

**Senate Inquiry Supplementary Submission on the ATSB Findings of the Ditching of the Westwind II  
VH-NGA off Norfolk Island on 18 November 2009**

**This submission is made under Parliamentary Privilege 26 February 2013**

**by Bryan Aherne in a private capacity**

## 1. Introduction.

I thank the committee for allowing me to make a supplementary submission to the Inquiry. The Inquiry has to this point necessarily had to consider technical matters contained in the many submissions it has received. This submission however, will focus on the issues of prejudice and outcome bias which along with allegations of collusion have tainted the ATSB investigation. On a separate matter, I have attached an Appendix which criticques the more confounding of the answers provided by the ATSB in response to questions on notice.

## 2. Prejudice, Outcome Bias and Coercion

The release of the documents and emails by the committee on the 15th of February 2013 show that the investigation outcome was determined as early as February 2010. This clearly explains the outcome bias evident throughout the Final Report. [See 3 (a) and 3 (b) below]The "Chambers report" is self explanatory and needs no further comment other than it offers a candid self-appraisal of the shortcomings of CASA's surveillance system at the time together with an admission that had CASA's surveillance been better, the accident might have been averted. It is telling that this was not picked up through the so-called "thorough" investigative process by the ATSB. This information alone warrants the re-opening of the investigation.

The FRMS Special Audit of Pel-Air is also self-explanatory, and identified that there were major shortcomings in Pel-Air's management of fatigue. It is telling that this too was not picked up by the ATSB if only to prompt a more thorough analysis of the existence of fatigue and its effect on the night of the accident.

It appears that at least two documents which had cause to significantly affect a safety investigation, was deliberately withheld CASA from the ATSB, in contravention of the provisions of the TSI Act 2003, the MOU and International Convention.

The ATSB's deviation from international standards as expressed in Annex 13 [(see 3 (d) below], has meant that important data is not available to share with the **international aviation community**. International conventions intend to foster standardisation, consistency and efficiency and when it comes to safety- **shared learning**. Australia has benefited from investigations conducted by other countries for example the Air France 447 loss of control accident, the Helios pressurisation tragedy; the Uberlingen mid-air collision catastrophe; the Hudson double engine failure ditching. What shared learning has resulted from the ATSB's three year investigation into the Pel-Air ditching at Norfolk Island? Virtually none! This undermines Australia's standing as a citizen of the aviation world:

It also appears (evidenced in email exchanges) as though the ATSB attempted to influence the conduct of the investigation by the Investigator in Charge [see 3 (c) below].

There are potentially serious ramifications to the ATSB and CASA's actions/inactions.

1. Australia's State Aviation Safety Program has been compromised.
2. There could well be a loss of confidence by the travelling public in the safety of aviation in Australia
3. Australia has not upheld its commitments as a signatory to ICAO and this reflects poorly on Australia's standing internationally.
4. There is a risk that participants in Australia's open safety reporting system will withdraw or disengage.

### 3. Evidence:

#### a) Outcome Bias.

Email from Martin Dolan to ATSB Investigator and General Manager Investigations written 10 February 2010:

*Thanks very much for this. My discussion yesterday with John McCormick gave me some confidence that CASA was looking for systemic answers and amenable to our approach. Since then CASA has changed its rhetoric and seems to be hardening its view that there has been a regulatory breach that needs to be addressed.*

*I think it would be helpful if you and other addresses could meet with me so that we agree the best way to manage our relationship with CASA in the course of this investigation.*

#### Analysis:

It is very clear that the ATSB had decided on a systemic investigation approach but that simply because CASA changed its rhetoric the ATSB did too. This is evidence of a weak State safety investigator that allowed itself to be influenced by the regulator whose shortcomings may have been exposed in any systemic investigation.

#### b) Prejudice and Outcome Bias

Email: Wednesday 18 August 2010 From CASA Officer to Director of Aviation Safety and Deputy Director of Aviation Safety

Re: ALIU Accident report Norfolk Island ditching VH-NGA

*The above referenced report is now complete.....I have discussed the report with the ATSB and there are no differences in the key areas which will eventually be published by them in their report. I have aligned the report with the submission made by ...our Westwind FOI Subject matter expert in yesterday's AAT meeting.*

Analysis: For CASA to have confidence that there would be no differences from the key findings (made by CASA) in an ATSB report which **was still two years away from being complete** is strongly suggestive that a meeting of the minds had occurred and an outcome agreed. This is evidence of prejudice and outcome bias.

#### c) Lack of independence of the ATSB and its investigators

Email: 6 August 2012. ATSB officer to General Manager Investigations

*...Many of my arguments that have been rejected have been ones where I have applied safety management methods and tolls and those arguments have been rejected by a reviewer who looks from a regulatory viewpoint instead....To make useful comments on these matters relies on a belief in and use of contemporary safety management theories and methods. To me this was particularly evident when CASA's Norfolk Island audit report came into our hands and some of the arguments I had tried unsuccessfully to include in the report were subsequently included on the basis of CASA's findings not mine! When I have to rely on CASA's opinion to persuade the ATSB how can I claim that the ATSB is independent when it investigates CASA?*

Analysis: This shows that the ATSB undermined the independence of its investigator. It also shows that the ATSB is unduly influenced by CASA or it shows a crisis of confidence at the ATSB. Either way the ATSB is clearly not independent of CASA.

#### **d) Breach of International Conventions**

Australia is a signatory to article 37 of the Chicago Convention, ICAO, Part IV International Standards and Recommended Practices.

As such, three International Standards (International Standards are defined as 'shall', International conventions intend to foster standardisation, consistency and efficiency and when it comes to safety- **shared learning**) under Annex 13 have not been complied with, namely Annex 13, 5.4 which states:

"The accident investigation authority SHALL have independence in the conduct of the investigation and have unrestricted authority over its conduct, consistent with the provisions of Annex 13"

Annex 13, 5.6 states:

"The investigator in charge shall have unhampered access to the wreckage and all relevant material, including flight recorders and ATS records, and shall have unrestricted control over it to ensure that a detailed examination can be made without delay by authorised personnel participating in the investigation".

However:

- 1) The Investigator in Charge was not given unhampered access to the relevant material of the "Chambers Report", the "UK CAA FRMS Study of the pilot" and the internal CASA survey results of its "Flying Operations Inspectors Survey" and the complete "FRMS" report by CASA officers.
- 2) The aircraft wreckage (**evidence**) was not recovered which meant that:
  - a) Crashworthiness data was not gathered. (Data as to how the impact forces were distributed, which load paths were critical, how energy was dissipated remain unknown and would have been useful information for future aircraft design.
  - b) Reasons for the survivability of the accident could not be determined. Seatbelt function, seat design, floor attachment points; cabin design; emergency exit design, stretcher design and placement.
- 3) The Flight Data Recorders and Cockpit Voice Recorders were not made available to the Investigator in Charge because of budget, not safety considerations. As a result the following data (**evidence**) is missing:
  - a) How much fuel was on board the aircraft? What were the fuel flow rates?
  - b) What were the actual winds and temperatures?
  - c) What was the navigation instrument accuracy? How accurately were the instrument approaches flown?
  - d) What altimeter settings were used by the crew? How accurate were the altimeters?
  - e) Which systems were operable / degraded / inoperable?
  - f) What decision making process was used by the crew?
  - g) What discussions were had regarding the viability of continuing the flight to Melbourne following a diversion to Noumea-this centres around flight and duty limitations.
  - h) What discussions were had regarding the costs of a diversion (fuel , navigation charges, landing charges, hotel and transport for passengers and crew)?
  - i) To what extent were the crew fatigued?

- j) To what extent did the nature of the operation (EMS) influence the crews' decision making?
- k) To what extent did the lack of operational support by the Operator (contactability, landing permissions, fuel availability, flight following) influence the crews' decisions?
- l) What was the quality of the radio transmissions being received by the crew?
- m) To what extent did CRM influence the accident sequence?
- n) To what extent did the first officer perform her function?
- o) How did the flight crew successfully ditch an aircraft at night.(Data on the aircraft pitch attitude, speed, configuration, rate of descent and orientation with respect to wind and wave would have been invaluable )

Annex 13, 5.13 states:

*"If, after the investigation has been closed, new and significant evidence becomes available, the State which conducted the investigation SHALL re-open it. "*

However: Despite new evidence being brought to the attention of the ATSB this has not yet happened.

Australia is obliged under International Convention to re-open the investigation.

#### **4. Conclusion**

In light of the "Chambers Report", the "UK CAA Fatigue study of the pilot" and the "Flying Operations Inspectorate Survey", as a signatory to article 37 of the Chicago Convention, Australia must withdraw the ATSB publicly released Final Report into the ditching of NGA on 18 November 2009, and re-open the investigation.

#### **5. Recommendation**

Recover the Flight Data Recorder and Cockpit Voice Recorder from the aircraft.

I thank the committee for their untiring efforts in identifying serious aviation safety deficiencies in our aviation system and addressing them through the Parliamentary process.

Yours Sincerely,

Bryan Aherne

## Appendix 1

ATSB responses to written questions on notice 21 November 2012:

*7. Did the ATSB form a view about the adequacy of the safety equipment standards related to the equipment that was used or required for the flight and in the subsequent ditching?*

**ATSB response:** No safety issue was identified in respect of the adequacy of the safety equipment standards affecting the flight.

When life jackets fail to operate to the standard of the risk control set by CASA, it is an obvious safety issue as life jacket function can mean the difference between life and death. Failure to identify it as such demonstrates the ATSB methodology to be flawed.

*8. In regard to emergency procedures:*

*(a) Did the ATSB form a view about the adequacy of the emergency procedures and safety equipment training required by Civil Aviation Order (CAO) 20.11?*

**ATSB response:** No safety issue was identified in respect of the adequacy of the emergency procedures safety equipment training required by CAO 20.11.

There is a double standard here and a denial of the facts. Why when the Operator did not comply with a risk control (by failing to train its flight crew) is it not described as a safety issue, yet wherever the flight crew did not comply with a risk control the ATSB view it as a safety issue. A double standard to support their findings and ignorance of the facts suggests Outcome Bias.

*(b) Did the ATSB form a view about the adequacy of the emergency procedures and safety equipment training provided by Pel-Air?*

**ATSB response:** No safety issue was identified in respect of the crew's training on mandated emergency equipment.

How can a Safety Investigation Agency not have a view about required safety training not being undertaken. The ATSB response appears to deny the value of training as a risk control in order to support an intended outcome. Outcome Bias.

*(c) Was each of the pilots compliant with the emergency procedures training requirements?*

**ATSB response:** Yes.

The ATSB response is misleading. The crews 20.11 checks were over 7 months expired. The Flight Crew's last wet drill training was in April 2008 and had expired over 7 months prior. Additionally, the nurse (considered crew for aerial work classification) had not done the complete wet drill training in demonstrating use of the life raft on the aircraft, or had been trained in the use of the Emergency Exits as required annually. (See the RCA's for this in the CASA Special Audit). I have not ascertained the co-pilot or doctors training status in this respect.

*(d) Was or should emergency procedures training have been provided to the medical team?*

**ATSB response:** The ATSB established that the medical staff had previously undertaken Helicopter Underwater Escape Training. The medical staff reported that this training assisted in their escape from the aircraft. The application of the relevant emergency procedures by the medical team to their exit from the aircraft was appropriate in very difficult circumstances (see pages 20 to 23 and 40 of investigation report AO-2009-072).

The ATSB have not answered the question. At no stage was the nurse compliant with CAO 20.11. No life raft drills were undertaken in water with the life raft type on the aircraft. No Emergency Exit training was conducted initially or annually as required under the CAO. (See the RCA's for this in the CASA Special Audit). I have not ascertained the doctors training status in respect to this. The nurse training in HUET was a lucky co-incidence, as she performed work on helicopters.

*9. Did the ATSB consider revisiting, reviewing or emphasising its previous recommendation on the classification of aeromedical flights?*

**ATSB response:** The differences in the requirements of CAO 82.0 as they affect passenger-carrying operations and aerial work operations (including aeromedical flights) were highlighted/discussed on pages 26 and 37 of investigation report AO-2009-072. In addition, CASA has advised its intention to regulate air ambulance/patient transfer operations to the same standard as air transport operations (see page 47 of the investigation report and in the ATSB's supplementary submission of 11 November 2012).

The ATSB have failed to answer the question. The question was directed to the reclassifications of aeromedical flights from its year 2000 recommendation. CASA responded in Feb 2009 that they would not reclassify aeromedical flights from Aerial Work category. ATSB accepted this as closed in 2009.

12. In regard to mandatory Training and Checking (T&C):

*(a) Did the ATSB form a view about the adequacy of the Training and Checking (T&C) regime provided by Pel-Air to its flight crew in meeting its requirements under Civil Aviation Regulation (CAR) 217 and CAO 82.1?*

**ATSB response:** Yes. On the basis of the crew's training and endorsement records, Pel-Air's training system covered aircraft system knowledge and how to operate and fly the aircraft under normal and abnormal configurations in all approved IFR environments.

Serious irregularities in records, record keeping, and lack of checks or line supervision as required under the Operations Manual were highlighted by the CASA Special Audit of Pel - Air. For the ATSB to make the statement above knowing that deficiencies existed both in the record keeping and the practical training; meant they could not be sure that Pel Air's training system performed as was expected or required under the regulations. The ATSB statement could be described as ignorant or deceitful.

*(b) Did the scope of the T&C regime extend beyond aircraft emergency and abnormal procedures to broader operational considerations?*

**ATSB response:** Yes, the training and checking regime extended to include flight planning and management, loading and documentation, ATC and other operational aspects, navigation and fuel management and weather appreciation.

Why is there is no discussion in the ATSB report that the Captain's proficiency was not checked following his command endorsement as was required under the company training and operations manuals. Why also were there deficiencies in Pel –Air's record keeping?  
Such omissions by the Operator point toward major quality assurance issues which if considered thoroughly by the ATSB could have established the degree to which they contributed to the accident.

It is possible that ATSB did not form any view on these matters because it would dilute the intended findings we now know the Chief Commissioner and CASA has agreed on a mere four months after the accident in February 2010, two and a half years prior to the final report being issued.

(c) If not, did the ATSB form a view that it should?

**ATSB response:** Not applicable.

The ATSB did not form any view because it would dilute the intended findings we now know the Chief Commissioner and CASA formed four months after the accident in February 2010 as per the released emails.

*(d) Did the ATSB form a view about the adequacy of the training and experience of the T&C staff?*

**ATSB response:** No safety issue was identified in respect of the provision of training or the experience of training staff.

As CASA had found that the Check and Training staff were NOT Approved by CASA, this statement by the ATSB can only be described as misleading.

*(e) Did the ATSB form a view about the adequacy of the supervision of the T&C staff by CASA?*

**ATSB response:** No.

The ATSB should have been able to form a view on this issue as they required under the TSI Act to do so. The ATSB have deliberately omitted safety critical evidence which adversely affects the outcome of the investigation. Now that the "Chambers report" has been released, it shows the CASA supervision of the operator to be inadequate. Adequacy of regulatory oversight is a primary function in an aviation accident investigation by the ATSB under the ICAO Annex 13 and the TSI Act.

*(f) Did the ATSB form a view about whether the T&C Manual was appropriate for the management of the T&C organisation?*

**ATSB response:** No.

(g) Did Pel-Air have a Command Upgrade training program?

**ATSB response:** The operations manual included procedures and required standards in



support of the conduct and certification of aircraft endorsements and pilot in command checks to line. As indicated on pages 13 and 14 of investigation report AO-2009-072, both crew had completed their aircraft endorsement and the pilot in command his check to line.

(i) If so, did the ATSB form a view about its adequacy?

**ATSB response:** No safety issue was identified in respect of Pel-Air's command endorsement and check to line procedures.

The ATSB must have viewed both the lack of documentation in the training records and the comments regarding training and documentation in the CASA Special Audit. The ATSB statement is contrived to suit their outcome bias..

16. Did the ATSB form a view about the adequacy of CASA's oversight of Pel-Air in general and the aeromedical flights in particular?

**ATSB response:** A review of CASA's audit documentation found that regular, scheduled audits of Pel-Air's documented processes were carried out by CASA in the years preceding the accident. No safety issue was identified in respect of CASA's oversight. No contributing or other safety factors were identified in respect of CASA's oversight of Pel-Air.

The ATSB is being deliberately deceptive to say "no safety issue was identified in prior surveillance of the operator by CASA". The ATSB have hoped the committee did not read the May 2008 audit by CASA. I have attached it in my third submission.

CASA issued a Safety Alert for no records of FRMS training immediately during the audit. To quote the CASA report " this non compliance was considered to represent an immediate threat to the safety of operations". This resulted in all operations approved under the FRMS to cease and to revert to the CAO.

Further, five RCA's were issued against Section 28 BE of the Civil Aviation Act for Crew Scheduling, the Civil Aviation Regulations (CAR) for CRM Training, against CAR 282 and CAO 82 for Instrument Rating Renewals, against CAR 215 and CAR 217 for EGPWS Training and against the repeated findings of lack of Wet Drill Training records against CAR 215, CAR 217 and CAO 20.11.

Again, for the ATSB to make the above response is deliberately misleading and the findings in 2008 have direct attribution to lack of Wet Drill Training, and appropriate FRMS training.

The only conclusion is that when the outcome was scoped of this investigation (as revealed in the Chief Commissioners February 2010 email) this information was deliberately withheld from the report in contravention of the Annex 13 and TSI Act 2003.

*17. In regard to hazardous weather alerting:*

*(a) Did the ATSB form a view about the adequacy of the procedures for the alerting of flight crew engaged in international flights to significant weather changes at their destination?*

**ATSB response:** The ATSB assessed the weather products available to the flight crew and did not identify any safety issues in respect of the weather information provided.

The ATSB failed to answer this question (the question was directed at determining the adequacy of ATS procedures for alerting flight crew not whether any safety issues emanated from the information actually provided) .

We know the Fiji ATC and New Zealand ATC failed to pass on hazardous weather as defined as an International Standard in Annex 11 and under New Zealand Civil Aviation Rules (see my third submission). Even if an agreement existed which exempted the ATS providers in question to proactively pass on pertinent flight information, the ATSB is a safety investigator not a compliance auditor. The provision of a flight information service is a fundamental obligation of air traffic control to flight crew. There are also clear duty of care obligations in general law to which ATS is subject. For the ATSB to make no comment on the safety impact (regardless of legality) of proactive provision of flight information services is beyond reason. What is more, if the Australian flight crew should have been aware that the local ATS procedures required them to initiate all requests for flight information then the responsibility to ensure that the flight crew knew this rested with the Operator (Pel-Air) as expressed in CAR 223. That the ATSB never examined this question represents serious investigative oversight.

On the subject of the question(above) which the ATSB chose not to answer, it is not credible for the ATSB to state that there *...were no safety issues in respect of the weather information provided.* The weather information provided was **wrong**. At a time when the valid forecast for Norfolk Island was predicting cloud at around 1000 ft. above aerodrome elevation the actual cloud was fluctuating around 500ft (but as low as 200ft.) When the forecast was finally amended it predicted the cloud would be at 500ft temporarily. This untimely amended forecast was made just prior to the aircraft's arrival at Norfolk Island at a time when the actual cloud level was 200ft. **The BoM**, despite having access to infrared satellite, aerological diagrams, wind and temperature data for the entire troposphere as well as the Auto Weather Station data from Norfolk Island **was in error by 100% at least in its estimates of the cloud level and in error by 6-7 hours in predicting the passage of the low pressure trough.** That the ATSB views this as not presenting a safety issue, again begs the questions:

Is the ATSB investigation methodology flawed?

Did the ATSB suffer outcome bias?

Was pressure exerted on the ATSB by CASA?

*(b) Was any comparison made between Airservices procedures and other nations' air traffic services for hazardous weather alerts?*

**ATSB response:** No. As advised in the ATSB response to question 19. below, the provision of air traffic services to the flight was from Auckland, Nadi and then Auckland air traffic control respectively (see the depiction of those airspaces at Figure 2 on page 5 of the investigation report). Airservices only involvement with the flight was the receipt and dissemination of the pilot's flight plan.

There should have been a comparison made by ATSB. Following the commencement of the Senate Inquiry, the Airservices evidence against what the ATSB suggested, shows there is considerable "dis-

connect" between the understanding of both agencies of the responsibilities to pass on Hazardous Weather.

21. The following statement is made on page 35 of the final report:

*Five different operators were interviewed and provided relevant sections of their operations manuals for review. Those manuals generally reflected the requirements of CAAP 234-1 but also had individual operational requirements appended. However, they either had no guidance, or did not provide consistent guidance on the process to be used when deciding whether to continue to a destination in circumstances similar to those affecting the flight to Norfolk Island.*

At the 22 October hearing Mr McCormick stated:

*In the particular case of remote island operations, there are six other operators conducting aeromedical evacuation flights. After the Pel-Air ditching we audited those six. We went and looked to see what they were doing. **None of those had an issue.** Norfolk Island has been flown to for many years, by Pel-Air as well in various iteration, without there being an issue. But it is a tricky place to fly to, I think we all agree"*

*(a) How does the ATSB reconcile the statement in the report with the statement by Mr McCormick?*

**ATSB response:** The ATSB was testing the proposition that, despite the content of CAAP 234-1, current operations manuals did not have clear/sufficient guidance in relation to fuel planning when faced with changing weather conditions while en route. The ATSB's understanding is that CASA was auditing the operator against the existing standards. This 'testing/auditing' by the two organisations represented different activities.

In layman terms the ATSB is disagreeing with John McCormick. If the ATSB believe that the decision making guidance material is inadequate it clearly cannot agree that the other operators did not (could not have had) a problem.

Testing and auditing are not two different activities as asserted by the ATSB when viewed in the context of determining the adequacy of risk controls. Individual operator procedures can be effective risk controls however changing the regulatory and guidance material is clearly a better way to ensure that all operators achieve a reasonable safety standard.

The ATSB response above is therefore somewhat nuanced and bordering on obfuscatory.<sup>22</sup> On what basis did the ATSB amend the far more precise draft report (16 July) from:

*Clearer guidance on the in-flight management by crews of previously unforecast, but deteriorating destination weather may have influenced the crew to consider their diversion options earlier, allowing more time for the necessary planning. However, the operator's limited oversight of its aeromedical operation increased the risk that crews would develop their own preand in-flight management methods, diminishing the reliability of its own risk controls in such operations.*

To the much more generalised final version:

*The operator's procedures and flight planning guidance managed risk consistent with regulatory provisions but did not minimise the risks associated with aeromedical operations to remote islands. In addition, clearer guidance on the in-flight management of previously unforecast, but deteriorating, destination weather might have assisted the crew to consider and plan their diversion options earlier.*

**ATSB response:** The amendments were the result of the Commission's consideration of the DIP responses received in the context of the overall investigation and the draft report that was presented for review.

Amending the statement on the basis of a DIP response is clearly no justification at all. If the ATSB articulated the reasons set out in said DIP response for its amendment of the report that would be transparent and sincere.

The audits conducted by CASA of the Operator in May 2008 and December 2009 criticised the Operator. That criticism would align best with the ATSB's draft statement rather than the one in the final report which. I repeat the statement from my first submission, the change in the report by the ATSB treats the Australian travelling public with contempt.

25. Documentation indicates a s32 request was made on 4 July 2012 for the CASA Special Audit. When was the audit sent by CASA? When did it arrive? The committee is aware of the fact that the ATSB knew about the CASA Special Audit when the audit was announced. That being the case, why did the ATSB wait for over two years to request it? Your supplementary submission (annex), which covers where the special audit was included in the ATSB report, appears to come from the March version of the report. Is that the case? How can the ATSB report refer to the Special Audit in the March 2012 draft when it appears the ATSB were not yet in possession of it?

**ATSB response:** As advised in its 14 December 2012 response to the Committee's questions on notice of 21 November 2012, the ATSB requested a copy of the CASA Special Audit Report under a S32 notice on 4 July 2012. A copy of the special audit was received by the ATSB on 9 July 2012.

As part of its investigations, the ATSB has not routinely obtained CASA Special Audits. As an independent investigation agency, the ATSB focuses on obtaining its own evidence in consideration of its evolving investigation hypotheses, and in support of its analysis and findings. This need not include the results of investigations or other activities that may be undertaken by other agencies for their own purposes. The decision of whether to obtain such outputs by other agencies would generally be informed by the evidence already gained by the ATSB's investigation, and the perceived benefits of obtaining them.

This is a false statement and one which contravenes everything the ATSB is required to do under the TSI Act 2003 and Annex 13. The ATSB historically has always sought as much information from CASA as possible including that contained in audits, since breaches of Regulations, Acts, Orders, procedures (i.e. risk controls), as identified in the special audit are well known to be critical to safety

The ATSB knew the special audit existed but failed to request it. CASA would have known that the information contained therein would have been relevant to the ATSB yet failed to provide it to the ATSB as required under the MoU.

I served a section 32 request on the Queensland Government Premiers Office cabinet in confidence documentation on an "internal report" on the dangers of night visual flying for helicopter air ambulance operations. The release of this document proved useful in shifting the Governments position on such operations and subsequently funding was provided which ended a long held practice which was at the heart of many previous fatalities in that state. In addition the ATSB and CASA have a MOU which encourages the sharing of information .

Appendix A to the ATSB's supplementary submission of 19 October 2012 compared the

content of investigation report AO-2009-072 that was released to the public on 30 August 2012 against the relevant areas of the CASA Special Audit. The aim was to highlight that the ATSB had considered the relevant factual information in the special audit, and to show the results of that examination in terms of the content of the final investigation report.

Attachment 2 to the present questions on notice includes the same table as appended to the 19 October 2012 submission, but also indicates (in square brackets) where the relevant factual information from the special audit was already addressed in the 26 March 2012 draft report. That was, these facts had been established by the ATSB's investigation before the receipt of the special audit.

Separately, and as advised on 14 December 2012, on 15 June 2010 the ATSB received an email from Pel-Air detailing safety action undertaken by the company in response to the special audit. The actions were detailed in a Pel-Air three-stage Management Action Plan (MAP). Pel-Air advised of the completion as at 2 June 2010 of the following elements of the MAP:

- Phase One – 26 items were completed between 20 November 2009 and 17 January 2010 prior to the resumption of domestic operations.
  - Phase Two – 11 items were completed between 1 December 2009 and 21 December 2009 prior to resuming international operations.
  - Phase Three – 14 items were completed between 14 December 2009 and 1 April 2010, with 6 items ongoing and scheduled for completion by 30 June 2010.
- The safety action reported in the draft report as taken by Pel-Air in response to the identified safety issue was based on Pel-Air's email advice of 15 June 2010.

26. What are the normal processes around requesting CASA special audits? If the ATSB report was approved for public release on 16 July as indicated in the ATSB submission, was there sufficient time to consider the findings of the CASA special audit if it was not formally requested until 4 July?

**ATSB response:** See the response to questions 25 above and 33 below. The ATSB report was approved for public release under S25 of the TSI Act on 16 August 2012. Receipt of the CASA special audit on 9 July 2012 allowed for sufficient time for its review before the draft final report was forwarded to the Commission on 30 July 2012 for approval for release under S25 (see the response to question 25 above for an indication of the scope of that review).

It would only allow time for the review if you wanted to ignore the CASA findings. If the ATSB were to do a comprehensive assessment on the failed risk controls identified, then the investigation would have to be completely re-written.

27. From documentation, it appears that on 5 July 2011 a safety issue was provided to CASA which stated: Safe fuel management systems for use on long flights are not universally implemented in Australian charter and airwork operations. [Significant safety issue]. How does that work through to the final report to become a minor safety issue which appears to be slightly different? (p.43)

**ATSB response:** The following response to this question was provided to the Committee Secretariat on 14 December 2012:  
Early in the investigation, initial information indicated that there was a safety issue and the

ATSB wrote to CASA about that issue. Subsequently, CASA brought additional information to the attention of the ATSB that they believed mitigated the level of risk associated with the safety issue. Additionally, during the interim period, the ATSB was gaining a better understanding of the interaction of the individuals/organisations involved. As the investigation and report underwent reviews within the ATSB the safety issue remained open. The day the Commission approved s25 release of the final report, on 16 August 2012, was when the safety issue was formally re-classified as a minor safety issue.

The 5 July 2011 correspondence with CASA was a 'safety issue briefing sheet', the provision of which is standard practice to alert CASA (or other parties) of a potential/evolving safety issue and to elicit feedback/discussion. Any indication of safety action in response to an identified safety issue is included in a final investigation report.

28. From documentation, it appears that on 5 July 2011 a safety issue was sent to the operator which stated: The operator did not provide the crew with the training or oversight to assure that the crew would flight plan to meet fuel requirements for abnormal operations as prescribed in the company operations manual [minor safety issue]. How does that work through to the final report of a minor safety issue which appears to be different? (p.43)

**ATSB response:** The advice to Pel-Air and consideration of a potential/evolving safety issue reflects the same approach as taken with CASA above (see the ATSB response to question 27 above). The final text of the safety issue was approved by the Commission in accordance with S25 of the TSI Act on 16 August 2012.

The reason the final report is different from the Safety Issue identified in Jul 2011 is because the Commission changed the final text of the report to reflect the outcome they chose early in the investigation.

29. Given the number of actions required of the operator as a result of the CASA special audit, which included RCAs and voluntarily ceasing operations, would the ATSB please explain how this is classified as a minor safety issue?

**ATSB response:** As indicated in the response to question 25 above, Appendix A to the ATSB's supplementary submission of 19 October 2012 compared the content of investigation report AO-2009-072 that was released to the public on 30 August 2012 against the relevant areas of the CASA Special Audit. The attachment to the present questions on notice includes the same table, but also indicates (in square brackets) where the relevant factual information from the special audit was already addressed in the 26 March 2012 draft report.

That was, sufficient facts were established by the ATSB's investigation in support of the identified safety issue before the receipt of the special audit. The classification of the safety issue was determined in accordance the ATSB's analysis methodology.

This demonstrates the ATSB methodology is either fundamentally flawed or that the investigation outcomes required such criticisms not to be made public.

30. In a minute from CASA dated 27 April 2012, CASA suggests that it might be helpful to note the lifejacket manufacturer and model and the time of the rescue, as the survivors reported that by the time they were rescued most of the life jacket lights had stopped working. Why was this issue not highlighted in the final report? Was there discussion of this with CASA?

**ATSB response:** CASA's DIP comments were considered in accordance with the ATSB's



normal procedures. The availability of the life jacket lights after the ditching is at page 24 of investigation report AO-2009-072. While the name of the manufacturer of the life jackets may be of note to CASA from a regulatory/compliance standpoint, it was not generic to the development of the accident or relevant to the findings of the report and so was not included in the report. In respect of the serviceability of the life jackets, see the response to question 34 below.  
There was no discussion with CASA in this respect.

This response from ATSB is alarming to say the least. If the participants drowned as a result of the accident this would still not come under the ATSB methodology of being "generic to the development of the accident".

It demonstrates a fundamentally flawed methodology. The survivors indicated what failed. It is the ATSB responsibility under the ICAO Annex 13 and the TSI Act to report such failings.

How does the ATSB expect the manufacturer and industry to know these failings?

34. Did the ATSB check the servicing history of the lifejackets? Why did you not make a recommendation that lifejackets be checked?

**ATSB response:** A review of the aircraft's maintenance documentation showed that the aircraft underwent a routine 200-hourly inspection from 29 October to 6 November 2009. In respect of the aircraft's life jackets, one life jacket was installed in the aircraft during that service with a shelf life expiry date of 31 March 2013. In addition, the aircraft's daily inspection records showed signatures certifying the checking of the aircraft's life jackets, with no anomalies recorded. In conjunction, this indicated that the life jackets were being maintained as part of the normal aircraft maintenance procedures. There was no evidence to suggest that there were any pre-existing deficiencies with the aircraft's life jackets.

Given the above, no safety factor and therefore issue was identified in respect of the servicing of the aircraft's life jackets. As previously advised, Australia's policy is to reserve the issuing of safety recommendations as a tool for addressing significant safety issues where the necessary safety action has not been taken. As no safety issue was identified in respect of servicing the life jackets, the pursuit of safety action, including the possible issuing of a safety recommendation, was not called for in that regard.

Australia's "policy" to not alert industry, and manufacturers of failed life safety equipment is astonishing to say the least. The above answer is really demonstrative of a failed investigation body if it cannot do the most basic of safety investigations such as investigating the history of servicing of life saving equipment and why it failed.

35. *If the life-raft was improperly placed in the aisle un-secured, should it be a Safety Recommendation to CASA and Operators to check this SOP in their manuals?*

**ATSB response:** In respect of an aircraft evacuation after a successful ditching, the Pel-Air operations manual indicated that any life rafts should be removed from their stowage and placed near window exits after the aircraft has come to rest. The ATSB's supplementary submission of 11 November 2012 explained that the life rafts were removed from their normal storage position by a rear-seat occupant and placed in the aircraft's central aisle ready for deployment after the ditching.

This ATSB response is at complete odds with their Final Report which states on page 20:

"The operator's operations manual contained procedures for ditching that included advice on the control and orientation of the aircraft with respect to the sea surface, the deployment of any life rafts and jackets, and on water survival. As the flight crew initiated the third missed approach, the co-pilot instructed the passengers to prepare for the ditching. To the extent possible, the company's ditching procedures were followed by the crew."

and on page 21:

"The life rafts were reported removed from their normal stowed position and placed in the aircraft's central aisle ready for deployment after the ditching." This paragraph leads into the ditching itself.

The ATSB have missed a very significant safety issue for industry. The words "ready for deployment after the ditching" is purported in their 21 Nov 2012 response to questions on notice to be read as "that this function was done after the aircraft ditched". The ATSB actually stated in their 11 November 2012 submission:

*• As indicated on p 21 of the investigation report, the life-rafts were reported removed from their normal storage position and placed in the aircraft's central aisle ready for deployment after the ditching. There are advantages and disadvantages associated with this action. Access to the life-rafts may be more readily available from a position in the central aisle; however, in anything but a low energy impact with the water, it could be expected a life raft might move/dislodge from that position.*

If they purport now the life raft was moved to the aisle after the ditching, they know that is not the case. The raft was moved to the aisle PRIOR to ditching and became an unrestrained 100 kg projectile. This had the potential to:

1. Block or impede the pilots escape route through the cockpit door
2. Fatally injure or seriously injure the pilots

The supplementary submission also highlighted that the key tasks of investigation are to identify safety issues and to take all reasonable steps to ensure they are responded to. Recommendations are one of a suite of possible ways of bringing safety issues to attention and having them dealt with. Australia's position that overuse tends to devalue the currency of safety recommendations. As a result, our policy is to reserve them as a tool for addressing significant safety issues where the necessary safety action has not been taken.

If the ATSB are so reluctant to issue Safety Recommendations because the industry itself are the ones to remedy a safety issue, why did the ATSB make a Safety Recommendation to Rolls Royce regarding the Trent 900 engine? It was Rolls Royce who identified the presence of fatigue cracking in their Derby Facility in the United Kingdom.

## Aviation safety issues and actions

### Recommendation issued to: Rolls-Royce plc



Date issued:	02 December 2010
Safety action status:	Released
<a href="#">Why this Recommendation was developed</a>	
Background:	The Australian Transport Safety Bureau recommends that Rolls-Royce plc address the safety issue and take actions necessary to ensure the safety of flight operations in transport aircraft equipped with Rolls-Royce plc Trent 900 series engines.

## Output text

Examination of components removed from the failed engine at the Rolls-Royce plc facility in Derby, United Kingdom, have identified the presence of fatigue cracking within a stub pipe that feeds oil into the High Pressure (HP) / Intermediate Pressure (IP) bearing structure. While the analysis of the engine failure is ongoing, it has been identified that the leakage of oil into the HP/IP bearing structure buffer space (and a subsequent oil fire within that area) was central to the engine failure and IP turbine disc liberation event.

Further examination of the cracked area has identified the axial misalignment of an area of counter-boring within the inner diameter of the stub pipe; the misalignment having produced a localised thinning of the pipe wall on one side. The area of fatigue cracking was associated with the area of pipe wall thinning.

### Critical Safety Issue

Misaligned stub pipe counter-boring is understood to be related to the manufacturing process. This condition could lead to an elevated risk of fatigue crack initiation and growth, oil leakage and potential catastrophic engine failure from a resulting oil fire.

## Initial response

<b>Date issued:</b>	02 December 2010
<b>Response from:</b>	Rolls Royce plc
<b>Response status:</b>	Closed - Accepted

**Response text:** On 2 December 2010, Rolls-Royce plc issued revision 1 to NMSB 72-G595 (see subsequent Other party safety action - Rolls-Royce plc) incorporating assessment and engine rejection criteria for the measurement of potential counter-bore misalignment, and a tightening of the compliance time frame from 20 to 2 flight cycles.

**ATSB response:** The ATSB is satisfied that the action taken by Rolls-Royce plc adequately addresses the immediate safety of flight concerns in respect of the operation of Trent 900 series engines.

*Last update 29 November 2012*

*36. Why is the lack of up to date emergency training not mentioned in the factual evidence and analysis? It appears that the wet drills training had expired for the flight crew. How would a reader know this?*

**ATSB response:** In respect of the crew member emergency procedure proficiency requirements of CAO 20.11 refer to the response at question 8(c) above.

In regards to 'wet drill' training, Part D, sections 3.2.12(e) and (f) of the Pel-Air operations manual indicate that this training shall take place as part of a pilot's initial qualification with the company. In addition, the manual stated that recurrent life raft training may be carried out using a step-by-step pictorial checklist or via a practical scenario. There was no mandated 'wet drill' currency requirement.

The crew's wet drill training was recorded at pages 13 and 14 of investigation report AO-2009-072. The reported benefits of the crew having undertaken this training were highlighted on page 20, discussed on pages 40 and 41 and recorded as an *Other key finding* on page 43 of the report.

The ATSB fail to answer the fundamental question. Why have they not reported the failed risk control of annual life jacket wet drill training and life raft wet drill training in the factual information and analysis? The CAO has head of power above the Operations Manual. They fail to answer the question because they have deliberately omitted this.

*37. On page 32 of the final report what does the following sentence mean? Does it mean it did not occur, or does it mean that the ATSB can't establish the facts?*

*'There was no independent evidence to indicate that the operator routinely assured itself of the accuracy of pilot's international flight planning and forms or their in-flight navigation logs and crews' compliance with the operator's procedures.'*

**ATSB response:** The sentence above means that the ATSB could not establish the facts.

Could that paragraph be reworded in the following way to reflect the findings of the CASA special audit?

*"There was evidence that indicated the operator did not routinely assure itself of the accuracy of the pilots international flight planning and forms or their in-flight management logs and crews' compliance with the operator's procedures".*

**ATSB response:** Since the ATSB could not establish the facts, it would not be appropriate to re-word the paragraph as proposed.

I suggest that the ATSB check the facts that the CASA inspectors found in the CASA Special Audit. If the ATSB cannot accept those facts then the only logical conclusion is they have deliberately ignored the evidence/facts.

*38. Can you please explain the following change from the drafts to the final report and what evidence resulted in the change? In the final report is the ATSB stating that they cannot find the evidence, or is the ATSB stating that the logs were not filled out correctly? The CASA Special Audit found the operator did not complete the in-flight navigation logs. Why is this not written in plain, unambiguous language as per the ICAO Accident Manual requirements? 26 March 2012 draft:*

*There was no evidence in the operator's training file for the PIC to suggest the completion of that additional training during his post-endorsement training.*

Final:

*There was no requirement in the operations manual for the content of such training to be recorded. The Australian Transport Safety Bureau (ATSB) was unable to independently confirm the extent of the PIC's post-endorsement training.*

**ATSB response:** Many operators develop checklist-style forms in support of their training. These forms list a number of exercises that might be undertaken in a particular flight and include a matrix that allows the trainer to annotate 'satisfactory', 'unsatisfactory', 'waived' or similar. There can also be a second element to such forms where the trainer makes manuscript observations on the conduct of the training flight, notes the exercises undertaken, and comments on/provides advice on any issues and where or how the trainee might improve performance in the future. Not all elements of an exercise covered during a flight are necessarily recorded on a form and trainers will often revert to more general comments and observations. This is not unusual. The intent of the draft report was to highlight the requirements in the operations manual for specified post-endorsement training, such as the calculation, application and/or adjustment of CPs and PNRs, etc that had relevance to the accident. There was no evidence in the pilot's training records that these items were specifically addressed in his training.

The ATSB say it here, very clearly, that there was NO EVIDENCE in the pilots records.

However, as a result of the initial DIP process, the pilot's training records were again reviewed and a comment by the trainer for the pilot's first post-endorsement training flight was found indicating that 'We went through flight planning, and re-flight planning for bad weather'. There was no clarification as to what specifically that exercise may have entailed, which prevented a full understanding from the training records of the extent of these aspects of the pilot's post-endorsement training. This was the reason for the revised text in the final report. It was not related to the completion or otherwise of the in-flight navigation logs.

This ATSB response is astonishing. It ignores the facts in CASA's Special Audit. Yet the ATSB is happy to accept purported facts in a DIP comment to remove any criticism and suggest there was no requirement for such training to be recorded, contrary to the Operations Manual requirements to record such information.

From 16 July draft

*Flight crews were expected to use their own methods, systems and tools for pre-flight planning. It was reported that co-pilots modified their techniques to reflect the preferred methods for each PIC with whom they flew.*

Final

*"Flight crews were expected to use their own methods, systems and tools for pre-flight planning in compliance with the provisions of the operations manual. It was reported that co-pilots modified their techniques to reflect the preferred methods for each PIC with whom they flew. **There was no independent evidence to indicate that the operator routinely assured itself of the accuracy of pilot's international flight planning and forms or their in-flight navigation logs and crews' compliance with the operator's procedures.***

**ATSB response:** In the first instance, and similar to most transport safety investigation agencies, the ATSB seeks independent evidence in the form of documentary, physical, recorded, etc data in preference to anecdotal evidence, such as (for example) witness recollection. The highlighted text was included subsequent to the DIP process to indicate the lack of such independent evidence.

The additional text supported the discussion at page 38 of the report on the oversight

difficulty faced by the operator as a result of the variation in its pilots' pre-flight planning procedures. The ensuing analysis highlighted the potential safety benefits (including potentially for other operators) of the closer review of flight documentation and how it was being applied. In the Pel-Air aeromedical operation, this included an increased likelihood of the identification of the inconsistent interpretation and application of elements of the operations manual in respect of fuel management. The change to the text was not related to the completion or otherwise of the in-flight navigation logs.

The ATSB should read the CASA Special Audit as it contains relevant evidence.. I have cut and paste below in accordance with their test of "independent evidence" via CASA documents:

A review of a sample of document packages relating to international flights was conducted for documents required to be kept in accordance with:

- International Flight Preparation Forms (IFPF) (6 months CAR-233 (3))
- Navigation Logs (CAR 78)
- Passenger Manifests (3 months CAO 82.1 App 1)

**Sampling of flight record packages provided by Pel-Air Aviation Pty Limited:**

29-30/9/09 – Aircraft Registration VH-NGA - Dominic James  
No Navigation Log, No IFPF, No Passenger Manifest

30/9/09 - Aircraft Registration VH-KHR - Ian Meyer  
No Navigation Log, No IFPF, No Passenger Manifest

2/10/09 - Aircraft Registration VH-AJV - John Turner  
No Navigation Log, No IFPF, Passenger Manifest present - part of General Declaration.

6/10/09 - Aircraft Registration VH-NGA - Richard Sanford  
Navigation Log present but not completed, IFPF present dated 1999 (unapproved),  
Passenger Manifest present - part of General Declaration.

8/10/09 - Aircraft Registration VH-KNS - Paul Stapleton  
Navigation Log present, No IFPF, Passenger Manifest present part of General Declaration.

14/10/09 - Aircraft Registration VH-KNR - Richard Sanford  
Navigation Log present but not completed, No IFPF, Passenger Manifest present

***RCA 321065 has been issued for failure to comply with CAR 233 (3) – No approved International Flight Preparation Form.***

***RCA 321066 has been issued for failure to comply with CAR 78 and CAO 82.1 Appendix 1 – Failure to retain and incomplete Navigation Logs.***

39. Why were the following paragraphs removed from the 16 July 2012 draft of the report?

What evidence was presented to the ATSB to remove this criticism of the operator?

*"However, the operator's expectation that pilots would use their own methods, systems and tools for pre-flight planning had the potential to dilute those regulatory and procedural requirements as risk controls. To some extent, this might explain the pilot in command's (PIC) actions to develop the flight plan for the flight to Norfolk Island by reversing his outbound flight plan to Apia and applying the previously-experienced upper winds and NOTAMs to his planning for the return flight via Norfolk*

Island.

*Similarly, by not specifically requiring the copilot to partake in the flight planning, and not overtly following the flight or ensuring the availability of operational and communications support at Apia, the operator precluded these additional potential safety defences from having effect. Together with the operator's normal process of not requiring crews to report to the operator if a flight was progressing satisfactorily, this would have increased the isolation felt by its crews, and prevented a full understanding by the operator of the residual risk affecting a flight"*

**ATSB response:** These paragraphs were part of the analysis section of that draft report and developed the argument in support of the draft finding in respect of Pel-Air's oversight of the aeromedical operation and flight planning guidance (see the draft findings at page 53 of the draft report). As indicated in the responses to question 28 above, the final text of the safety issue affecting Pel-Air was approved by the Commission in accordance with S25 of the TSI Act on 16 August 2012.

As part of its approval process, the Commission reviews the evidence in support of any draft findings. In this instance, the Commission felt that there was insufficient evidence to support the finding as drafted. In consequence, the above paragraphs were removed from the analysis section of the report and the finding changed to that seen in the final report (see the ATSB response to question 41 below).

The Commission of the ATSB should be held to account for their actions in removing this critical analysis of the operator's oversight of the operation which led to the accident sequence. It is critical safety information which was deliberately removed without justification other than that the Commissioners did not hold that view. There is an abundance of evidence which supported this finding.

What is most obvious is the lack of understanding of contemporary aviation safety investigation and more importantly system safety.

*40. What does the following mean? Why is it written in language that is not clear? Did the operator conduct post-endorsement training or ongoing proficiency checks as required by the operators manual?*

*However, in the absence of any independent record of post-endorsement training or proficiency checks of that knowledge, the ATSB was unable to independently determine the PIC's ongoing exposure to, and application of those requirements in the Westwind. Clear and readily available guidance for seeking and applying amended en route weather and other information to in-flight operational decisions would assist pilots maintain proficiency in such in-flight decisions.*

**ATSB response:** The above quote should be examined in terms of the preceding discussion in investigation report AO-2009-072 of the need for pilots to make in-flight weather-related decisions that are based on the most recent weather and other information relevant to a flight. The importance of a pilot's knowledge as a result of his or her Airline Transport Pilot (Aeroplane) Licence qualification was discussed. The requirement in the Pel-Air operations manual for post-endorsement training or proficiency checks of that and other knowledge was highlighted in the factual section of the investigation report. This included checks of the calculation, application and/or adjustment of CPs and PNRs in support of weather-related decisions. As discussed in the response to question 38 above, the only documented (independent) evidence of such training being provided to the pilot in command was a general comment by the trainer in the pilot's first post-endorsement training flight, indicating that 'We went through flight planning, and re-flight planning for bad weather'. There

was no specific indication of what that may have entailed, which prevented a full understanding of the extent of these aspects of the pilot's post-endorsement training.

This ATSB statement contradicts the evidence which they gave to Question 38. Here they say the Operators DIP comment " 'We went through flight planning, and re-flight planning for bad weather'. There was no specific indication of what that may have entailed, which prevented a full understanding of the extent of these aspects of the pilot's post-endorsement training" as not being independent evidence as it prevented a full understanding of the training, yet in Question 38, they gladly accept this comment as independent evidence to refute their finding in the previous draft of a "lack of recorded training".

This can only be described as a bizarre response by ATSB. An investigation agency which does not ask questions, refuses to acknowledge evidence, and then accepts a DIP comment as "documented independent evidence" is unacceptable.

The second sentence draws from the specifics of this accident to make a more general point in respect of the benefits for all pilots of clear and readily available guidance in respect of seeking and applying en route weather and other information to their flights. Such guidance would serve as a ready information source, allow pilots to self-study in preparation for a flight or check flight, assist operators in the development of their operations manuals and training packages and, overall, increase the likelihood of consistent and appropriate in-flight operational decisions.

As a result of this accident, CASA has advised of safety action that will:

- Enhance the available fuel-planning and in-flight decision making guidance in respect of flights to remote destinations.
- Carry out a holistic review of the fuel and alternate planning guidelines

Given the nature of the Pel-Air training and proficiency records as highlighted at pages 14 and 32 of the investigation report, the available evidence of the flight crew's training indicated that Pel-Air was conducting post-endorsement training and ongoing proficiency checks as required by the operations manual.

Contrary to the ATSB final paragraph above, their responses to Q 38 and 40 above contradict each other and this final paragraph.

41. Please explain the following change. What evidence was received?

Draft (16 July):

*The operator's limited oversight of the aeromedical operation and flight planning guidance prevented a full understanding by the operator of the residual risk affecting the operation. [Minor safety issue]*

Final:

*The operator's procedures and flight planning guidance managed risk consistent with regulatory provisions but did not effectively minimise the risks associated with aeromedical operations to remote islands. [Minor safety issue]*

**ATSB response:** As advised in response to question 26 above, the draft report was forwarded to the Commission on 30 July 2012 for consideration for release to the public under S25 of the TSI Act. As part of its S25 approval process, the Commission reviews the evidence in support of any draft findings. In this instance, the Commission felt that there was insufficient evidence to support the finding as drafted in the 16 July 2012

draft report. After consideration of all of the evidence, the Commission approved the final report text and findings on 16 August 2012.

The ATSB Commission need to be held to account for this statement.