and radial patches plus an unconstrained general option.
- Saves time on the loft floor.
- Dramatically reduces fabric wastage.



# PlotMaker

**PlotMaker** provides the most advanced and effective panel nesting tools available to the Sailmaker, to reduce fabric costs and save time. **PlotMaker's** extensive range of plotter/cutter drivers and CAD import/export features ensures excellent compatibility with other hardware and software.

## PackMaker - Panel Nesting for Hand Plotting

- Visual arrangement of panels on fabric, with rulers and calculation of fabric length and wastage.
- Arrangement of panels by dragging, flipping and rotating.
- Easily move and add panels between files, using Drag & Drop.
- Splitting of panels to any width.
- Checks for panel overlaps.
- Sail picture for each file.
- Printing of panel offsets and positions for manual plotting.

## Powerful Nesting Tools

- Accurately set panel spacing.
- Arrow Key Panel Compaction instantly and accurately compacts.
- Drag & Drop Nesting with a continuously updating preview.
- Automatic Nesting sorts and organises panels to reduce nesting time. One click and the whole queue is nested, radials matched together and sorted into rows.

## PlotMaker - Panel Nesting & Plotter/Cutter Control

PlotMaker incorporates the nesting features of PackMaker with the additional functions of plotter control. Drivers are available and are used daily for most brands of plot/cutters including:

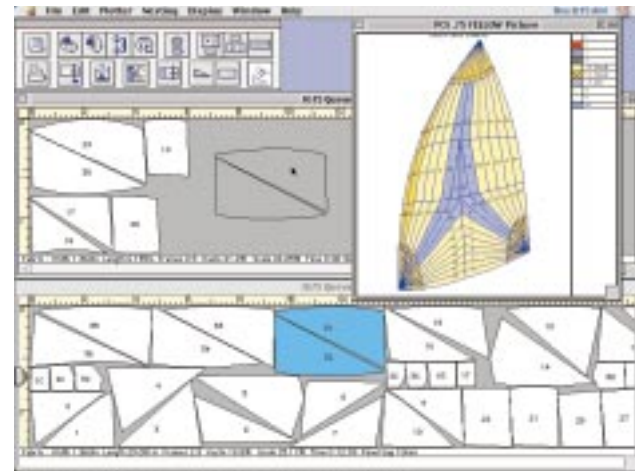
Aeronaut (Xplot & Maxis), Armstrong & White (Genesis, Taurus and Laser), Axon, Blackman & White Orion, Carlson, Cutting Edge, Design Correlations, Houston, HPGL, Isel, MCS, ProSail. Custom drivers can also be provided on request.

## PlotMaker CAD

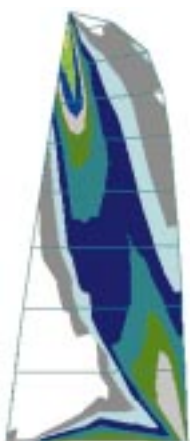
- Importing of pictures, including fonts, for plotting from CAD and drawing programs through the PICT format.
- Exporting of panels as PICT files for modifications and additions in other programs.
- Importing of Panellist Text and Binary files.

## MiniPlot

Developed by Aeronaut Automation, MiniPlot is recommended by SailScience as an excellent companion program to PlotMaker. MiniPlot translates DXF, SMSW Plotter Pilot ntv, MiniCad Text, and ProSail igl (HPGL) formats into and out of PlotMaker.

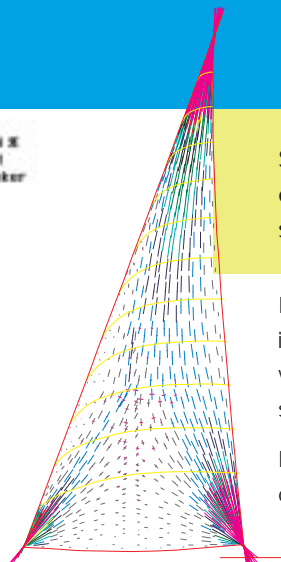


# RELAX



WARP STRAIN %  
SFVLM9 RUN:1  
Orig: SailMaker

0.50
0.55
0.60
0.65
0.70
0.75
0.80
0.85
0.90
0.95
1.00



SailMaker's **RELAX** Interface allows designers to export their designs into the **RELAX** finite element stress analysis and aerodynamic package.

Finite element analysis enables the sail designer to accurately investigate what his designed shape will be like in a variety of wind strengths. By linking to **RELAX**, SailMaker users can optimise sail shapes and ensure correct fabric selection and orientation.

**RELAX** can eliminate expensive mistakes and reduce the time consuming tweaking of existing sails.

# SailQuoter

SailQuoter is an integrated customer database, sail pricing, quote and order form system.

## Customer Database

- Store all your customer and boat details.

## Sail Pricing

- Accurate and consistent sail prices. Under pricing or over pricing can be very costly to your business.
- Fast. can price a sail in seconds. No calculator needed.
- Easily adjust your SailQuoter prices with the Setup Wizard.

## Quotes

- Produce professional printed quotes. Improve the image of your loft, look bigger and better, stand above the rest.
- Printout includes your company letterhead.
- A quote is the first representation of a company, it's product and service. The professional presentation of your quote can be as critical to you getting an order as the price itself.
- Fast. You can create a complete quote with priced sails in only minutes.
- Customer and sail pricing information is brought through automatically.

## Orders

- Generate orders straight from your quotes. No re-entering any data.
- Calculates total order price, including discounts local taxes and freight.

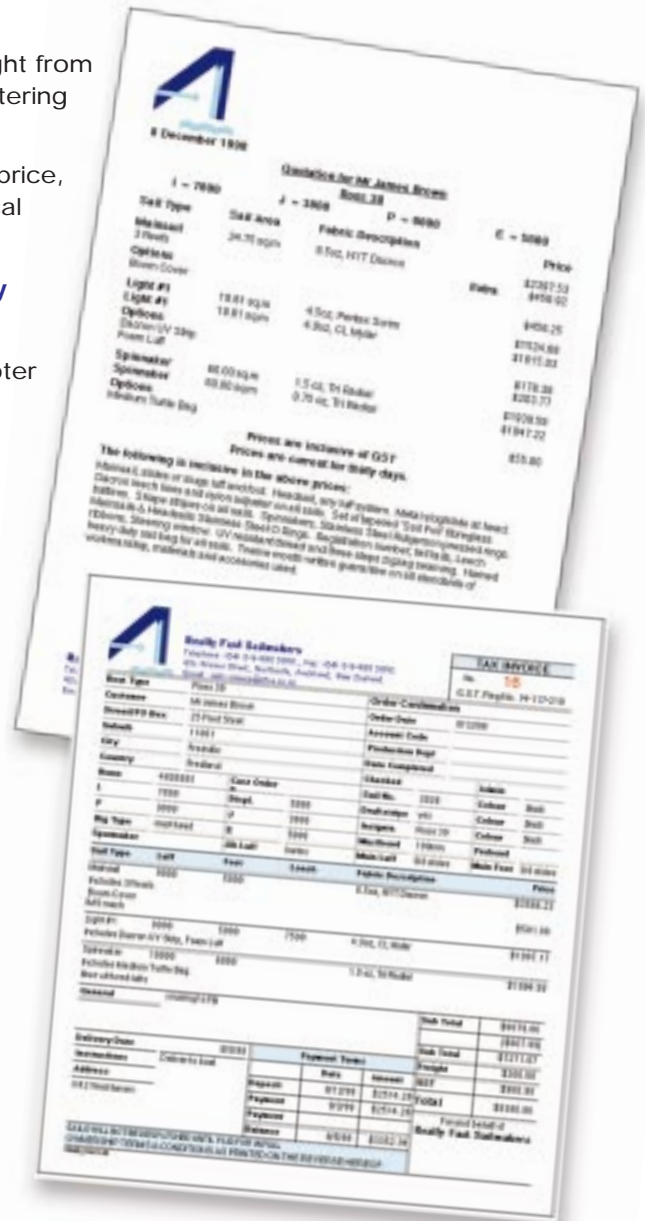
## Fully Integrated - Fully Automatic

- All the parts of SailQuoter are linked together, sharing the same information.
- All printouts are created automatically, just enter sail dimensions and pick and choose menu options, that's all. No keyboard skills required.

## Features

Easily customised to any loft, country, currency and language.

Mac OS and Windows compatible.



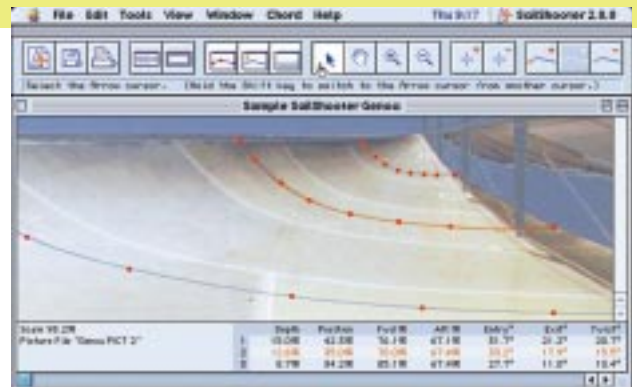
# SailShooter

SailShooter measures sail shapes from digital photographs.

Developed for use in the America's Cup 1995, an updated version has been developed for AC 2000. Measured chord shapes can be compared both on screen and numerically with SailMaker files.

Accurate and easy to use, SailShooter gives you full zoom features and click and drag point control. Sail shapes can be measured from scanned photographs or digital camera images.

SailShooter reads all major file types, PICT, JPEG, TIFF, GIF, BMP and more.



SailMaker and its associated range of design and production tools offer unsurpassed ease of use and accurate 3D modelling of sail shapes.

SailMaker is the official design system of Halsey Lidgard Sailmakers, the worlds fourth largest group of sail lofts and over 150 users can testify to SailMaker's effectiveness for all types of sail design and manufacture including ...

*"SailMaker's is the most complete sail design software on the market no question. It's a very sophisticated, but easy to use program".*

Dave Armitage, Sail Coordinator  
America True, America's Cup Syndicate

*"This is exciting. The best design software available".*

Mats Johansson, Gran Segel AB

Advantage Sails  
Ullman Sails Australia  
Sails By Prior  
Gosper Sails  
Saxby Sails  
Rolly Tasker Sails  
Steve Walker Sails  
B&J Canvas  
Sam's Sails, Shades & Canvas  
Sobstad Sails Australia  
Sheridan Sails  
D.R. Young Sails  
Atkins Fabrication  
John H. Cassidy  
Wittevrongel Sails  
Winning Sails  
Green Sails  
Carlsen Sails  
MP-Sejl Elvström Sails Nord  
Aura Sails  
Kb Neb Sails  
WB Sails  
Voiles Gateff  
Erton  
Fritz Segel  
Segelmacherei Arians  
Pfeiffer Segel  
Heino Haase Segel  
Ernst Schefferling  
Moritz Sails  
Hinsch & Ruhland  
Landesberufsschule for Segelmacher  
Jan Segel / Segelwerkstadt  
Faber and Munker  
Segelmacherei Latsch  
Bohn Segel  
Schultz Segel  
Hartzel-Segel  
Reinhard Malzahn  
Co-Segel  
Kafetzidakis Sails  
UK / McWilliam Sailmakers Cork  
Yamit Easy Sails  
Zeilmakerij-Tuigeri Neik Goes  
Bart Sails  
Mollers Sails  
Zeilmakerij S.A. den Boer  
Potma Sails  
Kempers Sails  
Zwaan Sails

Windward Sails  
Gran Seil  
Fischer Sails  
Velas Pires de Lima  
Vela Rio  
J. P. Velas  
Hyde Sails Sth Africa  
Vela 2000  
Royal Sails Stockholm  
Big Image Systems  
North Diamond Sailmakers Sweden  
Gran Segel Malmö  
Saltjöbadssegel  
Lind Segel  
UK-Sweden / Rebellsegel  
Gran Segel  
Magnusson Sails  
Voiles Gautier  
Alain Marchand  
Westaway Sails  
Steve Goacher Sails  
Pinnel & Bax Sails  
Sanders Sails  
Speed Sails  
Boats 'N' Bits  
Flew Sails  
UK / McWilliam Sailmakers Hamble  
Penrose Sails  
Yeoman Sails  
SKB Sails  
ACS  
Cranfield Sails  
Graham Deegan  
Saturn Sails  
Batt Sails  
Dolphin Sails  
UK / McWilliam Sailmakers Cowes  
Quay Sails  
Haze Sails  
Jeckells  
Osen Sails  
North Diamond SailMakers UK  
Iolair Sails  
Breaksea Sailmakers & Riggers  
Gambell and Hunter Sailmakers  
Point Sails  
Sailspar Sailmakers  
Irby Sailmakers  
Ocean Sails Cumana  
Kostan Sails

## System Requirements

### Mac OS

Any Macintosh or  
Macintosh clone  
computer

4Mb RAM

Hard Disk

System 7 or later, includes  
MacOS 8 & 8.5



### Windows

An Intel-compatible  
computer with a 486 or  
pentium processor

Hard Disk

8mb RAM

Executor Win32



## Optional Plotter & Cutter Links

Contact SailScience or  
it's distributors for information  
on available Plotters  
and Cutters.

## Distributors

### Island Computer Systems Ltd

41 Horsebridge Hill  
Parkhurst, PO3 5TJ  
Isle of Wight  
United Kingdom

Tel +44 1983 827107

Fax +44 1983 521608

Email [info@islandcomputers.co.uk](mailto:info@islandcomputers.co.uk)

<http://www.islandcomputers.co.uk>



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