

Loading event involving a Bombardier DHC-8, VH-LQK

Brisbane Airport, Queensland on 25 August 2014

ATSB Transport Safety Report Aviation Occurrence Investigation AO-2014-145

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Addendum

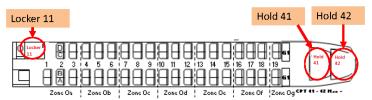
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Loading event involving a Bombardier DHC-8, VH-LQK

What happened

On 25 August 2014, a QantasLink Bombardier DHC-8 aircraft, registered VH-LQK, was being prepared for a scheduled passenger flight to Blackall and then Longreach, from Brisbane Airport, Queensland. Ground handlers loaded bags into the aircraft in accordance with the load instruction report: 12 bags with destination Blackall and 47 bags for Longreach in hold 41; 20 bags for Longreach in hold 42; and nil bags or cargo in locker 11 (Figure 1).

Figure 1: Cargo hold diagram



Source: Operator

A ground handling agent transcribed the baggage information onto a call back card, but indicated there were 12 bags in hold 41 instead of 59 bags. The agent omitted to verify the card information with the loaded baggage. The call back card was then provided to the flight crew, who entered the baggage information into the iPad loading application to complete the final load sheet. During the cross check of the load sheet, the flight crew did not identify the discrepancy between the load sheet and provisional baggage information.

The aircraft departed Brisbane and arrived in Blackall at 0915 Eastern Standard Time, with no anomalies noted during the flight. A ground handler at Blackall completed the offload reconciliation procedure and identified a discrepancy of 47 bags or 676 kg in hold 41.

Weight and balance review

A subsequent review of the aircraft weight and balance indicated that the aircraft remained within centre of gravity limits and no structural limits were exceeded.

Operator investigation

An investigation conducted by the aircraft operator found the following:

- In June 2014, the company implemented a major change initiative to the company's approved loading system. This included flight crew performing load control functions using an iPad application and changes in loading related paperwork and ground handling procedures.
- The loading documentation procedure used, and the flight crew procedures used when
 calculating figures using the iPad loading application, had been superseded. A memo was
 issued to company flight crew reminding them of the correct procedures for using the loading
 application. The contractor responsible for aircraft loading has increased the supervision levels
 required when loading aircraft.

Safety message

The ATSB SafetyWatch highlights the broad safety concerns that come out of our investigation findings and from the occurrence data reported to us by industry. One of the safety concerns is about data input errors,



<u>www.atsb.gov.au/safetywatch/data-input-errors.aspx</u>. Data input errors, such as the incorrect loading figures being used, occur for many different reasons. The consequences of these errors can include a range of aircraft handling and performance issues.

Accurate weight and balance information is essential for the safety of every flight. Following standard procedures and checklists minimise the potential for error.

General details

Occurrence details

Date and time:	25 August 2014 – 0715 EST		
Occurrence category:	Incident		
Primary occurrence type:	ce type: Loading related event		
Location:	Brisbane Aerodrome, Queensland		
	Latitude: 27° 23.05′ S	Longitude: 153° 07.05′ E	

Aircraft details

Manufacturer and model:	Bombardier DHC-8-402		
Registration:	VH-LQK		
Operator:	Sunstate Airlines		
Serial number:	4415		
Type of operation:	Air Transport High Capacity - Passenger		
Persons on board:	Crew – 4	Passengers – 67	
Injuries:	Crew – Nil	Passengers – Nil	
Damage:	Nil		

About the ATSB

The Australian Transport Safety Bureau (ATSB) is an independent Commonwealth Government statutory agency. The ATSB is governed by a Commission and is entirely separate from transport regulators, policy makers and service providers. The ATSB's function is to improve safety and public confidence in the aviation, marine and rail modes of transport through excellence in: independent investigation of transport accidents and other safety occurrences; safety data recording, analysis and research; and fostering safety awareness, knowledge and action.

The ATSB is responsible for investigating accidents and other transport safety matters involving civil aviation, marine and rail operations in Australia that fall within Commonwealth jurisdiction, as well as participating in overseas investigations involving Australian registered aircraft and ships. A primary concern is the safety of commercial transport, with particular regard to fare-paying passenger operations.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and Regulations and, where applicable, relevant international agreements.

The object of a safety investigation is to identify and reduce safety-related risk. ATSB investigations determine and communicate the safety factors related to the transport safety matter being investigated.

It is not a function of the ATSB to apportion blame or determine liability. At the same time, an investigation report must include factual material of sufficient weight to support the analysis and findings. At all times the ATSB endeavours to balance the use of material that could imply adverse comment with the need to properly explain what happened, and why, in a fair and unbiased manner.

About this report

Decisions regarding whether to conduct an investigation, and the scope of an investigation, are based on many factors, including the level of safety benefit likely to be obtained from an investigation. For this occurrence, a limited-scope, fact-gathering investigation was conducted in order to produce a short summary report, and allow for greater industry awareness of potential safety issues and possible safety actions.