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12.08.02



ACMI Screen Lounges: Progress report on design

From **Crowd Productions**: A report of progress and an outline of research, design and construction work to 12.08.2002

01.] Report on Design Progress: Developing the Control Console Design

As reported in report 15 we are designing the control console in response to feedback from ACMI stakeholders. We are building a full scale mock up to install into the test bed prototype at VECCI for stakeholders to respond to and play with. Below are some visualisations indicating the general approach we propose to take. It is proposed that the control console or mantle piece house a telescopic arm with the 17" touch screen mounted on it. The touch screen would travel out from the console horizontally. This is activated by pressing a fascia panel on the control console. The arm will extend some 300mm from the console. We hope the arm design will allow us to have the touch screen both swivel around and flip up.



02.] Further development of the test bed Screen lounge Prototype

The test bed Screen Lounge prototype at VECCI has been further augmented to better approximate the proposed interior fit out. Two *Soonas* have been installed along with interior panelling to illustrate the proposed materials and the functioning of the peep holes. The ceiling and end wall will be mocked up to simulate the presence of the inflatable ceiling and the blisterpack end wall. An acoustic partition is being constructed also to gain a indication of the sound absorbing capacity of the overall design.



Works undertaken to develop the test bed prototype:

- 01.] Modifying the seating profile to accommodate the *Soona* dimensions and maintain optimal ergonomic performance.
- 02.] Installing internal upholstered fabric wall with peepholes.
- 03.] Installing new control console with preliminary touch screen delivery system.
- 04.] Installing material to simulate the skin of the television wall.
- 05.] Painting the interior television wall and floor in a colour related to our colour proposal.
- 06.] Completing and installing two *Soonas*, each in a range of test fabrics to evaluate the *Soona* design and behaviour along with the fabrics performance.
- 07.] Installing a prototype pull out *Breadboard*, a seat extension and recliner mechanism to be used in conjunction with the *Soona*.
- 08.] Installing a ceiling skin to simulate the presence of the inflatable ceiling.
- 09.] Installing an end wall skin to simulate the presence of the *Blisterpack* wall.



Documentation of the development of the test bed prototype at VECCI. Top: Seating profile modification and operating *Breadboard*. Bottom: Second prototype *Soona* in 3 fabrics.

03.] **Report on Design Progress: Designing the Zoetrope peepholes**

To pursue the notion of porosity we have cut peepholes into the upholstered fabric wall behind the Screen Lounge seating. These peep holes allow the passer-by outside to obtain a fragmented glimpse of the interior space of the Screen Lounge. The peepholes can only be glimpsed discontinuously, as the viewer passes by, as the sequence of holes is interrupted by the row external louvres. The loose horizontal arrangement of small viewing ports is designed to be broken up into uniform discrete frames by the louvres, when walked past, to act like a Zoetrope, creating a reference to the phenomenon of persistence of vision, the foundation of the physics of the moving image employed by cinema and video. Further we wanted the cutouts to be illegible text. To this end we have turned to the Braille alphabet. The six panels spell out the word 'motion'.



A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P	Q	R

"M" "O" "T" "I" "O" "N"

04.] Report on Design Progress: Initial experimentation with a fibre optic lighting loom and driver

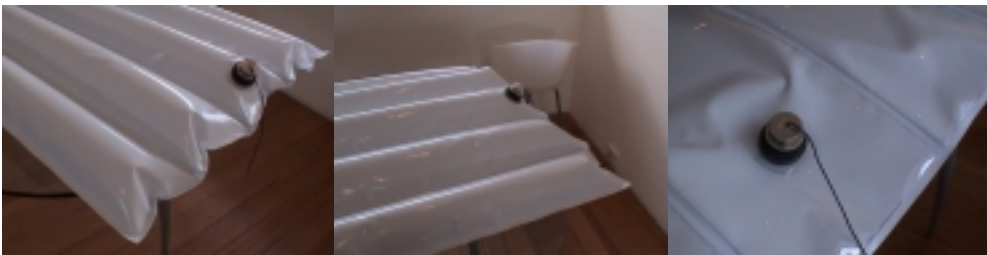
We have obtained a light driver and fibre optic loom from Fibre Light International to begin experimenting with lighting scenarios for the Screen Lounge Pods. The intention is to use this one source for all lighting in the Screen Lounge to facilitate maintenance and disassembly of the structure. The Fibre Light system comes with a wide range of illumination heads for general illumination and display illumination, suitable for the Blisterpack wall exhibition space.



Fibre optic light driver and optic cables with acrylic diffracting heads for display illumination.

05.] Report on Design Progress: Initial experimentation with inflatable structures for the Screen Lounge ceiling

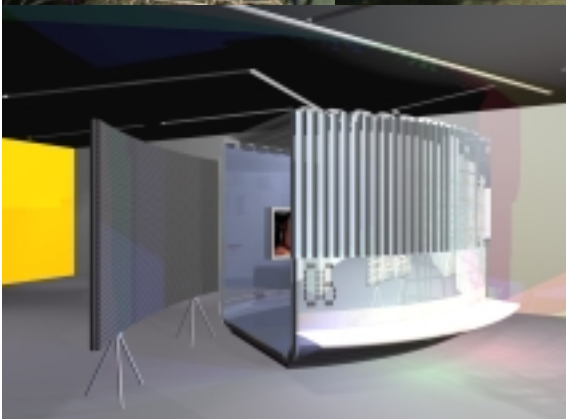
Fenquin Boat manufacturing have produced inflatable ceiling samples to test the translucency of a number of suitable fabrics in various combinations. These also give an indication of the effect of the proposed rib design for the self supporting structure.



Inflatable ceiling fabric and structural pattern samples showing two translucent skins in left and centre images and a mixture of clear and translucent fabrics on the right.

06.] Report on Design Progress: Second full scale prototype for the woven partition

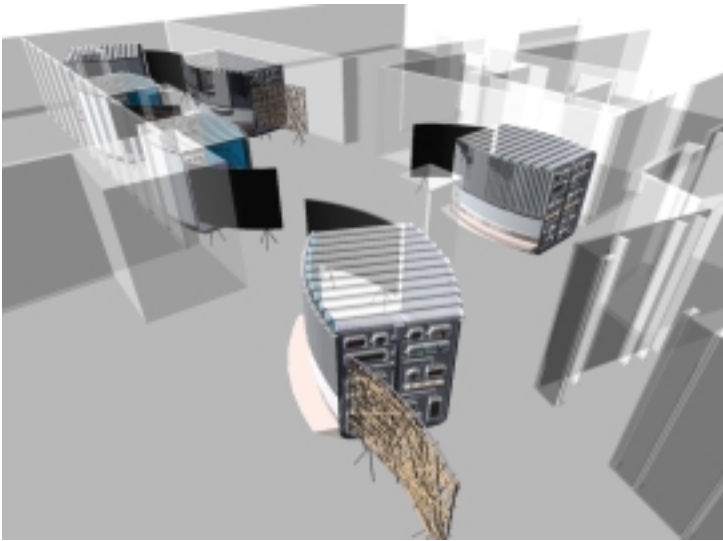
Working with Wendy Golden we have further developed the structural and textural elements for the 'way-finding' woven partition screen. This prototype focuses on the aesthetic of straight lines and sharp intersections to fall in with the aesthetic of the built environment at Federation Square. Further work will proceed with material variations to achieve slightly higher visual density and variation in the perceived texture of the screen.



07.] Report on Design Progress: New visualisations of the proposed design

We are continuing to refine the proposed design of the Screen Lounge Pods in response to the feedback from stakeholders. We are now looking at lowering the roof line of the Screen Lounge Pods by 100mm to reduce their overall visual impact and further optimize on material usage in their construction.

Further visualisations have also been prepared of the new Screen Lounge designs within the Federation Square environment.



08.] Report on Design Progress: Installation of the *Mantle Piece* Control Console in the Screen lounge Prototype

Below are images of the installed initial *Mantle Piece* Control Console unit in the test bed prototype at VECCI. Additionally we have mocked up part of the back wall and the ceiling in light translucent fabric to give a clearer indication of the sensation of the internal dimensions of the Screen Lounge Pod and of the effect of the translucent rear wall and ceiling.



Clockwise from top left: *Mantle Piece* control console with touch screen fully extended, *Mantle Piece* control console with touch screen fully retracted, *Mantle Piece* control console with touch screen fully extended, *Mantle Piece* control console with touch screen fully retracted and the technology boot open. Screen Lounge Pod interior with mocked up end wall to emulate the presence of a translucent end wall, Screen Lounge Pod with mocked up end wall to emulate the presence of a translucent end wall seen from outside.

09.] Meetings with ACMI Stakeholders to discuss the design of the Screen Lounge Pods

01.] 01.08.02. Meeting with Pivod, Kim Montgomery, Andrew Garton, Jane Ellery, David Watson and Simon Banks. This meeting raised many issues with regard to the Media Platform and the functionality of Screen Lounge Pods.

02.] 02.08.02 In discussion with Kim Montgomery we have prepared a questionnaire about the experience of the Screen Lounge Pod interior.

Questionnaire

01.] Do you think the Plasma screen in the Screen Lounge is situated at the correct height in relation to the seating?

02.] Would you still think this if the Plasma screen were not angled 5 degrees downward?

03.] Do you think the Plasma screen should be angled downwards?

04.] Do you think the Plasma screen is too big?

05.] Do you think the Plasma screen is situated too close to the viewer?

06.] How does the interior of the Screen Lounge feel with respect to its size internally? Does it feel big enough, just right or too big?

07.] How comfortable should you feel inside the lounge?

08.] Is there a personal intimacy with the screen?

09.] Do you think that the screen programming content will actually render all other elements of the Screen Lounge environment inconsequential?

03.] 07.08.02 Meeting with John Smithies to preview the prototype of the Mantle piece control console and the addition of a simulated translucent end wall. The 5.1 Surround sound system has been reinstalled with the additional wall panelling and external skin.

10.] Discussions with consultants and fabricators on fabrication techniques and systems for the Screen Lounges

01.] 02.08.02 Meeting with Simon Arkley from Safety Marine inflatable boat manufacturers to discuss technical issues with relation to fabrication and design of the inflatable ceiling

01.] 05.08.02. Meeting with John Maher from Source One Alliance to specify and order Egg Crate acoustic panels for the prototype acoustic partition.

02.] 06.08.02 Meeting Brent Tyrer from Rexel Australia. He delivered a fibre optic light driver and optic loom with greater power than the first model for further lighting simulation.

03.] 07.08.02 Meeting with Angela Baldwin from Textile Mania to look at a new range of fabrics suitable for the Screen Lounge Pod wall panels

04.] 09.08.02 Meeting with Kevin Poulton from K. Poulton and Associates, our senior lighting consultants about the lighting systems for the Screen Lounge Pods. He delivered a second fibre optic light driver and optic loom with greater power than the first model for further lighting simulation.

05.] 08.08.02 Emailed Nowra Canvas in New South Wales with a set of schematic construction drawings re inflatable ceiling module to obtain a quote.