Question no.: 192

Program: n/a **Division/Agency:** Australian Transport Safety Bureau **Topic:** Norfolk Island weather forecasts **Proof Hansard Page:** 138-139 (8 February 2016)

Senator Xenophon, Nick asked:

Senator XENOPHON: I go to the issue of the 22 February 2000 Bureau of Meteorology report about the reliability of Norfolk Island forecasts. Did your first report and does the subsequent report that you have been asked to do in relation to the Pelair incident take into account the fact that those matters do not appear to have been followed through by other agencies in terms of the lack of reliability on the Norfolk Island weather forecasts?

Mr Dolan: Mr Walsh is supervising the reopened investigation.

Mr Walsh: Can I clarify the question. Are we looking at the reliability or are we looking-

Senator XENOPHON: No, there was a report issued on 22 February 2000 about the reliability of Norfolk Island forecasts. It appears that certain things were not followed through. I would like to put it to your agency that it appears that down the chain there were things that were not followed through as a result of the very clear report on the lack of reliability. Was that something that was taken into account with respect of the first investigation report on the Pelair incident and also now with the second report that is being considered?

Mr Walsh: I cannot speak to the first investigation because I was not involved. In the second one, I would have to actually take it on notice.

Senator XENOPHON: Perhaps you could take that on notice in relation to the first report. I go now to the issue of the LAHSO operations. There is a report being undertaken in respect of the 5 July incident 2015. Do you have an approximate time line of when that report will be completed?

Answer:

A review of our records did not reveal any documentary evidence that indicates the Australian Transport Safety Bureau's 22 February 2000 report and recommendation to the Bureau of Meteorology was considered as part of that investigation.

The re-opened investigation includes consideration of the 22 February 2000 report and recommendation to the Bureau of Meteorology.

Question no.: 193

Program: n/a **Division/Agency:** Australian Transport Safety Bureau **Topic:** Go-around incident 22 December 2015 **Proof Hansard Page:** 139 (8 February 2016)

Senator Xenophon, Nick asked:

Senator XENOPHON: Perhaps you could take that on notice in relation to the first report. I go now to the issue of the LAHSO operations. There is a report being undertaken in respect of the 5 July incident 2015. Do you have an approximate time line of when that report will be completed?

Mr Dolan: We expect that report will be complete by July this year.

Senator XENOPHON: I ask you to take on notice information I received from constituents today about goarounds including a touch-and-go, one that occurred on the 14 December 2013, and I will refer you to the *Hansard*.

Mr Dolan: We have been listening to those previous exchanges.

Senator XENOPHON: And if you could also provide information relating to the incident of 22 December 2015, that JQ 710 flight. Again, I am not being critical of the pilots at all. The passengers said that they appeared to be very close calls. Could you let us know (a) whether you were aware of it and (b) whether it is being investigated.

Mr Dolan: We are not currently aware of it. They are the sorts of incidents that if there had been a serious concern we would have been aware of it and paid attention to it.

Senator XENOPHON: In relation to that first incident, where the passenger described it as a *Top Gun* manoeuvre to accelerate and climb sharply on 14 December 2013, if an aircraft touches the runway, as this passenger reported, and needs to take off, is that the sort of thing you would investigate?

Mr Dolan: It would depend on the nature of the report that was given to us. It is at the extreme end of a goaround. As I say, it is the sort of thing that would have got our attention, which is why am surprised that it did not.

Senator XENOPHON: Can you please take on notice whether you were aware of these incidents and if you were not aware of them whether you are able to make inquiries through Air Services or CASA in respect to them because these matters have been brought to my attention. **Mr Dolan:** Yes.

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Answer:

The Australian Transport Safety Bureau (ATSB) has no record in its occurrence database of any event on 14 December 2013, or any other date around that time, involving Qantas or any other operator that is consistent with the description provided in Hansard. The ATSB made enquiries with Airservices Australia, Qantas Airways, QantasLink and Cobham Aviation Services; none had any record of such an event on 14 December 2013, or any other date around that time.

The ATSB has no record in its occurrence database of an event on 22 December 2015 involving JQ 710, or any other aircraft around that date, that is consistent with the description provided in Hansard. The ATSB made enquiries with Airservices Australia and Jetstar Airways, and both advised they had records of a routine go-around event involving JQ710 on 22 December 2015 that was not assessed by either organisation as being a reportable transport safety matter. Based on the information from Airservices and Jetstar, the circumstances of the go-around were similarly assessed by the ATSB as being non-reportable.

Question no.: 194

Program: n/a **Division/Agency:** Australian Transport Safety Bureau **Topic: Search for Malaysia Airlines Flight MH370 Proof Hansard Page:** Written

Senator Sterle, Glenn asked:

- How much has the Australian Government spent so far in the search from MH370?
 a. In 2014-5?
 - b. In 2015-6 so far?
- 2. What is the Commonwealth's overall budgeted amount available for the search?
- 3. What have other nations contributed to the search?
- 4. What is the outlook for the search process?

Answer:

A comprehensive briefing on the search for Malaysia Airlines MH370 was provided to the Committee on 22 February 2016 by the Joint Agency Coordination Centre (JACC), which was established to coordinate whole of Australian Government activities in regard to the search, and the Australian Transport Safety Bureau (ATSB), which is responsible for underwater search operations. This response has been provided by the JACC.

- 1. In the 2014-15 Federal Budget, the Government committed up to \$89.9 million over two years from 2013-14 as part of Australia's contribution to the search for Malaysia Airlines flight MH370. This provided:
 - \$2 million for the Joint Agency Coordination Centre;
 - \$27.9 million to Department of Defence for costs in search for MH370; and
 - \$60 million to the Australian Transport Safety Bureau to undertake the underwater search.
 - a. In 2013-14 and 2014-15:
 - Department of Defence expended \$27.9 million;
 - Department of Infrastructure and Regional Development expended \$1.6 million to support the JACC; and
 - ATSB expended \$41.8 million of Australian Government funding on underwater search activities.

Other agencies absorbed their own costs.

- b. As at 29 February 2016, an additional \$18.2 million has been expended of Australian Government funding by the ATSB.
- 2. \$89.9 million.
- 3. Twenty-five other countries have been involved in the search for MH370, generously contributing resources and expertise: Bangladesh, Brunei, Cambodia, France, India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Laos, Myanmar, Malaysia, New Zealand, the People's Republic of China, Philippines, Russia, Singapore, South Korea, Thailand, Turkmenistan, United Arab Emirates, United Kingdom, United States of America, Uzbekistan and Vietnam.

During 2014-15, Malaysia directly funded the provision of a vessel and search system as part of the search.

The contract for the provision of these services was directly with Malaysia and the value of this contribution is not available. In addition, Malaysia has committed a cash contribution of \$100 million, of which \$80 million has been paid as at 29 February 2016.

During the early part of the search, China provided a vessel to undertake underwater mapping services. The value of this contribution is not available. In addition, China has committed to supply a search vessel and funding to cover search costs, to a total value of \$20 million

4. It is anticipated that searching the 120,000 square kilometre search area will take until the middle of 2016 to complete. Upon completion of the entire area, it is expected all high probability search areas will have been covered. In the absence of credible new information that leads to the identification of a specific location of the aircraft, the Governments of Australia, Malaysia and China have agreed that there will be no further expansion of the search area.

Question no.: 195

Program: n/a **Division/Agency:** Australian Transport Safety Bureau **Topic:** Rail accident investigations in Western Australia and Queensland **Proof Hansard Page:** Written

Senator Sterle, Glenn asked:

- 1. What does addition of WA mean for ATSB role in rail incident investigation?
- 2. How does it help?
- 3. What is the situation with Queensland?

Answer:

- 1. Western Australia's implementation of the National Rail Safety Reforms commenced on 2 November 2015, with the Office of the National Rail Safety Regulator (ONRSR) taking over regulatory responsibilities from the WA Office of Rail Safety, and the ATSB commencing an independent rail safety occurrence investigation role. The ATSB's Perth office has been staffed with two Senior Rail Transport Safety Investigators for a number of years originally in anticipation of significantly fewer delays in the implementation of the reforms. The ATSB now has a much-expanded role in rail safety investigation in WA, which includes the metropolitan, regional and NW heavy-haul iron ore operations. Partial costs of ATSB rail safety investigations in WA are presently borne by the WA Department of Transport under an Intergovernmental Charging Agreement based on a fixed-cost per investigation. This arrangement does not cover the overhead and ancillary costs to the ATSB of maintaining the investigative capability in WA.
- 2. An integrated national transport safety framework ensures a consistent, efficient and coordinated approach to rail safety in Australia and, for the first time, the national operation of a single law for rail safety investigations. The benefit to stakeholders is access to increased investigative capacity, uniform process and improved consideration of safety lessons across the entire Australian rail industry.
- 3. On 23 November 2015, the Queensland Government, through the Department of Transport and Main Roads, announced the intention to re-join the national reform agenda and commence negotiations with the ATSB and ONRSR with a view to these organisations commencing their respective operations early in 2017.

Question no.: 196

Program: n/a Division/Agency: Australian Transport Safety Bureau Topic: Cessna Supplementary Inspections Documents (SIDs) Proof Hansard Page: 109 (8 February 2016)

Senator Williams, John asked:

Senator WILLIAMS: He says in this letter they have never heard of it over there. Do we know of any catastrophes in Australia because of the condition of these Cessnas—their frame, or the reason the SIDS program has to be carried out? Have we had any fall out of the sky?

Mr Skidmore: The only one I can refer to is an ATSB investigation on a Cessna 208, I think—I would have to get the details—where there was a structural failure of the elevator. That was not in flight—luckily it was found on the ground.

Answer:

As aircraft age, they become more susceptible to structural or component failure through mechanisms such as fatigue, corrosion and wear. The rate at which component degradation occurs depends on many factors, including the number of flight hours and cycles, type of flying, operating and storage environments and aircraft maintenance.

In 2007, the Australian Transport Safety Bureau (ATSB) released research report B20050205 - *How Old is Too Old? The impact of ageing aircraft on aviation safety*. The report examined the relationship between ageing aircraft and flight safety, determined the chronological age of the Australian aircraft fleet and reviewed the current and future directions for the management of ageing aircraft.

The report determined that as of 2005, Australia's fixed-wing, piston-engine aircraft fleet had an average age of 30 years and, with very few new aircraft being registered, the average age was increasing. This was contrasted against the original intent of many manufacturers, which were producing aircraft with a design life of around 20 years, within which there would be a finite number of flight hours and cycles.

The report made the point that, as aircraft age, the original maintenance schedules may not be sufficient to ensure their (ongoing) safety. While some aircraft manufacturers have recognised this problem and have developed supplementary inspection programs (such as the Cessna Supplementary Inspections Documents - SIDs); other aircraft do not have the same level of airworthiness support.

Due to growing concern over the safety of their ageing fleet, Cessna and the US Federal Aviation Administration (FAA) started work on the SIDs development program in the late 1990s. The inspection documents aim to provide a regime that maintains the structural integrity of the airframe as the aircraft ages. This regime complements scheduled maintenance inspections that cover numerous Cessna aircraft models. The function of the SIDs is 'to find damage from fatigue, overload or corrosion through the use of the Non-destructive Inspections and visual inspections'. The focus of the inspections is on principal structural elements that are described as 'a structure whose failure, if remained undetected, could lead to the loss of the airplane'. Some of the inspections have variable compliance intervals to account for aircraft operation in mild/moderate and severe corrosion environments or typical and severe usage environments.

Given the criticality of principal structural elements on an aircraft in ensuring continuing airworthiness Civil Aviation Safety Authority (CASA) has mandated compliance with Cessna SIDs, although an exemption has been granted on supplemental inspections relating to landing gear. The ATSB does not have any record that in Australia there has been an aircraft 'fall out of the sky' in relation to SIDs or the lack thereof, but is aware of

two occurrences that were the result of a component failure, where the component was subject to the SID, but the inspection was not undertaken. One involved a wheels up landing by a Cessna 210 at Cairns in November 2014.

The other occurred on 12 September 2011 involving a Cessna 210N aircraft which was conducting low-level aerial survey operations near Bourke Aerodrome, New South Wales. While manoeuvring at an altitude of approximately 260 feet AGL, the aircraft pitched down in response to a turbulence event, requiring the pilot to make an immediate corrective pitch-up control input. After this event, the pilot reported that the elevator felt partially jammed and that it was very difficult to make elevator inputs and difficult to maintain altitude. The pilot was able to fly the aircraft back to the departure point and land without further incident. Examination of the aircraft's horizontal stabiliser showed a complete fracture of one rear attachment bracket and a partial fracture of another. The stabiliser forward spar had also fractured in a number of locations. This part of the aircraft was subject to a Cessna SID, but the inspection was not undertaken.

As a result of this occurrence, it was reported to the ATSB that a second C210 aircraft had been inspected in the area of the horizontal stabiliser and was also found to have a fractured rear spar attachment bracket. The ATSB's review of the preceding 15 years' Australian Service Difficulty Reports (SDRs) involving the part number 1232400 bracket assemblies found four instances where one or both of the brackets had cracked and three instances where the brackets were corroded.

A review of the SDR data base by CASA identified approximately 130 SDRs between 2005 and January 2016 that specifically related to the conduct of SIDs inspections, although there are likely to be additional defects reported arising from SIDs inspections that have not made specific mention of SIDs in the SDR. The identification of such defects during inspection goes to the very purpose of the SIDs; that is, to detect and rectify defects to ensure the continuing airworthiness of ageing aircraft and prevent an accident from occurring in the first place.