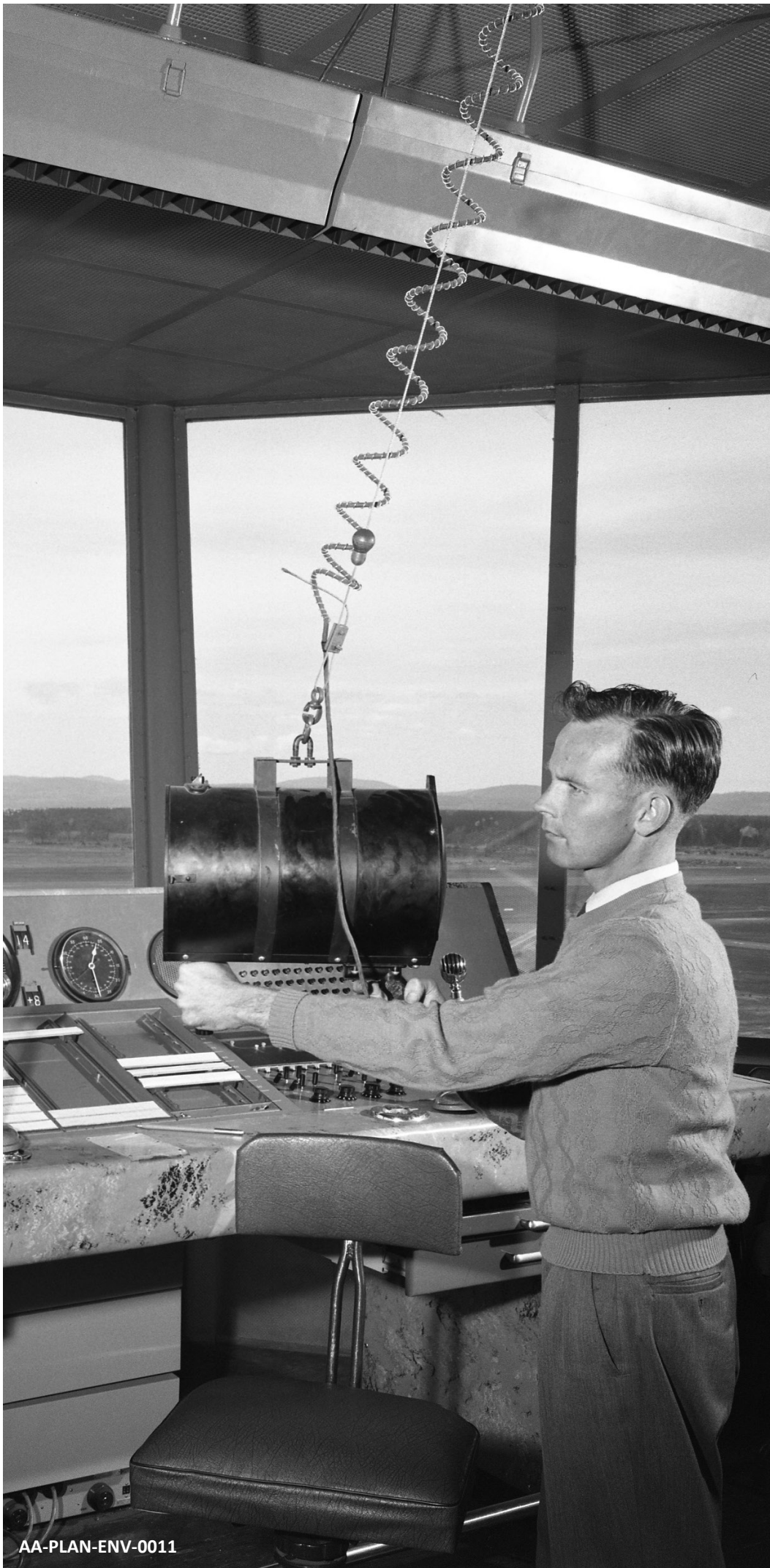




HOBART AIR TRAFFIC CONTROL TOWER

HERITAGE
MANAGEMENT PLAN

37 Tower Road,
Hobart Airport, Tasmania

April 2021

prepared for



prepared by

LOVELL CHEN

LEVEL 5, 176 WELLINGTON PARADE
EAST MELBOURNE 3002
AUSTRALIA
TEL +61 (0)3 9667 0800
enquiry@lovellchen.com.au
www.lovellchen.com.au

Date	Document status	Prepared by
March 2018	Complete draft	Adam Mornement <i>Associate Principal</i> , Lovell Chen
July 2018	Revised draft	Adam Mornement <i>Associate Principal</i> , Lovell Chen
August 2018	Revised draft	Adam Mornement <i>Associate Principal</i> , Lovell Chen
September 2018	Final document	Adam Mornement <i>Associate Principal</i> , Lovell Chen
April 2021	For department review	Adam Mornement <i>Principal</i> , Lovell Chen

Cover image: Hobart control tower cabin, 1958, with the hand-held, roof mounted beacon on display (Source: Civil Aviation Historical Society)

HOBART AIR TRAFFIC CONTROL TOWER

HERITAGE MANAGEMENT PLAN

Prepared for
Airservices Australia

April 2021

TABLE OF CONTENTS

List of figures	IX
Project team	XII
Acknowledgements	XIII
EXECUTIVE SUMMARY	XV
1.0 INTRODUCTION	1
1.1 Background and brief	1
1.2 Identification of the place	1
1.2.1 Airservices compound, Hobart International Airport	2
1.3 Methodology and document structure	4
1.4 Statutory heritage controls	6
1.4.1 <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)	6
1.4.2 <i>Historic Cultural Heritage Act, 1995</i> (Tasmania)	7
1.4.3 <i>Land Use Planning and Approvals Act 1993</i> (Tasmania)	7
1.4.4 <i>Aboriginal Relics Act, 1975</i> (Tasmania)	7
1.4.5 <i>Threatened Species Protection Act, 1995</i> and <i>Nature Conservation Act, 2002</i> (Tasmania)	8
1.5 Limitations	8
1.5.1 Aboriginal cultural heritage	8
1.5.2 Social values assessment	8
2.0 HISTORY	9
2.1 Cambridge Aerodrome	9
2.2 Site for a new Hobart airport, 1946	9
2.2.1 Llanherne Estate	9
2.3 Llanherne Airport, 1949	12
2.4 Hobart Airport, 1956	13
2.5 The ATC tower	14
2.6 Alterations to Hobart ATC tower	18
2.6.1 Control Tower at risk, 1990	18

2.7	Hobart Airport (1970s to present)	20
2.7.1	Hobart as an international airport, 1980	21
2.7.2	Federal Airports Corporation, 1988	21
2.7.3	Privatisation, 1998	21
2.8	Dark Mofo	22
3.0	PHYSICAL ANALYSIS	23
3.1	Summary site description	23
3.2	Airservices reserve	23
3.3	Exterior	27
3.4	Interior	33
3.4.1	Ground floor	33
3.4.2	First floor	35
3.4.3	‘Dwarf’ room (duct and service level)	37
3.4.4	Control cabin	38
3.5	Views	42
3.6	Analysis	44
4.0	ASSESSMENT OF SIGNIFICANCE	45
4.1	Comparative analysis	45
4.1.1	ATC tower development in Australia (1920s-1990s)	45
4.1.2	Australian control towers of the 1950s	50
4.2	Analysis of cultural heritage values	56
4.2.1	Analysis of historic value	56
4.2.2	Analysis of scientific value	57
4.2.3	Analysis of aesthetic/architectural value	57
4.2.4	Analysis of social value	58
4.3	Statement of significance	59
4.3.1	Commonwealth heritage values and attributes	60
5.0	OPPORTUNITIES AND CONSTRAINTS	61
5.1	Implications arising from significance	61
5.2	Legislative requirements	61
5.2.1	<i>Airports Act 1996</i> (Australia)	61
5.2.2	<i>Environment Protection and Biodiversity Conservation Act</i>	

1999 (Australia)	63
5.2.3 <i>Air Services Act 1995</i> (Australia)	64
5.2.4 <i>Historic Cultural Heritage Act, 1997</i> (Tasmania)	64
5.2.5 <i>Land Use Planning and Approvals Act, 1993</i> (Tasmania)	64
5.2.6 <i>Aboriginal Relics Act, 1975</i> (Tasmania)	64
5.2.7 <i>National Construction Code</i>	65
5.2.8 <i>Disability Discrimination Act 1992</i> (Australia)	65
5.3 Lease agreement	65
5.4 Stakeholders	66
5.4.1 Department of Agriculture, Water and the Environment	66
5.4.2 Department of Infrastructure, Transport and Regional Development	66
5.4.3 Hobart International Airport Pty Ltd	66
5.4.4 Cambridge Aerodrome	67
5.4.5 The City of Clarence	67
5.4.6 Aviation operators	67
5.4.7 Indigenous community	67
5.5 Presentation, operation and condition	67
6.0 CONSERVATION POLICY AND MANAGEMENT GUIDELINES	71
6.1 Definitions	71
6.2 General policies	72
6.3 Conservation policies	75
6.4 Use, adaptation and change	77
6.5 Management policies	80
6.6 Implementation plan	83
6.6.1 Monitoring of implementation	85
BIBLIOGRAPHY	87
ENDNOTES	89
APPENDIX A HERITAGE CITATIONS	A1
APPENDIX B ARCHITECTURAL DRAWINGS	B1
APPENDIX C USER GUIDE	C1

LIST OF FIGURES

Figure 1	Hobart International Airport (indicated) is located on a coastal spit, 17km east of Hobart	2
Figure 2	Plan of Hobart International Airport, with the location of the ATC tower indicated	2
Figure 3	Hobart Air Traffic Control tower lease plan	3
Figure 4	Aerial view of Hobart Air Traffic Control tower: Llanherne House and a wind row are to the south and south-west	3
Figure 5	Hobart International Airport, areas of environmental significance are shaded: the Air Traffic Control tower is indicated	7
Figure 6	Cambridge Air Traffic Control tower, c. early 1950s, view looking west: note hilly terrain in the background	10
Figure 7	Extract from a Metropolitan Water Board plan, 1965	11
Figure 8	Llanherne House, 1948: east (long) and north elevations	11
Figure 9	Map – Monmouth 241- parish of Cambridge, Llandhern Aerodrome – surveyor F Miles (Field Book 604), 1948	12
Figure 10	Sketch of the Terminal Building at Hobart Airport, undated but c. 1950	13
Figure 11	View looking east from Llanherne House to the site of the new airport, c. early 1950s, during construction of the new terminal and associated facilities	13
Figure 12	Sketch of the proposed Hobart ATC tower, October 1951	14
Figure 13	Left and right: Hobart ATC tower under construction, 30 November 1956: west and north elevations (left) and south elevation (right)	15
Figure 14	Hobart ATC tower under construction, 7 May 1957: north and west elevations	15
Figure 15	The original console at Hobart ATC tower, 1958: note the cabin's octagonal plan	16
Figure 16	Hobart control tower cabin, 1958, with the hand-held, roof mounted beacon on display	17
Figure 17	Installing the new console, November 1979	18
Figure 18	Undated, c. 1970s, view of the ATC tower looking north-west: note the	

	original entry enclosure:	19
Figure 19	Hobart ATC tower cabin, 1984, looking north-east: note the new and expanded terminal facilities in the background	20
Figure 20	Hobart control tower lit up for Dark Mofo, June 2016	22
Figure 21	Hobart Airport terminal temporarily re-branded for Dark Mofo, June 2016	22
Figure 22	Site plan: the control tower (Building 11) is to the west of the terminal building	24
Figure 23	Buildings/elements on the ridge to the west of Hobart Airport are, from right: the ATC tower, Llanherne House; the conifer wind break; water tanks; and meteorological station	24
Figure 24	Hobart ATC tower lease plan	25
Figure 25	View of the ATC tower from the north of the leased area: Llanherne House (left) is located approximately 25 metres south of the ATC tower	26
Figure 26	Llanherne House, north and west (part) elevation: the modern addition is visible to the right of the image	26
Figure 27	Hobart ATC tower, north elevation	28
Figure 28	East (left) and north, part (right) elevations of the ATC tower	29
Figure 29	West, part (left) and south (right) elevations: note the modern entry enclosure to the south elevation	30
Figure 30	Undated, c. 1970s, view of the original entry enclosure: looking north-west	30
Figure 31	West elevation: note double-height casement window to the north-facing elevation of the stairwell (pictured right)	31
Figure 32	Walkway around the duct and service drum	32
Figure 33	Detail of canted cabin windows	32
Figure 34	Ground floor plan	33
Figure 35	Highlight window between the equipment and switch rooms	34
Figure 36	Equipment room: original features include the marble-effect lino and the equipment rack	34
Figure 37	First floor plan	35
Figure 38	First floor: view looking east from the staircase	36

Figure 39	First floor office space (amenities room)	36
Figure 40	Plan of the duct and service level (also known as the 'dwarf' room)	37
Figure 41	Dwarf room below the cabin: note the original brass water tank	38
Figure 42	Plan of the cabin	39
Figure 43	The present console was installed in 1979	40
Figure 44	The original console at Hobart ATC tower, 1960s	40
Figure 45	The canted steel-framed windows are original	41
Figure 46	The perforated acoustic tiles, 'egg crate light', hand-held beacon and the circular visor track are original	41
Figure 47	View looking west from the Terminal building, towards the ATC tower	42
Figure 48	View looking west from the car park area outside the Terminal, towards the ATC tower	43
Figure 49	View looking south-east from the base of the ATC tower	43
Figure 50	Administration building and control tower at Newark Airport, New Jersey, USA, during demolition: the tower was built in 1934	46
Figure 51	Airport building with roof-mounted air traffic control cabin at Cleveland Airport, Ohio, USA, 1929	47
Figure 52	Elevations of Archerfield Operations and Administration Building, dated 6 March 1940	47
Figure 53	Transportable air traffic control tower developed by the Department of Civil Aviation, 1970s	48
Figure 54	View of the Tullamarine ATC tower, c. late-1960s	49
Figure 55	Hobart ATC tower cabin: note the thick mullions and frames	69
Figure 56	Door to the crawl space under the cabin: note asbestos 'warning' sign	69

Project Team

Adam Mornement, *Associate Principal*, Lovell Chen

Felicity Strong, *Heritage Consultant*, Lovell Chen

Candice Keeling, *Heritage Consultant*, Lovell Chen

Brigitte Samwell, *Graphic Design*, Lovell Chen

Acknowledgements

Kirsten Leggett, *Environment Manager*, Hobart Airport

Shane Thomson, *Work Area Lead*, Tasmania, Airservices Australia

EXECUTIVE SUMMARY

This Heritage Management Plan (HMP) for Hobart ATC tower at Hobart Airport (HA), Tasmania was commissioned by Airservices Australia, which owns the building and leases the land on which it is located. Hobart ATC tower is included in the Commonwealth Heritage List (ID: 106117), which is established under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). This HMP has been prepared in accordance with Schedule 7A of the *Commonwealth Environment Protection Biodiversity Conservation Regulations, 2000*: ‘Management Plans for Commonwealth Heritage Places’. The overarching objective of Schedule 7A of the EPBC Act is to provide frameworks to inform the future conservation and management of the cultural heritage values of places included in the Commonwealth and National heritage lists. This document also follows the principles and processes set out in best practice guidelines, including the *Burra Charter* (2013).

Overview of the asset

Hobart ATC tower was designed in 1954-55 by the Commonwealth of Australia Department of Works (Victoria & Tasmania branch) for the Department of Civil Aviation (DCA). It was built in 1956-57 and commissioned in 1958. It was constructed as part of the new Hobart Airport, and remains in use for its original purpose.

The building comprises an octagonal cabin, with full-height canted glazing to all sides, on top of an asymmetrical two-storey red brick base building. The cabin is raised on a partly chamfered and partly square duct and service drum. An observation deck cantilevers from the flat roof of the base building on three sides. To the west, the walkway is supported on the base of the broader stairwell. The building is generally intact as built, externally and internally. Alterations generally relate to systems upgrades, including the replacement of the original console in 1979.

The tower is located on a ridge to the west of the airport terminal complex, approximately 500 metres south-west of the runway and aprons, and two kilometres south-east of Cambridge Aerodrome.

Hobart ATC tower is unusual, and may be unique in Australia, in the sense that it achieves its elevation through siting on a topographical landmark, and it provides services to two airfields – Cambridge Aerodrome and HA.

The tower is the only building within the 431-square-metre landside reserve that is leased from Hobart International Airport Pty Ltd (HIAPL) by Airservices.

Findings

The assessment of significance undertaken for this HMP has found that Hobart ATC tower satisfies the Commonwealth Heritage List threshold for historical significance. It also meets the CHL criteria for rarity and representative values.

The tower is of historical significance for its association with an initiative to introduce standardised control towers at major airfields in Australia. The initiative was undertaken by the DCA for the Australian Government, and was a response to the regulation of international civil aviation and air navigation safety by the International Civil Aviation Organisation. The tower is one of eight comparable towers introduced at airports across Australia during the 1950s. Of this group, it is one of only three towers that remain in operation, the others being Essendon and Launceston.

The 1950s was a formative period in the evolution of air traffic control facilities in Australia. Towers of this era are generally characterised by a degree of experimentation and invention. This generation of control towers formed the stylistic prototype for towers built throughout Australia and Papua New Guinea until the late-1960s.

The tower is also an intact remnant of the original planning and operation of Hobart Airport, which was planned and built from the early 1950s.

Hobart ATC tower is a representative and largely intact example of a standard ATC tower type surviving from the 1950s. The 12.5 metre-high building comprises an octagonal cabin on top of an asymmetrical two-storey red brick base building.

Architecturally and aesthetically, the ATC tower is expressive of its design and construction during the post-World War II period, including a number of simple Modernist details, notably the double-height timber casement window to the staircase and the large windows to the first floor, north elevation, which are pushed hard up under the eaves (walkway). The cubic massing of the two-storey base building is evocative of mid twentieth century European design.

The idiosyncratic siting of the Hobart tower on a ridge is unusual. As a consequence, the building is a prominent and highly visible feature of the airport landscape.

Recommendations

The core recommendations of this HMP are summarised below:

Conservation

Conservation objectives for Hobart ATC tower include:

- Maintaining the external presentation of the building, as a free-standing structure which is recognisable as a control tower primarily as a consequence of its octagonal cabin, with full-height canted glazing to all sides;
- Conserving the building's architectural character and design qualities, which are expressive of its design and construction during the 1950s;
- Conserving evidence of the functional, hardwearing internal finishes and presentation;
- Maintaining unimpeded lines of sight from the cabin to the runway and taxiways.

Management

- Airservices Australia should comply with all applicable legislation in the management of the ATC tower's Commonwealth heritage values, including the *EPBC Act* and the *Airports Act 1996*.
- In the event that HIA is sold by the Commonwealth, Hobart ATC tower should be nominated for inclusion in the Tasmanian Heritage Register.
- Programs of priority maintenance, remedial works and cyclical maintenance should continue to form the basis for on-going care of the significant built fabric at Hobart ATC tower.
- Should there be a requirement for expanded space for equipment, the preferred approach would be for a remote structure, possibly located to the south-west of the ATC tower, to minimise its visibility in views from the east, and to avoid distorting an understanding of the ATC tower as a freestanding structure.
- A training program should be instigated to raise awareness of the heritage significance of Hobart ATC tower among the staff of Airservices Australia and HIAPL.
- In the event of disposal by Airservices, Hobart ATC tower is a building that can reasonably be considered for adaptive re-use without significant adverse impact on its identified heritage values. The building is located landside, with access by a dedicated track/road and generous provision for parking. Its co-location with Llanherne House also provides possibilities; co-ordinated management of the two assets as a 'heritage precinct' might be contemplated. Further, the equipment at the tower has not been assessed as being of significance in its own right, potentially allowing for the adaptation of internal spaces for new uses. Constraints on re-use and adaptation include the small dimensions of the building, and the limited potential for the construction of additions. The priority consideration in contemplating new uses for the building is to avoid or minimise the potential for impacts on the tower's Commonwealth Heritage values, and, related to this, to minimise adverse impacts on its external presentation. Strategies for change to significant elements and attributes are provided at Policy 15, Chapter 6 of this report.

Table 1 Table of
abbreviation and acronyms

Abbreviation/	Full name/title
ABCB	Australian Building Codes Board
ALC	Airport Lessee Company
ATC	Air Traffic Control
ATCT	Air Traffic Control Tower
Airports Act	<i>Airports Act, 1996</i>
Burra Charter	<i>Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013</i>
CHL	Commonwealth Heritage List
DAWE	Department of Agriculture, Water and the Environment
DCA	Department of Civil Aviation
DITRD	Department of Infrastructure, Transport and Regional Development
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Australia)
FAC	Federal Airports Corporation
HA	Hobart Airport
HIAPL	Hobart International Airport Pty Ltd
HMP	Heritage Management Plan
HMS	Heritage Management Strategy
ICAO	International Civil Aviation Organisation
MER	Mechanical Equipment Room
MFS	Master Facility Schedule
NCC	National Construction Code
Ops & Admin Buildings	Integrated Operations and Administration Building
RAAF	Royal Australian Air Force
RNE	Register of the National Estate
TAC	Tasmanian Aboriginal Corporation

1.0 INTRODUCTION

This Heritage Management Plan (HMP) has been prepared for Airservices Australia (Airservices), the Commonwealth agency responsible for the management of civilian air space in Australia. It addresses the Air Traffic Control (ATC) tower at Hobart Airport (HA). Hobart ATC tower is owned and operated by Airservices. It is located on land leased from Hobart International Airport Pty Ltd (HIAPL), the Airport Lessee Company for HA, which signed a long-term Commonwealth lease agreement on 6 July 1995. Hobart ATC tower is included in the Commonwealth Heritage List (CHL) as Place ID: 106117. It was gazetted by the Commonwealth Environment Minister for inclusion in the CHL on 24 November 2015.

This HMP has been prepared in accordance with 'Airservices Heritage Strategy 2018-2020', to enable Airservices to meet its obligations under the *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act). The EPBC Act imposes obligations on Commonwealth agencies to protect and maintain the environment, including the cultural heritage values of assets that they own or lease. The EPBC Act also establishes the CHL, a list of places managed or owned by the Australian Government, each of which satisfy at least one of the nine Commonwealth Heritage list criteria. All places with Commonwealth Heritage values are afforded statutory protection under the EPBC Act.

1.1 Background and brief

This report follows a heritage assessment of ATC towers throughout Australia undertaken by Lovell Chen for Airservices in 2007 (Stage 1) and 2009 (Stage 2). Stage 1 comprised a desktop review of the 28 control towers either owned or leased by Airservices to determine whether any of the towers had potential heritage values, and the nature, extent and level of those values. Of the towers assessed, 13 were identified as having heritage values of a nature and level indicative of Commonwealth Heritage Value. Further detailed assessment of the 13 ATC towers was undertaken as Stage 2 of the project. The Detailed Heritage Assessment for Hobart ATC tower concluded that the tower met the CHL criteria at a level that is indicative of Commonwealth heritage value in relation to historic values (criterion 'a'), rarity (criterion 'b') and demonstrating the principal characteristics of a class of cultural place (criterion 'd').

The primary objectives of this HMP are to:

- Confirm the cultural heritage significance of Hobart ATC tower;
- Provide policies for the conservation of the tower's cultural heritage values, taking into account its ongoing use and management; and
- Provide a heritage framework to inform future management of the place, including guidance on new works and development.

1.2 Identification of the place

HA is approximately 17 kilometres east of Hobart, in the City of Clarence, Tasmania (Figure 1). The airport is located on a low-lying and generally flat coastal spit. It covers approximately 565 hectares of Commonwealth land, and is bounded to the south by Frederick Henry Bay and to the north by Barilla Bay. There is agricultural and light industrial land to the east and west. Cambridge Aerodrome, a general aviation airfield, is a short distance to the north-west.

There is a single runway system at HA, Runway 12/30. It is 2,750 metres long and is served by two taxiways. The runway was recently extended to service significant growth in passenger numbers – since privatisation in 1998, HA has grown from 856,000 to 2.6 million passengers annually, with numbers anticipated to increase to 4.5 million by 2035.¹

1.2.1 Airservices compound, Hobart International Airport

Hobart ATC tower is located landside on a ridge (also known as Tower Hill), approximately 500 metres to the south-west of the runway (Figure 2). Llanherne House, a nineteenth century homestead that was established as an outstation of the Llanherne Estate, is close-by to the south. The rectangular area leased by Airservices measures 431 square metres (Figure 3). The ATC tower is the only building within this area. The Airservices lease includes part of the land comprised in Certificate of Title Volume 112358 Folio 1 in the City of Clarence.

The ATC tower is oriented on a diagonal to true north. Throughout this report, for ease of comprehension, the elevation facing the runway is described as the north elevation; and the elevation facing Llanherne House is south.

Figure 1 Hobart Airport (indicated) is located on a coastal spit, 17km east of Hobart

Source www.iplan.tas.gov.au, accessed 30 January 2018



Figure 2 Plan of Hobart Airport, with the location of the ATC tower indicated

Source www.melway.com.au/online-maps, accessed 30 January 2018



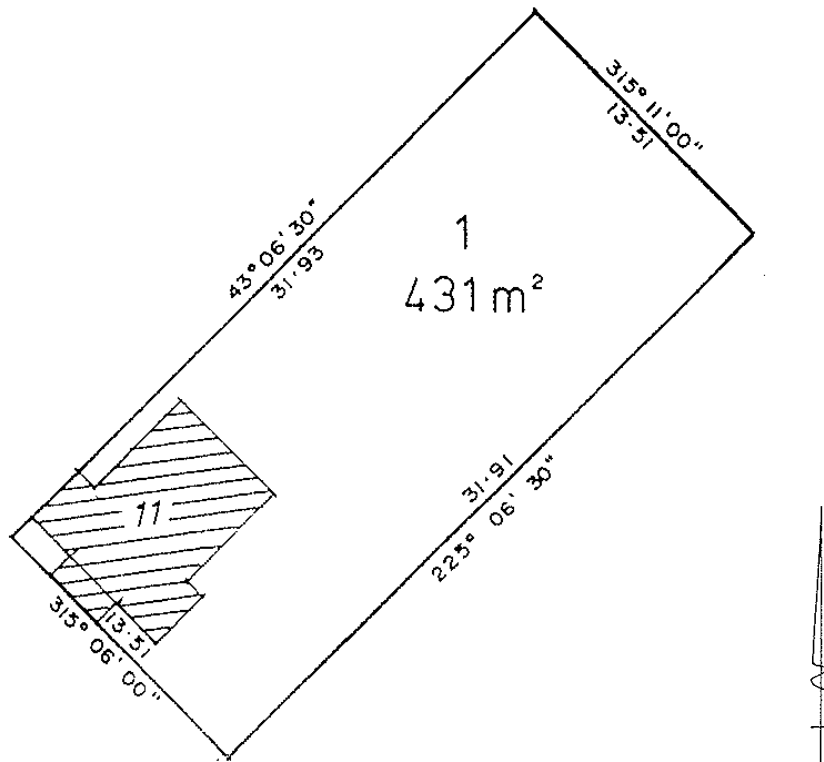


Figure 3 Hobart Air Traffic Control tower lease plan

Source Left, Memorandum of Lease (Section 64), No. B 954889

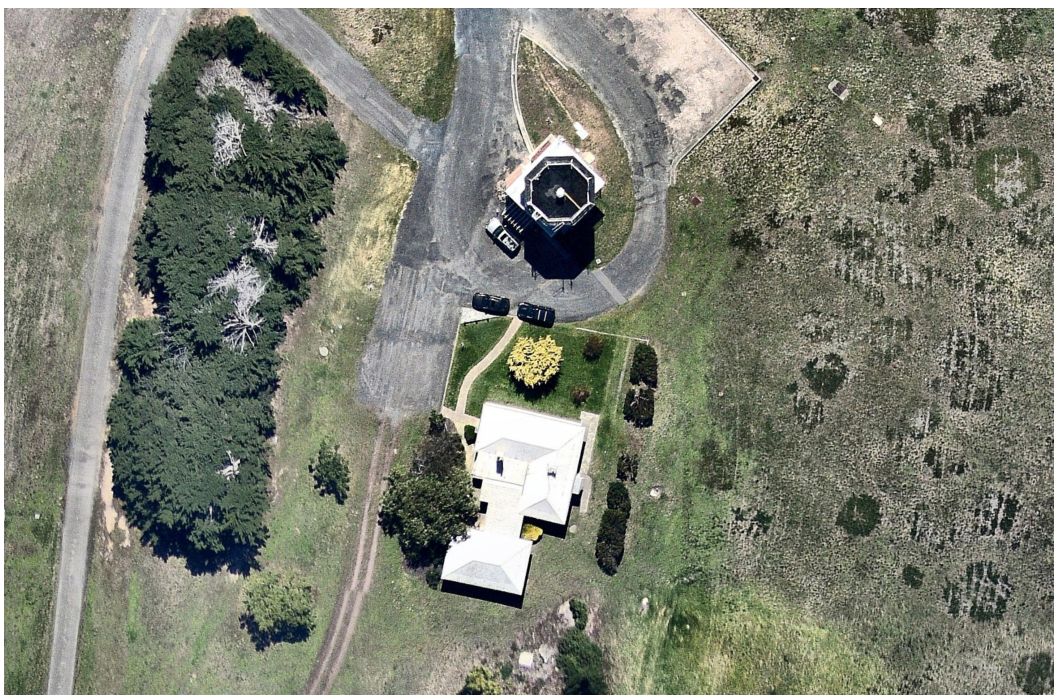


Figure 4 Aerial view of Hobart Air Traffic Control tower: Llanherne House and a wind row are to the south and south-west

Source www.nearmap.com.au, accessed 30 January 2018

1.3 Methodology and document structure

This HMP broadly follows the principles and processes set out in the *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013* (The Burra Charter) and its Practice Notes. The Burra Charter establishes a standard of practice for those involved in assessing, managing and undertaking works to places of cultural significance.

Specifically, the report has been prepared in accordance with Schedule 7A of the Commonwealth *Environment Protection Biodiversity Conservation Regulations, 2000*: ‘Management Plans for Commonwealth Heritage Places’. As a Commonwealth Heritage place, a HMP must be prepared for Hobart ATC tower that addresses a range of issues identified in the Regulations to the EPBC Act, at Schedules 7A and 7B. The purpose of these issues is to ensure that the plan meets the Commonwealth Heritage Management Principles set out in the Regulations.

Table 2 below sets out the EPBC Act Regulations requirements for heritage management plans and provides a comment about how the requirements are satisfied in the present HMP.

Table 2 EPBC Act
Regulation requirements for
heritage management plans

EPBC Act Regulations, 2000, Schedule 7a	Relevant section(s) of this HMP
(a) establish objectives for the identification, protection, conservation, presentation and transmission of the Commonwealth Heritage values of the place	Objectives to identify and conserve the cultural heritage significance of Hobart ATC tower were informed by best practice guides, notably the <i>Burra Charter</i> . These objectives are discussed at Section 1.3, and chapters 5 and 6 of this HMP.
(b) provide a management framework that includes reference to any statutory requirements and agency mechanisms for the protection of the Commonwealth Heritage values of the place	Statutory requirements and agency mechanisms for the protection of the Commonwealth Heritage values of Hobart ATC tower are identified in chapter 5, with particular reference to the EPBC Act and the <i>Airports Act, 1996</i> (Airports Act).
(c) provide a comprehensive description of the place, including information about its location, physical features, condition, historical context and current uses	A description of Hobart ATC tower is at Chapter 3. The contextual history at Chapter 2 refers to changes to the building over time.
(d) provide a description of the Commonwealth Heritage values and any other heritage values of the place	An assessment of significance, including a description of the tower’s Commonwealth Heritage values, is at Chapter 4.
(e) describe the condition of the Commonwealth Heritage values of the place	Condition (built fabric) is addressed at Chapter 3. The historical values of the ATC tower, as well as its rarity and representative values, are embodied in the physical fabric of the place.
(f) describe the method used to assess the Commonwealth Heritage values of the place	The assessment of the Commonwealth Heritage values of Hobart ATC tower was based on an understanding of the place (site history, Chapter 2 and physical description, Chapter 3).

EPBC Act Regulations, 2000, Schedule 7a	Relevant section(s) of this HMP
(g) describe the current management requirements and goals, including proposals for change and any potential pressures on the Commonwealth Heritage values of the place	The operation of the place as a control tower, and issues arising in relation to requirements for change at the tower, are addressed in Chapter 5 and Chapter 6, including Section 6.4, 'Use, adaptation and change'.
(h) have policies to manage the Commonwealth Heritage values of a place, and include in those policies, guidance in relation to the following:	A suite of conservation policies and management guidelines have been prepared to appropriately manage the identified Commonwealth Heritage values of Hobart ATC tower (see Chapter 6).
(i) the management and conservation processes to be used	See 'General policies', Section 6.2
(ii) the access and security arrangements, including access to the area for indigenous people to maintain cultural traditions	See Policy 19, Chapter 6
(iii) the stakeholder and community consultation and liaison arrangements	See Policy 6, Chapter 6 This HMP was placed on public exhibition from 17 September 2018 to 17 October 2018 through an advertisement in a newspaper with national circulation and the websites of Airservices and Lovell Chen. No submissions were received in response to this advertising
(iv) the policies and protocols to ensure that indigenous people participate in the management process	See Policy 6, Chapter 6; see also Section 5.4.7.
(v) the protocols for the management of sensitive information	See Policy 7, Chapter 6
(vi) the planning and management of works, development, adaptive reuse and property divestment proposals	See Section 6.4, Chapter 6
(vii) how unforeseen discoveries or disturbance of heritage are to be managed	See Policy 22, Chapter 6
(viii) how, and under what circumstances, heritage advice is to be obtained	See Policies 4 and 11, Chapter 6. See also 'User Guide' at Appendix C
(ix) how the condition of Commonwealth Heritage values is to be monitored and reported	See Section 6.6, Chapter 6
(x) how records of intervention and maintenance of a heritage places register are kept	See Policy 17, Chapter 6
(xi) the research, training and resources needed to improve management	See Policy 20, Chapter 6
(xii) how heritage values are to be interpreted and promoted	See Policy 21, Chapter 6

EPBC Act Regulations, 2000, Schedule 7a	Relevant section(s) of this HMP
(i) include an implementation plan	An implementation plan is at Section 6.6
(j) show how the implementation of policies will be monitored	See Section 6.6
(k) show how the management plan will be reviewed	See Policy 8, Chapter 6

1.4 Statutory heritage controls

1.4.1 *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)

Hobart ATC tower is included in the Australian Heritage Council's CHL as a Listed Place (Place ID: 106117), and is significant for historical reasons, as well as being a representative and substantially intact example of a standardised ATC tower form, dating from the first phase of post-World War II design in Australian air traffic control facilities (1950s-late 1960s). The full citation is included at Appendix A.

The ATC tower is the only building at HA which is included in the CHL. There are, however, areas of Commonwealth environmental significance in relation to biodiversity values within the airport, including:

- Lowland native grasslands of Tasmania (Critically Endangered) under the *EPBC Act*²
- *Eucalyptus ovata* Forest and Woodland (proposed Critically Endangered) under the *EPBC Act*³
- Sub-tropical and temperate coastal Saltmarsh community (Vulnerable) under the *EPBC Act*⁴
- *Carex tasmanica* (Curly sedge)⁵
- *Perameles gunnii* (Eastern-barred bandicoot)⁶

These areas are generally located to the south-western boundary of the airport. An exception is the critically endangered grassland at the west base of Tower Hill (areas hatched red and blue at Figure 5).

It is noted that the provisions of the EPBC Act provide protection of the Commonwealth Heritage values of all places which are either entirely within a Commonwealth area or are owned or leased by the Commonwealth or a Commonwealth Authority, including but not limited to places which are in the CHL.⁷ Under the EPBC Act, actions that have, or are likely to have, a significant impact on a matter of national environmental significance, including Commonwealth Heritage values, require approval from the Australian Government Minister for the Environment (the Minister). The Minister will decide whether assessment and approval is required under the EPBC Act.⁸

The management of heritage places at federally-leased airports is required to comply with both the EPBC Act and its regulations, and the Airports Act.

Prior to the preparation of this HMP, Airservices fulfilled its obligation to manage and conserve Hobart ATC tower by providing a 'User Guide' for the tower to all relevant contractors and staff (see Appendix C). The User Guide was drafted by Airservices in 2014 and was informed by the outcomes of the Detailed Heritage Assessment prepared by Lovell Chen in 2009 as part of the national assessment of ATC towers. The User Guide includes guidance for contractors and staff about obligations relating to the management of the tower's heritage values and attributes. It was updated following the completion of this HMP.

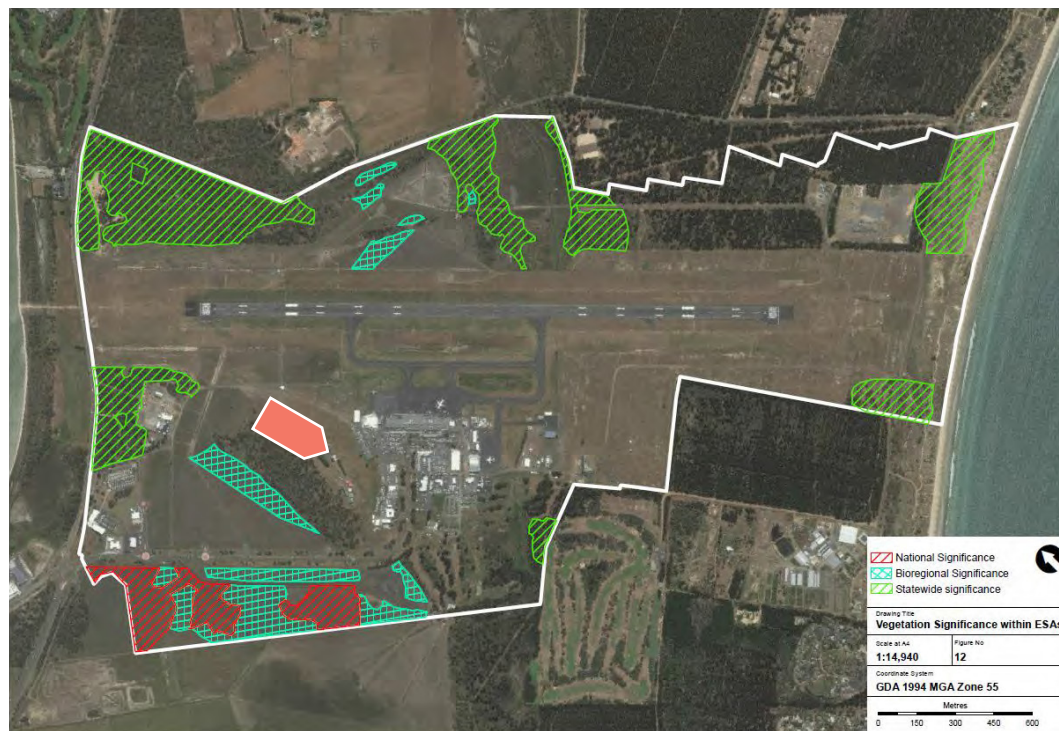


Figure 5 Hobart Airport, areas of environmental significance are shaded (excluding the saltmarsh community): the Air Traffic Control tower is indicated

Source Hobart International Airport Pty Ltd, *Hobart Airport Major Development Plan, Runway Extension*, undated, p. 69

1.4.2 *Historic Cultural Heritage Act, 1995* (Tasmania)

Hobart ATC tower is not included in the Tasmanian Heritage Register (THR). Hobart Airport is likewise not included in the Tasmanian State Heritage Register.

Llanherne House, the c. 1830s homestead to the south of the ATC tower (Figure 4), is permanently included in the THR (Place ID 1032). The building is, 'of historic heritage significance because of its ability to demonstrate the principal characteristics of a single storey brick Old Colonial Georgian building'.⁹ The full THR entry for Llanherne House is at Appendix A.

1.4.3 *Land Use Planning and Approvals Act 1993* (Tasmania)

HA, as Commonwealth land, is not subject to Tasmanian planning or heritage controls. However, mapping in the Clarence City Council Planning Scheme notes that HA, to its full extent, is the subject of a Heritage Code. Based on advice from the City of Clarence, it is understood that that the presence of the Heritage Code (and others) has no statutory effect and is a consequence of an oversight dating to a Planning Scheme amendment.¹⁰

1.4.4 *Aboriginal Heritage Act, 1975* (Tasmania)

The Tasmanian Aboriginal Site Index database (TASI), maintained by Aboriginal Heritage Tasmania (AHT), is a repository of information about all previously identified Aboriginal heritage sites in Tasmania. These sites are afforded statutory protection under the *Aboriginal Heritage Act, 1975* (Tasmania). Information about Aboriginal heritage artefacts and artefact scatter locations within HA is not publicly available. Advice provided by HIAPL is that: there are no Aboriginal heritage artefacts near the ATC tower or on the ridge (Tower Hill); and Aboriginal artefacts at HA are considered to be of 'low' significance.¹¹

1.4.5 *Threatened Species Protection Act, 1995 and Nature Conservation Act, 2002 (Tasmania)*

There are a number of threatened flora species of significance to Tasmania within the airport grounds, specifically:

- *Senecio squarrosus* (rare)
- *Vittadinia muelleri* (rare)
- *Vittadinia gracilis* (rare)
- *Haloragis heterophylla* (rare)
- *Lobelia pratioides* (vulnerable)
- *Wilsonia rotundifolia* (rare)
- *Calocephalus citreus* (rare)
- *Juncus amabilis* (rare)¹²

1.5 Limitations

1.5.1 Aboriginal cultural heritage

As noted at Section 1.4.4, under the *Aboriginal Heritage Act, 1975 (Tasmania)*, information about places of Aboriginal significance in Tasmania is maintained by AHT and is not publicly available. As such, the locations of Aboriginal heritage artefacts and artefact scatter locations within HA is privileged information. Of relevance to this HMP, however, is that there are no previously recorded Aboriginal heritage artefacts near the ATC tower or on Tower Hill.¹³

It is noted, however, that Tower Hill itself, as an elevated vantage point within a setting that would have been a favourable location for Aboriginal habitation prior to European arrival, has some potential to be a place that is valued by the Indigenous community. On this basis, it is would be appropriate for the Indigenous community to be consulted as a stakeholder in the event that significant change is proposed within the study area. The Tasmanian Aboriginal Corporation (TAC), which works with the Aboriginal Heritage Section of the Parks and Wildlife Service to manage sacred sites across Tasmania, can provide details of the relevant Indigenous representative(s).

This recommendation complies with EPBC Act Regulations, 2000, Schedule 7a (h) (iv). See also Policy 6, Chapter 6.

1.5.2 Social values assessment

No formal appraisal of social (or community) value, as might be informed by a community consultation process, was undertaken in the course of this HMP.

Appraisal of community attachment for Hobart ATC tower was limited to correspondence with HIAPL and a discussion with Airservices. The latter (Airservices) noted that the tower, by virtue of its location on a ridge, is prominent and well known, as reflected in the decision to illuminate it for the Dark Mofo arts festival in 2016 (see Chapter 2). As a consequence, the Airservices personnel noted that the building may be valued by a community or communities.¹⁴ HIAPL subsequently advised that it is not aware of groups that have a particular association with or affiliation to the ATC tower.¹⁵

2.0 HISTORY

This chapter addresses the origins and evolution of Hobart Airport since the late 1940s. The objective is to establish an historical and operational context to inform an understanding of the ATC tower at the airport.

2.1 Cambridge Aerodrome

Between 1936 and 1956, Hobart was served by Cambridge Aerodrome, located two kilometres north-west of HIA. An integrated Operations and Administration building, similar to those built at Mascot (Sydney), Parafield (Adelaide) and Archerfield (Brisbane, see Chapter 4), was proposed for Cambridge in the late 1930s.¹⁶ It was not built because World War II diverted funds and attention. It also became apparent that the hilly terrain to the west of the Cambridge Aerodrome was unsuitable for larger aircraft to safely land,¹⁷ meaning that Cambridge was unable to comply with minimum safety requirements for the operation of heavy aircraft established by the International Civil Aviation Organisation (ICAO).¹⁸ The Commonwealth Government was also interested in establishing a base that could manage the heavy aircraft required for Antarctic exploration.¹⁹

An ATC tower was built at Cambridge in the early post-World War II period. It was a standard issue RAAF-type tower, comprised of a square cabin with outward-canted windows on top of an open lattice tower (Figure 6).²⁰ This ATC tower initially served the new Hobart Airport when it first opened in 1956; the new permanent tower wasn't commissioned until 1958.²¹ During research for this HMP it was not established when the RAAF-type tower at Cambridge was removed.

2.2 Site for a new Hobart airport, 1946

Investigations into a site for a new airport began in the early post war period. A 1946 study revealed that the closest available site for a new airport that could accommodate runways in multiple directions was 32km from Hobart. This distance was considered too great, so a decision was made to develop a single runway airport at the Llanherne Estate, a low lying sandy spit between Barilla Bay and Frederick Henry Bay, south east of Cambridge Aerodrome (Figure 7).²²

A Public Works Committee report tabled in the Senate in November 1948 estimated that works could commence in early 1949, and be completed by 1952, if the land was acquired swiftly. The importance of a new ATC tower was emphasised in the report, which noted that, 'a control tower should be provided in a position affording efficient visual control of aircraft operations'.²³ Once the new control tower was commissioned, it was planned that the control officer would manage traffic at both Cambridge Aerodrome and the new airport.²⁴ The Llanherne estate was compulsory acquired for the new aerodrome on 28 April 1949.²⁵

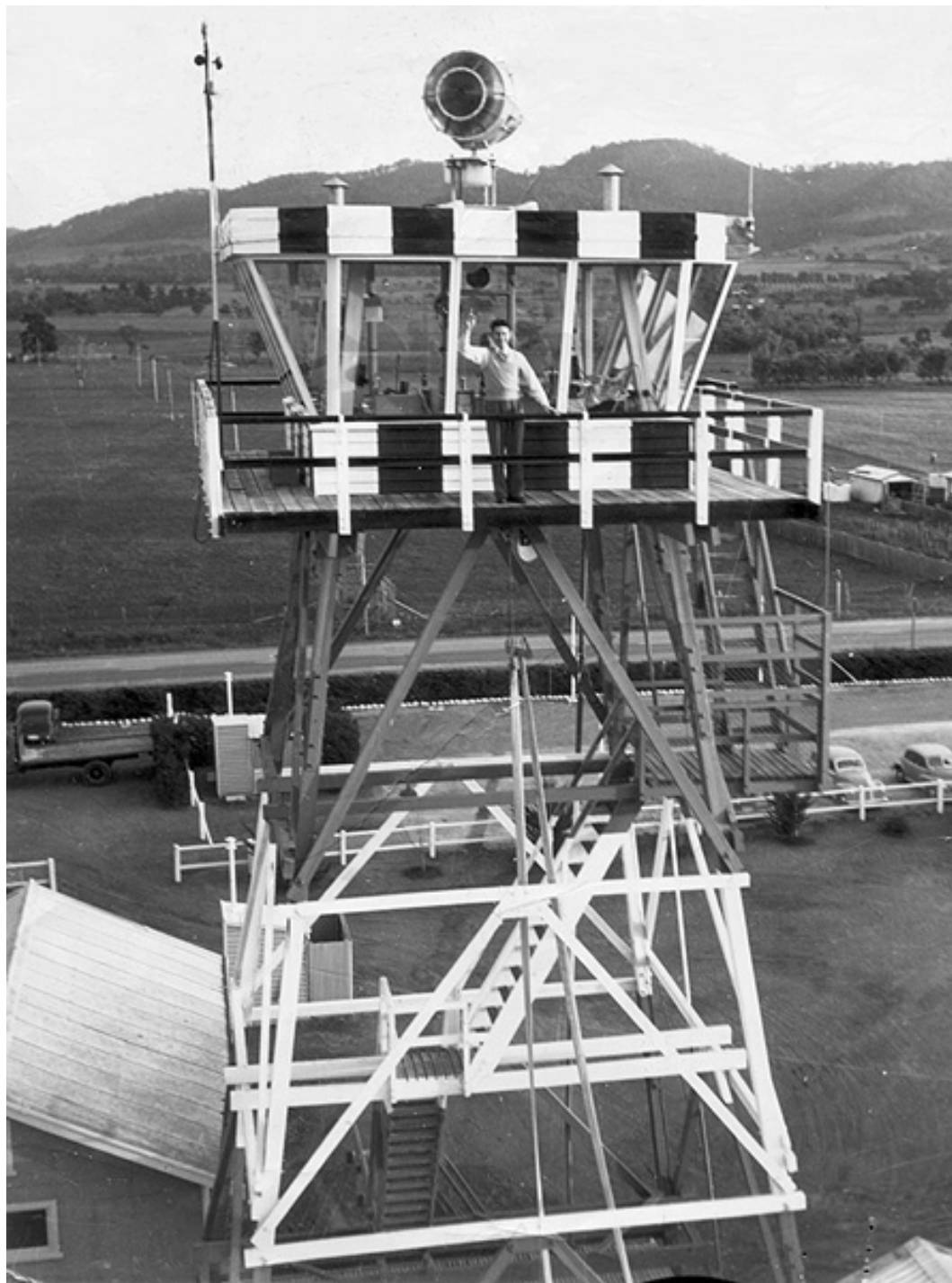
2.2.1 Llanherne Estate

Prior to European settlement, the area now occupied by HIA formed part of the traditional lands of the Mouheneenner people.²⁶ A property of approximately 1,000 acres, including the airport grounds, was granted to Anthony Williams in 1823.²⁷ The grant, known as the Llanherne Estate, was acquired by Richard Lewis in 1829, who had also acquired neighbouring properties Milford, Cilwne and Abernant.²⁸ The Llanherne and Milford properties were later developed as a Southdown stud.²⁹

Llanherne House was built in the 1830s by Richard Lewis and was the family residence until the early 1900s.³⁰ It was then bought by George Casimaty and part of the land was sold to Derwent Harbour Estates Pty Ltd for development as a pine plantation (Figure 7). During World War II, part of the property was used by the army for, principally for administrative purposes.³¹

Figure 6 Cambridge Air
Traffic Control tower, c. early
1950s, view looking west: note
hilly terrain in the background

Source Civil Aviation
Historical Society



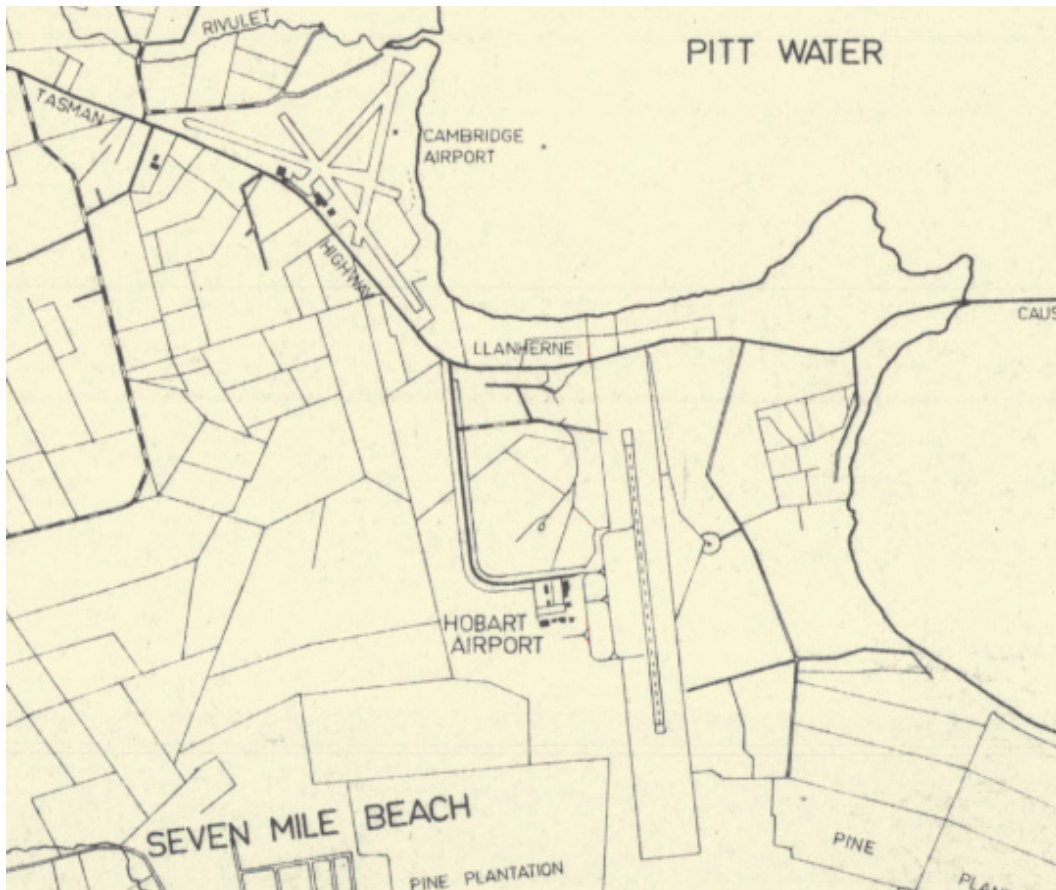


Figure 7 Extract from a Metropolitan Water Board plan, 1965

Source Archives Office of Tasmania, AF718/1/689



Figure 8 Llanherne House, 1948: east (long) and north elevations

Source The Mercury, in *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.12

When the Llanherne Estate was acquired for the new airport in 1949, Llanherne House was used for storage and as a training facility. It was refurbished as offices when the Federal Airports Corporation took over airport operations in 1988.³² The house was extended in 1993; construction work revealed a stone-lined well to the west of the house.³³

2.3 Llanherne Airport, 1949

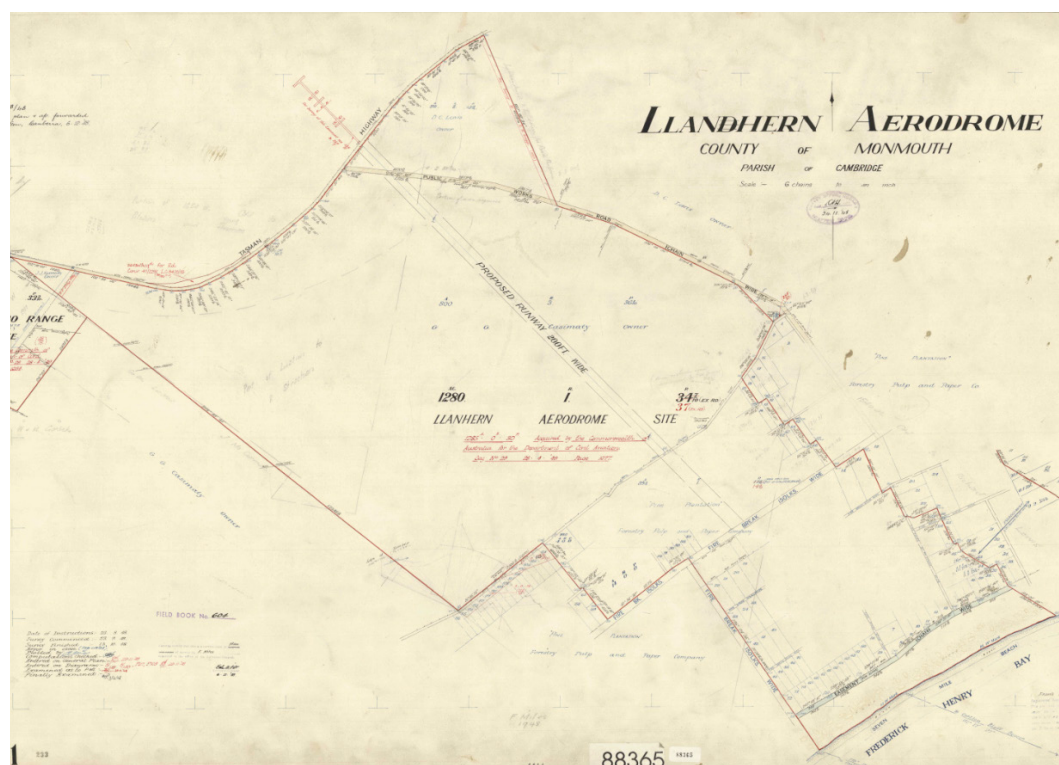
In 1949 the Department of Civil Aviation (DCA) announced a budget of £760,000 for the construction of the new airport. Plans for diagonal runways were scaled back to provide one runway, with the option of increasing this provision in the future (Figure 9).³⁴

The first stage of construction, in 1949, required draining a swampy low-lying area, and the introduction of 600,000 cubic metres of sand to bring the runway up to the required 2.4 metres above normal high-water level.³⁵ The initial aspiration to have the new airport completed by 1952 was not met and it wasn't until 1956 that the airport was officially opened.

The airport was initially referred to as 'Llanherne Airport', which is also spelled 'Llandhern' in some documents, including the surveyor's plan from 1947 (Figure 9). A plan to name it 'Abel Tasman Hobart Airport' was not supported by the Minister for Civil Aviation, who implemented a new policy that airports should be identified by their location.³⁶

Figure 9 Map –
Monmouth 241- parish
of Cambridge, Llandhern
Aerodrome – surveyor F Miles
(Field Book 604), 1948

Source Archives Office of
Tasmania, AF396/1/453



2.4 Hobart Airport, 1956

Daylight operations commenced at the new airport on 23 June 1956, with the first scheduled passenger flight arriving at Llanherne from Melbourne via Western Junction (Launceston). The travel time was two-and-a-half hours.³⁷

Although the airport was functioning, it was not completed. The terminal was not finished, and passengers were processed in temporary buildings before the completion of the terminal in 1958 (Figure 10 and Figure 11).³⁸ The new terminal, which cost £100,000, was opened on 27 June 1958.³⁹

As noted above, the ATC tower was not commissioned until 1958 and air traffic control for the airport was originally managed from Cambridge Aerodrome.

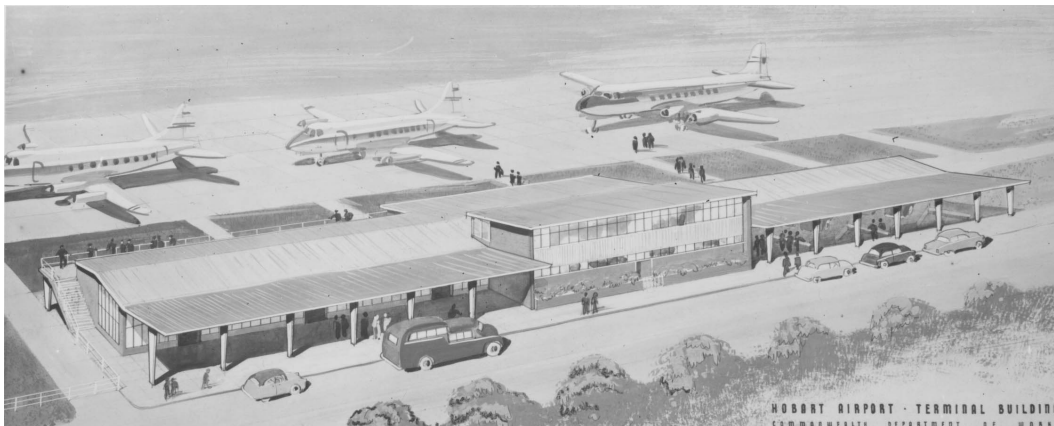


Figure 10 Sketch of the Terminal Building at Hobart Airport, undated but c. 1950

Source Civil Aviation Historical Society



Figure 11 View looking east from Llanherne House to the site of the new airport, c. early 1950s, during construction of the new terminal and associated facilities

Source Archives Office of Tasmania, AB713/1/6281

2.5 The ATC tower

A perspective sketch of the new control tower at Llanherne, dated 30 October 1951, shows a three-storey tower with a single-storey wing projecting to the east (Figure 12). The cabin is square and has canted windows, like the cabin at Sydney 3 (1953, since demolished). The arrangement of the tower and single-storey wing is comparable to Essendon ATC tower no. 3 (1956) and Brisbane ATC tower (1959, demolished).

Plans for the new Hobart ATC tower advanced in 1954, with the Commonwealth Government approving expenditure of £13,450 for its construction.⁴⁰ Correspondence suggests that the original intention had been to complete and commission the tower in time for the opening of the airport. A September 1955 *Report on Progress of Approved Works at the New Hobart Airport* stated:

A Contract for the erection of the Control Tower on the hill between Cambridge and Hobart Airports has been let and it is anticipated that it will be completed in December 1955. The design of the electronic equipment to be installed in it is proceeding in conjunction with that required for the towers at Melbourne and Launceston. Installation should commence early in the New Year.⁴¹

However, the following January a progress report found that:

The foundations of the Control Tower have been poured and approximately 9 months will be required to complete this structure.⁴²

The estimate of nine months from January 1956 appears to have been generally accurate. Photographs dated 30 November 1956 show control tower under construction (Figure 13), and by 7 May 1957 it was nearing completion (Figure 14). Max Byrne, a technician then working at Cambridge Aerodrome, recalls that the tower was commissioned in May 1958.⁴³

Figure 12 Sketch of the proposed Hobart ATC tower, October 1951

Source Civil Aviation Historical Society

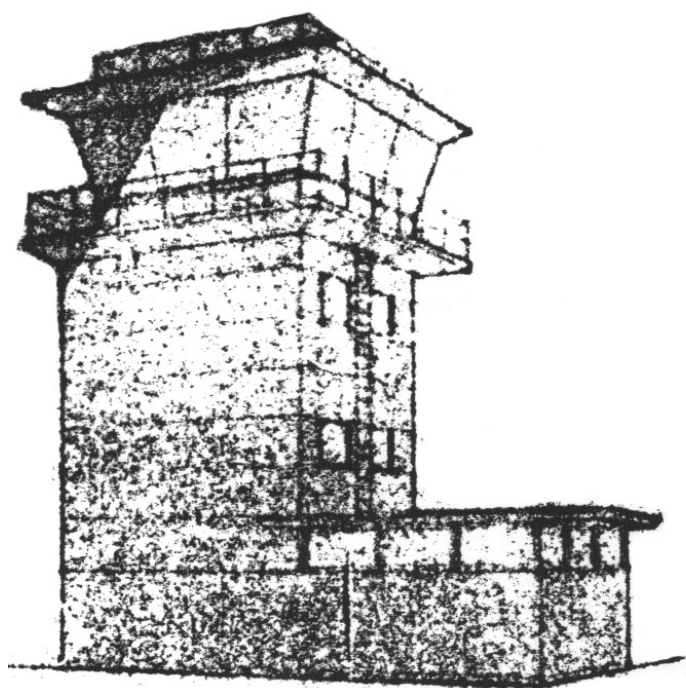




Figure 13 Left and right:
Hobart ATC tower under
construction, 30 November
1956: west and north
elevations (left) and south
elevation (right)

Source National Archives
of Australia, P2813 Album
Two, 71



Figure 14 Hobart ATC
tower under construction, 7
May 1957: north and west
elevations

Source Civil Aviation
Historical Society

The ATC tower as built differed from the 1951 sketch in a number of key respects. The tower itself was only two storeys high, not three. This reduction is presumed to have been a response to its siting on an elevated vantage point (ridge), as opposed to being at the same level as the runway and aprons. The location on the ridge – which was driven in part by the requirement for the tower to service Cambridge Aerodrome as well as HIA – also led to the tower being atypically distant from the runway, approximately 500 metres. The majority are much closer.

Another variation was the octagonal plan of the cabin. Of the early post-World War II ATC towers delivered by the DCA, only Sydney ATC no. 3 (1953) – the first tower completed in Australia after the war – had a square cabin. By the mid-1950s, the international convention of an octagonal plan had been adopted, to optimise sightlines.

A third notable change from the 1951 sketch was that there was no projecting wing at the ground floor. This meant that the equipment room was accommodated in the ground floor of the tower. As discussed in Chapter 4 and 5, this is now presenting operational challenges, there is limited ability to accommodate services and equipment related to system upgrades.

Figure 15 The original console at Hobart ATC tower, 1958: note the cabin's octagonal plan

Source Civil Aviation Historical Society

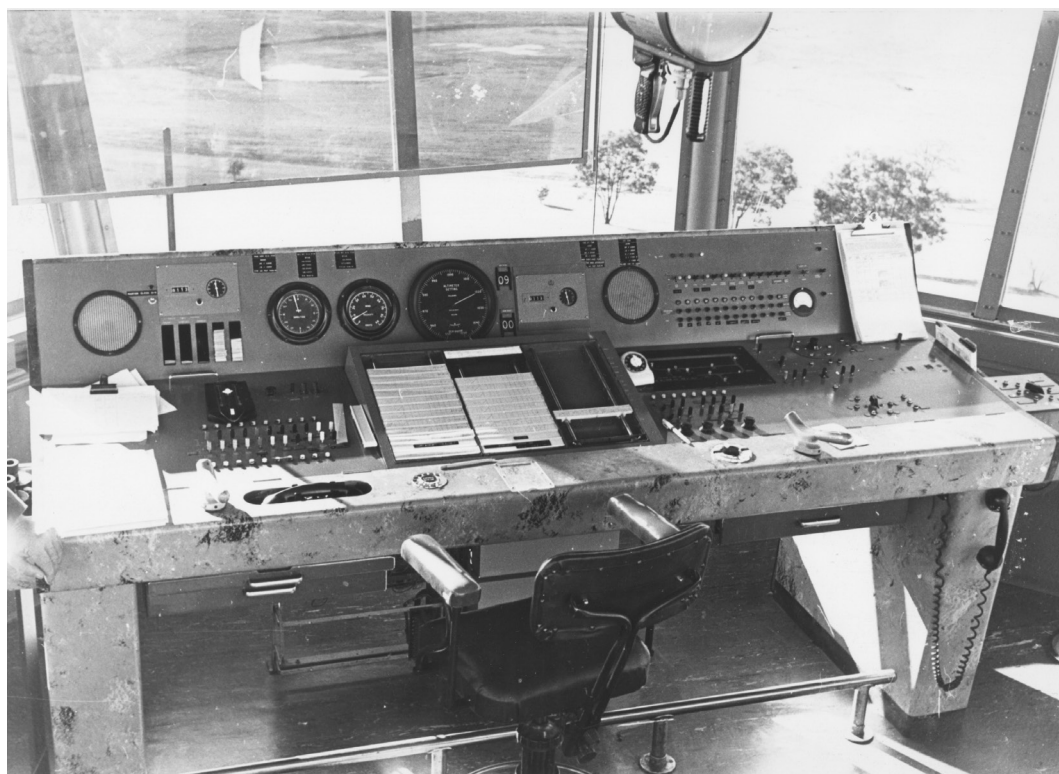




Figure 16 Hobart control tower cabin, 1958, with the hand-held, roof mounted beacon on display

Source Civil Aviation Historical Society



2.6 Alterations to Hobart ATC tower

Hobart ATC tower is substantially intact as commissioned in 1958, externally and internally – see Chapter 3 for a comprehensive physical description. A notable internal change, completed in November 1979, was the replacement of the original console, in November 1979 (Figure 17). As has been the case at a large number of ATC towers around Australia, system upgrades and the requirement to accommodate additional cabling and services, were the drivers behind this change. The most significant external change, in 2006, was the replacement of the original entry enclosure to the south elevation (Figure 18). The steel framing to the enclosure had failed in the saline conditions.

2.6.1 Control Tower at risk, 1990

In 1990, as part of a cost-benefit review of 11 Australian airports, the Civil Aviation Authority (CAA) considered the viability of the Hobart ATC tower.⁴⁴ It determined that airports not managing a high volume of traffic were at risk of losing their tower. Hobart fell into this category and despite the CAA's claims that the closure of the tower would not affect safety, opponents of the plan argued it would mean Hobart would be the only capital city airport without its own traffic control tower.⁴⁵ In particular, it was argued that the loss of the tower would put at risk the management of international flights (see Section 2.7.1). The review found that the ATC tower at Hobart cost about \$500,000 per year to run including wages for seven employees and maintenance. The tower's activity score was '93', close to the minimum set to require further investigation of its cost-benefit ratio.⁴⁶ Ultimately, the decision was made to retain it.

Figure 17 Installing the new console, November 1979

Source Civil Aviation Historical Society





Figure 18 Undated, c.
1970s, view of the ATC tower
looking north-west: note the
original entry enclosure:

Source Civil Aviation
Historical Society

2.7 Hobart Airport (1970s to present)

Air movements at Hobart, like every major airport in Australia, grew rapidly during the 1960s, and air traffic at Hobart grew much faster than projected.⁴⁷ In 1971-72, over 226,000 passengers transited through the airport, growing to 282,000 the following year.⁴⁸ This was in part credited to the opening of the Wrest Point Casino in 1973, the only legal casino in Australia at the time.⁴⁹ In November 1974, work began on a new and enlarged domestic passenger terminal (Figure 19). A separate pilot briefing and administration building was also built to the south of the new terminal.

Figure 19 Hobart ATC tower cabin, 1984, looking north-east: note the new and expanded terminal facilities in the background

Source Civil Aviation Historical Society



2.7.1 Hobart as an international airport, 1980

Representations for Hobart Airport to become an international port had been made before the airport began operating. In June 1948, the State Minister for Transport claimed that the airport may become an international port 'in a few years'.⁵⁰ Despite these aspirations, action wasn't taken until the 1970s, with the opening of the new casino at Wrest Point as a key driver.⁵¹ After plans for an international airport at Galston in New South Wales were abandoned, Hobart was proposed as an alternate location for the next international airport in Australia.⁵²

Optimistic that the pressure from the commercial airlines would force the issue, the State Minister for Tourism and Immigration began negotiating with Air New Zealand and Qantas in 1974.⁵³ Despite a setback in 1977 when the Commonwealth Government abandoned upgrade plans for Hobart, a limited service to Christchurch from Hobart was trialled for three months in 1980.⁵⁴ As the existing passenger terminal was not set-up to an international standard, new facilities to support international travel were required.

On 18 April 1981, the DCA considered plans to build a separate international terminal at the airport.⁵⁵ The announcement attracted criticism from the Canberra community, where it was perceived that plans for an international airport were being superseded by Hobart.⁵⁶ The Commonwealth Government approved \$950,000 for a new international terminal in April 1982.⁵⁷

The new international terminal opened on 4 June 1983, with flights to Christchurch, New Zealand, operated by TAA.⁵⁸ Although there have been not been regular international flights to Hobart since the mid-1990s, the airport retains its international terminal building, customs and immigration facilities and name. The new international airport was officially opened on 11 December 1985 by Prime Minister Bob Hawke, half-funded by the Commonwealth Government out of the compensation money given to the state, following the decision not to proceed with the Franklin Dam project.⁵⁹

2.7.2 Federal Airports Corporation, 1988

In January 1988, the operation and ownership of the airport was transferred from the Commonwealth Department of Aviation to the Federal Airports Corporation (FAC). The change to a Government Business Enterprise arrangement was part of a national strategy for a new body to manage 17 of Australia's major commercial aviation airports.⁶⁰ The new management had the aim of expanding Hobart airport from a quiet country airport into a commercial complex.⁶¹ Annual financial losses at the airport were addressed with a project to sell land not used for aviation. During this period, the Llanherne Golf Course acquired more land adjacent to their site in 1990 and the Cambridge Aerodrome was sold in 1993.⁶²

Another FAC review in 1991 recommended reducing the manning hours at the ATC towers at both Hobart and Launceston to save money.⁶³ One proposal included closing the tower's operations at 10pm every day, rather than operating to midnight four days a week.

2.7.3 Privatisation, 1998

In 1998, HIA along with 14 other FAC airports around the country was privatised.⁶⁴ It was expected to attract between \$20 and \$30 million, having reported a 42.8% increase in profits for 1996/97 to \$1.7 million.⁶⁵ The airport was acquired (in 1998) by a consortium, Hobart International Airport Pty Ltd (HIAPL), with both international and local ownership, including the Tas Ports Corporation, for \$35.9 million.⁶⁶ HIAPL was given a 50-year lease with an option to extend for a further 49 years.⁶⁷

2.8 Dark Mofo

In 2016, buildings at HIA, including the ATC tower, were illuminated with red lights as part of the annual mid-winter Dark Mofo arts festival (Figure 20 and Figure 21). Dark Mofo is organised by the Museum of Old and New Art (MONA), an arts museum located on the Berriedale peninsula in Hobart. MONA opened in 2011. Its success has been a key driver in increased visitation to Hobart and Tasmania, and increased use of the airport, during the 2010s.⁶⁸

Figure 20 Hobart control tower lit up for Dark Mofo, June 2016

Source Hobart International Airport Pty Ltd



Figure 21 Hobart Airport terminal temporarily re-branded for Dark Mofo, June 2016

Source Mercury, 7 June 2016 accessed online 12 February 2018



3.0 PHYSICAL ANALYSIS

The following provides a description of Hobart ATC tower as it exists. A key objective of the physical analysis is to identify alterations to the building as commissioned in May 1958.

A site visit was conducted on 15 November 2017. With the exception of the cabin roof, all areas of the building were accessed. Content relating to the cabin roof in the following is based on a site visit undertaken by Lovell Chen staff on 12 May 2008. It is noted that the tower is identified as Building B11 in the context of Hobart Airport (Figure 22).

Documentation referenced in the preparation of this analysis included historic photography (as reproduced below and in Chapter 2), and floor plans dated 4 May 1992 and 21 September 2010 prepared by Airservices Australia (MR 30100001 Sheet 001). Original drawings of the ATC tower were not located. A Hazardous Building Materials Survey report, prepared by JTA Health, Safety & Noise Specialists (July 2013) was also referenced.

As noted in Chapter 1, the ATC tower is oriented on a diagonal to true north. However, for ease of comprehension, the elevation facing the runway is described here as the north elevation and the elevation facing Llanherne House is south.

All photography is by Lovell Chen unless otherwise stated.

3.1 Summary site description

Hobart ATC tower is located on a ridge to the west of the runway, and north-west of the passenger terminal at Hobart Airport. Cambridge Aerodrome is to the north-west of the ridge. The tower is located approximately 350 metres from the terminal, 'as the crow flies'. Vehicular access is via Tower Road, to the north of the tower (Figure 22).

Other buildings/elements on the ridge are as follows (see also Figure 22 and Figure 23):

- Llanherne House, a nineteenth century homestead that was established as an outstation of the Llanherne Estate (see also Chapter 2). The house, which is owned by HIAPL, is included in the Tasmanian Heritage Register (Place ID, 1,032, address 1309 Tasman Highway, Cambridge 7170). It has been extended and extensively modified. The building is presently occupied by Airservices for administrative use.
- A conifer windbreak, to the west of Llanherne House, a remnant of its early planning
- Modern water tanks
- A meteorological station

Hobart ATC tower is unusual, and may be unique in Australia, in the sense that: it achieves its elevation through siting on a topographical landmark; and it provides services to two airfields, Cambridge Aerodrome and HA.

3.2 Airservices reserve

The control tower is located on a 431-square-metre landside reserve that is leased from HIAPL by Airservices (Figure 3). The reserve is unenclosed. The control tower, as commissioned in 1958, is the only building within the reserve. The leased area also includes a large at-grade hardstand area to the south-east of the tower, formed by a concrete retaining wall (Figure 25). This hardstand area is not original; it had been introduced by the late-1970s. Its extent appears to align with the extent of the Airservices lease.

Figure 22 Site plan: the control tower (Building 11) is to the west of the terminal building

Source Airservices
Australia, MR 30100001 Sheet
001, 21 September 2010

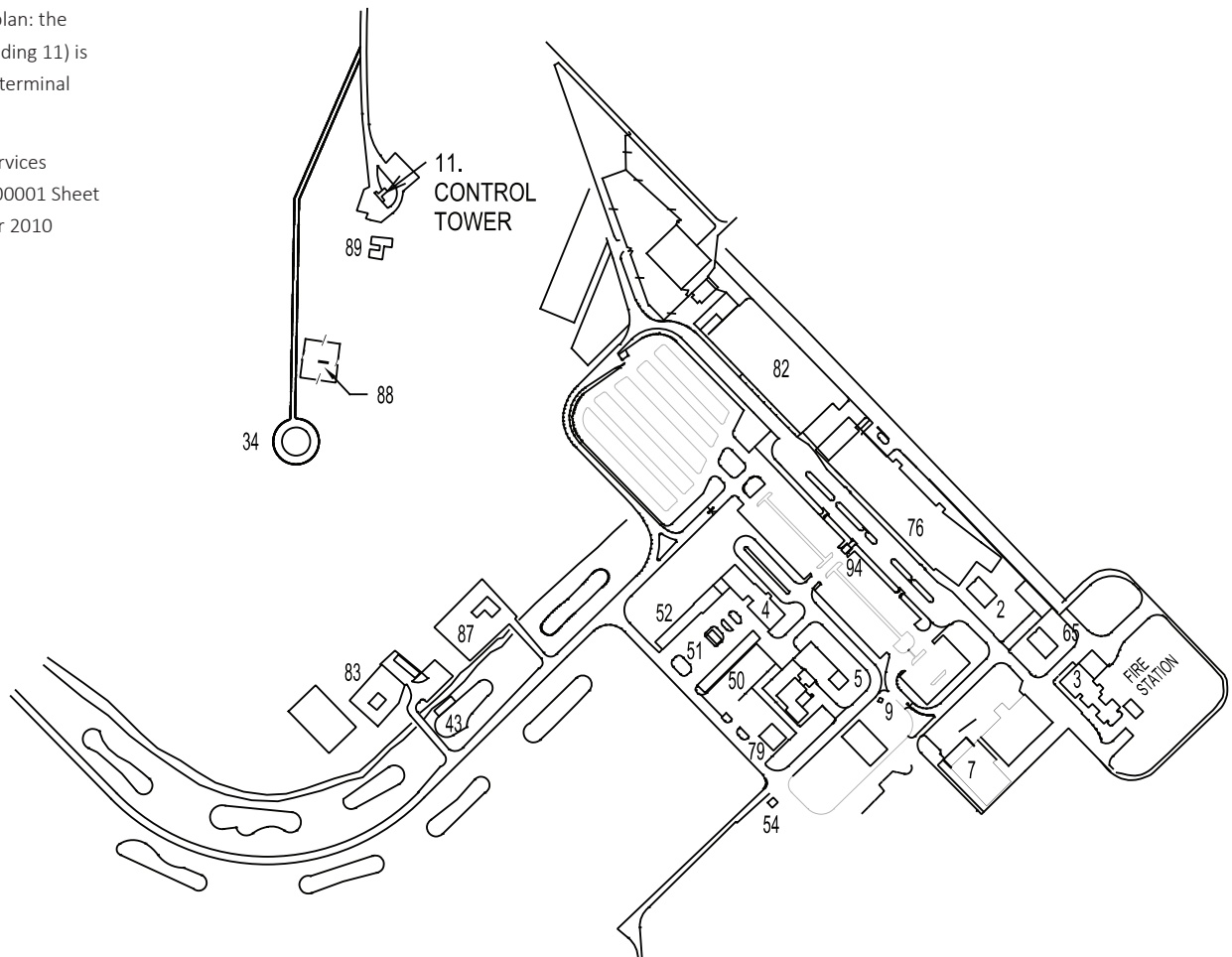


Figure 23 Buildings/elements on the ridge to the west of Hobart Airport are, from right: the ATC tower, Llanherne House; the conifer wind break; water tanks; and meteorological station



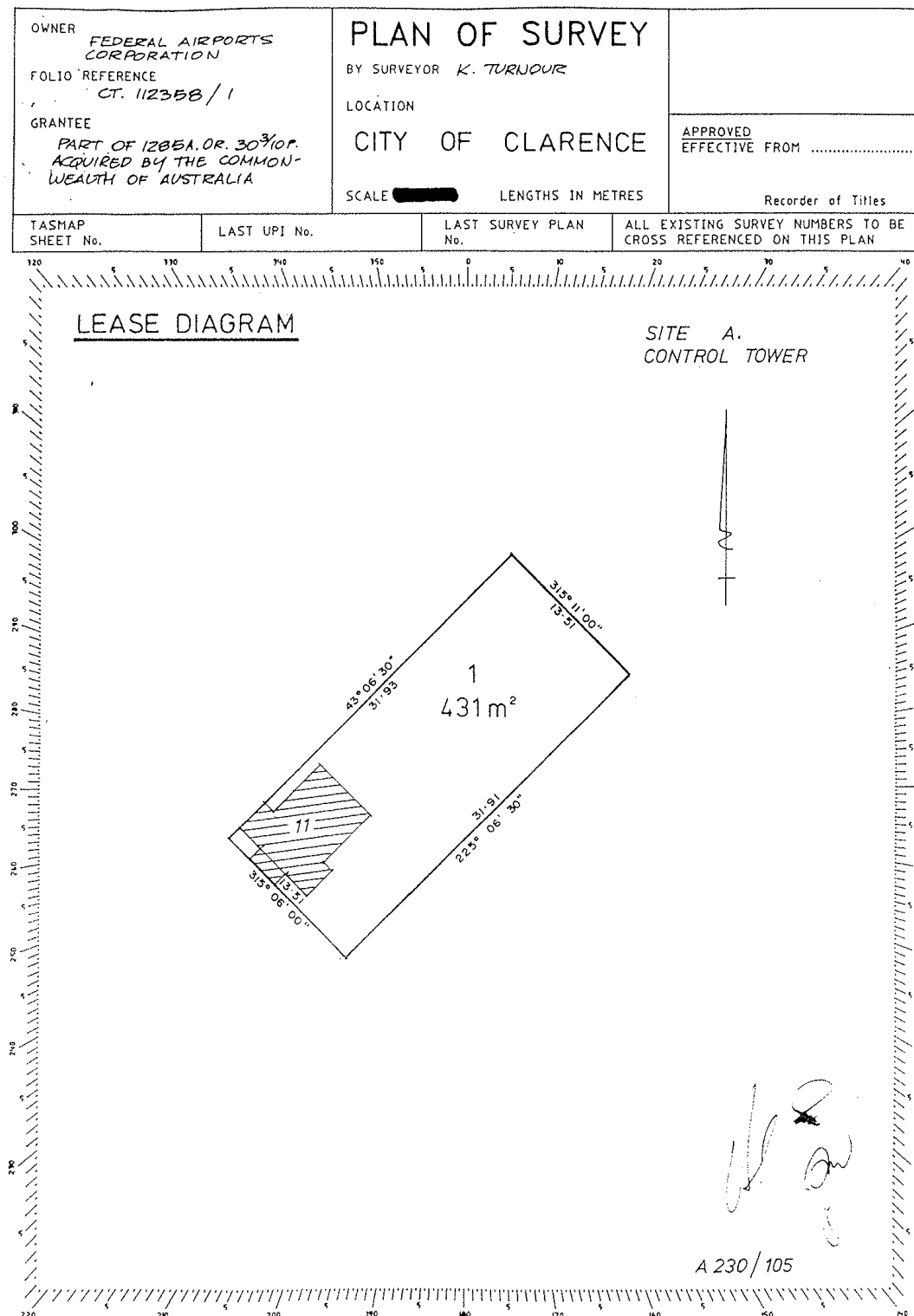
Figure 24 Hobart ATC tower
lease planSource Memorandum
of Lease (Section 64), No. B
954889

Figure 25 View of the ATC tower from the north of the leased area: Llanherne House (left) is located approximately 25 metres south of the ATC tower



Figure 26 Llanherne House, north and west (part) elevation: the modern addition is visible to the right of the image



3.3 Exterior

Hobart ATC tower comprises an octagonal cabin on top of an asymmetrical two-storey red brick base building. The cabin is raised on a partly chamfered and partly square duct and service drum. On three sides, an observation deck cantilevers from the flat roof of the base building. To the west, the walkway is supported on the base of the broader stairwell.

The 5,160mm-wide *north* elevation, oriented to the sealed runway, comprises four small timber-framed windows at ground level (to the equipment room), with modern security grilles, and three timber-framed windows across the width of the upper level (the amenities space, and a modern shower). The full width first floor windows are located directly beneath the eaves (walkway) and return to the longer north and south elevations (Figure 27 and Figure 28).

There are no window openings to the ground or first floor levels of the *south* elevation (7,750mm). A modern (2006) glass entry enclosure canted to the south, is located in the approximate centre of the ground level. This replaced the original flat-roofed portal entry, whose steel frame had corroded in the windy, saline conditions (Figure 30).

A bay projecting from the south end of the *east* elevation houses the switch room and toilet above (Figure 28). Steel safety hoops have been added to the vertical escape ladder to the east of the east elevation. The steel balcony at the first floor level is a replacement of a narrower concrete original. A half-height service entry with exposed concrete canopy is in the centre of the ground level. A security fence shields access to the service entry and escape ladder. The east and west elevations are both 7,950mm wide.

On the *west* elevation, the projecting bay houses the staircase (Figure 29). A double-height timber casement window in the north-facing wall of the bay provides natural light to the staircase (Figure 31). An original doorway, with a vent above, in the centre of the ground level provides access to the equipment room. To the left (north) of the doorway a metal locker houses batteries, for which there is no space in the equipment room. An air conditioning unit above the locker is a modern addition.

The walkway around the duct and service drum is essentially intact as built (Figure 32). Air conditioning units have been added to the east and west sides, and the cover to the escape ladder is modern.

The canted steel window frames to the octagonal cabin are original, as is the fixed steel ladder to the roof, at the south (Figure 33).

The balustrade around the cabin roof is steel piping, like the balustrade to the walkway. The original rotating beacon to the flat roof is extant.

Figure 27 Hobart ATC tower, north elevation





Figure 28 East (left) and north, part (right) elevations of the ATC tower

Figure 29 West, part (left) and south (right) elevations: note the modern entry enclosure to the south elevation



Figure 30 Undated, c. 1970s, view of the original entry enclosure: looking north-west

Source Civil Aviation Historical Society



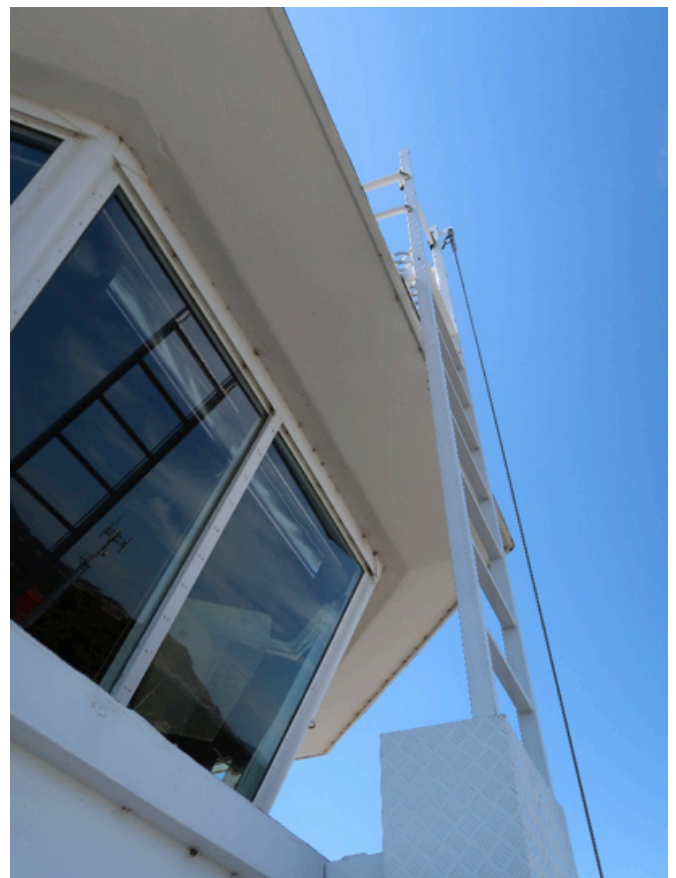


Figure 31 West elevation:
note double-height casement
window to the north-facing
elevation of the stairwell
(pictured right)

Figure 32 Walkway around the duct and service drum



Figure 33 Detail of canted cabin windows



3.4 Interior

3.4.1 Ground floor

Access to the ATC tower is through the modern (2006) entry enclosure to the west elevation. Nibs of the concrete walls to the original entry are extant within the space. The planning of the ground floor is unchanged. A small foyer provides access to the switch room (to the south), the equipment room (to the east) and the painted concrete staircase with timber balustrade (to the north). There is a storage space below the stair.

The switch room retains its original top-hung sliding door. The window to the switch room's west wall was replaced with an aluminium frame during works to accommodate the new entrance (2006). Highlights in the internal partition wall illuminate the equipment room (Figure 35).

Sections of the 1950s green marble-effect lino survive in the equipment room, as are cooling fans risers and, duct risers and the southern equipment rack (Figure 36). The sliding door of the equipment room was added to comply with OH&S requirements. The equipment room is unusual in never having been extended, and is congested as a consequence, with very limited space for additional equipment.

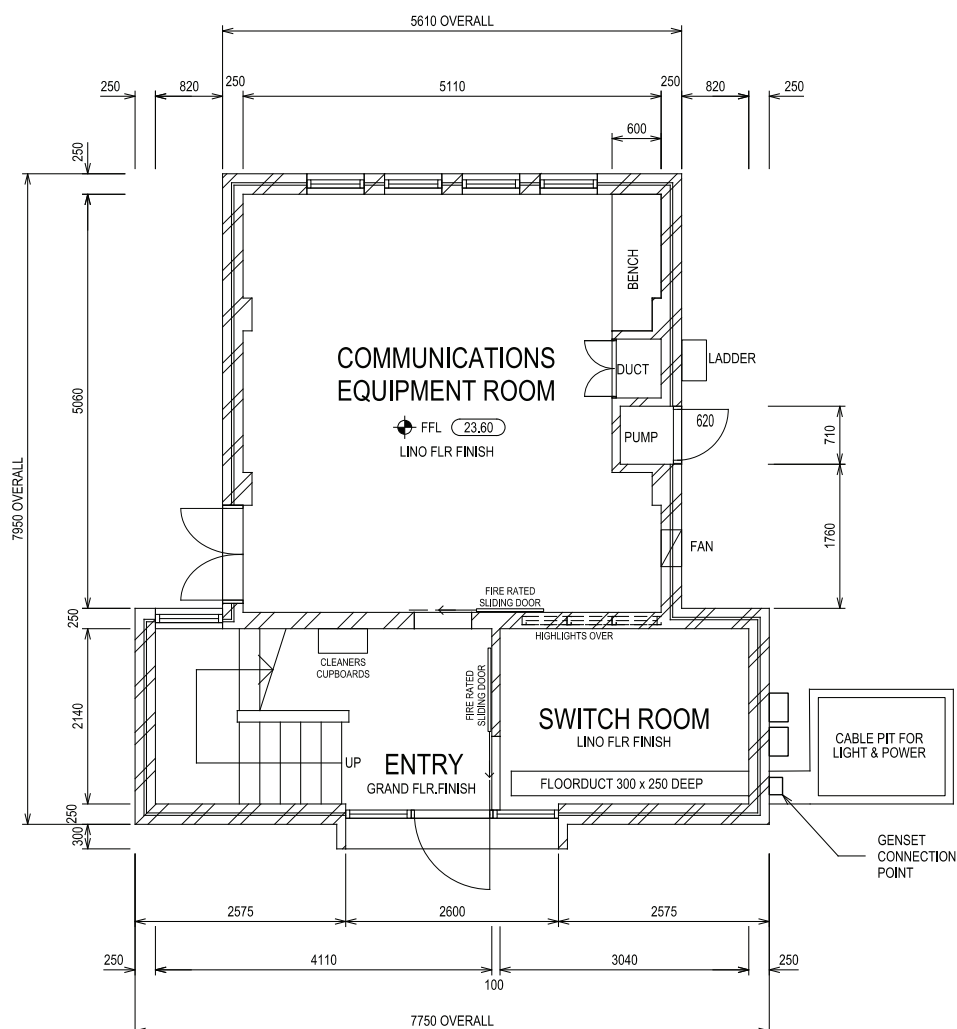


Figure 34 Ground floor plan

Source Airservices Australia, MR 30100001 Sheet 001, 21 September 2010

Figure 35 Highlight window between the equipment and switch rooms



Figure 36 Equipment room: original features include the marble-effect lino and the equipment rack



3.4.2 First floor

The staircase provides access to the toilets, at the south end of the first floor corridor space. The terrazzo partition wall in the toilet area dates to the 1950s, and the modern lino floor conceals asbestos tiles. The balance of the first floor comprises a locker room, with sink/kitchenette opposite, and an office/amenities space to the east (Figure 39). A modern partition wall has been installed between the locker room and office, which has a modern decorative treatment. A shower room has been installed in the south-east of the office.

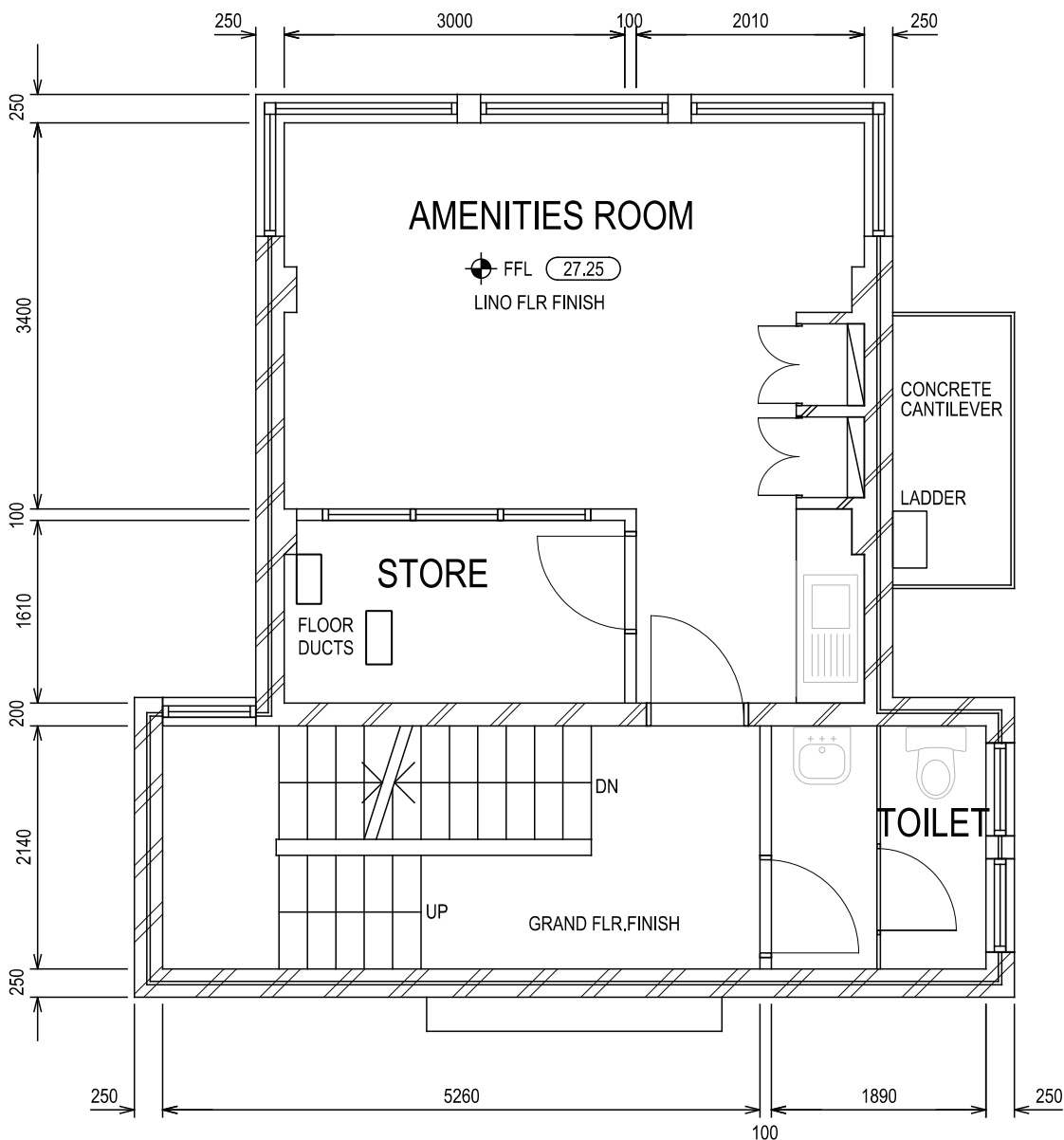


Figure 37 First floor plan

Source Airservices
Australia, MR 30100001 Sheet
001, 21 September 2010

Figure 38 First floor: view looking east from the staircase



Figure 39 First floor office space (amenities room)



3.4.3 'Dwarf' room (duct and service level)

The half-height duct and service space is accessed through an opening at the base of the stairs to the cabin – the height explains the use of the term 'dwarf' to describe the space. The doorway, with a metal grille and caneite lining on the inside, is original. The floor of the space is painted green, and an opening for wiring in the centre of the floor reveals the concrete base to be approximately 150mm thick. An original brass water tank is to the west of the space (Figure 41).

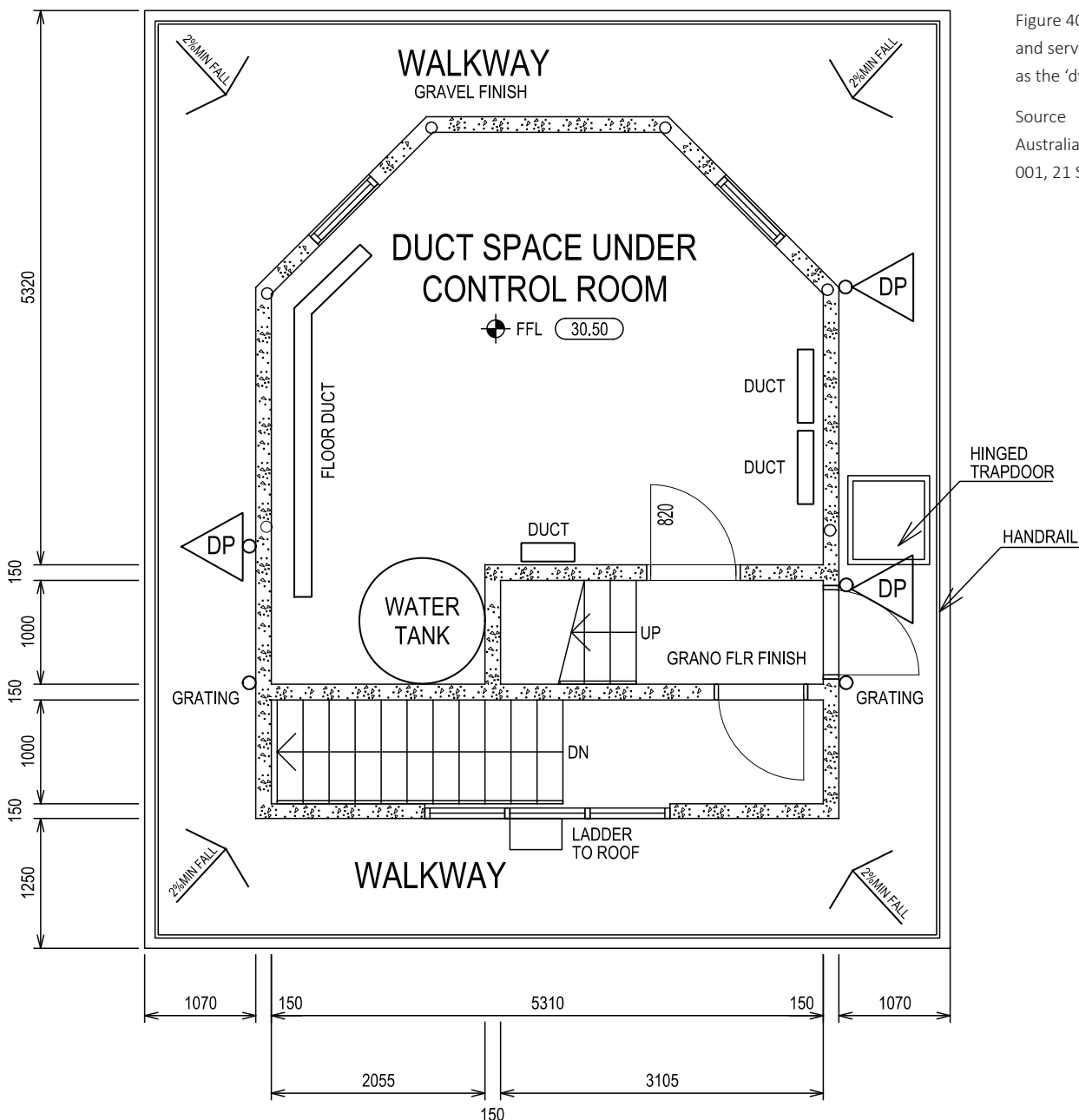


Figure 40 Plan of the duct and service level (also known as the 'dwarf' room)

Source Airservices
Australia, MR 30100001 Sheet
001, 21 September 2010

Figure 41 Dwarf room
below the cabin: note the
original brass water tank



3.4.4 Control cabin

Access to the cabin is from the west of the plan, and the console is oriented to the south-east, with views over the apron and the runway (Figure 43). The original console frame was replaced in 1979 (Figure 44), and the existing console frame has been modified to accommodate contemporary equipment. As noted above, the canted steel-framed windows divided by thick mullions are original. The windows themselves were vacuum-sealed double glazing; as existing, they are thick single sheets. The steel frames are concealed behind timber (Figure 45).

The floor is covered with carpet, for acoustic purposes – the floor was originally vinyl tiles (Figure 44). The original perforated acoustic tiles to the ceiling are extant, as are the strip light over the console (also known as the ‘egg crate light’) and the circular visor track (Figure 46). Roller blinds to each of the windows have replaced the original Perspex visor which hung from the circular track.

The three vents to the north-east, east and south-east of the cabin are extant, and still in use. Ceiling-mounted air conditioning units have replaced the original coolers to the north and south walls. Some sections of the original perforated metal wall cladding are visible, modern cabinetry may conceal other sections. A basin and small cooking area has been installed to the east.

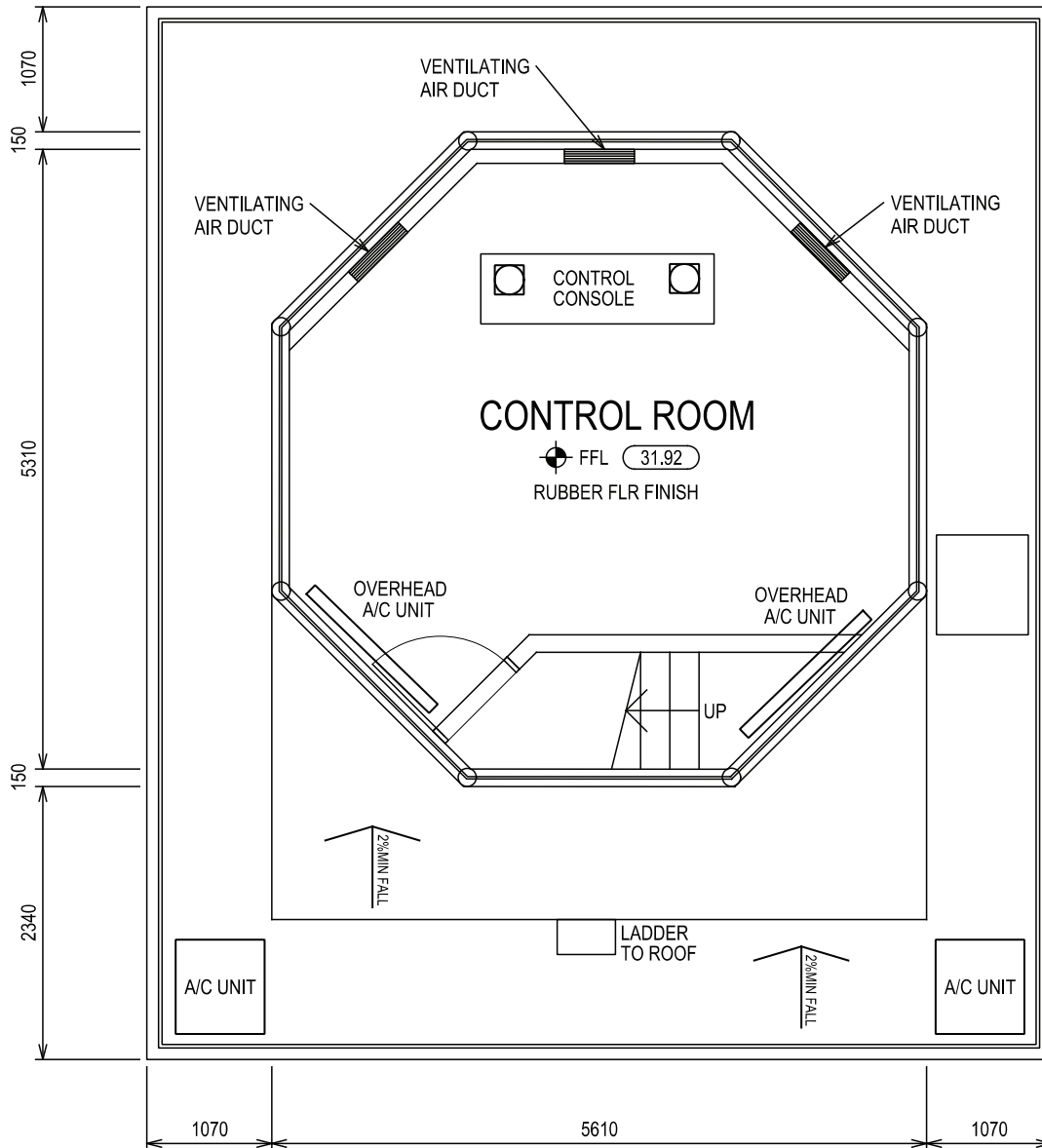


Figure 42 Plan of the cabin
Source Airservices
Australia, MR 30100001 Sheet
001, 21 September 2010

Figure 43 The present console was installed in 1979

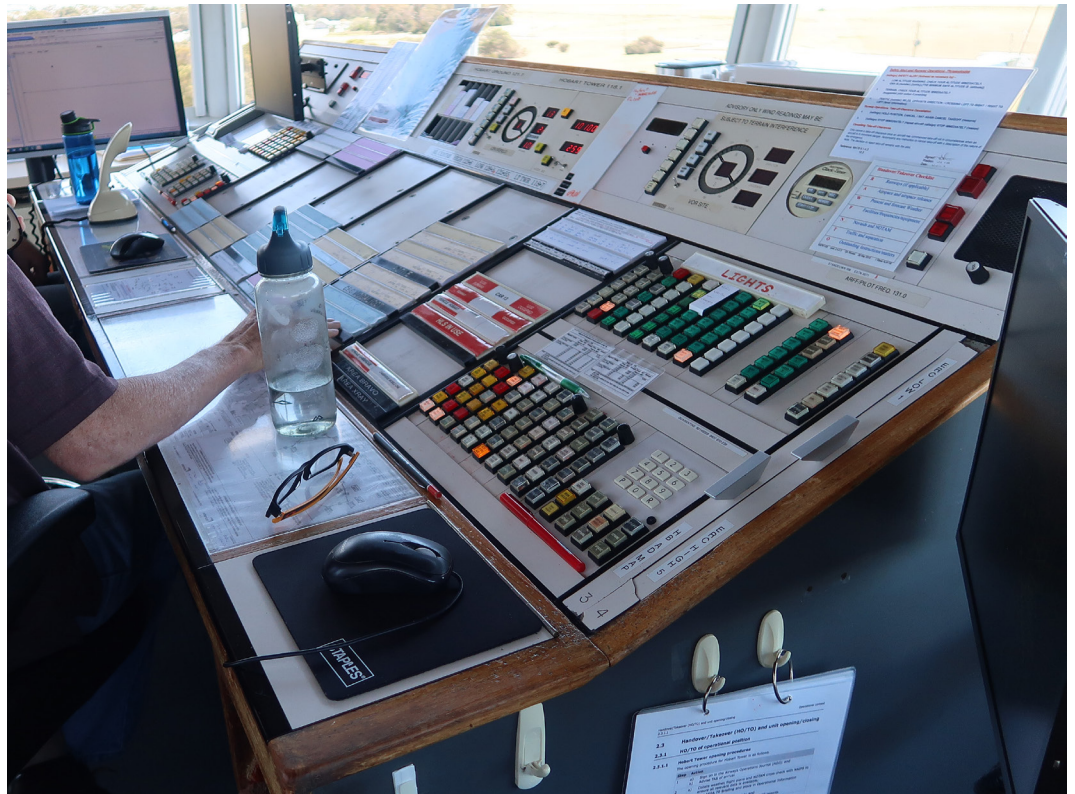


Figure 44 The original console at Hobart ATC tower, 1960s

Source Civil Aviation
Historical Society





Figure 45 The canted steel-framed windows are original



Figure 46 The perforated acoustic tiles, 'egg crate light', hand-held beacon and the circular visor track are original

3.5 Views

Hobart ATC tower is one of the most prominent structures at Hobart Airport, a consequence of its height, distinctive profile and elevated location (see Figure 23, Figure 47 and Figure 48). It is visible from the north, east and south within the airport compound, and is generally screened from the west by the wind break – as a consequence, the tower is not visible from Cambridge Aerodrome.

The location of the modern entry enclosure (the most notable change to the building) to the west elevation, which is generally concealed in views from the public domain, means that the ATC tower presents very much as built in the 1950s.

There are unimpeded lines of sight from the tower to all areas of the airport, apron and runways (Figure 49).

Figure 47 View looking west from the Terminal building, towards the ATC tower





Figure 48 View looking west from the car park area outside the Terminal, towards the ATC tower



Figure 49 View looking south-east from the base of the ATC tower

3.6 Analysis

Hobart ATC tower is largely intact as built, and presents very much as built in the mid-1950s. Aside from systems upgrades, alterations for OH&S compliance and the replacement of worn fabric, the major alterations/changes are summarised below.

Exterior:

- Replacement of the original entry enclosure to the west elevation
- Introduction of wall-mounted services, packaged air-conditioning units to the north, south and east elevations of the base building, and the duct/service drum
- Security fencing enclosure at the base of the south elevation
- Installation of a freestanding locker for equipment at the base of the north elevation

Interior:

- Replacement of the original console
- Repurposing of spaces on the first floor, with associated fit-outs and a new shower

4.0 ASSESSMENT OF SIGNIFICANCE

This chapter provides an assessment of the cultural heritage values associated with Hobart ATC tower against the Commonwealth Heritage List (CHL) criteria. The assessment (Section 4.2) draws on evidence presented in chapters 2 and 3, and the comparative analysis (Section 4.1). A Statement of Significance is at Section 4.3.

4.1 Comparative analysis

The following considers Hobart ATC tower within the context of Australian and other international control towers since the 1920s. It draws on the typological study of ATC towers in Australia and overseas prepared by Lovell Chen as part of the Stage 2 *National Control Towers Heritage Assessment* (2007-2009).

4.1.1 ATC tower development in Australia (1920s-1990s)

The first ATC towers were square timber structures raised only slightly off the ground. Contact with aircraft was purely visual, through devices including flags, flares and cane spheres mounted on a rooftop flagstaff. Towers of this type were introduced in Australia from the mid-1920s.

Following a review of air safety standards and procedures in 1938, Australia's first standardised control tower model, the Integrated Operations and Administration building (Ops & Admin Buildings), was developed. This was based on overseas precedents (notably the United States, see Figure 50 and Figure 51) and comprised a three-storey Streamlined Moderne building with the air traffic control cabin located on the roof. The small flat-roofed cabins featured steel-framed windows with curved windows facing the apron, and although they were fitted with radio facilities, communication with aircraft was still almost exclusively visual. Three of these Ops & Admin facilities were built in Australia, at Parafield Aerodrome (Adelaide), Archerfield Aerodrome (Brisbane, Figure 52), and Mascot (Sydney). Others were planned for Hobart, Essendon (Melbourne) and Maylands (Perth), but were not constructed because of the outbreak of World War II.

Efforts to establish international air traffic control regulations for were initiated in the post-World War II period. In Australia, a number of approaches were trialled in the design of control towers, including the use of different construction materials and tower forms. By the early-1950s, a standard control tower format had emerged. It consisted of a square base, typically of between two and four storeys, below a perimeter walkway, also in reinforced concrete, around an octagonal cabin with sloping glass panels fixed in steel mullions. Depending on the nature of the airport, the cabins were fitted with two, three or four-person consoles, and featured a range of noise abatement and cooling devices. Examples of this type of tower were constructed in Sydney (commissioned 1953), Melbourne (Essendon, 1956) (Figure 53), Adelaide (1957), Hobart (1958), Launceston (1958), Darwin (1959), Brisbane (1959) and Tamworth (1959) – see Section 4.1.2).

The 1960s was a period of continuing advances in the size and speed of aircraft and affordability of air travel. During this period the number of airports with control towers increased dramatically, and there were also major advances in terms of the equipment used to manage aircraft. However, the control towers themselves barely changed from the format of the 1950s. Towers based on this model, but refined and improved over time, continued to be built throughout Australia until well into the 1970s.

From the late 1960s a standardised low-cost tower, comprising an exposed steel frame base in a triangular plan and small single-glazed cabins, was introduced generally (but not exclusively) at general aviation or secondary airports. Until the late-1980s, this model of low-cost, perimeter-frame tower, with minor refinements and modifications, was constructed at airports across the country and may be the most widely built control tower type in Australia.

Figure 50 Administration building and control tower at Newark Airport, New Jersey, USA, during demolition: the tower was built in 1934

Source Historic American Building Survey





Figure 51 Airport building with roof-mounted air traffic control cabin at Cleveland Airport, Ohio, USA, 1929

Source Historic American Building Survey

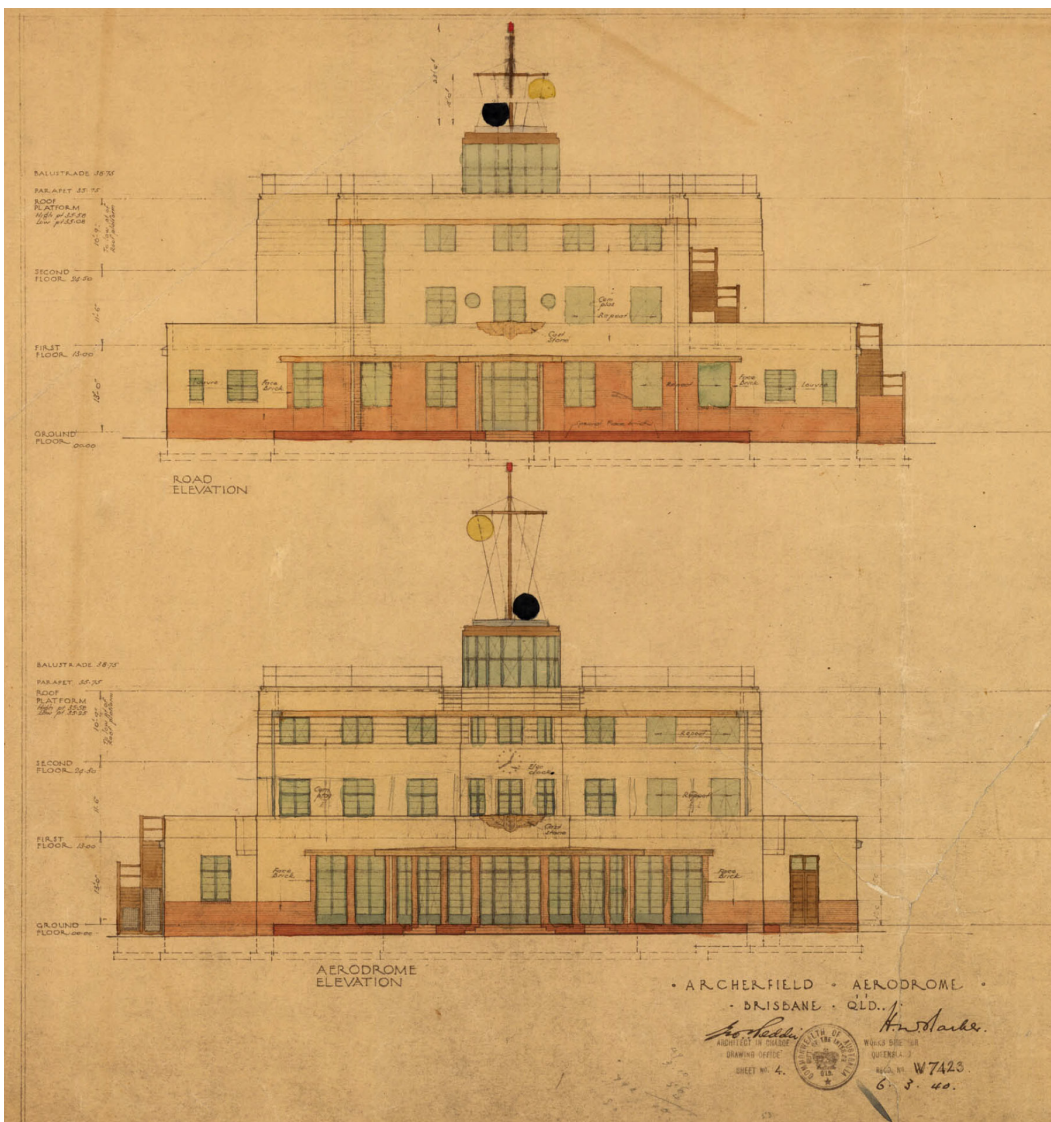
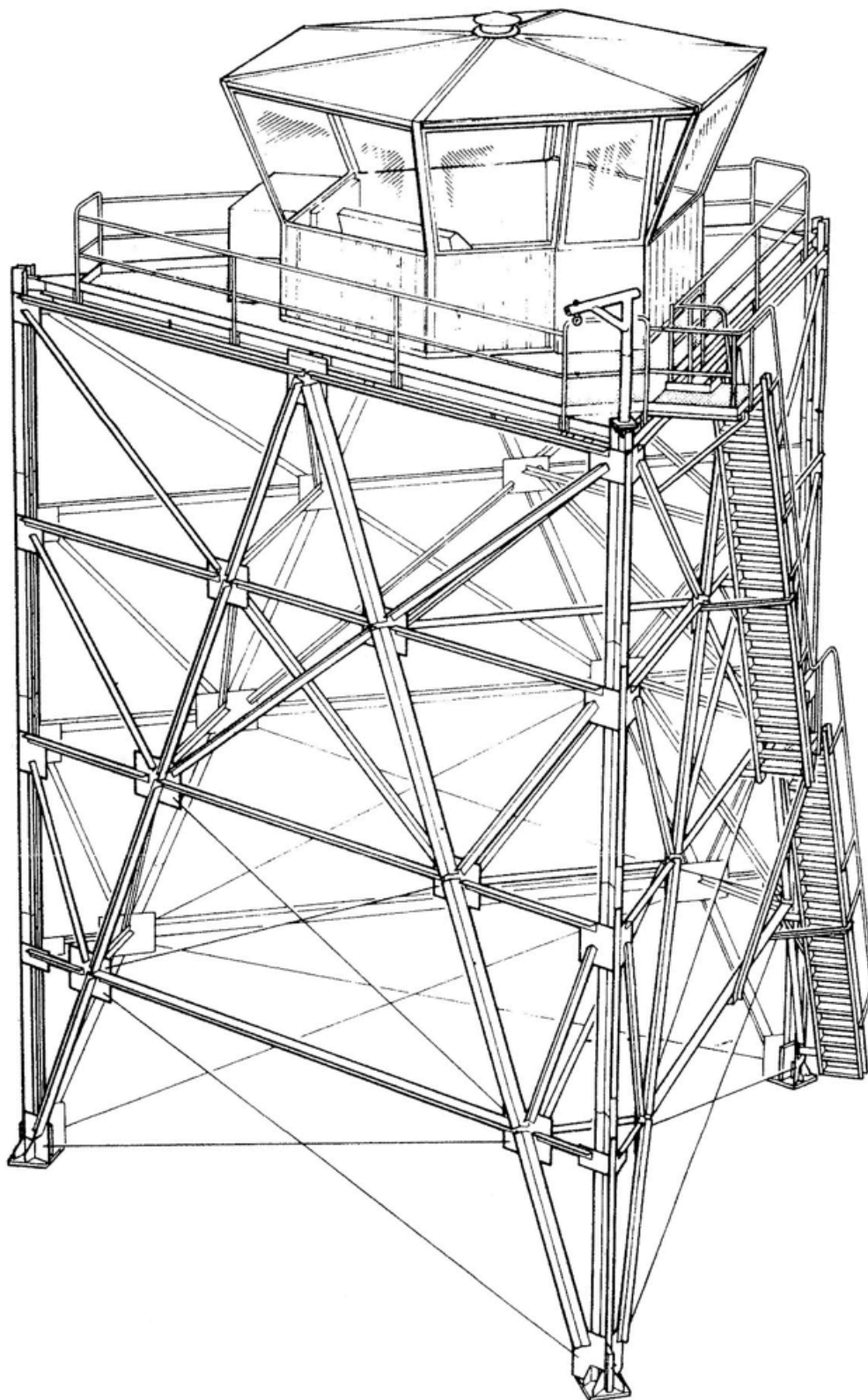


Figure 52 Elevations of Archerfield Operations and Administration Building, dated 6 March 1940

Source National Archives of Australia

Figure 53 Transportable air traffic control tower developed by the Department of Civil Aviation, 1970s

Source Civil Aviation Historical Society



The other tower type introduced in Australia in the late 1960s was column towers, first introduced in Australia at Melbourne (Tullamarine) in 1969 (Figure 54). This type comprised an integrated cabin and services pod on top of a slender concrete column, typically in the order of 50m in height. The unprecedented height of the columns towers required a new approach to the physical relationship between the ATC cabin and the equipment required for its operation. Proximity of radio, audio and other systems was required to ensure reliable feeds and signals, which had not presented a problem in lower, earlier towers. The new column towers resolved this issue by dividing the equipment that services the cabin into two sections: the main equipment room at ground level, and a subsidiary equipment space immediately below the cabin. Later column towers in Australia, in Perth (commissioned in 1986) and Brisbane (commissioned in 1988) were taller and more sculptural than the Melbourne tower, however, towers including Cairns (1990), Coolangatta (1990) and Tamworth (1997) did not repeat the sculptural form of Brisbane and Perth. Rather, these later towers were generally composed of broad cylinders housing services/amenities and cabins positioned on top of slender columns, more like the Melbourne tower. In more recent times, in terms of their external form, control towers have generally followed the Melbourne model established in the late-1960s. But since the mid-1990s, perhaps led by the present Sydney tower (1995) – a cable-stayed structure designed as a landmark by architect Ken Woolley – there has been a marked international trend in the design of control towers as conspicuous civic markers/landmarks by prominent architects.



Figure 54 View of the Tullamarine ATC tower, c. late-1960s

Source Civil Aviation Historical Society

4.1.2 Australian control towers of the 1950s

Developments in radio and navigations systems and in the speed of aircraft were accelerated enormously by World War II. The volume of air traffic also increased exponentially following the war.

As noted, the requirement for international standards to regulate civil aviation had been recognised before the end of the conflict. The Convention on International Civil Aviation was held in Chicago at the end of 1944, and resulted in the establishment of the (Provisional) International Civil Aviation Organisation (ICAO) directed at the regulation of civil aviation and air navigation in particular with the ultimate ambition of improving safety standards. Article 28 of the convention required contracting States to undertake, 'as far as it may find practicable':

- (a) [The provision] in its territory, airports, radio services, meteorological services and other air navigation facilities to facilitate international air navigation, in accordance with the standards and practices recommended or established from time to time, pursuant to this Convention;
- (b) [The adoption] of the appropriate standard systems of communications procedure, codes, markings, signals, lighting and other operational practices and rules which may be recommended or established from time to time pursuant to this Convention;
- (c) [Collaboration] in international measures to secure the publication of aeronautical maps and charts in accordance with standard which may be recommended or established from time to time, pursuant to this Convention.⁶⁹

The implications for control towers of the post-war civil aviation environment were multiple. Two of the most significant factors were the introduction of standardised communications, navigation and signalling systems which demanded sizeable storage spaces for equipment and power houses; and the increasing speed of aircraft, which demanded larger airstrips and taller control towers. Post-World War II control towers had also become free-standing elements within airport complexes, and often the tallest (2-4-storey towers typically being c. 15-20m-high to their cabin roofs). The plan form and appearance of control cabins also fell into a pattern during this period: they were typically octagonal with canted windows and raised on a half-height drum which housed crawl spaces for circuitry access, cooling and radio equipment.

The use of forward slanted windows in control towers evolved from airplanes, such as the Stinson Trimotor and the Boeing 247, in which the problem of window reflections interfering with airfield views had been tackled by the introduction of slanted windows in the 1930s. Outward-leaning window frames also allowed a pin-jointing linkage to the roof, which could be a lightweight canopy or a hollow-ceiling cantilever in which columns could be omitted. This arrangement later became almost universal in control towers. Because of the window slant the cabin volume in this type lent itself either to a mitred tapering square, a chamfered square with triangular corner windows mounted on their apexes, or a tapered octagon. This system had the added advantage of allowing a large window area but presenting virtually no window surface to high angle sunlight, countering the hothouse effect of glass-topped control towers.

In Australia, the Department of Civil Aviation (DCA) was working on a standard approach to the design of control towers from at least 1948.⁷⁰ Between 1952 and 1959 at least eight new towers were constructed in Australia, at Sydney (commissioned 1953), Essendon (1956), Adelaide (1957), Hobart (1958), Launceston (1958), Darwin (1959), Brisbane (1959) and Tamworth (1959).⁷¹ With the exception of Adelaide, which was a late version of the integrated tower and terminal type, these towers were of between two and four storeys. Some were surmounted by service/duct drums with walkways around, with the cabins on top, such as Essendon and Sydney. Others featured cantilevered walkways around the service/duct drums, as at Hobart, Launceston, Tamworth and Brisbane. Structural systems and materials used in these early towers also varied. The *Civil Aviation Journal* in 1951 noted that the standard design of the towers for Essendon, Sydney and Brisbane was originally designed for brick construction but that these towers would instead be clad with fibro-cement sheeting. Essendon and Brisbane followed this model, although Sydney was clad in brick (the Sydney tower was integrated with a fire station). The remaining control towers, Hobart, Adelaide, Darwin and Tamworth were all either brick or fibro-cement sheet clad, while Launceston was originally clad corrugated asbestos cement sheeting (see Table 3).

The service block surmounted by control cabin type endured as the international standard in ATC tower design for over 20 years, from the immediate aftermath of World War II to the early 1970s. Over this period it was refined and revised, but the essential composition of a square base tower (2-4 storeys) in reinforced concrete typically with a face brick cladding below a rectangular cantilevered walkway around an octagonal cabin remained largely unchanged.

Tower	Description	Photograph
Sydney ATC tower no.3 (1953) <i>Demolished</i>	In 1951 it was announced that Sydney (Mascot) as well as Brisbane (Eagle Farm) and Melbourne (Essendon) were to receive a new standard form of control tower.⁷² Sydney ATC tower no. 3, the first of the three identified towers to be completed, was commissioned on 2 November 1953. The Sydney no. 3 was constructed at the intersection of the runways and incorporated the airport fire station. The tower stood at approximately 16m in height and was clad in brick. The lower floors housed equipment rooms, an amenities area and offices, as well as a diesel generator on the ground floor which provided emergency power. Early innovations in the Sydney tower included the use of double-thick glass windows with an intervening layer of dry air to prevent the glass from misting and angling the windows at 21 degrees to eliminate reflections in the glass at night.⁷³	

Table 3 Australian control towers of the 1950s (excluding Hobart): the source for all images in the table below is the Civil Aviation Historical Society

Tower	Description	Photograph
Essendon ATC tower no.3 (1956) <i>Operational</i>	Essendon was the second of the three towers announced in 1951 to be built. Construction commenced in 1954 and the tower was commissioned in October 1956. As erected, the new tower comprised a square three-storey base building, clad in asbestos cement sheeting, surmounted by cabin in the form of an elongated octagonal. The cabin was raised on a duct and service drum positioned on top of the roof of the base building, which formed a walkway around the drum. In 1959, the first radar designed for civil aviation use in Australia was installed in the cabin. The radar display had a range of 30-40 nautical miles, and was located within a small dark room behind the console. Its use virtually doubled the number of aircraft arrivals at Essendon Airport.⁷⁴ Following the construction of airports at Tullamarine and Moorabbin by 1971 Essendon's future was uncertain. In 2001 the continued use of the site for aviation was assured when the site was purchased on a 99-year lease. Sections of the site have been developed for office and commercial use as part of a mixed-use precinct and the airport infrastructure has been upgraded.	

Tower	Description	Photograph
Adelaide ATC tower no. 2 (1957) <i>Demolished</i>	A new main airport in Adelaide (at West Beach) opened to regular services in 1955, replacing the earlier Parafield aerodrome. There was a rush to finish a temporary control tower prior to the opening of the airport⁷⁵, and this temporary control tower remained in use until the second control tower was constructed in 1957. The 1957 control tower was unusual in this group of air traffic control towers constructed in the c. 1950s as it was integrated into the terminal building. The Adelaide control tower remained in use until it was replaced by a new tower in 1982. A new passenger terminal was constructed in 2006 and the 1957 terminal and tower were demolished in 2008.⁷⁶	
Launceston ATC tower (1958) <i>Operational</i>	Air traffic control was established at Launceston in 1947, with the construction of a temporary tower south of the present terminal. The current tower, a steel-framed structure originally clad in asbestos cement sheeting, was designed in 1955 and constructed between 1956 and 1958. The Launceston control tower comprises an octagonal cabin on top of an asymmetrical steel-framed two-storey base building currently sheathed in corrugated Colorbond. This is the building's third cladding system, following the original corrugated asbestos cement sheeting and later ribbed steel. The control tower is extant although the base building has been significantly altered and extended, notably the addition to the large equipment room. The cabin, including the console, is largely intact in form and fabric.	

Tower	Description	Photograph
Darwin ATC tower (1959) <i>Demolished</i>	When civil operations moved into Darwin's military aerodrome in mid-1950, the DCA took over air traffic control responsibility and constructed a civil control tower within the frame and beneath the reservoir of a 1940 water tank. In late 1959, a new steel-framed four-storey control tower was constructed. The 1959 tower remained in civil use until 1965 when the RAAF resumed responsibility from DCA for air traffic control at Darwin. The control tower was demolished in c. 2000.⁷⁷	
Brisbane ATC tower (1959) <i>Demolished</i>	As noted above, in 1951 it was announced that Eagle Farm was to receive a new standard form of control tower. The new tower, with attached fire station, was commissioned in 1959. It comprised a square three-storey steel-framed base building, clad in asbestos cement sheeting joined under battens, and surmounted by an elongated octagonal cabin with outward canted windows. The cabin was raised on an elongated octagonal duct and service drum. The roof of the base building formed a walkway around the drum with a backward-canted balustrade.	

Tower	Description	Photograph
Tamworth ATC tower (1959) <i>Decommissioned</i>	In 1951 a decision was made to relocate the original 1940 RAAF aerodrome in Tamworth. Tamworth Regional Council commenced construction of a new airport in 1952; it was officially opened in 1956. ⁷⁸ The Tamworth control tower was commissioned on 1 October 1959. ⁷⁹ It is a three-storey brick base building surmounted by an octagonal tower and attached to a power house and a single-storey passenger terminal. The tower is extant, but has been decommissioned.	

Comment

Hobart ATC tower is one of a relatively small group of new towers constructed in Australia in the 1950s as part of a co-ordinated effort on the part of the Australian Government to upgrade air traffic control services nationally. Collectively, this group represents a major initiative to upgrade air traffic control facilities in Australia following the Chicago meeting of the ICAO in 1944, and the ICAO convention which came into effect in April 1947.

Of the eight towers known to have been constructed in this basic form during the 1950s, four survive and four have been demolished. The towers at Hobart, Essendon, and Launceston are managed by Airservices Australia and remain operational. Over their operational life, all three have been altered to some extent (both internally and externally) but all remain legible to the extent of their overall external form and design. Tamworth is likely to be substantially intact externally, but has been decommissioned. The Adelaide, Brisbane, Sydney and Darwin control towers have been demolished.

Hobart is one of three surviving, post-World War II ATC towers designed by the Commonwealth of Australia Department of Works (Victoria & Tasmania Branch) for the DCA still in operation.

4.2 Analysis of cultural heritage values

This section provides an analysis of the evidence presented above and in chapters 2 and 3 against the CHL criteria.

4.2.1 Analysis of historic value

The analysis of evidence of historic value is made against the following CHL criteria:

Criterion A: the place has significant heritage value because of the place's importance in the course, or pattern, of Australia's natural or cultural history

Criterion B: the place has significant heritage value because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history

Criterion H: the place has significant heritage value because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history

Hobart ATC tower is of historical significance for its association with a major program undertaken in the 1950s by the Australian Government in developing standardised air traffic control facilities across Australia. It is one of three surviving operational and one decommissioned ATC towers in Australia built during the 1950s to accommodate equipment and services based on guidelines developed by ICAO.

A perspective sketch dating to 1951 indicates that Hobart tower was designed concurrently with the earliest post-World War II towers, including Essendon (the oldest survivor), Brisbane and Sydney ATC tower no. 3 (both demolished), but that it was not constructed until 1956-58, and then in an amended form.

The early-mid 1950s was a formative period in the evolution of air traffic control facilities in Australia. Towers of this era are generally characterised by a degree of experimentation and invention. This generation of control towers formed the stylistic prototype for towers built throughout Australia and Papua New Guinea during the 1960s and early-1970s.

Hobart ATC tower is a rare surviving example of a standard ATC tower type surviving from the 1950s. As noted, of the eight towers constructed during this period only three remain in use, Essendon and Launceston being the other two.

The ATC tower is of local historic value as an original element of Hobart Airport, as planned and built from the early-1950s.

No special associations between the ATC tower and notable individuals or groups of individuals were revealed during research for this HMP.

4.2.2 Analysis of scientific value

The analysis of evidence of scientific value is made against the following Commonwealth Heritage criterion:

Criterion C: the place has significant heritage value because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history

Based on research undertaken for this HMP, no reason to believe that Hobart ATC tower has the potential to yield information that will contribute to an understanding of Australia's natural or cultural history came to light. There is no evidence to suggest that in-ground or otherwise concealed fabric/elements would provide significant new information that is not available from ATC towers of comparable age, and/or from documentary sources.

4.2.3 Analysis of aesthetic/architectural value

The analysis of evidence of aesthetic value is made against the relevant Commonwealth Heritage criteria specifically:

Criterion D: the place has significant heritage value because of the place's importance in demonstrating the principal characteristics of:

- › a class of Australia's natural or cultural places
- › a class of Australia's natural or cultural environments

Criterion E: the place has significant heritage value because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group

Criterion F: the place has significant heritage value because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period

Hobart ATC tower is a representative and substantially intact example of a standardised ATC tower dating from the first phase of post-World War II design in air traffic control facilities (1950s to late 1960s). The tower was designed by the Commonwealth of Australia Department of Works (Victoria & Tasmania Branch) for the DCA. Other examples are at Essendon, Launceston, Tamworth, and Adelaide. Later towers adopted a similar form as the typology evolved (see Rockhampton, Cairns, Mount Isa and the towers of the later 1960s).

Architecturally and aesthetically, the ATC tower is expressive of its design and construction during the post-World War II period, including a number of simple Modernist details, including the double-height timber casement window to the staircase and the large windows to the first floor, north elevation, which are pushed hard up under the eaves providing a detached and hovering character to the walkway and cabin above. The cubic massing of the two-storey base building is evocative of mid twentieth century European design.

As a consequence of its siting, the ATC tower is a prominent and highly visible feature of the airport landscape. It is also a freestanding building that demonstrates distinctive design characteristics. These qualities were exploited for promotional purposes during the Dark Mofo arts festival in June 2016. However, no evidence that the building has significant heritage value because it exhibits particular aesthetic characteristics valued by a community or cultural group came to light during research for this HMP.

With regard to Criterion F, although associated with a major upgrade in air traffic control practices in the post-World War II period, the design of the building itself is considered to be responsive to technical and other functional requirements but is not in any sense exceptional in terms of creative design or technical achievements. It is noted that some of the original equipment has been replaced, including the console.

4.2.4 Analysis of social value

The analysis of evidence of social value is made against the relevant Commonwealth Heritage criterion specifically:

Criterion G: the place has significant heritage value because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons

Criterion I: the place has significant heritage value because of the place's importance as part of Indigenous tradition

In relation to Criterion G, no special associations with a particular community or cultural group for social, cultural or spiritual reasons were revealed by the research undertaken for this HMP. While no detailed social value assessment was undertaken as part of this HMP it is possible that Hobart ATC tower is of value to current or former employees, or of interest to specialist aviation groups. However, even if they existed, it is considered that such associations or interest would be unlikely to satisfy the threshold for Commonwealth Heritage value.

Previously recorded Aboriginal heritage artefacts and artefact scatter locations within the airport grounds have been assessed as being of low significance, and there are no known sites of Aboriginal sensitivity near the ATC or on the ridge to the west of the terminal complex.⁸⁰ Further, no evidence has come to light that the control tower is significant because of its importance as part of Indigenous tradition.

4.3 Statement of significance

What is significant?

Hobart ATC tower was designed in 1954-55 by the Commonwealth of Australia Department of Works (Victoria & Tasmania branch) for the Department of Civil Aviation. It was built in 1956-57 and commissioned in 1958. It was constructed as part of the new Hobart Airport, and remains in use for its original purpose.

The ATC tower is located on a ridge to the west of the terminal complex at the airport, approximately 500 metres south-west of the runway and aprons, and two kilometres south-east of Cambridge Aerodrome. The tower is generally intact as built, externally and internally.

How is it significant?

Hobart ATC tower is of historical significance to Australia (CHL criteria A and B). It is also significant for demonstrating the principal characteristics of control towers of the early post-World War II period (CHL criterion D).

Why is it significant?

Hobart ATC tower is of historical significance for its association with an initiative to introduce standardised control towers at major airfields in Australia. The initiative was undertaken by the Department of Civil Aviation for the Australian Government, and was a response to the regulation of international civil aviation and air navigation safety by the International Civil Aviation Organisation. The tower is one of eight comparable towers introduced at airports across Australia during the 1950s. Of this group, it is one of only three towers that remain in operation, the others being Essendon and Launceston.

The 1950s was a formative period in the evolution of air traffic control facilities in Australia. Towers of this era are generally characterised by a degree of experimentation and invention. This generation of control towers formed the stylistic prototype for towers built throughout Australia and Papua New Guinea until the late-1960s.

The tower is also an intact remnant of the original planning and operation of Hobart Airport, which was planned and built from the early 1950s.

Hobart ATC tower is a representative and largely intact example of a standard ATC tower type surviving from the 1950s. The 12.5 metre-high building comprises an octagonal cabin on top of an asymmetrical two-storey red brick base building.

Architecturally and aesthetically, the ATC tower is expressive of its design and construction during the post-World War II period, including a number of simple Modernist details, notably the double-height timber casement window to the staircase and the large windows to the first floor, north elevation, which are pushed hard up under the eaves (walkway). The cubic massing of the two-storey base building is evocative of mid twentieth century European design.

The idiosyncratic siting of the Hobart tower on a ridge is unusual. As a consequence, the building is a prominent and highly visible feature of the airport landscape.

4.3.1 Commonwealth heritage values and attributes

The table below (Table 4) identifies Commonwealth Heritage values and related attributes at Hobart ATC tower.

Table 4 Commonwealth Heritage values and related attributes

Criteria	Values	Attributes
(A) History	Hobart ATC tower is one of the earliest operational control towers in Australia. It is contemporary with Launceston (also 1958) and was preceded by Essendon (1956). It relates directly to a formative period in the development of air safety controls following the significant technical advances and increase in air traffic precipitated by World War II. The tower is also an intact remnant of the original planning and operation of Hobart Airport.	The ATC tower, as upgraded and modified.
(B) Rarity	Hobart ATC tower is one of three surviving operational towers of the 1950s in Australia, and one of four in total	The ATC tower, 1958 extent and presentation.
(D) Characteristic values	Hobart ATC tower is a representative and largely intact example of a standard air traffic control tower of the early post-World War II period constructed throughout Australia to international standards.	The two-storey brick base building, to the extent of 1958 fabric. The building’s functional design and architectural character which are recognisably of the 1950s, including the double-height timber casement window to the staircase and the large windows to the first floor (north elevation) pushed hard up under the walkway. The octagonal cabin, with canted windows, raised on a partly chamfered and partly square duct and service drum.

5.0 OPPORTUNITIES AND CONSTRAINTS

The following establishes a framework for the conservation policy at Chapter 6.

5.1 Implications arising from significance

The statement of significance at Chapter 4 confirms that Hobart ATC tower is of historical significance to Australia for its strong association with a formative period in the evolution of civilian air safety and management following the ICAO convention which came into effect in April 1947 (CHL criterion A). It is one of the three earliest operational ATC towers in Australia, and one of only four surviving towers dating to the 1950s in Australia (CHL criterion B). It is also significant for demonstrating the principal characteristics of ATC towers of the early post-World War II period (CHL criterion D).

The implication arising from this assessment is that key aspects of the place should be conserved to retain this significance. Specific features and attributes requiring conservation include:

- The external presentation of the building, as a prominent, free-standing structure which is recognisable as an ATC tower primarily as a consequence of its octagonal cabin, with full-height canted glazing to all sides;
- The building's architectural character and design qualities, which are expressive of its design and construction during the 1950s;
- The functional, hardwearing internal finishes and presentation; and
- Unimpeded lines of sight from the cabin to the runway and taxiways.

5.2 Legislative requirements

5.2.1 *Airports Act 1996* (Australia)

The Department of Infrastructure, Transport and Regional Development (DITRD) owns 21 federally-leased airports in Australia, including HA. These airports are leased to airport lessee companies (ALCs) – HIAPL, in the case of Hobart. DIRDC takes on a regulatory role managing these airports through the *Airports Act 1996* and, with respect to the environment, the *Airports (Environment Protection) Regulations 1997*. The management of heritage places at federally-leased airports is subject to controls under both the *EPBC Act* and the *Airports Act*.

The *Airports Act* requires that a Master Plan be prepared for each airport that incorporates an Environment Strategy. The Master Plan is a 20-year strategic vision for the airport site which is renewed every five years, and addresses future land uses, types of permitted development and noise and environmental impacts. The Environment Strategy sets out the airport's strategy to manage environmental issues within a five-year period and beyond. It is the basis upon which the Commonwealth measures the environmental performance of airports and the document by which airport tenants will determine their environmental responsibilities.⁸¹ Further, DIRDC's draft Heritage Strategy (2016) places responsibility for management of heritage assets, including the preparation of management plans for Commonwealth Heritage places, with the ALCs. In the case of sub-lessees on a federally-leased airport (in this case Airservices), the ALC is obliged to work collaboratively in managing heritage values at the airport.

The *Hobart Airport Master Plan 2015* was prepared by HIAPL in accordance with the requirements of the *Airports Act 1996*. The Master Plan establishes HIAPL's objectives for the management and development of Hobart Airport during the period 2015-2035. The Master Plan includes the following regarding the ATC tower:

Air Traffic Control

Existing Situation

The airport's control tower is operated by Airservices Australia on land leased from HIAPL. The tower is 12.5m high and was constructed in 1953 [sic] on the peak of the hill to the west of the terminal [...] The elevated location and extra height of the control tower provide the tower with an excellent view of the whole airfield, the aprons and particularly the approaches to the runway. The air traffic controllers within the tower are responsible for directing all aircraft landings, take-offs, and all movements on the runway and taxiways at the airport, as well as activity at Cambridge Aerodrome. The two airfields are managed together as a runway system for aircraft operations. Cambridge Aerodrome has seen significant growth in recent years as a result of increased tourism operations and flight training.

Airservices Australia manages the air traffic in the Hobart region in a manner that maximises capacity and optimises the utility of the airport facilities during the tower's opening hours within the requirements of legislation including the Air Services Act 1995.

Future Development

It is anticipated that during the forecast planning period, the control tower instruments may need to be replaced with modern facilities. Airservices Australia has commissioned a site study under the national towers program which concluded that the current tower was situated in the best location. The study concluded that if a new tower were to be provided, it would be best situated adjacent to the existing tower in the same position or as-close-as-possible [...] on top of the hill. Alternatively, the current tower could be replaced or refurbished to allow for new technology and/or additional air traffic control management, training and extended equipment room accommodation within a secure compound. It is not envisaged that this will occur in the next five years [by 2020].

The development plans for the terminal, regular public transport (RPT) apron expansion, runway extensions and taxiway alterations have considered the sight lines of the tower in the positioning of the development. HIAPL recognises that further development, including that of the freight area and the Antarctic apron and facility, must consider lines of sight from the tower. Airservices Australia will be consulted during the design phase of the airport development.⁸²

A Heritage Management Plan has not been prepared for HA.

Management of heritage values

The management of development at airports is controlled by the *Airports Act*. Under Part 5 of the Act 'Land Use, Planning and Building Controls; a Major Development Plan is required for significant developments at airports, including where the development is likely to have a significant environmental or ecological impact. Where a development proposal may constitute a Controlled Action (an action that is likely to have a significant impact on a matter of national and/or Commonwealth environmental significance) the development should be referred to the Minister for the Environment under Section 68 of the EPBC Act (see below).⁸³

In addition, building and construction activities at leased federal airports must be approved by the Airport Building Controller (ABC). The ABC is appointed under Commonwealth law to administer the airport building control regime.⁸⁴

5.2.2 Environment Protection and Biodiversity Conservation Act 1999 (Australia)

The *EPBC Act* provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places—defined in the *EPBC Act* as matters of national environmental significance.⁸⁵ The Act imposes obligations on Commonwealth agencies to protect and maintain the environment, including the cultural heritage values, of assets that they own or lease.

Section 341ZA of the *EPBC Act* requires that Commonwealth agencies prepare a Heritage Strategy to provide for the management of any place which has, or might have, one or more Commonwealth Heritage values. Airservices' Heritage Management Strategy 2018-2020 identifies how Airservices will meet its heritage responsibilities under the EPBC Act. The objectives of this strategy primarily relate to:

- Ensuring continued integration of heritage management into Airservices corporate planning framework;
- Educating and training Airservices staff to be aware of their heritage obligations;
- Continuing the program of identifying and assessing likely Commonwealth heritage values of places owned or controlled by Airservices;
- Ensuring effective inter-governmental, aviation industry and community consultation, and conflict resolution processes exist in relation to heritage matters; and
- Maintaining a register of heritage places under Airservices ownership and control.⁸⁶

The Regulations to the *EPBC Act*, at Schedules 7A and 7B, identify matters to be addressed in a HMP for places included in the CHL.

The provisions of the EPBC Act provide protection of the Commonwealth Heritage values of all places which are either entirely within a Commonwealth area or are owned or leased by the Commonwealth or a Commonwealth Authority, including but not limited to places which are included in the CHL.

Should Airservices end its lease and cease to operate or function from Hobart ATC tower, or if HA is no longer Commonwealth owned or controlled, the above statutory framework would cease to apply, and the airport (including the ATC tower) would come under Tasmanian legislation, including the *Historic Cultural Heritage Act 1995* and the *Land Use Planning and Approvals Act 1993* (see Section 5.2.5).

Management of heritage values

Any place which is either entirely within a Commonwealth area or is owned or leased by the Commonwealth or a Commonwealth Authority is protected by the EPBC Act, regardless of whether it is included on the CHL. Generally, any action which will have a significant impact on the environment of a Commonwealth Heritage Place, including Commonwealth Heritage values, requires approval of the Minister for the Environment. If an agency is unsure that a proposed action will result in a significant impact it can refer the proposal to the Minister for a determination. The decision on whether to refer a proposal is a matter for the agency concerned, being a matter of judgement as to whether the action could have a significant impact on heritage values.

However, Section 9(1) of the EPBC Act states that this Act does not affect the operation of the *Airports Act 1996*. As such, if an action is likely to have a significant impact on the environment of a listed place, this action requires assessment and approval under the Airports Act and associated Regulations, rather than the EPBC Act. Where a development proposal may constitute a controlled action, this development may be referred to the Minister for the Environment under Section 68 of the *EPBC Act*.

5.2.3 *Air Services Act 1995* (Australia)

The *Air Services Act 1995* establishes Airservices, which provides air traffic control services, aeronautical information, radio navigation and telecommunications services and aviation rescue and fire-fighting services at federal airports. Section 8 subsection 1 (m) of the Act states that Airservices is responsible for carrying out activities to protect the environment from the effects of, and effects associated with, the operation of Commonwealth jurisdiction aircraft.

5.2.4 *Historic Cultural Heritage Act, 1997* (Tasmania)

The *Historic Cultural Heritage Act, 1997* is the Tasmanian Government's key piece of cultural heritage legislation, which provides a legislative framework for the protection and conservation of places and objects of heritage significance in the state. The Act also establishes the Tasmania Heritage Council (THC) and the THR.

Should the Commonwealth ownership of HA (including the Airservices compound) cease, the statutory requirements of the EPBC Act would no longer apply and Hobart ATC tower may be nominated for inclusion in the THR. The processes for listing (of places, buildings, works, relics, moveable objects or precincts) in the State Heritage Register are set down at Part 4 of the *Historic Cultural Heritage Act*.

Regardless of whether they are listed or not, the Heritage Act contains various legal measures to protect historical archaeological resources.

5.2.5 *Land Use Planning and Approvals Act, 1993* (Tasmania)

HA is the subject of a Heritage Overlay (HO) in the City of Clarence Planning Scheme, as identified in 'Heritage – Sheet 12 H' at Section 7.5 of the City of Clarence Planning Scheme, which is established under the *Land Use Planning and Approvals Act, 1993*. For places listed in the HO, Council approval is required for a range of works. These are set out at Section 7.5 'Heritage Overlay' of the Act.

5.2.6 *Aboriginal Heritage Act, 1975* (Tasmania)

As noted at Chapter 1, the TASI database, maintained by Aboriginal Heritage Tasmania, is a repository of information about all previously identified Aboriginal heritage sites in Tasmania. These sites are afforded statutory protection under the *Aboriginal Heritage Act, 1975* (Tasmania). Information about Aboriginal heritage artefacts and artefact scatter locations within HA is not publicly available. Advice provided by HIAPL is that: there are no Aboriginal heritage artefacts near the ATC tower or on the ridge (Tower Hill); and the Aboriginal artefacts at HA are considered to be of 'low' significance.⁸⁷

5.2.7 National Construction Code

The National Construction Code (NCC) provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings, and new work in existing buildings, throughout Australia. The NCC was developed to incorporate all on-site construction requirements into a single code. It covers the Building Code of Australia and Plumbing Code of Australia and is managed by the Australian Building Codes Board (ABCB).

The NCC provides a nationally accepted and uniform approach to technical requirements for the building industry. It contains provisions for the design and construction of buildings and other structures, covering such matters as structure, fire resistance, access and egress, environmental sustainability, services and equipment and aspects of health and amenity.

In cases of existing buildings undergoing alterations and/or additions, some discretion may be available with regard to upgrading the existing part of the building to meet the NCC.

5.2.8 *Disability Discrimination Act 1992* (Australia)

The *Disability Discrimination Act* (DDA) makes it illegal to discriminate against a person on the basis of their disability. It is not specifically about buildings, but it has an effect on buildings in which the design and construction prevents access by people with a disability, as the owners of those buildings are deemed to be discriminating against people on the basis of a disability.

The DDA is philosophical in approach and:

- Is complaints based;
- Has no construction standards;
- Applies to actions of discrimination wherever they occur; and
- Can apply retrospectively to both new and existing buildings, wherever the discrimination occurs.

On 1 May 2011, the Disability (access to Premises – Buildings) Standards (Premises Standards) took effect under the Disability Discrimination Act. Commonwealth agencies are bound to meet the objectives of the Disability Discrimination Act as far as possible.

5.3 Lease agreement

On 6 July 1995, Airservices entered into a 39-year (less five days) lease arrangement with the Federal Airports Corporation (FAC) for Hobart ATC tower (Volume 112358, Folio 1). Following the winding up of the FAC, the lease transferred to HIAPL. Under the terms of the lease, should wider airport planning and development objectives require Airservices to vacate the control tower, negotiations will be entered into to relocate Airservices to an alternative suitable substitute location at the airport site.⁸⁸

Airservices' obligations under the terms of this lease are that the ATC tower must not be used for any purpose other than the permitted use (i.e. for any purpose that is consistent with the functions of Airservices as prescribed by legislation). Should the lease expire or be terminated, Airservices is obliged to remove all or part of any 'Works' (defined as, 'the buildings including portable and relocatable buildings, improvements, fixtures and fittings and facilities together with all earth works, laying of foundations, site preparation and site sub-charging, reticulation, paving, landscaping and services' at the site).⁸⁹ It is understood that this would not require the removal of the ATC tower at the end/termination of the lease.

5.4 Stakeholders

Broadly speaking, stakeholders – people or organisations with an interest in Hobart ATC tower – fall into three categories: authorities and entities responsible for ensuring the appropriate management of the asset; individuals/organisations with a particular interest in the tower; and individuals/cultural groups with an interest in the tower's setting.

Stakeholders with an interest in and/or concern for the ATC tower include:

- Department of Agriculture, Water and the Environment (Commonwealth)
- Department of Infrastructure, Transport and Regional Development (Commonwealth)
- Hobart International Airport Pty Ltd
- The City of Clarence
- Cambridge Aerodrome
- Aviation operators
- The local Indigenous community (setting only)

5.4.1 Department of Agriculture, Water and the Environment

The Department of Agriculture, Water and the Environment (DAWE) is concerned with the protection and conservation of the identified Commonwealth Heritage values of the Hobart ATC tower. In the event that the tower is decommissioned, management of the asset and conservation of its identified Commonwealth Heritage values would be matters of interest to DEE.

5.4.2 Department of Infrastructure, Transport and Regional Development

Department of Infrastructure, Transport and Regional Development (DITRD) owns 21 federally leased airports in Australia, including Hobart. These airports are leased to long-term ALCs (HIAPL in the case of Hobart). DIRDC takes on a regulatory role managing these airports through the *Airports Act 1996* and, with respect to the environment, the *Airports (Environment Protection) Regulations 1997*.

5.4.3 Hobart International Airport Pty Ltd

HIAPL is the ALC for Hobart Airport. HIAPL's strategic direction, set out in the Hobart Airport Master Plan, is to consolidate the airport's status as a gateway to and economic hub for Tasmania. Core objectives for HIAPL include: the delivery of a 500m-long runway extension, to enable direct passenger and freight flights to/from South-East Asia; and the expansion of the passenger terminal. HIAPL will consult Airservices on the development of capital works projects with the potential to impact on sight lines from the ATC tower to the apron and runway.

As noted at Section 9 of the Master Plan (see also Section 5.2.1 of this HMP), significant change to the ATC tower in the period to 2020 is not anticipated. It is, however, possible that additional space for equipment will be required, to accommodate services upgrades.

5.4.4 Cambridge Aerodrome

Cambridge Aerodrome relies on the air traffic control services provided by Airservices at HA. Any proposal to change the services would be matters of interest to the managers of Cambridge Aerodrome.

5.4.5 The City of Clarence

HA is a place of longstanding interest to Clarence City Council.⁹⁰ While the airport is not subject to Tasmanian planning or heritage controls, it can be anticipated that the Council may have an interest in proposals relating to the ATC tower.

5.4.6 Aviation operators

There are a number of aviation operators who use HA and Cambridge Aerodrome that rely on the ATC tower services. These operators include:

- Emergency services
- Helicopter charter
- Aircraft charter/private jet
- Regional passenger transport
- Flying schools; and
- Light freight operators

Air traffic services at HA are required to allow for the use of the airport by the above aviation operators, however it is unlikely that the manner of the provision of this service (i.e. the continued use, or decommissioning of, the current tower) is a concern to these operators.

5.4.7 Indigenous community

There is limited potential for the ATC tower to be of significance to Indigenous people. However, as an elevated vantage point within a setting that would have been a favourable location for Aboriginal habitation prior to European arrival, there is some potential for Tower Hill itself to be valued by the Indigenous community. As such, significant change within the area leased by Airservices may be a matter of interest to the Indigenous community. The Tasmanian Aboriginal community, which works with the Aboriginal Heritage Section of the Parks and Wildlife Service to manage sacred sites across Tasmania, can provide details of the relevant Indigenous representative(s).

5.5 Presentation, operation and condition

Presentation

Hobart ATC tower is substantially intact as built and presents very much as commissioned in 1958. The notable exception to this observation is the 2006 entry portico, to the south elevation, which is aesthetically unsympathetic to the 1950s tower. The entry portico is concealed in views of the tower from the public realm – i.e. views from the terminal and apron.

Operation

With the exception of the equipment room, which is small, congested and has limited potential to accommodate further upgrades, there are no known impediments to the on-going operation of the tower for air traffic control services.

Air traffic controllers at Hobart have noted that the thick mullions and steel window framing restrict visibility (Figure 55).⁹¹ The frames and mullions are original; they were installed in 1957. As such, it is understood that the suboptimal nature of the steel framing and mullions is in the nature of an irritation, as opposed to an actual handicap.

Condition

- The ATC tower is generally in sound condition, and there are no known impediments to the on-going use of the facility, or its adaptation as a consequence of structural integrity. A hazardous building materials survey was carried out in July 2013 by JTA Health, Safety & Noise Specialists.⁹² The building includes asbestos-containing materials and lead paint. The asbestos-containing materials are: bituminous membrane, cable sheaths, gaskets, vinyl floor tiles and electrical backing boards. These materials were assessed in 2013 as being in good and stable condition, and in their present undisturbed form they do not pose a measurable risk to the health of building users. A Hazardous Material Register is mounted to the wall in the vestibule. It is, however, noted that JTA's 2013 recommendation that all asbestos containing materials in the building are labelled in accordance with the *Code of Practice – How to Manage and Control Asbestos in the Workplace 2011* has not been implemented. There are labels in the building (Figure 56), but the approach is not comprehensive.
- Lead paint was identified (in 2013) on some painted surfaces, and in acid batteries. Again, the paint was assessed as being in 'reasonable' condition, and does not present an exposure risk to building occupants in its present undisturbed state.
- The JTA document includes recommendations for the management of risks associated with the asbestos-containing materials and lead paint.



Figure 55 Hobart ATC tower cabin: note the thick mullions and frames



Figure 56 Door to the crawl space under the cabin: note asbestos 'warning' sign

6.0 CONSERVATION POLICY AND MANAGEMENT GUIDELINES

This conservation policy is based on the assessment of cultural significance at Chapter 4 and informed by the opportunities and constraints identified at Chapter 5. The policy provides direction and guidance on the conservation and management of Hobart ATC tower consistent with its on-going operation as a control tower. It also considers heritage management implications in the event that the tower is decommissioned or replaced.

6.1 Definitions

The terminology used in this chapter is of a specific nature. The following definitions are from the *Burra Charter, 2013* (Article 1), as endorsed by a large number of statutory and national heritage bodies.

Place means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

- › Cultural significance is embodied in the *place* itself, its *fabric, setting, use, associations, meanings, records, related places* and *related objects*.
- › Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the *place* including elements, fixtures, contents and objects.

Conservation means all the processes of looking after a *place* so as to retain its *cultural significance*.

Maintenance means the continuous protective care of a *place*, and its *setting*.

Maintenance is to be distinguished from repair which involves *restoration* or *reconstruction*.

Preservation means maintaining a *place* in its existing state and retarding deterioration.

Restoration means returning a *place* to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.

Reconstruction means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material.

Adaptation means modifying a *place* to suit the existing *use* or a proposed use.

Use means the functions of a *place*, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.

Compatible use means a *use* which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

Setting means the immediate and extended environment of a *place* that is part of or contributes to its cultural significance and distinctive character.

Related place means a *place* that contributes to the *cultural significance* of another place.

Related object means an object that contributes to the *cultural significance* of a *place* but is not at the place.

Associations mean the special connections that exist between people and a *place*.

Meanings denote what a *place* signifies, indicates, evokes or expresses to people.

Interpretation means all the ways of presenting the *cultural significance* of a *place*.

6.2 General policies

Policy 1 Significance as the basis for future conservation and management

The statement of significance included in this HMP should be the principal basis for the future management and conservation of Hobart ATC tower.

Specific conservation objectives should include:

- Managing in accordance with the significance attributed in this HMP (Chapter 4). In general terms, the implications of the identification of significance are as follows:
 - › Significant elements and attributes should be retained and conserved according to the principles of the Burra Charter (2013). Significant elements and attributes are listed at Policy 9, below.
 - › Elements and attributes that are not identified as significant can be retained, re-used or replaced by new construction or works in a way which has a minimum or no adverse effect on significant buildings and elements.
- The retention and conservation of significant elements and attributes in accordance with the policies and recommendations in this HMP.
- A sensitive and respectful approach to adaptation, new works and future development where significant fabric and elements may be affected.

If alterations or changes are proposed which support an appropriate and viable use for the control tower, the works should be undertaken in a manner which has minimal impact on significant fabric. A summary of significant fabric/elements, and the implications of these assessments, is included in the Hobart ATC tower 'User Guide' (Appendix C). This brief document was prepared by Airservices to provide guidance to contractors and staff about obligations relating to heritage at the site. The User Guide has been updated for consistency with the findings of this HMP.

Policy 2 Adoption of the Burra Charter

The conservation and management of the subject site should be carried out in accordance with the principles of the Burra Charter (2013).

When assessing the suitability of proposed works to significant elements and attributes at the Hobart ATC tower, the principles of the Burra Charter and its practice notes should be referenced. These principles provide guidance on the conservation and adaptation of places and elements identified as being of cultural heritage significance.

Policy 3 Adoption of policies

The policies included in this HMP should be endorsed and adopted by the present and future owners, or managers, of the Hobart ATC tower, and should form the primary guide for its management.

This HMP should inform future development of Hobart ATC tower. The present and future owners of the tower should adopt and implement the policies of the HMP as the key guiding reference in terms of managing change and future development within the site.

Implementation strategies

- › Airservices will adopt the policies and implementation timeframes set out in this HMP. The Executive General Manager Air Navigation Services (EGM ANS), who has ultimate accountability for ANS property management and is responsible for the implementation of the Heritage Strategy in relation to land and property management, will ensure that personnel are briefed on the implications of this HMP.

Policy 4 Specialist advice and skills

Advice from qualified heritage practitioners should be sought before any action is proposed or undertaken that could have an impact on the Commonwealth Heritage values of Hobart ATC tower.

Where works to significant elements or attributes are proposed, or where technical advice is needed, it is important to select consultants and contractors with proven experience in the relevant field. This applies to the development of strategic approaches to undertaking works, as well as to the delivery of conservation works.

Implementation strategies

- › Airservices will identify consultants/personnel with experience in the management of mid-twentieth century heritage assets, and in the delivery of works to them.

Policy 5 Compliance with legislation

Airservices should develop and implement protocols for compliance with all legislation, including the EPBC Act and the Airports Act.

The development of protocols to ensure compliance with all applicable legislation should include triggers to ensure compliance with the *EPBC Act*, being the key piece of legislation that applies directly to management of heritage values. A department/committee within Airservices should be tasked with preparing an information sheet identifying processes to be followed when contemplating works at the control tower, and disseminating the outcomes to key personnel and relevant contractors.

In the event that actions with the potential to have a significant impact on the Commonwealth Heritage values of Hobart ATC tower are contemplated, Airservices should consult with the Minister for the Environment. This consultation is not a formal requirement of the *EPBC Act*, but is recommended in recognition of the fact that the *Airports Act* supersedes the *EPBC Act* in a range of matters, including issues that affect the operation of the place.

Implementation strategies

- › Airservices will manage Hobart ATC tower consistently with the requirements of the EPBC Act. Compliance with the policies in this HMP will assist in achieving this objective.

Policy 6 Stakeholder liaison

Airservices should consult with all stakeholders identified at Chapter 5 (Section 5.4) and other parties/individuals as relevant, on matters affecting the heritage values of Hobart ATC tower.

Key stakeholders – being individuals and organisations with a particular interest in the ATC tower – should be advised of any proposals with the potential to impact on the identified values of the place and provided with opportunities to comment.

While there are no identified artefact scatters on Tower Hill, or in proximity to the ATC tower, there exists some potential for tower hill to be a place of interest to the Indigenous community. As such, it would be appropriate for the local Indigenous community to be consulted as a stakeholder in the event that significant change is proposed at the subject site. This recommendation complies with EPBC Act Regulations, 2000, Schedule 7a (h) (iv) – see also Policy 6, Chapter 6.

Policy 7 Managing sensitive information

Airservices should develop and implement protocols to protect sensitive information and equipment relating to the operation of Hobart ATC tower.

Hobart ATC tower is an important component of Tasmania's air safety infrastructure. It includes sensitive information and equipment. Protocols to ensure that this information and equipment is not compromised or accessed by unauthorised parties should be developed and implemented by Airservices. This policy complies with EPBC Act Regulations, 2000, Schedule 7a (h) (v).

Policy 8 Review of the HMP

Consistent with best practice, and the requirements of the EPBC Act, this HMP should be reviewed and updated every five years (by 2026).

Relevant considerations in undertaking a review of this HMP are to incorporate any new information that comes to light, particularly where there is the potential for the new information to result in a reassessment of values. Major physical change to the place would be a trigger for a review of this HMP. Other triggers include instances where: major change occurs as a result of an accident or misadventure (i.e. vandalism or fire); or the HMP is found to be out of date with regard to significance.

Implementation strategies

- Consistent with Airservices' Heritage Strategy (2018-20), the agency will undertake a review of this HMP within five years (2023), or if it is found that:
 - › the document does not cater for proposed unforeseen actions;
 - › additional Commonwealth heritage values are identified;
 - › degradation of the place's environment (for example, through accident or natural disaster) has occurred; and/or
 - › management policies/responsibilities do not adequately cater for changed operational or management regimes

6.3 Conservation policies

Policy 9 Conservation of significant attributes and elements

Significant attributes and elements at Hobart ATC tower should be conserved.

Significant attributes and elements are:

- The external form and presentation of the two-storey control tower base as built in 1956/57.
Note: The entry enclosure of 2006 is not significant
- The large windows to the first floor, north elevation, a well-resolved detail that is expressive of its design and construction during the post-World War II period, and the double-height timber casement window to the staircase
- The cubic massing of the two-storey brick base building
- The form and presentation of the control tower cabin, as built in 1956/57
- Original internal finishes, which are generally of utilitarian character
- Unimpeded views from the cabin to the apron and runways

Implementation of this policy will require recognition of and respect for the attributes and elements identified above on the part building occupant and managers, and the adherence to Policy 4, which recommends engaging the services of professional heritage consultants in planning and designing outcomes that are compatible with the ATC tower's heritage values. Consistent with the Burra Charter, appropriate heritage outcomes may include: maintenance, preservation, restoration and adaptation.

Policy 10 Heritage curtilage

The heritage curtilage for Hobart ATC tower should be defined as the Airservices Australia lease at Hobart Airport.

The 'heritage curtilage' for a building, complex or site has been defined as, 'the area of land (including land covered by water) surrounding an item or area of heritage significance which is essential for retaining and interpreting its heritage significance'.⁹³ A heritage curtilage should include all significant elements and establish an area which is managed to ensure the maintenance of heritage significance. Identification of land to be included within a heritage curtilage does not preclude change within this area. Land within a heritage curtilage does, however, need to be managed so as not to adversely impact on setting, presentation or significance of a heritage place.

Hobart ATC tower is a freestanding building that has a distinct and singular character in the airport context, primarily as a result of its octagonal cabin. The Airservices lease at Hobart affords views to and from the tower to all sides. There is no heritage imperative to consider a heritage curtilage that extends beyond the boundaries of area leased by Airservices Australia.

Policy 11 Remedial works and cyclical maintenance of significant built fabric

Programs of priority maintenance, remedial works and cyclical maintenance should form the basis for on-going care of the significant built fabric at Hobart ATC tower.

The fabric of historic buildings and fabric will deteriorate over time due to the effects of age, weather and use. Poor maintenance can hasten the decline and decay of fabric, which can be expensive to rectify if not promptly addressed. It may also result in the loss of significant heritage fabric which can in turn impact on the heritage values of the place.

The establishment of a cyclical maintenance program will help to retard deterioration and, following any refurbishment works, to prevent future deterioration of restored original or introduced new material. Broadly, the approach to maintenance should firstly be to maintain and ensure that the significant original and early fabric does not deteriorate further and secondly to maintain all existing fabric. *Ad hoc* repairs or patch ups should be avoided.

Regular inspections of the building's fabric should occur, with an emphasis on susceptible areas such as guttering and downpipes, door and window openings. Generally, day-to-day maintenance work can be carried out in accordance with the conservation policies and without reference to a conservation specialist. However, major maintenance works should be undertaken under the direction of an appropriately qualified conservation practitioner.

The primary aim of repair work should be to retain as much of the historic material as possible. In most cases involving repairs to significant fabric, the advice of a heritage practitioner will be required prior to undertaking the works, to ensure the significant fabric is treated appropriately.

Maintenance

Maintenance addresses all existing components of the place, including fabric and setting. Introducing new elements (such as new structures) or changing and adapting the existing building are not matters of maintenance, and are addressed in policies and recommendations included elsewhere in this HMP.

Typical maintenance works at Hobart ATC tower include:

- Cleaning out drainage systems and other water storage and drainage areas
- Maintaining and securing external wall fabric, battens, glazing and joinery in an appropriate and sympathetic manner (may require specialist input)
- Maintaining equipment and services (i.e. building services, not services related to the operation of the building as a control tower)
- Replacing or upgrading services (may require specialist input for substantial works)
- Maintaining existing power or pipelines or other services where this involves no alteration to the fabric of the place

With regard to the recommended cyclical inspection and maintenance programme, the following sets out a desirable annual program for cyclical maintenance at Hobart ATC tower:

- Finishes to the cabin roof and external walkway, external wall panels, downpipes, drains and surface drainage, security and fire precautions, plumbing, electrical and data cables and appliances, windows and doors and general safety. Ceilings, floors, stairs, joinery, fixtures and fittings, tiling and building services.

Repairs

From a heritage perspective it is generally recommended that repairs of significant buildings and structures should involve replacing 'like with like,' i.e. the replacement of material (missing, deteriorated or broken) with fabric to match the existing. Accepting this principle, it is also important to determine if the material proposed for replacement is appropriate (it may not be original). The advice of a qualified heritage practitioner should be sought on this. Wherever possible, only actual decayed fabric of a heritage structure should be replaced, instead of the whole host element.

Repairs to significant structures should also, in preference, be carried out by appropriately skilled staff or contractors, and may require in some cases prior analysis of the composition of the fabric to be repaired/replaced.

Specialist input may also be required for the identification and eradication of any damage caused by pest infestations. Rectification may involve repair to, or replacement of, damaged fabric.

Policy 12 Hazardous materials

Removal of hazardous materials from Hobart ATC tower should seek to minimise physical impacts on significant values and attributes.

Hobart ATC tower includes some hazardous materials (asbestos and lead paint), as confirmed in a report prepared by JTS Health, Safety & Noise Specialists (July 2013). Asbestos-containing materials are: bituminous membrane, cable sheaths, gaskets, vinyl floor tiles and electrical backing boards. Lead paint was identified on some painted surfaces, and in acid batteries. These hazardous materials were assessed in 2013 as generally being in a reasonable and stable condition. That is to say, unless they are disturbed, they do not pose a risk to the health of building users.

The JTA document includes recommendations for the management of risks associated with the asbestos-containing materials and lead paint, including protocols for their safe removal. These recommendations should be observed.

Where hazardous materials are removed, the key consideration from a heritage perspective will be to conduct their removal with minimal physical impacts on the presentation and character of the tower.

6.4 Use, adaptation and change

Policy 13 Use

Future uses of Hobart ATC tower should be compatible with the assessed values of the place so that its cultural significance is maintained and conserved.

At the time of writing, replacement of the ATC tower was not anticipated. The risk of redundancy related to the provision of remote ATC services was likewise a distant possibility – remote ATC has been trialled in recent years by Airservices, including the management of air space at Alice Springs by controllers based in Adelaide. That said, ATC towers are prone to obsolescence, and the potential for replacement and/or redundancy cannot be discounted.

Hobart ATC tower is a building that can reasonably be considered for adaptive re-use without significant adverse impact on its identified heritage values. As noted, the building is significant primarily for its historical values, as a largely intact ATC tower from a formative period in the development of systems for the management of civilian airspace. Its continuity of use is also of interest, as its status as an original component of HA as planned from the early 1950s.

The building is located airside, with access by a dedicated track/road and generous provision for parking. Its co-location with Llanherne House also provides possibilities. Co-ordinated management of the two assets as a 'heritage precinct' might reasonably be contemplated. Further, the equipment at the tower has not been assessed as being of significance in its own right (see Policy 15), potentially allowing for the adaptation of internal spaces for new uses. Constraints on re-use and adaptation include the small dimensions of the building, and the limited potential for the construction of additions.

The key issue in considering future uses of the tower (and complex) is to avoid or minimise the potential for impacts on the tower's Commonwealth Heritage values. The advice of heritage professionals should be sought in identifying and analysing options.

Policy 14 Additions to accommodate new equipment

Expanded accommodation for equipment at ground level should avoid impacts on the ATC tower's plan form and should not distort an understanding of the building as a freestanding structure.

Future change is anticipated to be required, to accommodate technical upgrades. This is likely to require expanded accommodation for equipment at the ground level. The present equipment room, as noted, is small and congested. Its inability to accommodate significant new services/equipment – as would be required, for instance, if a digital console were to be introduced – is evident in the provision of a metal locker at the base of the west elevation.

The preferred approach for an expanded equipment room would be for a remote structure, possibly located to the south-west of the ATC tower, to minimise its visibility in views from the east, and to avoid distorting an understanding of the ATC tower as a freestanding structure.

Policy 15 Changes to significant elements and attributes

Physical alterations to significant fabric and attributes should be limited to works that do not diminish the cultural heritage values of Hobart ATC tower.

In the event of disposal by Airservices Australia it can be anticipated that physical change will be required to support a new use, including internal reconfiguration and the introduction of a lift. A key to maintaining the building's cultural heritage significance will be to minimise impacts on its external presentation.

Where works are required the over-riding objectives are firstly to retain and conserve significant fabric and attributes, and secondly to plan and undertake works in a manner that is sensitive to the valued form and presentation of significant fabric. All alternative approaches should be investigated before removal of significant elements, and new works should be clearly identifiable as such.

The commentary at Table 5 provides guidance on approaches to future change.

Building/element	Principles to guide future change
ATC tower base, exterior	◦ The external building envelope should be retained, to maintain the original form, scale and presentation of the control tower ◦ There is some limited potential for the introduction of a low-scale addition to the south of the ATC tower, in the location of the 2006 entrance enclosure ◦ If a lift is required, the preferred location is to the west side of the south elevation, isolated from views of the building from the east. In constructing the lift, all options to avoid impacts on the cantilevered walkway should be explored. ◦ The south elevation should be retained as the primary entry to the building, to provide an understanding of the original planning ◦ New works/additions should adopt a utilitarian character, with limited decorative detail or embellishment, consistent with the original building ◦ New window openings should be small, and avoid sun shades
ATC tower base, interior	◦ The existing floor levels, including the crawl space under the cabin, should be maintained ◦ Evidence of the original planning and original fittings/finishes (where they survive) should, in preference be retained
Control tower cabin, exterior	◦ The cabin is intact as built and is a key identifier of the building as a control tower. There is no potential for significant change to the cabin externally ◦ Maintain the transparency of the cabin as viewed from ground level
Control tower cabin, interior	◦ Maintain the cabin interior as a single volume ◦ Remove non-original finishes and accretions

Table 5 Strategies for change to significant elements and attributes

Policy 16 Equipment

In the event that the ATC tower is disposed of, original and early equipment/fittings should be catalogued and stored appropriately.

Equipment, plant and services at ATC towers are standardised. The equipment and plant at the Hobart tower has not been assessed as significant in its own right. However, some of the equipment and fittings are original, and have the potential to support an understanding of the building's use and operation.

In the event of disposal or termination of the lease, Airservices Australia's obligations include removing fixtures and fittings. Prior to this obligation being implemented, an audit of equipment and fittings should be prepared. The audit should include recommendations for salvage, and identify options for appropriate management – for instance, integration into site interpretation.

Policy 17 Recording

Airservices Australia, and subsequent owners, should maintain a record of significant interventions to Hobart ATC tower.

Records of works/interventions to the tower should be maintained by Airservices Australia. The record (or file) should include copies of all superseded architectural drawings, and photography of the affected areas before and after the works.

This policy complies with EPBC Act Regulations, 2000, Schedule 7a (h) (x).

6.5 Management policies**Policy 18 Statutory controls**

Hobart ATC tower should continue to be recognised as a place of cultural heritage significance to Australia through its inclusion in the Commonwealth Heritage list.

Hobart ATC tower has been assessed as a place of historical and aesthetic significance to Australia. As such, it should continue to be managed in compliance with the heritage obligations under the Airports Act 1996 and the provisions of the EPBC Act 1999. It is recommended that the CHL entry for the control tower should be updated to reference this HMP, and to include the Statement of Significance in this HMP.

In the event that the asset is divested Airservices Australia will ensure that the Commonwealth Heritage values of the asset are protected. As per Section 341ZE of the EPBC Act, in the event that the tower is sold or leased, Airservices will advise the Minister at least 40 business days prior to the execution of the contract, and follow all appropriate measures to ensure the Commonwealth Heritage values of the tower are protected. Assuming that Hobart Airport remains Commonwealth-owned land, the ATC tower would remain in the CH list.

Anyone is able to nominate a place for listing in the Tasmanian Heritage Register, which is established under the Historic Cultural Heritage Act 1995 (Tasmania). The process, as set out on the Tasmanian Government Office of Primary Industries, Parks, Water and Environment website (<https://heritage.tas.gov.au/heritage-listed-places/adding-new-entries>), would require the site to meet at least one of the following criteria set out below.

For a place to be entered in the Register, it must meet at least one of the following criteria set out in the Historic Cultural Heritage Act 1995:

- (a) the place is important to the course or pattern of Tasmania's history
- (b) the place possesses uncommon or rare aspects of Tasmania's history
- (c) the place has the potential to yield information that will contribute to an understanding of Tasmania's history
- (d) the place is important in demonstrating the principal characteristics of a class of place in Tasmania's history
- (e) the place is important in demonstrating a high degree of creative or technical achievement
- (f) the place has a strong or special association with a particular community or cultural group for social or spiritual reasons
- (g) the place has a special association with the life or works of a person, or group of persons, of importance in Tasmania's history
- (h) the place is important in exhibiting particular aesthetic characteristics.

It should be noted that Hobart ATC tower may not satisfy the threshold for inclusion in the Tasmanian Heritage Register.

Policy 19 Access and security

To maintain security, all visitors to the ATC tower should report to the Senior Area Controller.

While the tower remains operational, Airservices should maintain the current security arrangement, whereby visitors report to the Senior Area Controller via a telephone next to the ground level entry to request access.

This policy complies with EPBC Act Regulations, 2000, Schedule 7a (h) (ii).

Policy 20 Training and awareness

A training program should be instigated to raise awareness of the heritage significance of Hobart ATC tower among the staff of Airservices Australia and Hobart International Airport Pty Ltd.

The heritage significance of Hobart ATC tower is unlikely to be self-evident to casual observers, and those outside the heritage profession. It is recommended that a training program to promote awareness of the building's heritage values is developed and implemented by Airservices. Key audiences for the program are Airservices personnel, and staff of HIAPL

Policy 21 Interpretation and promotion of heritage values

Airservices, and subsequent owners of Hobart ATC tower, should promote and disseminate information about the cultural heritage values of the building.

Strategies for the promotion and dissemination of information about the cultural heritage values of the ATC tower should be prepared in the form of an interpretation plan. Recommendations for interpretation should be informed by but not limited to consideration of: best practice principles (including the Burra Charter 2013 practice note 'Interpretation'); the identified heritage values of the place; the anticipated audience for interpretation; and existing interpretive programs at HA.

Interpretation can be undertaken via a range of tools and methods. Information can be presented in a readable format (printed or electronic, including brochures, pamphlets, books and websites); through on-site signage; through the display of objects/artefacts; and through art works.

In the event that the ATC tower is adapted to a new use, especially a new use that provides public access to the building, the nature of the interpretive program is likely to change.

Policy 22 Archaeology

The discovery of historical archaeological artefacts and objects, which can contribute to an understanding of the history, technology and operation of the site, should be reported to the Department of Agriculture, Water and the Environment.

The potential for subsurface artefacts relating to the existing use of the Airservices reserve and earlier occupation of Tower Hill to be uncovered cannot be discounted. In the event of archaeological remains being uncovered at the site, the DEE should be informed of the discovery before proceeding with further work. This is also consistent with regulation 4.05 ‘Duty to give notice of cultural etc discovery’ in the *Airports (Environment Protection) Regulations 1997*.

Policy 23 Risk preparedness

A Risk Management Strategy should be integrated into the broader management and administration of Hobart ATC tower.

Risk preparedness and management is an important means of protecting and conserving the heritage values of heritage places. While a detailed assessment of risk is beyond the scope of this report, the following table describes potential threats and hazards posed to the physical fabric at the subject site by environmental and man-made factors.

Table 6 Analysis of risk to
Hobart ATC tower

Threat	Probability	Preparation/ Response
Vandalism and theft	Moderate	Hobart ATC tower is located airside and is readily accessible. Vandalism and theft are always possible. As such, security protocols should be maintained. Installation of security cameras could be considered in discrete locations. These should be fixed to cause the minimum possible impact on the presentation of the tower.
Fire	Always present	Establish a fire suppression and warning system as part of any adaptive re-use, and upgrade as required. Ensure there is an evacuation plan in place, and conduct regular training and rehearsals. Ensure that combustible materials do not come into contact with hot lights. Ensure that extinguishers, fire blankets etc, are located within reach of potential sources of fire. Maintain electrical systems in good order. Maintain liaison with fire brigade to regularly test and monitor systems.
Flood	Possible	Localised internal flooding, from toilets, sinks and pipe work, is always possible. Maintenance of wet areas and pipe work is a means of minimising this possibility.
Water ingress	Moderate	Rainwater goods (gutters, downpipes and sumps) should be repaired (where required), maintained, installed and kept clear. Inspect and maintain roofs, windows and doors regularly.

6.6 Implementation plan

A plan for the implementation of the policies set out at Section 6.2 'General policies', 6.3 'Conservation policies', 6.4 'Use, adaptation and change' and 6.5 'Management policies' is included at Table 7. This complies with EPBC Act Regulations, 2000, Schedule 7a (i).

Hobart ATC tower is an operational asset, and as such is managed and maintained in accordance with Airservices' corporate Environmental Management System (EMS), which is certified (and independently audited) against ISO14001:2015. This includes compliance with a range of on-ground environmental standards, procedures, plans and guides, including heritage matters.

Hobart ATC tower 2 is operated and maintained as part of Airservices annual operational budget for Air Navigation Services (ANS) operations (Southern Region).

Policy	Responsibility	Timing	Funding
Policy 1: Ensure that the Statement of Significance included at Section 4.3 of this report is referred to prior to any proposed works or alterations, including conservation and management, being undertaken to the ATC tower.	Airservices project managers	On-going	N/A
Policy 2: Ensure that conservation, maintenance, preservation, restoration or adaptation works to the ATC tower, or within the area leased by Airservices, are consistent with the <i>Burra Charter</i> .	Airservices project managers	On-going	N/A
Policy 3: Ensure that the policies in this HMP are endorsed and form the primary guide for the management of the ATC tower.	Airservices project managers	On-going	N/A
Policy 4: Maintain access to specialist contractors and consultants	Airservices project managers	On-going	N/A
Policies 5, 18 and 22: Maintain protocols for compliance with legislation, including with regard to unexpected discoveries (archaeology)	Airservices project managers	On-going	N/A
Policy 6: Ensure that stakeholders identified at Section 5.4 of this report are provided with opportunities to comment on proposed changes to the ATC tower	Airservices project managers	On-going	Funds to be identified in project budgets
Policy 7: Protocols to protect sensitive data and equipment should be maintained.	Environment Team Leader	On-going	Airservices' annual operating budget

Table 7 Implementation plan

Policy	Responsibility	Timing	Funding
Policy 8: Ensure that a review of this HMP is undertaken by 2026	Environment Team Leader	By 2026	Funds to be allocated for HMP review in 2026
Policy 9: Ensure than elements and attributes intrinsic to the significance of the ATC tower, as listed at Section 6.3 of this report, are conserved	Airservices project managers	Within the life of this plan, 2021-2026	Airservices' annual operating budget
Policy 10: Ensure that works within the area leased by Airservices, do not impact detrimentally on the setting or presentation of the ATC tower.	Airservices project managers	On-going	N/A
Policy 11: Monitor and document the condition of the built fabric (annual maintenance regime). Undertake maintenance works as required.	Airservices project managers	On-going	Airservices' annual operating budget
Policy 12: Observe recommendations for management of asbestos-containing and lead paint.	Airservices project managers	Within the life of this plan, 2021-2026. See also JTS Health, Safety & Noise Specialists report, July 2013.	Airservices Work Health and Safety budget.
Policies 13 and 15: In the event of disposal by Airservices, ensure that changes associated with adaptation to a new use are compatible with the building's assessed significance and CHL values.	Future owner/operator	N/A	N/A
Policy 14: If additions are required accommodate new equipment, the preferred approach would be for a remote structure, to avoid distorting an understanding of the ATC tower as a freestanding structure.	Airservices project managers	N/A	N/A
Policy 16: In the event of disposal by Airservices, ensure that original/early equipment and fittings are catalogued and stored.	Future owner/operator	N/A	N/A
Policy 17: Maintain a record of significant interventions to the ATC tower.	Airservices project managers	On-going	N/A

Policy	Responsibility	Timing	Funding
Policy 19: Ensure that access and security protocols are maintained while the tower is operational.	Airservices staff	On-going	N/A
Policy 20 : Instigate heritage awareness training program, to promote an understanding of the tower's significance.	Environment Team Leader	Within the life of this plan (2021-2026)	Heritage matters are covered under site inductions for Hobart ATC tower and through mandatory online environmental training for all staff and contractors (with regular refreshers).
Policy 21: Develop and implement an interpretation plan for the ATC tower	Environment Team Leader	Within the life of this plan (2021-2026)	As required
Policy 23: Ensure that risks associated with vandalism, theft, fire and flood are managed in line with the recommendations set out in this report.	Airservices project managers	Ongoing	These risks are evaluated, managed and mitigated to a level of ALARP (as low as reasonably practical) through Airservices corporate risk management system (CIRRS)

6.6.1 Monitoring of implementation

The implementation of the management plan, and its effectiveness in conserving the ATC tower's CHL values will be managed by the ANS Senior Environmental Specialist and assessed by the relevant ANS Technical Services Officer (using the ANS Annual Site Condition Checklist – Form081, v19, 1 February 2017).

BIBLIOGRAPHY

PRIMARY SOURCES

Archival sources

Convention on International Civil Aviation done at Chicago on the 7th day of December 1944, refer article 28.

Llanherne Tasmania - Compulsory Acquisition 28 April 1949 - Proposed Site for Hobart Airport, National Archives of Australia, A6074, PO10813

Report dated 16 September 1955, courtesy of the Civil Aviation Historical Society.

Report dated 24 January 1956, courtesy of the Civil Aviation Historical Society.

Report on Civil Aviation in Australia and Papua-New Guinea, 1948-1949.

Roger Meyer, Historical Information Relating to the Control Tower at Essendon Airport, 30 May 2016

Newspapers

Argus

Canberra Times

Hobart Mercury

Mercury

Sunday Tasmanian

Queensland Times

Journals

Civil Aviation Journal

Map and image collections

Civil Aviation Historical Society

Archives Office of Tasmania

National Archives of Australia

SECONDARY SOURCES

Books and publications

Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006

Heritage Office, *Heritage Curtilages*, Department of Urban Affairs and Planning, New South Wales, 1996

Unpublished reports

Airservices Heritage Strategy 2014-2017

Cultural heritage Management Plan, Llanherne House, Hobart International Airport, November 2013

Environmental Assessment of Hobart Airport – Proposed SIDs & STARs, Airservices Australia, 2017,

Godden Mackay Logan, *Sydney Airport Heritage Management Plan*, June 2009

Hobart Airport Master Plan 2015, Hobart Airport International Pty Ltd

Hobart Airport Control Tower Lease (Federal Airports Corporation, Airservices Australia), 6 July 1995

Hobart International Airport Pty Ltd, *Hobart Airport Major Development Plan, Runway Extension*, undated

JTA Health, Safety & Noise Specialists, Hazardous Building Materials Survey, Hobart Airport Control Tower Complex, July 2013.

Llanherne House, Tasmanian Heritage Register Datasheet, THR number ID 1,032.

Websites

5DME, Adelaide Aviation & Flight Simulation, <http://5dme.net/atc2.html>

Airways Museum, various pages, accessed via www.airwaysmuseum.com

Australian Government, Department of the Environment and Energy, various pages, accessed via www.environment.gov.au/

Australian Government, Department of Infrastructure and Regional Development, various pages, accessed via www.infrastructure.gov.au/

Hobart Airport, <https://hobartairport.com.au>

ENDNOTES

- 1 Hobart International Airport Pty Ltd, *Hobart Airport Major Development Plan, Runway Extension*, undated, p. 1.
- 2 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 2 March 2018.
- 3 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 2 March 2018.
- 4 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 2 March 2018.
- 5 Hobart International Airport Pty Ltd, *Hobart Airport Major Development Plan, Runway Extension*, undated, p. 69.
- 6 Hobart International Airport Pty Ltd, *Hobart Airport Major Development Plan, Runway Extension*, undated, p. 69.
- 7 Pers. comm., Leanne Burrows, Department of Environment, 21 July 2016.
- 8 What is protected under the EPBC Act? www.environment.gov.au/epbc/what-is-protected viewed 27 July 2016.
- 9 Llanherne House, Tasmanian Heritage Register Datasheet, THR number ID 1,032.
- 10 Pers comm (email), Dan Ford, Strategic Planner, Clarence City Council, 9 March 2018.
- 11 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 31 January 2018.
- 12 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 2 March 2018.
- 13 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 31 January 2018.
- 14 Pers comm (meeting), Shane Thomson, Airservices Work Area Lead, Tasmania, 15 November 2017.
- 15 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 7 February 2018.
- 16 Roger Meyer, 'Control Towers Part 1 (1937-1946)', Airways Museum, www.airwaysmuseum.com/Control%20towers%20pt%201.htm; accessed 30 November 2017
- 17 New site possible for Hobart Airport, *The Mercury*, 25 June 1947, p.10
- 18 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.10
- 19 New Hobart Airport, *Queensland Times*, 2 June, 1948, p.3
- 20 'Hobart/Cambridge Control Tower c. early 1950s', The Airways Museum & Civil Aviation Historical Society, www.airwaysmuseum.com; accessed 30 November 2017
- 21 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.15
- 22 Alternative airport for South; new field to cost £650,000, *The Mercury*, 21 September 1948
- 23 New aerodrome in Tasmania recommended, *The Canberra Times*, 19 November 1948, p.4

- 24 New Hobart Airport ready in 1951, *The Mercury*, 30 July, 1949, p.8
- 25 Llanherne Tasmania- Compulsory Acquisition 28 April 1949- Proposed Site for Hobart Airport, National Archives of Australia, A6074, PO10813
- 26 Environmental Assessment of Hobart Airport – Proposed SIDs & STARs, Airservices Australia, 2017, p. 16
- 27 ‘1951 before airport at Llanhern is completed’, *The Mercury*, 3 June 1948. P.2
- 28 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.13
- 29 ‘1951 before airport at Llanhern is completed’, *The Mercury*, 3 June 1948. P.2
- 30 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.13
- 31 ‘1951 before airport at Llanhern is completed’, *The Mercury*, 3 June 1948. P.2
- 32 Cultural heritage Management Plan, Llanherne House, Hobart International Airport, November 2013, p.8
- 33 Cultural heritage Management Plan, Llanherne House, Hobart International Airport, November 2013, pp.8-9
- 34 ‘Drome at Cambridge to cost £760,000, *The Mercury*, 18 March 1949, p.5
- 35 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.12
- 36 Airport not to be “Abel Tasman”, *The Mercury* 16 June 1953, p.1
- 37 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.14
- 38 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.15
- 39 New air terminal for Hobart, *The Canberra Times*, 26 June 1958, p.3
- 40 Control Tower for Llanherne, *The Mercury*, 27 October 1954, p.14
- 41 Report dated 16 September 1955, courtesy of the Civil Aviation Historical Society.
- 42 Report dated 24 January 1956, courtesy of the Civil Aviation Historical Society.
- 43 Pers comm, Adam Mornement (Lovell Chen) and Max Byrne, former Airservices Australia, 9 May 2008.
- 44 Closing tower a disaster for State, *Sunday Tasmanian*, 11 November, 1990, p.8
- 45 Closing tower a disaster for State, *Sunday Tasmanian*, 11 November, 1990, p.8
- 46 Sue Jacobson, The control tower at Hobart Airport under threat, *Sunday Tasmanian*, 11 November 1990, p. 15
- 47 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.21
- 48 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.24
- 49 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.24

- 50 Quoted in Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.31
- 51 Frank Cranston, Call to upgrade airport likely, *The Canberra Times*, 8 December 1972, p.11
- 52 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.31
- 53 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.32
- 54 Frank Cranston, TAA, Ansett gain NZ route, *The Canberra Times*, 10 July 1980, p.1
- 55 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.35
- 56 Decision on airport 'appalling', *The Canberra Times*, 8 April 1982, p.3
- 57 Airport, *The Canberra Times*, 7 April 1982, p.3
- 58 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.38
- 59 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.39
- 60 John Jesser, Stand on airlines no surprise, *The Canberra Times*, 31 May 1988, p.7
- 61 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, p.41
- 62 Lindy Scripps, *Our Front Door: The Story of the Hobart International Airport 1956-2006*, Hobart International Airport, 2006, pp.41-42; For sale: Hobart's second largest airport, *The Canberra Times*, 29 July 1992, p.4
- 63 Fears of cost-cuts plan at airports, *Hobart Mercury*, 20 February 1991,
- 64 Michael Lester, Four still in race to buy state airports, *Hobart Mercury*, 19 February 1998
- 65 Michael Lester, Four still in race to buy state airports, *Hobart Mercury*, 19 February 1998
- 66 Stuart Diwell, Fees may fall in airport sale, *Hobart Mercury*, 21 March 1988
- 67 Stuart Diwell, Fees may fall in airport sale, *Hobart Mercury*, 21 March 1988
- 68 See, for instance, Greg Bearup, 'The Mona Effect', *The Weekend Australian Magazine*, 22 July 2017.
- 69 Convention on International Civil Aviation done at Chicago on the 7th day of December 1944, refer article 28.
- 70 Report on Civil Aviation in Australia and Papua-New Guinea 1948-1949.
- 71 Report on Civil Aviation in Australia and Papua-New Guinea 1952-1959, p. 50.
- 72 *Civil Aviation Journal*, Vol. 1, No. 4, p. 15.
- 73 Roger Meyer, Control Towers Part 2 (post-1946), www.airwaysmuseum.com/ viewed 24 May 2016.
- 74 Roger Meyer, *Historical Information Relating to the Control Tower at Essendon Airport*, 30 May 2016, p.4.
- 75 New Control Tower Facility at Adelaide Airport, <http://5dme.net/atc2.html> viewed 24 May 2016.

- 76 Adelaide Control Tower & Passenger Terminal – 1957, www.airwaysmuseum.com/ viewed 24 May 2016.
- 77 2nd Darwin Control Tower – 1950 and 3rd Darwin Control Tower – 1959, www.airwaysmuseum.com/ viewed 24 May 2016.
- 78 Tamworth Airport, https://en.wikipedia.org/wiki/Tamworth_Airport viewed 24 May 2016.
- 79 Tamworth Tower – c. 1970s, www.airwaysmuseum.com/ viewed 24 May 2016.
- 80 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 31 January 2018.
- 81 Australian Government, Department of Infrastructure and Regional Development, 'Airport Planning and Regulation', www.infrastructure.gov.au/aviation/airport/planning/ viewed 21 June 2016.
- 82 Hobart Airport Master Plan 2015, Hobart Airport International Pty Ltd, accessed online, www.hobartairport.com.au, 13 February 2018, p. 90.
- 83 Godden Mackay Logan, *Sydney Airport Heritage Management Plan*, June 2009, p. 107.
- 84 Australian Government, Department of Infrastructure and Regional Development, 'Airport Planning and Regulation', www.infrastructure.gov.au/aviation/airport/planning/, viewed 21 June 2016.
- 85 Australian Government, Department of the Environment and Energy, 'EPBC Act Frequently Asked Questions', www.environment.gov.au/epbc/publications/factsheet-epbc-act-frequently-asked-questions viewed 21 July 2016.
- 86 Airservices Heritage Strategy 2014-2017, p. 2.
- 87 Pers comm (email), Kirsten Leggett, Environment Manager, Hobart International Airport Pty Ltd, 31 January 2018.
- 88 Hobart Airport Control Tower Lease (Federal Airports Corporation, Airservices Australia), 6 July 1995, Section 10.01.
- 89 Hobart Airport Control Tower Lease (Federal Airports Corporation, Airservices Australia), 6 July 1995, Section 15.
- 90 Pers comm (email), Dan Ford, Strategic Planner, Clarence City Council, 9 March 2018.
- 91 Shane Thomson, Work Area Lead, Tasmania, Airservices Australia, 15 November 2017.
- 92 JTA Health, Safety & Noise Specialists, Hazardous Building Materials Survey, Hobart Airport Control Tower Complex, July 2013.
- 93 Heritage Office, *Heritage Curtilages*, Department of Urban Affairs and Planning, New South Wales, 1996, p.3.

APPENDIX A

HERITAGE CITATIONS

- A.1 Commonwealth Heritage List entry for Hobart ATC tower**
- A.2 Tasmanian Heritage Register entry for Llanherne House**

Place Details

[Send Feedback](#)

Hobart Airport Air Traffic Control Tower, Tower Rd, Cambridge, TAS, Australia

Photographs	None
List	Commonwealth Heritage List
Class	Historic
Legal Status	Listed place (22/01/2016)
Place ID	106117
Place File No	6/01/002/0053

Summary Statement of Significance

The Hobart Air Traffic Control (ATC) tower is of historical significance in a national context as a rare and representative surviving example of a post-World War II era control tower equipped to an international standard following guidelines devised by the International Civil Aviation Organization (ICAO). It was one of eight Australian ATC towers built to the same operational specifications between 1952 and 1959 in the first major phase of control towers development in the post-World War II period.

The Hobart tower was built between 1956 and 1958, and commissioned in 1958. It is one of the oldest operational towers in Australia. Its contemporaries are the Essendon ATC tower, commissioned on 4 October 1956, and Launceston, which is believed to have been commissioned in 1958. All three were designed by the Commonwealth of Australia Department of Works (Victoria & Tasmania Branch) for the Department of Civil Aviation.

The building comprises a two-storey base building surmounted by an octagonal cabin. The cabin is raised on a partly chamfered and partly square duct and service drum. On three sides, an observation deck cantilevers from the flat roof of the base building. To the west the walkway is supported on the base of the broader stairwell.

The ATC tower was a central element of the new Hobart Airport at Llanherne, which replaced Cambridge Aerodrome as the city's primary airport in 1956. Like the original terminal building, the tower was not complete by the time daylight operations commenced at the airport. The tower has been used for its intended purpose since completion and is relatively intact.

Official Values Not Available

Description

Context:

Hobart International Airport covers an area of 568 hectares on a plain between Frederick Henry and Barilla bays. It has a single, sealed runway, 2,251m long and 45m wide. The ATC tower is situated on a hill to the west of the runway, and north-west of the terminal buildings. Hobart ATC tower is unusual and may be unique in Australia in that it serves two airfields: Cambridge Aerodrome, from 1936-56 Hobart's main airport and now a general aviation airfield; and Hobart International Airport, approximately two kilometres to the east.

Exterior:

Hobart ATC tower comprises an octagonal cabin on top of an asymmetrical two-storey red brick base building. The cabin is raised on a partly chamfered and partly square duct and service drum. On three sides, an observation deck cantilevers from the flat roof of the base building. To the west the walkway is supported on the base of the broader stairwell. The building's primary publicly-visible face, the east elevation, comprises four small windows at ground level, with modern security grilles, and three timber-framed windows across the width of the upper level. The window returns to the broader north and south elevations.

A bay projecting from the west end of the south elevation houses the switch room and toilet above. Steel safety hoops have been added to the vertical escape ladder to the east of the south elevation. The steel balcony at the first floor level is a replacement of a narrower concrete original. A half-height service entry with exposed concrete canopy is in the centre of the ground level. A security fence shields access to the service entry and escape ladder. On the north elevation, the projecting bay houses the staircase. A double height casement window in the east-facing wall of the bay illuminates the staircase, similar to the Launceston tower prior to the extension of the equipment room. A doorway to the equipment room with vent above is an original opening in the centre of the ground level. To the left, a modern metal locker houses batteries, for which there is no space in the equipment room. An air conditioning unit above the locker is a modern addition. The original concrete portal entry on the west elevation was replaced with the present canted glass canopy in 2006. The steel frame of the original entry had corroded in the saline, windy conditions. The walkway around the duct and service drum is essentially intact as built. A window facing north-east has been filled in, and air conditioning units have been added to the north and south. The cover to the escape ladder is modern. The canted steel window frames are original, as is the fixed steel ladder to the roof (at the west). The balustrade around the cabin roof is steel piping, like the balustrade to the walkway. The original rotating beacon is extant.

Interior:

The building is entered through the modern canted glass canopy on the west elevation. A painted concrete staircase with timber balustrade is to the left, with a storage space below. The switch room, to the right, retains its original top-hung sliding door. The window to the switch room's west wall was replaced with an aluminium frame during works to accommodate the new entrance. Highlights in the internal partition wall illuminate the equipment room. The equipment room is an original space. Sections of the 1950s green marble-effect lino are extant, as are cooling fans risers and equipment racks. The sliding door has been replaced to comply with OH&S requirements. Unlike the equipment rooms at Essendon and Launceston towers, Hobart's has not been extended. The staircase offers access to the toilet directly in front. The terrazzo partition wall in the toilet dates to the 1950s. The modern lino floor conceals asbestos tiles. The balance of the first floor comprises a locker room, with sink/kitchenette opposite, and an office to the east. A modern partition wall has been inserted between the locker room and office, which has a modern decorative treatment. A shower room has been installed in the south-east of the office.

The floor of the duct and service crawl space is painted green. An opening for wiring in the centre of the floor reveals the concrete base to be about 150mm thick. An original brass water tank is to the west of the space. The doorway, with caneite lining on the inside and metal grille, is original. The three vents to the north-east, east and south-east of the cabin are extant, and still in use. Ceiling-mounted air conditioning units have replaced the original coolers to the north and south walls.

The original perforated acoustic tiles to the ceiling are extant, as are the strip light over the console (also known as the 'egg crate light') and the circular visor track. There are roller blinds to each of eight outward-canted windows. As built, the windows were vacuum-sealed double glazing. As existing, they are thick single sheets. The original steel frames are extant, concealed behind timber. Some sections of the original perforated metal wall cladding are visible, modern cabinetry may conceal other sections. A basin and small cooking area have been installed to the east. The original console in marble effect vinyl was replaced with the present console in 1979. Over the years the timber frame has been modified to accommodate equipment including computer screens and the like. Carpet to the floor conceals the original marble-effect lino.

Conclusion:

Hobart ATC tower is largely intact as built. Aside from systems upgrades, alterations for OH&S compliance and the replacement of worn fabric, the major alteration is the removal of the original concrete entrance portal entry and installation of the modern canted glass canopy.

History

Until 1956, Hobart was served by Cambridge Aerodrome (developed from 1936), two kilometres west of the existing Hobart International Airport and approximately 17km from Hobart. An integrated Operations and Administration building, similar to those at Mascot (Sydney), Parafield (Adelaide) and Archerfield (Brisbane), was proposed for Cambridge in the late 1930s. It was not built, initially because World War II diverted funds and attention, and later because hilly terrain to the west of the airport, and limited land for expansion, meant that Cambridge was unable to comply with minimum safety requirements for the operation of heavy aircraft established by the International Civil Aviation Organization (ICAO). An air traffic control tower was built at Cambridge in the early post-World War II period. It comprised a square cabin with outward-canted windows on top of an open lattice tower. A 1946 study revealed that the closest available site for a new airport that could accommodate runways in multiple directions was 32km from Hobart. This was considered too far, so it was decided to develop a single runway airport at the Llanherne Estate, a low lying sandy spit between Barilla Bay and Frederick Henry Bay, directly to the east of Cambridge Aerodrome.

A drawing of 'Llanherne Airport Control Tower' dated 30 October 1951 shows a three-storey tower with a single-storey wing with shallow gable roof projecting to the east. The composition of tower and single-storey wing is also comparable to Launceston Tower and the former Brisbane Tower, the latter commissioned in 1959. It is also interesting to note that the north elevation featured a service entry with boom above, similar to the arrangement as built at Melbourne (Essendon) and Brisbane. Daylight operations commenced at the new airport on 23 June 1956. At that time the terminal building and the new ATC tower, on a hill to the west of the site next to the historic homestead, were still under construction. For the next two years, air traffic control for the new airport was managed from Cambridge Aerodrome.

Correspondence suggests that the original intention had been to complete and commission the tower in time for the opening of the airport. A September 1955 Report on Progress of Approved Works at the New Hobart Airport stated: 'A Contract for the erection of the Control Tower on the hill between Cambridge and Hobart Airports has been let and it is anticipated that it will be completed in December 1955. The design of the electronic equipment to be installed in it is proceeding in conjunction with that required for the towers at Melbourne and Launceston. Installation should commence early in the New Year.'

However, the following January a progress report found that:

'The foundations of the Control Tower have been poured and approximately nine months will be required to complete this structure.'

A photograph of the tower taken on 5 May 1957, shows that the building was still under construction at the time. A technician recently interviewed then working at Cambridge Aerodrome, recalls that it was commissioned in May 1958. The tower as built was different to the 1951 drawings in several respects: it had two storeys, an octagonal cabin and no projecting wing to the east.

Condition and Integrity

Modifications undertaken are as per description provided.

Location

Approximately 70 sq metres, Tower Road, Hobart Airport, comprising the Air Traffic Control Tower and its base building located within Land Parcel 1/152454 and centred on approximate MGA point Zone 55 540999mE 5257312mN.

Bibliography

The material provided in this nomination is sourced from Airservices Australia's commissioned Detailed Heritage Study (DHA) on Hobart Airport Control Tower. The Heritage study was undertaken by Lovell Chen Architects and Heritage Consultants. IE. *Lovell Chen Architects and Heritage Consultants, June 2009. National Control Towers, Volume 2 -Appendix B, Detailed Heritage Assessments.*

Report Produced Wed Jan 31 12:44:13 2018

Tasmanian Heritage Register Datasheet



103 Macquarie Street (GPO Box 618)
Hobart Tasmania 7001
Phone: 1300 850 332 (local call cost) | 6233 2037
Fax: 6233 3186 | Email: enquiries@heritage.tas.gov.au
Web: www.heritage.tas.gov.au

Name: Llanherne House
Status: Permanently Registered
Tier: State

THR ID Number: 1,032
Municipality: Clarence City Council
Date Listed: 22-September-1999

Location Addresses

1309 TASMAN HWY, CAMBRIDGE 7170 TAS
1309 TASMAN HWY, CAMBRIDGE 7170 TAS
1309 TASMAN HWY, CAMBRIDGE 7170 TAS

Title References

105979/1
138713/1
105979/3

Property Id

7593048
7593048
7593048



Untitled

No copyright on file



Untitled

No copyright on file

Setting: No Data Recorded

Description: This is a small house with a hipped roof and narrow boxed eaves and evenly placed double hung windows. The brick walls have a plinth at the base and a string course at the top. There is also a well on the site.

History: This is a small stone cottage currently used by FAC as offices. Constructed in c.1830, the building is associated with the Lewis family. It has been renovated in recent times with the assistance of the National Trust.

Statement of Significance: No Statement is provided for places listed prior to 2007
(non-statutory summary)

Significance:

The Heritage Council may enter a place in the Heritage Register if it meets one or more of the following criteria from the Historic Cultural Heritage Act 1995:

- a) It is important in demonstrating the evolution or pattern of Tasmania's history.
- b) It demonstrates rare, uncommon or endangered aspects of Tasmania's heritage.
- c) It has potential to yield information that will contribute to an understanding of Tasmania's history.
- d) It is important as a representative in demonstrating the characteristics of a broader class of cultural places.
Llanherne is of historic heritage significance because of its ability to demonstrate the principal characteristics of a single storey brick Old Colonial Georgian domestic building.
- e) It is important in demonstrating a high degree of creative or technical achievement.

- f) It has strong or special meaning for any group or community because of social, cultural or spiritual associations.
- g) It has a special association with the life or work of a person, a group or an organisation that was important in Tasmania's history.

PLEASE NOTE This data sheet is intended to provide sufficient information and justification for listing the place on the Heritage Register. Under the legislation, only one of the criteria needs to be met. The data sheet is not intended to be a comprehensive inventory of the heritage values of the place, there may be other heritage values of interest to the Heritage Council not currently acknowledged.

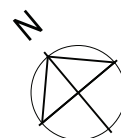
APPENDIX B

ARCHITECTURAL DRAWINGS

- B.1 Airservices, Hobart Tas, Control Tower Building 11, Floor layout diagram
(MR 30100001-001-A1)**



ALL DIMENTIONS ARE APPROXIMATE ONLY,
EXACT DIMENTIONS TO BE TAKEN ON SITE



DIST'N	2
HB TWRER	1
LT TMC	1

[illegible]

FILE: \\DATAVIEW-PRD-01\\drawings\\tas\\hobart\\MR30100001_001*003.DWG
DATE: 18-Aug-16 11:12

HOBART TAS
CONTROL TOWER
BUILDING 11
FLOOR
LAYOUT DIAGRAM

© Airservices Australia. All rights reserved.



DRAWING No	SHT N
MR 30100001	00

WARNING: Airservices Australia gives no warranty that the information in this drawing is current. A search using DataViewer must be undertaken to ensure that this drawing is current.

APPENDIX C USER GUIDE

C.1 Hobart Air Traffic Control Tower Airservices Australia Heritage User Guide, ENV-GUIDE-0010, Version 1, Effective 17 November 2014

Hobart Air Traffic Control Tower Airservices Australia Heritage User Guide

ENV-GUIDE-0010

Version 1

Effective 17 November 2014

Prepared: Renee Allen-Narker

Authorised: Paula McMahon
Manager, Environmental Services

***Information sourced from Lovell Chen National Control Towers Heritage Assessment, June 2009**

Change summary

Version	Date	Change description
1	17 November 2014	Initial Issue.

This document was created using Generic Document Template C-TEMP0047 Version 5.

Table of contents

1	Purpose	3
2	Scope.....	3
3	Context	3
4	Site details.....	3
5	History	3
6	Significant aspects.....	4
7	Structural significance.....	5
8	Works approval and advice.....	6
	8.1 Works not requiring heritage advice or legal approval.....	6
	8.2 Works requiring heritage advice	6
	8.3 Works which are likely to require statutory heritage approval include	6
9	Contact	6

1 Purpose

The purpose of this document is to guide the management and maintenance of Hobart Air Traffic Control Tower, so that any development, works, or modifications are carried out in a manner that does not impact on the heritage values (known or potential) of the site.

2 Scope

The guide sets out the type of works that may be undertaken without heritage advice from Environmental Services or legal approval from the federal Minister for the Environment, works that typically require advice or approval, and those works that are likely to require approval.

This guide applies to all staff (including contractors) responsible for the management, development and maintenance of Hobart Air Traffic Control Tower. It also applies to people responsible for works within the vicinity that may affect the tower.

The heritage values (known or potential) of Hobart Air Traffic Control Tower and a brief history are also described in this document.

3 Context

Airservices has a responsibility under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) to conserve and protect the Commonwealth heritage values of places that it owns or controls.

An approval for works is required from the federal Minister for the environment, where the proposal is likely to have a significant impact on a matter of national heritage significance.

4 Site details

Site Address	Hobart International Airport, Strachan Street, Cambridge 7170
SAP functional location	HB-APT-CTC
SAP BE/BU	BE 389 BU 1
Heritage Listings	
	Recommended for inclusion on the Commonwealth Heritage List

5 History

The Hobart ATC tower was built between 1956 and 1958, was commissioned in 1958 and is one of the oldest operational towers in Australia. It is one of three surviving operational and two decommissioned ATC towers in Australia built during the 1950s. Hobart tower was a central element of the new Hobart Airport at Llanhern, which replaced Cambridge Aerodrome as the city's primary airport in 1956. Hobart tower is unusual and may be unique in Australia in that it serves two airfields; Cambridge Aerodrome, from 1936-56 Hobart's main airport and now a general aviation airfield; and Hobart International Airport.

6 Significant aspects

Hobart ATC tower is of historical significance nationally as a rare and representative surviving example of a post-World War II era control tower equipped to an international standard following ICAO guidelines. Hobart, Essendon and Launceston ATC towers were designed by the Commonwealth Department of Works (Victoria and Tasmania Branch) for the Department of Civil Aviation. Later towers adopted a similar form e.g. Cairns, Mount Isa and towers of the later 1960s.

The building comprises a two-storey red brick base building surmounted by an octagonal cabin. The cabin is raised on a partly chamfered and partly square duct and service drum. On three sides, an observation deck cantilevers from the flat roof of the base building. To the west the walkway is supported on the base of the broader stairwell.



Above: North and east elevations of Hobart Control Tower. The exterior is essentially intact as completed in 1958



Above: View of tower during construction May 1957

7 Structural significance

[Table 1](#) describes the major structural elements, and associated significant aspects, of the Hobart Air Traffic Control Tower.

Table 1: Hobart Air Traffic Control Tower – Structural significance

Major structural element	Significant aspects
Base building	Two-storey red brick base building, with original windows at ground level and upper level. The projecting bay housing the staircase, with double-height casement windows. A doorway to the equipment room with vent above is an original opening in the centre of the ground level.
Octagonal cabin	The cabin is raised on a partly chamfered, partly square duct and service drum. The observation deck and walkway around the duct and service drum is essentially as built. Original canted steel window frames, fixed steel ladder to the roof, steel piping balustrade around the cabin roof. The original rotating beacon is extant.
Entrance canopy/awning	Consideration should be given to the removal of the modern entrance canopy and the reconstruction of the original concrete awning supported on steel columns.
Interior	Original fittings such as; original doors, the equipment room with 1950s linoleum flooring, cooling fans and equipment racks, terrazzo walls, brass water tank, perforated acoustic ceiling tiles, original steel window frames behind timber.

The Hobart tower should be retained and conserved to the extent of its original external form and fabric (two-story base building and octagonal cabin). The building should be retained as a free-standing structure. There is greater scope for adaptation of the interior.

8 Works approval and advice

8.1 Works not requiring heritage advice or legal approval

- Cleaning and landscaping maintenance
- Securing and replacing roof, glass or other external materials where replacement material matches the existing
- Repainting provided paint treatment/colours match the existing
- Servicing and repair of existing equipment and services including power or pipelines where there is no alteration to building fabric
- Replacing or modifying original internal fittings where they match the existing

8.2 Works requiring heritage advice

- Demolishing any building components
- Constructing an addition to the building or a new structure or building on the property
- Repairing/replacing original external materials and fabric including glass and brick elements
- Replacing or modifying original equipment in cabin
- Repairing/replacing original internal fabric including stairs, doors, door handles, panels, flooring and skirting
- Changing the paint treatment/colour scheme
- Reconstructing/ reinstating original building elements and features, wholesale room fit outs
- Introducing new external awnings/shades or other significant fixtures
- Modifying or removing existing windows
- Any works which impact on the aspects identified as significant above

8.3 Works which are likely to require statutory heritage approval include

All of the actions identified under Section B above, unless heritage advice has been received that states no statutory approval is required. For example, repairs to fittings and fabric typically don't need approval where the works are undertaken in a sympathetic manner including replacing like with like. Heritage input from the contact below is required to clarify and confirm this.

9 Contact

For questions and advice regarding the management of heritage values, contact Team Leader, Corporate Environment Programs, environment@airservicesaustralia.com or (02) 6268 4735.

LOVELL CHEN



LEVEL 5, 176 WELLINGTON PARADE
EAST MELBOURNE 3002
AUSTRALIA
TEL +61 (0)3 9667 0800
enquiry@lovellchen.com.au
www.lovellchen.com.au