

Preliminary Operational Management Plan

FLIGHT TRAINING CENTRE

Qantas Airways Limited

Revision B

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1. Introduction

Qantas Airways Ltd (Qantas) has prepared this Preliminary Operational Management Plan (POMP) in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs), and in support of **SSD 10154** for the development of a new flight training centre at 297 King Street, Mascot.

1.1 Description of site and locality

The site is located at 297 King Street, Mascot and comprises land known as Lots 2 & 4 DP 234489, Lot 1 DP 202747, Lot B DP 164829 and Lot 133 DP 659434. The site is identified in Figure 1.



Figure 1 - The Site

Key features of the site are as follows:

- The site is approximately 5.417ha and is an irregular shape. It is approximately 240m in length and maintains a variable width of between approximately 321m in the northern portion of the site and approximately 93m along the King Street frontage (refer to Figure 1).
- The site possesses a relatively level slope across the site. An open Sydney Water drainage channel bisects the northern portion of the site in an east-west direction. There are some isolated changes in level immediately adjacent to this channel. A Site Survey Plan accompanies the application which details the topographic characteristics of the site.

- Multiple mature Plane Trees are scattered throughout the site. A variety of native and exotic trees and vegetation also exist around the perimeter of the site which help screen the site from surrounding uses.
- Site improvements include at-grade car parking for Qantas staff, an industrial shed to store spare aviation parts, a substation, a disused gatehouse, a Sydney Water Asset with two driveways over it, the Qantas catering facility and Qantas tri-generation plant.
- The site forms part of a larger land holding under the ownership of Qantas that generally extends between Qantas Drive to the west, Ewan Street to the south, Coward Street to the north, with the Qantas “Corporate Campus” fronting Bourke Road.
- Vehicular access to the site from the local road network is available from King Street. The site has intra-campus connections along the northern boundary in the form of two connecting driveways in the north-eastern and north-western corner of the site along the northern boundary which link it to the broader Mascot Campus.
- The site is located within the Bayside LGA.

Key features of the locality are:

- **North:** The site is bounded to the north low scale industrial development, beyond which is Coward Street. Further north of the site is the Mascot Town Centre which is characterised by transport-oriented development including high density mixed-use development focussed around the Mascot Train Station.
- **East:** The site is bordered to the east by commercial development including a newly completed Travelodge hotel which includes a commercial car park. Additional commercial development to the east includes the Ibis Hotel and Pullman Sydney Airport fronting O’Riordan Street.
- **South:** The site is bounded to the south by King Street, beyond which is Qantas owned at-grade car parking and other industrial uses. Further south is the Botany Freight Rail Line and Qantas Drive beyond which is the Domestic Terminal at Sydney Airport.
- **West:** The site is bordered to the west by the Botany Freight Rail Line and Qantas Drive, beyond which lies Sydney Kingsford Smith Airport and the Qantas Jetbase (location of the current Flight Training Centre).

1.2 Project description

Safety is Qantas’ first priority. The flight training centre is a key pillar of this value. The facility enables pilots and flight crews to undertake periodic testing to meet regulatory requirements by simulating both aircraft and emergency procedural environments. The Project seeks consent for the construction and operation of a new flight training centre, and associated ancillary uses including a multi-deck car park. The Project is comprised of the following uses:

Flight Training Centre

The proposed flight training centre will occupy the southern portion of the site. It is a building that comprises 4 core elements as follows:

- An emergency procedures hall that contains;
 - cabin emergency evacuation trainers,
 - an evacuation training pool,
 - door trainers,

- fire trainers
 - slide descent towers,
 - security room,
 - aviation medicine training and equipment rooms.
- A flight training centre that contains:
 - a flight training hall with 14 bays that will house aircraft simulators,
 - integrated procedures training rooms, computer rooms, a maintenance workshop, storerooms, multiple de-briefing and briefing rooms, pilot's lounge and a shared lounge.
- Teaching Space that contains
 - training rooms,
 - classrooms and two computer based exam rooms.
- Office Space
 - Office space for staff and associated shared amenities including multiple small, medium and large meeting rooms, think tank rooms, informal meeting spaces, a video room and lunch/tea room.
- Ancillary spaces including the reception area at the ground floor, toilets, roof plant and vertical circulation. The external ground floor layout will include a loading dock, at-grade car parking for approximately 39 spaces and a bus drop-off zone at the northern site boundary.

Car Park

The proposed multi-deck car park will be located to the north-east of the flight training centre and adjacent to the existing Qantas catering facility and tri-generation plant. The car park is 13 levels and will provide 2059 spaces for Qantas staff. Vehicle access to the car park will be provided via King Street, Kent Road and from Qantas Drive via the existing catering bridge.

2. Operational Overview

2.1 Organisational Structure

The ongoing operations of the Flight Training Centre is the responsibility of Simulator Facilities & Commercial Operations. The immediate team responsible for the ongoing operation of the Flight Training Centre are outlined in the organisational structure included at Appendix C of this POMP.

2.2 Purpose of Facility

To house and maintain Full Flight Simulators, Integrated Procedures trainers and Emergency Procedures training equipment including a pool for wet drill training to service the training requirements for Qantas Group Flight Crew and Third-party customers.

2.3 Services and Offering

Services provided include, recurrent and Initial Type Ratings for Pilots and Cabin Crew; bespoke Flight Crew training courses such as Human Factors and Aviation Medicine and Security Training and the sale of such services to non-Qantas Group customers.

This training is provided specific to the fleet on which the flight crew is operating. Every year each member of Flight Crew (Pilots and Cabin Crew) is required to renew their licence to operate on that particular fleet and following successful completion of the particular training matrix, their licence to operate is renewed (recurrent training). Where Flight Crew are promoted or change aircraft type, an Initial Type Rating is completed, which requires additional training specific to that particular aircraft. This training includes an overview of the specific equipment, door training and in the case of Pilots, a comprehensive training footprint for that specific aircraft.

2.4 Key Contacts

2.4.1 Qantas Personnel

The following Qantas personnel are involved in the ongoing operation of the facility.

- Tim Harnett – Head of Simulator Facilities & Commercial Operations.
- Derek Perkins – Manager Simulator Facilities.
- Aziz Baslama – Manager Commercial Operations.
- Chris Blakely – Manager Change & Programs.
- Cary Christian – Maintenance & Logistics Coordinator (Sydney).
- Ash Yousef – Coordinator Business and Facilities.

3. Operations

3.1 Hours of Operation

It is proposed that the facility will operate 24 hours a day, 365 days a year in order to meet the operational and training requirements of Qantas.

3.2 Operations and Procedures (Equipment & Training)

3.2.1 Full Flight Simulator

A Level D Full Flight Simulator simulates all aircraft systems that are accessible from the flight deck and are critical to Pilot training. These simulators provide accurate force feedback for the pilot's flight controls, through a simulator system called "control loading", and other systems such as avionics, communications and "glass cockpit" displays are also simulated. Full Flight Simulators are required to facilitate the completion of Regulatory required Pilot training under CASR Part 142, for both licence renewals and new initial type ratings for the QF Group Pilot community. Full Flight Simulators are required to be qualified and certified to the Australian Civil Aviation Safety Authority (CASA) standards, as prescribed in Civil Aviation Safety Regulations Part 60, pertaining to synthetic training devices. These synthetic training devices are required to be certified annually by the regulatory body (CASA), to ensure that the fidelity of the device replicates that of the particular aircraft. Similarly, the maintenance of these devices is prescribed to maintain Regulatory approval, under Part 60 for the use of such devices for QF Group Pilot training. The maintenance of these devices is performed by the in-house QF maintenance technicians in accordance with the Original Equipment Manufacturers' (OEM) requirements. These technicians are required to maintain the training devices at a standard to ensure the fidelity of the training devices are consistent with the fleet in question and also to ensure that warranty provisions on the equipment are satisfied. CASA provides a number of Team Leader Instruments, to staff within Qantas Flight Training, who are responsible for completing the annual regulatory approval process, resulting in recertification of the device for another 12 months.

3.2.2 Integrated Procedures Trainer

The Integrated Procedure Trainer's (IPT) are lower level training devices principally used in the ground school component of Pilot Training for new initial type ratings. An IPT is typically used to simulate the various systems on the aircraft in question and combines use of multiple touch-sensitive screens that display simulated panels in the same size as the actual aircraft panels and hardware replica panels. Additional screens are used for the instructor station and active schematics displays. Similar CASA regulatory requirements are in place for these devices, for both regulatory compliance and warranty purposes with the OEM. The maintenance of these devices is performed by the in-house QF maintenance technicians.

3.2.3 Training Pool

The Training Pool is used to provide ditching training for Pilots and Cabin Crew, for both licence renewals and initial type ratings. Rafts are stored and used for an aircraft fleet type for wet drill training purposes. Maintenance is performed by the in-house maintenance technicians in accordance with the draft OEM requirements. The maintenance of the pool as it pertains to

chemical management, pool heating and pool room atmosphere humidity is managed by Qantas Property on a quarterly basis.

3.2.4 Cabin Emergency Evacuation Trainers

Wide and narrow body Cabin Emergency Evacuation Trainers (CEET) are used for the purpose of training Pilots and Cabin Crew in emergency situations that may exist in the event of a ditching, smoke filled cabin, depressurisation, Door operation, Door malfunctions, jammed exits, internal & external fires and general obstructions within the cabin. In some cases, these CEET equipment may also have a slide raft attached to the device to complete full cabin evacuation training. These devices also require Regulatory certification under CAO 20:11 and maintenance is performed by the in-house maintenance technicians in accordance with the OEM requirements.

3.2.5 Door Trainers

Door Trainers provide the ability to train and assess Pilots and Cabin Crew, in the operation of aircraft type specific doors and exits. These assessments are conducted under supervision of a qualified Aviation Safety Training Instructor. This training/assessment includes correct door operation techniques, evacuation commands, door specific malfunctions and passenger control. The ability to utilise door training equipment in lieu of training on the aircraft, is set down in CAO 20:11 and as such each piece of equipment is approved by the Regulator, to be used in the operator's training program. Maintenance is performed by the in-house maintenance technicians in accordance with the OEM requirements.

3.2.6 Fire Trainer

Fire Trainers provide training to Pilots and Cabin Crew to ensure they are competent in addressing various types of fire situations that may occur on an aircraft. It provides the opportunity to develop team work and situational awareness when faced with an onboard fire and smoke. This equipment is certified under CAO 20:11 and CASR 121, coming into effect in March 2021. Maintenance is performed by the onsite maintenance technicians in accordance with the OEM requirements.

3.3 Fire Safety

The facility will have smoke detectors placed in accordance with the Building Code of Australia requirements. It will also be fitted with an Emergency Warning & Intercommunication System (EWIS), to protect and advise occupants when a building evacuation is required. The training equipment will be protected with onboard fire detection and EWIS, aural and visual warnings. Simulators fitted with a hydraulic motion system requiring a Hydraulic Power Unit, will be fitted with infra red detection and a water misting suppression system. Hydraulic Power Unit rooms will utilise ceiling water sprinklers or gas protection or other suitable system.

Maintenance of the various plant rooms, fire extinguishers, gas systems and other fire safety services are managed on a scheduled basis by Qantas Property.

3.4 Maintenance Strategy

Qantas Group manages all of its property asset maintenance through a third party contractor Jones Lang LaSalle (JLL) who manage the provision of subcontractors to address maintenance issues.

raised during the life of the building. The Principal Contractor will prepare operational and maintenance manuals for all services and infrastructure, and prepare a schedule of planned maintenance work to inform the ongoing maintenance strategy to be implemented by Qantas.

3.5 Work Health & Safety

WHS is managed by Sim Facilities staff on site who have been trained via external and online courses so they understand their responsibilities for WHS. Published schedules are in place to conduct Work Place Inspections and Safety Observations monthly. Injuries and Near Misses are reported via the INTELEX system for manager's oversight and rectification. Identified hazards are managed inhouse or via Qantas Property contractors. Qantas Group are governed by the procedures for WHS as defined under Qantas internal safety policy, SAFE2.

3.6 Chemical and Dangerous Good Handling Management

Qantas Group has developed a standard approach to chemical and dangerous goods handling management, which is applied consistently across all business units. The procedure describes responsibilities for employees, contractors, etc., identification and tagging procedures for chemicals and dangerous goods, risk assessment and mitigations measures, and standard management tools and forms. Given the sensitive nature of the policy, Qantas has not included a copy of the procedure in the current version of this POMP.

3.7 Loading Dock & Deliveries

The proposed Flight Training Centre includes provision for a primary and secondary loading dock, which will manage all deliveries to the facility. Loading for the flight training centre will be provided within a service area, located on the eastern side of the building. The docks will be designed to accommodate rigid trucks, with all trucks entering and departing the docks in a forward direction. Trucks will access the site via King Street, entering via the eastern driveway and departing via the western driveway. A secondary service area will be located adjacent to the western driveway, to allow delivery of hydraulics to the flight simulators. Procedures to manage access and timing for deliveries to the loading docks will be further developed during the commissioning phase of the project.

3.8 Medical Emergency Procedures

The proposed facility will comply with Qantas standard policies in relation to medical emergency procedures, including the provision of appropriate emergency signage and equipment. During the commissioning phase of the project, further investigation will be undertaken to determine the measures required to comply with Qantas' standard medical emergency procedures.

4. Security Procedures

4.1 Security Systems

It is anticipated that the security contractor MSS will provide the manpower, monitoring and surveillance as requested by the business units and the Duty Security Controller (DSC).

Security Contractor ACG provide the access control via CCTV and Card Readers. They are responsible for the installation, maintenance and fault rectification of the equipment. Both MSS and ACG have a direct link into the DSC and the facility will also be monitored by CCTV, at various points throughout the building.

4.2 Security Protocols & Monitoring

Due to the critical aspect of the services managed within the Facility, the building has a secure perimeter, together with a number of layers of access control, at various “gates” within the facility. For example, access to the Sim Bay Hall is managed utilising card reader access to ensure only authorised personnel access that area. For Third Party customers, Instructors are inducted into the facility and the appropriate training device. Third Party customers are responsible for any persons they bring into the Facility. The instructor is issued a swipe card to get into training centre only. He / she is responsible for swiping the crew into the centre.

4.3 Bomb Threat Procedures

Qantas Group has developed standard bomb threat procedures, which are applied consistently across all business units. The procedure describes responsibilities for employees, contractors, etc., risk assessment and mitigations measures, and standard management activities. Given the sensitive nature of the policy, Qantas has not included a copy of the procedure in the current version of this POMP.

5. Staff Amenities

5.1 Staff Facilities

Qantas' Facilities Management team work closely with QF Property / External Contractors, to ensure Staff have access to a clean working environment with the appropriate amenities including natural lighting, toilet and shower facilities, lunchroom facilities, fridges to store food and drinks, microwaves to prepare meals, hot water and clean filtered drinking water. Tea, coffee and milk is provided together with appropriate kitchen and break out areas. Parking will be available in the new multi-story carpark for cars and motorcycles.

5.2 Staff Carparking

Access to the proposed multi-storey car park will be managed using staff members swipe access cards, which are centrally managed by Qantas security and facilities management teams. The proposed multi-storey car park provides sufficient provision for all staff using the facility, and forms part of a campus wide parking strategy.

6. Waste Management

6.1 Approach to Waste Management

Qantas is proactive in implementing effective waste management and recycling initiatives across all business units to improve our environmental, economic and social outcomes. As outlined in the Operational and Construction Waste Management Plan prepared by Waste Audit and Consultancy Services, Qantas is committed to waste minimisation and management, and have satisfactorily addressed the requirements of Bayside Council's Botany Bay Development Control Plan 2013 and Environmental Protection Authority in the Waste Management Plan. Some initiatives proposed as part of this development include:

- Multi placement of wheelie bins in administration and lunchroom areas for paper and cardboard collection for recycling or external skip bins dedicated to recycling materials only. Waste collection is managed by Qantas Property/External Contractors and is scheduled accordingly.
- Discarded oil products / cloths, derived from the maintenance of training equipment are to be kept in a bunded area in prescribed drums and removed by an EPA approved service (SITA) for recycling.

6.2 Ongoing Waste Management

Having suitable systems in place is only one element of an effective waste management system. Compliance by all stakeholders is essential. Contracted cleaners are central to the effectiveness of the systems in place. Monitoring of the system will be carried out by the cleaning supervisor and Flight Centre management.

In addition, contracted cleaners will be required to feed back to the facility management any non-compliance issues they observe during their cleaning activities. This may include contamination of recycling; non-participation in the recycling system, or missing or damaged bins. In this way issues can be promptly dealt with by management.

Waste and recycling contractors will be required to report actual volumes collected by stream so that management can monitor performance and feed this back to stakeholders.

It is anticipated that a reporting program be set up at which would include bin tally sheets that detail the number of bins collected and how full they are at the time of collection, in addition to communication procedures to allow waste contractors to provide feedback regarding contamination and leakage.

7. Air Quality

SLR Consulting Australia Pty Ltd (SLR) was commissioned by Qantas to prepare an Air Quality Impact Assessment (AQIA) report covering the proposed construction and operation of a Qantas Flight Training Centre.

The report identified air quality issues associated with the proposed Development Site operations as predominantly relating to the following:

- Products of fuel combustion (including particulates) from the fire trainer cabins ; and
- Products of fuel combustion and wind-generated dust from the vehicle movements entering and moving around the site.

Consideration was given to the proposed air quality system design, nature of impact, receptor sensitivity and magnitude, with a quantitative assessment undertaken of both potential air quality impacts from fire trainers cabins and vehicle movements. The report concluded that based on the above considerations, and the scale of operations, the potential impact of air emissions from the fire trainer cabins and vehicle on the local sensitive receptors was neutral and would not unreasonably impact occupants of the facility or neighbouring properties.

8. Noise and Vibration Management

8.1 Operational Plant & Equipment

Norman Disney Young (NDY) was commissioned by Qantas to prepare an Noise and Vibration Impact Assessment report covering the proposed construction and operation of a Qantas Flight Training Centre.

The report assessed the operational noise impact originating from the following activities:

- Service vehicle & car movements
- Car park noise emissions
- Bus movement on site
- Changes to local traffic conditions
- Building services plant noise, and
- Operational noise from fire trainer sessions and simulator maintenance noise.

NDY's report concluded that the predicted noise level associated with the service vehicles and cars movements, car park noise, and bus movements on site are expected to comply with boundary noise criteria at the nearest affected industrial receivers in all cases, or not impact the existing noise levels.

NDY confirmed that any potential increase in road traffic on King Street will be well below the noise impact from plane flyovers and will be appropriately attenuated through the building façade to comply with internal noise criteria.

Noise emissions from the equipment are expected to be treated with internally lined ductwork and/or attenuators where required. Noise emissions due to fire training activities and maintenance work are unlikely to contribute to an increase in boundary emission noise.

In relation to operational vibration impact, it is anticipated that all operational activities that will occur on this site are likely to have very little impact on the surrounding buildings on a vibration basis and will readily comply with the vibration limits.

8.2 Training Access

Pilots, Cabin Crew, Maintenance Technicians, Instructors and contractors will frequent the facility on a 24/7 basis to conduct and attend training and to attend to facility/equipment breakdowns. These people will park at the multi-story carpark and walk to the facility. Arrival at the facility will vary depending on their starting location and how the individual navigate to the facility ie over the catering bridge, via King Street etc. On-site parking is available for those contractors requiring close proximity to the facility.

Appendix A – Glossary and Abbreviations

Glossary

Term	Definition
The Site	Qantas Airways Limited owned land in Mascot to the north of Sydney Kingsford Smith Airport consisting of Lots 2 & 4 DP 234489, Lot 1 DP 202747, Lot B DP 164829 and Lot 133 DP 659434. Current site improvements include including at-grade car parking for Qantas staff, an industrial shed to store spare aviation parts, a substation, a disused gatehouse, a Sydney Water Asset with two driveways over it, the Qantas catering facility and Qantas tri-generation plant.
The Project	The construction of a new Flight Training Centre and ancillary uses to replace the existing facility on the Qantas Jetbase that will be impacted by RMS' Sydney Gateway Project.
Mascot Campus	Over 19ha of Qantas Airways Limited controlled land in Mascot to the north of Sydney Kingsford Smith Airport consisting of freehold and leased land. The following lots are owned by Qantas: Lot 133 DP 659434; Lots 4 & 5 DP 38594 Lot 23 DP 883548; Lots 1 & 2 DP 738342; Lot 3 DP 230355; Lot 4 DP 537339; Lots 2 & 4 DP 234489; Lot 4 234489; Lot 1 DP 81210; Lot 1 DP 202093; Lot 1 DP 721562; Lot 2 DP 510447; Lot 1 DP 445957; Lot B DP 164829 and Lot 1 DP 202747 and equates to 16.5ha of land.
Jetbase	The following lots are leased by Qantas: Lot 14 DP 1199594 and Lot 2 DP 792885 and equates to 2.7ha of land. Qantas leased land within the boundaries of Sydney Kingsford Smith Airport.
Sydney Gateway Project	A RMS Project including a road and rail component that is intended to increase capacity and improve connections to the ports to assist with growth in passenger, freight and commuter movements across the region, by expanding and improving the existing road and freight rail networks.

Abbreviations

Acronym	Definition
CASA	Civil Aviation Safety Authority
CCTV	Closed Circuit Television
CEET	Cabin Emergency Evacuation Trainer

Acronym	Definition
DSC	Duty Security Controller
EWIS	Emergency Evacuation Intercom System
IPT	Integrated Procedures Trainer
LGA	Local Government Area
OEM	Original Equipment Manufacturer
POMP	Preliminary Operational Management Plan
SEARs	Secretry Environmental Assessment Requirements

Appendix B – Organisational Chart – Simulator Facilities and Commercial Operations

Appendix A

2a. ORG Chart – Simulator Facilities & Commercial Operations

Simulator Facilities & Commercial Operations

