

# ATSB TRANSPORT SAFETY INVESTIGATION REPORT

Aviation Occurrence Report – 200607054

Final

Reported Runway Excursion – RAAF Richmond, NSW

**22 November 2006** 

**UR-BXQ** 

**IL76 TD** 



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Aviation Occurrence Report 200607054 Final

# Reported Runway Excursion RAAF Richmond, NSW – 22 November 2006 UR-BXQ – IL76 TD

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### Abstract

On 22 November 2006 at 0817 Eastern Summer Time, an Ilyushin Design Bureau IL-76TD (IL-76) aircraft, registered UR-BXQ, was reported to have entered the runway 28 stopway before becoming airborne while departing from runway 28 at Royal Australian Air Force Base Richmond, NSW. The aircraft was departing on a charter flight to Manila, the Philippines with 10 crew members on board.

A number of witnesses at various locations on the airport reported that the main wheels of the IL-76 did not lift off the ground until after the aircraft entered the stopway. However, the pilot in command of the IL-76 stated that the aircraft became airborne at about 250 m before the end of the runway.

From the available witness and flight crew reports, and the physical and recorded evidence, the investigation was unable to determine whether the aircraft entered the runway 28 stopway. The investigation could not reconcile the discrepancy between the recollection of events provided by the witnesses to the occurrence, and that of the pilot in command.

# THE AUSTRALIAN TRANSPORT SAFETY BUREAU

The Australian Transport Safety Bureau (ATSB) is an operationally independent multi-modal Bureau within the Australian Government Department of Transport and Regional Services. ATSB investigations are independent of regulatory, operator or other external bodies.

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. Accordingly, the ATSB also conducts investigations and studies of the transport system to identify underlying factors and trends that have the potential to adversely affect safety.

The ATSB performs its functions in accordance with the provisions of the *Transport Safety Investigation Act 2003* and, where applicable, relevant international agreements. The object of a safety investigation is to determine the circumstances in order to prevent other similar events. The results of these determinations form the basis for safety action, including recommendations where necessary. As with equivalent overseas organisations, the ATSB has no power to implement its recommendations.

It is not the object of an investigation to determine blame or liability. However, it should be recognised that an investigation report must include factual material of sufficient weight to support the analysis and findings. That material will at times contain information reflecting on the performance of individuals and organisations, and how their actions may have contributed to the outcomes of the matter under investigation. 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.

Central to the ATSB's investigation of transport safety matters is the early identification of safety issues in the transport environment. While the Bureau issues recommendations to regulatory authorities, industry, or other agencies in order to address safety issues, its preference is for organisations to make safety enhancements during the course of an investigation. The Bureau prefers to report positive safety action in its final reports rather than making formal recommendations. Recommendations may be issued in conjunction with ATSB reports or independently. A safety issue may lead to a number of similar recommendations, each issued to a different agency.

The ATSB does not have the resources to carry out a full cost-benefit analysis of each safety recommendation. The cost of a recommendation must be balanced against its benefits to safety, and transport safety involves the whole community. Such analysis is a matter for the body to which the recommendation is addressed (for example, the relevant regulatory authority in aviation, marine or rail in consultation with the industry).

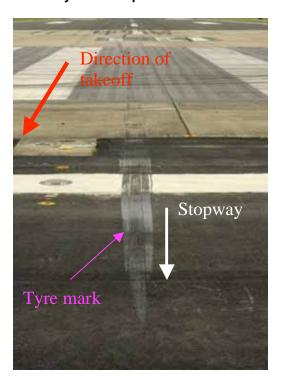
# **FACTUAL INFORMATION**

On 22 November 2006 at 0817 Eastern Daylight-saving Time<sup>1</sup>, an Ilyushin Design Bureau IL-76TD (IL-76) aircraft, registered UR-BXQ, was reported to have entered the runway 28 stopway<sup>2</sup> before becoming airborne while departing from runway 28 at Royal Australian Air Force (RAAF) Base Richmond (RAAF Richmond), NSW. The aircraft was departing on a charter flight to Manila, the Philippines with 10 crew members on board.

A number of witnesses at various locations on the base reported that the main wheels of the IL-76 did not lift off the ground until after the aircraft entered the stopway. However, the pilot in command of the IL-76 stated that the aircraft became airborne at about 250 m before the end of the runway.

The RAAF Richmond manoeuvring area and control zone (CTR) were active at the time the IL-76 taxied for departure and were being administered by the Department of Defence – RAAF. An air traffic controller on duty at the time of the occurrence conducted a routine inspection of the manoeuvring area before, and immediately following, the departure of the IL-76. The controller's inspection following the departure of the IL-76 found a tyre mark beyond the upwind threshold of runway 28, which continued into the stopway (figure 1).

Figure 1: Photograph taken in the direction of runway 10, showing the tyre mark beyond the upwind threshold of runway 28.



<sup>1</sup> The 24-hour clock is used in this report to describe the local time of day, Eastern Daylight-saving Time (ESuT), as particular events occurred. Eastern Daylight-saving Time was Coordinated Universal Time (UTC) + 11 hours.

<sup>2</sup> A defined rectangular area on the ground at the end of the available take-off run that has been prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned takeoff.

The investigation determined that the tyre marks were not those of an IL-76. The bogie configuration of an IL-76 did not match those in the runway 28 stopway, and the dimensions of the markings themselves did not match those of the tyres of an IL-76.

There was no relevant radar data that could be used to determine the point at which the IL76 became airborne. In addition, the investigation was unable to obtain information from the aircraft's flight data recorder.

The aircraft's take-off weight was reported as 170,587 kgs. The weight and balance and other performance data provided by the crew were independently validated by the Australian Transport Safety Bureau. Those calculations indicated that the aircraft was capable of operating safely from runway 28 in the prevailing weather conditions.

From the available witness and flight crew reports, and the physical and recorded evidence, the investigation was unable to determine whether the aircraft entered the runway 28 stopway. The investigation could not reconcile the discrepancy between the recollection of events provided by the witnesses to the occurrence, and that of the pilot in command.