Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: Design life for wide-bodied aircraft Proof Hansard Page/s:** 70 (14/02/2012)

Senator Gallacher asked:

Senator GALLACHER: What is the designed life for a wide-bodied aircraft? Is it 27 years? **Mr McCormick:** I will take that on notice. It relates to cycles and hours of flying rather than actual years of age.

Answer:

The design life of older wide-bodied aircraft in service today has been 20 years or around 50,000 flight cycles. Aircraft that exceed this design life do so on the basis of extensive manufacturer formulated inspection and maintenance programs, which ensure the ongoing airworthiness and safe operation of the aircraft.

In more modern aircraft the design life is closer to 30 years, with manufacturers designating over 100,000 flight cycles. This change is due to a number of factors including advances in technology.

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: Service difficulty reports for Jetstar and Virgin Proof Hansard Page/s:** 70 (14/02/2012)

Senator Gallacher asked:

Senator GALLACHER: How do Qantas, Virgin and Jetstar compare on that log, allowing for the differing fleet sizes and ages?

Mr McCormick: I would have to take a comparison on notice, but I can give you the figures for Qantas if you like.

Senator GALLACHER: Thank you.

Mr McCormick: The basic issue is that we have what is called service difficulty reports. Service difficulty reports mean for any major maintenance difficulties that they encounter an airline or anybody else subject to that has to report that defect within 48 hours. In the case of Qantas, their service difficulty reports for October to December 2011 numbered 92. **Senator GALLACHER:** Do you have the stats for Jetstar or Virgin? **Mr McCormick:** Not as a comparison. We will take that on notice.

Answer:

For the period October to December 2011, Qantas submitted 92 Service Difficulty Reports (SDRs). For the corresponding period, Virgin submitted 47 SDRs and Jetstar submitted 11.

For comparative purposes the respective fleet sizes are:

Qantas – 151 aircraft, made up of Boeing 737, 767, 747 and Airbus A330 and A380; Virgin – 94 aircraft, made up of Boeing 737, 777 and Embraer 170/190; and Jetstar – 64 aircraft, made up of Airbus A320 and A330.

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: A380 scheduled inspections Proof Hansard Page/s:** 71 (14/02/2012)

Senator Heffernan asked:

Senator HEFFERNAN: According to my information of February, the Qantas A380 fleet was grounded after cracks were found in the wings of the planes. Current regulatory requirements in the EU require all A380s to be checked after 1,300 flights, yet no Qantas planes have achieved that many hours yet; have they?

Mr McCormick: I do not know whether any aircraft has achieved that yet, but the Qantas fleet in total will not achieve a 1,300 flight cycle until the end of February this year. **Senator HEFFERNAN:** Was a check on the wing scheduled for the future? What time distance was this schedule for? Was there a forward plan?

Mr McCormick: For repairs or inspections?

Senator HEFFERNAN: Yes.

Mr McCormick: The inspections come with the air weather director from EASA, the European Aviation Safety Agency, and we incorporate any ADs that they— Senator HEFFERNAN: Is there a time and distance requirement in that for the inspections? Mr McCormick: If I could— Senator HEFFERNAN: You can take that on notice if you like.

Mr McCormick: I think we will take it on notice, yes.

Answer:

Airworthiness Directive (AD) 2012-0026, issued by the European Aviation Safety Agency on the 8 February 2012, is applicable to all Airbus A380 aeroplanes. The effective date of this AD is 13 February 2012.

The time frame in which to accomplish required inspections is based on the total number of flight cycles accumulated since an aircraft's first flight, according to the table set out in the AD, which specifies:

- For less than 1216 flight cycles, inspect before the accumulation of 1300 flight cycles;
- For cycles of 1216 or more, but less than 1384 flight cycles, inspect within 6 weeks or 84 flight cycles whichever occurs first after the effective date of the AD;
- For flight cycles of 1384 or more, inspect no later than 3 weeks after the effective date of the AD.

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: CASA legal costs for Polar Aviation Proof Hansard Page/s:** 72 (14/02/2012)

Senator Eggleston asked:

Senator EGGLESTON: I wish to make some inquiries about the cost of CASA's various legal cases against Polar Aviation. Polar Aviation is a small Port Hedland aviation company which I understand has been in dispute with CASA since 2004. This has led to a series of legal actions beginning with the Administrative Appeals Tribunal and then the Federal Court, all of which Polar Aviation has won and all of which cases have been appealed by CASA. I understand that now, eight years later, CASA is still appealing the decisions made about Polar Aviation. In fact, the managing director of Polar Aviation has said to me in a letter describing this process: *What followed was a relentless vendetta to close the company down. The court action that followed was defended in the AAT and the Federal Court and Polar Aviation has won on all occasions*.

This case is now eight years old, as I said. All this man, Clark Butson, says he wants to do is: ... tell my story to a judge. All CASA wants to do is avoid that process at any cost. This case has real relevance and should be tested in a court. If CASA has nothing to fear why will they not bring it on?

What bothers me is that this is a small company. CASA represents the Commonwealth government and has used the financial resources of the Commonwealth government to try to shut down this very successful and respected airline in the Pilbara. I would like to have—and I ask for it to be provided on notice—a detailed summary of the costs incurred by CASA in the various legal actions against Polar Aviation.

Answer:

Administrative Appeals Tribunal proceedings

External legal costs incurred by CASA: \$34,755 Internal legal costs (CASA in-house lawyer): \$15,000

Federal Court application

In March 2005, CASA sought review of a decision of a member of the Tribunal made on 11 February 2005 to stay CASA's decision of 14 January 2005 to cancel Polar Aviation's Air Operator's Certificate (AOC). On 27 July 2005, the Court dismissed CASA's application.

External legal costs incurred by CASA: \$11,550 Internal legal costs (CASA in-house lawyer): \$4,000

Payment to Grundy Maitland & Co for costsinvolved in 2005 Federal Court hearing:\$30,929

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: Tests on air quality in aircraft Proof Hansard Page/s:** 73 (14/02/2012)

Senator Xenophon asked:

Senator XENOPHON: If you could provide some further information on notice, that would be useful.

Mr McCormick: If you give us a specific question, certainly, yes.

Senator XENOPHON: Are any regular tests carried out of purity of air in aircraft? Are standards enforced? Is there a difference of standards between domestic or international flights?

Is the issue of any legal or policy distinctions between an international flight sector and a domestic flight sector something that is within your purview, or is that more a matter for Customs or Immigration?

Mr McCormick: In relation to air quality now?

Senator XENOPHON: No, going to tagged international flights.

Mr McCormick: Tagged international flights?

Senator XENOPHON: Yes. Does CASA have a role with that?

Mr McCormick: We have a role as to the fatigue side of it with the crew that are involved in those tagged flights, if that is what you mean. And the actual tags go to traffic rights and—

Answer:

Regular testing of cabin air is not a requirement for either domestic or international flights. However, airline operators must report smoke and fume events in aircraft to CASA through its Service Difficulty Reporting system.

The report by the Expert Panel on Aircraft Air Quality: *Contamination of aircraft cabin air by bleed air* – *a review of the evidence* noted that one of the particular difficulties with collecting evidence of cabin air contamination was that, although it was possible to sample cabin air during normal operations, events of contamination were infrequent and unpredictable.

Through the recently established Joint Aviation Safety Analysis Coordination Group, CASA and the ATSB will be looking more closely at the reasons behind smoke and fumes events in aircraft.

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: Foreign based flight crew duties and hours Proof Hansard Page/s:** 74 (14/02/2012)

Senator Xenophon asked:

Senator XENOPHON: Has there been any level of information exchange or cooperation with the Fair Work Ombudsman's office in relation to their investigation about foreign based flight crew and their duties and hours?

Mr McCormick: I will take it on notice but, generally speaking, we are looking at the Civil Aviation Act and how it is applied.

Answer:

There has been no information exchange or cooperation between CASA and the Fair Work Ombudsman's office in relation to their investigation about foreign based flight crew and their duties and hours.

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: Fatigue Risk Management Systems Proof Hansard Page/s:** Written

Senator Xenophon asked:

- 1. Can you give an update on the progress of the fatigue risk management project?
- 2. In their supplementary submission to the current inquiry into the air crew bills, AIPA offered some views on interim measures to manage cabin crew fatigue pending the formal commencement of work in that area. Were you aware of those proposals?
 - (a) Did CASA develop a response to those proposals?
 - (b) Do you still believe that an interim solution, such as proposed, would "seriously divert resources from completing the fatigue risk management scheme for pilots", as was your evidence on 24 Nov 2011?
- 3. I note the comments of Jetstar Mr Bruce Buchanan in this committee's inquiry into the Qantas Sale and Aircraft Navigation amendments about aircraft leasing. I note that CASA have an extensive policy document called *Regulatory policy CEO PN007 2010*, which is called *Assessing aircraft leases prior to adding aircraft to an AOC*.
 - (a) What is your interest in how an aircraft comes into an operator's control?
 - (b) Does it make any difference whether an aircraft is wet-leased (where I understand the operator would be granted a lease by the owner) or just operated on behalf of the owner (which I am told is described as an operating lease)?
 - (c) It is significant if an airline such as Qantas owns an aircraft, then leases that aircraft to a subsidiary to provide services on behalf of the airline as a purported wet-lease?
 - (d) Is it different if the airline leases the aircraft from the owner (say, a bank) and then subleases it to the subsidiary to provide services on behalf of the airline as a purported wet lease?
- 4. Mr Joyce stated that Jetconnect and Cobham were wet lease operators. Given that he made a point of these arrangements in his evidence given last Monday to the aviation bills inquiry, I do not imagine that there should be any privacy or confidentiality issues in confirming the Government's assessment of those arrangements. Is Mr Joyce's evidence consistent with your determinations as per your *Regulatory policy CEO PN007 2010, Assessing aircraft leases prior to adding aircraft to an AOC* document?
- 5. Evidence given to the Committee indicates some confusion about whether a flight is an international flight, a domestic flight or some form of undefined hybrid.
- 6. Is there a legal and or policy distinction between an international flight sector and a domestic flight sector?
- 7. Are they mutually exclusive?
- 8. Who determines the nature of the flight from a regulatory perspective?
- 9. What is the legal definition of a "tag" flight? Is it an operator's invention or term recognised by aviation regulators?
- 10. How many sectors conducted solely within Australian airspace may be designated as international "tag" flights? How is such a determination monitored?

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Answer:

- 1. The fatigue risk management project team, on which CASA, industry and staff associations are represented, has been progressing well with this project. It is expected that the Notice of Proposed Rule Making to amend the Civil Aviation Order for fatigue management for flight crew will be published in April 2012.
- CASA was aware of the Australian and International Pilots Association's (AIPA) submission. While AIPA provided a large amount of information to the project team relating to flight crew, CASA is not aware of detailed material relating to cabin crew.
 a. See above.
 - b. Yes. CASA considers that any evaluation of parallel alternatives for cabin crew would divert resources from the flight crew project and impact upon anticipated timelines.
- 3. a. CASA interest is in ensuring that any aircraft lease arrangement does not compromise operational safety of an aircraft.
 - b. No. A 'wet lease' is for an aircraft and crew. An 'operating' (or dry) lease is for the aircraft only.
 - c. CASA does not consider such an arrangement to be a "significant" event. It is not an unusual practice for an airline to lease aircraft to other operators. If this occurs CASA, takes appropriate steps to ensure that whoever is the operator of the aircraft has operational control over it and its crew.
 - d. No.
- 4. CASA Regulatory Policy Notice CEO-PN007-2010 requires CASA to assess the lease arrangement whenever an aircraft is added to an Air Operator's Certificate (AOC). CASA understands that Qantas holds the leases for Boeing 717 aircraft operated by Cobham. Cobham holds an Australian AOC and is the registered operator of the aircraft listed on the AOC. CASA does not have any safety concerns with the maintenance or operation of aircraft operated by Cobham.

This regulatory policy only applies to an Australian AOC. Jetconnect is a subsidiary of Qantas and operates in and out of Australia under the Australia New Zealand Aviation (ANZA) privileges using aircraft registered in New Zealand. As New Zealand registered aircraft, their operations fall under the New Zealand Civil Aviation Authority.

- 5-8. Refer to Question no. 87
- 9. The term "tag" flight is a term generally used within the aviation industry to refer to a flight that may be added on to another flight. While it is commonly understood in the industry, it is not a term that is used in the regulatory framework applicable to airline operations in Australia.
- 10. The Department publishes a summary of routes and frequencies that international airlines are authorised to operate in accordance with the *Air Navigation Act 1920*. This summary includes approvals given to airlines to operate domestic sectors as part of an international service. The timetable summary is available at: http://www.infrastructure.gov.au/aviation/international/timetable.aspx

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority **Topic: Qantas Engine Stop Proof Hansard Page/s:** Written

Senator Heffernan asked:

03/02/2012. A Qantas plane was forced to return to Canberra after it suffered engine failure. Passengers report seeing the propellers stop turning.

- 1. Has there been a report into this incident? What have been the findings so far? When will the report be made publicly available?
- 2. Have there been other instances in the past 12 months regarding Qantas flight malfunctions? Provide a list of these details.
- 3. What percentage of these incidents can be linked to improper or inadequate maintenance? In this definition include all incidents of any reported malfunction or failure occurring in the past 12 months whilst the plane has been in flight and grounded.
- 4. Given that Tiger Airways was grounded last year for inadequate maintenance please provide the differences between the Qantas case and the Tiger case. Prove why Qantas should not suffer the same grounding.

Answer:

- 1. A report of this incident was made to the ATSB and to CASA, in the latter case through CASA's Service Difficulty Reporting (SDR) system. The cause of the failure was a sheared fuel metering valve drive shaft. These reports are not available to the public although summaries of select SDRs are published in CASA's Flight Safety Australia magazine.
- 2. Qantaslink has experienced a number of in-flight shutdowns on Dash 8 aircraft over the past 12 months.
 - 15 September 2011: VH-TQY, the crew conducted a precautionary in-flight shut down due oil pressure transmitter failure. Oil pressure transmitter replaced.
 - 12 October 2011: VH-QOE, the crew conducted a precautionary in-flight shut down following caution message indicating Full Authority Digital Engine Control (FADEC) failure. The FADEC was removed and sent to the manufacturer for investigation.
 - 19 October 2011: VH-TQG, the crew conducted a precautionary in-flight shut down due to low engine oil pressure. The cause was identified as an oil leak from the engine generator.
 - 30 November 2011: VH-QOR, the crew conducted a precautionary in-flight shut down due to high engine oil temperature. The cause was identified as a faulty engine oil cooler bypass valve.
 - 06 December 2011: VH-QOW, an engine failure caused by accessory gearbox driveshaft failure. The engine was sent to the manufacturer for investigation.

- 03 February 2012: VH-QOE, an engine failure due to failure of fuel metering unit drive shaft failure. The pump has been sent to the manufacturer for investigation.
- 23 February 2012: VH-SBG, an engine failure caused by accessory gearbox driveshaft failure. The engine was sent to the manufacturer for investigation.
- 3. Monitoring has not revealed any improper or inadequate maintenance by Qantaslink that has contributed to the in-flight engine shut down events. CASA continues to monitor Qantaslink activity.
- 4. Qantaslink is addressing the causes of the in-flight shut down events in an appropriate manner and is engaging with CASA, the aircraft manufacturer and the engine manufacturer in the process. CASA is satisfied that the actions being taken are appropriate to address the causes of the shutdown events. CASA does not consider that the situation in this instance poses a serious and imminent risk to aviation safety.

Program: n/a Division/Agency: (CASA) Civil Aviation Safety Authority Topic: Virgin pilot knocked over by Qantas engine thrust – 19 Oct 2011 Proof Hansard Page/s: Written

Senator Heffernan asked:

- 1. If ATSB does not undertake a report into this, what agency will? Is ATSB aware of an investigation into the incident completed by any other department?
- 2. Is there a minimum distance which pilots must maintain in relation to other aircraft when taxiing? Provide the details. If there is not a regulation for this please provide any material which suggests why this should be the case.
- 3. Has there been an investigation as to whether this regulation was breached?
- 4. Is there a maximum thrust level regulation for taxiing on a runway? Was this regulation breached?
- 5. It is clear that the current regulation is not maintaining safety; has there been a consideration of a change in regulation so that this type of incident does not occur again?

Answer:

- The report of the ATSB's investigation into the incident was published on the 13 March 2012, in the Aviation Short Investigation Bulletin (AB- 2012-019) Fourth Quarter 2011 (Issue 8). The report, entitled AO-2011-137 VH-OEH Jetblast Occurrence, can be found at page 17 of the Bulletin.
- 2. Yes, the distance is 46 metres for turbine engines as set out in the Civil Aviation Orders.
- 3. CASA has not investigated this matter to date. CASA will consider the findings of the ATSB report and take such action, if any, as may be appropriate.
- 4. There is no maximum thrust level regulation specified for taxiing on a runway.
- 5. The Manual of Standards Part 139 relating to aerodromes provides guidance for aerodrome operators as to the necessary distances to protect people and property from jet blast. CASA does not agree that the incident necessarily demonstrates that "the current regulation is not maintaining safety."