NR & NIS MINIMUM FICHE

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Wp/ref no                  Nai ref no

composed by working party of: Australia

1 Identity of building      Qantas House, Sydney

1.1 current name of building No.1 Chifley Square
1.2 variant or former name  Qantas House
1.3 number & name of street No.1 Chifley Square. Also as Nos. 68–96 Hunter Street
1.4 town/suburb, city       City of Sydney
1.5 state                  New South Wales
1.6 post code               2000
1.7 country                Australia
1.8 national grid reference AMG: 3 34 350 E, 62 51 100 N
1.9 classification/typology Commercial Office Building
1.10 protection status & date
NSW Heritage Council – State Heritage Register, Item No. 1512 gazetted 25 May 2001
Central Sydney Heritage Local Environment Plan 2000 Schedule 1
Item No. 184
Central Sydney Heritage Inventory No. 2014
RAIA NSW Chapter – Register of 20th Century Buildings of Significance
The Register of the National Estate (Database No. 100123)
National Trust of Australia (NSW) – Register

2 History of building

2.1 original brief/purpose

Background
Qantas Airways was established in 1920 as *Queensland and Northern Territory Aerial Services* (QANTAS) and was the first airline established in eastern Australia. In 1930 Qantas established its head office in Brisbane. Becoming Empire Airways in 1934 to operate the Brisbane to Singapore air route, Qantas began operating flying boats from Sydney in 1938. Nationalised in 1947 Qantas quickly expanded its fleet using Constellation aircraft, and later Boeing 707s in 1959 and 747s in 1971. Qantas Airways built Qantas House as its first international headquarters, however, with the rapid rise in air travel and requirements for accounting and computing systems the building became too small by the late 1960s and was sold in 1982. Qantas moved to a second city headquarters building designed by architect John Andrews before moving again in the early 1990s to near Sydney Airport.

Rudder, Littlemore and Rudder, Architects, were established as Rudder & Grout in 1925. Rudder & Grout were one of the most prolific firms in NSW in the 1930s designing public buildings and hotels (Great Northern Hotel, Newcastle, Petersham Town Hall 1938, and the North Sydney Pool, 1936). By the 1940s the brothers Roy and Herbert Rudder had been joined by David Littlemore to form Rudder, Littlemore & Rudder. The Rudders knew Hudson Fysh, one of the founders of Qantas, and possibly Roy Rudder designed the original Qantas hangar in Longreach, Qld. The firm undertook the fitout of an office for Qantas when it moved from Brisbane to Sydney in 1938. After designing Qantas House the firm continued to work on commercial office buildings but none of these have the heritage status of Qantas House.

Felix Tavener, the design architect for Qantas House, studied architecture at Sydney Technical College, graduating in 1938. In 1939 he travelled to Europe to see the architecture of Modernists such as Willem Dudock and Erich Mendelsohn. In London he saw the *Peter Jones Department Store* in Sloane Square designed in the early 1930s by William Crabtree and Professor Charles Reilly and completed in 1939 as ‘the first curtain wall building in London’. Tavener was forced to remain in England during the Second World War. Returning to Australia he joined Rudder, Littlemore & Rudder in 1949.

Planning and Design
The city of Sydney grew in an organic manner in the early nineteenth
century around Sydney Cove. By the early twentieth century this street pattern led to congestion where it met the later grid pattern city. The *Royal Commission On Sydney Improvement* recommended changes in the area later to become the site of Qantas House and schematic sketches show a curved Beaux Arts style building on this site associated with a tunnel to Sydney Cove. In the 1930s similar schemes were prepared by the City Council to extend Elizabeth Street terminated at this point. This plan came to fruition when the city resumed sites and demolished buildings to create a curved extension to Elizabeth Street; the resultant curved site was purchased by Qantas Empire Airways in 1949. Once Qantas House was constructed and other older buildings removed, a new urban space, now known as Chifley Square, was formed, framed by the elegant curve of Qantas House.

From 1912 until 1957 the height of buildings in Sydney were limited to 150 feet by the *Height of Buildings Act*. Qantas House was one of the last buildings completed under this Act and thus forms a historical transition between the early and later twentieth century urban form of Sydney that is exemplified by postwar high-rise buildings such as the AMP Building constructed in 1962.

The design influences of Qantas House include the interests and background of the architect, the client’s brief and the site itself. Felix Tavener had trained during the interwar period in the practice of traditional masonry architecture but was very interested in modernism, particularly the European ‘moderate’ modernism of Dudock and Mendelsohn. These twin influences are reflected in Qantas House in the traditional tripartite design that is combined with the modern curtain wall. The client was very keen to showcase its progressive approach and was explicit about wanting the design to reflect this. The aerodynamic shape of the mullions and the choice of aluminium was in direct response to this. The architect identifies the curved narrow site as a significant constraint that helped define the building’s form that fills the site.

One of the first buildings in the city to use a curtain wall construction, the building itself has a standard concrete clad steel frame. Innovations included the early use of air conditioning and the use by Qantas of advanced booking and computing systems.

| 2.2 | dates: commission/completion | Commission c1949, design 1950, completion 1957 (opening 28 October 1957 by the Prime Minister of Australia (Sir) Robert Menzies) |
| 2.3 | architectural designers | Rudder Littlemore & Rudder, Architects Felix Tavener, FRAIA, Design Architect |
| 2.4 | others associated with building | Structural Engineers: Morrison and Little Mechanical Engineers: Gutteridge, Haskins & Davey Builder: Concrete Constructions Pty Ltd Curtain Wall: W T Worrall & Sons Stonework: Melocco Bros Pty Ltd |
2.5 significant alterations with dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964/1965</td>
<td>Alterations and additions to the rear light well area to provide for Qantas computer installations.</td>
</tr>
<tr>
<td>1967</td>
<td>Further small addition in the light well area.</td>
</tr>
<tr>
<td>1982/1984</td>
<td>Full building internal refurbishment by Stephenson and Turner Architects for the new owner, the Joint Coal Board – interior stripped to concrete frame. Minor alteration to curtain wall by additions of aluminium strips between mullions and frames.</td>
</tr>
<tr>
<td>1992</td>
<td>Replacement of original curved awning with a rectangular awing.</td>
</tr>
<tr>
<td>2002/2004</td>
<td>Internal refurbishment to all floors (except ground and mezzanine) and conservation works to interior (including reconstruction of original Level 11 clerestory windows and exterior (concrete roof resurfacing, sandstone repair, reconstruction of northern entrance lobby, drainage and resealing of curtain wall and reconstruction of the original curved entrance canopy – planned for late 2004.</td>
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</tbody>
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current use

Commercial Office Building: Qantas Airways lease ground and mezzanine levels. Commercial office tenants on all upper floors.

current condition

The building is in good condition – refurbishment project 2002–2004.

3.0 Description

3.1 general description

Qantas House is a twelve-level commercial office building (plus a mezzanine level and three basement levels). The building is distinguished by its graceful, segmented, curved facade which consists of a 46m high, double-glazed curtain wall of green glass with enamelled blue-green steel spandrel panels. It is located on the western side of Chifley Square which itself is located at the intersection of Elizabeth, Hunter and Phillip Streets in Sydney.

The building's design is a variation of postwar International Style that is influenced by what can be called European 'moderate modernism'. The base, middle and top of the building are differentiated by changes in the facade treatment. The base consists of a double height foyer which incorporates a mezzanine level. On the facade, the volume of this space is differentiated from the upper levels of the building by the use of dark green and black polished granite cladding and by the large, uninterrupted panels of glazing set in bronze frames. The eleven storeys of the middle section of the facade are characterised by the repetitive pattern of the parabolic shaped aluminium mullions framing curtain wall panels. The curtain wall panel sections are composed of awning windows at their tops, central panels of fixed glazing and enamelled steel spandrel panels at their bases.

At the northern end of the building is a full height sandstone faced wall on which a vertical 'Qantas Airways' sign was originally located. The sandstone facing returns in a long band to form the top of the facade composition, providing an exciting demarcation of the building against the sky. A top level staff cafeteria and library facility was initially planned to include a narrow balcony behind this upper
band but was glazed during construction. Setback clerestory windows above this upper level have recently been reconstructed. While the reinforced concrete structure of the building is relatively conventional, the planning is noteworthy in that the service cores are asymmetrically placed adjacent to the boundaries with the adjoining buildings. This allows for the inclusion of a light well at the rear of the building, ensuring the penetration of light deep into the interior and it also means that the curved line of the building against the sky is not interrupted by vertical projections of centrally-located service cores. The planning also resulted from a desire to maximise the available building envelope – the building reached the maximum floor space ratio and maximum height which were allowable under the planning codes at the time. The exterior of the building is in near-original condition, the only notable changes having been the loss of the original cantilevered entrance awning. Internally, the double height volume of the foyer is intact. Originally, the building interior featured Australian grown timbers such as sycamore, mahogany and walnut, however, these were removed in 1984.

3.2 construction

The building’s structure is a steel frame encased in concrete with internal columns in a 4.5 x 7 metre grid. The two lift cores are reinforced concrete construction. The roof is reinforced concrete. The curtain wall is constructed of parabolic cast aluminium mullions at approximately 1.2 metre centres.

3.3 context

Qantas House is an important element that helps to define the planned urban space of Chifley Square. In following the curve of Chifley Square, the building's plan respects the semicircular form that was proposed for the northern side of the square in its original design of 1908. The building’s curved form also provides for a welcome pedestrian area at the front of the building. Qantas House forms an elegant termination to the long view northwards along Elizabeth Street (see photograph).

At its south-eastern corner, the building joins Emil Sodersten's 1936 City Mutual Life Building in a carefully considered and sensitive manner. The polished granite base course below the foyer windows respects the line and material of the base of Sodersten's granite-clad building. Adjoining Qantas House to the north is the Wentworth Hotel built by Qantas Airways in 1966 and designed by Skidmore Owings and Merrill in association with Laurie and Heath of Sydney.

4 Evaluation

4.1 technical

The building is of Technical Significance: Qantas House is an important landmark in the development of the modern office building in Australia. Significant for its use of early curtain wall technology and as one of the last multi-storey buildings designed prior to amendments to the *Heights of Buildings Act* in 1957 in NSW, it is from the first phase of curtain wall buildings in Sydney that provided a transition to the mature high-rise buildings of the 1960s.

Qantas House is also important as a showcase for Australian building materials, including the granite and sandstone facing of the facade. The early use of air conditioning in this building and the
early use of electronic booking and computing systems in this building by Qantas are also technically significant.

The building is of Social Significance:

Qantas House has a strong association with Qantas Airways, a prominent Australian company of international renown. Qantas Airways, at that time Australia’s only, and Government-owned, international airline, constructed the building as its first purpose-designed world headquarters, as an identifiable icon for its modern image, and was its sole occupant for twenty-five years. It is important evidence of the rapid postwar growth in Qantas Airways’ international operations and in air travel generally. Alterations to Qantas House to allow for the construction by Qantas of the adjacent Wentworth Hotel are important evidence of changes in the nature of air travel and the growth of international tourism in Australia. This association with Qantas Airways is continued through its lease of the ground and mezzanine floors.

Qantas House was designed by the noted architectural firm Rudder Littlemore & Rudder, with Felix Tavener as the design architect, and is arguably their most significant building design achievement. Qantas House shows the continuity of use from the time of construction to the present as a commercial office building and the continuous use of the ground floor for a publicly accessible use associated with travel. It provides evidence of the period during which air travel originated at city terminals for departure to Sydney Airport.

Qantas House is viewed as culturally significant within the community of NSW generally, not just for its association with Qantas, an Australian corporate icon, but also for its readily appreciated aesthetic and townscape qualities. This level of esteem was evident at the time of construction.

Qantas House is also held in a high level of esteem by the architectural profession and other conservation. Qantas House was critically acclaimed in the architectural press at the time and it was the recipient of the 1959 Royal Institute of British Architects Bronze Medal. The building is now included on the Royal Australian Institute of Architects Register of Twentieth Century Buildings of Significance and they nominated the building for inclusion on the State Heritage Register.

The building is of Cultural Significance:

The construction of Qantas House marked the partial implementation of a significant town planning scheme for the betterment of Sydney and provided the pattern for the eventual completion of Chifley Square as a significant urban space some eighty years after it was first envisaged. The fulfilment of this town planning vision provides important evidence of the complex nature of such activity and the interaction between various levels of government, professionals and land owners.

Qantas House is a statement of the confidence and progressive spirit that was characteristic of Australia during the 1950s. The
international status and progressive nature of Qantas’ operations when combined with the exuberant form and imagery, the use of innovative and local materials, and innovative techniques and services in the building itself, provides an exemplar of the positive, forward-looking aspects of Australian society during this period.

The building is of Aesthetic Significance:

Qantas House is a masterpiece of architectural form, composition and construction. It represents the highest standards of architectural design response to its urban setting and its client’s needs. Its unique graceful double-curved form strikes a chord with the public and professionals alike. The composition of its facade elements is coherently ordered, as is its curtain wall construction featuring aerofoil-shaped Mullions – symbolically linking building and client – lustrous teal coloured spandrels and green-tinted glazing.

Qantas House is significant as a variation within the Post-War International style of architecture, representing some aspects of transition from interwar European modernism. Characteristics of earlier styles can be identified in both the building (a humanist/organic form, a traditional composition and symbolic use of elemental forms) and in the influences identified by its designer, while its materials, such as aluminium, and its curtain wall construction arrived as postwar construction technologies.

As a landmark building in such a prominent location, Qantas House demonstrates an excellent urban design response. Its relationship with Chifley Square, which it helps to define, reflects earlier twentieth-century schemes for the space and has itself been respected by the recent developments around this important urban space. The generous footpath space in front of Qantas House provides an appropriate forecourt to the public ground-floor booking hall.

Qantas House forms an aesthetically distinctive termination of the northern view along Elizabeth Street, while at the same time the building leads the eye around the Chifley Square space and onto the extension of Elizabeth Street as Phillip Street.

Qantas House joins sensitively with the City Mutual Life Building to the west with complementary materials and form.

The external form of Qantas House retains its integrity with only minor alteration, and its key internal ground-floor/mezzanine space is retained along with its key internal circulation spaces. Although much of the building’s internal fabric has been altered, the external fabric remains largely intact.

The building is of Iconic/Canonical Significance:

Qantas House is an important early and innovative example of postwar multi-storeyed office building in Australia. Qantas House is a rare example of Post-War International Style architecture with an expressionist form. It was one of the first uses of curtain-walled technology in Australia and was designed as a showcase for Australian materials. It also featured an innovative internal fitout and use of air conditioning services.

Qantas House is a rare and outstanding example of architectural design of the highest quality in the Australian context from the first
phase of post-War, multi-storey commercial building construction in
Australia in the period up to 1960. Qantas House is a unique
example in the Australian context of a curved, curtain wall building of
this type and period.

The facade of Qantas House retains its original, aluminium-framed,
curtain wall construction, with distinctive aerofoil-shaped mullions.
This early technology is becoming increasingly rare with continual
upgrading of buildings and the Qantas House facade is an excellent
example of this type.

**General Assessment**

Qantas House, No. 1 Chifley Square, Sydney, designed in 1950 by
Felix Tavener of Rudder Littlemore & Rudder, Architects and
completed in 1957 represents the highest standard of architectural
response to its urban setting and client needs through its form,
composition and construction. A variant of the Post-War
International style of architecture, Qantas House represents
transitional aspects of 'moderate' 1930s European modernism,
combined with the latest in postwar curtain wall technologies and
materials and is the best design response to its setting in Australia
from this period.

Although altered internally, its external facade remains largely intact.
The graceful double-curved facade is coherently ordered and its
shape reflects and visually reinforces the implementation of a long-
planned extension to Elizabeth Street. It became the inspiration for
the eventual completion of the ironically named, but no less
significant, Chifley Square, modelled on a town planning scheme of
some eighty years before. Qantas House is a key defining element
in this important, planned, urban space; it provides an appropriate
visual termination to important vistas and it visually links to adjoining
important buildings and streets.

Historically significant as the first planned world headquarters for
Qantas Empire Airways, at the time Australia's only, and
government-owned, international airline, the building, and in
particular the aerofoil-shaped aluminium mullions of its curtain wall,
gives form to Qantas' forward-looking and expansive image at a time
when air travel was taking off. Qantas Airways remained as its sole
occupant for twenty-five years and remains associated with the
building through its lease of the ground floor. The building is highly
regarded by the people of Sydney for its inherent aesthetic qualities
and its association with Qantas, an Australian corporate icon.

Qantas House is a fine example in the Australian context of intact,
postwar, multi-storeyed office buildings from the first phase in the
1950s, and is from the small group in Sydney designed prior to the
amendments to the *Heights of Buildings Act* in 1957 that heralded
the subsequent 'high-rise' phase. It has particular rarity within
Australia for its unique shape, the outstanding quality of its curtain
wall facade and its contribution to its urban setting. As such, it is
considered to have heritage significance at a national level.

A well-known and much loved city landmark, Qantas House is an
icon of its time; a quintessential Sydney building that represents a
brave future and a strong sense of history and of place.
5 Documentation

Written Sources
Godden Mackay Logan Pty Ltd, Qantas House, No.1 Chifley Square, Sydney, Conservation Management Plan, July 2002.

NSW Heritage Council State Heritage Register Listing (www.heritage.nsw.gov.au)

Graphic Sources
Refer to the Qantas House Conservation Management Plan above (also the case study on this building at: www.gml.com.au).

5.1 principal references
5.2 visual material attached
5.3 rapporteur/date

Geoff Ashley, September 2004