Unloved Modern
Air Traffic Control Towers in Australia

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National Air Traffic Control Towers
Heritage Assessment

Consultants: Lovell Chen Pty Ltd
Client: Airservices Australia
Project duration: 2007-9
Scope: Heritage assessment of 29 ATC towers across Australia (1940-1997) under the Environment Protection and Biodiversity Conservation Act
London (Croydon) airport, early 1920s, complete with signal flag and searchlight.

Type 1 - Raised timber booths
Sydney Mascot (NSW) c. 1936-7. The coloured cane sphere was a signalling device.
Essendon (Vic) in front is a 1930s booth added to Aero Club building, behind it is a freestanding tower constructed during WWII.
Hobart (Tas) 1946-8 with cabin mounted beacon
Moorabbin (Vic) c. late 1940s
Cleveland Hopkins Airport (Ohio, USA) 1929. Integrated terminal and ATC control building surmounted by circular cabin.
Bagdad (Iraq) c. 1932
Liverpool (UK) c. 1933-5
Birmingham (UK) 1939
Newark (New Jersey, USA) 1934
Proposed Control Building for [Australian] Capital City Aerodromes, 1940
Proposed Control Building for [Australian] Capital City Aerodromes, 1940
Sydney (NSW) Ops & Admin building, 1940, now with cabin removed and building integrated into broader airport complex
Archerfield (Brisbane, Qld), 1940, survives but with cabin removed
Parafield (Adelaide, SA), 1940
Type 3 - Cabin on square service block (1950-1976)

Munich (Germany) 1941, nine-storey tower with cabin above London-Heathrow (UK) 1953 (photograph 1997)
New Control Tower Design

1951 – Department of Civil Aviation
Sydney 3 (NSW) 1953, demolished 2005
Hobart and Launceston towers (Tas) both completed in 1958
Brisbane (Qld) c.1959 – Rockhampton (Qld) 1961
Adelaide (SA) 1957, integrated terminal variation
Jandakot (WA) 1965, Bankstown (NSW), 1970, both extant
Alice Springs (NT) 1968, extant, Cairns (Qld) 1970-71, partly demolished
Port Moresby (PNG), c. early 1970s
Type 4 - Perimeter frame towers
(1972-1986)

Moorabbin (Vic) 1977, Adelaide (SA) 1981, Albury (NSW) 1983
Plans & elevations, Moorabbin ATC tower, February 1975
Type 5 - Column form (late 1960s-present)

Washington-Dulles International, Chantilly, Virginia (1958-60), designed by Eero Saarinen

Control tower at Charles de Gaulle Airport, Paris, designed by Paul Andreu (1974)
Melbourne (Vic) commissioned 1969, extant
Perth (WA) 1986, Brisbane (Qld) 1988, both designed by private sector architects with the Department of Housing and Construction
Regional versions of the column typology, Mackay (Qld) 1972, Archerfield (Qld) 1975 and Cairns (Qld), 1995, all extant
Sydney 5 ATC tower (NSW) 1996 by Ancher Mortlock & Woolley (designer Ken Woolley)
Heathrow control tower (2007), London, a cable-stayed tower designed by Rogers Stirk Harbour + Partners
## Assessment

<table>
<thead>
<tr>
<th>CHLCriterion</th>
<th>Significance indicators</th>
<th>Threshold indicators (CHL)</th>
<th>Application in study</th>
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</table>
| (a) importance in the course, or pattern, of Australia’s natural or cultural history; | association with: • significant event, political, economic or social process • significant phase in the development of civil aviation • significant development in the provision of air traffic control services | • Distinctive / exceptional • Integrity • Longevity • nature and extent of association | Yes  
Association of some towers with key phases in civil aviation and the provision of air traffic control services  
Early examples of standard ATC forms  
Relationship of towers to the historical development of individual airport complexes not a major consideration. Most towers are related to a major phase of expansion at their airports. Not considered to elevate significance to CHL level. |
| (b) possession of uncommon, rare or endangered aspects of Australia’s natural or cultural history; | Rare example of a particular typology of control tower.  
Rare example of significant technology associated with air traffic control. | • in state / national context | Yes, early surviving towers from 1940s and 1950s |
| (c) potential to yield information that will contribute to an understanding of Australia’s natural or cultural history; | Potential information about: • air traffic control operations • associated technology | • earliness  
- rarity  
- intactness | No application in study. Limited assessment of |
<p>| (d) importance in demonstrating the principal characteristics of (i) a class of Australia’s natural or cultural places; or (ii) a class of Australia’s natural or cultural environments; | Representative example of an important control tower typology. | • integrity | Yes, intact representative examples of standard ATC forms |</p>
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| (e) importance in exhibiting particular aesthetic characteristics valued by a community or cultural group; | Evidence that aesthetic characteristics are valued                                         | - integrity  
- design excellence  
- craftsmanship  
- legibility  
- unity  
- innovative                      | No, little evidence of appreciation of aesthetic qualities of towers.                      |
| (f) importance in demonstrating a high degree of creative or technical achievement at a particular period; | demonstrable qualities:  
- technical/artistic merit  
- resourceful (technique)  
- adaptation (material and construction)  
- expressive of function/parts | - extent and degree of association  
- enduring quality                                    | Limited application. With few exceptions, the towers are utilitarian in their design conception and execution.  
Perth and Brisbane towers are refined and successful designs.  
Sydney 5 a key exception as a building specifically designed as a landmark. |
| (g) strong or special association with a particular community or cultural group for social, cultural or spiritual reasons: | values:  
- social and cultural meaning  
- longevity of association  
- popularity |                                                                                       | No, no evidence of such associations.  
• Towers are functional structures that do not loom large in the public’s consciousness.  
• For most people, they do not form part of their direct experience of the physical environment.  
• No local social/historical associations (as for public/community buildings such as post offices).  
• Association is with infrastructure/service provision. |
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<td>(h) special association with the life or works of a person, or group of persons, of importance in Australia’s natural cultural history</td>
<td>associations: - important people or groups - major achievement of a recognised person/group</td>
<td></td>
<td>Limited application.</td>
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<td>(i) importance as part of Indigenous tradition</td>
<td>Not applicable</td>
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Recommended for nomination to the Commonwealth Heritage List

- Parafield (SA) 1940
- Essendon (Vic) 1956
- Hobart (Tas) 1958
- Launceston (Tas) 1958
- Melbourne (Vic) 1969
- Bankstown (NSW) 1970
- Sydney 5 (NSW) 1996
Parafield (SA) 1940, extensively modified including the addition of an overscaled 1980s cabin
Essendon (Vic) 1956, the building is relatively intact externally. The original console is now in the Airways Museum at Essendon Airport
Hobart (Tas) 1958, a new entry has been added on the west elevation. The original console was replaced in 1979.
Launceston (Tas) 1958. The original external cladding has been replaced and the original console has been extensively altered.
Bankstown (NSW) 1970, this tower is unusually intact including interiors and original console.
Sydney 5 (NSW) 1996
Issues for Future Management

- Upgrade and refurbishment works to operational towers unlikely to affect heritage values
- Towers are only replaced when there is a major functional failure.
- Obsolescence becomes an issue when airports are expanded or reoriented.
- Long-term retention and maintenance of obsolete structures with little or no scope for adaptation.
- Many towers are located within secure airport complexes where availability of land can be an issue.