

31

09.04.03



ACMI Screen Lounges: Progress report on construction

From **Crowd Productions**: A report on progress of research, design and construction work to 09.04.03

01.] Report on design and construction progress: Design and construction completion for Screen Lounge pod 01

The evolution of the design and the subsequent construction of the Screen Lounge pods for ACMI at Federation Square has been a fascinating and convoluted pathway. Key to providing a useful resource for ACMI, our goal in developing a design for the Screen lounge pods has been the creation of an open-ended facility. Not all technical requirements and problems are going to be solved definitively at this first stage but two factors are crucial in our design strategy. Firstly we have treated the design process as one of experimentation and research, to build up the best possible understanding of the technical and creative possibilities enfolded by the original brief. Secondly, where ever possible, in listening to ACMI stakeholder groups and technical collaborators and drawing from our own research we have tried to accommodate for the possibility for future changes, developments and demands. There is also a great tension between the security based model of the bus shelter 'public-proof' model and the far more creative model of the future-lounge-room production facility.

While future proofing is fraught at the best of times, it has been a central element in our approach. Realistically we now balance satisfying as many of the final demands as possible while moving to see the completion and commissioning of these tools as soon as possible. We feel the real nature of their use will only be engaged once they have started to be used. This is both the great opportunity of building genuinely innovative facilities that are not copies of existing archetypes, and the danger of entering uncharted territory. In this sense the Screen lounge pods represent a research program in progress. We aim to get the best possible response and outcome to a complex and layered brief with the available resources and to have it begin operation as soon as possible. The end of this initial design and construction program is the beginning of the ongoing evolution and development of the Screen Lounge project.



02.] Report on construction progress: Completing the metal chassis and fitting the skin for SLP01.

26.03.03. On Wednesday 26 March Crowd reviewed progress on the fabrication of the metal chassis, Mantle Piece/Technology Boot,

fibreglass skin fitting and commencement of the second Scissor Arm prototype. These stages are all illustrated in the accompanying images. Detailing of the anchoring positions for the Mantle Boot were discussed and finalised. Details for additional stiffening of the Mantle Boot were discussed and finalised. These details have been addressed with the consideration that there are in fact two possible design outcomes for the touch screen delivery system. Details and positions of the frame tabs to secure the Plasma monitor within the Screen Lounge pod were finalised. We fitted the preliminary fibreglass components to the metal frame to assess the fit. The pieces fit to the metal frame perfectly, which given the lengthy and remote development of these two separate elements, is very heartening.

01.04.03. On Tuesday 01 April Crowd reviewed progress on the fabrication of the Mantle Piece/Technology Boot fixing system, fitting of internal lining to floors and walls, fabrication of the fixing tabs for the removable internal panels, fixing of the Plasma monitor support tabs, the final fixing and trimming of the fibreglass components and fitting of the aluminium skin. This progress is illustrated in the accompanying images. With the wooden panel cores in place it is possible to see the interaction between the louver wall, the metal mesh and the peepholes in the internal wall lining. The result appears very effective. The complexity of the internal frame with all its connection details disappears under the applied skin of the Screen Lounge pod and the finished assembly takes on a far simpler and smoother appearance. Crowd is about to transport the first completed Screen Lounge shell to our Melbourne studio for the final internal fit-out and finishing.



Left and above: Fitting the fibreglass skin to the frame. The fibreglass is rebated to conceal all connection details. The external fibreglass skin is translucent.



Left and below: Fitting the aluminium skin to the frame. Details of the internal panel tab system, aluminium skin rear Mantle Boot vent and the composite louvre wall/mesh and peephole membrane construction.





Above: Construction of the Mantle Boot showing final fit, air intake, cable duct/support stalks, internal metal subframe, rear support flanges and laser cut finishing components. The entire assembly has been designed so that it can be removed or rewired with reasonable ease. Attention to air flow has also been critical. Jockey wheel shown. Left: The components and position, in relation to the Mantle Boot of the second Scissor Arm prototype.

03.] Report on construction progress: delivery of the fibreglass components for SLP01

31.03.03 On Monday 31 March Crowd took collection of the first set of finished fibreglass components from Quality Fibreglass. On Tuesday these were transported to Riva Fab for fitting to the frame.

04.] Report on design progress: Discussions with PIVoD on the sound system

27.03.03 John Philp from PIVoD has advised us of the final choice of speaker for the screen Lounge pods. These are the Electro Voice EVID 3.2. In discussion with Matthew Mulcahy from ACMI on 28.03.03 we have established the connection system between ACMI's AME Plasma bracket, Crowd's AME wall bracket to connect the Plasma monitor to the wall and ACMI's AME speaker and video camera brackets. The speakers will be supported on short horizontal AME stalks projecting either side of the AME Plasma monitor bracket. The speakers will be directly attached to the stalks via their own wall mount brackets. Additionally the video camera to be used in the Memory Grid Lounges will be mounted on a short AME stalk that just clears the top of the Plasma monitor allowing the camera to appear to sit just on top of the monitor. Ideally with this support system most of the bracketing will be invisible from the users seated position.



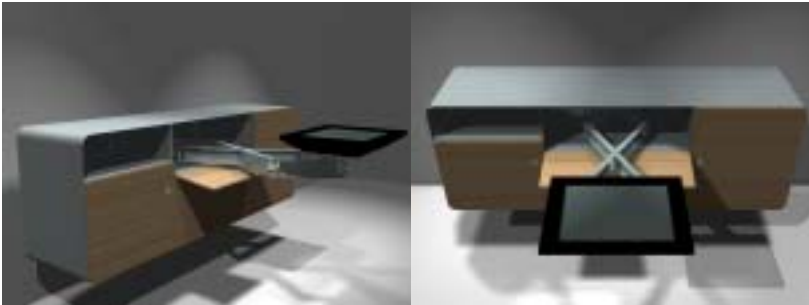
In discussion with Michael Parry from PIVoD we have established the final selection for the headphone jacks in the Screen Lounge pods. This is the Switch Craft headphone jack, originally proposed by Gerry Nixon from Lake Technologies. On this basis Crowd is proceeding with the laser cutting of the final headphone jack stainless-steel trim plates to cleanly detail the fixing of the headphone jacks into the Screen lounge pod walls.

05.] Report on design progress: Discussions with PIVoD on the Mantle Boot

In discussion with John Philp in the week of 24.03.03 we have presented the two options for the delivery system for the touch screen and 17" LCD control monitor and the associated interior design detailing of the Mantle Piece/ Technology Boot. It is clear that the

Scissor Arm proposal allows approximately 30 percent more space within the Mantle Boot for housing the technology required to drive the Screen Lounge pods than the second option which involves the Spacedec arm. This second Spacedec option, with the consequence of a reduced amount of space remaining within the Mantle Boot, is causing John and PIV some headaches. The outcome of the commissioning of a delivery system must wait until we can trail the second Scissor Arm prototype and the Spacedec arm in conjunction with the final touch screen option selected by ACMI.

The Mantle Boot has gradually grown in size, through consultation with ACMI stakeholder groups, as the technical requirements proposed for both the Screen Lounge pods and the Memory Grid pods have evolved until it has reached a limit or threshold size, occupying all the space available within the pod without interfering with the operational and ergonomic requirements of the space. Thus the delivery and technology storage issues must compete for the existing space within the Mantle Boot.



Left: Visualisations of the final Mantle Piece/Technology Boot design showing the option of the Scissor Arm delivery system for the LCD control/touch screen.

06.] Report on design progress: Form finding for the inflatable ceiling.

28.03.03 On Friday 28 March Crowd met with Peter Lim from Tensys Engineering. Peter presented the first form study completed by Tensys for the project. Visualisations of the design are presented here. The proposed design is intended to reduce detailing and simplify the form to present a smoother surface. All the advantages of light diffusion with regard to viewing etc. in earlier designs are maintained. We have discussed with Tensys the problem of the overall profile, which is currently too deep and consumes too much headroom within the pod. Tensys will now revise the design to see what improvements can be made. If an appropriate depth can not be reached then an alternate design strategy for the inflatable ceiling shape will need to be found. We have also been advised that elongation tests will need to be made on the selected material in order that these can be factored into the computer modelling used in the pattern making.



Above: Visualisations of the revised Inflatable ceiling element formed by Tensys. The proposed advantages of this design are the reduction in the number of elements reducing surface welding and the design has eliminated the need for internal baffles. The forces on internal baffles act directly against the welds or joining surfaces which increases the possibility of failure of the membrane structure.

07.] **Report on design progress: Further exploration of options for the Samsung LCD touch screen conversion.**

28.03.03. On Friday 28 March Crowd met with David Watson, Max Goode and Joy Woodford from ACMI and Michael Parry from PIVoD to review the Samsung LCD screen which has been prepared with a tough touch screen layer using a 3m product. This arrangement increases the weight of the LCD by 2 kilos and increases its depth by 2mm. This all looks very promising. David and Max would like to see an additional aluminium jacket surrounding this arrangement to protect the LCD buttons being assessable by the public. It was noted however that these same buttons will need to be accessible by ACMI staff to set luminance levels etc. Michael Parry suggested a Perspex screen attached to the front of the LCD with a cut out for the screen. There is concern that additionally to playing with the buttons the public might try to pick at the tough touch screen boundary tape which has been adhered to the LCD screen edge to hide the tough touch screen connection apparatus. For Crowd the key issues are finished weight and size, as any delivery system including the current appropriate and affordable commercially available ones and our own Scissor arm will not carry weights much above 7 kilos. Crowd has proposed that the most useful course of action is for us to deliver the two proposed delivery systems for ACMI stakeholders to both evaluate and use as a basis for consideration of other detail discussions that affect finished touch screen unit weight and size.



Above: The Samsung touchscreen with a 2mm tough touch layer inserted into the existing cabinet, only marginally expanding its depth and outward appearance

08.] **Report on design progress: Development of the imagery in the Memory Wall/Blister Packs.**

02.04.03. As part of its conception of the Screen Lounge pods, Crowd is keen to see the pods themselves to be exhibition spaces. The Memory Wall/Blister Pack element is designed to achieve three things: partially obscure the interior from the surrounding space, articulate a notion of the lounge room and domestic space within the Screen Lounge pod and finally activate the external presence of the screen Lounge pod to aid in enlivening the surrounding space. The screen Lounge pods and their surrounding space need to engage and appear dynamic and intriguing even when they are not in use. Additional to this we see this space as an exhibition space, able to be disassembled and refilled to coincide with programming within the Screen Lounge pods and ACMI. On Wednesday 03 April Crowd met with Peter Clarke, photographer, to discuss details of content for the first work to appear in the Memory Walls/Blister Packs. This work is designed to comment upon the initial brief for the Screen Lounge pods and the design response by Crowd. In effect this work completes the design response by Crowd and is based on our initial research work. The preparation of this initial content for the Blister Pack is also important in establishing the detailing and processes required to design content for this space and prepare a guide on how to approach the use of the space.

In working with Peter, two key themes are being addressed. Firstly, how to imply or evoke the condition of domestic space and the intimate casualness of the lounge within a public space and secondly how to comment on the fragmentary and particulate nature of human vision and the technologies that generate photographic and digital imagery and, ultimately cinema, video and digital animation. Peter has proposed a series of ideas for framing and sourcing content that captures the intimacy of the domestic while remaining ambiguous and techniques that amplify the processes of image reproducing technologies. We are also mindful that this fragmentary condition of image making is also present in story telling and narrative.