

Rural & Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates 2017 - 2018

Infrastructure and Regional Development

Committee Question Number: 117

Departmental Question Number: SQ17-000256

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Drone strike and Bird Strike

Proof Hansard Page: 73 (23 May 2017)

Senator Rice, Janet asked:

Senator RICE: Can you take this on notice? I assume there have been some comparisons in other jurisdictions around the world on what the relative impact of drone strikes versus bird strikes would be. Have you analysed that data yourself?

Mr Carmody: We continue to look at material all the time on those sorts of matters, but, as I said—

Senator RICE: Could you take it on notice to provide for the committee some of your rationale about the difference between bird strikes and drone strikes, and your basis for deciding that drone strikes are, it sounds like, no more of an issue than bird strikes?

Mr Carmody: I would be happy to. I think that the need to know more about the issue is the point we are endeavouring to make. We have a lot of bird strikes and a lot of animal strikes.

CHAIR: There are a hell of a lot more birds than drones out there at the moment.

Senator RICE: But regarding the issue of what impacts a drone strike would have—particularly the recreational drones; the under two-kilogram drones that are being used for recreational purposes that we know are flying where they should not be in controlled airspace, out of sight and far higher than they are meant to—

Mr Carmody: We can certainly take it on notice.

Answer:

The Civil Aviation Safety Authority (CASA) has reviewed a number of preliminary international studies and research papers that show the impact of drone strikes on aircraft are similar in consequence and severity to those of bird strikes in a similar weight category. In the absence of sufficient data to determine the true severity of a drone strike, with only five confirmed drone strikes with aircraft recorded worldwide since 1997, the closest comparison on potential effects of a drone strike on aircraft is a bird strike.

CASA continues to monitor international studies, reviews and tests in this area.

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Committee Question Number: 118

Departmental Question Number: SQ17-000257

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Community Knowledge and Consultation on Drones

Proof Hansard Page: 73-74 (23 May 2017)

Senator Rice, Janet asked:

Senator RICE: If you provide the comparison to the committee, that would be very useful for us. Another bit of information that I would like to know is: you have been talking about your communications program to inform recreational users—how much assessment and what knowledge do you have about the level of knowledge amongst those recreational users of what the rules are and whether they can play with them?

Mr Carmody: We are communicating constantly—

Senator RICE: That is not my question. My question was: how much knowledge in the community is there?

Mr Carmody: I would prefer to take it on notice. I think that I can probably find the answer for you.

Senator RICE: Have you done any analysis of the level of understanding amongst recreational drone users of what the rules are?

Mr Carmody: I am not aware, so I will take it on notice.

...

CHAIR: I am familiar with when it was. You referenced that. You would, no doubt, have information about who you consulted and what the breadth of the consultation was. Could you take that on notice and provide us with who you consulted and if there are any documents where they made a submission to you, you exchanged or a file note—could you also produce that for us?

Mr Carmody: I am happy to. We have a pretty standardised process for consultation. We are very happy to take it on notice.

Answer:

CASA uses its social media channels to determine the communication reach of its safety messages. So far this year, CASA has reached over 1.4 million people through 32 drone safety related posts on Facebook. CASA also provides safety advice and delivers safety education and training through its Aviation Safety Advisors throughout Australia, which includes information on drones.

CASA released a new smartphone app ‘Can I fly there?’ in May 2017 which saw over 20,000 downloads after its first week of launch. The app provides the rules around where you can and cannot fly your drone, presented in an easy-to-use graphic format and using non-aviation language.

CASA also received 90 responses to its Notice of Proposed Rule Making (NPRM) for the CASR Part 101 amendments in 2014, which was open to comment from industry and the general public.

Consultation was also undertaken through CASA’s Unmanned Aircraft Systems Standards sub-Committee, which currently has 75 member organisations.

CASA expects to publish a Summary of Responses to the NPRM within the next three months, which includes the comments, the respondent’s name/organisation and CASA’s response to all the NPRM responses.

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Budget Estimates 2017 - 2018

Infrastructure and Regional Development

Committee Question Number: 119

Departmental Question Number: SQ17-000258

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Cost of Communication on Drones

Proof Hansard Page: 74 (23 May 2017)

Senator Rice, Janet asked:

Mr Walker: Correct. We look at how they gain their information. It would be quite simplistic to say that we would take out some advertising, et cetera, which we do in drone publications and, obviously, IT magazines. But where we have been targeting is very much in the social media space. An example is our Facebook site—CASA now has a Facebook site. We started that a couple of years ago; we have seen an exponential growth in the number of people looking at that site. We now have 30,000 followers, and the vast majority of those and a vast amount of the traffic we are seeing is around drones and people wanting to know more information around drones. We have used social media specifically—including Twitter—around targeting the mums and the dads and the 13 year-old kids. And then the next area we have looked at is very much, I suppose, the hobbyist and enthusiast who is not necessarily interested in buying a commercial off-the-shelf drone; they actually buy their components via the internet and they build their own. That has been another key target area.

Senator RICE: What has been the cost of your communications campaign so far?

Mr Walker: In terms of total spend, I would have to take that on notice. In terms of social media, we manage that in-house—that is, the staff, relying on the expertise we have with our own subject-matter experts, and the content is all generated and delivered in-house as part of our normal communications packages.

Answer:

Since the establishment of CASA's ongoing drone campaign in late 2013, through to June 2017, CASA has spent approximately \$177,600 on production and distribution of leaflets, other advertising and associated costs, and on production of the drone app. Social media campaigns are delivered from in-house resources.

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Budget Estimates 2017 - 2018

Infrastructure and Regional Development

Committee Question Number: 120

Departmental Question Number: SQ17-000259

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Drone Communication at Avalon Air Show

Proof Hansard Page: 74-75 (23 May 2017)

Senator Rice, Janet asked:

Senator RICE: Getting to my other question, it is all very well to be putting that communication out there. And with the drones, you have also got the information in the yellow leaflets—is that what you were referring to? Is it the leaflet that we saw at our drones inquiry?

Mr Carmody: It is a leaflet; I have seen multiple ones, but yes—

Senator RICE: It is a DL-size yellow leaflet. But I think for your average 15-year-old, once they get their drone out of the package from Harvey Norman, the leaflet would end up with the wrapping paper and it would not even be looked at. I want to know what sort of analysis you are doing of the effectiveness of your communications program. How are you evaluating whether you are indeed reaching your target audience?

Mr Walker: In answer to that, we intend to go out to market and actually test that via survey.

Senator RICE: You intend to go out to market—so you have not tested it as yet.

Mr Walker: Not as yet, but we do monitor a number of things on a weekly and a monthly basis, specifically around our website and around the internet traffic. In a couple of the other forums that we attend, we also do a high degree of exit polling of those attendees. If I could give you an example of that, recently at the Avalon air show, we happily participated in and were very supportive of what was called the 'Drone Zone'. On the public days at the Avalon air show, they specifically targeted mums and dads and kids that were turning up, to provide education around drones. We had members of our staff there to answer questions and provide information, and we also then asked people on the way out whether or not that information had been useful, as we do in all our forums.

Senator RICE: How many people would you have reached at that show, for example?

Mr Walker: Over the three days, I would have to take it on notice to give you precise numbers; obviously, it tends to be a little bit anecdotal. I know I had three staff on the stand and they were literally hammered for the three days.

Answer:

Over the trade days (Tuesday-Thursday) at the 2017 Avalon Airshow, and the three days (Friday-Sunday) of the inaugural Avalon Air Show *Drone Zone*, CASA reached an estimated 6,000 people.

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Infrastructure and Regional Development

Committee Question Number: 121

Departmental Question Number: SQ17-000260

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Communication on Drones

Proof Hansard Page: 75-76 (23 May 2017)

Senator Rice, Janet asked:

Senator RICE: I would like to go back to what you said before—that you intended to go to market to do some evaluation of your effectiveness. Can you tell me more about the time lines and about what you are proposing to take to market in terms of evaluating the effectiveness of your communications?

Mr Walker: The intent is that later this year we will be going to market to do a further sample of our stakeholder engagement relationship with industry. As part of that, we are in early discussions with the service provider that does that for us as to whether we can include a component around drones and drone awareness and also drone safety. It is early days, but I would like to think that we will be going out before the end of this year to do that.

Senator RICE: Will that be targeted at the group that we are concerned about, the recreational drone users?

Mr Walker: Yes, this would be targeted at the general public—targeted at, I suppose, mums and dads and kids—to try and understand what their level of awareness is and, based on that, what our level of effectiveness has been in delivering the communication packages that we have.

Senator RICE: So you are hoping to have determined the program by the end of the year or be out in the field by the end of the year?

Mr Walker: I would like to think we will be out in the field by the end of the year in a position to have some data on the back end of that early in the New Year.

Senator RICE: If you could provide on notice some details of what you have planned in that field, that would be appreciated.

Mr Walker: Certainly, happy to.

Answer:

CASA will be undertaking its biennial stakeholder engagement survey in November 2017 that will include the topic of drones and the understanding of CASA's role.

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Infrastructure and Regional Development

Committee Question Number: 122

Departmental Question Number: SQ17-000261

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Assessing Safety

Proof Hansard Page: 84-85 (23 May 2017)

Senator Fawcett, David asked:

Senator FAWCETT: Mr Mrdak, as you are aware, we have spoken before about manual of standards part 139, which goes to airport design. Over the years we have seen what have essentially been open spaces for airports, with standards put in place. But as commercial pressures have built up that real estate and that airspace have been encroached upon right up to, and in some cases, I would argue, intruding into, the limits that MOS 139 is supposed to put in place.

What Senator Xenophon was pointing to, I think, is the fact that if you look at a safety system holistically—a bit like James Reason and his accident causation model—what we are finding is that each of those pieces of Swiss cheese has been thinned to the absolute minimum that is permissible by law, which maximises the chance of an accident by minimising the options for a pilot who has a malfunction in an aircraft. I guess the request here is that we sit back and look at this holistically, as opposed to saying, 'Yes, they have met this requirement or that requirement,' and look at the aggregation of the loss of margin and, therefore, options for an aircrew member who has an issue with an aircraft. Public safety zones are but one element of that whole system.

I guess I am seeking assurance from you, Mr Carmody, that CASA's approach to this, as we have discussed here on multiple occasions, will move beyond the, 'It can be made safe by limiting the operations' to, 'This is what an airport is designed to do in terms of the Commonwealth lease'—which says it must maintain its existing capacity and have the option to grow capacity—so that CASA will put its hand up and say, 'If these changes are made for existing or future operations, it will be unsafe,' as opposed to saying, 'It can be made safe by limiting operations,' which has been the practice in the past. I am seeking that assurance from you that the organisation will change the way it views its role in assessing that aggregation of safety implications.

Mr Carmody: I will certainly look at that.

Answer:

Part 12 of the *Airports Act 1996* prohibits the intrusion of controlled activities (e.g. buildings, cranes and other structures, etc) into the prescribed airspace of leased federal airports (i.e. those airports that operate under a lease with the Commonwealth) without an approval granted under the Airports (Protection of Airspace) Regulations (APARs). The Department of Infrastructure and Regional Development administers the APARs.

CASA will provide advice on aviation safety matters related to a proposed controlled activity to the Department, in accordance with the APARs.

As part of its comprehensive assessment of the proposed controlled activity, CASA will consider:

- the Civil Aviation Safety Regulation Part 139-Aerodromes and its Manual of Standards, in particular the regulatory arrangements associated with the establishment of Obstacle Limitation Surfaces;
- the International Civil Aviation Organization (ICAO) Annex 14-*Aerodromes*;
- the ICAO Document 8168 *Procedures for Air Navigation-Aircraft Operations* (PANS-OPS), in particular the instrument procedure design surfaces (PANS-OPS surfaces) associated with the leased Federal airport in question; and
- the National Airports Safeguarding Framework and associated guidelines;

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CASA's advice will take one of the following forms:

- the proposal is acceptable without risk mitigation;
- the proposal is acceptable subject to conditions imposing risk mitigation measures; or
- the proposal is unacceptable.

The APARs specify a proposed controlled activity must not be approved by the Secretary if CASA advises that carrying out the controlled activity would have an unacceptable effect on the safety of existing or future air transport operations into or out of the airport concerned. In other circumstances, CASA's advice on risk mitigation measures will be considered by the Department in making its decision.

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Budget Estimates 2017 - 2018

Infrastructure and Regional Development

Committee Question Number: 123

Departmental Question Number: SQ17-000262

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Aviation Safety Regulation Review

Proof Hansard Page: 90 (31 May 2017)

Senator Fawcett, David asked:

Senator FAWCETT: Could I ask you on notice to give the committee a list of recommendations that you believe have been implemented, recommendations that are still open and the actions that you either plan to take or that you have decided, for whatever reason, not to implement.

Mr Carmody: Certainly. As I indicated, we are doing that work now anyway, so by the time the notice period comes through we should have worked through a number of those things with Mr Forsyth. I am hopeful that Mr Forsyth, as the author of the review, and I, as the regulator that is implementing those things, will be agreeing on each one of the recommendations that have been closed out and the ones that remain. That is my aim. So I would be delighted to provide that information. Of course, a number of the recommendations are also departmental and we have been managing the actual list of recommendations through the department. I have worked very closely with the department to conclude that list.

Answer:

Of the Aviation Safety Regulation Review (ASRR) recommendations that relate to the Civil Aviation Safety Authority (CASA), the following provides an update as at 30 June 2017 noting that the practical implementation of a number of matters (such as CASA's transition of more of its business with industry online under Recommendation 8) is ongoing:

In progress

Rec	Remaining actions
23	Implement procedures, by the December quarter 2017, to share Authorisation Holder Performance Indicator information and key factors that influenced the results at all pre-audit meeting.
25	Implement a modified approach to current arrangements to apply a three-tier scheme ranked on the basis of the severity and risks to safety by the September quarter 2017.
32	Undertake reassessment of penalties when the majority of CASR Parts are drafted. This is expected to begin once the drafting of the Operations Suite package has been finalised next year.
33	Finalise drafting of outstanding CASR Parts of the regulatory reform program by end of 2018, noting that transition periods and final rules may extend to 2020.

Completed

Recommendations 4, 6, 7, 8, 9, 11, 14, 15, 16, 17, 18, 19, 21, 22, 24, 26, 27, 28, 29, 30, 31, 34, 35 and 37 a-c and e.

Not Supported

The CASA Board did not support the establishment of review panels 37(d).

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Infrastructure and Regional Development

Committee Question Number: 124

Departmental Question Number: SQ17-000304

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Public safety zone around Badgery's Creek

Proof Hansard Page: Written (5 June 2017)

Senator Xenophon, Nick asked:

1. Has CASA had discussions with relevant authorities planning Badgery's Creek on the requirements for a public safety zone around the new airport's site?
2. Will CASA be the approving authority for that airport in respect of a public safety zone?

Answer:

1. No, this is a matter for the Department of Infrastructure and Regional Development.
2. No, which is consistent with other federally-leased airports.

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Budget Estimates 2017 - 2018

Infrastructure and Regional Development

Committee Question Number: 125

Departmental Question Number: SQ17-000305

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: Impact on airspace management above the Sydney basin

Proof Hansard Page: Written (5 June 2017)

Senator Xenophon, Nick asked:

Is CASA conducting any studies into the impact Sydney Airport will have on airspace management above the Sydney basin?

Answer:

No.

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Budget Estimates 2017 - 2018

Infrastructure and Regional Development

Committee Question Number: 126

Departmental Question Number: SQ17-000306

Program: n/a

Division/Agency: Civil Aviation Safety Authority

Topic: NASAG override of CASA on air safety

Proof Hansard Page: Written (5 June 2017)

Senator Xenophon, Nick asked:

Can National Airports Safeguarding Advisory Group (NASAG) override CASA on a matter of air safety? If so, under what circumstances?

Answer:

No. CASA has legislative aviation safety obligations and powers under the *Civil Aviation Act 1988* and *Airspace Act 2007*, and administers aviation regulations. NASAG is an advisory group, not a decision making body.