

**Supplementary
Submission
No 119b**

**INQUIRY INTO GOVERNMENT'S MANAGEMENT OF
POWERHOUSE MUSEUM AND OTHER MUSEUMS AND
CULTURAL PROJECTS IN NEW SOUTH WALES**

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**SUBMISSION TO THE SELECT COMMITTEE ON THE GOVERNMENT'S MANAGEMENT OF THE
POWERHOUSE MUSEUM AND OTHER MUSEUMS AND CULTURAL PROJECTS
IN NEW SOUTH WALES**

**THE STRATEGIC IMPORTANCE OF THE HARWOOD BUILDING FOR
TRADITIONAL TRADES RESKILLING**

1.0 The naming of the Technological Museum in 1890 coincided with the Museum falling under the Minister for Public Instruction and amalgamation with the Sydney Technical College – setting the course for the Museum's **educational** function.

2.0 Many of the early displays in the Museum were taxonomic and related closely to the trade courses being taught in the College. Students regularly visited the Museum to supplement their education.

3.0 From the 1950s to the 1970s, the Museum formed an informal partnership with the Sydney Technical College, School of Vehicle Trades, to restore under direction many large transport objects in the Museum's collection.

3.1 This arrangement produced mutual benefits: the College students had real objects of historical value to work on and the Museum had a subsidised form of labour that would have otherwise been unaffordable.

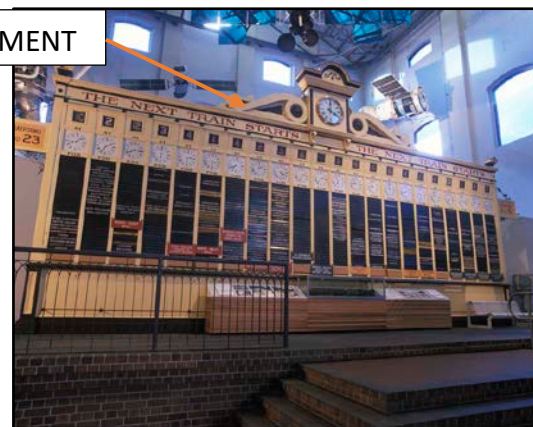
4.0 During the development stage of the Powerhouse Museum (1980-1988), the Museum employed 8-10 metals conservators, tradespeople who had experience with historical collections and others with rare artisanal skills to work on large object reconstructions and restorations. Their workplace was the workshop and conservation laboratories in the Harwood Building, which were specifically designed to handle and treat both large and small technological artefacts.

5.0 One of the most impressive projects undertaken by this group of highly skills workers was the reconstruction of the Sydney Terminal (Central) Station train departures indicator board, built in 1906.

5.1 Among the skills required for this project were those applied to the replication of the pediment based on historical records: sheet metalwork, fibre-glassing and signwriting (see photos).



Central Station indicator board c1935 (MAAS image)



Central Station indicator board (Object B2450) in 'Transport' exhibition, Powerhouse Museum, c1988 (MAAS image)

6.0 Another project was the re-skinning and repainting of the Museum's 1934 Cierva Autogyro (Object no.B2361). Cotton fabric was doped to effect the necessary stretching over the airframe of the autogyro.

6.1 The conservation decision was made to use this traditional material and technique over a modern equivalent like Dacron, which would better resist the effects of ultraviolet light but which would depart from the originality of the object. (see images below).



1934 Cierva Autogyro (B2361) in Harwood Building after treatment c 1987



Cierva Autogyro on display in Turbine House, Powerhouse Museum, c1995

6.2 These examples illustrate the importance of the combination of the Harwood Building workshop and its facilities and the employment by the Museum of staff with special skills and knowledge in conservation techniques and historical trades.

7.0 The juxtaposition of the Harwood Building to the Museum produces obvious synergies: the completed projects can become exhibits in the Museum at minimal risk to the exhibits for visitors to appreciate. Installations and inspections can be carried out efficiently.

7.1 Also, potential sponsors and other supporters of the Museum can gain an understanding of the importance of the Harwood Building and its skilled staff in maintaining and promoting the Museum's collection.

8.0 ISSUE: Traditional manual trades and the associated skills are gradually being lost as a result of our increasingly disposable consumer culture and the economic realities of the availability of cheap reproductions in a world market.

8.1 The loss of in-house trade skills over the past 25 years is an existential risk to the Museum's ability to fulfil its legislated responsibilities to its collection.

8.2 The Museum's experience of out-sourcing "restoration" work in the 1980s under the "Contract restoration scheme" resulted in compromised standards and techniques, loss of originality, unsympathetic treatments, and philosophical clashes.

8.3 The Museum's ability to sympathetically preserve its own collection into the future will demand renewed attention on redeveloping in-house skills in many traditional and threatened trades and skills, such as hand forging, wood carving, sheet metal working and signwriting.

8.4 Without the facilities in the Harwood Building workshop, *the Museum would lose most of its future capacity to carry out any major conservation or restoration work on the larger objects in its collection*. Only A Store at Castle Hill (built 1978) has any of the facilities boasted by the Harwood Building, and these are very limited in terms of volume, equipment and variety. Loss of the Harwood Building workshop would almost inevitably lead to outsourcing work such as dismantling heavy machinery or machining and fabricating components for engines and vehicles.

8.5 Loss of capacity to carry out heavy engineering work would inexorably lead to a further loss of in-house skills to carry out this work. There has been an alarming loss of skills and knowledge among Museum staff in engineering conservation work over the past 10-15 years; the plans for J Store at Castle Hill confirm that this trend will gain pace. *I anticipate that, unless this situation is addressed urgently, within five years the Museum will have completely lost its former reputation for engineering acumen in the preservation of our movable heritage*. And this, at a time when education and training in Science, Technology, Engineering and Maths was never more important.

8.6 *The risks to large objects will increase* if they have to be moved to external contractors for treatment, as a result of both transport and handling risks and loss of direct control of how work is carried out.¹

9.0 REDRESSING THE ISSUE: A multi-faceted approach, including education (reprising the Museum's traditional relationship with the Sydney Technical College), interactivity, collaboration and drawing on the collection and the Harwood Building as key resources:

9.1 Long-term interpretive exhibition in the Museum featuring hand and machine tools from the collection

9.2 Collaboration with Museum conservators, Mens' Shed mentors and TAFE Ultimo (former Sydney Technical College) instructors to provide classes and training in traditional trades in the Harwood Building workshop

9.3 Promoting exhibition and training opportunities to schools linked to "Technologies and Society" syllabus of the new Australian Curriculum

9.4 Partnership with leading engineering firms to provide a component of traditional trade skill education for their apprentices in the Harwood Building

9.5 Partnership with organisers of "Lost Trade Fairs" to hold similar events on Museum site. An ideal location would be the courtyard area that currently serves the rear entrance to the Museum.

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¹ The Museum set up a "contract restoration program" in the early 1980s in which external contractors were employed to carry out work on objects in the collection to a detailed brief written by the Museum. This was done to complete the enormous amount of work on the collections required to meet the deadlines for opening the Museum. Despite the precision of the briefs, managing the outcomes of this work proved to be difficult mainly because the contractors' work could not be directly supervised, with frequently compromised results.