ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 114

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority **Topic:** Amount of hours flying for CASA inspectors

Proof Hansard Page/s: 101-102 (18/10/11)

Senator FAWCETT asked:

Senator FAWCETT: How do you go with maintaining the currency and competency of both your engineering workforce and your flight operations inspectors to allow them to do their role and stay up to date with, in the case of the flying guys, their flying instrument ratings et cetera and, in the case of the engineering guys, the evolution into more FADEC and electronic systems? How do you tackle that challenge?

Mr McCormick: We are doing a very extensive training program. We have a number of tiers in that training. One of them is basic inspector training and then there are advances, for instance, in the engineering world that you speak of. We have courses we put people through. It is nascent days for us going into things like carbon fibre reinforced plastics, composites and some of the more emerging technologies. We have a plan to do that. We have a training program and we are putting people through it. But it is taking time because we had to start with the basic training again to make sure all our people were at the right level that we wanted people at. They were at the right level, but there is also a function of being seen to have done the right thing, not just to have actually done the right thing. On the FOI side, we have discussed at length how much recurrent flying we give our flying operations inspectors. We currently do not have our flying operations inspectors operating in a control seat with the regular public transport operators, the high-capacity jet operators, but we do put them through simulator programs and we are currently addressing the amount of flying that we give each of the FOIs during the year.

Senator FAWCETT: What is that level at the moment?

Mr McCormick: We are actually in negotiations with our workforce agreement at the moment. That is an issue that is in those negotiations. I can take it on notice.

Senator FAWCETT: Surely that is not so much a condition of employment, as in a benefit, as a competence based thing. I am aware that the Defence Force, particularly the Navy, has recently gone through a review of basic competencies required for somebody to be a current IFR pilot. I think—and I am happy to be corrected—the number of flight hours just to achieve the competencies was over 100 per year. I think it came to 120. Do you need to link it in with the conditions of employment? Surely it is a safety issue.

Mr McCormick: It is a core deal. That is for sure. The military probably has a wider set of skills required than we have. The reason I would like to take it on notice is that I am not sure of the actual number. I think it is 40 hours at the moment, but I do not know what that number is. We will take it on notice,

Answer:

The following flight hours are allocated to CASA Inspectors and Examiners:

- Air Transport Inspectors 16 hours per annum in a flight simulator;
- General Aviation Inspectors 39 hours per annum in an actual aircraft; and
- General Aviation Examiners 70 hours per annum (approximately 10 hours in a flight simulator and 60 hours in an aircraft).

ANSWERS TO QUESTIONS ON NOTICE Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 115

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Obstacles at Archerfield aerodrome

Proof Hansard Page/s: 105 (18/10/11)

Senator FAWCETT asked:

Senator FAWCETT: So it is unique, it is unusual, but it maybe accounts for the take-off. But what about the overshoot case, where somebody has come off the 28 RNAV, is forced to do an overshoot because of heavy rain and so does not have visual contact with what is now quite a large obstacle that intrudes into the airspace?

Mr Cromarty: May I take that on notice and get the definitive answer for you?

Answer:

The Archerfield Runway 28 RNAV missed approach design takes the obstacle into account only in so far as the obstacle is below the threshold heights assumed during approach and missed approach designs. Therefore, the obstacle is not considered to involve an intrusion into the airspace.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 116

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Date of verbal advice to Qantas **Proof Hansard Page/s:** 105 (18/10/11)

Senator ABETZ asked:

Senator ABETZ: When did you indicate that verbally?

Mr McCormick: I indicated that verbally to Qantas—I do not have the date with me—before

any industrial action had started.

Senator ABETZ: If you could take on notice to get us that date, that would be helpful.

Answer:

The date of the discussion with Qantas was 19 August 2011.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 117

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Letter to airlines and unions and effects of industrial action

Proof Hansard Page/s: 105-106 (18/10/11)

Senator ABETZ asked:

Senator ABETZ: Can you tell us which unions? Was it to the Transport Workers Union or the licensed engineers association?

Mr McCormick: The letter that we sent is dated 14 October 2011. It went to the chief executive officer of QantasLink, the chief executive officer of Australia and New Zealand Jetstar, the president of the Australian Federation of Air Pilots, the managing director and chief executive officer of Qantas Ltd Australia, the federal secretary of the Australian Licensed Aircraft Engineers Association, and federal secretary of the Transport Workers Union.

Senator ABETZ: And that was an identical letter to this?

Mr McCormick: Correct.

Senator ABETZ: Are we able to be provided with a copy of that letter? If you need to consider that, you can take it on notice. Whilst I accept that the officials at the table may not necessarily be able to give us a history of the consequences of previous strikes, would there potentially be files in the archives of CASA which could shed some light on how maintenance had slipped with certain airlines as a result of strike action, and then how long it took them to get their fleet back to a fully healthy condition—and excuse my lack of technical terminology there?

Mr McCormick: We will certainly do that, Senator, and if you can give us more specificity in a question on notice we could most probably look more carefully at a particular operator, if you wish.

CHAIR: While we are at it, I want you to take on notice a question on information you may have about overseas outsourcing of maintenance and how that may have affected previous situations similar to the one we are facing here in Australia.

Mr McCormick: Yes, we still recall the thrust of your committee investigations into pilot training. We have that in our minds. I would like to correct one thing I said earlier on. I said that our funding was over five years; it is actually over four years.

Answer:

i) The text of the letter sent to all the above organisations was:

Aviation safety during industrial disputes

I am writing to advise you of the Civil Aviation Safety Authority's (CASA) position during industrial disputes. CASA has no role in industrial relations unless developments during industrial disputes introduce risks to aviation safety. I would like to remind all parties involved of the paramount importance of aviation safety at all times. I would appreciate your assurance that you share this understanding during these difficult times. CASA will continue a high level of audit and surveillance of aviation safety related activities during industrial actions and will take any necessary action required to maintain aviation safety.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

ii) CASA has examined whether it is possible to provide more information on the effects on maintenance of both previous industrial disputes and the outsourcing of maintenance overseas and has determined that, without more specific detail, it is not possible to proceed.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 118

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Date of advice on Senate committee report

Proof Hansard Page/s: 108 (18/10/11)

Senator XENOPHON asked:

Senator XENOPHON: Mr McCormick, when did the government seek your advice on the

Senate committee report?

Mr McCormick: I do not have that actual date. We will try and get that date.

Answer:

The Department of Infrastructure and Transport requested initial advice from CASA on 14 July 2011 and further comments on a draft response were sought by the Department on 13 September 2011.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 119

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Jetstar fatigue management Proof Hansard Page/s: 110 (18/10/11)

Senator XENOPHON asked:

Senator XENOPHON: All of those reforms that you refer to, all of those matters that have been dealt with by Jetstar, how long have they been in force? Obviously, since 22 April.

Mr Hood: I received a draft report this week and I am currently reviewing that with a view to having a look at what our own team said about verifying Jetstar's actions.

Senator XENOPHON: You need to verify the actions to see that they will actually make a difference in relation to the fatigue issues?

Mr Hood: Once again our role is to trust but verify. The airline will tell us some of the actions they have taken. Our job is to go and verify that they have taken those actions.

Senator XENOPHON: Sure, but this relates to cabin crew and flight crew.

Mr Hood: This relates to fatigue in general. The specific review that I asked for related to cabin crew. The measures taken relate more broadly, it is my understanding, to the review of fatigue practices within the airline.

Senator XENOPHON: I do not know whether you are in a position to provide any of those documents—

Mr Hood: I only have my notes here but I am happy to provide you with a copy of the timelines since 22 April.

Answer:

Timeline of CASA actions in relation to Jetstar air crew fatigue matters since April 2011.

May 2011 - As part of its ongoing audit and surveillance program, CASA examined Jetstar's management of flight and duty times for flight crew. This audit included an examination of cabin crew fatigue risk management. Jetstar decided to issue Standing Orders and Operations Manual amendments to clarify procedures for crew contact outside duty hours, management of permitted duty extensions and reporting requirements.

28 July 2011: CASA examined the circumstances involving the five Thai cabin crew members on 22 April 2011, as reported in ABC Lateline on 27 July 2011.

August 2011: CASA discussed the issue with the responsible Jetstar personnel and issued an audit observation following the examination of documentation.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

September 2011: A CASA human factors analysis of cabin crew rosters was forwarded to the airline. Jetstar provided CASA with a response to the Audit Observation issued in August 2011 and also gave CASA a formal briefing on the status and development of Fatigue Risk Management Systems for flight and cabin crew.

October 2011: Following a request from CASA, Jetstar provided further information on fatigue risk management of Thailand based cabin crew. CASA continues to monitor Jetstar's regulatory compliance.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 120

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Upgrades for CASA staff Proof Hansard Page/s: 112 (18/10/11)

Senator XENOPHON asked:

Senator XENOPHON: This goes to this issue of receiving upgrades from the airline. I think there was the issue of the chairman's lounge. Back on 26 May I asked:

Senator XENOPHON: Do you see any issue ... for any executives in CASA ... to be receiving upgrades from any airline?

Mr McCormick: No, I do not. Provided it is properly declared, I do not see an issue at all. Senator XENOPHON: 'Provided it is properly declared', but is a proper declaration something

that ought to be public?

You took it on notice and said:

CASA is considering the question of whether, and if so in what circumstances, CASA staff members might properly accept an upgrade, and if it is determined that they may properly, what would constitute a proper disclosure in such circumstances.

I am happy for you to put on notice as to what systems are in place in terms of transparency with respect to upgrades.

Mr McCormick: We will take it on notice.

Answer:

With respect to upgrades when travelling with airlines, CASA has the following protocols in place:

- No CASA employee may use frequent flyer points to upgrade a flight booking to a level to which they are not entitled. Any offer of an upgrade by an airline must be approved by the relevant Executive Manager before acceptance.
- In circumstances where an upgrade is offered at the point of check in and an Executive Manager cannot be contacted for approval, CASA employees are required to complete a declaration on return to the work place.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 121

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Archerfield Safety Proof Hansard Page/s: Written

Senator Fawcett asked:

An auction site that stores large plant and equipment and attracts significant numbers of people has been placed within the public safety area of runway 28 Right at Archerfield Airport. Does this breach the Queensland public safety area policy and if not why not? Is CASA happy that single engine aircraft have adequate safety margins in the event of engine failure after takeoff or approach landing?

Answer:

In respect to the Queensland public safety area policy see answer AAA05.

Adequate safety margins are established by CASA in relation to developments on the Manoeuvring Area of registered aerodromes including at Archerfield.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 122

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Archerfield runway Proof Hansard Page/s: Written

Senator Fawcett asked:

In reference to the ATSB report in relation to Archerfield runway 28 Right in response to the proximity of aircraft hangers located on the airport, could an explanation be given as to which MOS 139 tables were used to determine inner edge distances. Why was 150m used instead of 180m? Is CASA satisfied that there are adequate safety margins for a baulked landing off runway 28Right e.g. due to reduced visibility from sudden adverse weather conditions?

Answer:

See Answer to Question 128.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 123

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: FOI flying hours

Proof Hansard Page/s: Written

Senator Fawcett asked:

How many currency flying hours are required for flight operations inspectors (FOI) to remain competent? Do FOI's agree with the current allocation?

Answer:

The following flight hours are allocated to CASA Inspectors and Examiners:

- Air Transport Inspectors 16 hours per annum in a flight simulator; and
- General Aviation Inspectors 39 hours per annum in an actual aircraft.

CASA's FOIs have not expressed their disagreement with the current arrangements.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 124

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Bankstown runway Proof Hansard Page/s: Written

Senator Fawcett asked:

Given the removal of the North-South runway at Bankstown Airport, do you consider it an acceptable risk for light aircraft needing to land in the Sydney Basin if cross-winds exceed 10 knots?

Answer:

For most aircraft, such as those operating into Bankstown Airport, the crosswind limit is more than 10 knots.

CASA considers it acceptable for a qualified pilot to take-off or land an aircraft with a crosswind component up to the limit specified in the aircraft's flight manual for that aircraft type.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 125

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Qantas engines

Proof Hansard Page/s: Written

Senator Heffernan asked:

Qantas Flight QF1 from Sydney to London on May 19th 2011 was forced to make an emergency landing at Bangkok Airport following engine difficulties. Passengers on the flight reported a loud bang followed by repetitive thudding, shuddering, erratic lurches and smoke coming from one of the engines.

It is understood that several recent episodes of similar critical engine failures have occurred with the RB211 engines on Qantas 747s, due to rupture of the compressor blades, resulting in severe engine damage, and that the fault is acknowledged by the Rolls Royce manufacturer - who have designed an engine modification that prevents this critical engine failure from occurring.

The manufacturer has recommended that there is no need for urgent repair of all the faulty engines - but rather that they should be repaired at the time or regular maintenance. It is understood from CASA that Qantas is choosing to follow this recommendation, rather than undertake an urgent and immediate upgrade of all affected engines.

- 1. Was CASA made aware of these engine issues and what date were they made aware?
- 2. Given the inherent safety risks of this engine fault, why did CASA not suggest that the engine modification be completed immediately?
- 3. What reasons were given for the decision to allow Qantas to allow flying with potentially faulty engines?
- 4. What measures have been put in place to reduce the risk of accident for planes flying with potentially faulty engines?
- 5. Has CASA and Qantas made this information public?
- 6. Does CASA accept that they owe a duty to inform the public that they may be flying in a plane with known engine issues?

Answer:

1. Under the civil aviation regulations, aircraft operators and maintainers are required to report every major defect to CASA within 2 working days of the discovery of the defect. In accordance with this requirement, Qantas have been reporting all major defects to CASA, including B747-RB211 - In Flight Shut Downs (IFSD) in accordance with these regulations. The predominant cause of the B747-RB211 IFSD is a failure of the engine's High Pressure stage 1 compressor blades. These particular IFSDs have been reported to CASA since July 2000.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

- 2. CASA has performed independent engineering and safety investigation and analysis of the reported B747 RB211 IFSDs. The investigation and analysis included a review of all reports submitted to CASA as well as additional data provided by Qantas and the engine manufacturer, Rolls-Royce. This analysis indicates that the IFSD rate of a RB211 engine installed on a B747 aircraft, for the known engine failure modes, while high, is below the accepted threshold (0.02/1000 flight hours) where immediate intervention may be required. Further analysis indicates that Qantas has taken a conservative approach, based on established reliability methodology, when addressing engineering issues surrounding the IFSD rate. This approach provides a sufficient safety margin to allow for continued safe operations.
- 3. The current Qantas B747– RB211 IFSD rate is below the relevant design and operational level that would require Qantas to take more immediate action with regard to reducing the number of IFSDs. Qantas, however, has put measures in place to modify the affected engines in the Qantas fleet at a rate that is higher than the normal major maintenance overhaul and repair rate, as recommended by the manufacturer, for these engines. Qantas anticipate that the majority of their B747– RB211 equipped fleet will be modified by March 2012. CASA is satisfied that these actions are appropriate.
- 4. In addition to accelerating the recommended modification program, Qantas have introduced several changes to their operating procedures to reduce the potential for further IFSDs. Moreover, the B747 is a four engine aircraft which has been certified and demonstrated to operate safely with inoperative engine/s. Provided the IFSD rate remains below the pre-determined threshold, there is no need for further action.
- 5&6 If CASA was of the view that an unsafe condition existed it would take the appropriate action, including informing the public.

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates October 2011

Infrastructure and Transport

Question no.: 126

Program: n/a

Division/Agency: (CASA) Civil Aviation Safety Authority

Topic: Type ratings

Proof Hansard Page/s: Written

Senator Heffernan asked:

- 1. In relation to Mr Trevor Sava, what were the qualifications of Mr Sava's FFS-6 signatory on the 16/07/2003?
- 2. Would the length of Endorsement Training Australia's course conducted in 2003 be approved by today's standards?
- 3. What is the official CASA policy on finishing type ratings outside of full courses?
- 4. What are the experience criteria of CAR 5.21 approved simulator instructors?

Answer:

- 1 CASA holds no record of training or endorsements issued in 2003 for a Full Flight Simulator (FFS) 6 for Mr Sava.
- 2. Endorsement Training Australia's Boeing 737 simulator training material was approved by CASA in 2003 and the syllabus and presentation were found to be of an excellent standard. Whether CASA would now approve the length of any course from 2003 would depend on the nature of the course and any regulatory changes introduced since 2003.
- 3. Type endorsement requirements are specified in Civil Aviation Order 40.1.0. CASA's approval of the syllabus of training is required for certain types of aircraft. A pilot undertaking type endorsement training must complete the full syllabus of training prior to being issued with the endorsement.
- 4. In determining whether to grant a CAR 5.21 approval, CASA will consider an individual's qualifications and experience on merit. The simulator instructor must be qualified on the particular aircraft type in order to conduct training.