

## APPENDIX G (Updated on 23 July 2016)

This appendix includes all the agreed modifications to the AC45 Yacht and may be updated periodically.

<b>WING AND WING HARDWARE</b>	
<i>ITEM</i>	<i>DESCRIPTION</i>
Camber arm	Split fixed triple sheave to 3 individual sheaves
Camber control	Remove camber control swivel block with jammer from base of wing and relocated to spine. Mounted on carbon base. Fitted new turning block to spine at base of mast
Camber control	Wing camber handle
Camber control	Safety strop for camber control line
Camber control	Reinforce camber control swivel block stainless steel
Camber control	Calibration scale on camber
Camber control	Change braided Sk90 for unidirectional Sk90
Wing interior	Fitted soft padeyes for media equipment
Flap control	Replace lashings to turnbuckles under camber arm
Flap control	Change to uni-directional sk90 rope all wing control ropes
Jib halyard	Soft loop and dog bone for attachment
Jib halyard	Lengthen 1 to 1 portion
Code Zero halyard	Reinforce top attachment
Wing sheet	Soft loop and dog bone for attachment
Halyard jammer	Reinforce jammer with side plates
Twist control	Reinforce twist control swivel block stainless steel
Twist line	Cover over twist line
Shroud	Add braid for the lowest 2m of shrouds to protect from sheets
Twist control	Remove swivel and replace it with cam cleat
Wing sheet	Add one cam cleat for wing sheet in different position
Wing rotation ball	Retaining mechanism for wing rotation ball
Code Zero jammer	Move code zero jammer to the wing spar base
Code Zero jammer	Add code zero jammer to the wing spar base
Wing flaps	Add foam rubber between the gaps of the wing flaps and tape over.
Wing sheet	Wing sheet ferrule to stop wing sheet catching in runners
Code Zero halyard	Shock cord on Code Zero halyard release
Wing jammer	Add fairlead at the inside of webbing at bottom of the wing for Code Zero halyard and associated fittings.
Wing Camber Line	Add wing camber take up bungee.
Wing Shrouds	Add bungee at lower and upper shroud to stop head swivel catching
Wing Membrane	Add wing membrane penetration windows to allow for maintenance
Wing Flap	Overlengthen CA4 Pin with retainer
<b>HULLS, TRAMPOLINE, CROSS BEAMS, SPINE AND ASSOCIATED RIGGING AND FITTINGS</b>	
<i>ITEM</i>	<i>DESCRIPTION</i>
Transom	Mount carbon tube for mounting wind gear
Whisker cable	Change braided Sk90 for unidirectional Sk90

Trampoline	Patch where spine cable passes through trampoline
Fwd trampoline	100mm wide cuben cover on centerline to stop blocks from catching
Furler line	Addition of blocks on forward beam
Furler line	Addition of blocks on bowsprit
Furler line	Replace 10mm furling line with 8mm one.
Furler line	Addition of block on spine
Hiking straps	Add hiking straps provided they are attached to the trampoline, cross structure or hulls. Hiking straps lead through standing rigging are not permitted
Turning block	Remove extra block and use moveable gennaker/code zero turning block on aft beam
Winches	Upgrade Harken traveler winches
Cleats	Cleats for traveler winches
Pin stop	Change adjustable athwarships jib lead system to pin stops
King Post Stay	Change king post stays to unidirectional
Centre spine	Shock cord pad eye for camber line
King post	Kinpost keeper bolt
Jib up/down	Upsize block in jib up/down 4-1
Jib up/down	Change to a double block under the forestay
Jib up/down	Remove jib up/down purchase under the spine
Jib fairlead	Remove fairlead jib sheets
Jib sheet	Jib sheet override roller
Bowsprit/Spine	Change to dogbone attachment for forestay and whisker stays to spine and bowsprit
Jib	Rope and clip to stow the jib
Velocitek	Instrument bracket for Velocitek
Sheet holder	Velcro sheet holder on hulls and bowsprit
Knife	Knife on spine (Not part of the boat weight for measurement condition)
Winches	Add washer to winch to aid winch handle removal
Wingsheet	Ferrule attached to the spine to stop wing sheet from catching in the runners
Spine	Add block on spine for gennaker halyard
Jammers	Add jammers for jib sheet, fair lead blocks and carbon fittings
Winch handles	Replace Harken winch handles with Holmatro winch handles of the same size
Hulls	Carbon covers on hull inspection deck plates
Hulls	External deck reinforcement at winches
Hulls	Add flaps the drain holes in the transom
Code Zero halyard	Add removable carabiner as a fairlead
Code Zero halyard	Raise spinnaker halyard fairlead
Shroud chainplate	Add lashing ferrule on shroud chainplate
Sheets	Replace covers on jib and code zero sheets with spectra or similar
Code Zero sheeting	Replace ferrules with turning blocks
Code Zero sheeting	Lash block directly to traveller car.
Wing sheeting	Add dog boned block near the wingsheet winch
Fairlead for primary	It is permitted to remove the fairlead for the primary winch

winch	
Jib up/down	It is permitted to change the jib up down as long as no extra blocks or fittings are added.
Crash Stern	Two 14mm holes shall be drilled, one forward and one aft of the hull-crash stern joint. Holes shall be on centreline as close as possible to the joint within the monolithic part
Deck gear	It is permitted to remove the snubber winch and the associated fairlead
Winch handles	Replace Harken winch handles with Lewmar One-touch winch handles of the same size
Code Zero sheeting	Add loop with tylaska type shackle to allow upwind/downwind sheeting setting.
Systems take up	Add take up systems inside forward crossbeam for jib up/down and hobble.
Jib in/out	Add tail take up system to jib in/out lines.
Wingsheet	Add cleat for wingsheet near the aft hatch.
Dolphinstricker	Extend engagement of lower fitting into the dolphinstricker
<b>RUDDERS AND STEERING SYSTEM</b>	
<i>ITEM</i>	<i>DESCRIPTION</i>
Tiller arm	Shock cord system inside tiller bar to hold up tiller extensions
Tiller	Cut 100mm off end of tiller
Tiller extensions	Tiller extensions permitted (submit model for approval)
Rudder rake system screws	Replace fasteners with wing nut type fasteners
Rudder Elevator	Reinforce the connection between elevator and vertical blade up to 75mm from the blade on each side. Any reinforcement not to exceed 1mm in height.
Lower Rudder Bearing	It is permitted to raise the lower rudder bearing by approximately 6mm to permit installation of bearing washer flush with the hull.
<b>DAGGERBOARDS AND ASSOCIATED ELEMENTS</b>	
<i>ITEM</i>	<i>DESCRIPTION</i>
Daggerboards	Chamfer 100mm top aft corner of daggerboards
Lower aft bearing plate	Substitute lower aft bearing plate with metal plate
Top bearing	Remove top bearing division for rope to pass through
Daggerboard case sheave	Drill hole on daggerboard case sheave box to allow drainage
Daggerboard take up	It is permitted to fit a daggerboard take up system
Lift post sheave cover	It is permitted to fit a cover over the lift post top sheave
Daggerboard rake indicator	It is permitted to add reference lines/marks for daggerboard rake.
Daggerboard Fair leads	It is permitted to install daggerboard lifting fairleads
Bungee	It is permitted to add bungee cord to keep the up/down ropes separate
Up Line Stop	An up line stop rope of dyneema 5mm minimum diameter preventing the daggerboard from going higher than 2.200m above the top bearing shall be installed
Daggerboard take up	It is allowed to install the take up system for the up line stop using the fasteners on the forward hatch cover.
Daggerboard Hydro	It is permitted to install quick connect couplers
<b>OTHER ITEMS</b>	
<i>ITEM</i>	<i>DESCRIPTION</i>
Lines	Sail and equipment retaining lines on platform and wing

Short sheet	Short sheet arrangement
Tail bag	Fit tail bags and winch handle holders
Trampoline	Install additional securing or support lines for trampoline
Sheets	Shorten sheets to appropriate size
Rope handle	Rope handle forward of crossbeam
Rope handle	Guest rope handle
Rope handle	Helmsman rope handle
Electronics	TackTick T070 Micronet Race Master is permitted
Electronics	Novasail NS360+ is permitted
Electronics	Velocitek Speedpuk is permitted
Electronics	Sailbrain GPS is permitted
Chase boat Loops	Fit Spectra loops for chase boat to clip to
Electronics	Potted electrical connections
Code Zero	It is permitted to modify the Code Zero aft head point with a chamfer or radius of 70mm
Sheaves	It is permitted to add spacer to limit sheave movement
Communications	From the 1 <sup>st</sup> of May 2016 it is permitted to use on board communication system. Such system shall be approved by ACTV regarding frequency interference and may transmit from the AC45 to the support boat(s) but shall not be able to transmit from the support boat(s) to the AC45
<u>Electronics</u>	2 x Go Pros (1 x camera below the light stack and 1 x camera under the main spine - under the jib tack). Position subject to approval from Mark Sheffield. Teams can use this footage for internal coaching purposes only.