

Investing in the future of regional aviation

Address by Jason Harfield
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Introduction

Thank you. It's great to be here.

Regional flying has always been the lifeblood of Australian aviation.

I see it as part of our national DNA. Australia's answer to the tyranny of distance.

It reflects the size and scale of our continent, our unique flying conditions, the economic weight of our agriculture and mining industries, the heritage of outback communities, and our national love of travel and adventure.

At Airservices we also know that, more than ever, it takes guts and grit to run an aviation business in regional, rural or remote Australia.

The nation is lucky to have the local heroes like yourselves who work so hard to keep flying viable for your communities, sometimes against the odds.

You have to manage on tight margins, while keeping up with the latest advances in technology and regulations. Not to mention challenges such as the current pilot shortage.

Today I want to bring you up to date on some of the changes that are happening now, or are a prospect for the near future.

With so much change going on, it might be tempting for some to wish it would all stop, or at least slow down for a bit.

But that's not going to happen. If anything it will accelerate.

But I can assure you that the approach Airservices is taking will ensure that regional aviation will reap the benefits.

Our mission at Airservices

Our job at Airservices is to provide you with safe, secure, efficient and environmentally-responsible air navigation and aviation rescue fire fighting services and, more broadly, to foster and promote civil aviation across Australia.

We place critical importance on not being an economic or operational impediment to the growth of the aviation industry, and we are absolutely committed to providing value for your hard-earned money.

As we have announced, we have been able to hold our prices at 2015 levels through to 2023 at least, and will probably do so for longer.

That's at least a 17 per cent decrease in real terms for you.

We've been able to do this partly because we've had 3.4 per cent growth in activity over the past year (and approximately 10% growth in activity over 3 years).

But more importantly, through a lot of hard work by the Airservices team, we have reduced our operating costs by another 2.3 per cent this past year.

For example, we achieved an 11 per cent reduction in operating cost per IFR flight hour compared to the prior year, and close to a 60% reduction in internal project costs, while continuing to deliver the safe and efficient services our customers and you expect.

This further increase in efficiency means we are in a position to invest more than a billion dollars in our investment program over the next five years, and the economic benefits will be even greater.

Our cost savings allow us to recognise the special requirements of regional aviation, and regional and remote communities in Australia.

Aeromedical waiver

We were delighted to announce earlier this year that Airservices is waiving service charges for the Royal Flying Doctor Service and six not for profit aeromedical services.

These services have traditionally relied heavily on community donations to stay in business and provide their vital medical support to country people.

Our decision will ensure that the precious donor money stretches even further. The RFDS, for example, estimates that its \$2 million annual air navigation saving could fund 235 extra flights, or 15 extra nurses.

The three challenges

Perhaps more than any other Australian institution, Airservices is connected to all points of the aviation ecosystem – the airlines, of course; airports; safety regulators; governments; and the broader community.

We have a unique vantage point from which to view the issues and challenges facing the Australian aviation industry and to play a pragmatic role in making it better for all participants.

Today we undertake this role in the context of unprecedented and widespread change across three areas in particular.

First we have the dramatic growth in air traffic in Australia. Brisbane-Sydney and Sydney-Melbourne are already two of the busiest air routes on the planet.

That's astounding when you think of our population.

The forecasts are for Australia's capital cities to more than double their passenger movements over the next twenty years.

Air traffic is also growing in complexity, including with the fast-rising use of drones, and this development will also need to be safely integrated into the overall air traffic management system.

The second development relates to the first. As a nation we are now investing heavily in airport infrastructure to support this forecast growth.

While this is good economic news, and great for local jobs, it also raises issues about community impacts.

Our approach is to seek to foster a collaborative environment that respects the interests of all participants and strikes the right balance, so that the aviation industry can thrive.

The third development is the continuing acceleration of technological change.

Aviation and the flying experience at all levels is being transformed, from the performance of the biggest and most advanced commercial aircraft, through to low-cost, high-tech devices for the world's most remote aviation locations.

At Airservices we must manage the day-to-day maintenance of this safe and stable present, while delivering the full potential of a smart, high-tech, and very different future.

OneSKY

You've all heard of OneSKY. Earlier this year Airservices and the Department of Defence signed final contracts with Thales Australia for the \$1.2 billion OneSKY program to harmonise civil and military air traffic management into one seamless system.

It is probably the biggest development in the management of Australia's skies since aviation began in this nation, and world-wide there is nothing like it.

We will have more to announce as we hit our milestones in the coming months and years, but OneSKY will make all of Australian airspace as uniformly safe and efficient as possible, which means we will have the world-leading management regime for 11 per cent of the world's air space.

We will see over a billion dollars worth of economic benefits for the industry from OneSKY, and these benefits will be felt by all aviation participants, including regional aviation.

Air Modernisation Program

Airservices is of course directly responsible for civil air traffic management and we are working on an airspace modernisation program.

The aim is to deliver a series of enhancements that take advantage of technological innovations to make flying safer, smarter and more efficient.

For example, Airservices is proposing a greater standardisation of airspace architecture in line with the principle that each class of airspace should align with the service level required to manage the level of risk.

This will reduce complexity for air traffic controllers and pilots, and therefore increase safety.

Another proposed change will allow us to take full advantage of the benefits of ADS-B technology.

As you know we have been driving the expansion of surveillance using ADS-B across the country and investing in the ground stations necessary to support its implementation.

The benefits for regional operations will be realised progressively as we see more aircraft in the sky, as we underpin the safe expansion and growth of aviation services across Australia. This includes more rural and regional areas where we expect to see population growth and tourism expansion.

As our first step we are proposing that in five locations - Hobart, Albury, Launceston, Alice Springs and Tamworth – we capitalise on the expansion of our surveillance coverage by transferring the control of airspace 4,500 feet and above from the air traffic control tower to an enroute surveillance service.

This move will increase the use of surveillance, improve safety and also contribute to the improved consistency and efficiency across the network.

Weather Cameras and Microtowers

At Airservices we are always seeking to innovate in a way that makes the whole aviation ecosystem more effective.

But Australia is an incredibly diverse flying landscape and we are also looking to take advantage of bespoke technologies that can help us solve specific problems, particularly where we can integrate those solutions into the broader system.

That's why, in collaboration with the Bureau of Meteorology, we have constructed purpose-built camera infrastructure at more than 20 aerodromes across the country to allow pilots to view weather conditions at the site. It's a big boost for safety.

We have also been investing in a new interactive portal that allows pilots to view the weather on their mobile devices.

It's more user friendly and it takes advantage of the incredible connectivity and power of modern personal devices.

We are also investigating the potential of microtowers.

These are small, solar-powered, self-contained advanced air traffic advisory systems for airports without air traffic control towers.

Microtowers have numerous benefits.

They can provide brief real-time weather information to pilots, including wind shear and crosswind.

A unique two-way radio check feature allows pilots to verify both the signal strength and the clarity of their radios prior to takeoff. Artificial intelligence speaks to pilots using the existing air traffic VHF frequency.

A microtower uses 100% off-grid solar power which is ideal for Australian conditions.

They can be installed in a day, without requiring great technical skills. They are easy to maintain and support.

S-BAS

Finally let me mention Satellite-Based Augmentation Systems (SBAS), which supports improved vertical guidance.

Continuous vertical guidance is one of the most important tools available to a pilot during the final stages of flight. It ensures the crew can maintain a safe height above terrain and obstacles when approaching a runway.

In adverse weather, such as low cloud, they can also descend to a lower altitude before needing to become visual on approach to the airport.

This continuous vertical guidance decreases the chances of a pilot undertaking a go-around or having to divert, saving both fuel and time.

When this technology becomes available, SBAS will allow regional carriers to reap the same benefits as at larger airports, but without the need to install costly infrastructure.

Geoscience Australia is currently assessing SBAS technology across Australia using information gathered from trials in multiple sectors including agriculture and mining.

We are also currently running aviation trials to assess the accuracy and safety of SBAS while ensuring it can be easily implemented using existing avionics.

These trials will test three new technologies, first generation SBAS, second generation SBAS and what is known as Precise Point Positioning.

Early indications suggest that the business case for SBAS is strong.

Conclusion

Let me conclude.

Airservices has transformed into a far more efficient and agile organisation, better able to respond to the needs of our aviation industry customers today and into the future.

Including, and especially, in regional aviation.

And we will need to keep performing to the highest standards because the opportunities and challenges ahead are significant.

Traffic growth will continue to be a feature of the Australian aviation landscape.

New entrants like drones will change the way we think about airspace.

And technology will continue to drive the way we deliver our services to ensure safety, efficiency and sustainability in a time of rapid growth and change.

Our goal is to keep on supporting and strengthening Australia's regional aviation sector and all of you who keep it going, sometimes in very adverse conditions.

Over the long term it seems clear that a national goal will be to encourage more Australians to live in regional and rural Australia.

Safe and efficient aviation services will undoubtedly form part of an appealing package for those looking to work and live outside the capital cities.

We know how important you are to your communities and to the well-being of Australia as a whole.

And as always, we welcome your feedback and input as we proceed.

Thank you.