

Aviation Green Paper response

Sep 25, 2023 Mark Newton

Two brief points to make about the Aviation Green Paper.

Regulatory agency fitness for purpose

In several places, the Green Paper asserts that the existing regulatory frameworks and associated bureaucratic structures are fit for purpose. No major changes are proposed for the Dept of Infrastructure, CASA, or the ATSB.

This is clearly preposterous.

Some examples of current (must less historical) failures:

- Maladministration from the Dept of Infrastructure has seen Australia's capital city secondary airports, and the businesses reliant on them, go into precipitous decline. The priority at those airports is very obviously corporate profits driven by property development; Aviation is viewed by the leaseholders as an annoying inconvenience. These places should be thriving, but they're moribund regardless of whether Australia is in a boom or bust cycle. Why do you think that is? Shouldn't the Department be a little bit curious about the part it's playing?
- Several submissions to the recent Senate Rural, Regional Affairs and Transport General Aviation Industry inquiry are critical of the role CASA has played in the decline of the General Aviation industry. By any objective measure, CASA has failed to improve aviation safety; At best, the hundreds of millions of dollars per annum fed into CASA's gullet have the industry treading water, if not declining outright, while safety and economic metrics for aviation in our peer jurisdictions surge from strength to strength. It's disappointing that the Government doesn't seem curious about why that is.
- The relationship between the ATSB and CASA has been so corrupt that CASA officers were referred to the AFP for criminal investigation following the ATSB's failed Pel-Air accident investigation in 2013. The suggestion that the structure of the relationship between CASA and the ATSB is fit for purpose is frankly laughable.

The Green Paper seems to suggest that the Government is interested in plotting a path for the future of aviation in Australia without regulatory reform. It's fine if that's the aim, but it'd be more honest to plainly say that the upcoming White Paper is intended to be a failure at the outset if that's the path the Government wishes to take.

AAM, hydrogen, and electric aviation.

The Green Paper contains a very large number of references to Advanced Air Mobility (AAM), hydrogen propulsion, and electric propulsion in the upcoming future.

At the outset: There is a grand total of zero (0) successful AAM companies world-wide in 2023. It seems foolhardy for a government to extrapolate from zero to a future pillar on which the entire industry will rest. The Green Paper's references to AAM read like 1950s SciFi magazine predictions that in 2000 we'd all be flying around in jetpacks and hover-cars to restaurants preparing food pills in nuclear powered ovens.

The fact that there are thousands of companies across the world working on AAM without success doesn't mean it'll be successful; The government's attitude seems to be, "A pile of manure this big must have a pony under it somewhere!" and we're going to orient our nation's aviation strategy around the needs of the pony for the next quarter century whether we find it or not.

Similarly: There are zero (0) hydrogen powered aircraft world-wide in 2023. While it's possible that the application of engineering talent and limitless money will solve the significant challenges of weight and explosive crashworthiness for hydrogen containment vessels, and the rest of society could solve the fuel production and distribution problem, we could just as easily attain more fuel efficient or less carbon-intensive aviation through completely different means. Furthermore, even if the entire world hitches its wagon to hydrogen aviation, it's so unlikely to mature in the next 25 years that it's foolish to make public policy on the assumption that it will.

Finally: Battery-electric propulsion for aircraft is plainly and unambiguously nonsense without at least a 1500% improvement in battery energy density (without even considering crashworthiness and fire risk) to reach rough equivalence with what we get from liquid fuels now. The Green Paper invites its readers to entertain the prospect of hundreds of thousands of dollars being spent in remote settlements of a few dozen people to recharge aircraft worth millions of dollars to ferry light-weight freight from an airport less than an hour away. Why would any of that happen? Does the Department foresee a business case, or is this just hand-waving magic?

The Green Paper (and, likely., the White Paper it'll spawn) seems like little more than a vector for the Government to bolster its "Net Zero by 2050" credentials by hand-waving about an illusory plan to achieve it. But there's no credible pathway: The Green Paper repeatedly states that it expects all sectors of the aviation industry to do their part to achieve the goal, but it's conspicuously silent on what's supposed to happen if industry sectors can't.

Is it the Government's position that regional Australia will no longer be able to use aviation because their communities are too small to justify investment in SAF-burning jets? If it is: Say so. Be honest about it.

If SAF doesn't scale-up, and hydrogen is a dead-end: What's the plan? Is there one?