

HIGHLIGHT



sailboat designs by Keith Callaghan

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Highlight was designed in 2003. She was commissioned by Mike Hardie (who sails one of my 'Hazard' Merlin Rockets), as a comfortable but fast daysailer. She has a 160kg ballasted centreboard for stability, and this also makes her very easy to launch and recover from her trailer.

Principal Dimensions:

Length over all	5.5 metres
Beam	2.0 metres
empty weight	465kg
Sail area (main + jib)	17.3 sq m
Spinnaker	20 sq m

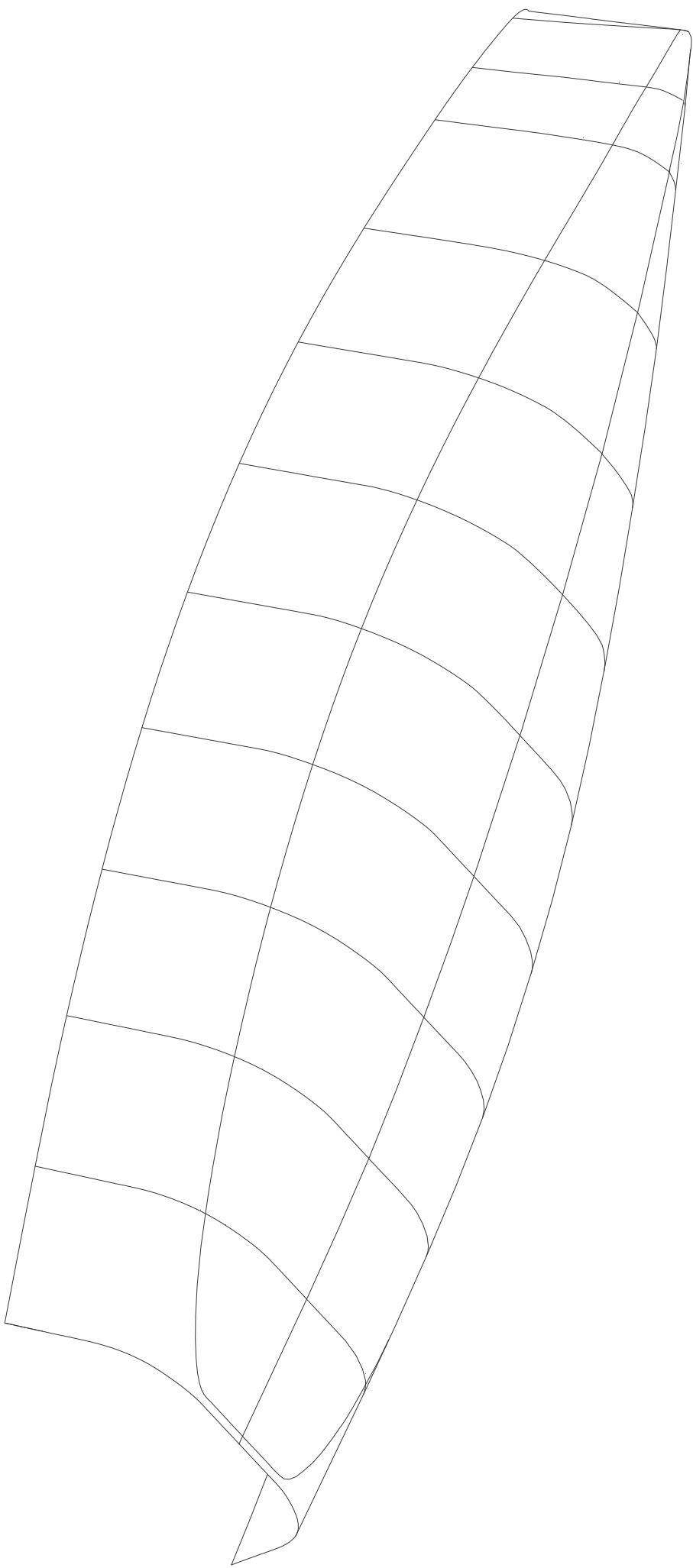
Fully detailed PLANS of *HIGHLIGHT*, consisting of about 30 sheets, are available from the designer, Price £175.00 (€250.00, \$335.00). (Approximately 30 man/weeks build time). Price includes royalty for one boat, and free of charge comprehensive support for you during the planning and building of your boat

Support Policy

1. *Support is included as part of the package that you purchase with the boat plans.*
2. *I will answer all reasonable questions about how to build my design. As the builder, you are responsible for acquiring sufficient general knowledge about boatbuilding before you start your project. Many good books and other sources of information are available, and I can recommend such information sources.*
3. *The plans and other documentation that I supply are very detailed and contain a great deal of information. You do not get a step-by-step set of building instructions, however.
It will be useful for you to go through the data thoroughly before you start the project. This will help to minimise mistakes and will speed up the actual construction. If you cannot find the answers in the documentation and drawings, I'm here to help, so please ask me.*
4. *I will endeavour to respond promptly to your enquiries. However, I cannot undertake to be available at all times.*

Contact Information

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HIGHLIGHT DAYBOAT

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31/10/2006 14:43

HL0018.srf / HLgra02.skf

HIGHLIGHT

A Dayboat for Mike Hardie

Scale 1:40

HL.splan02.skf HL0016.srf

Printed 31/10/2006 14:42

1 metre

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Mast Section: Z SPARS Z145

inertia: 45 x 29 cm⁴

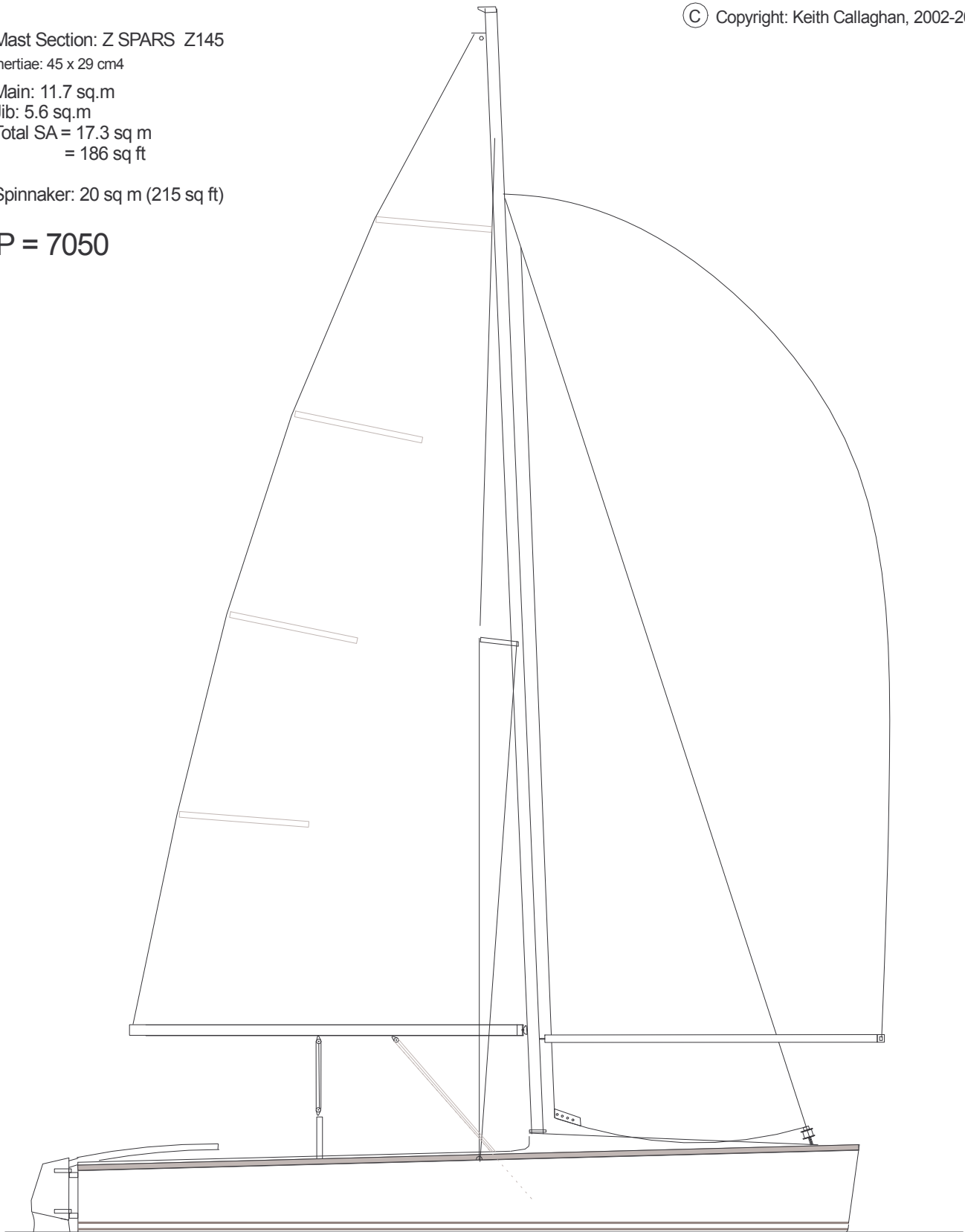
Main: 11.7 sq.m

Jib: 5.6 sq.m

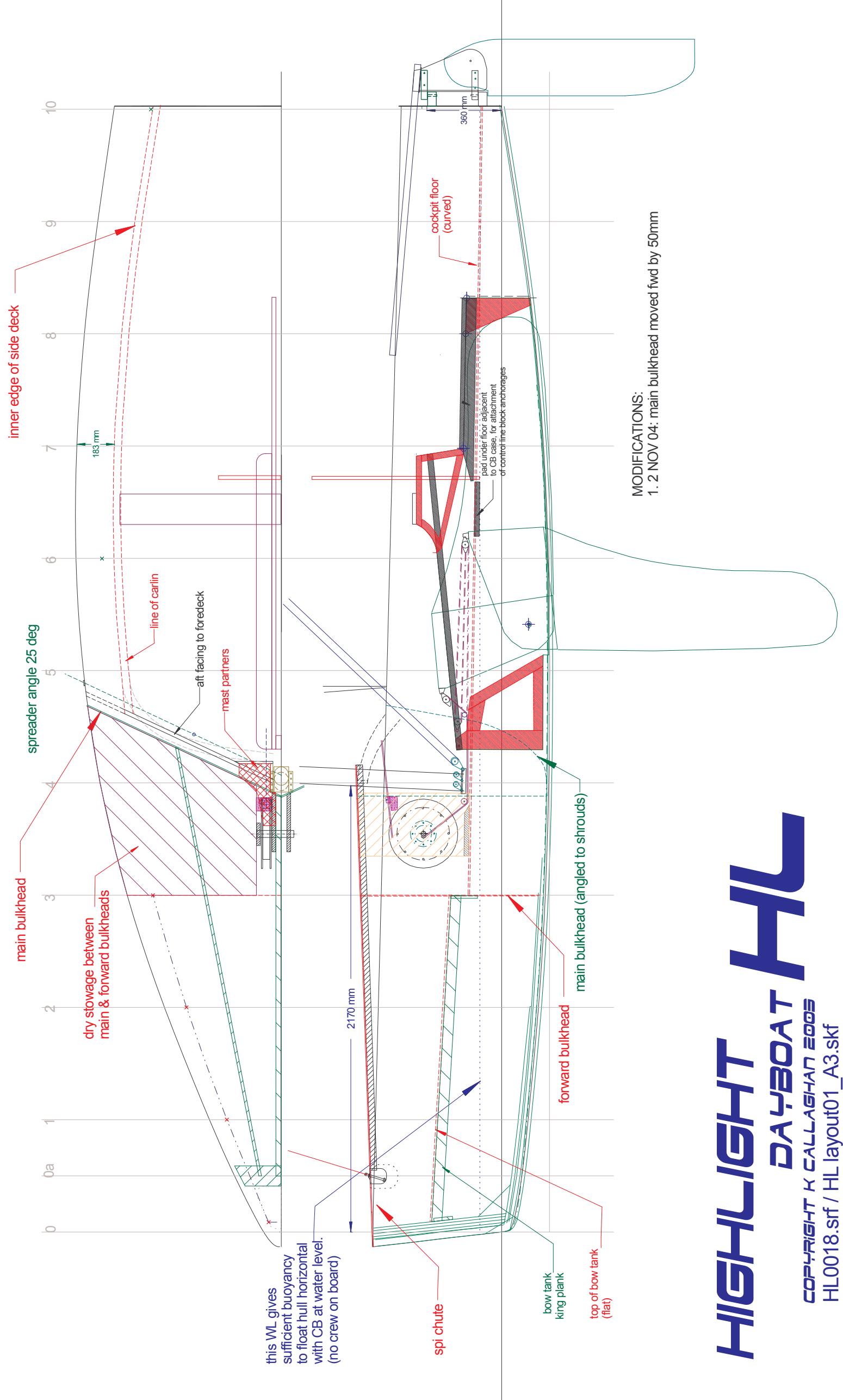
Total SA = 17.3 sq m
= 186 sq ft

Spinnaker: 20 sq m (215 sq ft)

P = 7050



Sta	Height
0a	559
1	543
2	511
3	479
4	379
5	370
6	361
7	352
8	343
9	334
10	325



MODIFICATIONS:
1. 2 NOV 04: main bulkhead moved fwd by 50mm

HIGHLIGHT DAYBOAT HL

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HL0018.srf / HL layout01_A3.skf
Scale 1:20 31/10/2006 14:39

this WL gives sufficient buoyancy to float hull horizontal with CB at water level. (no crew on board)

spi chute

bow tank king plank
top of bow tank (flat)

forward bulkhead

main bulkhead (angled to shrouds)

main bulkhead

dry stowage between main & forward bulkheads

spreader angle 25 deg

line of carlin

aft facing to foredeck

mast partners

cockpit floor (curved)

pad under floor adjacent to CB case, for attachment of control line block anchorages

360 mm

inner edge of side deck

183 mm

x

10

9

8

7

6

5

4

3

2

1

0a

10

STATION 6 (3276mm aft)

Recommended sequence of assembly:

1. fit centreboard case.
2. fit sub-floor frames.
3. trial fit floor, then remove it.
4. fit deck knees; glued to frames.
5. cut slots in floor for knees, and glue floor in place.

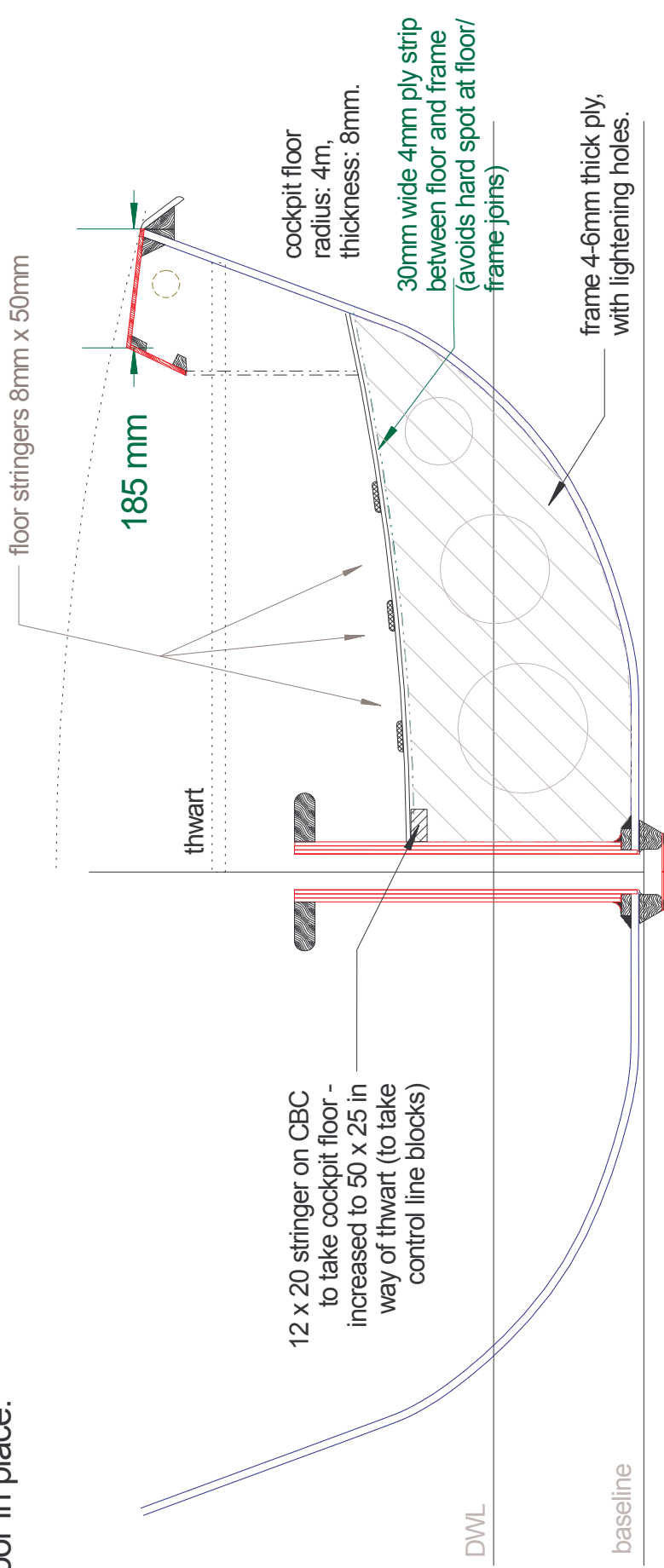
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Scale 1:10

HL0018 sta6.skf

31/10/2006



CENTREBOARD CASE SIDES

Scale 1:10

printed 31/10/2006 14:41

+3500

The case is made of 1 lamination of 6mm ply, plus 2 additional 6mm laminations forward of +3500mm

Before assembly, the inner face is finished with 1 layer of glass cloth overall, with an additional layer forward of +3500mm

Coordinates on lower edge of centreboard case are to outside skin*. ie the lower edge of the inner case lamination only.

The outer laminations are higher by the thickness of the skin plus hog.

See drawing HLcbc005.skf

* except area fwd of CB case slot

outline of inner ply lamination of case

Dotted line shows outline of outer laminations of case (fwd of +3500)

16mm clearance

bottom edge = outside skin

fwd part sits on top of hog

Assumed thicknesses:
HOG: 15mm
Skin: 12mm

If actual thicknesses are different, then bottom of case profile must be adjusted accordingly.

HIGHLIGHT DAYBOAT

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HLcbc004.skf / hi0018.db

8

7

1427 mm

645 mm

1465 mm

414 mm

2196 mm

400 mm

2196 mm

94 mm

2022 mm

75 mm

1477 mm

29 mm

1094 mm

645 mm

931 mm

542 mm

931 mm

6 mm

609, 99

461, 27

461, 0

0 mm

448 mm

0 mm

30 mm

HIGHLIGHT DAYBOAT

HL CBwinch03a_A3.skf

Scale 1:2

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Centreboard Winch SIDE ELEVATION

31/10/2006

Harken or HA
alloy cam cleat.
mounted between
stbd cheek of winch
bracket and dry
stowage side panel.

main bulkhead
at CL

winch rope:
6mm polyester

There must be sufficient
clearance under the
jammer bracket to
extract the winch drum
for servicing.

Stainless tube -
acts as fairlead
for centreboard
rope/strap.

mast foot is raised 20mm
to provide a tunnel in
which the centreboard
hoist rope runs.

5mm Dyneema or 1" webbing
- centreboard hoist rope/
strap.

hoist rope clamped
to winch axle

Ensure there is sufficient
clearance here when axle
is fully loaded with rope/strap.

233 mm

