

Senate Rural and Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Transport and Regional Services

Department of Transport and Regional Services

Consideration of Senate Budget Estimates May 2005

Question No.: ATSB 01

Topic: Failure of Aircraft Engines

Hansard Page: p. 54 (Monday, 23/5/05)

Output: Australian Transport Safety Bureau

Senator O'Brien asked:

Is there any correlation between the age of an aircraft and the statistical probability of failure of engine or airframe over time.

Answer:

There has been no statistical research undertaken on the relationship between the age of aircraft and the probability of failure of engine or airframe over time. The Civil Aviation Safety Authority has however, undertaken a project on issues relating to ageing aircraft.

The circumstances of most occurrences are not related to the age of the aircraft's airframe or engine. Occurrences relate mainly to maintenance errors, pilot mishandling of the aircraft, controlled flight into terrain, wire-strikes, fuel exhaustion and non age-related engine problems.

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ANSWERS TO QUESTIONS ON NOTICE

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Consideration of Senate Budget Estimates May 2005

Question No.: ATSB 02

Topic: Age of Aircraft in Aviation Accidents

Hansard Page: p. 55 (Monday, 23/5/05)

Output: Australian Transport Safety Bureau

Senator O'Brien asked:

Senator O'BRIEN—Of the 124 non-sport aviation accidents, is it possible to give us a breakdown of the age of the aircraft involved?

Mr Bills—Yes; I cannot do that now, though.

Senator O'BRIEN—I am not expecting you to have it in your back pocket, but we would appreciate having that.

Mr Bills—CASA should have that detail and we can link with them and produce it.

CHAIR—Is that engine and airframe?

Senator O'BRIEN—That is the age of aircraft.

CHAIR—You would want engine and airframe hours.

Mr Stray—Depending on the engine type, the engines are subject to major overhaul at various—

CHAIR—That is right, and there is the number of hours since a last major overhaul.

Mr Stray—Since the last major overhaul—that is what—

CHAIR—Then there would be the total as well.

Mr Stray—So how many overhauls and how many lives—

CHAIR—Yes, elapsed engine and airframe hours, and hours left to run. I do not need to tell you the business. There are various levels of inspection of engines before their last major overhaul.

Mr Bills—The only caveat may be that, of those 124, we have not investigated all of them. For the ones we have not investigated we may not have that data and may not readily be able to get it, but we will do our best.

Senator O'BRIEN—Will you be able to include the location of the accidents?

Mr Bills—Certainly by state or territory—that is in our database.

Senator McLUCAS—But not areas smaller than that?

Mr Bills—Again, exactly what is in our database may depend on whether we have investigated it.

Senator O'BRIEN—Perhaps you can tell us how many of those were in the top half of Queensland.

Answer:

The **attached Table 1** features details of the 124 accidents involving civil aircraft within Australian Territory during the period 01 July 2004 to 22 May 2005 excluding sports aviation.

In the 110 aviation accidents where the aircraft age is known, the average accident aircraft age was 25 years. The average age at the end of 2003 of Australia's overall General Aviation and regional Airlines fleet in which most accidents occur was 26.7 years.

The **attached Table 2** details the sixteen of these accidents that occurred in North Queensland, above the Tropic of Capricorn. The fifteen North Queensland accidents for which the aircraft age is known feature an average aircraft age of 23 years.

Airframe hours and engine hours are not considered to be relevant factors for any of these 2004-05 occurrences so are not detailed in the attached tables.