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Ministry of Transport
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To whom it may concern:

Submission on the exposure draft of the Civil Aviation Bill

Thank you for the opportunity to comment on the exposure draft for the Civil Aviation Bill.

Zephyr Airworks is a joint-venture company that is currently testing, certifying and going-to-market in New Zealand with one of the world's first self-flying, electric vertical takeoff and landing aircraft. The company is one of the Government's flagship programmes under the Ministry of Business Innovation and Employment's Innovative Partnerships Programme.

Our interest in the exposure draft and in submitting is around future-proofing the New Zealand aviation ecosystem so that it can take full advantage of the evolving UAV industry.

The air taxi market is anticipated to be worth US$1.5tn a year by 2040, with passenger traffic comprising US$851bn of that. We believe that New Zealand has an amazing window of opportunity to lead the world in the new aerospace evolution. With technology advances in air cargo drones, emergency drones, commercial drones, air taxis and even in general aviation aircraft, society is going to need to think about how we safely and efficiently integrate the different airspace users. New Zealand is not alone in experiencing an increase in the numbers of a variety of aircraft, weather balloons and drones. All of which need to move around safely. The benefits of developing that airspace in an integrated, future-proofed way are becoming more evident as new craft like Cora emerge.

Electric aircraft also mark an important evolution in how we move about. We all prefer to connect face-to-face. That is why flight is so important to how we connect with each other. But we also know that we can't continue to use the planet's resources in the way that we have. Cora was developed with the planet in mind and is part of the electric revolution towards clean, green transportation. We are also committed to supporting the New Zealand Government's vision of New Zealand being Carbon Free by 2050.

Zephyr Airworks acknowledges the history of the existing Civil Aviation Act and the forward thinking that originally went into its drafting.

The Act was developed with the best advice available in 1988 and, to its credit, has served the industry well, remaining largely unchanged for the past 30 years.

We believe that, while this exposure draft does address some current issues in aviation, it does not provide us with confidence that the future-focused issues and thinking have been adequately considered.

In short, it does not fulfil the mission of creating a piece of legislation that will support New Zealand to retain its strong global credibility and leading edge thinking.

We would therefore recommend, along with other submitters who we support, that this exposure draft be put on hold while a number of critical issues are addressed.

It is our belief that the exposure draft does not fundamentally address the issues associated with the modernisation of aviation safety but rather takes the approach that change will occur through existing structures, processes and procedures.

We have divided our comments into two sections: General Comments and Specific Comments

1. General Comments

1.1. We are supportive of the need for the Civil Aviation Act and Airport Authorities Act to be modernised. However, we join with other submitters in our overall concern that the modernisation has not gone far enough. Other legislation related to the aviation safety ecosystem, including the Transport Accident Investigation Act, is also not being modernised at the same time, which, we believe, is a significant oversight.

1.2. Definitions: We would raise the question about some of the definitions and whether they are being future-proofed enough (taking even a 15 year view). One example of these is the definition of aerodrome and whether this will cover a vertiport or vertipad on a roof or other structure, above the ground. Part 1 of the Civil Aviation Act currently has a broader definition around a heliport. Does the aerodrome definition cover both the aerodrome and heliport? Or is it covered by Part 1?

1.3. Definition of Safety: We would recommend that the Civil Aviation Act appropriately addresses the definition of an acceptable level of safety and support aligning the Civil Aviation Act with Health and Safety in the Workplace Act by adopting the “reasonably practicable” test. All participants would benefit from understanding the test for acceptable level of safety and the expectations placed upon them. The alternative is to accept the definition of the acceptable level of safety from ICAO as being “the state in which the possibility of harm to persons or property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management”.

1.4. Rulemaking: Many of the Civil Aviation Rules are now 20 plus years old and have never been refreshed. The rulemaking process also continues to be problematic, unwieldy and has not improved over time, despite several attempts. Particular issues include:

- There is little proactive identification of issues, which appear to be identified by CAA’s operational staff, with little cost benefit analysis or prioritisation.
- There appears to be much more discipline needed in developing performance based rules. There is reference to risk based/performance based regulation but the rules developed under this philosophy are just as prescriptive as many of the

other rules. For example, §101.205 and §101.207 are unnecessarily verbose, somewhat redundant, and hard to understand. Part 102 is the mechanism to apply for variances from these rules. However, the safe mitigation of risk associated with these rules needs to cover multiple similar aspects with separate procedures to show compliance to separate rules. This is in spite of the fact that, for an aircraft the size and with the performance of Cora, the actual operation of the aircraft is the same relative to each rule.

- There are a number of other rules where New Zealand is simply not aligned with the rest of the world for example (1) radio requirements for over water operations, (2) certification of non-air transport operations, (3) definition of crew member, and (4) enabling installation of new technology safety enhancing equipment.

Overall, we would recommend a full review of the rulemaking section of the bill with a view to improving the quality and speed of rulemaking.

1.5. Foreign Medical Certificates: We would like to see recognition of foreign medical certificates and on-going acceptance of medical certificates issued by foreign jurisdictions. At the moment, New Zealand does not recognise medical certificates issued by other competent authorities. There is no reason why CAA cannot accept medical certificates issued by those jurisdictions considered to have a comparable standard such as Australia, the US, EASA countries, the UK and Canada.

2. Specific comments on the Exposure Draft

2.1. Section 44 to Section 52 of the exposure draft all refer to the nature and characteristics of Rules that can be made. It must be possible to rationalise these Sections into one as it simply lists all of the rules required relating to aviation security and safety. The language used to head up the various sections is quite old and reflects today's aviation terminology. It may be more appropriate to say 'there will be Rules and these will operationalise the intent of the legislation'. This of course would require a lot more thought being given to the purpose and intent of this piece of legislation.

2.2. Many companies operate voluntary reporting systems and intensively collect data. It is understood that in certain circumstances the CAA may call for this information to be provided during an investigation or an audit or surveillance (Section 254 (5) refers). It is important that the information which is required to be disclosed is given some protection.

2.3. The terms "public interest" and "interest" used in Sections 265 and 266 are not defined and they depart from ICAO and internationally recognised practice. Public interest is not a well understood concept and can have very different meanings to different people. To have any comfort that the protections are meaningful, the concepts of "public interest" and " interest" need to be clearly defined as these ensure the Director takes the appropriate action i.e. to prosecute or to issue an infringement notice.

2.4. Incorporating Just Culture into the Act is an important step to further increasing aviation safety. We join with other submitters in recommending that, prior to proceeding to final Bill form, there should be a workshop to ensure that everyone in the aviation community understands the proposal. Without widespread understanding and acceptance, and a clear understanding of how this piece of the Act will work, there

could be a potentially negative impact on the vital aspect of aviation safety to have the confidence to report in an open and frank manner.

2.5. We believe there are issues with introducing a highly prescriptive Drug and Alcohol Management Programme concurrent with the performance-based Health and Safety at Work Act which ensures a duty of care and the adoption of a reasonable practicable test when ensuring safety at work. Our preference is for no DAMP rules within the legislation given the performance-based HSW Act. The recommendations by TAIC to implement changes in maritime and aviation's alcohol and drug management plans pre-date the introduction of the Health and Safety at Work Act. Also that the Director of Civil Aviation has now taken the position that the Health and Safety at Work Act is the preeminent piece of legislation when prosecuting operators involved in an accident resulting in death or serious injury.

2.6. We support the integration of the Airports Act into the Civil Aviation Act. We support the modernisation of the Airports Act in full. We support the removal of Section 4A of the Airports Act but consider provisions under the Commerce Act regarding disclosure of information to incur a significant cost to the industry. We would support a more efficient dispute resolution mechanism.

2.7. We do not support the changes in respect of delays to service unless this is extended to all transport service providers, not just airlines. Singling airlines out for special treatment is inappropriate, while extending the provision to all service delays on all modes of transport would be fair and equitable. In many jurisdictions these types of provisions do not discriminate by mode.

2.8. We do not support the change proposed to Section 3 regarding the main purpose of the Act. The proposed change adopts the existing vision statement of the Civil Aviation Authority. The additional purposes at Section 4 are nothing more than a shift of the existing Functions on the Minister (S.14A) and existing Functions of the Authority (S.72A) with the replacement of a couple of words. This is not the future-focus that we want to see for a piece of legislation that is likely to guide the sector for decades to come.

In conclusion, we do not think that this exposition does enough to future-proof the New Zealand aviation industry and we join with other submitters in recommending that this exposure draft does not proceed until there has been a more thorough review of all aspects of the aviation system.

Thank you for the opportunity to make this submission.

Yours faithfully,

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