

Position Snapshot

Position Title:	Flight Operations Engineer
Division / Department:	Aircraft Operations / Business Support Services
Location:	BNE
Reports to:	Manager, Aircraft Operation Services
Direct reports:	0
Level:	1D
Award:	
Classification:	N/A / N/A
Date:	April 2021

Overall Impact Statement

Our vision is to build the airline people love, and we'll do that by having happy people, happy customers, happy owners, by doing what matters, and by ensuring everyone is safe, always. We also believe that how you show up is as important as what you do.

The objective of the Flight Operations Engineer role is to develop, maintain and co-ordinate company processes supporting the functions of Weight & Balance and Aircraft Performance within the Virgin Australia Group. This includes an occasional on-call (24/7) component.

The role must also:

- Develop and maintain aircraft loading systems data and processes.
- Produce and maintain aircraft performance information for flight crew and other internal customers.
- Provide analysis of aircraft fuel efficiency trends via Performance Deterioration Allowances.
- Support aircraft air-ground datalink communications functions and system.
- Deliver training, presentations and reports to internal and external stakeholders (e.g. CASA).

Organisational Context

Virgin Australia Group is a major Australian airline headquartered in Brisbane, Australia. The company operates scheduled domestic and short-haul international flights, charter and cargo services, and the award-winning loyalty program Velocity Frequent Flyer. The Group has been a competitor in the Australian aviation landscape for more than 20 years.

The company is now embarking on an exciting new chapter in the next stage of our journey. In September 2020, US private equity firm Bain Capital acquired Virgin Australia in a \$3.5 billion deal. The airline has now re-launched as a mid-market carrier with a renewed focus on small and medium sized businesses, price-sensitive corporates, premium leisure travellers and holiday makers.

Since November, Virgin Australia has been working on a plan to set itself up for future success. The Group has worked to ramp up flying, simplified its organisational structure, confirmed plans for 25 new 737 aircraft to renew and grow the fleet, and signalled deeper investment in technology and customer experience.

The Group recently appointed several new faces to its Executive Leadership Team, all with a proven track record and deep experience in aviation or consumer-focussed businesses.

Virgin Australia Group prides itself on recruiting the right people to meet the challenges ahead. No matter their role – our employees share an enormous amount of passion for our guests and ambition to be the most loved airline in Australia.

The Aircraft Operation Services team supports Aircraft Performance within the Virgin Australia Group.

Key Accountabilities

Accountability	Major Activities
Safety, Security & Business Resilience	 Complete mandatory training applicable to the role (including Safety, Security, Resilience and, Health and Wellbeing) Participate in the SMS and SeMS by identifying and reporting hazards to the operation Be aware of personal safety matters including the emergency procedures relevant to role location Adhere to all documented operating procedures Actively participate in Safety Shares Actively participate in Better Me initiatives Actively participate in the Groups emergency response program Participate in consultation of WHS matters as related to your working environment Challenge unsafe behaviours in others Abide by the lawful directions of security personnel and law enforcement officers. Actively participate in the Group's Resilience program.
Aircraft Performance	 The efficient design and production of aircraft obstacle avoidance procedures using technical specialist skills and knowledge. Providing compliance with CAO 20.7.1b. Research, calculate and publish aircraft performance data for flight crew manuals as per requirements of CAO 20.7.1b, and the flight planning system. In accordance with the Flight Operations Engineering procedures. Ensure that data is reviewed and updated as required. Source and review NOTAMs, MOWPs and airport updates and assess for impact on Virgin Australia Group operations.
Aircraft Loading Systems	 Work towards CASA issued Weight Control Authority (WCA) in accordance with CAO 100.7 and CAO 100.28. Assist in providing oversight of the loading system by way of database management, program validation, training of flight crew and operational support staff. Keep internally defined documents and an AHM 565 document for each of VA's aircraft variants up to date. Effective and timely resolution of technical issues relating to supported load control systems and the provision of high quality technical advice to day of operations staff. Preparation, analysis and monitoring of weight & balance data used in the Load Control System, and by the Load Controllers.
System and Software Design, Development and Analysis	 Support and use of all relevant manufacturer and third party Software. Including database management, program validation, and training of flight crew and operational support staff. Maintain and improve the existing processes through the use of COTS and in house products.

Accountability	Major Activities
Air-ground datalink communication systems	 Assist to deliver and monitor aircraft communications over ACARS with Hermes and other wireless means. Ensuring the highest level of availability and data integrity. Be cognisant of the changes to ACARS and processes, and their impact on metrics, such as On Time Performance (OTP).
Aircraft Performance Monitoring and Fuel Analysis	 Aircraft Performance Monitoring - Generate cyclical reports on each airframe's fuel consumption and distribute as required. Collaborate across departments to achieve fuel monitoring and efficiency goals.
Airport and Route evaluation, induction and surveillance	 Prepare and analyse data for new and proposed routes requiring the sourcing, generation and analysis of applicable information for block time and payload optimisation. Prepare Reports and technical analysis of airport capability, payload and enroute for requested routes. Carry out technical inspections of airports and represent Group Aircraft Operations and customer airlines (as appropriate) on Airport Induction Projects, and any additional monitoring that will be required.
Regulatory Compliance and Quality Assurance	 Complete data verification and quality assurance in the implementation and ongoing use of Performance software. Carry out testing and fault diagnosis to a high degree of accuracy. Complete data verification and quality assurance in the implementation and ongoing use of manufacturer Weight and Balance data. Assist in the review, development and maintenance of a system for checking and approval of all performance data and weight & balance data prior to issue. Review and evaluate current and proposed regulations relevant to aircraft performance, weight & balance and airport requirements for both domestic and international operations.
Team Support & Special Projects	 Assist with management and control of the Jeppesen/Honeywell navigation data for the Flight Management Computer (FMC) on the aircraft. SME support and management of special projects as directed by Leader, Aircraft Operations Technical Support or delegate. Provide support to other Aircraft Operations Technical Support teams as required Provide SME support to Aircraft Operations division. Provide expert teaching and guidance in FOE disciplines to flight crew, check and trainers, flight dispatchers and load controllers.
On call after hours support	 As duty flight operations engineer provide support and coverage for all aircraft operations technical support functions.

Accountability	Major Activities
Liaison and Relationship Management	 Liaise with Aircraft Operations management, Engineering, Customer Service Delivery in the development of shared systems, procedures and operational documentation to ensure regulatory compliance and efficiency. Liaise with relevant authorities, service providers and aerodrome operators (both domestic and international) relating to aircraft performance, weight & balance and aerodrome infrastructure issues. Develop highly effective relationships across the Group with all internal and external customers and stakeholders. Displays respectful and considerate communication and actions. Displays a high degree of openness, and agreeableness.

Key Requirements

Requirement	Essential	Desirable
Education / Qualifications	 Either Mechanical Engineering, computer engineering, or other aviation related Tertiary qualification. 	 Completed an Aircraft Manufacturer aircraft performance or weight & balance training. CASA Weight Control Authority Holds or held a Commercial Pilot Licence.
Experience	 Experience in technical and procedural writing. Previous experience in an airline operational environment Experience working in small flexible team environment. 	 Practical experience in aircraft weight and balance and aircraft performance analysis. Delivery of training. Commercial pilot experience

Requirement	Essential	Desirable
Skills	 Intermediate user of the MS Office Suite of applications. Familiarity with Geographic Information Systems (GIS). Familiarity with aviation operational and navigational information including Nav Databases. A proven ability to analyse data in many forms and provide accurate and reliable advice based on this analysis. Ability to judge the severity of problems, associated risk and identify the need for escalation when required. Ability to present in an open forum. 	 Familiarity and experience with the following applications: Boeing OPT Boeing AFM-DPI Boeing PET OPS Airportmax Computer coding, programming and web design. Familiarity with computer aided design (CAD) software.
Knowledge	 Command of Spoken and Written English. A high level of understanding and experience in the interpretation of Aviation legislation, regulations and orders. Practical knowledge of Aerodynamics applicable to large aircraft. 	 Knowledge of the principles of takeoff and landing performance. Knowledge of the principles of weight and balance.

Virgin Australia Leadership Standards

Standard	Level 1 Behavioural Descriptors
Passionately VA	 Displays a passion for delighting both internal and external customers Seeks to understand customer needs by actively listening to their thoughts and concerns Embraces diversity and is responsive to different experiences, perspectives, values and beliefs Is curious and continuously looks for ways to learn and improve Knows, understands and follows standard operating procedures Is authentic and honest, can admit to making mistakes
Desire to be Better	 Strives to improve experiences for internal and external customers Has a curious mind towards identifying opportunities and finding ways to be better Demonstrates a high level of personal motivation to learn and develop Resourceful and creative with coming up with solutions Identifies and contributes ideas for improvement Identifies, addresses and reports safety hazards
Collaborates	 Displays passion for sharing knowledge and ideas Voices opinions and new ideas freely Respects differences and seeks to understand diverse perspectives Works constructively in and across teams, viewing every interaction as an opportunity to collaborate Is curious and open-minded to new ideas, perspectives and approaches Clarifies own understanding and embraces alternate view Challenges behaviours that compromise safety
Inspires Team	 Participates in 2-way conversations, listening and discussing issues thoughtfully and openly Understands and value the skills, knowledge and experiences that others bring Engages with others, clearly conveying information and facts Actively seeks to provide suggestions on how to be a better team Informs team about work and progress Understands personal obligations with respect to following standard operating procedures
Creates Future	 Welcomes change and remains positive in the face of ambiguity Seeks information to understand change and impacts Demonstrates a change mindset, flexibility and openness Understands the need for VA Group to be innovative and drive business improvement Seeks to understand Virgin Australia's strategy and how they can contribute Demonstrates forward-thinking and awareness of immediate consequences of actions ensuring safe outcomes
Drives Results	 Plans work to deliver within expected timeframes Shows energy, enthusiasm and initiative for achieving own goals Follows through on commitments to both internal and external customers Seeks guidance and support to address obstacles and achieve set goals Integrates feedback and takes responsibility for achieving own goals Delivers outcomes within standards operating procedures.