



COMMONWEALTH OF AUSTRALIA

# Proof Committee Hansard

## SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT  
LEGISLATION COMMITTEE

**Operation of the Australian Transport Safety Bureau, and in particular its  
report on the June 2017 crash of a flight conducted on behalf of Angel Flight  
Australia**

(Public)

WEDNESDAY, 4 SEPTEMBER 2019

SYDNEY

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**SENATE**

**RURAL AND REGIONAL AFFAIRS AND TRANSPORT LEGISLATION COMMITTEE**

**Wednesday, 4 September 2019**

**Members in attendance:** Senators Brockman, McDonald, Patrick, Rennick, Sterle.

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**CREES, Dr Owen, Safety Manager, Angel Flight Australia**

**MORGAN, Mr Benjamin, Executive Director, Aircraft Owners and Pilots Association**

**PAGANI, Ms Marjorie, Chief Executive Officer, Angel Flight Australia**

**Committee met at 14:46**

**CHAIR (Senator McDonald):** I declare open this public hearing of the Senate Rural and Regional Affairs and Transport Legislation Committee. The committee is conducting an inquiry into the operation of the Australian Transport Safety Bureau and in particular its report on the June 2017 crash of a flight conducted on behalf of Angel Flight Australia. I welcome you all hear today.

This is a public hearing and a *Hansard* transcript of the proceedings is being made. Before the committee starts taking evidence, I remind all witnesses that in giving evidence they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee, and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to a committee.

The Senate prefers all evidence to be given in public, but, under the Senate's resolutions, witnesses have the right to request to be heard in private sessions. It is important that witnesses give the committee notice if they intend to ask to give evidence in camera. If a witness objects to answering a question, the witness should state the ground upon which the objection is taken, and the committee will determine whether it will insist on an answer, having regard to the ground which is claimed. If the committee determines to insist on an answer, a witness may request that the answer be given in camera. Such a request may, of course, also be made at any other time. Finally, on behalf of the committee, I'd like to thank all the witnesses here today for being here to give evidence.

I now welcome representatives from Angel Flight Australia. Do you have any comments to make on the capacity in which you appear?

**Ms Pagani:** I am also a director of Angel Flight.

**Mr Morgan:** I am a liaison officer for Angel Flight for Aircraft Owners and Pilots Association.

**Dr Crees:** I'm a volunteer pilot with Angel Flight and their volunteer safety manager.

**CHAIR:** Thank you. I invite each of you to make a brief opening statement before the committee asks questions. Do you wish to make an opening statement?

**Ms Pagani:** Yes please, Senator. Firstly, on behalf of Angel Flight and personally, it's important for us to acknowledge the immense tragedy of these aviation accidents. We're here, generally speaking, out of respect and to honour all of those touched by these accidents and, importantly, to ensure that the safety message arising out of these accidents and any subsequent reports or rules is done properly. We want to make sure we get it right for them and the aviation community into the future. That is fundamental to our welcoming the opportunity this committee has given us today.

Firstly, in relation to the ATSV report, the primary issue we take with that is that it is wrong, it's dishonest, it's misleading, it uses inventive and flawed datasets, it targets unfairly a charity and it does nothing to investigate the accident or to give any guidance or recommendations into how this sort of thing can be prevented in the future. These were human-factors accidents, as are most—car, boat and aircraft accidents. That hasn't been investigated. We have a very small percentage of a report that effectively says the pilot took off in poor weather and lost control and fatalities occurred. We know that that is, sadly, a very common accident in aviation across the world, and certainly in Australia. There is nothing in the report whatsoever that assists pilots with guidance, training or future reference to prevent this happening again. It was, and it's always been, set out to be an attack on this charity.

At the accident scene in Mount Gambier, the lead investigator, with no experience in aviation, stood before national television and said: 'We will be investigating Angel Flight.' And that's what happened. That was at a time, senators, when the ATSV had not even given Angel Flight the courtesy of a confirmation that this was an Angel Flight related accident. I can tell you that I received the call from our senior flight coordinator—we flight track all the flights. It was clear from flight tracking that there was an issue, as the track had stopped. Immediately, I called South Australia Police, the ATSV and CASA and gave them all of the details of this flight, the persons on board, their relatives and how they could be contacted in the event that it was as it seemed to be.

I was unable to do more at that stage, because I was told by the Mount Gambier manager of the airport that two light aircraft had taken off within one minute of each other. I was there with the relatives calling me saying: 'Is this our family?' I had to say: 'It doesn't look good, but I can't confirm that, because I can't get any information

back from the ATSV.' And at that time we had the ATSV investigator telling Australia that was our flight. That set the standard for this investigation. It was a result that was predetermined and the figures were matched, and that comment—not in those exact words—was made by our very senior statisticians, who have examined all of these reports, in a bundle that's, sadly, been sent late to you all. We also had analysis done of those statistics, which revealed the same. In effect, what the ATSV has done is to select a portion of the flights, certainly less than half, on the basis that they are not interested in the flights arranged by Angel Flight, coordinated by Angel Flight, where the fuel is paid by Angel Flight, unless there is a passenger on board. We have represented to them that if, as they urge us to believe, there is, in their words, a perceived pressure for pilots completing these flights, then surely the pressure would be existing when the pilot departs to pick up the passenger, to get the passenger, to take them to their appointment. They said, 'No, we're only interested when they've got them and they're bringing them back.' It's totally artificial. We had at that time approximately 46,000 flights, and that doesn't include pilot relocation sector flights—that is, they are just including flights out and back, to get the passenger and to bring the passenger back, but not often a third sector where a pilot goes from his base to the pick-up spot. So we have encountered this.

They have deliberately cut out half of those flights. At a meeting with the ATSB, this has obviously been raised. The draft report did not mention any data relating to our two-sector flights. The ultimate report did put that analysis in—it had been done but not been included. I asked Mr Hood at a meeting why he had headlined this huge discrepancy between these charity flights and others when their own data and their own analysis revealed that, had they used all our flights, except the pilot repositioning, we would have the same safety rate or better than private general aviation. His response to me was that if people wanted to see those facts, they could dig through the appendices of the reports, to which I responded, 'People will only read the headlines, and you know them to be wrong.' And, indeed, I raised at that time that the report was dishonest.

This is based on an assumed pressure. I want to make it very clear that at no time whatsoever did the ATSB nor CASA—before they did their ruleset—approach us and ask, 'Could we have a list of names of your pilots, health professionals, passengers or drivers to talk to about this?' Clearly, I wouldn't have given names of patients et cetera without their consent but I certainly would have told those people: 'Here's a number. Ring the ATSB if you want to talk to them.' So they came to this view on pressure without talking to a single solitary participant in this whole event. In the final report—this wasn't in the draft—they did acknowledge that Angel Flight puts no pressure on pilots, so they moved to this perceived pressure on pilots.

What they also did is count 10 years of flights, not hours. Had the hours been counted, our studies reveal that our statistics would be as good as charter statistics. But the ATSB counted flights, totally in opposition to its own protocols. The direct quotes of what they should've done will be in the summary, when you have a chance to read our overview. By doing that, they're saying that a joy flight around Sydney Harbour for 10 minutes is the same as a trip from Sydney to Lightning Ridge and back, Adelaide to Marree or Birdsville and back or a non-training circuit. For currency, we all have to do circuits sometimes for touch-and-go practice. That takes between four and six minutes depending on your aircraft. They counted those flights as being the same as a flight halfway across the country and back, because they refused to count flight hours. That is totally at odds with what they should have done.

At least in the final report they did change one other aspect. They had originally said that we offered no guidance to pilots; they changed that to insufficient guidance to pilots, but nowhere have they told us what is sufficient. What they've done is they've said to Australia, 'Angel Flight should not exist in its current capacity; it should use jet transport.'

There's a very important statistic they've missed out: they didn't count 2017 accident statistics for the rest of GA but only for Angel Flight when they did their comparisons. I can tell you—it's acknowledged by the ATSB—that in that same accident year, 2017, there were 22 deaths in commercial aircraft in Australia out of 14 accidents, and nowhere do we hear the ATSB saying to commercial operators, 'You have a duty to tell your paying passengers that they should not travel on your charter aircraft, because RPT is safer.' But that's what they're saying to us.

What is really important here, for both the ATSB and CASA, is to acknowledge the difficulties of people in rural Australia. In saying they should all catch jets, they have absolutely no idea what it's like. It's not just about whether you are an hour or so from an RPT airport. Surgeons and hospitals don't work to RPT timetables. We have people in far western Queensland. They have wheelchairs. They have special seats for babies. They say to us: 'Even if we could get an RPT flight, what happens when we get there? Certainly the airlines are very helpful at getting us with disabilities off the aircraft, but then we're faced with a big city airport with a wheelchair or special baby seats for the cerebral palsy children et cetera. Then we've got to find a waiting point.' The driver—if we

provide a driver, even for an RPT flight—can't leave their car. They're somewhere around Sydney Airport waiting, and these often elderly people or people with young children have to find their way, with all their equipment, bags, chairs and wheelchairs, to where these drivers are. It shows a total lack of understanding of rural Australia.

Our feedback from our passengers—and some of the feedback you will have in your bundle of documents—is: 'Why is a government agency treating us like idiots? Why are they saying, "You cannot choose how you get to hospital; we are telling you you should not be choosing these private flights"?' You will have the documents in front of you for related reading. You will see how well informed they are. In addition to all of this, there's a formal briefing by our flight coordinator, and they must watch a video, signed off by their health professional, which shows the smallest of the aircraft we use. We don't put the Citations, Cheyennes or King Airs on there; we put four-seaters on there so they know what they're flying in.

What the ATSB are saying is: 'The people in rural Australia are too stupid—notwithstanding the documents, the video and that they live in the outback, where light aircraft flight is a given—to know they are not flying in a jet.' That's what they and the Civil Aviation Safety Authority are saying to the people of rural Australia, and certainly Angel Flight looks to the Australian parliament to rectify this and to stand up for these people and allow them to make what are very well-informed choices and to make those choices knowing that this data is misconceived and deliberately flawed. The agency has decided on an outcome and used the statistics it wants.

What Angel Flight would like to see is a withdrawal of the ATSB report and a proper expert investigation into the accident. If this committee or others in the parliament think there needs to be an investigation into charity flying then so be it. We will cooperate, as we have done above and beyond our call of duty, with any investigation. But it should not be merged and focused on, instead of an aircraft investigation. We have been urging CASA for many years to enhance its human factors training, pre licence. Certainly one can attend seminars on a voluntary basis post licence.

As you all know, we rely on CASA, its training and its licensing. If CASA is saying these pilots are dangerous, CASA is also saying: 'We don't provide proper training. Our pilots are dangerous.' Are we not entitled to rely on them? Bear in mind, the standards that we set are far, far higher, and they certainly were before the accident, than CASA has ever required—for example, 250 in command. They didn't change that. A pilot can get a commercial licence and fly passengers with 70 hours, total time. We say and have always said: 250 in command. So is CASA saying to us and the public, 'We don't trust our training system'? They must be saying that, but they've imposed rules which do not at all reflect in any way the causes of these accidents or indeed any real accident statistics.

I challenged Mr Monahan about this when he came to my office on 28 November 2018 with a hastily scribbled bunch of notes and said: 'We're going to propose these new rules. They'll be published in five days.' I've been working with CASA for 1½ years. We had initiated safety training, mentoring, which CASA has now stopped. We had been putting into place a lot of safety procedures, which really were the responsibility of the regulator, and at no time were our plans criticised. They certainly said they'd like to see us move more quickly, but at no time did they ever mention this new set of rules. It was presented to me—not shown to me but told to me on 28 November. I said to Mr Monahan: 'What does this have to do with the accidents? It has no relationship to them, these rules.' He said to me, 'I agree, it isn't related, but we have to do something.' That was one day after they'd received a call from the ATSB asking, 'What have you done since the accident?'

No proper protocols were followed. The minister here, sadly, has been grossly misled by CASA. He's been told that there's been public consultation. You will see in your bundle of documents that there are about 10 pages of protocols for consultation that CASA is supposed to follow. It didn't follow any of them. He's also been misled in that—and I spoke to Mr McCormack about this—Mr McCormack had been told by CASA that it was only following the FAA. That is totally, 100 per cent wrong. Private flights in the USA are not regulated. We follow the Californian model, US Angel Flight West, the biggest operator, which does private flights—no regulations. There are so many ways that they have misled the minister, which is really unfortunate. I don't blame the minister. It is the responsibility of CASA to properly inform the minister.

What we would like to see—and I hasten to add that when I challenged Mr Carmody at a meeting in Canberra, where various CASA executives and our directors were present, about why he was not following protocols on this, Mr Carmody's first answer was, 'Well, I have the power'—that is, to issue an administrative directive without going through the protocols. I pressed further, and Mr Carmody's answer was, 'Well, Marjorie, because it's easy.' That's what he said in front of his senior executives and me and one other director of Angel Flight. And, really, what CASA hasn't done, which we would welcome, is to get rid of this ridiculous document, which does not address any safety issue whatsoever related to these, and most, accidents, and send it to where it's supposed to go—to advisory committees, to industry, to proper industry consultations.

CASA says: 'We went to industry consultation. We set out this consultative document a few weeks before Christmas.' Then the responses came in. Within three working days after the responses—and there were a huge number of responses—they had the rules published. That seemed a bit odd, but how reliable are they? And Mr Greg Hood from the ATSB has also read these and clearly relied upon them, because that was raised at our last meeting. I have added to your documents just one example of these submissions where an ATPL commercial airline pilot, corporate jet pilot and very experienced private flying pilot put in a very lengthy submission of five pages. What came out from that same person on the website—and you have this in your bundle; I won't mention any names—is four lines. That was said to be this person's submission: four lines.

**Senator STERLE:** On whose website?

**Ms Pagani:** CASA. They've published the community service flight consultation hub. How can we, or they, rely on them? These are not identifiable documents. Mr Hood has relied on them as well. It's just absurd to do that, when they could have talked to seniors in the industry, to the people who are involved in this—the passengers, the pilots, the drivers. They didn't talk to anyone—neither CASA nor the ATSB—and nothing in their website is verifiable. But, more importantly, when they've told the minister that they've done this consultation, feigning transparency, nowhere have we ever seen an analysis of all these documents. What did they say? Our analysis shows they certainly didn't say there should be rules anything akin to what CASA put out.

And, even in the ATSB report, the only reference to the new rules was a lauding of the policing factor. We now have to write that in our logbooks. We have to put in our flight plans. They could ask us if they wanted to. They never did. I realise I've probably gone over time, so—

**CHAIR:** I just want to give the committee the opportunity to ask you questions.

**Ms Pagani:** Yes, and I'm sorry. I shall leave it there.

**Senator STERLE:** I think we've got the picture.

**CHAIR:** Mr Morgan, is there anything you want to add briefly?

**Mr Morgan:** I won't rehash or go over the issues that Marjorie has raised, other than to say that it is critical that this report be rescinded and that a new investigation be undertaken, and potentially and more broadly a larger investigation into the totality of it, because this report drove regulatory changes that have a direct impact on the industry, regulatory changes that have applied a great deal of negativity towards the overall safety culture of general aviation. General aviation pilots are now aircraft maintenance standards. As I said from the outset on this issue through Angel Flight and OAPA, absolutely nothing that CASA have put forward would have prevented either of the two accidents from occurring. And I think this is the critical point. We are here today because two pilots of their own volition, in total contravention of the civil aviation regulations and in total contravention of the procedures and processes of Angel Flight, took it upon themselves to make decisions that resulted in a fatality—pilots who are trained and licensed and regulated by our government aviation regulator. Angel Flight is now bearing a huge punishment for those individual decisions, and the industry is paying the price. To allow a report to drive a regulatory change that does not directly address the root causes of both of these accidents which are identical—human factors, the human condition: the same principal reason we have fatigue fatalities on the road, we have alcohol fatalities on the road, we have speeding fatalities on the road—to allow that regulation to stay in place and to allow that report to stay in place, I think, would be an enormous travesty. So I really do urge the government and the senators here today to listen to what Angel Flight has to say, because it is based in truth. All we are interested in achieving are outcomes that genuinely benefit safety—not pay lip-service to it, not pretend to do something for it, but actually address safety.

**Dr Crees:** I'll be very brief. I just want to refer to a couple of issues related to the statistics, because I was one of the people who did a fairly detailed analysis of the accident statistics on behalf of Angel Flight. Ms Pagani mentioned some of the misleading information that was provided by CASA in regard to the regulations. I think at Senate estimates CASA said that it is 'four or five times less safe to fly with Angel flight than to fly with your mate'. I believe that data was obtained from the annual aircraft activity survey carried out by the Bureau of Infrastructure, Transport and Regional Economics. I'm not sure how they managed to do that, because that survey has only been identifying community service flight since 2014—a four-year period as compared to a 10-year period. But, on top of that, there is nothing in the aircraft logbook that records the purpose of the flight. So I don't know how an aircraft owner is meant to identify how many hours or how many flights his aircraft has done, when it's not recorded in the log book. If you look closely at the data, in the four years from 2014 to 2017 that activity survey shows an average of 46 aircraft reporting that they did community service flights. Angel Flight's own records show that in each of those years more than 200 different aircraft were involved in community service flights. So to extrapolate from 46 aircraft in four years to 200 plus aircraft over 10 years is a bit of a stretch, to

me. What's more, the bureau's definition of a community service flight is a very broad one that would include organisations such as Little Wings, FunFlight and any local aero club that's doing a charity event or activity. They're all captured by the definition, but that is not the definition used by CASA in their new regulations. So there's a big mismatch there.

In terms of the ATSB data, there's a statement early in their report that says their objective was to 'understand the risk to passengers'. So they have selected passenger-carrying legs from Angel Flight and compared that with all other private flying. It seems to me that it's fairly difficult to have a risk to a passenger in a flight that doesn't have a passenger, and there's an unknown proportion of general aviation flights that don't carry passengers. The fact that you don't have matching data is no justification for doing the comparison between passenger flights and all flights. There are quite a number of other differences which can be identified that would make the comparison dubious if not invalid.

As a result of our discussions with ATSB after the draft report was issued, they have included some further information and analysis in the final report, including counting the empty sector in the Angel Flights, which more than doubles the number of flights that they counted. When you do that, the difference in accident rates between Angel Flight and other private operations is insignificant—they're almost the same number. If you do that for fatal accidents, again, you get a slight difference which is statistically insignificant. That information appears only in the fine print of appendix B in their report. The headline statement, as Ms Pagani said, is based on the passenger leg only, which they claim says we're seven times more dangerous. To me, there are so many deficiencies in the analysis that it's not useful to us as an organisation trying to identify safety features or risks.

In terms of occurrences, these are things that happened that weren't accidents but could have some impact. When you look at the group of occurrences that ATSB said Angel Flight features most prominently in, almost all of those occurred in controlled airspace. In fact, that's exactly what you would expect to see, because all of our flights operate in controlled airspace. There is some unknown proportion of other general aviation flights that never go near controlled airspace. I don't see how you could actually say Angel Flight is better or worse when you're not comparing the same things. I think that's sufficient on the stats at the moment.

**CHAIR:** Excellent; that will give the committee some time to give you some questions. I want to ask you, just to clarify, Marjorie, about when you said that the consultations were sent out a few weeks before Christmas and that the final report was published three days after consultation closed. Which consultation was that?

**Ms Pagani:** I'm sorry; that was the CASA Consultation Hub. When Mr Monahan messaged me on 28 November with his scratch notes about the proposals he said, 'We will have these published within five days.' However, they did give more consultation. It was over the Christmas period—it was a bit over a month, from my memory. But then, on the closing day of consultations—within three working days of that—the rules had been struck.

I can tell you how I found out about that. It's because the chairman of the CASA board, in an interview with ABC Television Rockhampton, told them of this. They hadn't told us. That young lady called me and said: 'Here's a statement by the head of the CASA board. Did you know anything about this?' I said no.

**CHAIR:** That was 28 November, was it?

**Ms Pagani:** Yes. That's when I got—

**CHAIR:** In what year?

**Ms Pagani:** Sorry—2018.

**Senator PATRICK:** You said in your opening statement that you didn't think the report covered off on the accident. But it actually does go through the accident, and goes into quite a detailed reasoning as to the cause of the accident. I think it's safe to say that it says that the pilot, in using poor judgement, took off in flying conditions in which he should not have done. I understand you have objections to the data and the report in respect of Angel Flight, but are you okay with what has been done in terms of the forensic analysis of the flight itself?

**Ms Pagani:** There hasn't been a forensic analysis. Certainly, we don't have any issue with the facts. But the facts are there; anybody standing on the ground would have come up with the same facts. The pilot took off in bad weather, not exercising a proper judgement. The same pilot, clearly—unless there was a medical event and that wasn't examined—was not complying with the regulations that he was supposed to comply with, lost control and crashed. They are facts; we don't dispute those facts. That is not a forensic analysis. There is none in that report.

What needed to be done was to look at the history—to look at the background before this accident, whether it was the aircraft or the pilot. Look at any history that would enlighten us on that. But, more importantly, where are the recommendations?

**Senator PATRICK:** I understand the recommendations are—

**Ms Pagani:** Yes, sorry. No forensic analysis was done. It was simply a statement of facts, and we have no issue with those facts.

**Senator PATRICK:** Okay. But in your call to rescind the report you would accept that the facts as laid out in relation to the flight are correct?

**Ms Pagani:** Yes.

**Senator PATRICK:** That work does not have to be redone?

**Ms Pagani:** No.

**Dr Crees:** Could I just add briefly to that? One of my concerns, as a pilot, with the analysis of the accident itself is that it really ignores the steps before that. Most accidents start a long time before the accident itself occurs. This pilot left Murray Bridge to fly to Mount Gambier on a day when clearly it wasn't appropriate for a VFR pilot to fly to Mount Gambier. He was scheduled—or planned—to fly back to Adelaide and the weather forecast for Adelaide on his arrival time was clearly not suitable for a VFR arrival. I happen to know that as an absolute fact because I was scheduled to do an Angel Flight into Adelaide on the same day and cancelled because of the weather. So there's a lot that surrounds this accident which is valuable information and which hasn't been considered.

**Senator PATRICK:** You say in your testimony that normal protocols were not followed in respect of the way in which you do analysis of a flight, starting from the prepositioning flight through to the carriage of the passengers and then, presumably, getting the aircraft back to its original location. What protocols are they in breach of?

**Dr Crees:** The two issues there are, first of all, the positioning flight, where the empty leg, if you like, is organised by Angel Flight. The pilot is under pretty much the same pressure whether he's got passengers or is just getting to the passengers. That's a key part of the ATSB analysis.

The second is the use of flight numbers rather than flight hours. As far as I can find, in all other ATSB accident analyses the accident rates are based on rates per 10,000 hours, 100,000 hours, a million hours—they're hours based calculations. For some reason or other this report has reverted to flight numbers.

**Senator PATRICK:** Okay, but you say there's a protocol in place that would normally be used in aviation to count those prepositioning flights? In my view that's the case. That's when any fatigue analysis would commence, wouldn't it—from the very first time the pilot went to the aircraft to open the door?

**Dr Crees:** Yes. The entire trip is under the same pressures and challenges as the passenger leg.

**Senator PATRICK:** But is there a protocol—

**Senator STERLE:** Sorry, Senator Patrick, but I just want to clarify. Dr Crees, by ATSB using the number of flights that the pilot had performed in his career, rather than hours, did it make it look like the pilot was less experienced?

**Dr Crees:** No. This is the analysis of accident rates that we're talking about.

**Senator STERLE:** Not just this one?

**Dr Crees:** No; this is the overall analysis of accident rates.

**Senator STERLE:** Okay. Thank you.

**Senator PATRICK:** Which, of course, leads to your major concern that the ATSB, in effect, has gone with a headline rather than looking at the total number of flights. Obviously we'll be asking them why they might have done that, which is why I'm trying to identify some international standard or some protocol that would require them to do so.

**Dr Crees:** In terms of flight numbers, ICAO recommend flight numbers, but that's only for commercial transport flights of aircraft above—I can't remember the weight—2,200 kilograms or something; it might be 5,000. Basically it's for airline flights. ATSB, in all the reports I've seen, use hours, not flight numbers. The NTSB in the US also uses hours, not flight numbers, for general aviation. So here we have one particular analysis which is out of sync with everything else.

**Senator PATRICK:** We'll put that to CASA.

**Mr Morgan:** To clarify—I think I might understand where you subtly may be going there—if this accident hypothetically were a commercial charter organisation and the ATSB were investigating it as an accident then there would be a fair assumption that in collating the data the ATSB would be looking at the total flight, not just a portion of the flight—that is, one sector of the flight. They'd be looking at it from the moment the pilot clocks on to the moment the pilot clocked on in all of the legs he or she may have flown. That's if I understand the question you're asking.

**Senator PATRICK:** I'm just trying to identify whether there is an international standard. Clearly a choice has been made about what statistics to use. It's a case of lies, damn lies and statistics; you can always pick whatever suits your case. I want to know whether there is an international standard in relation to the examination of these sorts of operations and what should properly be used.

**Dr Crees:** As far as I know, for general aviation there is no international standard; there is a common practice, which is hours.

**Senator PATRICK:** Ms Pagani, you've indicated that the ATSB in some way had a preconceived idea that they wanted to direct this at Angel Flight. How did you come to that conclusion? Is it through communications or just an observation of the number of data points?

**Ms Pagani:** It's part of a story, a continuum. It started on the airfield with the lead investigator, arms folded, saying, 'We will investigate Angel Flight,' as I said, before they told us about—

**Senator PATRICK:** That's in relation to the second crash in 2017?

**Ms Pagani:** That is so.

**Senator PATRICK:** Was there any activity prior to that, after the—was it the 2013 crash?

**Ms Pagani:** No. Of course we had an investigation arising out of the 2011 accident. In that ATSB report, no responsibility was found to attach to Angel Flight. There was also the Coroners Court of Victoria finding to that effect, that there was no responsibility to be laid on Angel Flight. What the ATSB did here was to resurrect that, notwithstanding that they never appealed the decision of the Coroners Court or did anything about their own report. They never disagreed with their own report, but they decided to drag that up and include it in this. So, in my view, it became a witch-hunt against Angel Flight and totally contrary to the ATSB's initial findings in 2011 and the Victorian coroner's finding, which was never appealed. So that decision stands, but the ATSB has sought to rein all that in as an attack on Angel Flight. I have had many—

**Senator PATRICK:** What's the motive?

**Ms Pagani:** It's difficult to know what the agenda is, other than trying to show they've done something. It's similar to what Mr Monahan said: 'We've got to do something. It doesn't matter that it's not relevant, we have to do something.'

**Senator PATRICK:** You've had conversations on ways in which to improve Angel Flight safety—I presume you've had those sorts of discussions.

**Ms Pagani:** Yes. Look, Senator, we certainly went above and beyond with the ATSB, I can tell you. Under a summons, we only had to produce our data. It was in spreadsheet form—we didn't have very sophisticated reporting access—so we agreed to have our IT person write the code for the whole 10 years of flights so that they could then run that through Airservices and CASA data to save them a lot of work.

**Senator PATRICK:** That goes to cooperation with the ATSB, but what about the internal analysis—how you looked at the accident in 2011 and the accident in 2017, asking, 'How do we deal with this?'

**Ms Pagani:** Yes. What we did, and I suppose this goes back to CASA, was immediately after the accident, in August of that year, we invited CASA into our offices. Now we're not an AOC holder; we didn't have to do that. But in the spirit of trying to work towards safety reform, I invited them, and a team came into our office. We gave them our documents. We couldn't let them directly access our computers, because we have patient files on them. They sat with us and with our chief flight coordinator and we answered any questions they might have had. I suggested then that we start to work with CASA. What I would have liked was a partnership. Indeed, Mr Monahan, in those early days, after reading our documents and procedures, said to me: 'This is very impressive. It looks like a military man wrote it.' I did not take offence. However, there was no criticism of the way we do things.

We did, however, say, 'Look, these are other things that we'd like to do,' and we were greatly assisted by Angel Flight West in California. We then started on the process of writing the script and so on for an induction course. It's been a big procedure. We've now filmed it. In the meantime, to get the USA course up, and it's required for our pilots, we put in place a mentoring program for pilots. CASA has stopped that—

**Senator PATRICK:** They've stopped that through the new regulation that has come into force that doesn't—

**Ms Pagani:** They've stopped it through that, yes.

**Senator PATRICK:** It doesn't allow a mentor on the plane; it only allows a passenger.

**Ms Pagani:** No, it says 'operating crew'.

**Senator PATRICK:** Okay.

**Ms Pagani:** Indeed, we have a letter from Mr Monahan that says it must be a person endorsed on that aircraft. Well, that's not the CASR definition of operating crew; it's basically a person appointed by the pilot in command with a duty in relation to the safety or operation of the aircraft—such as a load master or a navigator. So Mr Monahan is wrong; it doesn't have to be an endorsed pilot.

The purpose of the mentoring was to take a pilot—they don't have to be endorsed on the same plane; I might have somebody in a Cessna 172 who goes along with the guy in a TBM 850—to observe how the safety culture works, the procedures and the sorts of things they might experience with the passengers who have disabilities getting on and off and the like. Importantly, it was to observe that even an experienced jet pilot, if he didn't like what he saw up the front, would pull the levers back and say: 'No, we're not going. Ring Angel Flight.' We take over. The pilot doesn't have a responsibility with the passengers. We wanted the junior pilot to observe that if an experienced pilot is happy to pull the power back on the runway then it's okay, that there's no pressure. We've had to stop that because we cannot honestly say that pilot being mentored is operating crew for that aircraft. Most people, if you get them on your aeroplane—get a stranger next to you in the right seat—you're not going to let them take the controls.

**Senator PATRICK:** Mr Morgan, have you ever been asked how to help—

**Mr Morgan:** Senator, I think it's actually a very interesting question. About two to three weeks after the 2017 accident I had a meeting with the board at AOPA Australia, and I discussed with the board that we seemed to have a recurring theme within aviation of inadvertent flight into IMC by VFR pilots, and it results in fatalities.

**Senator PATRICK:** IMC?

**Mr Morgan:** IMC is 'instrument meteorological conditions', so entering into cloud and not being able to see what you can do. It's a worldwide phenomenon. It's not limited to Australia. It's not exclusive to our airspace. It happens in all aviation regions where there is general aviation aircraft. Light aircraft pilots fly into cloud and if they're not appropriately trained then they have but a few seconds to live. Our organisation has written quite a number of editorials about this.

I reached out to our industry stakeholder relations manager, Mr Rob Walker, and I informed him that I'd had a conversation with our board and that we felt it would be beneficial to the industry if we worked together in developing some kind of guidance process, information process or awareness process—an educational resource. One of the reasons I had brought this up was that AOPA Australia is part of a global AOPA community. We're the world's largest general aviation advocacy. AOPA USA has the world benchmark on community service flight education resources, and I believe that Angel Flight has been working with AOPA in the US to leverage from those. I put the offer to Rob Walker that we would like to work with CASA. I was just told: 'No. We're doing our own thing. But if you really feel compelled about it, you could write to us.' I didn't bother following up after that, because I knew what that comment was. That comment was: you don't agree with everything that we do; we don't want to work with you; we'll go our own way, thanks. I walked away, and my report back to the AOPA board was that CASA were playing politics and they were not serious about safety. If they were deadly serious about safety, they would have taken that invitation and they would have said: 'Ben, let's do something. Let's get it happening.'

So CASA have gone it alone since 2017. They run their pilot safety information seminars. Not a great deal of people turn up to these seminars because broadly, across the aviation industry, there is a significant chasm of distrust, a vacuum of trust, between the industry and CASA, so people don't generally like to go along to these things and interact with them. So CASA aren't actually communicating with the industry. They're not actually supporting the industry. There's a veneer of it. That veneer is enough for them to hang their hat on it so that they can claim to the minister that they're doing these things and there's a commitment, but the dirty little secret is that these programs and these initiatives are not delivering results.

Despite the politics, we still remain entirely open to working with CASA. We would embrace that opportunity and we would do everything we could do, because ultimately we want to eliminate fatalities in aviation. Let's go right back to the very start of this. We had two pilots who maybe, if they had been given some support, if there had been appropriate information and awareness from the regulator, wouldn't have made those decisions that were made. What I do know, and I would be willing to lay my professional career on this, is that there is no amount of

paperwork that CASA can generate that will ever stop a pilot sitting in the cockpit, where CASA are not, from making terrible decisions. The writing on pages does not oversee a pilot in the cockpit. His education, his training, his currency and the support he receives in the industry are what keep him safe.

**CHAIR:** Senator Rennick, do you have a question?

**Senator RENNICK:** Just a few. How many lives do you think Angel Flight has saved?

**Ms Pagani:** We've transported about 100,000 people and I can tell you, because I constantly move around the country and talk to little groups in midwestern Australia and all over the place, that I have people saying to me: 'If it were not for this service, I would not go.' I had an 84-year-old lady, where I drove a few hours south of Geraldton, and she said: 'I've been driving to Perth for my cancer treatment, but I can't do it anymore.' We take her. I have people in the middle of Western Australia from Aboriginal communities. They don't get their gynaecological and obstetric check-ups, so babies are often born with problems. We now bring them in from all corners. I have these comments all the time: 'We just couldn't do it. We can't face city airports. We're in our 80s. We're just not going for treatment.' And that is one of the reasons I would have liked both the ATSB and CASA to have a real look at what is happening in rural Australia, because they don't know.

**Senator RENNICK:** Sure. I'll just support that statement. I've just been around rural Queensland for two weeks myself, and the feedback about Angel Flight was fantastic; nothing but good things were said. And I myself am from western Queensland, so I know that flying is not a luxury; it's an essential service. I have one other question: do the pilots volunteer their own time?

**Ms Pagani:** They do.

**Senator RENNICK:** So basically the intent is there to help people?

**Ms Pagani:** They volunteer their time, their skills and their aircraft. And, Senator, you would know, from being in the bush, that, as to the cost of running an aircraft—not including the cost of buying it—about one-third is fuel. So we reimburse up to their one-third. We have a fuel capping system. They pay the rest, as well as the buy-in cost and a lot of time. I have one particular pilot who flies a jet aircraft in Moorabbin who hires it—he doesn't even own it—who is just reaching his one-thousandth flight.

**Senator RENNICK:** That's fantastic.

**Ms Pagani:** That's probably about \$700,000 or \$800,000 worth of aircraft pilot. And Dr Crees is about to do his 500th flight. So these people are giving so much. And you know what? They are not the yobbo, inexperienced mob that CASA and the ATSB would have us believe. We have about 50 per cent commercial or ATPL.

Here's one of the accidents referred to in the ATSB: a gear-up landing. A faulty gear light says, 'Gear's down,' but gear's not down. So that's one of our accidents. He's a 25,000-hour airline and other pilot.

So what both CASA and the ATSB would have you believe is that there's a bunch of yobbo private pilots out there with shonky machines who don't know what they're doing. Let me tell you: all of us who own our own aircraft look after them very well. We fly our families. We don't want to have accidents. It's quite different from some—not all, but some—commercial operations where it's important to make a dollar. Well, it isn't, with these people. And I can tell you—

**Senator RENNICK:** It's a refreshing change.

**Ms Pagani:** There are two or 10 owners who might have a \$200,000 or \$300,000 aircraft with another \$300,000 panel on them. These are not yobbo pilots.

**Senator RENNICK:** Fantastic. Thank you.

**Senator STERLE:** When I was reading this on the plane yesterday coming over, the first thing that hit me in the head was the different figures that had been used by the ATSB when they were doing the inquiry. Since the inquiry has come out, has Angel Flight been inundated with calls or letters saying, 'Whoa! We're never going to use you again'? What's been the—

**Ms Pagani:** Not one.

**Senator STERLE:** Sorry, I know, Ms Pagani, I'm impressed that you are. But, apart from taking it to heart, it's not the case?

**Ms Pagani:** Sorry?

**Senator STERLE:** Have you been inundated with people going, 'Bugger me! We're never going to get an Angel Flight'?

**Ms Pagani:** Not one. But I have got a lot, hundreds, of letters of support, emails and phone calls saying: 'We use this service. We feel very safe.' Again, why didn't they ask some of these people? Are you properly briefed? Are you informed?

**Senator STERLE:** We're going to ask as soon as you're finished.

**Ms Pagani:** It's been quite the opposite. Even from the health professionals out there—and they're the core of this; they refer people—we've had a tremendous amount of support. They're saying: 'What will these people do without you? These people trust you.' Really they are very well informed about what they're doing.

**Mr Morgan:** There has also been an enormous body of response from general aviation pilots, across the industry, who are asking the question: 'Why has no-one contacted me to ask me about my experiences, the flights I've conducted and whether I ever felt that I was under unnecessary pressure and would do something stupid?' There are a lot of pilots scratching their heads, asking: 'Why has no-one reached out? Why are we having our regulator telling us what we're thinking, and yet we've never actually been interviewed to provide that thought?' There's a lot of that going on.

**CHAIR:** Just to follow on from Senator Sterle: one of the many reasons that we are having this hearing today is the outpouring of concern from regional Australia, the number of people who have contacted members of this committee privately and publicly, through organisations like Queensland Country Life and *The Courier-Mail* in Queensland, and expressed their concerns about this essential service for regional Australia. No matter what you might think if you're based in Canberra or Sydney, commercial flights are not a viable alternative.

I would also remind members of the audience that, if you're here, you're here to observe and to be respectful of evidence given by other people.

Thank you very much for your evidence today.

**Ms Pagani:** Thank you, senators.

**CHAIR:** I invite you to stay to observe the rest of the evidence.

**GODLEY, Dr Stuart, Director, Transport Safety, Australian Transport Safety Bureau**

**HOOD, Mr Greg, Chief Commissioner, Australian Transport Safety Bureau**

**HORNBY, Mr Patrick, Manager, Legal and Governance, Australian Transport Safety Bureau**

**MANNING, Mr Christopher, Commissioner, Australian Transport Safety Bureau**

**NAGY, Mr Nat, Executive Director, Transport Safety, Australian Transport Safety Bureau**

[15:48]

**CHAIR:** Welcome. Before we start, can I check if Senator Brockman is on the line?

**Senator BROCKMAN:** I am on the line.

**CHAIR:** I'm very pleased to hear you. I remind senators that the Senate has resolved that an officer of a department of the Commonwealth or of a state shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of the officer to superior officers or to a minister. This resolution prohibits only questions asking for opinions on matters of policy and does not preclude asking for explanations of policy or factual questions about when and how policies were adopted. Officers are also reminded that any claim that it would be contrary to the public interest to answer a question must be made by a minister and should be accompanied by a statement setting out the basis for the claim. I invite you to make a brief opening statement before the committee asks questions. Do you wish to make an opening statement?

**Mr Hood:** Yes, please. And congratulations, Senator, on succeeding Senator Barry O'Sullivan as chair.

**CHAIR:** Thank you.

**Mr Hood:** We are grateful for the opportunity to explain our findings and methodologies from the investigation into the collision with terrain at Mount Gambier on 28 June 2017 of a light aircraft conducting a community service flight on behalf of Angel Flight Australia. On behalf of the ATSB, I would like to reiterate our deepest sympathy to the family and friends of the pilot of the aircraft and the family and friends of the teenage girl and her mother killed in this accident. This is why we investigate: to help prevent future similar accidents.

Given that this investigation involved a community service flight undertaken for Angel Flight, let me also state that the ATSB has great sympathy for the role that the organisation plays in providing transport to make life better for people in rural and regional areas with health issues who need to travel to the city for a medical appointments and treatment. I would also like to add that this report is not a slight on volunteer pilots such as Dr Crees who conduct these flights daily and, for the majority of the time, safely. Our intent is to work with organisations who have the ability to allow this to continue as safely as possible.

It is those rural and regional people who are at the heart of the safety actions that we are encouraging Angel Flight and CASA to take so that they are not exposed to unnecessary levels of risk as passengers on community service flights. These safety actions are achievable: training, education and ongoing support for pilots; the reporting and analysis of safety information about community service flights; and considering the use of commercial airline flights, ahead of private flights, when circumstances permit. We are pleased that some safety action has already been initiated, and we would like to encourage more. Similar encouragement from this inquiry can improve safety further.

Before we take your questions, it may assist the committee if I provide some background on the ATSB's remit under the Transport Safety Investigation Act 2003 to understand the reasons for the safety action that we are encouraging. Firstly, we are completely independent. We are independent of regulators and we are independent of industry. Secondly, we take a no-blame approach to investigations and we focus on systemic safety factors, not on the one-off actions of individuals. We seek to understand what regulatory and organisational risk controls could be put in place to reduce the chance of future incidents and accidents.

Modern accident investigation methodology is heavily influenced by Professor James Reason, who has stated that 'discovering an error is the beginning of the search for the cause, not the end'. That means in this accident the investigation looked beyond the fact that the pilot took off in poor weather, without the qualifications and experience to do so, to contributing and other safety factors that increased the risk of the accident. We are seeking to prevent similar accidents in the future.

The ATSB's methodology was recognised as best practice by the Canadian Transport Safety Board in its independent review of the ATSB in 2014. We consistently apply our approach using a team of investigators with an array of different backgrounds, multiple levels of review and scrutiny, a natural justice process with external

parties—and that includes Angel Flight and CASA in this case—and a commission approval process. This rigour ensures our investigation reports are fair, balanced and factually correct.

This investigation also included data analysis using well-tested and validated techniques consistent with many years of research performed and published by the ATSB. Research scientists on staff are expert at aviation safety analysis. For transparency, all the details of the data used and all of the analyses have been outlined in the extensive appendices to this report. Our investigations also follow the minister's statement of expectations for the ATSB by giving priority to transport safety investigations that have the potential to deliver the greatest public benefit. As such, a primary focus is on risks to the travelling public involved in passenger transport.

As the ATSB is not the regulator, we have no power to force organisations to take safety action. Instead we rely on our influence, the influence of others and the mature safety cultures of the organisations involved who are prepared to adopt a 'lessons learned' approach to safety. The lessons learned from this investigation are clear. By any measure, there is a different and elevated risk for community service flights operated by Angel Flight Australia compared to other private flying operations and commercial air transport. Similar risks were identified in the United States a decade ago, and independent statements from Australian community service flight pilots show that there is already this understanding in Australia as well.

We have called for reasonable and achievable safety actions. Angel Flight has accepted and is currently developing processes to address the safety issue relating to the additional risks associated with community service flights; it has already addressed another safety issue concerning the future reporting of safety incidents; and the third safety issue resulted in a safety recommendation for Angel Flight to have processes in place to consider a commercial flight before organising a private flight.

The ATSB wishes to see Angel Flight continue to provide its valuable service of organising flights enabling rural and regional Australians to meet medical appointments in major cities. To do so, the ATSB encourages Angel Flight to address the safety issues in the investigation report to avoid future tragedies and to ensure that the best possible level of safety is afforded to the passengers benefiting from this community service.

We welcome your questions, recognising that this committee may have questions relating to aviation safety, the measurement of aviation risk, data analyses or ATSB's legislation. I have brought along subject matter experts relevant to this inquiry. I am the chief commissioner. I served almost 10 years as an Air Force officer in Australia and the Middle East before undertaking various senior roles at Airservices Australia and CASA. I've been appearing in front of this committee since 2006. I've been a glider pilot since the age of 15. I'm also a general aviation pilot; until recently, I owned my own aircraft. Commissioner Chris Manning, on my left, has had a flying career of nearly 50 years. His time as a pilot with Qantas culminated in his appointment as Qantas's chief pilot. Prior to his tenure as chief pilot he also served as the president of the pilots union, the Australian and International Pilots Association. Executive Director Transport Safety Nat Nagy, on my far right, began a commercial flying career at the age of 18. Whilst flying was his first career, he proceeded to a second career as an air traffic controller and then as a senior manager with Airservices Australia. Director Transport Safety Dr Stuart Godley, to my left, holds a PhD in human factors psychology. Prior to joining the ATSB, Dr Godley was the manager of safety analysis and human factors at Qantas. He has almost 20 years experience in analysing aviation safety data. The ATSB's manager of legal and governance is Pat Hornby, to my right, who holds a law and political science degree, and postgraduate legal qualifications. During his time at the ATSB he has negotiated and drafted international instruments covering the standards for accident investigation. We welcome any questions that the committee might have.

**CHAIR:** Thank you very much, Mr Hood. Senator Brockman, would you like to commence your questions.

**Senator BROCKMAN:** My apologies for having to do this on the phone; hopefully I won't drop out! The reason I'm on the phone partly brings what we're discussing here today into a bit of relief. I'm in a little place called Newdegate, in Western Australia. If you look at a map, there is pretty much equal distance between it and four major population centres: Perth, Kalgoorlie, Esperance and Albany. If someone from Newdegate gets sick or has to go to a non-urgent medical appointment, they face at least a 2½-hour drive in any one of four directions. If they want to go to the city, it's more like a four-hour drive. In the bush, the impacts come into pretty stark relief. Firstly, I'd like to ask about the nexus between the statistics you have provided in your report and the other analysis. How do you utilise the statistics in the report in your final decision-making?

**Mr Hood:** Thanks very much for the context of where you are, Senator. Can you clarify the decision-making portion of the question?

**Senator BROCKMAN:** In terms of the final recommendations of the report.

**Mr Hood:** I'll ask Dr Godley to talk about the findings, and how we arrived at those.

**Dr Godley:** Does everyone have a copy of the report? We'll table a copy.

**Mr Hood:** I notice we have one stapled together, but we can actually give you a nice bound one, Senator. Sorry you don't have one, Senator Brockman.

**Dr Godley:** The findings are on page 49.

**Senator STERLE:** You're lucky we have such a diligent secretariat. They provided us with a run-down on it anyway.

**Mr Hood:** Dr Godley is referring the committee to page 49.

**Dr Godley:** The statistics that we've been talking about address findings 4 and 5—the first two under the other factors that increase risk. The first one says:

- Community service flights conducted on behalf of Angel Flight had considerably more occurrences per flight than other private operations. It is almost certain this higher occurrence rate is due to exposure to different operational factors as a result of the task being undertaken.

Secondly, there is the safety issue that follows on from that finding. It says:

- Angel Flight had insufficient controls in place, and provided inadequate guidance to pilots to address the additional operational risks associated with community service flights.

We're pleased to see that Angel Flight had actually accepted that safety issue and, as they pointed out, they've started a number of initiatives in several areas to improve training, education and support for their pilots.

**CHAIR:** Dr Godley, I think Senator Brockman was asking you to talk to the statistics—how they were generated and the considerably more occurrences per flight.

**Dr Godley:** The investigation started with the second fatal accident. That drew our attention to the fact that there might be something in this.

**Senator STERLE:** Is that the Mount Gambier one?

**Dr Godley:** The Mount Gambier accident followed the 2011 accident near Nhill in Victoria. When we did the statistics, looking at passenger flights we found the risk for a fatal accident was seven times more than in other private operations. We used other private operations because Angel Flight was being operated as a private operation. It's the regulatory regime that it was being operated under. That was just the start, so we didn't draw conclusions on that. Then we did an extensive search on our database. ATSB holds the Australian Aviation Occurrence Database, but unfortunately, because they were regulated as a private flight, there was no indication about what was private and what was a community service flight. We had to get the data from Angel Flight. As has been mentioned today, they gave us records of all of their flights. They had a bit over 20,000 flights. They had records for 13 years. We looked at the last 10 years of the contemporary analysis to be fair to Angel Flight. Our analysis is based on that, but I can give you data for the whole set, if you want. From that, we had to take the flights and then identify, in the database, which ones were actually Angel Flight related. That obviously took many months of work. This has never been done before. This data had never been available to ATSB, CASA or Angel Flight because the flights had never been identified. After many months of work, we identified the dataset and we could do our figures. Does that answer the question or do you want me to go on with statistics?

**Senator BROCKMAN:** It does. It's raised another question in my mind. You mentioned that you used contemporary data to be fair to Angel Flight, but, to my way of thinking, given you're only dealing with two fatal incidents—and obviously that's two too many—over the last seven years—is that correct?

**Senator STERLE:** Longer.

**Senator RENNICK:** It was 2011 to 2017.

**Dr Godley:** That was the 10-year period, Senator. We did have the data. Angel Flight has been operating since 2003. They had no flight records for the first two years of operation, but they told us that they didn't do many flights in those first two years. What we do have is data for 13 years. If you look at the two fatal accidents over those 13 years, you still get a fatal accident rate 5.8 times higher than for the rest of private aviation. So it's less than seven but it is still 5.8. It would have still led us to the analysis that we've done based on that.

**Senator BROCKMAN:** My principal concern with using statistics in this way—and I don't pretend to be a statistician; I have an amateur's interest in it—is that with two data points on one side of the equation how are you getting to anything remotely approaching statistical significance?

**Dr Godley:** We had two accidents, but what we did was normalise it by flights. So we had two accidents and a bit over 13,000 private flights conducted by Angel Flight. We compared that to the rest of private aviation, where we had 72-odd fatal accidents and 3.5 million flights in that time. From that you can compare the rate and then

apply statistics to that. Those statistics say that it's very likely that that difference—seven times higher—is not due to chance alone.

**Mr Hood:** The ATSB, as Dr Godley has said, have had the ATSB aviation safety occurrence database in existence since 1969. We have periodically reviewed various sectors of the industry and compared their relative levels of safety, so we have flying training, RAAus, aerial agriculture and sports rotorcraft. We have a level of safety for those different sectors of the industry. What we didn't have—and, in fact, what Angel Flight didn't have—is access to all the reported safety occurrences, because they weren't required to be reported to Angel Flight. So Angel Flight didn't have any great knowledge of the number of safety occurrences being experienced on their missions and neither did CASA or the ATSB. We had to request the data from Angel Flight to get the schedules. We then matched that with the flight plan data and the aviation safety data and, using an algorithm, we were then able to extract the aviation safety occurrences that were being experienced with these types of flights. So what we've done in effect we had never done before for the community service flight sector. We have baselined the safety. Now we'll be able to measure it, just like we do for any of the other sectors of the industry, for improvements.

**CHAIR:** Earlier we heard from Angel Flight that there was not an international standard for measuring incidents using flight hours or flights. You've just used flights. I think Angel Flight made an interesting point that a touch-and-go flight or a joy flight will obviously be much shorter than, for example, a regional flight. How did you make the decision to use flight numbers not flight hours?

**Mr Hood:** I'll ask Dr Godley to answer. The ATSB's legislation—the Transport Safety Investigation Act—is drawn from International Civil Aviation Organization annex 13. Our processes, methodologies et cetera are all drawn from the international standard. I'll get Dr Godley to talk to flights versus flight hours.

**Dr Godley:** I have a number of points on that. The analysis by hours is also in appendix B on page 67. If you look at the fatal accidents on passenger flights, instead of it being seven times higher it's 5.6 times higher. If you look at all occurrences, which is what we based our findings on, instead of it being four times higher it was 3.7 times higher. So the numbers are very similar.

**Senator PATRICK:** Are these numbers using prepositioning flights?

**Dr Godley:** No, but we can do that.

**Senator PATRICK:** It seems to be fundamentally flawed in that—

**Dr Godley:** Yes, we can do that as well. The prepositioning flights are—

**Senator PATRICK:** If you include the prepositioning flights, what are the numbers then?

**Dr Godley:** They are in the report.

**Senator PATRICK:** What are they?

**Dr Godley:** If you look at all occurrences on passenger flights alone, we see a four times higher risk. If you look at the prepositioning flights alone, we see a doubling of the risk.

**Senator PATRICK:** No, together.

**Dr Godley:** Together we see 3.2 times the risk, rather than the risk we talked about, which was four times the risk. So it's very similar. But the fact that there is a doubling of the risk when there are passengers on board compared to when there are not passengers on board suggests that there are actually operational differences when there are passengers on board, as well.

**Senator BROCKMAN:** Getting back to my original point—which is the low sample size on one side of the equation—in one category, the accident category, the private flights were actually more risky than Angel flights. There is an 82.2 per cent probability that the accident rate for private flights is higher than for Angel flights. I would assume that you would put that to one side and say it's a statistical anomaly based on a small number of data points. If that is saying—

**Dr Godley:** I'm not sure where you're getting that figure from, but I don't think that's correct. The 82 per cent probability refers to fatal accident rates and it refers to when we combine both the repositioning flights and the passenger flights.

**Senator BROCKMAN:** Yes, but in your breakdown—I don't have it in front of me now, but I think it was on page 69—

**Mr Hood:** Yes, the bottom of page 69.

**Dr Godley:** The table on page 69.

**Senator BROCKMAN:** yes—in a category of accident rates for Angel flights versus private flights, there was a 17.8 per cent probability that Angel flights were more accident prone. That being the case, it means there is an 82.2 per cent probability that private flight accident rates were higher than those for Angel flights in that category. I'm not arguing about that. What I'm saying is that, presumably, you would put that to one side in your report because of the low number of data points. My concern is that the overall analysis being based on one side of the equation, on such a low number of data points, makes the statistical significance extraordinarily low. You're looking at a rate of probability, in terms of the fatal accident category, of 82.2 per cent. Now, normally it would want to be in the category of 95 to 99 per cent to be considered statistically significant.

**Dr Godley:** We actually based all of our conclusions on analysis of all occurrences. So these are incidents and accidents combined. That's the most reliable set. It's the most widespread—as in it's the dataset with the most numbers—and you'll see in that table that all of those, whether it's just the passenger flights by themselves or whether we combine the passenger flights with the repositioning flights, are at that 99 per cent or higher statistical level. As a result, the findings in our report talk about being almost certain that these are due to differences in the operational characteristics of Angel flights compared to other private flights.

**Senator BROCKMAN:** But you would agree that the raw statement in your report, that 'the fatal accident rate was more than seven times higher per flight than other private flights', does not meet that level of statistical significance.

**Dr Godley:** That meta-level of 96.8 per cent—and we didn't call it 'statistically significant'; we called it 'very likely', and that is consistent with the way we at the ATSB do our analysis. We've done it that way for many decades, at least 15 years if not longer, and that's pretty consistent with the way safety agencies across the world do analysis.

**Senator BROCKMAN:** So explain to me the difference between that 96 per cent you just mentioned and the 82 per cent, which is in that table on page 69, comparing the fatal accident rates of AF versus PP.

**Dr Godley:** One is fatal accident rates. Again, we concentrated on passenger-carrying flights because that's essentially the risk that we're most interested in reducing. That's what the 96.8 per cent dealt with—the fatal accident rate for private passenger flights. I think what you're referring to is everything that's called an accident, if you combine all the flights together, looking at the positioning flights and the passenger flights together. That might be a gear-up landing or anything that causes some sort of damage to the aircraft. They're normally a bit more minor, and there weren't very many in the dataset either.

**Senator PATRICK:** Does it include information where, say, air traffic control made a mistake or some other pilot in another aircraft made a mistake?

**Dr Godley:** That's not what Senator Brockman is talking about. He's talking about accidents. They're really the wheels-up landing scenarios. But the analysis of the—

**Senator PATRICK:** I thought you said incidents as well?

**Dr Godley:** Yes. We based our conclusions on all incidents. If you turn to page 33 you'll see the breakdown of the types of incidents that Angel Flight had more of than other private operations, once it was normalised. These are all operational-type incidents. You'll notice that a lot of them involved controlled airspace, as you said, Senator. One of the comments before was that Angel flights operate into controlled airspace more than other private aviation. That probably accounts for some of the data. But that's actually what we were looking for: are there additional risks, beyond that private regulatory regime that they're regulated under, that Angel Flight pilots are exposed to? Some of the key things that came out were runway events, operational noncompliance with air traffic control communications and those sorts of things to do with controlled airspace.

You'll notice the fourth one in the bar there is what's called an ANSP error—air traffic control errors. They're the sorts of errors where it's not something that the pilot has done; it's something that air traffic control has done. These are obviously in both datasets—the private dataset and the Angel Flight dataset. But you'll see that the difference area is very much smaller compared to the events that are down to pilot actions—the runway events and the operational noncompliance—suggesting that there's an additional level of complexity there.

**Senator BROCKMAN:** Am I correct in saying that if you compare Angel flights with passengers to all private flights it's seven times higher, but if you compare Angel flights combined with all private flights combined then the fatality rate is 2½ times higher?

**Dr Godley:** Then the fatality rate is 2.5 times higher.

**Senator BROCKMAN:** And at an 82 per cent probability there is a genuine difference?

**Dr Godley:** Correct, yes.

**Senator BROCKMAN:** Again, we've only got two data points over 10 years. How is it possible to make accurate statistical inferences from two data points over 10 years?

**Dr Godley:** It's really just a repeat of the 96.8 per cent. The statistics show that that wouldn't happen by chance alone. To put it another way: looking at the number of flights that Angel Flight have done, if they had a fatal accident rate at the same level as the rest of private aviation you'd be looking at one accident every 37 years. We've seen two accidents—one in 2011 and one in 2017—quite close together. That suggests that there's something different about Angel Flight operations to the rest of private aviation.

**Senator RENNICK:** Are you saying that there's only one accident every 37 years in general aviation?

**Dr Godley:** No. I'm not talking about general aviation; I'm talking about private flights. Private flying is very large; there were 3½ million flights over the last decade. If you scale that to the number of flights that Angel Flight have done you'd expect one fatal accident every 37 years.

**Senator RENNICK:** But there have been accidents in general aviation a lot more than every 37 years.

**Dr Godley:** Yes, but to put it into perspective: Angel Flight were doing a bit over 13,000 private flights in the last decade and there were 3.5 million other private aviation flights. It's a bit hard to compare it on numbers; we're just comparing it to the rates.

**Senator BROCKMAN:** Again, that's my point: if you took either one of those incidents/accidents out of the equation you would actually find that Angel Flight was safer than other private flights—

**Mr Hornby:** Senator—

**Senator STERLE:** Look outside! You've got the lawyer coming!

**Senator BROCKMAN:** On that basis, I'm having difficulty with the level of certainty you're putting on this.

**Mr Hornby:** Dr Godley took you first to the page that has our findings on it. It was an important reference point to start with, because our findings around the safety issue there are on all occurrences. So they are accidents and incidents, not just on those two fatal accidents. I think that's very important when the original question was about, 'How did you get your findings?' There is a larger data set there to work from. I'll pass back to Dr Godley.

**Dr Godley:** Yes. I would have said that, but it's the fatal accidents that were the starting point; it wasn't how we ended and got to the conclusions.

**Senator BROCKMAN:** All right, I'll leave it there.

**Senator PATRICK:** Two accidents in 20 years doesn't really seem like the systemic issues that the ATSB is charged to look at.

**Mr Hood:** I'll just take you back to the last set of inquiries for the ATSB. This committee found that the ATSB concentrated its efforts too much on looking at the individual contribution to an accident and not on organisational and systemic factors. What we have here are two fatal—

**Senator PATRICK:** I'm going to stop you there, because with the Pel-Air flight that you're talking about the ATSB was found negligent by the committee. Then, obviously, it led to the whole report being done again because you focused on the pilot instead of all the other areas of aviation involved with that accident. It wasn't to do with Pel-Air's operations over many years.

**Mr Hood:** Sorry, I thought that's what I said, that—

**Senator PATRICK:** No, you're suggesting that the committee had steered you to look at something from a systemic level, like you've done with Angel Flight. The committee at that point in time said, 'No, you need to look at this accident and look at why, for example, Auckland control didn't provide weather information to the pilot'. That's what the committee said. It did not say to go and look at Pel-Air systemically over many years.

**Mr Hood:** This is what we're trying to do in this particular case, to look systemically at these—

**Senator PATRICK:** Yes, but please don't suggest that the Senate committee steered you down that path. They did not.

**Mr Hood:** If that was the interpretation, I apologise. It certainly wasn't my intent.

**Senator PATRICK:** Okay. I want to go back to an answer you provided me on notice at estimates, but it relates to this inquiry. I said:

**Senator PATRICK:** I'm being really specific. I really would like an answer to this. Have you talked to a number of Angel Flight pilots—if so, how many?—in respect of pressures that might be put on them relating to community service flights?

You said:

We have talked to Angel Flight pilots. I'd have to take on notice how many.

The answer you gave me is one of the most unsatisfactory answers that has ever been presented to this committee, in my view. You said:

Over the course of the investigation (AO-2017-169), the ATSB interviewed a number of pilots with varying backgrounds. The ATSB can provide a number after completion of its investigation.

I was specifically after the number of pilots you talked to, because at that point in time you had prepared a draft report, and it's highly relevant to the conduct of your organisation as to how you've done consultation. That question was not answered, and I want to know how many pilots you had spoken to up to the date 8 April 2019.

**Mr Hood:** I certainly apologise. I wasn't meaning to be evasive or anything.

**Senator PATRICK:** There is no way that the answer that was provided to the committee could ever be considered by anyone to be sufficient in terms of openness and transparency by the ATSB, as is required by this committee.

**Mr Hood:** My apologies. I think that the investigation wasn't complete and we were not yet certain of how many people we would have spoken to.

**Senator PATRICK:** Well, the investigation wasn't complete, but surely you would know how many people you had spoken to? Surely your records up to that date would have said you'd gone out and talked to this many people? How many Angel Flight pilots did you talk to throughout this investigation?

**Mr Hood:** I'll get Dr Godley or Mr Hornby to talk about how we went about understanding the best methodology to apply in this particular case. It's very important from our perspective that all our investigations are supported by evidence. We did consider whether we should poll 3,000 Angel Flight pilots to get the full cross-section of opinions. We felt that that could inject a fair bit of subjectivity. What we did have were submissions from Angel Flight pilots to the CASA notification of proposed rule making, many of which indicated that there were pressures and challenges faced by Angel Flight pilots—and in fact I think Dr Crees said today there were pressures and challenges facing Angel Flight pilots. In this particular case the methodology we chose to use—

**Senator PATRICK:** In some senses, it's a key finding of the report. How many pilots did you speak to? If pressure was an issue—

**Mr Hood:** Dr Godley?

**Dr Godley:** Senator, we've outlined this in the report. We didn't speak to any pilots about whether they've experienced perceived pressure. That's because we were very confident in the argument. We had submissions to the 2014 CASA instruments where some people showed that they have perceived pressure. We have evidence from the US where investigations by the NTSB, the equivalent of us, found the same thing—

**Senator PATRICK:** I'm sorry, but pressure generally relates to the culture of an organisation.

**Dr Godley:** Can I finish, please? Is it okay if I finish?

**CHAIR:** I think Senator Patrick was asking specifically how many Angel Flight pilots—

**Senator PATRICK:** Yes, it's a number.

**CHAIR:** you investigated in relation to this report.

**Dr Godley:** So my answer in terms of whether people perceived pressure is that we didn't ask the question. The reasons why are outlined on page 26. The reasons why are that we were very confident that some pilots some of the time do experience pressures, and it doesn't matter whether that's five per cent—

**Senator PATRICK:** You didn't speak to any of them.

**Dr Godley:** or 90 per cent, the risk is still out there, and that's the sort of risk that we think should be addressed.

**Senator PATRICK:** Mr Godley, how many Angel Flights have cancelled during an operation?

**Dr Godley:** There have been some. You'll see, from the submissions and plenty of other commentary around, Angel Flight has a range of pilots—

**Senator PATRICK:** Answer the question that I'm asking you: have you conducted any analysis on how many pilots who were engaged in an operation—

**Dr Godley:** I think we have, but I don't have that figure with me and I don't—

**Senator PATRICK:** Could you look at that and come back on notice. I would have thought: you're looking at pressure points and cultures of organisations, yet you haven't talked to a pilot and you're unable to tell us about what I would consider to have been a pretty obvious thing to do, which is to go and ask, 'There's pressure on people to complete these flights; how many pilots cancelled?' We know that Mr Owen did. He told us so.

**Dr Godley:** Are you happy for me to respond?

**Senator STERLE:** Yes, actually we are.

**Dr Godley:** If we go back to what I said earlier, we're very confident that some pilots some of the time feel pressures. As is stated in the report, not all pilots will feel pressure and not all pilots will feel pressure in the same situations. Some pilots may not feel that pressure because they haven't been exposed to those situations. But, as is very evident—and we've got some quotes in the report on page 25 of examples of these sorts of pressures—

**Senator STERLE:** From Angel Flight pilots?

**Dr Godley:** From Angel Flight pilots. It's the sort of pressure where you're carrying people that are often unknown to you. They're relying on you. They're sick. You've got to go to meet a schedule, a deadline to bring them to a medical appointment. You've got to travel to a big city. All these things are potential pressures that may affect some people some time, and they definitely do affect some Angel Flight pilots some of the time. It doesn't really matter if it affects all 3,000 or actually only 50, because that's out there and that's potentially leading to an accident. That's the sort of issue that we think Angel Flight can address, and they have already started addressing that. So they actually agree that there's an issue there.

**CHAIR:** I want to be very clear on this: you've taken responses from respondents who weren't answering a specific question on this and didn't know that their answers would be used towards this sort of report, and you've extracted those responses and extrapolated them in your report, which attributes the high accident rate to, in particular, 'pilots experiencing perceived or self-induced pressures'. It seems to me to be a fairly significant leap to take answers from respondents who weren't aware they were asked this question—not a specific question, and not a question directly in relation to this accident—and use them directly in relation to this accident.

**Dr Godley:** I actually think it's the opposite. These people weren't being asked whether they had pressure; they volunteered this information. So we've taken that information. It was in the earlier 2014 report. If you look at the research in the US, after the NTSB investigation of four similar accidents, the US AOPA—we had an AOPA rep here today—has taken it on board to actually put an education and training program in place by Angel Flight pilots in the US specifically dealing with perceived pressure, because they recognise that it's a—

**Senator STERLE:** Dr Godley, it says that of the '18 responses at least 12—but how many of these pilots were Angel Flight pilots? Sorry, it's not that I don't believe you, but that doesn't mean anything to me.

**Dr Godley:** When it says 'at least 12', that means we know 12 were, but—

**Senator STERLE:** Twelve were Angel Flight pilots?

**Dr Godley:** there could have been more community service flight pilots.

**Senator STERLE:** Were 12 pilots Angel Flight pilots?

**Dr Godley:** Yes.

**Senator STERLE:** And they said that they felt pressure? They said it to CASA, not to you?

**Dr Godley:** Yes. That was in a public submission that involved nonpilots as well as pilots.

**Senator STERLE:** So you did talk to CareFlight pilots?

**Dr Godley:** No, this was CASA.

**Senator PATRICK:** Noting my question about 'over the course of the investigation', back on 8 April the answer to that question is zero, based on your evidence?

**Dr Godley:** Correct—to do with perceived pressures, yes.

**Senator PATRICK:** Okay, we don't have to take that on notice now. We know the answer is zero, and we got to the end of the entire investigation without talking to any Angel Flight pilots about pressure. I want to go back to the statistics. I'm reading this as saying that, if you include the prepositioning flights, Angel Flight comes up at 1.5 accidents per 10,000 flights, and you've got the other flights coming up at much higher numbers.

**Dr Godley:** Sorry, could you say that again?

**Senator PATRICK:** Looking at page 69, if you include the prepositioning flights and postpositioning flights—

**Dr Godley:** So you're just talking about the subset of accidents now?

**Senator PATRICK:** Yes.

**Dr Godley:** And that was Senator Brockman's point, yes.

**Senator PATRICK:** Was it a discretionary choice, or some choice you made, in respect of not including prepositioning flights, or is there some standard by which that is the requirement for these investigations?

**Dr Godley:** If you look at the current definition of a community service flight that CASA put out—

**Senator PATRICK:** No—

**Dr Godley:** it's about passengers.

**Senator PATRICK:** That definition actually came out two years after this accident occurred.

**Dr Godley:** But it is consistent with that—

**Senator PATRICK:** It's semantics. The reality is that the flights start—the pressure starts—from the moment they first get out onto the tarmac at their original location. They know they need to get to wherever they need to get to to pick up the passenger. Probably the last sector has less pressure on it. It just seems totally against all reasonableness to cut out those flights. I am just wondering what—

**Dr Godley:** As we said, we did—

**Senator PATRICK:** In terms of international standards, are there any international standards that suggest that the way you are doing it is the way that it should be done?

**Dr Godley:** There is no international standard, but, as I said before, we made our conclusions—

**Senator PATRICK:** So you made a choice?

**Dr Godley:** based on all incidents. When you look at prepositioning flights as well as passenger flights, it's still higher for all those together. But there is a difference between prepositioning flights and passenger flights, so the risk is not the same; the risk is slightly higher. It is higher when there are passengers on board.

**Senator PATRICK:** Mr Hood—changing tack, if you'll indulge me, Chair—one of the recommendations that flows from this report is that we now get Angel Flight to, instead of using their pilots, use commercial flights. Of course, you have no power to make them do that—in fact, I don't think CASA would have a power to make them do that. In essence, you're going to someone who, to put it in simple terms, grows apples and saying, 'I want you to do oranges.' These guys do these particular flights, so there's no requirement for them to do this. In terms of thinking through this recommendation, what you're suggesting is that commercial flights should be a choice of these passengers. Now, they clearly can't afford to do that. Who is going to pay for these commercial flights? Is that going to come from the ATSB budget? Have you talked to anyone in government about how you might pay for these flights?

**Mr Hood:** Thanks for the question. We did look around the world, too. There's a similar demographic in Canada. Their community service flight organisation is called Hope Air. Seventy per cent of the people carried on Hope Air are carried on commercial flights.

**Senator PATRICK:** Go back to my question. I'm talking about the current regime we have in Australia. You can dream up whatever you like, but, if you can't legislate for them to do that, that would have to be a choice they make. That means someone is going to have to bear the cost of that commercial flight. Who do you say is going to do that?

**Mr Hood:** Sorry, Senator. Maybe I was trying to answer it in a roundabout way—

**Senator PATRICK:** I like direct answers, actually.

**Mr Hood:** The Hope Air charity in Canada funds the travel on the commercial flight—

**Senator PATRICK:** They don't operate here. Who in Australia is going to fund that?

**Mr Hood:** If I can be permitted to finish: they also have an airline partnership scheme and GA pilots—recognising the fact that the demographic is almost identical to Australia. About 70 per cent of those locations in Canada are serviced by commercial flights. I think 69 per cent in Australia are serviced by commercial flights; 31 per cent are locations, I think, like Senator Hollie Hughes said when she was in Brewarrina. She utilised the service regularly for her child because there were no commercial flights. I fully accept that. Given the delta in the safety between the private flights and the Angel Flight flights, we recommended that the charity consider looking at commercial flights. I would have thought that, in terms of raising funds for that, they would fund the carriage on commercial flights.

**Dr Godley:** I can add to that: the report actually does a bit of a cost analysis. It shows that once you take into account the reimbursement of fuel to pilots, which happens on 85 to 90 per cent of flights, and compare that to the price of two passengers on an airline flight—even taking into account passenger need; obviously there are going to be some passengers that can't use a commercial flight, for a variety of reasons—probably at least one-third of

the flights that have been done by Angel Flight could have been done on an airline at no additional cost to Angel Flight to buy those tickets at a commercial rate compared to reimbursing the fuel.

**Senator PATRICK:** But the way they've set themselves up—they have volunteer pilots, so they want to go down a particular pathway. In the absence of them agreeing to do that, do you say that recommendation therefore doesn't stand? I understand the point you're making; you're saying, 'We're putting that out there as an idea.'

**Dr Godley:** What we're really careful to show is that the main aim here is to move people that don't have the financial means themselves from a country area to a medical facility. If Angel Flight want to do that in the safest possible way, all we're saying is: 'Is there a commercial flight available? Do the passenger needs mean that they can fly on a commercial flight? If so, why don't you book a commercial flight before you book a private flight?' That's really the essence of the recommendation, and that's it.

**Senator PATRICK:** You realise that, if Angel Flight were not there, most people would then have to go to road transport. Are you aware of the statistics of road accidents in South Australia?

**Mr Hood:** We are aware of the statistics. We're not an agency that investigates road accidents, so we don't maintain the database, but we're certainly aware of the road statistics, particularly on country roads.

**Senator PATRICK:** But in terms of your responsibility to the public, noting the importance of these flights—and I don't think anyone disagrees about the importance of these flights—the most likely alternative for people who couldn't afford the commercial flights would in fact be to revert to road, where the accident rate is much, much higher. There were 39 accidents on the Limestone Coast, I think; I'll check that.

**Dr Godley:** Yes, but again, you'd have to normalise that by the kilometres travelled or time or something. But there is nothing in our report that's going to stop Angel Flight operating. The only safety issues in our report that can be addressed are going to increase safety, so there's no reason why anything in our report will push people out of aeroplanes and onto the road.

**Senator PATRICK:** But if we look at pressure as being the cause or a contributor to the accident—

**Dr Godley:** We actually haven't said that, Senator. The perceived pressure is another factor because we don't have evidence around what the pilot was thinking. We don't have recorders on board et cetera. And we're talking about perceived pressure. So the pilot might not even have noticed that there.

**Senator PATRICK:** So where are the detailed recommendations of what CASA should be doing in relation to pilots and perceived pressures on any flights?

**Dr Godley:** Where the recommendations come in—and it's not a recommendation; it's a safety issue on which Angel Flight have already started to take action—is to do with perceived pressure that Angel Flight pilots will have from time to time. And, because it's to do with Angel Flight pilots, the safety issue is addressed to Angel Flight, and Angel Flight, to their credit, have taken it on board and have started a lot of action.

**Senator PATRICK:** Respectfully, Angel Flight pilots use CASA trained and licensed pilots. The training for these pilots or the responsibility for ensuring people are safe to fly rests with CASA.

**Dr Godley:** And that was really the essence behind the data analysis. The data analysis shows that there are additional operational risks that Angel Flight pilots—

**Senator PATRICK:** Respectfully, I think you've taken the wrong numbers. I get it that it suits your answer—

**Dr Godley:** It doesn't matter which way you cut the pie, Senator; Angel Flight is still higher. It shows that they're exposed to additional operational risks to the normal private pilot, and Angel Flight are actually in the best position to do that. If they don't do it, then perhaps CASA has to do it, but then CASA will—

**Senator PATRICK:** Then let's go to CASA's response—

**CHAIR:** Senator Patrick, would you mind if I just—

**Senator PATRICK:** Yes, that's fine.

**CHAIR:** I think your point is well made, and we will be talking to CASA next about their training. Senator Rennick, do you have a question?

**Senator RENNICK:** Dr Godley, you've said there's nothing in your report that's going to stop Angel Flight from continuing. Can you summarise briefly what changes you want Angel Flight to make and how they will impact Angel Flight?

**Dr Godley:** There are three areas. The first one is the easiest. At the time of the accident, Angel Flight was unaware of any incidents occurring by its pilots and they're aware of about 10 per cent of the occurrences that we found in our database when we did the analysis, so now they require their pilots to report all incidents to them. So

they've already dealt with that safety issue, and they've got Dr Owen over there as their new safety manager to deal with that.

The second one is a safety issue. They had inadequate controls and provided inadequate guidance to their pilots to deal with the additional risks. They started to do safety action on that. They've—

**Senator RENNICK:** Sorry for interrupting you, but when you say 'additional risk', is that because the patient is ill?

**Dr Godley:** Yes, so if you—

**Senator RENNICK:** I'll just lead on my own question. If the patient is ill, isn't this risk going to be the same on a commercial flight as it would be on an Angel Flight?

**Dr Godley:** No, it's more about—the safety analysis on page 43 outlines it. We've got those dot points. A key difference between an Angel Flight and other private operations is the carriage of ill, unrelated and often unknown passengers, rather than your family and friends and the fact that you're flying to meet a schedule rather than choosing when you fly, which is what most private pilots do.

**Senator RENNICK:** But all those risks you can't really remove. If the patient is ill, the patient is ill. So the risk is with—

**Dr Godley:** It is, yes.

**Senator RENNICK:** not the flight but the fact that the patient is sick, isn't it?

**Dr Godley:** It's more to do with: what sort of impact does that have on the pilot's decision-making? When we're talking about perceived pressures, the pilot won't necessarily know that they're perceiving the pressure. Maybe, as in the case of this accident, it was unsuitable to fly in but that pilot has chosen to fly in it anyway. Possibly that was because there was this pressure: 'I've got to get these people to their medical appointments.'

**Senator RENNICK:** Going back to Senator Patrick's comment then: if he doesn't fly, and he's in a car, possibly the driver of the car is going to take similar risks as well, knowing that the patient is ill. I guess my point is: the risk stems from the fact that the patient is ill and not from the flight itself, and therefore you're always going to have that risk there. You can't really remove that. The flight isn't the issue; it is the fact that the patient is ill and needs to get to hospital quickly, or something like that.

**Dr Godley:** There are very clear rules about what you can and cannot fly in when you're a visual pilot. In this case and in the other accident, the pilot broke those rules. They broke those rules because of the pressures, probably, that were on them on the day. They didn't break the rules because they were wanting to be reckless, most likely. It was probably due to these other pressures. The controls to do with this are things like training and education, specifically about identifying when you're affected by those pressures and then what to do about them, and having the support in place, whether it's an app, whether it's a mentor pilot, whether it's a pilot that you can ring up—all those sorts of tools that we take for granted in commercial aviation.

**Senator PATRICK:** Are you a pilot?

**Dr Godley:** I'm not, no. I've worked for an airline, though.

**Senator RENNICK:** What's the third thing? While I accept that there's extra pressure there, I still think a lot of that is to do with the illness of the patient, and that will always be there. What's the third impact?

**Dr Godley:** The third one is taking into account that private aviation, leaving aside Angel Flight, has a much riskier record than commercial aviation. So, if Angel Flight are taking into account the safety of their passengers over the long term, we're just asking them to consider booking a commercial flight if they're available, if they're suitable to the passengers, if they're cost comparative—if all those things are in place. And they were, in this case. In this case, there were two flights going from Mount Gambier to Adelaide that day. The passengers had no special needs. They could have been on those commercial flights. They had a fortnightly recurring medical appointment. It's cases like that that Angel Flight—

**Senator RENNICK:** You say they could have been, but it would have come at a cost, wouldn't it?

**Dr Godley:** Booking the two people on that Rex flight would have come at a very similar cost to, if not cheaper than, the Angel Flight, than the reimbursement cost for the fuel to the pilot. The figures are all in the report.

**Senator PATRICK:** Mr Hood, Ms Pagani said that she believes a call took place, when she'd spoken to CASA—that, a day after the accident, the ATSB had called CASA and said, 'What are you doing about this?' Are you aware of anyone in the ATSB that made that call?

**Mr Hood:** I'll have to take that one on notice, because I'm not aware of that.

**Senator PATRICK:** So it wasn't you and it wasn't anyone else at the table?

**Mr Hood:** Not that I'm aware of.

**Senator PATRICK:** If you could find that out, please, I'd be grateful.

**CHAIR:** Further to that, there was also a comment that, when Angel Flight had contacted ATSB asking, 'Is this our flight?' ATSB said, 'We can't tell you,' but then did make a public statement on the TV saying, 'We are investigating Angel Flight.' Can you comment on that?

**Mr Hood:** I'm happy to take that on notice too. I'm not aware of the specific sequence of events.

**Dr Godley:** The accident happened on the 28th, in the morning. That night, Channel 9 was broadcasting to Australia that it was an Angel Flight mission. Our investigators didn't arrive to site till the next day, and it was during that media briefing that, I think, we mentioned that it was an Angel Flight.

**CHAIR:** Had somebody from ATSB contacted Angel Flight during that period to confirm that it was their aircraft?

**Dr Godley:** I believe we were in contact, but we will probably have to take that on notice.

**CHAIR:** If you could take that on notice, that would be a good thing. Mr Hood, you just mentioned that you're completely independent. Who does ATSB report to?

**Mr Hood:** To the parliament—to the minister with the portfolio responsibilities, so to the Deputy Prime Minister, who is the transport minister.

**CHAIR:** So you would take policy instructions or guidance from him?

**Mr Hood:** That's correct.

**Mr Hornby:** Just to follow up, we do get a statement of expectations from the minister. Mr Godley referred to that in one of his answers about the focus on the public benefit, and that then leads to our focus on the traveling public as part of that public benefit. The minister can't direct us as to how to do an investigation, so that's where our independence comes from—from our legislation.

**CHAIR:** Right. I was impressed to hear about the experience of the panel. Even Dr Godley has worked for an airline. Do you think there's a culture at ATSB of thinking that commercial pilots are superior to general aviation pilots?

**Mr Hood:** As a pilot myself—and a pilot who has made mistakes—I can say that we see this all the time. Unfortunately, what we see at the ATSB is the aftermath of when things don't go quite right or when decisions have been made badly.

**CHAIR:** I appreciate that, but, when all of your experience is in the Air Force or commercial airlines, do you think they're superior pilots?

**Mr Hood:** Do I think they're superior pilots?

**Dr Godley:** To put it into perspective, we would have more investigators from a general aviation background than we would from an airline background.

**CHAIR:** I was just trying to get to what the view is of the management of ATSB.

**Mr Manning:** I know a lot of pilots. The answer is no. There are very good pilots in all spheres of aviation. There are some average ones and some below-average ones in all spheres. Obviously, airline pilots are trained continually; their training is continuous, so you expect them to get to a higher standard. But, whether they are innately better—I think that's fallacious, because they're probably not. Take Angel Flight: there are some very good pilots. I know a lot of them, and they're airline pilot type people who do it on the side. As in all spheres of aviation, there are the ones down the bottom. That's what happens. I think the ATSB might have only one or two airline pilot type investigators. The rest are general aviation pilots. I haven't seen that. There are certainly more investigations into the heavy end of town because they carry more passengers and there are more flights and therefore more incidences. But, no, I don't see that.

**CHAIR:** Thank you for your time.

**Mr Hornby:** I want to table a document if that's all right with the committee. It's another brochure that we released after this accident. It's not specific to this accident but accidents involving visual flight rules pilots in instrument meteorological conditions. So it picks up, for private pilots more generally, some of the risks that they face. It's a part of an educational program that we have, which is: Don't push it, don't go.

**CHAIR:** Was that mailed to every pilot? How would they have received it?

**Mr Hornby:** It would have gone out through our social media channels and our contact networks.

**Dr Godley:** We don't have access to pilots' email addresses. That's regulated.

**Senator STERLE:** Did CASA assist putting that out?

**Dr Godley:** No, that was us.

**Senator STERLE:** No, I meant: did CASA assist distributing it?

**Mr Hornby:** We would have to leave that as a question for CASA. It was something that we produced rather than CASA, and we pushed it out through our social media—

**Senator STERLE:** I understand that. The question was: how did you get it out? You don't have access to pilots, so I asked a very simple question: did CASA assist—yes or no? If you don't know, don't try to flick it and then start diverting by saying, 'We did it all.' It's getting too late in the day.

**CHAIR:** Thank you.

**Mr Hornby:** I'll table that document, if that's okay, Senators.

**ALECK, Dr Jonathan, Executive Manager, Legal and Regulatory Affairs, Civil Aviation Safety Authority**

**CRAWFORD, Mr Graeme, Acting Chief Executive Officer and Director of Aviation Safety, Civil Aviation Safety Authority**

**MONAHAN, Mr Chris, Acting Group Executive Manager, Aviation, Civil Aviation Safety Authority**

[16:55]

**CHAIR:** I welcome representatives of the Civil Aviation Safety Authority. I invite you to make a brief opening statement before the committee asks questions. Do you wish to make an opening statement?

**Mr Crawford:** Yes, we do. Thank you very much. I'd like to begin by passing on apologies on behalf of Shane Carmody, who could not be here today, so I'm afraid you're stuck with me. I will try to be brief, but I would like to cover five key points in relation to CASA's aviation safety responsibilities in relation to the tragic Mount Gambier fatal accident on 28 June 2017, which resulted in the deaths of the pilot and the two passengers on board.

First of all, Mr Carmody is on record as saying earlier this year that the changes introduced through CASA in the March 2019 instrument in relation to community service flights were not an attempt to close down the valued services that CSF organisations offer to the rural and regional communities of Australia. On the contrary, we are trying to fulfil our mandate and the public's expectations by ensuring these flights continue to be conducted without placing passengers at unnecessary risk. Our position on this has not changed.

Second, CASA believes the minimum standards introduced in March 2019 are very modest and are designed to ensure that CSF pilots have an increased level of experience and an appropriate level of currency sufficient to meet the more challenging factors inherent in conducting CSFs. We believe we have struck a rational balance between the need to mitigate the increased risks present in such flights and the important benefits these flights provide to the Australian community. We cannot fulfil our mandate by only focusing retrospectively on past accidents. We must also consider a range of factors and risk mitigators, including industry feedback, on any proposals for changes received through consultation. In the case of CSF, we consider these factors in the context of two fatal accidents that resulted in the deaths of six individuals; the major causes of accidents in private operations being CFIT—controlled flight into terrain—landing incidents, pilot error, decision-making, and power plant or engine related problems; our regulatory responsibilities; the potential impact on the volunteer pilots; potential impacts on CSF operations; and approaches taken by other international regulators towards similar operations.

Third, CASA independently analysed available accident statistics. This analysis compared the community service flight sector to the general private flying sector over a 10-year period. The CASA analysis determined that the fatal accident rate was 5.4 times higher for CSFs than for ordinary private flights.

**Senator PATRICK:** Accident or incident?

**Mr Crawford:** Accident rates. When we did the analysis, we didn't have the visibility of incidents.

Fourth, CASA provided the aviation community the opportunity to provide feedback on the proposed instrument during a six-week consultation period. We considered 223 written responses from organisations and individuals, of whom 217 identified as pilots—including 115 who had flown CSF operations. The output from the consultation showed that as many respondents felt improvements were needed in the CSF space as those who felt little or no improvements were needed. CASA used all these inputs to improve—refine, craft—the instrument, in order to garner safety improvements with the least impact on those support CSF operations. I note that, earlier today, Angel Flight confirmed that the CASA instrument had not been detrimental to Angel Flight or its services. In summary, the instrument demonstrates a risk based, proportionate approach to the identified risks, with the aim of ensuring the safety of passengers carried on CSF flights. Thank you. We're happy to take questions.

**CHAIR:** Thank you.

**Senator PATRICK:** There have been parallel activities taking place here. One of them is that the ATSB has been carrying out an investigation. Clearly CASA has been doing something else in response to, presumably, the 2011 flight and then the 2017 flight. It clearly involved data analysis that was different to what ATSB had done, and then led to an instrument that was tabled in the parliament. Can you take me through the steps you went through there and why—this is not a criticism; I'm just trying to get an understanding—you did those actions before the ATSB had reported, and what interaction took place between the ATSB and CASA in respect of the consideration of the instrument being tabled.

**Mr Crawford:** First of all, the second fatal accident got our attention, hence why we did some analysis. We felt that the second accident provided us with some information to suggest that we should take action and not wait for the ATSB process to take its normal duration.

**Senator PATRICK:** Is that normal?

**Mr Crawford:** Yes, that is normal for us. If we believe there is a safety risk to be addressed, or that we should implement a mitigation, we will not wait for the ATSB report. We will consciously evaluate the situation, do our own analysis and determine what we do. We apply a careful consideration. We're very conscious, if we're going to make changes that impact a sector or the flying community, to consult on that. That's what we believe we did.

**Senator PATRICK:** In respect of the instrument itself—I have had discussions with Mr Carmody in relation to this; I want to keep this short, so I'm just trying to work out a way we can do this without me going through every element of the instrument, which I have here before me—I understand you might be attempting to impose a standard on community service flights. I don't have an objection to that, but there might be a couple of elements I want to talk about. Would you agree that, rather than having us go through all of this, all of the provisions in the instrument, had they been in place in 2011, would not have prevented these accidents?

**Mr Crawford:** If you take the first accident in 2011—

**Senator PATRICK:** A night VFR.

**Mr Crawford:** It was a night VFR. The instrument addresses that. If we had introduced that instrument prior to that accident, we might have avoided it. It still relies on pilot decision-making. In reality though, when we see two fatal accidents, whilst we consider what specifically happened in those two accidents, we also consider whether there is something in the pressure that pilots potentially feel, depending on their experience. And we felt it was necessary to address that situation.

**Senator PATRICK:** Which of those provisions in the instrument go to pressure? Obviously, pilot experience.

**Mr Crawford:** Pilot experience. One of the observations we have is the information that we can rely on, as was referred to earlier. Clearly, part-pay pilots who have a CPL or an ATPL who are conducting Angel Flight activities have been trained to a different standard, and part of that is human factors. So they have already received some training that assists them in handling pressure situations. But, in a private community of pilots, we are relying on education material around human factors, which we do provide, to try and educate pilots.

**Senator PATRICK:** Narrowing it down to the instrument: the instrument says '400 hours in an aircraft and 250 hours in command'. In the case of the Mount Gambier flight, the pilot had 530 hours. In the Nhill flight, the pilot had around 940 hours. So, if you are talking about pressure, that clearly wasn't a part of those two accidents in that the pilots already had in excess of the minimum hours.

**Mr Crawford:** Essentially the individual involved there had cleared the hurdle; that's correct. The other thing to consider though is that, when we produced this instrument, Angel Flight had in place lifesaver requirements—not necessarily enforceable requirements. But this instrument is for all of CSF, and we had to also consider if there would be any entrants in the future. That is one of the reasons why we specified minimum standards.

**Senator PATRICK:** I am happy to concede that much of the instrument in some sense doesn't cause detriment and it places at least a minimum standard. This is not a criticism but, when I look at the instrument, I struggle to find provisions that directly address—other than night VFR; and do I note that that flight wasn't at night but just prior to—

**Mr Crawford:** Entering night.

**Senator PATRICK:** Yes, last light. Maybe I should just go to the ones I have a problem with. I don't have a problem with mandating minimal hours. I think Angel Flight do that anyway; it doesn't have an effect on them. After hearing the evidence today, would you concede that the instrument as it currently stands prevents a mentoring pilot from being in the aircraft and that is actually a bad thing?

**Mr Crawford:** We don't agree with that.

**Senator PATRICK:** Can you explain that a bit more. Angel Flight are basically saying they can't put a mentoring pilot into the aircraft, which is clearly something that would go to culture, pressure and experience.

**Mr Crawford:** Mr Monahan can provide a more detailed response. But our position is that, if we want to put another pilot in the plane to be present with an experienced intraflight pilot, we have no objection with that. If it is to help introduce that individual to conducting flights on behalf of Angel Flight, we are comfortable with that. All we ask is that it needs to be clear who the pilot in command is—because you can do it both ways. Pilot A could be the experienced person on a particular aircraft, and the pilot in command, but not experienced at doing Angel Flights, and the mentor pilot is not in the control seat, or it can be reversed. So we have no objection to doing that.

We would say that the term 'operating crew' and the definition of 'operating crew' actually allows them to do that. It also allows them to have a pilot in place that's just assisting with some activities on behalf of the pilot in command. But I will ask Mr Monahan to expand.

**Senator PATRICK:** So the committee is clear, the provision basically says that you must not operate a flight unless the aircraft does not carry on board any person other than the patient mentioned—in one of the other paragraphs—and any other passenger who accompanies the patient to provide support and assistance and the operating crew. They are the only people allowed on the aircraft, so clearly there's some confusion here. Perhaps with Angel Flight, that could be clarified.

**Mr Monahan:** Certainly, and we've had that discussion, but perhaps we'll have it again. The pilot in command has the ability to designate some of his operating crew to assist them, and one of those functions could be filling the same role as that mentoring. We've had discussions on that for some time. We believe that is beneficial, like you describe. For example, if you're flying into a more congested area you're not familiar with, taking somebody with you who is familiar with that only enhances the safety of it. We have no objection to that at all. So we believe the instrument as written gives the latitude to the pilot in command to be able to designate someone and bring them along.

**Senator PATRICK:** So, if there's an accident, the operating crew is defined in law to include—because that's obviously where these things unravel, after an accident's occurred, and that would perhaps prevent Angel Flight operating in a way contrary to law. You say in law the operating crew can include a mentor. Is that spelt out anywhere?

**Mr Monahan:** There's no aviation definition of a mentor. It's not an endorsement; it's not a licence. It's a colloquialism that people use in the community, and that's why we specifically say operating crew versus crew member versus pilot in command. They all have different definitions of mentoring. We believe, though, it has the latitude to fit under and meet the operating co-requirement with the same outcome you—

**Senator PATRICK:** Is there anywhere in writing that says that Angel Flight could rely on—is there an instruction somewhere, somewhere in law where that—

**Mr Monahan:** Because we don't define mentoring, because it's not something we have endorsement for, I can't give you a clearance to do that because that's not a category. I can talk about operating crew, and in the—

**Senator PATRICK:** But is there a definition of operating crew that would allow for a mentor to be part of the crew?

**Mr Monahan:** I might ask Dr Aleck to respond.

**Dr Aleck:** I understand your question, and it's a good question. As Mr Monahan said, it's probably an area that merits further exploration to make it clearer. But our position now is that, as defined in the Civil Aviation Regulations, a member of the operating crew is a person who is on board the aircraft with the consent of the operator of the aircraft—who would be the pilot in the case of a private operation—and has duties in relation to the flying and safety of the aircraft. If you look at that provision it's followed by a number of notes. These days notes are considered to be relevant to the way you interpret it. CASA interprets this provision, and we have made it clear, and I think in a discussion that Mr Monahan was hoping to have, that from our perspective a person who is genuinely being mentored—not a legal definition, but I think we share an understanding of what's involved—as opposed to taking the opportunity to fly in the aircraft for some other reason. If it's genuine, we would interpret the rule as applying to that person as a mentor. If that needs to be made clearer as a matter of law, we are more than happy—

**Senator PATRICK:** So that may be something that could flow, a recommendation from this committee, and you would look at that, because—

**Dr Aleck:** Absolutely. In the meantime I think we're on solid ground.

**Senator PATRICK:** You know that I have a disallowance on this instrument, and actually it wouldn't take much to remove that disallowance because I get that you're trying to create a minimum standard. The other one that in my view causes a problem is the one relating to maintenance. You place an extra maintenance requirement on an Angel Flight aircraft that in neither of those accidents had any part to play and has no part to play in pressure, which is one of the issues which have been raised in the ATSB. I'm concerned it places a burden and a deterrent on people who are qualified pilots with aircraft that meet the normal safety requirement to fly. No matter how small, it does create an extra burden.

**Mr Crawford:** Perhaps I could respond to that as well. When we wrote our instrument, as you recognise, we were setting a minimum standard. At the end of the day it's a system of safety, and we felt that we also had to look at maintenance and consider that in the safety system.

**Senator PATRICK:** Is there a safety case that you've generated for that?

**Mr Crawford:** The other point I would like to make is that we believe that what we've proposed, or introduced, isn't too onerous, because it's 100 hours or 12 months. If there's data that can be shown to us that suggests it's overly onerous we could look at that—we're happy to look at it—but our understanding is that it's not. If you think about it, if there are people who are doing, typically, more than 100 hours in 12 months, which we understand to be a very low number of people—potentially it's less than 10, we believe, but we may be wrong—

**Senator PATRICK:** I've got the CEO of Angel Flight behind you shaking her head in disagreement, and I think Dr Crees—

**Mr Crawford:** Okay. Can I just make one point, though. We introduce, let's say, a hundred hours, and you hit a hundred hours at one to 10, so you've been able to fly for Angel Flight for 10 months—12—and I guess the decision is whether you do your maintenance at one to 10 or wait two months and—

**Senator PATRICK:** You know that before the parliament—and it's a government bill; it has passed through the Senate, which means it will pass through the lower house—there is a general direction from the parliament saying safety is paramount but you have to consider the effect it has on business operations as well. I put it to you: neither of the ATSB reports goes to maintenance. Can you provide a safety analysis that got you to the point of imposing this particular new criterion? I know Dr Crees has pulled out of flying because of that particular requirement. Where's the analysis that got you to that point? Can you please table that analysis. You must have done some. How did you pick that?

**Mr Monahan:** When you look at the average number of flight hours by private pilots in Australia, it's roughly 40 to 45.

**Senator PATRICK:** So you have this laid out in a safety case?

**Mr Monahan:** Yes. We'll provide that.

**Senator PATRICK:** A very simple question: can you provide that to the committee?

**Mr Monahan:** Yes.

**Senator PATRICK:** As I said, I would be willing to withdraw the disallowance. I understand that you're trying to put a standard in place. It's actually already met by Angel Flight, but you are placing a couple of onerous elements, albeit one caused by ambiguity, on the organisation which would be harmful to it.

**Dr Aleck:** The ambiguity issue can be readily addressed, as I said. In the meantime, as we're the interpreter and applier of that rule et cetera, I might mention too that, in addition to the analysis that Mr Monahan referred to, as Mr Crawford indicated, we did look at what was going on elsewhere. Of the 10 criteria that the FAA applies when assessing exemptions for the purpose of Angel Flight—public benefit flights, as they're called in the US—one is imposing higher aircraft airworthiness requirements. We looked at the kinds of considerations that that authority took into account, and that's amongst the others we've mentioned here.

**Senator PATRICK:** But, recognising that GA around this company has suffered at the hands of CASA and regulations and the parliament has now acted—or is within a stroke of being able to react to that—it seems to me that you are looking around for something that demonstrates you've done something, but actually there's no justification for it on the evidence of operations here in Australia.

**Dr Aleck:** I think Mr Monahan indicated the kind of information that could be provided to support that. For what is a relatively modest intervention, it has an impact, but we believe it's balanced by the safety benefit, on an analysis that was presented but also on the basis of assessments by other authorities who are looking at the same things. None of the accidents that the NTSB looked at, which gave rise to the result with the implications here, involved a maintenance issue—none of them did. My understanding—and I'll defer to Mr Monahan on this, of course—is that the requirement effectively brings forward what would otherwise be an obligation, rather than creating a new maintenance related obligation.

**CHAIR:** I'm sorry, would you just repeat that?

**Dr Aleck:** My understanding is the requirement in the instrument. Rather than introducing an entirely new maintenance related or airworthiness related requirement, in terms of the 100 hours or 12 months, it simply will bring forward the period of time within which maintenance needs to be undertaken.

**Senator PATRICK:** If someone has to do maintenance at a particular point and then, six months later, has to do maintenance again and then six months later again, because of the trigger, that involves additional cost.

**Dr Aleck:** It does, but I think it was a balance.

**Senator PATRICK:** When you table the safety case, I guess we'll see the balance.

**Mr Crawford:** The other thing is that the 100 hours and a 12-month periodic inspection is a well-established solution across the globe. It's been in place for a very long time, and the purpose—

**Senator PATRICK:** With community service flights, you say?

**Mr Crawford:** No. Try to hear me out. The issue for us is that we are often encouraged by industry to look at best practice elsewhere and adopt. That's what we attempted to do when we did our analysis and looked at what the FAA do. I would also point out that, in most jurisdictions, the FAA insists on these flights being conducted under IFR, which we have not done. Back to the maintenance, our objective is to make sure that somebody's not flying an aircraft well in excess of 100 hours conducting community service—

**Senator PATRICK:** My understanding is that most manufacturers recommend 200 hours.

**Mr Monahan:** It depends on air—

**Senator PATRICK:** Sure.

**Mr Monahan:** Regarding the 100 hours, if you're on OAM scheduled maintenance or you're on CASA-approved scheduled maintenance then that 100 hours doesn't apply.

**Senator PATRICK:** I can see the chair looking at me. She hasn't given me a lot of time.

**CHAIR:** No—I'm actually encouraging you because I think this is a very key point as to why that legislation was amended: to consider cost. By bringing forward any maintenance schedule, you're potentially increasing the cost for maintaining that aircraft to greater than within 100 hours. The cost of operating private aircraft in Australia is one of several reasons. People leave the industry and sell their aircraft. I think this is a very important point. I just want to check, Senator Patrick: is this not a question you've asked previously at another hearing?

**Senator PATRICK:** I've engaged CASA previously on some elements of this but have not informed myself with the ATSB report. If the ATSB report had mentioned a maintenance issue, that would have changed the scenario.

**CHAIR:** But you have previously asked for the basis of the maintenance report and it's not been forthcoming.

**Senator PATRICK:** Yes, I understand. I have actually. I think that was taken on notice. Thank you, Chair, for helping me there. In your analysis, have you looked at the cost aspects of this?

**Mr Monahan:** Yes.

**Senator PATRICK:** So, when we get that safety report, we'll get to see what the cost implication on the user would be with respect to these.

**Mr Crawford:** We're very confident we have taken a pragmatic and proportionate approach on this instrument.

**Senator PATRICK:** The instrument I have has, I think, 11 days standing. That will probably take us to the sitting week afterwards. I'm happy to sit down. There is Mr Carmody. When the instrument was first brought in, helicopters were in there and that was changed almost immediately. I'm grateful for that. It made it—

**Mr Crawford:** I don't believe anybody has used it—just so you know—

**Senator PATRICK:** Sure; I understand that. Once again, we don't want CASA making regulations or placing restrictions on things just for the sake of it. That's what the—

**Mr Crawford:** To be candid, we didn't place a restriction on it; it was an oversight.

**Senator PATRICK:** Okay. You didn't add the word 'helicopter'. I appreciate that. Perhaps you're able to table that. I'll give you the offer of having another discussion with you offline. I get what you're trying to do with the instrument. I'm just cognisant of what the parliament has done, or at least the Senate, but I'm sure the House of Reps will also say, shortly: 'We're trying to grow this industry. It's been collapsing for some time.'

**Mr Crawford:** We recognise the cost aspect of maintenance. Our concern is, if in a 12-month period somebody goes well over 100 hours, is there a potential risk to the passengers? That's our rationale.

**CHAIR:** Senator Patrick has specifically asked for this rationale before.

**Mr Monahan:** To be honest, if you have, I'm not aware of that. You've asked us about maintenance before and we've had that discussion.

**Mr Crawford:** We will certainly respond.

**Mr Monahan:** To be specific on this one, we will respond.

**CHAIR:** If you refer back to the additional estimates day, Senator Patrick specifically asked Mr Carmody for the statistics and how those regulations would have altered those statistics. It's quite specific. Please respond, I would suggest, as a matter of urgency. I would also—

**Senator PATRICK:** Have we set a date for questions on notice?

**CHAIR:** No.

**Senator PATRICK:** We should probably do that anyway. It could be two weeks?

**CHAIR:** It could be two weeks for questions on notice?

**Mr Crawford:** Sure.

**CHAIR:** I would just flag in terms of that issue that's just been raised, you're trying to balance safety. I think there would be nothing safer than nobody flying, and that is where—

**Mr Crawford:** That's not our objective.

**CHAIR:** I would encourage you to review that objective in line with the reality of what's happening.

**Mr Crawford:** That's a phrase that's often used. That's certainly not where we hunt.

**CHAIR:** I appreciate that you may not think so, but it is the result. The outcome of where we're at is the number of pilots who are leaving the industry and GA and the flight hours that have been flown.

**Mr Crawford:** Again, we believe that our instrument is very modest with flight hours, but we've obviously been asked to look at the maintenance aspect and provide a justification.

**Senator PATRICK:** To be specific I'll just say: you did answer that, but not with a safety case. I want to see the—

**Mr Monahan:** You want to see the why.

**Senator PATRICK:** Yes, the why.

**Mr Monahan:** The rationale.

**Senator PATRICK:** Whatever you have—if you're in doubt about whether to send it, send it.

**Dr Aleck:** I'm sure the evidence will be there, Senator, but I might point out something that has been said a few times: our objective here is not to specifically address what caused those two accidents; it's to address what kinds of things can cause incidents and accidents of this kind. We're being prospective. If we were to wait for sufficiently robust data to support an evidence based decision for every individual decision we took in this space, we would have to wait for a dozen or more accidents to occur.

**Senator PATRICK:** But bar the difference of the pressure, which the ATSB has talked about, we are talking about CASA licensed pilots in private aircraft that are otherwise considered safe in any other operation, and you're imposing an additional requirement on community service flights.

**Dr Aleck:** But, similarly, it's recognised in the federal aviation policy on this that a private pilot license is an entry-level requirement and that community service flying is different.

**Senator PATRICK:** Can I just tell you, I think our pilots would love to have the FAA regulations dropped here in Australia. We could get rid of all the CASA stuff, and we'd have a much happier place.

**Dr Aleck:** In this particular space—

**Senator PATRICK:** You're cherry-picking!

**Dr Aleck:** No, Senator, I'm just saying, in this particular space I think we are more modest than FAA.

**Mr Crawford:** We are.

**Senator RENNICK:** I've just got a bit confused, so I apologise for my confusion. Were those accidents a result of maintenance? Were they a maintenance issue? My belief was that they were a pilot error.

**Mr Crawford:** Correct.

**Senator RENNICK:** Are you imposing extra maintenance requirements on Angel Flight?

**Mr Crawford:** We have imposed some modest additional maintenance requirements, yes.

**Senator RENNICK:** Why—

**Mr Monahan:** Senator, I'm sorry. It's not on Angel Flight; it's on the pilots—

**Mr Crawford:** It's on the CSF.

**Mr Monahan:** Exactly, so it's not on Angel Flight.

**Senator RENNICK:** Is it just Angel Flight or all flights?

**Mr Monahan:** All community service flights.

**Mr Crawford:** No, all community service flights. When we use the term 'CSF', we're referring to the whole survey. But it was too—

**Senator RENNICK:** I know we've just discussed this in detail, but just briefly summarise again why you're imposing extra regulations.

**Mr Crawford:** When we constructed the instrument, part of our process was to also look around the globe to see what other regulators were doing in this space. We're often encouraged by the aviation community to look at the FAA, and we did look at the FAA. If you look at what the FAA has, it's essentially—

**Senator RENNICK:** Would these additional requirements have prevented the accidents from occurring?

**Mr Crawford:** Those two specific accidents?

**Senator RENNICK:** Yes.

**Mr Crawford:** No, but they may prevent an accident from happening in the future.

**Senator RENNICK:** 'May'. Yes.

**Mr Monahan:** They go to the core reasons why accidents happen in the private sector, and the instrument addresses fundamentally the top four to five in some capacity, in very small amounts—not an effect to close it all completely but, hopefully, just to break the chain enough and turn the dial just a little bit to the right that it will enhance what different operations are doing, and for the private pilots that don't have the luxury to—

**Senator RENNICK:** No, that's fine. There's no connection.

**Mr Monahan:** No, no. I understand.

**CHAIR:** Mr Monahan, just to go on from that, did I understand correctly that you just said that most accidents in the private aviation space happened as a result of reduced maintenance or—

**Mr Monahan:** No—

**CHAIR:** poor maintenance? Could you just explain your answer.

**Mr Monahan:** What I'm saying is that the accidents that happen through each sector of aviation have different themes. The No. 1 across the world, globally, is controlled flight into terrain. That is flying into weather when you're not qualified, and what qualifies that. That is the biggest accident, and the biggest killer of people. That's the first place you look. So you try to find ways to address the most likely case of mishaps in the future for a particular sector or cohort of pilots. That's the discussion.

**CHAIR:** Right. So it wasn't around maintenance?

**Mr Monahan:** No, and we'll address that in the comments when we come back.

**CHAIR:** Just on that, ATSB has produced a document. Given that that is the No. 1 cause of accidents, did you take any steps to distribute that document to your pilots?

**Mr Monahan:** Sorry, which document are you talking about—the mishap report or the VFR information?

**CHAIR:** No, the new brochure that they just tabled. We're just going to get you a copy now.

**Mr Monahan:** I wouldn't know. I'll have to check with our stakeholder engagement to see if we did. But, if not, it's something that we can certainly make a link to.

**Mr Crawford:** We do provide a lot of guidance material around human factors. We did something like 220 aviation safety seminars last year. That's where we go to remote locations—in fact, we're doing one in Rockhampton next week—and we get local pilots to come and we try to educate them on the risks. If you go to our website, we've got a number of tools, like 'Safety behaviours: human factors'. We have a lot of material actually available to the pilot community that they can utilise to their advantage.

**Mr Monahan:** I see this ATSB document was updated last month, so I can check with our stakeholder engagement. We'll certainly try to get it out. As you mentioned earlier, we have access to pilots, through our database, to be able to inform them to go to the website and look for things.

**Mr Crawford:** We may even be able to put an electronic version onto our website as well.

**Mr Monahan:** We can look at that.

**Mr Crawford:** We're happy to do that. Anything that's in the interest of aviation safety, we're happy to do.

**CHAIR:** I would recommend that.

**Mr Crawford:** Sure.

**Senator PATRICK:** You mentioned you were going to a workshop next week.

**Mr Crawford:** We're holding a seminar in Rockhampton.

**Senator PATRICK:** Mr Morgan previously said you don't get many people turning up to those seminars.

**Mr Crawford:** We had 8,200 people—

**Senator PATRICK:** Can you say that again?

**Mr Crawford:** We had over 8,000 people at 200 seminars last year. I think that's significant.

**Senator PATRICK:** Okay. Dr Aleck, this is slightly off-topic. Well, it has some relationship. Assuming the CASA amendment goes through the lower house, and it is a government bill, it will require you to consider the effect any regulation has on general aviation. Firstly, do you do regulatory impact statements now when you change a regulation; and, secondly, will that change after the bill goes through?

**Dr Aleck:** We are currently subject to the requirement to conduct regulatory impact statements when we're obliged to do so. There are processes for exemption from that process, but we have to satisfy the OBPR on that before we can do it.

**Senator PATRICK:** Was there a regulatory impact statement for this instrument that has been tabled?

**Dr Aleck:** No, there was an exemption for that.

**Senator PATRICK:** Who granted the exemption and on what basis?

**Dr Aleck:** I'm trying to remember what the acronym stands for. The office of—

**Mr Monahan:** best practice regulation.

**Dr Aleck:** The Office of Best Practice Regulation issued an exemption for that on the basis that the impact was considered to be minor.

**Senator PATRICK:** Is it possible also for you to table any correspondence you've had in respect of that exemption—so, basically, the request for the exemption and indeed the response? That might be another area that the committee would be interested in. And I presume that, after we go through this change in legislation, there would be a requirement—perhaps a more stringent requirement—for you to do a regulatory impact; those exemptions won't be quite as easy to get.

**Dr Aleck:** I don't know that there's an exemption under the proposed legislation to begin with, but the terms of the proposed amendment are different from the terms of the RIS. They're quite specific. And we are very mindful of what that will involve, and we're turning our mind to it already in anticipation of what we expect will be law.

**Senator PATRICK:** I'm sorry Chair; this is with your indulgence, but it goes to creating regulation without publishing impact statements. When the new bill comes through, how do you intend to change the approach of CASA? Maybe that's for Mr Crawford.

**Dr Aleck:** May I take that on notice? The analysis of what sorts of things you take into account and how you weigh them up is not, strictly speaking, a legal issue.

**Senator PATRICK:** Sure.

**Dr Aleck:** What we're looking at now is: what would our obligation be if those provisions become law? Bear in mind that they are prefaced by: 'subject to the safety requirements'—

**Senator PATRICK:** Of course. Safety is paramount.

**Dr Aleck:** Right.

**Senator PATRICK:** But now there's a new consideration for you.

**Mr Crawford:** Yes, and we're well aware of that.

**Senator PATRICK:** I think the committee would be interested in your initial thoughts on that, even though the legislation hasn't gone through the lower house.

**Dr Aleck:** Well, those initial thoughts wouldn't necessarily be mine, but—

**Senator PATRICK:** Sure. I understand.

**CHAIR:** Just going back to the training that you're doing in Rockhampton—particularly given that it's in my state—how many do you think you'll get to that training?

**Mr Crawford:** We broadcast on our website that the training is happening. All I can tell you is: last year we did about 200 training sessions. We provide training and we also share safety messaging. As to those 220 last year, we had over 8,000 people come and participate.

**CHAIR:** How many pilots do you have in the industry?

**Mr Crawford:** The total is about 30,000. But bear in mind that some of them are transport pilots who most likely wouldn't come to these sorts of events. When we're doing these events, we're typically reaching out to the private pilot and also the aerial ag business, trying to get to people—it's the best mechanism to try to provide education or guidance that may help them avoid an accident. That's really the primary purpose.

**CHAIR:** Well, I think I've run out of questions.

**Senator PATRICK:** Can I get you to perhaps provide some further statistics on who turns up to your training sessions?

**Mr Crawford:** Sure. I think we have it in our annual plan—

**Senator PATRICK:** So who turns up. I guess some people do multiple courses.

**Mr Crawford:** And sometimes it may be people who are also interested in maintenance. There's a variety of people who may attend some of these sessions.

**Senator PATRICK:** If you could provide some statistics on that, I'd be grateful.

**Mr Crawford:** I'm happy to do that.

**Senator PATRICK:** Thank you.

**CHAIR:** Just on the number of pilots in the industry, how current would you say your list is? Do you audit your list?

**Mr Crawford:** I would say it would be fairly accurate because pilots have to get certain things renewed on a certain basis, like medicals. So I would say that it is relatively accurate.

**CHAIR:** I was speaking to a pilot last night who said he hadn't done the touch-and-goes or whatever you call that—

**Mr Crawford:** So he's not current.

**CHAIR:** He's not current. So would you be able to provide the list of who is current—how many current pilots there are?

**Mr Crawford:** I'm not sure we could do that. What we've been able to do in the past is to categorise them between air transport, commercial, recreational, private—

**Dr Aleck:** There's no legal requirement to be current—

**CHAIR:** No.

**Dr Aleck:** but you can't lawfully operate unless you are. So there is no report that I'm not current.

**CHAIR:** I guess what I'm interested in is that CASA has very high standards for its pilots and for the maintenance of its aircraft. I'm just hoping that CASA applies the same level of rigour to its own lists and internal processes.

**Mr Crawford:** I think our pilot standards and maintenance standards are pre-aligned with international civil aviation, to be honest.

**Dr Aleck:** Our licensing data, as I understand it, is drawn from the record that we keep on that. So I can't imagine there'd be a discrepancy of any significance between the actual—

**Mr Crawford:** No, I wouldn't have thought so.

**Senator PATRICK:** For example, I have a private pilot licence, but I haven't flown in 20 years.

**Mr Crawford:** Is this a confession?

**Senator PATRICK:** You wouldn't want to fly with me! But my understanding is that the licence is perpetual, so the better signal, as you suggested, is probably medical certificates.

**Mr Crawford:** Yes.

**Senator PATRICK:** So rather than telling us the number of pilots, is it possible to tell us the number of active medical certificates—and perhaps over the last three or four years?

**Mr Crawford:** We'll take that on notice.

**Dr Aleck:** Your question is about the granularity of our statistics.

**Senator PATRICK:** Sure.

**Mr Crawford:** We have a similar challenge with aircraft, as you may appreciate. People register them once, so we don't actually know how many aircraft are truly active.

**CHAIR:** Would you know how many are up to date with their maintenance?

**Mr Crawford:** Not necessarily, no.

**Dr Aleck:** Again, the requirement is to not operate an aircraft if it is not complying with the applicable maintenance requirements. It is the obligation of the certificate-of-registration holder, if the aircraft is going to be operated, that they have a maintenance release to do those things. But there is no explicit compulsion in law: maintain your aircraft by this date. You just can't fly it if you haven't.

**Mr Crawford:** The pilot in command is responsible for ensuring that the aircraft has a current maintenance release.

**CHAIR:** But you're going to introduce an instrument that says that you have to maintain your aircraft more frequently, or to a higher standard, for the—

**Dr Aleck:** The instrument imposes that requirement on the pilot in command of a community service flight, whereas the existing maintenance requirements are on the certificate-of-registration holder. So the obligation, then, under the instrument as it is, is that if you're going to conduct a community service flight as a pilot it's your obligation to ensure that the maintenance on that aircraft meets the requirements of the instrument. So it's a specific obligation on the pilot.

**Mr Crawford:** Just as it's your obligation to make sure that you've got a current medical and your licence is current.

**CHAIR:** There is just something that's bothering me about the record keeping for CASA and the requirement on the pilot and the community service flights.

**Senator PATRICK:** A double standard.

**CHAIR:** Yes, it's a double standard. That might be one way to—

**Senator PATRICK:** It might be convenient, Chair, if they don't know the state of the GA industry!

**CHAIR:** Oh dear! As there are no further questions, we look forward to your responses within the two weeks, please, and we will see you at estimates not too soon after that. That concludes today's proceedings. Thank you to all witnesses who appeared. Thank you to Hansard and broadcasting. The committee stands adjourned.

**Committee adjourned at 17:43**