

Element of SUPERCAR frame examined

This series of calculations concerns the vertical section, or the projected part thereof, equivalent to the front frame of the cockpit (taken that the frame is angled from the vertical).

Source material

Photographs from various sources were used, from publications;
supplied by others;
derived from the series videos directly into prints
derived from the series videos via slides into prints

Method

Lines of perspective were constructed onto photographs, either in fine pencil or scribed by point. Key points were selected to depict the section. Horizontal (x) and vertical (y) measurements were taken on the photographs along line of constructed perspective. A series of ratios for certain distances between points were carefully selected. Same ratios were compared for the different sources and in cases of excessive divergence from the average measurements & lines of perspective were re-examined and sometimes adjusted. Averages were reassessed then a 'corrected' average made by excluding highest & lowest values. Frequently there was no significant difference between the averages. The different averages were used to infer appropriate values and checked by induction. Given the selection of ratios, a further iterative process was set to reconcile end values. A separate worksheet (sckprhv1.wk3) uses two different ratios to determine the ratio of horizontal (x) to vertical (y), ie. x/y

Record of work sheets

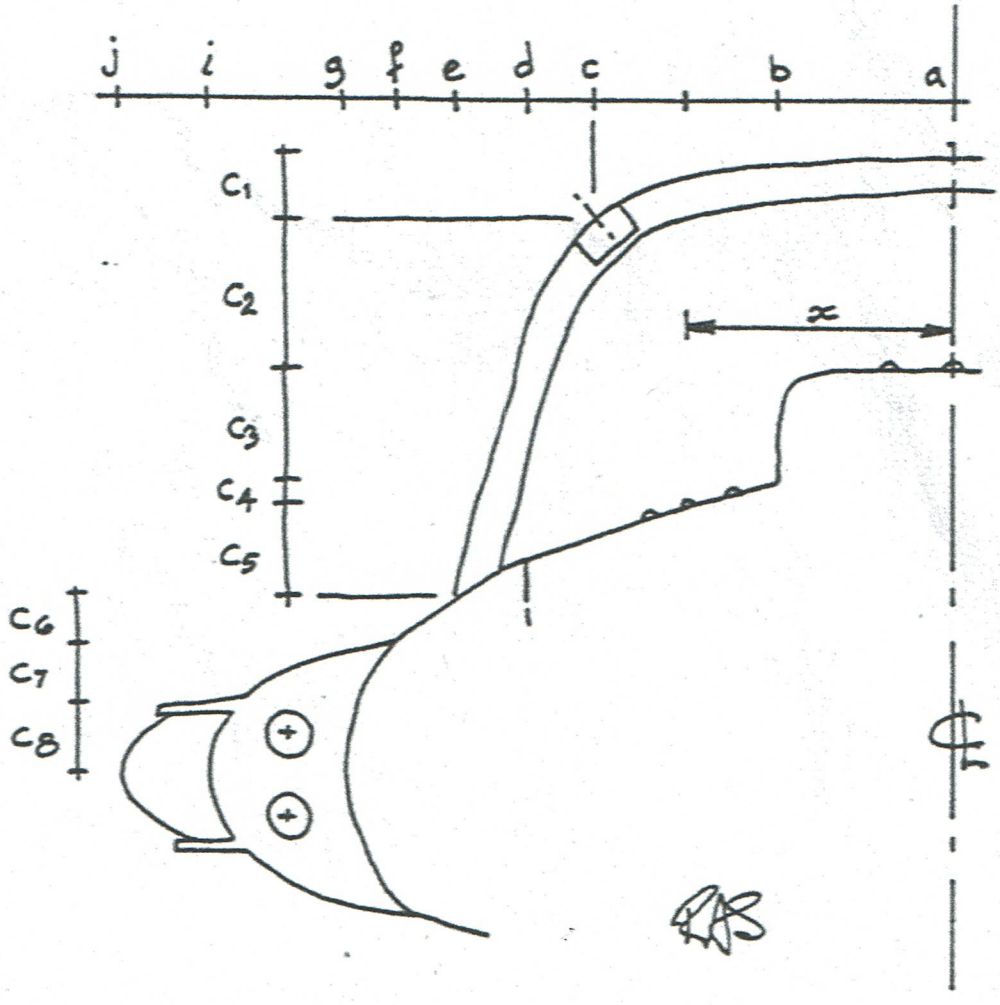
sckph01.wk3	Initial horizontal measurements
sckph02.wk3	Adjusted horizontal measurements with iterative process with some reconciliation
sckpv01.wk3	Vertical measurements of points with iterative process and reconciliation
sckprhv1.wk3	Ration of horizontal to vertical dimensions
sckpmv01.wk3	Additional vertical measurements

Co-ordinates to establish equivalent vertical section at front frame of cockpit

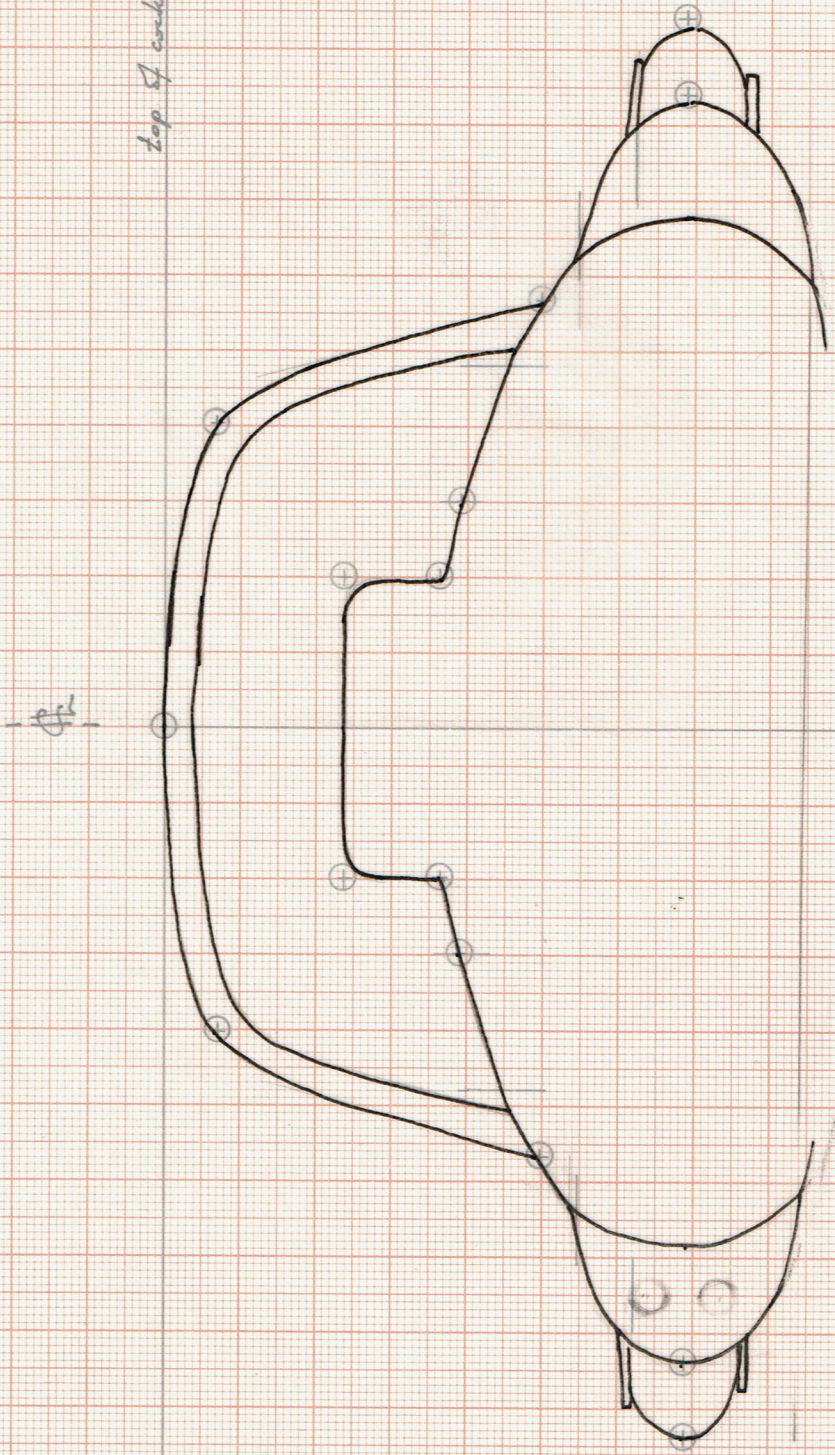
Nomenclature for Horiz. measure	Horizontal (x)	Nomenclature for Vert. measure	Vertical (y)	
point 'a'	0		0	Top of cockpit frame, centreline
ac	2.020	C1	0.360	External midline of horizontal cockpit frame spars
ab	0.995	C12	1.197	Intersection of horiz & vert faces of cowling at ClearVu
ab	0.995	C13	1.834	Intersectn. of vert faces of cowling at ClearVu with dash'
'x'	1.494	C14	1.968	Central bar of tri-bars on dash
ad	2.398	-		Inside edge of cockpit
ae	2.829	C15	2.498	Extreme edge of cockpit frame where contacts body
af		C16	2.742	Chrome bead line
		C17	3.101	Upper flat over cooling fins where meeets body
ag	3.398	C18	3.460	Theoretical outer edge of fore-body inside of retros
ai	4.196	C18	3.460	Outside edge of body
aj	4.690	C18	3.460	Extent of fins

The coordinates for the section above are considered, for practical purposes definitive.

Most values are probably correct to THREE significant figures and generally correct to +/- less than 2 per cent.



top of cockpit via



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